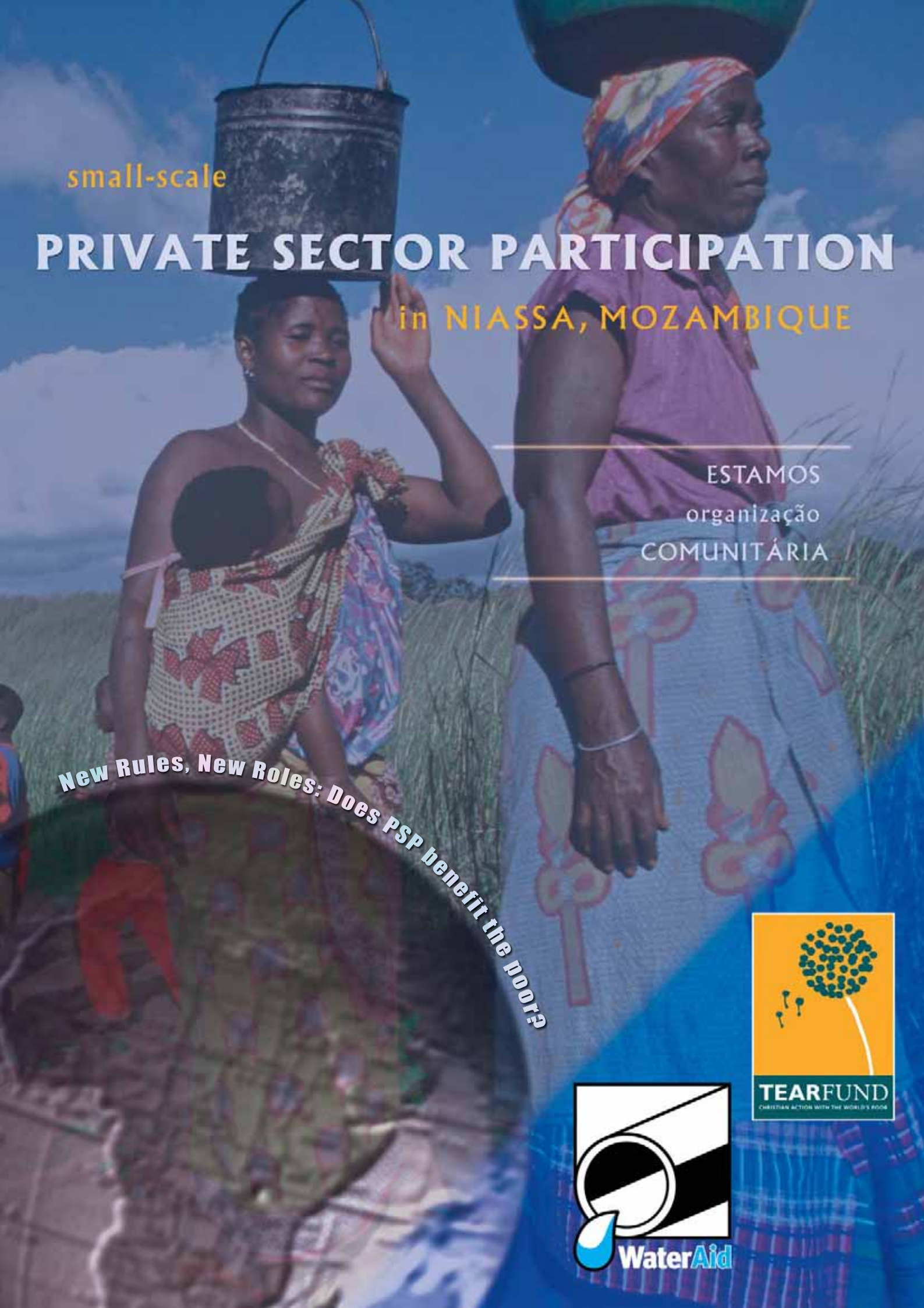

small-scale

PRIVATE SECTOR PARTICIPATION

in NIASSA, MOZAMBIQUE

ESTAMOS
organização
COMUNITÁRIA

New Rules, New Roles: Does PSP benefit the poor?

TEARFUND
CHRISTIAN ACTION WITH THE WORLD'S POOR

WaterAid

New Rules, New Roles: Does PSP Benefit the Poor?

Small-Scale PSP in Niassa, Mozambique

Estamos - Organização Comunitária

Estamos – Organização Comunitária (Estamos) is a non governmental organisation based in Lichinga (the capital town of Niassa Province in Mozambique) and is a partner of WaterAid-Mozambique. Estamos (www.estamosoc.org) runs water and sanitation programmes, as well as HIV-AIDS awareness and education programmes in poor rural villages in the province. This research was originally written in Portuguese. Jose Atanasio David and Lindsey Breslin of Estamos are the main researchers and writers for this case study. Feliciano Dos Santos and Edward Breslin provided valuable contributions and commentary.

Contents

Boxes

Map of Niassa Province

Source: Provincial Physical Planning Service of Niassa
Scale: 1: 2.500.000

Acronyms

DAR	Direção de Agua Rural (Directorate of Rural Water) – the central state body for rural water.
DAS-Niassa	Departamento de Agua e Senaemiento (Department of Water and Sanitation)-Niassa Province
DPOPH	Provincial Department of Public Works and Housing
Empreteiros	Local private firms or individuals operating as construction contractors for water and sanitation projects
EPAR	Estaleiro Provincial de Agua Rural (Provincial Construction Company for Rural Water)
FRELIMO	Frente de Libertação de Moçambique (Liberation Front of Mozambique)
HIPC	Highly Indebted Poor Country
NGO	Non Governmental Organisation
NIS	National Institute of Statistics
NWP	National Water Policy – enacted in 1995, it provided for the change in government and other stakeholders' roles in water and sanitation services
O&M	Operation and maintenance
PRONAR	National Programme of Rural Water
PSP	Private sector participation
RENAMO	Resistencia Nacional Moçambicana (Mozambican National Resistance)

A protected well in Niassa, Mozambique
Photo by: WaterAid/Jon Spaull

I. Executive Summary of the Synthesis Report

Governments, both northern and southern, have rightly placed themselves under much pressure to achieve better water and sanitation coverage. The Millennium Development Goals aim to halve the proportion of people without access to water and sanitation services by 2015. Millions die every year from lack of access to safe water and adequate sanitation. On one hand there is an undeniable urgency about these issues that makes prolonged discussion frustrating and a questionable use of resources. But on the other, the risk of the blanket promotion of one debatable method of reform is an unnecessary waste of scarce resources.

Most southern governments have consistently failed to deliver affordable and sustainable water and sanitation to the poor. It is difficult to summarise the causes for this failure as each situation is different and complex. However, some broad problems cut across many public utilities and municipal services: bad financial management, low funding priority, lack of staff experience and qualifications, absent or weak customer service orientation, political interference, little or no independent regulation and an absence of civil society consultation. Many of these problems have been described as attributable to weak government capacity – equally acute in urban and rural contexts.

Our research shows that the policy of private sector participation (PSP) does not comprehensively tackle the underlying causes of water utilities' failure to serve the poor. In four key areas capacity building, community participation, finance and institutional reform, major problems persist, making it unlikely that the multinational private sector is going to play any significant role in achieving the Millennium Development Goals.

Currently the pursuit of a policy of PSP generally undermines local and national government capacity. For one, it limits the ability of the public sector to take services back should PSP fail or when contracts end. Private sector contracting must not result in irreversible dependence on private companies, and there must be clauses in contracts to prevent this dependence.

Without adequate government capacity, no reform processes can be successful. The private sector cannot be contracted without tackling failing government. The government's role to facilitate, monitor and regulate is as much an essential element in PSP as in public and user-managed utilities. Yet, it seems that this requirement is being practically ignored in the rush to establish PSP. It is essential that donors refocus efforts to building government capacity at local and central levels.

The involvement of local communities is often lacking in PSP reform programmes. Where PSP has failed to deliver the promised gains, the case often is that the poor are seen mainly as recipients, rather than contributors to development. Whether projects involve large or small-scale PSP, the focus is on giving contracts or concessions to the private sector. Social mobilisation and community participation, proven time and again as prerequisites for sustainable development, are seen as burdens and non-essential components of the task. Failure to consult communities means that the interests of the poor are often not being represented. It results in a lack of ownership over projects and an absence of accountability between users and service providers. It seems that the lack of community involvement that led to previous failures is continuing, raising serious doubts over the sustainability of PSP projects.

Cost recovery and capital cost contributions are in most cases necessary for water services to be sustainable. However, there are problems in the application of these principles, which often results in denying the poor access to services. Expensive technology choices and a failure to consider the non-cash contribution of the poor are widespread in PSP contracting. Donors are guilty of promoting an approach that is narrow and mechanistic, allowing for little flexibility and absence of perspectives incorporating community action and considering the complexities of poverty.

Changing the role of government, by effectively reducing its capacity through reductions at central level, but not increasing personnel at local government levels, erases benefits that could be gained from decentralisation per se (such as responsiveness to people's needs, greater accountability etc.). Weak decentralised agencies cannot be expected to quickly learn about tenders or forms of contracting and keep track, monitor and supervise the activities of contractors fanning beyond provincial capitals.

In the rural areas that were studied, reduced government roles had a detrimental impact as work was often sub-standard leaving the communities with a costly and unreliable service. The rural case studies also show that there are, so far, no improvements in accountability. In some respects, accountability was compromised in the dilution of responsibilities that accompanied the change in roles. Because projects are between governments and contractors (communities are typically not a party in the contract), the supposed beneficiaries are in no position to seek redress for sub-standard work. Accountability is lost in the commercial/ contractual, quick-fix arrangements of private sector involvement.

Political interference has been seen as contributing to the failure of many public utilities to deliver to the poor. In established democracies there is 'interference' in the running of utilities but this is seen as government exercising its duty to keep institutions to account. There is a fine line between 'interference' and the need for accountability, the difference seems to be the depth and strength of democratic institutions in individual countries.

Civil society working to strengthen the hand of government through, for example, commenting on tender documents prepared by external advisors, increases the likelihood that reforms will further the concerns of the poor. It is in the interests of government to involve a broad constituency, especially one that represents the interests of the poor and poor people themselves in the shaping of privatised basic services. Pro-active openness and transparency by government in reform processes lessens the possibility of civil strife.

With these findings, we are opposed to donors pressuring developing countries to accept PSP in water services as a condition of aid, trade or debt relief. To promote a policy regardless of specific contexts increases the likelihood of failure especially when the likelihood of success of that policy is intensely contested. Furthermore, the enforcement of PSP as the central policy reform limits the options for governments and civil society to improvise and innovate using the best possible arrangements. We believe rather that policies should be used to ensure that in any reform process the poor will be protected, their access to services increased, and the process itself actively seeks the opinion of civil society.

This does not mean that we are rejecting private sector involvement. The private sector has a role that should not be denied. But, where there is corruption and/or political resistance to serve the poor, the private sector can do very little and can, in fact, compound the problem. Where there is lack of information, participation and democratic processes, the situation is thrown wide open to opportunistic behaviour from the private sector. However, given a situation with stable rules, enough political commitment to address the underlying causes, good governance and an informed and active citizenry, the private sector can be a responsible partner in development and an important player in reforming and improving water services.

In order to move forward on this contentious issue, a multi-stakeholder review should be undertaken. We believe that it is only through such a review (similar to the World Commission on Dams) that the final, authoritative word can be made on whether PSP benefits the poor. We also believe in the necessity of building the capacity of civil society actors to influence privatisation processes and to hold governments and the private sector to account. This needs to start with improving their knowledge and understanding of the issues surrounding failing water services, and enabling civil society groups around the world to learn from each other's experiences of intervention in privatisation processes.

II. Case Summary

Decades of fighting and civil war have devastated Mozambique's economic and political infrastructure, leaving an estimated 57 percent of the rural population without a safe water source and 80 per cent without access to basic sanitation. In response the Mozambique government kick-started an Economic Rehabilitation Programme, which stated that delivery of public services, including water and sanitation, would pass from the state to the private sector; a move it believed would help increase development and efficiency and intensify economic activity. However it is debatable whether this system of Private Sector Participation (PSP) has done much to improve water and sanitation services to small-scale poor rural communities. There is also concern that as government pulls back from public services, Mozambique's rural areas lack the strong and sustainable private sector needed to deliver effective water and sanitation networks.

Background

Following its independence from Portuguese rule in 1975, Mozambique plunged into 16 years of civil war that destroyed what was left of its economy and infrastructure. Water and sanitation networks have been particularly affected by the fighting, and the government felt it lacked the financial, structural and organisational capacity to get the system back on to its feet. In 1995 it approved a National Water Policy (NWP) to increase the coverage and quality of water and sanitation supply. Under the NWP the government was to withdraw from direct implementation of services, and the private sector would construct and manage water and sanitation services across Mozambique.

Following the privatisation of the water and sanitation sector in 1999, the Directorate of Rural Water produced an implementation policy for rural water and sanitation projects based on the principles of the NWP. It set out guidelines for meeting the basic water and sanitation needs of the 15 million people living in rural areas, and outlined the roles that local communities, national, district and provincial governments, NGOs and the private sector would play in meeting these needs.

Niassa, one of the country's poorest provinces epitomises the problems facing the government's policy of private sector participation. In 2001 only 40 per cent of its population had access to potable water, and years of underdevelopment, a troubled social history and lack of resources has curtailed the emergence of a viable private sector. This paper aims to assess whether the implementation of PSP in water and sanitation programmes on the small-scale rural level in Niassa improved communities' access to water and sanitation services

Private sector participation in Niassa

There are three principal private providers of construction work in Niassa. There are considerable issues with their ability to deliver effective work.

EPAR. Before privatisation, the formely state-owned EPAR (Provincial Construction Company for Rural Water) worked as the sole implementing agent of water and sanitation in Niassa Province, receiving equipment and salaries from the national government. Following the NWP, the plan was that it should become a private sector company, but EPAR still continues to receive work in Niassa without competing against other companies or submitting a bid.

Local private contractors. When the government started to withdraw from the water and sanitation market, there were not enough private sector companies in Niassa to fill the gap. Only 15 small-scale private contractors exist in the region, and those who can not diversify into housing and building construction find it difficult to survive. The issue of low budgets and the refusal of local companies to take responsibility for low quality work feeds conflicts between the private sector and donors or implementing agents.

Local Construction workers. Donors, especially NGOs, would prefer to use local construction workers to build water and sanitation projects as they can be held accountable for bad work. However according to current legislation only certified companies are allowed to construct community waterpoints.

Community involvement. Communities have little influence in deciding which contractors are used, the location of the water pumps and the technical applications used in building. *Empreteiros* are not effectively communicating maintenance and technical skills to local villages.

Niassa

Niassa is the largest but least populated of Mozambique's ten provinces. The development of water and sanitation services has been slow, with many villages of repatriated refugees lacking access to safe water sources. It is estimated that as many as 550,000 out of a population of 800,000 lack safe water access and 700,000 are without adequate sanitation. Before the construction of waterpoints, water was collected from traditional wells located near rivers and swamps which was often dirty and contaminated.

The region lacks the construction materials needed to build an effective water and sanitation network. Seasonal constraints also mean that there is only a three to four month stretch in which construction work can be done. Although the policy of PSP was designed to speed up this development process, there are only 15 small-scale *empreteiros* (businesses) working in Niassa Province, and projects constructed by these private firms have been slow moving and of poor quality. There is no government capacity to effectively monitor or regulate competitive construction contracts that would help force private firms to raise standards and comply with regulations. Local communities are also unsure of their responsibilities towards part financing and maintaining water sources.

Contracting. There has been no uniform system of contracting, which creates confusion. Depending on the donor, contracts to the private sector are either given directly or through a bidding process. Some, like EPAR, still receive contracts directly from DAS-Niassa. Other donors such as NGO's often contract businesses or local workers directly without asking for bids, resulting in great disparity between the budgets for contracts. Competitive bidding for contracts is not widely followed.

Problems emerging from PSP in Niassa

Poor quality of work. Projects that have been completed by private *empreteiros* have been of such bad quality that many communities have returned to the unsafe water conditions they were previously using.

Inspections. The inspection and supervisory role of DAS-Niassa, the government Department of Sanitation and Water for Niassa, has proved ineffective because the state lacks sufficient funds to carry out the work. Many inspections are not carried out until projects are completed, and small private companies are not receiving the technical support they need.

Based on eight water projects implemented by WaterAid and DAS-Niassa, research showed that the level of training, operation and maintenance of the water and sanitation projects by private sector companies was low. Many of the completed water projects were located outside the villages near to lakes and swamps because they were easier and faster to build and allowed contractors to move on to the next project. These waterpoints did not ease the pressure on the local communities, and many produced insufficient water to serve 500 households within 500 metres as stipulated in the NWP. In a successful project in the village of Malemia, with three handpumps located in the village built to sufficient depth and where the community has received instruction on maintenance and care, there have been improvements in health and productivity.

Conclusion

The implementation of PSP in an environment such as Niassa showed that such a policy is unlikely to achieve its objectives and has compounded the water and sanitation problems faced by impoverished rural communities. The aggressive removal of state provision of services in an area such as Niassa, where markets and social institutions are fundamentally weak, has compounded rather than improved the complex problems of water and sanitation provision. The following challenges and recommendations have resulted from WaterAid's analysis of the impact of PSP on Mozambique's rural communities. With the removal of state institutions from the provision of public services, the private sector gets to assume a vital role to play. But an area such as Niassa, with an impoverished local community and destroyed infrastructure, cannot support and sustain a viable private sector overnight. PSP cannot be relevant in such an environment unless a marketplace exists in which a strong private sector can develop. A prerequisite to the process of PSP is the development of private enterprise. This need must be urgently addressed.

WaterAid recommends a policy of private enterprise development, capacity-building at local government level, and community development and mobilisation. WaterAid-Mozambique and its partners have tested the viability of such a policy. Results included developing monitoring and supervision capacity in the provincial water and sanitation department, increasing competitive contract bidding processes, and holding individual companies to account for poor work. There should be greater co-ordination between DAS-Niassa and the donor and NGO communities to ensure that all work in the province is in accordance with the nationally-mandated Implementation Manual. The government will then be able to complete its regulatory and monitoring role, and ensure that correct contract bidding takes place. Communities should be given more control over their water projects, which will only happen when they are provided with sufficient information and handed some degree of control over the budgets for the construction of water points. Communities can only hold private sector companies to account over poor work if they have the power to stop payment.

III. Introduction

Private sector participation (PSP) is increasing throughout the world as governments change their role from being direct providers of services (power, transport, water, etc.) to being facilitators, monitors and regulators of such services (WaterAid Concept Note, 2001). This situation can be best explained in terms of a marketplace - a physical space with stalls representing different services and key areas of economic activity. In many countries, these stalls have been dominated or totally occupied by government bodies. Because these bodies do not operate by the rules of competition and efficiency, little activity occurs in the market. The market thus remains a dull and boring place, not the spark plug for economic activity and development that it should be. Furthermore, government occupation of particularly important 'stalls' in this market stifles growth by displacing and denying the private sector the opportunity to use those stalls. So a policy mechanism needed to be implemented to resolve the problem of dullness. Government bodies were moved out of the market, and the private sector was encouraged to replace them. This policy mechanism, the theory goes, will bring greater efficiencies, lower costs for consumers, reduce government burdens, or improve tax revenues that can be mobilised for other useful development purposes. The theory continues that PSP intensifies economic activity and in the case of services, brings tremendous efficiencies. It is therefore a key policy tool for development.

Mozambique is no exception to these changes. Formerly organised as a socialist economy with central planning since independence in 1975, the Mozambican government made a 180-degree turn in 1989 and adopted liberalisation and free market policies, including PSP, to deal with its problems of under-development (Financial Times, 1999). In the water and sanitation sector, the government has gradually withdrawn from the direct implementation of services. In the seven major urban cities, the private consortium, Aguas de Moçambique, has taken over the responsibility for the management of water and sanitation services through a concession agreement. In smaller towns, parts of the service are being contracted out to private companies. Expansion of piped networks is now almost totally implemented by private companies. In rural areas, the construction of boreholes, wells and protected springs is now implemented through tenders inviting private *empreteiros* (contractors) to bid for work. This process is administered by the local provincial governments.

This case study is an assessment of the implementation of PSP in water and sanitation programmes on the small-scale rural level in Niassa Province of north west Mozambique, bordering Malawi and Tanzania. Since 1998, this province has seen the expansion of the small-scale private sector. In part, this was due to the government's gradual withdrawal from directly implementing water and sanitation projects. EPAR (Estaleiro Provincial de Agua Rural), the provincial parastatal company for rural water, was partly privatised, in order to make space for local *empreteiros* to bid and compete directly for projects. The objective of this study is to investigate whether these moves improved poor communities' access to water and sanitation services and questions whether oor communities have access and sustainable delivery of water and sanitation services with private sector participation?

The research examined the emergence of PSP in Niassa Province and evaluated eight community water projects implemented by local private firms between 1995 and 2000 that were financed by WaterAid and Niassa's Provincial Department of Water and Sanitation (Departamento de Agua e Senaemiento or DAS-Niassa).

The following methodologies were used to collect data:

- Interviews with 17 key informants in the water and sanitation sector, ie government officials, non governmental organisation

(NGO) representatives, and private sector business people

- Focus group discussions with five private sector business people
- Participatory evaluations with 149 community members
- Direct observation of 25 waterpoints
- Informal interviews at 25 waterpoints

The results of the investigation reveal that at the Niassa Province level, PSP in water and sanitation programmes did not result in increased efficiencies or in intensified provision of services. In other words, it did not result in increased access to water and sanitation services by the poor. One simple explanation is that when the government moved out of the market, there were not enough private sector players who moved in. Niassa Province, by President Joaquim Chissano's own admission, is Mozambique's poorest province. It emerged almost totally devastated from ten years of a colonial war against the Portuguese and 16 years of civil war. Physical infrastructure and productive economic enterprises were levelled to the ground. Because Niassa is adjacent to Malawi, a country which supported Mozambican National Resistance (RENAMO) rebels opposed to the ruling Liberation Front of Mozambique (FRELIMO), fighting in the area was particularly vicious. For years, the chief source of income in the area was food aid administered by UN agencies. It can be said that it was only from 1996-1998 that Niassa Province started to put itself together again - starting with the repatriation and resettlement of refugees who now constitute the population of many of its rural villages.

The development of water and sanitation services in Niassa Province has been particularly slow. Many villages of repatriated refugees do not have safe water sources, and are forced to use rivers and shallow hand-dug wells. Access to these villages is often only by foot trails, and the population lives mainly on rain-fed agriculture. According to the World Bank, only 43 per cent of all rural Mozambicans are connected to a water source, and 20 per cent to adequate sanitation (World Bank, 2000). The figures for Niassa Province are much worse, due to the devastation brought by war, the number of broken-down waterpoints and the poor quality of projects that have been implemented. It is possible that as many as 550,000 of Niassa Province's estimated population of 800,000 do not have access to a safe water source and as many as 700,000 are without access to adequate sanitation. PSP was supposed to speed up the process and improve water and sanitation coverage. But this study found that:

- There is no evidence of improved coverage. The number of people that have access to a safe water source did not increase. While there has been no actual data, partly because of weak information systems in the area, there are only 15 small-scale, largely inexperienced *empreteiros* operating in Niassa Province. These are firms with only a handful of full-time staff (mostly relatives or close associates of its proprietors). They employ workers for their projects only during the construction season which are the dry months of July to November
- Projects that have been constructed by private *empreteiros* are of such poor quality that most have broken down. In the eight projects evaluated, most community members have returned to the unsafe water sources they were using in the past
- There is no government capacity to do the job. The Provincial Construction Company for Rural Water (EPAR), while supposedly already privatised in Agua Rural, is still assigned contracts to implement projects by the government, not through competitive tendering. Yet Agua Rural with its current capacity is not in a position to improve coverage targets, as its own officials admit
- The government body tasked to facilitate, monitor and supervise projects, the Departamento de Agua e Saneamento (DAS), is under-staffed, under-funded and under-equipped. It is quite weak in terms of local capacity and funding and this creates constraints on it in fulfilling its supervisory and regulatory role

This study argues that the situation in Niassa Province is characterised by a weak state and an extremely weak private sector. Returning to the market place theory in the introduction, there is not even a marginally well-developed marketplace in Niassa Province. The foundations have not been laid properly for there to be any basis for development activity. Niassa Province's problems are of a fundamental nature. PSP, which is perhaps applicable in other areas, will tend not to resolve anything in the province. What is needed in Niassa Province is not PSP, but the more fundamental *private enterprise development* in combination with state capacity-building and civil-society building. Both the public and the private sector, as well as civil society need to be developed in Niassa Province, so that progress can be made on the Province's large development problems.

The following pages will present the details of this argument. It will start with the historical background on Mozambique and Niassa Province. It will then look at the water supply and sanitation policy of the country and describe the principal role players and their responsibilities. It will then go on to describe the processes and dynamics around PSP in water and sanitation in Mozambique, particularly in Niassa Province. Finally, it will present an evaluation of the eight community projects. The conclusion summarises the study and starts to draw an outline of a policy response to the unique problems of Niassa Province.

IV. Historical background

Situated on the southeast coast of the Indian Ocean in southern Africa, Mozambique borders South Africa, Swaziland, Zimbabwe, Zambia, Malawi and Tanzania. Mozambique expands over 799,390 square kilometres and has 13,000 square kilometres of water in its interior. The climate is sub-tropical to tropical (from the south to the north). Mozambique consists of ten provinces with a population of 17.2 million people (NIS, 1997). About 3.2 million people live in urban areas, with the majority of the population living in rural areas. The official language is Portuguese, with 13 other traditional languages that vary from province to province. But, while Portuguese is the only common language in the country, only 13 per cent of the population actually speak it. Mozambique's natural resources include hydropower, gas, coal, minerals, wood and an agricultural terrain. The principal products for exportation are prawns, cotton, sugar and tea. The metical is the national currency and Mozambique has a GNP per capita of US$236.9 and a GNP growth of nine per cent (NIS, 1997).

The World Bank estimates that 86 per cent of urban Mozambicans and 43 per cent of rural Mozambicans have access to potable water. However as 61.1 per cent of Mozambicans live in rural areas about 60 per cent of the Mozambican population have access to potable water. In terms of sanitation, only 20 per cent of the rural population and 60 per cent of the urban population have access to basic sanitation (World Bank, 2000).

The recent political history of Mozambique started with the rise of African liberation movements and African nationalism in the continent in the seventies. In Mozambique, FRELIMO was created through the joining of three other movements and led the fight for independence from Portuguese colonial rule. Ten years of fighting led to the Lusaka Accord in September 1974 which facilitated the independence process. National independence was declared on 25 June 1975. Thereafter, a "20-24" policy was implemented for the Portuguese – which meant they had 24 hours to leave the country with 20 kilos of luggage. After independence FRELIMO, the only political party at the time, followed a Marxist-Leninist policy and moved to nationalise industries and structured the rural areas into communes and cooperatives. In 1977, the third Congress of FRELIMO adopted a programme of educating the proletariat and establishing a socialist state under the leadership of Samora Moises Machel (History of the Black African). However, not all members of FRELIMO were happy with a socialist state and formed an

opposition party, RENAMO, with the support of former Portuguese colonists, South Africa and former Rhodesia. In 1979, a civil war started between FRELIMO and RENAMO. The civil war lasted 16 years. About one million people died and the country was destroyed economically. In October 1992, the Rome Accord was signed between Joaquim Chissano, President of FRELIMO, and Afonso Dlakama, President of RENAMO. Thereafter, the political structure changed from a one-party socialist state to a multi-party democracy. The first elections were held in 1994. FRELIMO won and Chissano became President. FRELIMO won the elections again by a narrow margin in 1999.

The war left the country in ruins. A programme was designed to rebuild the infrastructure destroyed by the war. Mozambique showed considerable economic growth during the 1990's, with economic growth doubling since 1992. Yet, despite having one of the fastest growing economies, Mozambique remains one of the poorest countries in the world (Financial Times, 1999). In 1999, Mozambique became the third country to obtain HIPC debt relief. However, Mozambique embarked on structural economic reforms since 1987.

As part of the Economic Rehabilitation Programme, Mozambique began a privatisation programme that has, among other things, had an impact on the water sector. Between 1989 and the end of 1997, 840 companies out of 1200 public institutions were privatised. A majority of the companies were from the industrial, agriculture and fishing sectors (CPI, 1999). However, as mentioned above and will be further discussed below, the management concession for the water and sanitation sector, which applies to seven cities in the country, only occurred in 1999. Water and sanitation improvement is a high priority for the Mozambican government. This is demonstrated through Mozambique's Poverty Reduction Plan in which water for rural areas is one of the top priorities (Interview, Chief of DAS-Niassa).

Background on Niassa Province

In terms of surface area Niassa is the largest of Mozambique's ten provinces, but is the least populated. Niassa has a surface area of 129,362 square kilometres and a population of about 800,000 people. Approximately 85,000 people live in the provincial capital city of Lichinga. Niassa Province is located in the north-west of the country, bordering Malawi in the west and Tanzania in the north. Niassa is located on a plateau with a tropical climate. In Lichinga, the annual rainfall is about 1200 millimetres (A Look at Niassa, 1999). The Yao, Macuas and Nyanjas are the principal tribal groups in Niassa.

In a speech in Niassa in October 2001, President Chissano stated that Niassa is the poorest province in the country. Niassa Province is divided into 15 districts, each being governed by district administrations. Some 88 per cent of the active population survives through agriculture and fishing (NSI, 97 Census). However, Niassa lacks markets and distribution systems for agricultural products, which limits the income families can earn from farming. The cash base of rural Niassa is therefore weak and seasonal. Most people from Niassa spend a majority of their time in distant fields from November to June.

Niassa Province has a particular history that has its origins in the Portuguese colonial period. Many Portuguese who came to live in Niassa were exiled from Portugal for crimes or political reasons. This attitude of sending exiles to Niassa continued after independence. Thousands of Mozambicans with questionable conduct (according to the FRELIMO government) were sent to Niassa to be 're-educated'. People were also sent to Niassa to implement Operation Production whereby new industries would be created and Niassa would become the national granary for the country. The programme failed and as a result, thousands of people left, many joining the armed movement of RENAMO. Other people settled down, had families and still live in Niassa today. The development of Niassa has been difficult. Because it was perceived as a place of exiles, it was never a priority to develop the Province. It is sometimes referred to today as the Siberia of Southern Africa. During the colonial period, small profit-making activities such as merchant commerce and small industries were run by the Portuguese using Portuguese employees. Hence, when they had to

leave the country, all businesses were abandoned and the people of Niassa did not have the capacity, nor were they prepared to assume the responsibility for the small resources that existed. The socialist system of cooperatives started during this time, and created the opportunity to take on such responsibilities. But this never fully took root because of the aggravations caused by the civil war. Following the civil war, the private sector was reborn, but due to the under development of the province, it was difficult to achieve a great deal of growth and capacity.

In relation to water and sanitation, coverage rates in Niassa were very low before 1993. Due to the war, the Province did not have construction materials for waterpoints, and access to most of the districts was difficult. Communities collected their own drinking water from unprotected hand-dug shallow wells near swamps or rivers. Unfortunately, many of the province's rivers and swamps become desiccated during the dry season, forcing people to search for water at more distant sites (WaterAid, 1994).

From 1993 to 2001, coverage rates for potable waterpoints have risen in the province to approximately 40 per cent in rural areas. Urban coverage remains weak, with only two small piped systems in the province's two largest cities and one additional small piped system in a small town (Interview, DAS-Niassa technician). In terms of annual spending on water and sanitation, DAS-Niassa has a budget of US$173,000 for 2002. A majority of this money comes from international donors (Interview - Chief of DAS-Niassa).

The window of opportunity for water and sanitation sector work in Niassa is short. Community facilitation work and actual waterpoint construction occurs from May until the middle of December as it is impossible to construct wells during the rainy season from mid-December to April. Construction work can only begin in late August because water tables are high after the rains and wells that are excavated before August invariably run dry as the water table drops towards the end of the dry season. As a result, private sector companies have a small window of three to four months in which to work. They have to secure contracts that will not only occupy them during the short construction period, but sustain their businesses during the nine months they will effectively be idle. Some private sector companies have succeeded in diversifying their work and are involved in housing and building construction. Before 2001, the private contractors were mostly involved in the construction and installation of handpumps, charging about US$3500 to do the work. After 2001 when a community participation process was implemented by WaterAid and Estamos, many communities chose wells with a windlass and bucket instead. These protected wells were constructed by local private contractors with prices ranging from US$900 to US$2300. The higher costs reflect the location of the village rather than the actual cost of the well.

V. Policy and players

After the civil war, immense problems existed in the water and sanitation sector due to the destruction of water and sanitation infrastructure and lack of maintenance. The state did not have the financial, technical or organisational capacity to handle these problems effectively. Due to these problems as well as the climate of democratic institutional reform, in 1995, the Ministers approved the National Water Policy (NWP). The two main objectives of the policy are to increase the levels of coverage and improve the quality of water and sanitation supply (NWP, 1995).

Importantly, the NWP addresses the need to develop PSP in water and sanitation services. The policy states that the "government [is] likely to withdraw from direct implementation of services," and will therefore take on a new role, including providing direction, defining priorities in each province, defining minimum levels of service, regulating the activities of service

providers and collecting and providing information on project sustainability. In addition, the government intends to use the private sector not only for the construction of water and sanitation facilities but for the management of services as well. However, the policy also states that while it will encourage the participation of the private sector in rural water supply, the "state will retain a certain implementation capacity to intervene in the areas where private participation is shown to be non-viable" (NWP, 1997). Hence, the state seems to recognise that some provinces may not have any private sector capacity. The government consulted certain people, mainly government workers and private companies in Niassa Province, about how they felt about using the private sector. These people agreed that the EPAR had weaknesses and that it was necessary to include the private sector and involve communities in the process of providing water and sanitation. Communities were not consulted about the new NWP (Interview, Chief of DAS-Niassa).

The NWP also sets out general principles in the following areas:

- Basic needs
- Community participation
- The value of water
- Institutional aspects
- The role of government
- Integrated water resource management
- Investment
- Capacity building
- The private sector

With these basic principles included in the NWP, the Directorate of Rural Water (DAR) produced a draft implementation manual for rural water and sanitation projects in 1999. The Implementation Manual was made policy in December 2001. The Manual specifies the principal elements of the sectoral policy that hope to contribute to the sustainability of water and sanitation infrastructure. These are:

- Satisfaction of basic needs – water and sanitation services are to be given maximum priority, especially for rural communities and lower socio-economic groups
- Minimum level of services - in rural areas, the basic level of water supply is a well or a borehole with a handpump (or other type) that will serve 500 people within a radius of not more than 500 metres.
- The minimum level of rural sanitation is for each family to own an improved latrine constructed in accordance with the criteria stated in the technical manual (NWP, 1997).

Principal role players in rural water and sanitation services and their responsibilities

The Implementation Manual for rural water supply includes the responsibilities of the following main participants in the sector:

- Communities
- Government (district, provincial, and central levels)
- Donors and the international community
- Implementing agents (private sector and NGOs)

The community (local level)

At this level, according to the manual, the communities are to solicit technical and financial assistance from their respective District Administration or the DDPOH. In addition, the communities are to choose representatives to participate in a water and sanitation committee that will perform the following functions:

- Organise the communities to facilitate their participation in all phases of the project
- Collect local contributions to create a community fund for contributions to the

capital costs, between 2-10 per cent as well as contributions for operation and maintenance, repairs and the eventual replacement of the system

As stated above, the Implementation Manual was not made policy until December 2001. Therefore, many of the conditions explained in the Manual for community participation have yet to be implemented. However, since 2000, WaterAid in coordination with DAS-Niassa; and Estamos, have both been implementing pilot projects in two districts, based on the process explained in the draft Implementation Manual.

According to the majority of the projects evaluated for this case study, with the exception of two projects evaluated in the District of Maúa, previously projects were carried out with limited community participation. This study looks primarily at projects implemented before the Implementation Manual was developed and at two projects using the Implementation Manual policy with community members involved throughout the project.

Communities received water in two ways before the Implementation Manual was produced. From time to time district governments held meetings asking communities to prioritise their problems. The communities interviewed had prioritised water, and were put on a list to receive water in the future. Between two and three years later, a private construction company arrived to construct the waterpoint (once funds had been secured from a donor or from the state). In other cases, donors and government departments simply chose communities which would receive improved water based on budgets they had to spend. Communities often awoke one day to find a construction team in their village, and had done little or nothing to actually solicit such support. In both of these scenarios, the community did not participate whatsoever in choosing the private company who built the waterpoint. Even NGOs, like WaterAid and Estamos who work closely with communities throughout the project cycle, do not include communities in the decision as to which private company will be contracted.

As will be explained in more detail below, six out of the eight communities interviewed had no role in the choice of technology that was installed. They also had limited say in the location of the waterpoint. However after construction, the community's were informed by the contractor that from now on they (the community) had responsibility for managing the waterpoint. The Implementation Manual attempts to move away from this approach because the evidence in the field is that it does not lead to sustainable service delivery. Communities felt no ownership of the waterpoint and hence took limited responsibility for its operation and maintenance.

Government at district level

According to the Implementation Manual, district level government has the following responsibilities during the first phase of the implementation of the NWP:

- Explain the NWP
- Supervise the management of projects at a local level
- Promote sanitation and hygiene education
- Develop relationships with the implementing agents, NGOs, private sector, etc

During the second phase, district level government has additional responsibilities including:

- Manage funds and contracts with the private sector and other implementing agents
- Supervise and control the quality of work
- Lead the process of identifying the priorities of intervention

It should be emphasised that many of these responsibilities have not been implemented. Most of the decisions about water and sanitation services are still made at the provincial level yet the district is supposed to send lists of priority communities that need water to the provincial level Department of Water and Sanitation.

Two differing opinions on how this is being implemented exist between the Provincial

DAS-Niassa and the district administrators interviewed. According to DAS-Niassa, the provincial department works directly with DPOPH. The districts are to prioritise villages that are to receive water. But the decision on when prioritised villages will actually receive improved services remains at the provincial level. Districts will be informed when funds have been secured (Interview, DAS technician). Until recently, they were rarely informed on who would implement or construct the project; and in some districts, they are still not informed when a private company is due to arrive to start work. As the administrator in the district of Maúa stated, "the *empreteiros* of these waterpoints never came to the administration and completely ignored us. We heard someone say they were here to work. It is therefore difficult on our part to control things and for this reason, many times the services are badly done" (Administrator of the District of Maúa). Another complication is that in most cases the district department in charge of all public works is only one person, making it difficult to carry out the activities envisioned in the NWP and Implementation Manual. To compensate, DAS is still used to supervise the work.

Government – provincial level

According to the manual, DPOPH and DAS-Niassa (who are part of DPOPH) have the following responsibilities:

- Promote and explain the NWP
- Analyse and disseminate information referring to rural water and sanitation
- Inspect, evaluate and monitor the quality of projects
- Contract and manage the contracts for implementing projects
- Approve contracts at the Provincial level

As will be discussed below, the greatest weakness that the provincial government has currently with these responsibilities appears to be the inspections and monitoring of the quality of projects.

Government – national level

DAR is the central organisation for rural water and has the following responsibilities in the Manual:

- Define policy and strategy
- Promote, coordinate and support water and sanitation activities at a national level
- Explain norms and regulations
- Promote the mobilisation of funds and finance and supervise the implementation of the Manual

Donors and the international community

Donors and the international community constitute the main financiers of the water and sanitation sector in Niassa Province. Some donors are simultaneously financing water and sanitation as well as implementing projects directly. Donors active in the water and sanitation sector in Niassa Province include:

- WaterAid – provides financial and technical support to DAS-Niassa, DDOPH-Maúa and Nipepe, and Estamos; and assists with the testing of the NWP and Implementation Manual at District level. WaterAid donated US$105,347 for construction in 2001
- The Irish Embassy – finances water projects through DAS-Niassa. The Irish Embassy donated US$180,000 to DAS in 2001
- SDC – provides institutional support to DPOPH and DAS in Niassa. Institutional support includes the financing of technicians, training courses, and financing efforts to inform District level role players of the NWP
- Oxfam (Belgium) – provides finances directly to EPAR
- Concern Universal – implements the construction of a small number of water wells and does not work through DAS-Niassa

- Caritas implements a small number of water wells and does not work through DAS-Niassa

- Christian Outreach – implements a small number of water wells and does not work through DAS-Niassa

- PEDAL (IBIS – Denmark) – implements the construction of a small number of waterpoints and does not work through DAS-Niassa

- SAS (Holland) – implemented a pilot-small piped system project in Metangula and provided finance for three improved waterpoints and a number of latrines in Metangula. SAS's programme ended in December 2001

Private sector

According to the NWP, the term "private sector" includes the implementing agent for the state, ie EPAR. The private sector also includes private construction companies, private sector consultants and NGOs that work in the social or software aspects of water and sanitation.

In the view of the government, experience shows that the dynamism and flexibility that characterises the private sector represents great potential to respond to the needs of communities (Implementation Manual). For this reason, the state gave the private sector the following functions:

- Implement technical and social studies

- Construct water and sanitation infrastructure

- Train community members in operation and maintenance

- Market materials, equipment and spare parts

Private sector companies involved in the social aspects are to implement community education and participation (PEC) in water and sanitation in the following ways:

- Provide technical assistance with the development of community and local business capacity

- Support, prepare and organise communities in participation in all the phases of the project cycle

- Design activities to raise hygiene education and awareness

In reality, the private sector does not currently carry out all of these aspects of their work – their main role has been to construct waterpoints. In the past, however, according to private sector *empreteiros* interviewed, private companies offered both social and technical services. However, according to our interviews with community members, private sector-implemented social aspects are limited to informing the community about the waterpoint and speaking about the advantages and importance of drinking potable water.

Currently in the province, there is no private sector company existing with the specific capacity to facilitate the social aspects or software side of water and sanitation provision. However, in 2000, projects funded by WaterAid used a local NGO, Estamos, to complete the community education and participation aspect of the project. DAS has also contracted out Estamos to complete the social aspects in other districts where it has projects. Currently, WaterAid and Estamos have also trained local villagers as activists to promote good hygiene practices in maintaining the village waterpoints and conservation practices in the home.

This software role should be left in the hands of NGOs and locally trained activists as the private sector does not have the training in participatory techniques to facilitate this part of the project cycle within the communities. The private sector is accustomed to simply giving talks about water and hygiene which have had very little impact in the past.

VI. Private sector participation in Mozambique

PSP exists at two levels in Mozambique. PSP exists in terms of the management of a municipal system (a concession) and at the small-scale level that includes both formal businesses and informal providers.

On 30 November 1999, the consortium Aguas de Moçambique won an international tender to manage water services in seven Mozambican cities. The consortium is made up of Saur International with 38.5 per cent of the capital, IPE-Aguas Portugal with 31.5 per cent of the capital, and Mazi-Mozambique with 30 per cent. Mazi-Mozambique consists of a Mozambican NGO and three other private Mozambican companies. The concession agreement is for five years in the cities of Beira, Dondo, Quelimane, Nampula and Pemba. The concession agreement also includes the management of water services in Maputo and the adjoining city of Matola for 15 years.

Private sector participation in Niassa Province

PSP in Niassa Province consists of small-scale providers, both formal and informal. The principal small-scale providers whose main function is construction work are the following:

- EPAR
- Officially registered businesses
- Local construction workers

EPAR

EPAR existed for many years as a parastatal and the only water and sanitation implementing agent in Niassa Province. As stated by the Director of EPAR in Niassa, "EPAR was the direct implementing arm of the state, created specifically for the rehabilitation and construction of waterpoints." As the direct implementing agent, EPAR received vehicles, equipment, and salaries from the state, specifically from the National Programme of Rural Water (PRONAR). Oxfam Belgium was the main donor to EPAR from 1994-1999. PRONAR received funds from Oxfam Belgium and then distributed the funds to EPAR. However, when the NWP that changed the role of government was implemented in 1995, EPAR's status changed. The plan was for EPAR to eventually become a private sector company. Beginning in 1995, the government slowly started withdrawing support for EPAR by not supplying equipment to it. Although EPAR's status had changed on paper, EPAR still received work from DAS-Niassa without competing against other private sector companies or submitting a contract bid. "The State is EPAR's biggest partner. They give us contracts and we execute the work," said EPAR's Director. If EPAR is required to submit contract bids, its Director is worried it will not be able to compete because it lacks the necessary resources, vehicles and equipment (Interview, Director of EPAR). However, as from April 2002, EPAR does not receive any assistance from the state and must survive completely through its own efforts. The status of EPAR is still not clear because it is not completely a private sector institution, nor is it part of the state. In April 2002 the government also put out a tender for a study and evaluation of all the regional EPARs in the country so that a final decision can be made on their status.

Officially registered companies

Niassa Province currently has about 15 businesses involved in the construction of water and sanitation projects. To become officially registered to construct waterpoints and latrines, businesses must:

- Present the certification document that identifies the activity the business will engage in. This document was previously acquired through the Ministry of Public Works and Housing, but can currently be obtained through DPOPH
- Have Mozambican Citizenship
- Have a minimum of 10,000,000 meticals (US$500) in the bank

- Show DAS any construction equipment they have

Local construction workers

Local construction workers work on an informal basis and are local community members. NGOs implementing projects directly often identify local workers and contract them for local construction of waterpoints (Interview, Community Adviser-PEDAL). One advantage to using local construction workers is that it is easier to hold them accountable for their work because they live in the local community. When outside private companies work in communities, the communities have no way of contacting the company if work is badly done. However, according to DAS only certified companies are allowed to construct community waterpoints and local, informal construction workers are not to be used.

The development of a rural contractor

One local *empreteiro* started his company in 1996 through his own initiative. He had been working for an international NGO that trained him in water and sanitation construction. When his contract ended with the NGO, the *empreteiro* decided to form a company because he had experience in this area and he wanted to see if he could improve his standard of living. The company was also formed to do civil construction and road construction, not just to construct waterpoints and sanitation facilities. In 1996, this company existed only in name and constructed only one waterpoint. The *empreteiro* did not have any equipment, transport or personal infrastructure to complete any work. The company properly started working in 1997 with an administrator and a water and sanitation technical worker. They rented a car and the necessary equipment needed to complete their work, therefore they did not make as much profit as hoped due to these costs. However, the profits were enough for the company to buy a car in 1998 which helped them greatly to improve their work and feel that they had more control. The best year for them came in 1999 when they received financial assistance from WaterAid to buy moulds, a generator and other equipment. The *empreteiro* also participated in a course on project management. He stated that “I want to say with clarity the management course and the equipment WaterAid provided helped us and strengthened us”. The company’s workload grew because he was one of the first *empreteiros* and had become known in the province. Despite the growth in the number of contracts he received in the past, the *empreteiro* feels that he is still not making enough money to do quality work and maintain his office and staff. He blames this on the donors not accepting high budgets. As he stated, “Our weakness is that we do not have the power to enter an agreement with the donors in terms of the cost of the work. We are subjected to accepting their prices so we do not lose work and do not close down.”

This last statement demonstrates a conflict that exists between the private sector and donors or implementing agents in Niassa. The private sector feels that they have to accept low budgets and the donors or implementing agents feel that the private sector should not be given higher budgets because they are not producing quality work nor are they taking responsibility for poor quality work. According to the NGOs, this particular *empreteiro* is not making as much money as in the past not because of low budgets, but because he is being awarded less contracts because of poor-quality work, and often does not finish the job completely. For example, this *empreteiro* approached Estamos for work in 2001. Through the contract bidding Estamos decided to award this *empreteiro* a contract for two wells with a windlass and bucket. In an evaluation by Estamos in April 2002, it was discovered that the two wells this *empreteiro* constructed were completed in March but people were still not drinking water from the wells because he had not brought the windlass and bucket. In 2002, he had a difficult time winning contracts because he has the reputation of producing poor-quality work.

The emergence of the private sector in Niassa

The formal private sector emerged in about 1998 in Niassa. As stated earlier, the NWP outlined new roles - more involvement of the private sector and the government eventually withdrawing from direct implementation of water and sanitation projects. This policy created the climate in which the private sector could emerge in Niassa Province. One businessman put forward a proposal to WaterAid in 1997 to assist and create a formal sector of companies that could construct waterpoints and latrines (Focus group discussion with private sector *empreteiros*). In 1998, WaterAid, in agreement with DAS-Niassa, assisted five private sector businesses with construction equipment and a course on construction and business management (Interview, WaterAid Country Representative). In 1997, when WaterAid first agreed to help the private sector, only about five private sector companies existed. These were small companies comprising the proprietor working with family members who hired casual workers as they were needed during the construction period. Most of the private sector company owners gained their experience through working with NGOs during the emergency period or were employed as sub-contractors by EPAR. As such, these businessmen had experience in construction but no experience in formally running a business. Only one private sector company *empreteiro* has had experience in talking with banks about loans. However, this *empreteiro* stated that loans were difficult to procure because either the conditions were impossible to meet. For example loans had to be repaid within 90 days, often before an *empreteiro* had time to finish a job and receive payment, or, the bank asked for collateral which the private sector companies do not have.

The objective of creating and formalising the private sector in Niassa is debatable. According to the Director of EPAR and a technician from DAS-Niassa, the expansion of the private sector would increase the coverage of water and sanitation services in the province. “The government analysed the situation in the province and saw that EPAR alone did not have the capacity to do wells in all of the districts in Niassa.” (Interview, DAS-Niassa technician). However, the opinion of WaterAid differs. WaterAid’s vision for assisting in the creation of the private sector was a question about options. Prior to 1998, donors and government relied on EPAR to implement all water and sanitation projects. The emergence of private construction companies created more options in the water and sanitation sector with the hope of improving the quality of work in the Province as well as reducing the costs of water and sanitation service delivery (Interview, WaterAid Country Representative).

Since the creation and formalisation of the private sector, 15 formal enterprises have emerged in the water and sanitation sector. However, during the first few years, not enough work existed for all of these enterprises and many were dependent on WaterAid for work (Interview, WaterAid Country Representative). In 2001, Estamos started implementing water projects on a larger scale and other international NGOs also started implementing a small number of waterpoints as part of their larger development projects. The contracting process varies greatly depending on the government, donor conditions, and NGOs implementing projects directly.

Service contracts for the private sector

In the past, EPAR received service contracts directly because of its status as the only implementing agent in the water and sanitation sector in Niassa. Today, the situation has changed with some service contracts given directly and others going through a bidding process depending on the donor.

Direct award of contracts

As mentioned above, EPAR receives contracts directly from DAS-Niassa. The reasons for this are twofold. First, there is a sense that a rapid change to a competitive tendering process would have dire consequences for EPAR. As the Director of EPAR stated “If the Government releases us in this condition without equipment and transport, we will have trouble functioning as a company. We won’t be able to compete equally with companies with more capacity”.

Secondly, awarding direct contracts depends on the donor. For example, the Irish Embassy donates a great deal of money to DAS-Niassa every year for water projects and stipulates that DAS-Niassa must use EPAR for these contracts (Interview, representative of Irish Embassy).

However, contracts are not only directly awarded to EPAR but to other private sector business or informal providers as well. Other NGOs who directly implement projects often contract businesses or local workers directly without asking for bids or conferring with DAS-Niassa.

Awarding contracts directly has certain consequences for the private sector as well as for NGOs. *Empreteiros* would like to be included in contract bids for state funds that the government currently gives directly to EPAR without a tendering process. NGOs implementing projects directly may be overcharged for their work because they have not compared the prices of a waterpoint with other businesses nor consulted the government about normative prices. If two NGOs are using the same private sector *empreteiros* and a great disparity exists between the budgets for the projects, the private sector company often delays the implementation of the lower-cost contracts. (Interview, Director of Estamos). Given the short construction period, there are cases when private sector companies do not finish the work because they are more committed to the higher-value contracts. The result is that communities are left with either hastily done projects of low quality, or incomplete projects because the private sector did not finish the work before the rainy season.

Contract bidding

Although DAS-Niassa gives contracts directly to EPAR, the department does put up tenders for projects, especially if required by the particular donor. The donor and representatives from DAS-Niassa form a commission to look at bids for contracts. The first step is the distribution of a document describing the necessary elements of the project – ie type of waterpoint, the location of the construction and distance from the provincial capital.

Interested companies then submit their bids indicating the price of project execution and the time the company will need to complete the project. Decisions on who wins the tender are made jointly by DAS-Niassa and the donor sponsoring the project. In the past the Irish Embassy and WaterAid insisted on this process. Currently, only WaterAid and are insisting on an open tendering process (Interview, WaterAid Country Representative).

WaterAid and DAS-Niassa have had tenders put up for private contractors to bid, but this process was not competitive. Both wanted to give each contractor a chance to gain work and grow. The tender process also offered the opportunity to evaluate the private contractors and help the particular company in areas where it was performing badly (poor quality work, management problems, etc). However in 2001, DAS-Niassa suggested that the process should become more competitive. There were two reasons for this suggestion. Firstly, DAS-Niassa and WaterAid had learnt that the capacity and quality of private sector companies varied considerably. An un-competitive tendering process was, in some senses, protecting the weaker companies as they were guaranteed to get some work. A more competitive process would send a strong message to the private sector that the quality of work, and not just the budget, was an important consideration when awarding contracts (Interview, WaterAid Country Representative). Secondly, WaterAid did not have enough finance to sustain all private sector companies. A more competitive process would ensure that the better companies survived (as they would win more contracts) and the poorer ones would either improve the quality of their work or close down.

The contract bidding process has negative and positive consequences for communities. On the positive side, the competitive process hopefully ensures that those companies who complete good quality work will receive future projects, while those which abandon community projects or provide poor service will not (Interview, WaterAid Country Representative). On the negative side the process can pave the way for companies to win contracts by lowering budgets to unrealistic levels, making it impossible to

complete a waterpoint of good quality. Therefore, the community once again suffers from poor quality work (Interview, Director of Estamos).

Participation in the contract bidding process

Contract bidding processes do not appear to be widely practised. They seem to be limited to DAS-Niassa and its donor partners. In 2001, the District Director of Public Works and Housing in Maúa and Nipepe was involved in a contract bidding process, since this was mandated by government policy. But generally in the past, no other district involvement in tendering processes has been seen.

At the community level, community members have no participation in the contracting process, and prior to 2000, had very little input into the project process itself. WaterAid considered having a community member involved in the bidding process in 2002 but felt that "community participation would only be token at this time. Communities could only have some say over the private sector when they have control of their own budgets and when the private sector actually received its payments from the community instead of from a donor or government" (WaterAid Country Representative).

Contract conditions

The contracts themselves specify the type of waterpoint to be constructed, the time period for the work to be completed and the specifications for training operating and maintenance groups from the community, as well as the provision of a kit of handpump spare parts. Depending on the agency contracting out the work, whether an NGO or DAS-Niassa, the contracts specify the amount to be paid and the amount taken off for each week the project goes beyond the completion date. An addition that WaterAid included in 2001 was that if the contractors were unable to construct the waterpoint within ten metres of where the community wanted it located, DDOPH or DAS-Niassa must be consulted to explain the problem before the waterpoint was re-sited. This was done to prevent private sector companies from using as an excuse that the geo-hydrological study showed that a waterpoint could not be constructed where the community wanted it and that a source further away (and closer to a river) was better (Interview, WaterAid Country Representative). In the past, private companies gained greater profits at the community's expense because they could simply dig three to four metres next to a river rather than 10-12 metres near the village itself.

Project supervision

The supervision of the quality of construction work is the responsibility of DAS-Niassa. However, project supervision is a contentious issue. According to DAS-Niassa, inspections are an important part of the process and should occur four to five times for each project. According to a DAS-Niassa technician "The inspection of a well can be done on average between four to five times during the process. It can be during the research phase, the opening of the well phase, during the phase of introducing the drainpipe, the phase of cleaning and the assembly of the handpump. These are the principal phases" (Interview, DAS-Niassa Technician).

However, private companies maintain that actual inspections are not taking place. Moreover, private *empreteiros* would welcome greater technical supervision throughout the process, as it would improve the quality of their work (and lead to future contracts). As previously mentioned, this local private sector is nascent and weak, and on-going supervision could assist in improving its work and teach companies how to prevent the technical mistakes they are making. As one private sector *empreteiro* stated "For my part, I'm not afraid for one of the DAS-Niassa inspectors to appear and watch. He can, for example, say to the *empreteiro* that the water flow is too slow and is always constant. If the inspector sees that a greater depth is needed, this can be done. But if the inspector is gone for two weeks, the *empreteiro* may have doubts about what to do and will not continue with the work. Therefore project supervision needs to get better and we will see a way forward." Another private sector contractor stated "The state should supervise the *empreteiro's*

work but currently the process has its flaws. I remember I was in Maúa for four months before any technician arrived and it was only because he was with the co-ordinator of WaterAid that he came to see the work. But what happens when contracts are signed for instance with INDER/DAS-Niassa and a clause in the contract says DAS-Niassa needs to supervise the work, but they don't supervise? They only arrive when the pump is finished and they don't know how deep the well is. Then, after two months DAS-Niassa calls us and says the well is dry. Where were you when we built the well?"

The inspection and supervisory role of DAS-Niassa is indeed a crucial part in the project. This in itself is a problem, which is further compounded because the weakness and constraints apparent with project supervision are also being used by the private businesses as an excuse for poor work. These companies basically have to also take responsibility for poor work; if they are implementing such projects, they should have sufficient knowledge of installing a handpump properly.

However, according to the WaterAid Representative and the Director of Public Works and Housing in the Districts of Maúa and Nipepe, the reason for the weakness of DAS-Niassa inspections is because the state lacks sufficient funds to carry out such work (Interview, Director DDOPH, Maúa). Technically the state is required to finance project supervision, but these funds are insufficient for the task required. Moreover, DAS-Niassa faces a problem with NGOs because they either do not inform it of where their water projects are, or do not give DAS-Niassa enough time to request project supervision costs from the state (Interview, WaterAid Country Representative).

One suggested solution is that NGOs in the water sector could allocate funds to DAS-Niassa to carry out its role in supervising and inspecting projects. However, the situation is further complicated by a policy by the National Directorate of Water that NGOs or donors should not fund DAS-Niassa for this work as it is the state's responsibility (Interview, WaterAid Country Representative).

The supervision reports for the projects evaluated for this case study could not be located because the DAS technician said it would take a long time to find them. The private sector *empreteiros* stated, for the most part, that the supervision and inspection occurred at the end of the construction work (Focus group discussion, private sector).

VII. Evaluation of rural community water projects

The evaluation focused on eight water projects implemented by WaterAid/DAS-Niassa or by DAS-Niassa alone between 1995-2000. The projects implemented in 1995 and 1997 were implemented by EPAR, now considered part of the private sector. With the exception of the projects in the district of Maúa in 2000, all of the villages prioritised water as a need in meetings with government officials. Between two and three years later, a private sector company arrived to construct the designated waterpoints. The projects in Maúa followed the guidelines laid out in the Implementation Manual, where the community participated in the whole process, choosing the type of waterpoint and making a capital cost contribution. The cost of a handpump at that time was around US$630 not including labour, materials and travel. In 2002, the price of a handpump cost US$2575 not including labour, materials and travel (Interview, Chief of DAS-Niassa).

Life in the communities evaluated

A majority of communities in Niassa, specifically those eight villages evaluated, has the same type of livelihood. Most of the community members in these villages were born in these communities. During the civil war some community members were refugees in Malawi or fled to other villages they felt were safe. After the war, however, they returned to their original villages.

A majority of the families in these villages are very poor, with an extremely small amount of financial resources received through the selling of agricultural products, traditional alcohol, wood and craft work, such as baskets and mats. The commercialisation of agricultural products is weak in Niassa because of the small number of markets and lack of access to the markets that do exist. Therefore, communities such as Malica and Licole which have access to the main road toward the capital Lichinga may be able to sell to the market, but costs for transport may be beyond the reach of many. Hence, a major part of agricultural production is for subsistence purposes. Families produce maize (the main staple), beans, mapira, sweet potatoes and cassava.

The villages only have primary schools which end in the fifth grade which is then the end of education for most of the community members. The schools do not have waterpoints and water must be fetched at the same sources used by households.

Before the implementation of the waterpoints, women fetched water for their households from traditional wells and rivers. The traditional wells were located near rivers or swamps and the women would dig down about two metres in these areas and scoop water into their buckets. This water was often dirty from rain and wind contaminating the source. Women could usually fetch water from these sources within 30 minutes, but during the dry season, these traditional wells ran dry and it often took the women an hour or more to find and fetch water. Many women still return to these traditional sources because the handpumps are broken, have run dry, or are located at a greater distance from their homes.

In projects prior to 2000, all the communities assisted the construction team with food and lodging and in some projects assisted with the actual construction work. The *empreteiros* had the responsibility for constructing the waterpoint, training a group in operation and maintenance, and explaining to the community that they had responsibility for the pump and therefore needed to contribute to the operation and maintenance (O&M) costs. In projects after 2000 the communities made a two per cent capital cost contribution for the construction of waterpoints.

Our research showed that the level of training in operation and maintenance and community understanding of its responsibilities were low. In four of the eight villages, the community O&M teams stated that if the pump broke down they would ask the *empreteiro* to repair the handpump. The community members did remember the name of the *empreteiro*, but they did not know how to or where exactly to contact him. Despite some communities having access to spare parts, the O&M teams were not sufficiently trained to repair the handpumps.

In the past, it was usually important community members like the local chief or the *empreteiro* who chose the location of the waterpoint. In all the villages, community members asked that waterpoints be located within the villages. However, due to problems finding water or rocky terrain, the *empreteiros* ultimately located the waterpoints outside the villages near rivers or swamps. These are the same areas where villagers already collected water from unprotected sources. Placing waterpoints near swamps and rivers made the work much easier for the *empreteiros* because they were able to dig shallow wells, complete the work faster and save money. This then allowed them to move on to the next contract, leaving communities experiencing the negative consequences of haphazardly implemented projects.

Waterpoints located outside villages, in the end, did little to reduce the burden on women and children as they still had to walk to the river to fetch water from an improved water source. Other villagers simply did not use the new improved water sources but continued to fetch water at traditional unprotected wells if these were much closer. One example is the village of Chiawanjota, where two handpumps are located so far away that there is no easy access for the majority of villagers. One villager stated "The people who use the handpumps are satisfied and the water is good but has an odour during the rainy season. A majority of the people do not use the handpumps because it takes about two hours to fetch water from there." The handpumps actually serve only about 20 households – nowhere near the '500 households within 500 metres' stipulated in the NWP.

Another example is in the village of Malica. All of the handpumps are located outside the village. Five out of the eight handpumps constructed have been stolen because they are located in isolated spots and cannot be protected at night. People are still fetching water from these wells which are now just open holes in the ground, but the sources are unprotected and contaminated daily because each villager needs to collect the water with their own bucket attached to a wooden rod that is lowered into the well. Direct observation showed that the cleanliness of the buckets varied, and that it was likely that the dirtier buckets were contaminating the waterpoints. A water quality test of one these unprotected wells in April 2002 showed faecal contamination of 350 cfu/100ml. As a result of this research and a demand by the community, new protected wells with a windlass and bucket were constructed in January 2002. A water quality test in one of these protected wells on the same day showed a faecal contamination of four cfu/100ml, an enormous improvement.

The shallow depth of the handpumps is usually measured between six and seven metres, with some as shallow as three or four metres (villagers dig their own pit latrines deeper than this). Such shallow depths have consequences for the quality and quantity of the water. In some areas, like in the villages of Vatiwa, Luagal and Namanola, the handpumps run dry or have very little water for four or five months of the year. In terms of quality, the handpumps with a depth of only three or four metres often produce dirty water and an odour during the rainy season, such as in the villages of Chiwanjota, Luagala, and Vatiwa.

One village, however, Malemia, has a successful project. The three handpumps are functioning and located in the village, creating easy access. The handpumps also have sufficient depths of between 13 and 17 metres so that the pumps never run dry. The O&M group also received a kit of spare parts to repair the handpumps if needed. Community members feel that the impact of these handpumps has been very positive. The improved services have reduced illnesses like diarrhoea, and because women do not have to spend a great deal of time fetching water, they have more time to complete other work. This project seems to have the components needed for success, including good location, sufficient well depth and available spare parts.

The evaluation however suggests that the majority of people in these projects do not have better access to potable water. Projects are not unsustainable in the long run, which means that poor communities are increasingly forced to return to unprotected waterpoints. Respondents throughout the evaluation indicated that there have been no improvements in health, that water is not more easily accessible, and that the systems installed are not sustainable. The evaluation also shows that there is little or no difference between the projects implemented by EPAR or by the private sector. Thus, Niassa does not even have a choice between public or private provision – one type is no better than the other. Clearly the government feels that the private sector is the route to go as they are trying to privatise the EPAR system in all of the provinces. The Appendix provides a tabulated summary of the evaluation of the waterpoints.

VIII. Conclusion

This case study has attempted to show that the implementation of a policy mechanism like PSP in water and sanitation in a context like Niassa is highly unlikely to achieve the development impacts intended. It appears that the concept "PSP" itself is erroneous; it assumes that there *is* a private sector wishing to participate, and that public sector delivery is the key obstacle to private involvement. Equally erroneous is the idea that the private sector can just emerge from market mechanisms that are assumed to be existent. The market itself, and the relationships that typically exist within it, need to be constructed first. Niassa is an example of an extremely impoverished area where the cash-poor local economy and damaged social institutions currently could not support and sustain the emergence of a viable private sector.

The private sector has an important role to play. In Niassa, state institutions are either too weak or have purposely abandoned all forms of participation in the market, to meet enormous development challenges. Communities here are too poor and barely recovering from the dislocation and impact of a debilitating war. With the state unwilling and communities impoverished, a local private sector needs to emerge to play a key role in development. The more fundamental problem of private enterprise development needs to be addressed first and it is a prerequisite to the process of PSP. Problems of capacity-building are thus serious and urgent. The reality of ignoring this need has been seen in Niassa, namely unsatisfactory private sector activity resulting in bad quality work that clearly has a negative impact on communities.

In place of PSP this case study recommends the long and less-travelled route of a three-pronged programme of private enterprise development, local government capacity-building and community mobilisation and organisation. The results of this case study provide sufficient evidence in support of this policy recommendation.

This three-pronged policy is indeed much more difficult to implement and manage, and entails much more time and on-site engagement. Hence the question, could there be an easier, simpler, faster way? WaterAid-Mozambique and its partners' current implementation of a programme to actually test this policy response may provide some answers.

On 9 April 2002, a meeting was held at the offices of the Department of Public Works in Lichinga between seven proprietors/directors of local construction companies and an enterprise development and business management adviser. The services of the adviser, a VSO volunteer from the United Kingdom, were offered by WaterAid to the *empreteiros*. Among others, the adviser was to assess their work, evaluate their business planning, look at the quality of their bids and comment on overall project administration capacities. The adviser would then recommend and agree with the *empreteiros* a two-year training programme for capacity-building. At the end of the meeting, both *empreteiros* and adviser agreed on steps to deal with various problems and issues that the *empreteiros* themselves identified. One such step was to hold a meeting with donors, facilitated by the adviser, where *empreteiros* would voice the various issues they have with donor-funded projects. A similar meeting would be held with DAS, this time to raise issues on government supervision and monitoring of projects.

Developing DAS monitoring and supervision capacity has been another key component of the policy response being developed for Niassa. DAS capacity, hampered mainly by funding constraints, has been extremely limited. At various times, WaterAid and its partners have formally complained about the quality of monitoring reports. Certain projects were reported as being in order, when inspection would reveal obvious problems like cracks in the wells or murky water that is unsafe for drinking. As a result, DAS has removed incompetent technicians from their supervisory and regulatory

roles. Thus, DAS's work is also improving along with greater adherence to technical standards.

WaterAid and its partners have constantly engaged with DAS and private companies to create layers of relationships that will lead to improved capacity. For example, to improve the work of the private sector, the NGOs have initiated ongoing monitoring and evaluation of both the work of the private sector and DAS. This includes increasing the competitiveness of the bidding process for contracts. Companies that did poor quality work in the past were not given new contracts in 2001. The NGOs also challenge the companies to be accountable directly for their work. Companies that have done sub-standard work have been asked to re-do the work at their own expense, starting from the beginning if necessary. Some private companies have also been fined when work is not completed on time.

Finally, the third prong is to ensure serious and careful software building - or community organisation in the villages. For instance, Estamos has been contracted to do community preparation work in villages where waterpoints are to be constructed. Estamos is also doing other work in these communities, notably AIDS education and prevention.

Serious thought is also being given towards developing a strategy on how to give extremely impoverished and cash-poor communities more control over the construction of the waterpoint. WaterAid and Estamos are contemplating a standard procedure that informs communities that they (the community) have a certain budget to build a waterpoint, that they should choose the technology to be used and most importantly, that they should choose the private sector company and authorise the payment to this company. Through this strategy, the private sector is held more accountable to the communities instead of to the donor or the NGO providing the actual funds. The community becomes the customer to which the private sector should be accountable, not the donors.

Signs of improvement in the policy environment are emerging. For instance, clear steps are being taken to improve communication, acceptance and implementation of the NWP. One of these steps was the change in the status of the Implementation Manual from draft to policy in December 2001, which now means it is an actual field guide used in the structuring of contracts and in guiding supervision work. This change is significant because it creates the conditions for communities to become more involved in all phases of the project which has not been the case in the past. Communities can express their demand for water, choose the appropriate technology and the location of waterpoints, clarify responsibilities for operation and maintenance, and contribute to the capital cost, all of which has the advantage of increasing the community's sense of ownership of the waterpoint.

This three-pronged policy is still evolving. There are a number of issues yet to be resolved and areas yet to be improved. For instance, there are specific problems relating to the timing of hydrogeological surveys and the contracting cycle (so that key steps are made to coincide better with the dry and wet seasons), and also on project supervision visits by DAS. These problems were brought out in the meeting of the *empreteiros*. This study suggests that the prospects for sustainable service delivery will be enhanced if all key participants in the province continue to evaluate, modify, and improve their work with the goal of greater community access and sustainable delivery in mind. In addition the private sector must evaluate and improve the quality of its work, take responsibility for, and rectify poor work and become more efficient.

At the government level several changes also need to occur. Now that the Implementation Manual has been made policy, it needs to be monitored to make sure that all stakeholders in the water and sanitation sector are working under the same policies and are implementing projects under the same conditions. Confusion is apparent when some communities are expected to pay a capital cost contribution and others are not. Greater coordination is needed between DAS-Niassa and the donor and NGO communities. It is important to ensure that all role players in the province are applying consistent policies derived from the country's water sector policy. If this occurs, the government can then complete its regulating and monitoring role by having the knowledge of where projects are

being implemented. It can ensure that a correct contract bidding process is taking place. And it can promote best practices based on a sound knowledge of what is actually happening in the province.

The need for potable water is considerable in the resource-poor province of Niassa. Rolling back the State, in a situation like Niassa where markets and social institutions are at best tenuous, appears to have compounded rather than resolved the complex problems of water and sanitation provision. It appears that the only viable policy response is to implement a combination of private enterprise development, state building and civil society building. Finally, communities need to be given even more control over their water projects. This can only happen if they are given control over their own budgets. The private sector will only become accountable to communities when these communities have the right and ability to stop payment for poor quality construction. Currently, communities have little recourse when a job is done badly by a private sector company. They often do not have the means of contacting the company and do not have transport, money or political power to come to Lichinga to resolve the problem. Many communities sit and wait and hope that either government will come and resolve the problem or that another organisation will come and renovate their waterpoints. Unfortunately, at this point in time many communities are still waiting and are increasingly disempowered.

Photo by WaterAid/Jon Spaull

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Appendix: Evaluation of WaterAid-financed water projects in Niassa Province, Mozambique

											Impact	
Name of village	**How comm. applied for water**	**Year of const.**	**# of pumps**	**Location of Pumps**	**Who made decision on location?**	**Well Depth**	**Community**	**Private sector**	**O&M system**	**Quality of water and quantity**	**Positive**	**Negative**
Chiwanjota 2,007 inhabitants	Meeting with LG structures	1998	2	Outside village	Private Sector	4 metres 6 metres	Labour Food Lodging Chose O&M team	Contact traditional structures Construction Train O&M team Informed community that pump was its responsibility	O&M team = 2 men and 2 women O&M team lacks capacity to repair pump If broken, will call private sector	At times has odour Good quantity – well never runs dry	Better quality water for families who use the pumps	Long distances Majority of community do not have access to pumps Hard to monitor because of isolated location
Namanola 1,724 inhabitants	Meeting with LG structures	1999	3	Outside village	Private Sector	3 metres 6 metres 7 metres	Labour Food Lodging	Contact traditional structures Construction Train O&M team Informed community that pump was its responsibility Left spare parts kit	O&M team = 1 woman and 1 man If severely broken, will call private sector	Pump with 3 metres gives dirty water during rainy season Poor supply of water during dry season	Better quality water than traditional wells	Long distances Illnesses like diarrhoea continue Part of the population does not have access to pumps

Evaluation of WaterAid-Financed Water Projects in Niassa Province, Mozambique												
											Impact	
Name of Village	**How Comm. Applied for Water**	**Year of Const.**	**# of Pumps**	**Location of Pumps**	**Who Made Decision on Location?**	**Well Depth**	**Community**	**Private Sector**	**O&M System**	**Quality of Water and Quantity**	**Positive**	**Negative**
Luagala 441 inhabitants	Meeting with LG structures	1999	1	Outside village	Private sector with traditional structure	6 metres	Labour Food Lodging	Traditional structures Construction Train O&M team	O&M team = 2 men and 1 woman If broken, they do not know what they will do. Can wait for the private sector to arrange a plan	Dirty water sometimes Well is dry between Aug-Dec.	No positive impact	If pump breaks, they have no plan The water is the same as a traditional well Illnesses continue Long distance
Malica 11,902 inhabitants	Meeting with LG structures	1996	5	Outside village	Private Sector	7 metres 8 metres	Labour Food Lodging Help with construction equipment	Contact traditional structures Construction Train O&M team Informed community that pump was its responsibility	O&M team =2 men for each pump, 1 man responsible for whole village	Clean water Unprotected pumps were stolen Poor water supply Sept-Dec.	Better quality of water	Long distances equal to traditional wells Long queues Pumps stolen because of isolated location.

Evaluation of WaterAid-Financed Water Projects in Niassa Province, Mozambique												
											Impact	
Name of Village	**How Comm. Applied for Water**	**Year of Const.**	**# of Pumps**	**Location of Pumps**	**Who Made Decision on Location?**	**Well Depth**	**Community**	**Private Sector**	**O&M System**	**Quality of Water and Quantity**	**Positive**	**Negative**
Malemia 3,667 habitants	Asked EPAR directly	1995	3	Inside the village	Traditional structure	13 metres 17 metres	Labour Food Lodging	Contact Traditional Structures Construction Train O&M team Informed community that pump was their responsibility Left spare parts kit	O&M Team = 2 men and 2 women	Good quality-clean 1 well has poor water supply Sept.-Jan.	Pumps are close to houses Women have time for other work Reduction in illnesses	Contribution for O&M caused some conflicts
Licole 3,966 inhabitants	Meeting with LG Structures	1998	3 Only 1 function.	2 inside village 1 outside	Private sector with traditional structure	7 metres 12 metres	Labour Food Lodging	Contact traditional structures Construction Train O&M team Informed community that pump was its responsibility	O&M Team = 2 men and 2 women	Good quality-clean Low water supply Oct-Dec	Short distance Reduction in illnesses	Long queues because 2 pumps are broken

Evaluation of WaterAid-Financed Water Projects in Niassa Province, Mozambique												
							Roles and Responsibilities				**Impact**	
Name of Village	**How Comm. Applied for Water**	**Year of Const.**	**# of Pumps**	**Location of Pumps**	**Who Made Decision on Location?**	**Well Depth**	**Community**	Private Sector	**O&M System**	**Quality of Water and Quantity**	**Positive**	**Negative**
Township 2 Maúa Town 1,264 inhabitants	Meeting with LG structures	2000	1	Inside the village	Private sector with traditional structure and Director of DDOPH	7 metres	Capital cost contribution in money Contribution for O&M	Contact Traditional Structures and DDOPH Construction Train O&M team Informed community that pump was their responsibility	O&M team = 2 men and 1 woman	Good quality-clean Pump has low water supply	Clean water reduction in illnesses Short distance	Low water supply Long queues Spend a long time fetching water Returned to traditional wells
Vatiwa 584 inhabitants	Meeting with PEC team contracted by WaterAid	2000	2 not functional	Inside the village	Traditional structure	3 metres 7 metres	Capital cost contribution in agricultural products	Contact Traditional Structures and DDOPH Construction Train O&M team Informed community that pump was its responsibility	O&M Team = 2 men and 2 women O&M team lacks capacity to repair pump	Good quality from 7 metre pump but dirty water from 3 metre pump Both wells ran dry after 6 months of use	When functions a short distance to fetch water	Returned to traditional wells at long distances Water-related illnesses continue