

July 2006

# Reforming public utilities to meet the Water and Sanitation MDG

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Papers prepared for a seminar on 'Reforming public utilities to meet the water and sanitation Millennium Development Goal' at the UK's Department for International Development, 4 July 2006, organised by the World Development Movement and WaterAid.



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# 1. Reforming public utilities to meet the Water and Sanitation MDG

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## Introduction

By Belinda Calaguas, WaterAid, and Vicky Cann, World Development Movement

A paper prepared for a seminar on 'Reforming public utilities to meet the water and sanitation Millennium Development Goal' at the UK's Department for International Development, 4 July 2006, organised by the World Development Movement and WaterAid.



### 1. Introduction

*“If we are to achieve the Millennium Development Goals in water, we need to bring clean water to an extra 150,000 people, every day, every year for the next 10 years. That is roughly the task of supplying water to a city the size of Birmingham every week, every month, every year for the next decade ... over 300,000 people will need decent sanitation every day, every year for the next 10 years to achieve the MDGs.”*

**Hilary Benn, Secretary of State, February 2006**

It is common knowledge that there is a global water crisis. Millennium Development Goal seven aims to reduce by half the proportion of people without sustainable access to safe drinking water and adequate sanitation by 2015, although a number of the other MDGs (education, child mortality, gender) also require significant progress in the area of water and sanitation too.

But current progress gives little cause for optimism, particularly in sub-Saharan Africa and South Asia, where approximately half the people in need of a water connection live. With some 90 per cent of water and sanitation network services currently in public hands, it is clear that, in many parts of the world, the public sector is not delivering effectively.

There have been a wide variety of estimates of the investment needed to achieve this goal. These range from US\$51 billion to US\$102 billion for water supply, and from US\$24 billion to US\$42 billion for sanitation, but the actual costs will depend on decisions taken in each country on governance, technology and other factors.

There is almost certainly consensus on the need to tackle the global water crisis in order to achieve the MDGs. There is almost certainly consensus that the public sector has not succeeded in improving water and sanitation in many parts of the world. There is almost certainly consensus on the need for major investments in water and sanitation if the situation is to be changed. And there is almost certainly consensus on the need for donor governments to give water and sanitation a high priority.

However, the debate still rages over how to tackle the global water crisis. In particular, what role for the public sector and what role for the private sector? Who can and should provide the investment? And what is the appropriate role for donor governments?

Although there has been much focus on the private sector over the past decade, recent evidence suggests that it will be simply impossible to achieve the MDGs without major public investment alongside the improvement and expansion of existing public providers, working hand-in-hand with existing domestic providers. The question is, who has the experience to do this and how can it be utilised?

This briefing is aimed at demonstrating that there is indeed wide experience of well-functioning public water and sanitation providers and that there are practical ways in which this experience can be tapped, disseminated and scaled-up.

### 2. A new vision for public utilities

*“There is nothing that the private sector can do that the public sector cannot. The public sector can do everything that the private sector can do and more.”*

**Antonio Miranda, member of the UN Secretary General’s Panel on Water and Sanitation**

Clearly, there are public utilities which are struggling around the world and serving a smaller and smaller section of the population. A clichéd view holds them to be inefficient, bureaucratic, unresponsive to the needs and demands of users; possibly corrupt and with poor cost recovery. While on the one hand there are certainly many that are subject to some or even all of these failings, on the other hand, it must be acknowledged that there is nothing intrinsic to the public sector that means that utilities have to be like this.

The problem for donor governments is that if the cliché is accepted and perpetuated, there is little room for manoeuvre when it comes to donor policy. There is no escaping the fact that massive investment in the public sector is needed, but this investment is hard to justify and allocate if the perception exists that the public sector cannot work in the developing world.

The challenge is therefore to change this negative image of the public sector into a new positive vision of ‘public-ness’, based on effective operations in practice. Such a vision would see public utilities providing a good quality service to all users, helping deliver on governments’ social goals. Utilities would be demand-led and accountable to users and government. Staff would take pride in their work and in delivering a good service to users. Crucially, there would be transparency and, in some cases, perhaps even community participation in the decision-making of the utility (eg, in the area of tariff setting, cost recovery and investment priorities).

This is not a utopian vision but one which is becoming a practical reality amongst a growing number of water and sanitation providers in the global south, alongside strong public providers in the Netherlands, Sweden, North American and other parts of the global north. What the case studies that follow demonstrate is that poor-performing public utilities can be turned around, from within, to better meet the needs of their users and to make a significant contribution towards tackling the global water crisis.

These cases, and indeed others from around the world featured in the publication “Reclaiming Public Water”, should all be viewed as ‘work in progress’. They may not have solved all the challenges that they face, but they are taking positive steps in a number of key areas and the ongoing nature of the reform process means that further improvements are likely. Even the World Bank, which has criticised its own ‘irrational exuberance’ for private sector participation in the developing world’s water services, has recently announced renewed interest in working with public utilities that are willing to reform and remain public.

These cases are diverse in their structures and processes, and while they can be found across the world – in urban, peri-urban, or rural areas - in each country, city or

region the specific model varies, reflecting local circumstances and cultures. These utilities may deal exclusively with water or sanitation, or they may tackle both.

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### 3. The vision in practice

*“Most of the successful utilities have improved water and sanitation via a vision of a public service that serves broader societal objectives, including democracy, environmental sustainability and human security.”*

#### Reclaiming Public Water

It is clear that there is no one-size-fits-all solution to the reform of public utilities, but we do believe that there are some common themes which can be drawn out for successful examples.

A shared feature of these reformed public water utilities is the development of a new public service ethos. ‘Public-ness’ should be re-defined as something that goes far beyond simply public ownership and management by public employees. It is about both users and staff taking pride in a utility which delivers a good service to all users.

It seems that the utilities must know their customers well in order to be truly demanded and to better meet their needs. This can happen through better communication, transparency and accountability to users. However, in many cases, serving public needs is enabled and enhanced by direct citizen participation and decision-making by communities. At the same time, government must not shirk its responsibility of making explicit the performance around social goals that they expect from the utilities.

The critical issue is creating new connections, especially for poor communities and leveraging the funding or capacity into the utility to facilitate that. Whilst some utilities do require external funding from donors of one form or another, getting better value for money out of existing resources by driving up efficiency is also key. In this way, existing customers have had their faith in the utility boosted and the new-found capacity can be re-allocated towards connecting new communities.

Tariff collection can also provide extra resources which can be re-invested back into the utility to fund new infrastructure, but getting the tariffs right is also clearly a complex and potentially politically fraught area. Being accountable, transparent and participative can ensure that communities agree, understand and respect changes to tariff levels.

Four key themes which re-occur in these case studies are efficiency, accountability, transparency and community participation.

#### Efficiency

- In **Tamil Nadu**, the utility aims to get the annual budget to stretch 10 per cent further each year, significantly boosting the numbers of people connected to water.
- In **Uganda**, the utility has boosted service coverage from 48 per cent in 1998 to 68 per cent in 2005. In these seven years, the utility has gone from

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producing a loss to tripling its turnover and producing a profit which is used to finance network expansion and maintenance programmes.

### Accountability

- The utility workers in **Tamil Nadu** have shifted from thinking of themselves as purely engineers concerned with infrastructure, pipes and taps, to thinking about the people using the system - their needs and demands. In this way, the utility has become accountable to users and far more 'demand-led'.
- In **Uganda**, customer complaint procedures have been transformed and managers are evaluated on the customer feedback. Customer satisfaction surveys are used to gauge user observations and the surveyors may visit customers to get detailed feedback which is then passed back to the utility's managers for action.

### Transparency

- The utility in **Tamil Nadu** is committed to sharing all necessary information about new water schemes as well as about how departments are run, how much they cost, and who is in charge.
- In **Uganda**, the publication of a magazine called the *Water Herald* provides a platform for utility managers to describe innovations, identify constraints and receive credit for good performance. It captures "dos" and "don'ts" and details relative performance against key targets, plus any incentive awards earned.

### Community participation

- By using the traditional **Tamil** concept of a *koodam*, the utility has succeeded in involving a far wider range of people than before. The *koodam* is a decision-making space, which treats everyone as equal. As a result, the participation of women and dalits (or 'untouchables') has greatly increased within the utility.
- In **Uganda**, the utility has monitored what actually works on the ground in delivering services to the poorer households and it has been working alongside civil society organisations to develop better strategies of provision.

The examples featured here are just some of the many examples of successful public reform models of which we are aware.

In **Botswana**, the Water Utilities Corporation has been able to meet daily water requirements in all of its operational areas, including both urban and peri-urban areas, and has carried out a 10-year Master Plan. It argues that it has "contributed immensely to national economic growth and social upliftment". WUC substantially increased the proportion of the population with access to safe water over the period from 1970 and 1998. The population served increased from 30,000 to 330,000 while the average daily consumption rose – from five to 84 mega-litres. The WUC operates on commercial principles and sets tariffs which allow a 'fair' return on its services and assets employed. The corporation maintains a policy of cross-subsidy to ensure that domestic consumers at the lowest band have access to water supplies. The corporation is headed by a Chief Executive who is accountable to a Board of Directors which consists of six to eight members. The board members are appointed by the Minister of Mineral Resources and Water Affairs.

In **Cambodia**, the public utility in Phnom Penh was rated as "an efficiently managed water utility that has shown dramatic improvements in performance in the last 5

years” in a 2004 survey by the Asian Development Bank. Consumer satisfaction is high with water available 24 hours a day in the served areas. Financial management is also strong with a fee collection rate of 99.7 per cent.

In **Brazil**, a survey of consultants came up with over 80 recommendations of good practice in water and sanitation provision around the country. These include **Porto Alegre** where the communities have started to assume part of the responsibility for the quality of services: users have promised the utility that they will help to prevent clandestine water connections, conserve the supply network, control consumption and combat the loss of water.

In **Bangladesh**, the Dhaka Water & Sewerage Authority and Chittagong Water & Sewerage Authority have directly worked in partnership with local NGOs to ensure the expansion of utility connections to the poorest slum areas in the cities, at a cost affordable to the households in these areas.

Furthermore, there are alternative models to the traditional state-run utility, which are also serving to get water to poor communities. These include:

**Workers’ co-operatives** - in **Santa Cruz, Bolivia**, a co-operative was set up to operate water supply and sewerage customers; customers now elect the utility’s decision-makers. By 1996, water supply had been extended to 272,000 inhabitants and sewerage to 46,700. After achieving these objectives, it had funds left over that were also used to construct additional sewerage works. In **Binangonan, Philippines**, the water co-operative has run a commercially viable water supply service to its growing customer base, with profits re-invested in improving the system.

**Village-level distribution schemes** – in **Savelugu, Ghana** a system has been established where water is bought in bulk from the state utility (GWCL) and then the community manages the distribution, maintenance, tariff-setting and collection. Access to potable water has been increased to 74 per cent (the national average for rural areas is 36 per cent). In **Olavanna, India** the local community has initiated 60 drinking water schemes, over half supported by local government, that are providing reliable water to over half the local population, in contrast to only about 30 per cent in the 1990s. Around the world, from urban slum communities to rural villages, community managed water supply schemes operate technologically appropriate and affordable services to provide to the poor and non-poor.

There is enormous variety in the good practice within the public and community sector and this short paper cannot do justice to all the cases.

### 4. Scaling up good practice

*“The [Annan Water and Sanitation] Board recommends a new mechanism, Water Operator Partnerships, a structured programme of cooperation, based on the concept of mutual support among water operators, on a not-for-profit basis; even small managerial change could bring major improvement.”*

**United Nations Secretary General’s Advisory Board on Water and Sanitation, March 2006**

One of the fundamental challenges is how can we scale-up this existing good practice. Of course, there is no one-size-fits-all solution to the global water crisis. But there is a role for sharing experiences, expertise and applying the lessons learnt to utilities with a desire to transform.

How can a struggling public utility in one part of the world access information and expertise about other more successful utilities in the area of leakage reduction, tariff-setting, community participation, staff restructuring?

**Public-public partnerships** (PUPs) provide a key way of doing this. They are not about new facilities, or big enterprises; PUPs are exclusively about capacity building, about solving on-the-ground problems through exchange of knowledge. PUPs are, in one word, co-operation. (They can be contrasted with public-private partnerships or PPPs, largely launched as the ‘great idea’ to solve the problem of investment infrastructure worldwide, with very patchy results. PPPs are, in one word, businesses).

PUPs can take many forms, but perhaps the model with the most potential are partnerships between water utilities, which match up well-performing public utilities with those that are performing less well, to share expertise on a not-for-profit, cost-covering basis in order to improve the standard of the lesser performing utility. The not-for-profit element is crucial so that money is not diverted from the utility to pay external fees.

PUPs between utilities in different cities, countries and continents also already exist. Water companies with a long history of world class public water delivery from **Sweden** and **the Netherlands** have over the last two-to-three decades been involved in numerous long-term projects to support weaker utilities both in southern countries and in central and eastern Europe. In **Indonesia**, the public water company PDAM Tirtanadi has supported other smaller utilities in Northern Sumatra through an ‘operational co-operation contract’, a domestic PUP.

It is clear that public water utilities in both rich and poor countries have great expertise and skills, but poor country utilities will often lack the resources to enable them to share their expertise more widely. Donor support could turn this situation around and enable struggling water utilities to learn from other more successful utilities, as organisations like ASSEMAE (the Brazilian municipal water operators’ association) and Uganda’s National Water & Sewerage Corporation External Services Unit. An emphasis on south-south capacity-building and sharing of skills and experiences could really help to speed up progress on issues, like extending networks to peri-urban or slum networks, where the expertise of utility staff in the



south who are working on these issues on a daily basis, can be tapped into and disseminated.

PUPs could be supported in a variety of different ways, including on a one-off basis by matching utilities together on a case by case basis and / or ultimately via a mechanism such as a Public-Public Infrastructure Advisory Facility. Excitingly, at their meeting at the World Water Forum in Mexico in March 2006, the United Nations Secretary General's Advisory Board on Water and Sanitation recommended a new mechanism to spear-head not-for-profit partnerships between water operators, although it is not yet clear how this proposal will be progressed.

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### 5. Our challenge to donors

*“So, my challenge is, I'm not interested in what you are against but I am interested in what you're for and how you can help meet the challenge we face ... what do you propose to do?”*

**Hilary Benn, February 2006**

We believe that the case studies and the discussion around PUPs, outlined above, offer an exciting vision for the future of water supply in developing countries. We also think that they provide real opportunities for donor political and financial support which could make a genuine difference on the ground.

DFID says that 95 per cent of its water sector funding goes into public and community water provision; but both WDM and WaterAid have looked into this matter and cannot find evidence of strong, consistent action from DFID to support the kinds of processes that can help public utilities reform successfully.

Overall, WaterAid and the World Development Movement believe that donors like DFID could do more to support the successful reform of public utilities. This could include:

- Recognising how international financial institutions sometimes promote private sector reform options to the exclusion of all other possibilities, and refusing to fund these projects which stem from these conditions.
- Playing an active, visible role on the international stage to promote viable public reform solutions and government leadership over the global water crisis.
- Giving strong political support to public utilities in speeches, research and policy analyses, and devoting significant DFID resources to understanding this agenda and disseminating good models to DFID country offices and governments
- Ensuring technical assistance projects and processes always include public sector reform models on the 'menu of options' being explored.
- Supporting public-public partnerships or PUPs - arrangements between public utilities, which match up well-performing public utilities with those needing assistance, to share expertise on a not-for-profit basis in order to build capacity within the weaker utility. PUPs could be supported in different ways including: one-off grants to pay for one utility to support another or a

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mechanism such as a Public-Public Infrastructure Advisory Facility which would fund such arrangements.

- Investing in in-country water dialogues and capacity-building to enable public discourse over the direction of water utility reform and building civil society capacity to engage in these processes, eg. through a water governance fund.
- Ensuring that all water sector reform processes supported by UK aid money have community support, prioritise the needs of the poor, and involve full transparency and public participation.

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## 2. Turning around struggling state-owned enterprises in developing countries

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### The case of NWSC-Uganda

By Silver Mugisha and Sanford V. Berg<sup>1</sup>

A paper prepared for a seminar on 'Reforming public utilities to meet the water and sanitation Millennium Development Goal' at the UK's Department for International Development, 4 July 2006, organised by the World Development Movement and WaterAid.



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<sup>1</sup> Manager, Research, Monitoring and Evaluation, NWSC; Distinguished Service Professor of Economics and Director of Water Studies, PURC, University of Florida. The authors are very grateful to Belinda Calaguas, Head of Policy at WaterAid and Vicky Cann, Campaigns Policy Officer at World Development Movement for their input into this paper.

### Abstract

*The conventional thinking has, hitherto, been that state-owned enterprises cannot perform well and should be restructured with a view of privatizing them or at least putting them under private sector management. In this paper we outline how NWSC, a state-owned water corporation in Uganda has internally restructured itself and improved performance significantly from 1998-2006. We discuss the key managerial approaches and success factors. We also outline the role of private sector and observe that 'international operators' do not come to manage problems but to earn returns on their investments. We also note that the Donors still need to play an important role in restructuring of state-owned enterprises but that such collaboration must be executed in a meaningful manner, encouraging a "do it yourself policy" for the process owners. African proverbs are interspersed throughout the article to underscore key themes.*

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### 1. Introduction

*"A person, who never travels, believes his mother's cooking is the best in the world."*  
(Kiganda, Africa, Proverb)

Lessons from others provide perspective and enable decision-makers to identify strategies that might be more effective than those currently in use. Given the importance of water infrastructure investments and operations, improving performance of the sector is a high priority in emerging markets. An earlier study details the historical background and performance improvement initiatives that have been implemented within National Water and Sewerage Corporation (NWSC) since 1998 (Mugisha et al, 2004a). This article builds on that background, describing what NWSC has done up to 2006.

NWSC is a public corporation wholly owned by the government of Uganda, having been established in 1972 by decree No. 34 (*during the time of President Idi Amin Dada*). The corporation's legal position was strengthened by NWSC Statute No. 7 of 1995, which was later incorporated into the NWSC Act of 2000. Under the new legal framework, the powers and structure of NWSC were revised to enable the Corporation operate on a commercial and financially viable basis.<sup>1</sup> Accordingly, the Corporation is currently mandated to manage water and sewerage services in 19 urban areas under its jurisdiction.

The NWSC is structured in such a way that there is a Head Office, which acts as an asset holding arm. Then there are service providers (operators) in the 19 urban areas (large towns) that carry out day to day operations management. The Head Office is responsible for large-scale investments, asset management, operations support and performance monitoring. Since 1998, there has been a progressive increase in

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<sup>1</sup> Before the new legislation, NWSC was operating under a Decree. The powers of the corporation were constrained through cumbersome reporting requirements to the Minister (Government). The NWSC was not allowed to freely outsource operations management. There were a lot of overlaps in role definition between Government and the Corporation. The new Act was aimed at streamlining these inconsistencies.

managerial autonomy to the service providers through structured internal incentive contracts.

In 1998 NWSC was not a healthy organisation. The World Bank noted in its report that: “Over the last 10 years, the GOU in partnership with the World Bank and other Donors have made significant investments (over US\$ 100 million) in the urban water and sewerage sector. These investments have contributed immensely in rehabilitating the existing infrastructure under the NWSC management.

Unfortunately, these investments have not been matched with the necessary efficient commercial and financial management capacity that can ensure the delivery of sustainable services in the medium to long-term”.<sup>1</sup> This conclusion, based on a thorough analysis found that the corporation had sound infrastructure, abundant water resources, and enabling legislative framework.

However, the corporation had a large and inefficient labour force with conflicting and overlapping roles, high unaccounted for water (more than 50 per cent), poor customer service, low collection efficiency (about 71 per cent), substantial accounts receivables (Days Receivable Ratio of about 420 days) and corruption within the work force, especially field staff. There was a running monthly deficit of about Ushs 348 million (US\$300,000) despite a high average tariff of Ush 1100/m<sup>3</sup> (US\$ 1.00/m<sup>3</sup>). In other words NWSC was in near state of bankruptcy. Apart from the weaknesses, the corporation had to contend with a number of threats, including debt servicing obligations coming due and a VAT law that compelled NWSC to pay taxes on any increases in bills. On the other hand, Government was willing to give support to pro-active managers and the economy was relatively stable. In this respect, government was willing to freeze the debt (US\$100 million) for some time to give chance to the corporation to recover, if serious managerial efforts were initiated. Overall, improving operational and financial performance was essential to prevent further deterioration.

This paper outlines the corrective actions undertaken by NWSC management and staff to turn around performance,<sup>2</sup> the sequencing of those steps and the outcomes from this reform programme. The paper demonstrates to managers of poor-performing utilities the benefits of new initiatives. Such initiatives are not painless, nor can they guarantee success. However, citizens and political leaders are finding the status quo unacceptable: organisational transformation based on feasible commercial plans and team initiatives can improve performance.

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## 2. Initiatives Undertaken to Turn Around Performance

*“The hunter in pursuit of an elephant does not stop to throw stones at birds.”*  
(Ugandan proverb)

Staying focused is crucial for reform champions. Sometimes an impending crisis becomes a catalyst for change. In an effort to address managerial inefficiencies in NWSC, the government appointed a new Board of Directors. The new Board

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<sup>1</sup> World Bank Aid Memoiré Document (1998), Project Evaluation Report to NWSC Management

<sup>2</sup> More details on the reform measures can be found in Mugisha et al, 2004a, b and 2005.

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comprised of representatives from local governments, business community, professional bodies, environment, and Ministries of Finance, Water, Health and Small Scale Industries. The composition and structure of the Board enabled it to exercise its governance functions properly and was able to shield the corporation from political interference and patronage.

The new Board, in turn appointed a new Managing Director, Dr William Muhairwe,<sup>1</sup> who was given the mandate to re-think strategies for performance improvement (Matta and Murphy, 2001). The appointment led to an emphasis on commercial viability, utilizing “customer care” as an organising theme. The Board and new management also pursued the approach of having performance contracts with Government where roles and obligations were clearly spelled out.

Fortunately for the new team, management and staff were aware that the ship would “sink” if nothing was done to remedy the situation. Dr. Muhairwe decided to adopt the approach of working with everybody, despite origin and colour. In the end all the change management programmes that are outlined hereafter were mainly implemented by incumbent staff, who fortunately had acquired sufficient technical skills in the past. It was just the change in organisational behaviour and work culture that had to be worked on.

At the tactical level, the new Board and management came up with a series of programmes:

- **100-Days programme**, (Feb-May, 1999) was a high-impact programme that focused on reversing operational and financial inefficiencies. This was carried out through aggressive revenue collection strategies and cost-cutting measures. A number of cost cutting measures implemented during this programme include rationalization of the medical scheme and reduction of travel costs (establishment costs).
- **Service and Revenue Enhancement Programme**, (August, 1999-August, 2000) aimed at restoring customer confidence in the ability of NWSC to deliver services. Under this programme customer service centres and front desks were put in place, customer surveys to capture customer wants conducted and amnesty for illegal water use instituted.
- **Area and Service Performance Contracts** (2000-2003), focusing on making service providers reach commercial sustainability: managers had the authority to take important decisions and were accountable for outcomes.

The Corporation had to improve operating margins by reducing bureaucracy, increasing staff productivity, and encouraging worker involvement. The NWSC management also collaborated with the union to reduce excess staff by half from 1,800 in 1999 to 900 in 2001, without any industrial unrest. These programmes were designed to improve morale, especially confidence of managers to dramatically alter

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<sup>1</sup> Dr. William T. Muhairwe is a Management Specialist trained in Economic and Business Management and has been managing public companies for the last 15 years in Uganda and abroad. Formerly, Dr Muhairwe worked for the Uganda Investment Authority as its Deputy and eventually Acting Executive Director for 3 years and was responsible for attracting inward private investments to Uganda. He was also, at one time, the MD of the East African Steel Corporation, a Joint Venture Company between the government of Uganda and a private company (The Madhvani Group).

the expectations of operating staff. Organisational change was accomplished through two other initiatives:

- **Stretch-Out Programme** (2002-2003), emphasizing teamwork through work involvement and reduction of boss-element. There was increased simplicity, which is currently demonstrated by the “T-shirt” wear for everybody on every Friday to show that all staff are the same and are working towards a common objective.
- **One-Minute Management Programme** (2003), creating procedures for promoting individual performance accountability, a problem identified when teams were the focus of organisational development. Individual staff accountability was introduced by asking each staff to come up with a vision, a mission and goals describing his/her planned role in achieving corporate objectives. The achievement of goals was then a subject of periodic appraisals and incentive awards.

At present, NWSC is implementing *Internally-Delegated Area Management Contracts* (IDAMCs) aimed at giving more autonomy to Area Managers (Partners),<sup>1</sup> defining roles and responsibilities more clearly, and creating better incentive plans that allocate more operating risks to Partners. By passing more risks to Partners, the Head Office is able to encourage more innovation and work commitment. In this regard, the Partners are paid for taking on these risks through increased incentives. To rationalize the monitoring and evaluation activity, a *Checkers* system has been introduced to strengthen the IDAMC implementation process, emphasizing both processes and outputs.

Of course, no organisation can be successful in isolation: collaborations allow managers to learn about the strengths and weaknesses of peer companies. To facilitate such exchanges, NWSC carries out regional networking through a recently established “External Services” Unit. Through this Unit, the Corporation has established a mechanism for sharing experiences and rendering consultancy services to outside companies, on a cost-covering basis.

The organisation’s experiences in Private Sector Participation (PSP) and with other commercialization activities have provided NWSC professional staff with experience; the internal evaluation process serves as a mechanism for internal learning. When shared with peers, these initiatives provide lessons for others. Recent activities provide examples of cases that help other organisations better understand how to create value. These initiatives, which have to a large extent been financed by internally generated funds, include:

- Reducing accounts receivable and uncollectibles: Kampala Revenue Improvement Project (KRIP): 1998 - 2001, Under Gauff J.B.G
- Improving financial performance further through enhanced monitoring of managerial performance--Kampala Water Supply and Sewerage Area Management Contract: 2002 - 2004: ONDEO Services.
- Evaluating the impacts of rate design--Tariff Review (since 2001-todate

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<sup>1</sup> Under the IDAMCs, the Head Office enters into an internal non-legalistic contractual arrangement with Partners in Areas. The Partners are a team of senior managers in the Areas/Water utilities, who are bound together by a Partnership Deed detailing how business shall be conducted during the period of the internal contract. The Partners are headed by a Lead Partner, who is the accounting officer of the water utility/Area.

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- Reduced connection/reconnection fees
- Tariff Indexation against Inflation
- Expanding customer base--New Connection Policy, which was introduced in 2004, was aimed at giving free access for pipe lengths up to 50m (with a nominal fee of about US\$ 30).
- Modernizing information technologies--Computerization of systems (billing, financial, procurement, payroll, voice over IP, lotus notes, customer complaints tracking, call centre etc). Major computerization initiatives were implemented in 2003 and these were funded by the German Development Co-operation through the GTZ.
- Improving customer services--Introduction of account-balance checking system with local telephone (2003) and direct -debit (DD) system with local banks (2006). The administrative costs of these initiatives are minimal and are being met through internally generated funds.

These programs illustrate the range of managerial and engineering programs that can promote sustainable financial conditions and credibility with consumers and government agencies.

One factor supporting the favourable outcome to date is the performance contract between NWSC and the Government of Uganda represented by Ministry of Water and Ministry of Finance. The targets and reporting procedures have institutionalized accountability, without introducing a separate agency to monitor the firm. At some point, current arrangements will come under review. However, the arrangements have been beneficial to date, in contrast to patterns observed elsewhere. It may be that the second generation of performance contracts have benefited from the experiences of others.

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### 3. Main Performance Considerations

*“Between imitation and envy, imitation is better.”*  
(Ekonda proverb, Democratic Republic of Congo)

The main ingredients to NWSC performance improvement programmes have two orientations: Internal and External. Internally, NWSC developed a programme design outlining clear roles and responsibilities; bottom-up approaches to strengthen programme ownership and support and SMART (Specific, Measurable, Achievable, Realistic and Timely) targets that were later strengthened through use of “stretched” (tougher) targets. In carrying out all these changes due consideration had to be put on professional change management to cope with possible resistance to change. Dr. Muhiarwe introduced the philosophy that “the only constant factor is change”. The tough stance, coupled with participation, transparency and tangible results from short-term oriented programmes brought everybody on the ‘*performance bandwagon*’.

The other major incentive or drive to change was the threat of privatization from government and the Donors. The managers and staff were aware that there were many potential substitutes outside there who would take over if NWSC improvements were not forthcoming.



NWSC also introduced competition for managerial responsibility through business plan preparation and expressions of interest from each of the water utilities under NWSC.<sup>1</sup> Although incumbent managers had information advantages, the process forced incumbents to review their current processes and personnel. Their “competitors” gained experience in preparing plans and budgets. Furthermore, there were some switches that alerted all managers that NWSC expected their professionals to deliver innovative programmes. In addition, NWSC instituted strong incentive systems and equitable gain-sharing plans to minimize employee skirting tendencies (Mugisha et al 2005). As the organisation’s leaders gained a handle on past trends and baselines across the water utilities, they were able to develop stronger tailor-made monitoring and evaluation (M&E) arrangements and benchmarking activities.

Externally, the corporation enjoyed significant Government support, which resulted into debt freeze and non-interference with the corporation’s management. Being somewhat insulated from political pressures meant that managers could focus on commercial issues in the early years of reform. Instead of fending off powerful political leaders who sought jobs for relatives or network expansion for their constituencies, managers could devote their scarce resources to more productive activities. At the same time, donor support in the form of financial and technical assistance added to the capabilities of the organisation.

Customer and public confidence in NWSC performance improvement initiatives turned out to be another external factor that motivated staff to innovate further. NWSC’s turn-around was good news, and captured media headlines. Pride based on genuine accomplishments gave confidence to mid-level managers that they were on the right track.

### **3.1 Accomplishments and challenges (1998-2005)**

*“A forest cannot be cut with a broken axe.”*

(Bantandu proverb)

The reform initiatives from 1998 – 2006 have had positive impacts. Notably, service coverage has increased from 48 per cent to 70 per cent. The water network coverage has increased by 52 per cent (1300 km of water mains extensions; 1060 km from internally generated funds and 140 km from external funding). In addition, new connections increased from 3,317 to 23,312 per year. As a result, total connections are up from 50,826 to 148,312 (or 70 per cent of target population served, from a population base of 1.7 Million people as at 2006). Unaccounted for water has fallen from 51 per cent to 29 per cent (Kampala is 34 per cent while other Areas are now at 15 per cent).

Metering efficiency (proportion of metered accounts to total accounts) has increased from 65 per cent to 99.6 per cent, while connection efficiency (proportion of active connections to total connections) has improved from 63 per cent to 93.9 per cent. On the financial side, annual turnover has improved from about US\$11 million to US\$34 million. Because of this performance, operating profit after depreciation has improved from losses of US\$0.4 million to a surplus of US\$3.0 million. Positive cash flows have

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<sup>1</sup> More details on this approach are found in Mugisha et al (2005).

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financed network expansion and enabled maintenance programs to be scheduled and implemented.

Despite the accomplishments, NWSC still faces challenges in the area of sewerage where the coverage is about 10 per cent. The sewerage investment costs are inherently very high and the Corporation is currently finding it hard to devote resources to such investments, given the payoffs to other uses of those funds. Therefore, achieving the Millennium Development Goals remains a distant goal.

NWSC also faces the challenge of serving the poor communities where cost recovery is questionable. The infrastructure in such communities is very poorly planned and extending services to such areas involves significant difficulties. Nevertheless, the organisation continues to explore cost-effective ways to carry out this task.

The original approach to service for the poor in NWSC was through use of water kiosks/communal taps. However, through experience, it has been found out that the water vendors at these points sell water to the users at a price 4-8 times that offered by NWSC. This '*middle-man*' effect defeats the whole objective for which the pro-poor tariff was set. It affects the willingness and ability to pay and restricts consumption thereby obstructing health enhancement initiatives. In order to address this service problem, NWSC has come up with a *new connection policy*, which aims to subsidize access and charge consumption at affordable rates. The policy also incorporates a network intensification activity in the poor communities in order to reduce connections lengths to individual households. Consequently, each household in the poor community areas is encouraged to connect a yard tap and pay directly to NWSC. This approach is working very well, so far.

### 3.2 Performance monitoring approaches

*"If you do not listen to good advice, you will be embarrassed in public."*

Oshiwambo (Namibia)

Performance monitoring is a key mechanism in the reform process since it allows top management to review past trends, identify current baselines, establish targets, and determine whether those targets are met. Without underlying data, decision-makers cannot make "informed" decisions: staff performance cannot be evaluated, nor can incentives be introduced in a systematic manner. Although process benchmarking is widely used in developed countries (Alegre, et. al. 2000); the costs of such comparisons (and detailed record-keeping requirements) can be prohibitive. Water utilities in developing and transition economies have focused on output (metrics) performance indicators: labour productivity, uncollectibles, or other core ratios. Regulators and performance monitors often lack information on inputs and production processes. The production chain may not be well documented or monitors may lack the technical skills to evaluate activities.

The rationale for focusing on output has been the perceived oversight costs and possible interference associated with process evaluations. Smith (2002) observes that monitoring inputs or processes rather than outputs or outcomes tends to reduce the firm's incentives to search for and apply lower cost ways of achieving the result. This concern ought to be balanced against potential benefits in developing countries where the service providers are still in a critical stage of institutional development. International operators, often brought in to transfer "best practice," are initially ignorant of the local network— technologies and operating conditions. Those who

should be “in the know”, the local operators, can be mired in an organisational culture that does not promote excellence, are indifferent to waste, and lack strong incentives for high performance. The two potential operators, therefore, have limitations that can lead to sub-standard performance. The “arms-length” regulator/monitor is left with inadequate data for evaluating progress or understanding opportunities for improvement.

Within NWSC, managers have reconsidered the implications of arms length regulation—concluding that there are gains from more active partnering between service provider and the performance monitor. The overriding factor is not the “interference” and “cost” of such an interface, but the opportunity to provide improved services to the citizens at reasonable costs.

### 3.3 Monitoring technical processes and inputs

*“If you want someone more knowledgeable than yourself to identify a bird, you do not first remove the feathers.”*

(African Proverb)

Withholding information reduces the likelihood that problems will be correctly identified. In NWSC, the performance monitor<sup>1</sup> has established a monthly magazine called the *Water Herald*. This magazine provides a benchmarking platform for utility managers to describe their innovations, identify binding constraints and receive credit for achieving targets. The magazine captures the “dos” and “don’ts” experienced in the previous month, outlining how peers can copy and adapt good practices and avoid pitfalls. The magazine also displays a monthly performance scorecard detailing the relative performances on key criteria and how much incentive awards were earned by staff & water utility management. The formal communication complements informal meetings and other information exchanges, enabling utility managers to access a menu of performance improvement strategies. NWSC specialists at the “centre” also share ideas learned from individuals and with the managers of local utilities, who decide for themselves whether the information about “best practice” is applicable to their situations. Ultimately, what matters is performance since they (and their staff) are rewarded for achieving targets. Those incentives involve bonuses of up to 50 per cent of salaries.<sup>2</sup>

The performance monitor established a “checkers” system in May 2005 that emphasizes processes and technologies. Under this system, the monitor and the local service provider agree on a certain set of performance criteria related to systems and activities that need to be performed. These targets involve managers engaging in a range of activities clustered under general, engineering, finance, management services and customer care. Such monitoring ensures that the service provider works professionally, avoids asset stripping, and promotes continuous improvements in operations. Compliance is checked on un-announced basis and consistent failure may mean that managers of water utilities losing their jobs and/or responsibilities because of breach of internal contracting obligations.

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<sup>1</sup> It should be recalled that NWSC is made up of the Head Office (Performance Monitor) and the Water utilities (service providers). The Head Office also carries out large investments planning and implementation and professional assets management.

<sup>2</sup> NWSC salary structured is determined by the Board of Directors and is generally competitive among the Ugandan companies (public and private). Coupled with incentive payments, this partly explains why staff are fairly motivated and committed to continuous improvements.

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The NWSC Checkers System has been a significant driver of the corporation's internal reform initiatives. The system has incorporated activities that promote competition among the water utilities for successful compliance with the internal reform objectives. For example, NWSC benchmarks cleanliness of premises, orderliness of offices, corporate image, and systems operation and maintenance. In addition, the corporate culture is affected by attitudinal changes induced by a mix of partnering and monitoring. Water operators have improved their efficiency to earn incentives: decision-makers see concrete benefits from improving input usage and strengthening production processes.

In Kampala for example the checkers system improved the new connections implementation processes, reduced the lead time for installation and improved the technical quality of the work done in the field. In addition, compliance has greatly improved in meeting financial regulations, following procurement laws, and adopting other managerial procedures. In terms of technical capabilities, the operators have improved compliance for preventive maintenance programmes, operational procedures and safety. Last but not least, staff discipline has improved, even as individuals strengthened their inter-personal skills so that teams could perform more effectively.

Thus, the checkers system has contributed to meeting organisational objectives. The Partners (Local managers of the water utilities) are happier because they know what they are expected to put in place. Time, perhaps an individual's more scarce resource, is put to better use. Once the system was put in place and its credibility established, checkers spent little time carrying out the checking activities. They do not waste the Partners operational time, as was the case before there was a conscious effort to strengthen accountability and improve managerial incentives. The follow-up on identified issues is handled in a more consistent and effective manner, so issues are not 'swept under the carpet'. Many managers at Head Office receive copies of the checkers findings, helping to increase follow-up accountability.

However, the checking system has not been without challenges. Excessive paperwork becomes a danger when reports are available to so many individuals: when a local manager is responsible to "everyone" he or she might effectively be responsible to "no one". This pattern has been avoided through creating robust cost containment safeguards, eg, *imprest system* with strict accountability facets and other replenishment conditionalities, resulting in greater value for money. In addition, the system requires extremely dedicated individual checkers who are objective and cannot be captured by the Partners. Review of the checkers implementation process indicates that there are some checkers who score the Partners close to maximum points when the actual situation pertaining on the ground has many gaps. The follow-up on identified issues also needs strengthening to ensure continuous performance improvements. Looking ahead, such follow-ups require more careful institutionalization of procedures and the development of better skill sets for the checkers.

### 3.4 Monitoring customer protection processes

*“A family is like a forest, when you are outside it is dense, when you are inside you see that each tree has its place.”*

(Akan, Ghana)

Getting inside an organisation or customers' minds enables analysts to gain fresh perspectives on issues. Regulating/monitoring for customer protection is one of most challenging tasks within the regulator-regulated interface. Protecting the consumer from abuse is the rationale for intervention, based on the monopoly characteristics of a typical water and sanitation (watsan) business. Water and sanitation are basic prerequisites of human well-being and crucial ingredients of sustainable economic development. As a result, because of the technical difficulties involved in introducing meaningful *in-market* competition, watsan services have remained largely monopolistic. NWSC has utilized a number of approaches to track customer perceptions/complaints; subsequent incentives are directed at helping managers achieve 'customer delight' over services.

There are two major approaches used in NWSC to capture customer complaints and compliments. The first process involves capturing formal customer complaints. These relate to the package of services observed by customers, related to service quality, product quality, or other features of the product. Complaints reflect reductions in customer's willingness to pay. To promote prompt corrections, customers are encouraged by respective utility managers to put in writing any of their concerns or observations about service gaps. In NWSC most reported gaps relate to erroneous billings, estimated bills, no water, illegal connections, unfriendly staff and service delays. No system is perfect. Therefore, the efficiency and effectiveness of NWSC utility managers is judged from the response quality and time taken to resolve reported cases.

The local manager is faced with a number of challenges. For example, there is a tendency to compartmentalize decision centres in the customer complaints handling cycle. Compartmentalization erodes managerial accountability—each group can point to another as being responsible for delays. Ultimately, the customer suffers: service delayed is service denied. Dealing with this problem has been the main focus of NWSC monitors/checkers who have insisted on creating and institutionalizing a comprehensive customer complaints tracking system, from the date and time of reporting up to the resolution stage. One process “owner” (usually the unit manager) is held accountable and is asked to take full responsibility of the entire tracking cycle. In addition to process oriented monitoring, the unit manager is checked against the response time taken and the quality of interactions with customers. A complaint, which is reported to have been resolved, can be cross-checked by ringing the customer concerned, following a random selection approach, to verify the response time and quality.

In the same way, complaints can also be captured through telephone communication between the customer/public and the utility staff. NWSC has recently modernised this activity through a call centre facility that enables quick phone-receipt of complaints by dedicated staff and easy transmittal to appropriate action centres. The feedback on actions taken is managed through the same facility, where strict managerial enforcement procedures have been adopted. Throughout the organisation, managers are evaluated based on their prompt and timely customer feedback. The challenge in this activity is how to ensure timely and satisfying responses to customer concerns.

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In water utilities undergoing reform, like NWSC, the potential for slow responses and delays during workload peaks require strong oversight capabilities (for monitoring performance) and incentive/penalty mechanisms to ensure improvements over time.

The second mechanism for dealing with service quality is routine customer satisfaction surveys. The survey covers a number of service attributes. These include accuracy of bills, bill delivery effectiveness, quality and reliability of water supply, customer handling quality, and perceived managerial effort to improve services. The survey instrument is a short questionnaire meant to be completed in about 3-5 minutes in order to obtain a high response rate. The questionnaire is given by designated survey assistants to randomly selected visiting customers and analysed on bi-monthly basis. This approach reflects on-going benchmarking activity to document (and encourage) customer orientation in the different NWSC operating entities. The results of the surveys are analyzed and communicated to the entities by the monitors/checkers. At the same time, the monitors obtain information on the strategies the local utilities have taken to address gaps identified in the past.

The challenge to the monitor/checker is how to ensure that the suggested improvement strategies are effectively put in place (or that substitute policies are developed and implemented). The checker takes an output orientation when evaluating performance, through follow-up surveys assessing improvement in perceptions regarding service-offerings. The output orientation minimises the potential micro-management syndrome, which in turn gives operating entities the opportunity to implement practical innovations and technologies in a flexible manner. The monitor follows a partnering approach, advising on possible routes to ensure customer satisfaction and (later on) customer *delight*. The operating entity is encouraged to implement high-impact innovations of its choice, sometimes taken from a benchmarking menu but also developed through thinking “out of the box”.

The methodology in the above questionnaire approach includes an open-ended question, allowing the survey assistant to ask the visiting customers if they have any other complaints or compliments outside the scope of the questionnaire. This process provides a variety of customer observations; these are sent directly to the principal monitor, with copies to the chief executive officer (CEO) and other top NWSC managers.

The principal monitor then reviews these customer responses and observations and asks the responsible process/unit manager to address the issues and give feedback on actions taken. The challenge with this open-ended approach is that a significant number of issues can be raised in a very short time. Therefore, it is very important that the monitor adopts a flexible and partnering approach, viewing the complaints or suggestions as opportunities to address customer concerns; the customer comments are not used to punish the operating entity. No water system is immune to customer complaints. So what is important is to manage the emerging complaints and act quickly. The operator must be evaluated on prompt remedies and an overall reduction of complaints.

Because of this protracted approach to customer relations management, the customer perceptions about NWSC services have improved. The annual average proportion of customers satisfied with NWSC’s service quality has improved from 70-75 per cent in 2000 to 85-90 per cent in 2006. The main service quality aspects, which are routinely surveyed, include pressure at the taps, quality of water, and

accuracy of bills, reliability and customer handling by interfacing staff. Inadequacies/shortfalls are routinely identified and used as weaknesses to be addressed in subsequent performance improvement efforts.

### 3.5 Putting emphasis on what works: The right mindset matters

*“Do not throw away the oars before the boat reaches the shore.”*

(Mpongue Proverb)

The successful implementation of the performance enhancement initiatives across NWSC’s operating units suggests that the conventional wisdom regarding non-performance by public companies is incorrect. The NWSC experience clearly shows the benefits of focusing on what works – there is no single textbook solution to the myriad problems facing water utilities, especially in low income countries. Most of these problems are caused by the local managers, poor organisational cultures, citizen non-payments, and political intrusiveness. Thus, citizens in emerging countries are the sources of problems, and ultimately, the change-agents who can address those problems.

In some cases, the person who is the source of the problem needs to be removed from his or her position of responsibility. However, the person should be given the opportunity to change—to become part of the solution. NWSC leaders believe that one who causes the problem and lives with it is best placed to give information about it and even provide input about how to solve it! It is essential that the internal governance system provide the right incentives and a good framework to enable such people to diagnose the situation and come up with solutions. Developing sound incentives requires several steps: strong leadership articulates the right vision for the company, guides staff in problem analysis, and motivates them to come up with strategies to address gaps. It has been established that this ought to be a continuous process. The principle *“never be satisfied with the status quo”* works well for any business, including water supply—where the challenges are clear.

Conventional thinking reflects the view that managerial practices under public management settings are fundamentally flawed, reflecting frustration with poor performance of public companies. Sometimes that poor performance is attributed to the non-economic objectives given to public enterprise (such as job security, employment, or regional development), so standard financial performance measures may be inappropriate. The situation has been most problematic in “basic needs” infrastructure utilities where governments say that they do not want citizens to lack access to clean water or to suffer the health impacts of contaminated water. The general record suggests that nations often become trapped in what Savedoff and Spiller (1999) label a “low level equilibrium” involving low prices, low quality, slow network expansion, operating inefficiencies, and corruption. The situation is “stable” in a sense—as managers pretend to manage, their utilities pretend to deliver services, and customers pretend to pay.

When the water utilities lack cash flows, those responsible for public funding recognize that using limited Treasury resources to finance inefficiencies is not sensible, so promised funding disappear: the situation remains bleak. This dilemma has often led to what could be called ‘desperate solutions’: privatise such companies. However, an independent consultant for NWSC remarked, “governments should never expect to privatise their problems to international companies and think it will work” (Richards, 2003).

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Indeed, the private sector participation experience at NWSC suggests that ‘international operators’ do not come to manage problems but to earn returns on their investments. They exit and leave the country if the combination of their skills and the institutional environment lead to low cash flows. Those cash flows may be low because of internal problems (their lack of needed skills and misunderstanding of local conditions) or external circumstances (their reasonable expectations regarding institutional changes were unfulfilled). This fact partly explains why NWSC could not continue contracting arrangements with Gauff at one time and Ondeo at another.

International operators do not have a monopoly on approaches to improving performance. From NWSC’s experience, excellent performance can be “home-grown”, but such an outcome requires a set of conditions. “*Do it yourself*” works if the implementing team has strong leadership, the right tools (legal framework), appropriate skills, and a clear set of (shared) objectives. Nevertheless, one wonders why have so few water utilities been reformed and transformed? Current managers have knowledge and skills, but they often lack the incentives to make the extra effort and make some difficult decisions. For many utilities, local managers, are the starting points for improvements in performance.

In the case of NWSC, Dr. Muhairwe’s insistence on self-actuated internal reforms paid off in this regard. Initially, some stakeholders thought that NWSC problems needed *imported* management. The Management and Board insisted that they had the tools and vision that more than matched capabilities of outsiders. Of course, weak performance would have been evidence that the reform team was incapable in turning the organisation around. That meant establishing baselines, identifying past trends, and setting realistic targets. No longer were numbers proprietary (or, as has been the case for many public enterprises, “unavailable”: transparency and accountability guided the process). Data reflected reality, not the wishful thinking of managers or the hopes of politicians. The results supported the team’s confidence and gained stakeholder support.

In some cases, particular stakeholders (eg, consultants, reform managers, technical advisors etc) over-estimate institutional problems (or underestimate the capabilities of state-owned enterprises). Such groups must be handled carefully, since their actual intentions may not be consistent with public statements (or with local values or aspirations). Some of them are representatives of stakeholders (such as national donor agencies) of national investment opportunities for the firms they champion.

Other stakeholders represent international banks, which support the policy “flavour of the month”. While both groups can provide capital through a variety of arrangements, they can prematurely damage initiatives that the company is planning and/or implementing. “Conditionality” becomes another word for “policy being dictated by those who are unfamiliar with issues” on (and under) the ground. Communicating with such groups and convincing their representatives that the local team can succeed requires a substantial investment of time. That investment is necessary: in some cases, the dialogue leads to better plans; in others, the local team is able to persuade these important stakeholders that the highest payoff will come through local talent, insulated from volatile political forces. As NWSC entered the process, managers realized that they needed to identify their roadmap, accept constructive advice, respect differences of opinion, and ensure that company values and objectives were at the centre of everything. International consultants have a role in



the process, but the ultimate decisions cannot be delegated to professionals who lack a deep understanding of national institutional constraints and unique local opportunities.

### 3.6 Matching performance improvement initiatives to prevailing conditions

*“The new moon cannot come until the other has gone.”*

(Bahunde or Hunde Proverb, Democratic Republic of Congo)

Most utility companies in developing countries are characterised by inadequate performance resulting in poor technical and financial operating efficiencies. The cycle of poor performance has often resulted in inadequate cash generation by these companies, which in turn affects payment of staff salaries, basic infrastructure maintenance, and network expansion. Consequently, employees, both line workers and managers, suffer from morale problems. Without a sense of team spirit and clear managerial objectives (and incentives for reaching those targets), the system becomes dysfunctional. In addition, utility managers lack knowledge regarding how to address performance inadequacies that result in poor financial operating efficiencies and low team development levels. The figure below outlines a practical performance improvement path, based on the NWSC-Ugandan experience, when a water company is in the following performance situation:

- The company is potentially able to attain financial viability but is instead operating far below the production possibility frontier
- The company employees (managers and low-cadre) have different perspectives and aspirations regarding company performance objectives
- The company employees have significant shirking tendencies

**Figure 1. Performance incentive contracts development path**

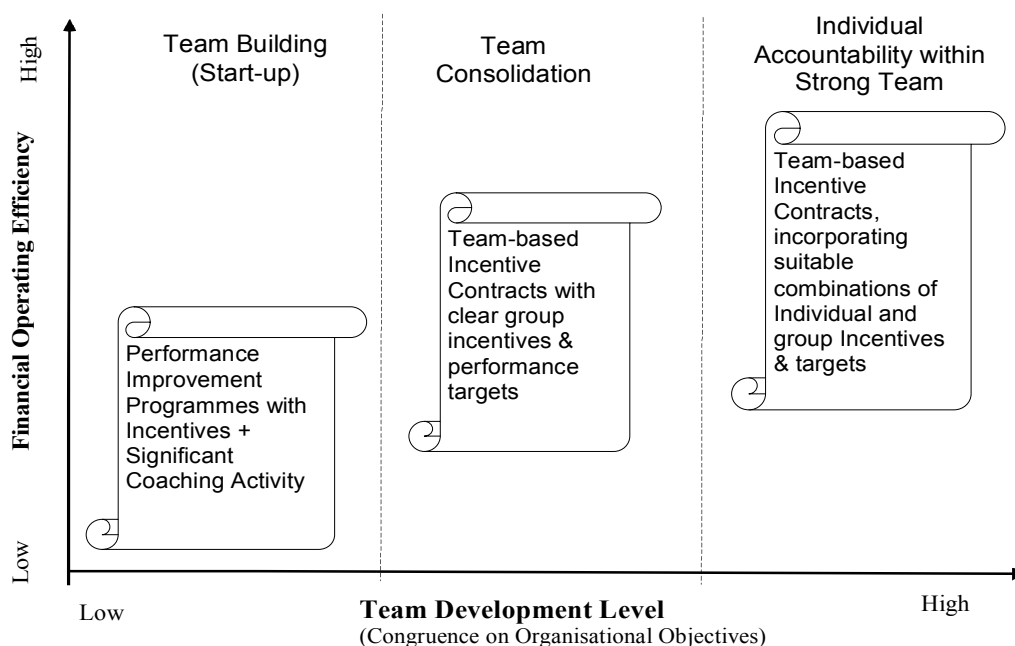


Figure 1 shows that, based on NWSC-Uganda experience, utility companies with low financial operating efficiencies and low team development levels need to focus on performance initiatives incorporating tailor made incentive plans and coaching.

## Reforming public utilities to meet the water and sanitation MDG

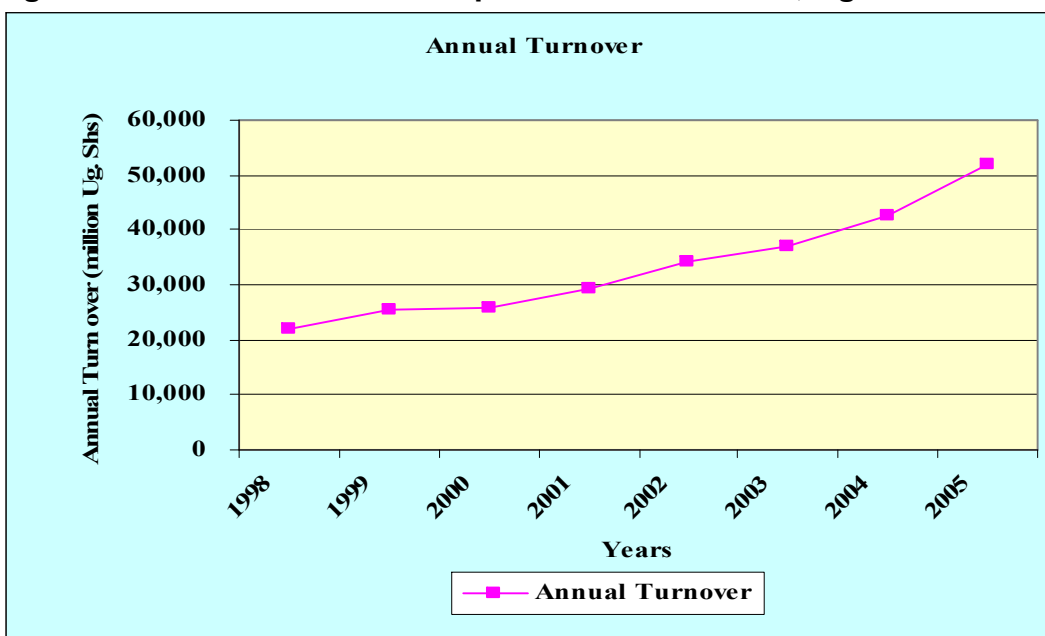
Managerial coaching is important at this stage, as a start-up activity, to build strong performance teams and to re-align organisational and individual objectives. At this stage, the set performance targets must incorporate high-impact financial improvement indicators e.g. cash collections. Once the financial operating efficiency of the company improves, the accruing efficiency gains will help to alleviate cash-flow problems. On the other hand, the combination of managerial coaching and associated performance gains tends to promote teamwork among managers. Once this consolidation has been achieved, the company can move into advanced stage of performance road-mapping through internal incentive contracting between the centre (Principal) and the operating arm (Agent). As discussed in Mugisha et al (2005), such internal contracting arrangements must incorporate clear group targets and incentive plans.

Once the teams have been consolidated and financial operating efficiency improved, the company can move into more complex internal contracting arrangements incorporating both individual and group commitments. The individual contracting element strengthens individual performance accountability within a team and ensures equity in handling work-loads. The approach is important in re-aligning the agent's behaviour to the principal's interests.

According to Demski and Sappington (1991), once proper gain sharing plans have been incorporated in such contracting arrangements, they help to mitigate counter-productive activities where employee shirking cannot be documented conclusively to any third party and so is not verifiable.

Figures 2 and 3 shows how, by following the above performance improvement path, NWSC-Uganda and Dar es Salaam Water and Sewerage Corporation (DAWASCO) of Tanzania have improved their financial operating performance.

**Figure 2. Revenue collection improvement for NWSC, Uganda**



In particular, the annual turnover in NWSC-Uganda, has improved by about two and half times, over a period of seven years.

**Figure 3: Revenue collection improvement for DAWASCO, Tanzania**

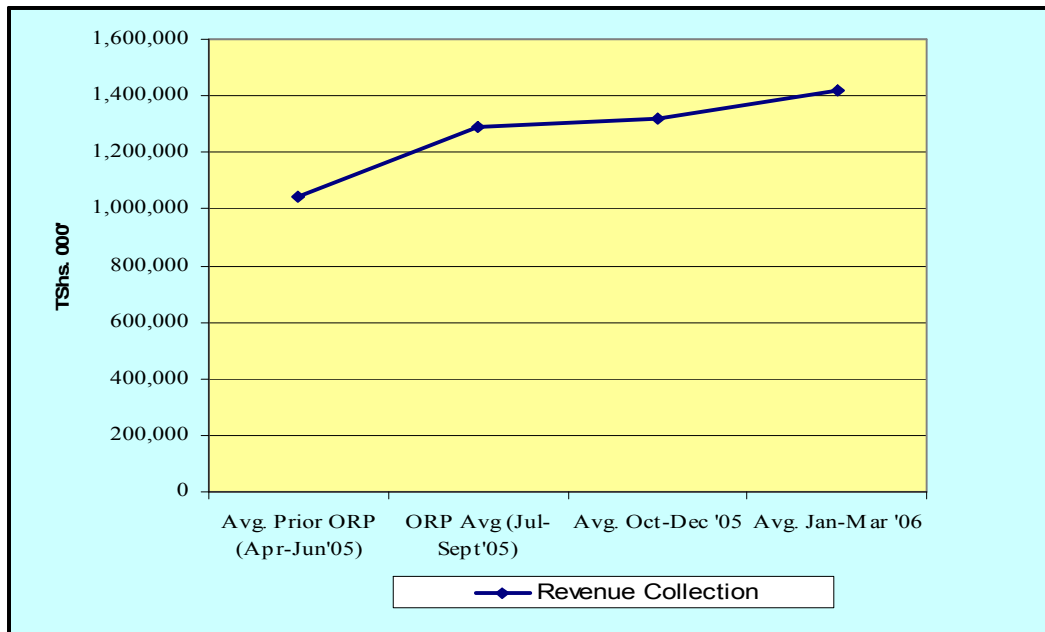


Figure 3 shows revenue collection trends for DAWASCO, after the termination of the City Water Company lease contract in May 2005. The NWSC-Uganda, through its External Services Unit, worked with the successor management, following the improvement path in figure 1, to design a 3-month Operation Rescue Plan (ORP). Thereafter, a “Win-Win” Programme was designed, again with assistance from NWSC Uganda. These two series of programmes have led to significant improvement in the financial performance of DAWASCO.

### 3.7 Managing Organisational Rigidities and Inflexibilities

*“If the rhythm of the drum beat changes, the dance step must adapt.”*  
(Swahili Proverb, East Africa)

Sometimes, managing public organisations is marred by a multiplicity of managerial and procedural rigidities (described in studies of public enterprises, see Boycko, Shleifer, and Vishny, 1996 and Megginson and Netter, 2001). Managers in bureaucracy-ridden utilities in low income countries can easily fall prey and become prisoners: constructing the very bars that hold back good performance. Pretending there is no problem is a natural response: those bureaucratic procedures may once have had justifications. However, the cumulative effect of rules, strict hierarchical reporting systems, and required committee approvals imprison initiative and destroy ideas for improving performance. The leadership at NWSC has insisted that managers *‘break all rules and procedures’* that do not make sense and which are, therefore, roadblocks to innovation. They are urged to put performance and service delivery to the forefront.

Apart from “rules and procedures” there is often a tendency of adhering to strict managerial and leadership theories. Managers forget that these theories were

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developed through research activities in different parts of the world, some of which may have different operating properties from their own. The NWSC approach has been that these theories are simply guidelines and some principles might not apply in certain circumstances. Management of water supply is (in a sense) simple, but continuous improvement requires innovation due to the transient nature of the challenges involved. Managers need the flexibility to try ‘this and that’, so they take risks and obtain rewards when they are successful.

Good leaders listen and receive information from both formal and informal sources. A key task involves sorting out what might be correct and what might be mere allegations and/or misperceptions. All these information sets shape the management style, enhancing institutional order (not rigidity) and promoting fairness.

When observations are difficult to document (i.e. they are somewhat subterranean), further investigation is warranted. The emerging patterns are likely to capture part of the reality that must be addressed: requiring managers to make meaningful strategic decisions.

In the same vein, various forms of favouritism (tribalism and nepotism) must be addressed frontally, since these are common governance problems in developing countries. The problem is normally double edged. First the influence of tribalism and nepotism in taking important managerial decisions leads to bias and in most cases demotivates the staff. In such cases, it appears that “Who you know, not what you know, matters.” At NWSC, the approach has entailed staff involvement, explanation of the factors contributing to the decision, objectivity in the presentation of the case, and transparency regarding the choice. Ultimately, managers must earn the trust of colleagues—that is achieved through a track record that reflects high performance and authenticity in all that is done.

### 3.8 Realities about Moving Towards Cost Recovery Frontier

*“If you refuse the elder’s advice, you will walk the whole day.”*

(Ngoreme, Tanzania)

Perhaps the most difficult managerial task in developing countries, after turning the organisation around, involves moving towards full cost recovery. The issue of full cost recovery has, of recent, become a ‘rigid’ position taken by some donors, arguing that water companies must reach this stage as soon as possible. The NWSC experience has shown that premature price increases ultimately choke off reform within water companies.

First of all, the cost-recovery idea is good but politically unachievable in the short to medium term, especially in developing countries. Reaching this frontier requires significant tariff increases (doubling, tripling and sometimes quadrupling). The mantra of “raising prices” is drowned out by outraged cries about affordability and helping the poor. Tariff increases require a thorough structured analysis of citizens’ willingness and ability to pay. We know that water that is trucked to peri-urban areas is much more expensive than piped water, but citizens already receiving service will revolt against substantial price increases.

In developing countries, especially in Africa, the economies are still evolving and cannot support huge tariff adjustments. Such actions would lead to customer anger and civil disobedience. This would, in turn, have negative effects on the company’s

ability to collect bills, leading into poor cash flows. In the wider context, such developments would of course have damaging impacts on the political setting of the country, which may boomerang on the company's managerial opportunities. No manager wants to hear that his/her company's actions are a cause of poor performance on the political scene. On the other hand, of course, it is not proper for a company to fall prey to excessive political log-rolling and that is why countries formulate rules and standing orders to counteract such tendencies. Such actions disrupt network expansion and severely compromise the company's ability to equitably distribute water supply services to the citizens of the country.

On the other hand, price freezes do not make sense either. NWSC experience has demonstrated that there are benefits from following an *incrementalist approach*, indexing the tariff nominally against inflation, foreign exchange and key input price changes. If there is to be a real tariff increase, it should be done in such a way that its effects are not dramatic: the bill increases are hardly unnoticed by the customers and the public. This long term approach, of course, with time, takes the tariff to cost-covering levels without causing undue citizenry agitation and unrest.

Of course, care must be taken that such tariff changes are not used to finance company managerial inefficiencies. That is why tariff adjustments should not be looked at in a simplistic manner. Managers should not be in the habit of "*every time there are cash-flow problems, we should increase tariffs*". The starting point must be optimisation of production processes and minimisation of technical inefficiencies. If this activity does not improve the company's financial situation, the manager can then justifiably consider a tariff review. This suggestion means that the issue of full cost recovery should be tackled in a phased manner. Big investments like treatment plants, transmission mains, big network systems etc cannot easily be financed through revenues generated from tariffs. These can be financed through grants from development partners or government subsidies. However, such grants must be properly targeted and implemented in an efficient manner.

### 3.9 The Role of Donors

*"Water that has been begged for does not quench the thirst."*

(Soga, Uganda)

There is evidence that NWSC is on the right track to meet its operational costs as well as the costs of computerisation, depreciation and retooling, financing costs and even making a significant surplus. But the delivery of water and sewerage services is too expensive for NWSC to handle by itself. Therefore, the corporation will continue to request donor support for its long-term capital development projects in order to improve its services to the rapidly growing urban population. The corporation has earned credibility, through its performance. Donor confidence and support have led to increased long term capital investments being incorporated in the Medium Term Expenditure Framework financed by government and donors.

For any organisation to continue to receive external support, it must maintain the confidence of donors and (in the long run) investors. Donor confidence is based on performance, which in turn, depends on adopting the types of monitoring and incentives mechanisms described in the overview of NWSC reforms. In addition, the NWSC must seriously consider its future dealings with development partners.

The potential application of the “arm-twisting syndrome” needs to be pre-emptively stopped, without losing access to the ideas and expertise that often reside in multinational organisations. If the present momentum of NWSC-donor collaboration continues, the prospects are good for continued reform and, ultimately, the creation of a viable commercial enterprise.

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### 4. Concluding Remarks

*“There are forty kinds of lunacy, but only one kind of common sense.”*  
(African Proverb)

The NWSC case reflects common sense since it builds on principles that have demonstrated their worth. The lessons from the NWSC experience also show the value of experimentation and decentralization—without losing contact with experts at the centre.

First, a hard working and committed Board of Directors with a good mix of skills is necessary if an organisation is to make meaningful progress. In addition, a dynamic utility management and staff team motivated by clear vision, mission and objectives is fundamental to success. Furthermore, it is necessary to secure government and donor commitment to support key initiatives like the debt freeze, pension reform, and payment of government debts. In addition, the following factors have been the pillars of reform: promoting managerial autonomy through decentralization, strengthening information systems via monitoring and evaluation programs, and providing incentives to managers through comparative competition and financial incentive packages associated with meeting targets. Organisational behaviour change towards strong customer and commercial orientation has also improved the financial viability of NWSC.

Furthermore, monitoring/regulation of both technical and customer protection processes is very important in water utility management. It requires prompt responses, managerial discipline, reasonable flexibility, and (ultimately) understanding on the part of the monitor. A customer complaint does not always mean that the operator is underperforming. It is the *speed of response* and minimisation of repeat complaints that determine the operator’s efficacy. On the other hand, monitoring of technical production processes must not interfere with the operator’s decision making portfolio. Micro-management is likely to significantly hamper managerial innovation. The approaches applied in NWSC are feasible and possible in developing country utilities where operational effectiveness is far inside the frontier.

Often, policy makers and managers in developing countries believe that outsourcing operations management is a panacea for achieving efficiency gains. While outsourcing can be a good means in itself, it must be well conceived and instituted at a time when the clientele managers themselves feel that they can manage but simply have peak workloads that make them less productive. If outsourcing comes because local managers are simply weak and have minimal capacity to solve their own problems, this incompetence is likely to translate into an inability to manage Principal-Agent relationships. The (outside) Agent that they blindly brought on board

is in a position to take advantage of informational asymmetries: those overseeing utility performance will never get out of this quagmire. The client has better chance by trying a “*we can do it ourselves*” approach.

In addition, there is need to diagnose the company’s performance situation with respect to financial performance and team development to determine the next course of action. If the financial performance and teamwork among managers and staff is low, leader/managers need to start with simple performance improvement programmes, incorporating tailor-made incentive plans and targets. In tandem, the teams need to be coached and developed to improve performance. It is from this point/stage that the company can progressively move into more complex internal contracting arrangements incorporating individual and group commitment plans.

While implementing these performance improvement plans, managers ought to know how to deal with internal managerial rigidities and inflexibilities that hamper performance. These can be potential performance barriers if the managers do not have the self confidence to ‘demolish’ them wherever they do not make sense. Finally, realities about moving towards the cost recovery frontier need to be addressed. There are not many water companies that can easily attain this performance level in developing countries. The movement towards such frontier needs to be sequenced to minimize adverse effects on the citizens. Targeted subsidies/grants can be used to fill financing gaps, while moving towards cost recovery.

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July 2006

# Democratisation of water management: Establishing a paradigm shift in the water sector

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## The Tamil Nadu experiment with governance reform

By V. Suresh and Vibhu Nayar<sup>1</sup>

A paper prepared for a seminar on 'Reforming public utilities to meet the water and sanitation Millennium Development Goal' at the UK's Department for International Development, 4 July 2006, organised by the World Development Movement and WaterAid. This paper is for private circulation only.



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### 1. Introduction

*“(The) water crisis is largely our own making. It has resulted not from the natural limitations of the water supply or lack of financing and appropriate technologies, even though these are important factors, but rather from profound failures in water governance ... Consequently, resolving the challenges in this area must be a key priority if we are to achieve sustainable water resources development and management.”*

**- UNDP on water governance<sup>1</sup>**

There are many influential studies<sup>2</sup> which show that the solution to the global water crisis is not in increasing investment or introducing better technology but in improving water governance.

Nonetheless, reports of numerous conferences, repeat the same jaded mantra: increase investments, introduce more technology, downsize public utilities, curtail the role of government and bring in the private sector.

The addition of newer policy prescriptions, sometimes described as paradigm shifts, do not get much attention. Ideas include: greater community participation through an increased sense of ownership and participation by intended beneficiaries or ‘consumers’; a shift from supply driven to demand responsive functioning; a shift in the role of government functionaries from being ‘providers’ to ‘facilitators’; and moving towards greater decentralization in water supply function.

An important question is seldom asked: what happened to the billions of dollars worth of investment in the water sector worldwide in the last two or three decades? What is inexplicable is that in the absence of any scientific evidence or assessment of the type of water assets created by prior investments, or details about how long they remained useful or reasons for their collapse, more investments are sought to answer the water crisis.

It is not the purpose of this paper to argue that new investments are not required to address the challenge of providing safe, adequate and sustainable water to all human beings. To the contrary, while acknowledging the necessity of raising investments to ensure water supply, what we would like to stress is that the solution to the water crisis can be found only by breaking out of the stereotyped solution frameworks adopted until now. We would like to suggest that a much more cost effective but important solution would be to initiate comprehensive governance reform work within the water sector.

This paper highlights one such effort to fill this gap in water governance reform, initiated in the rural water supply division of the Tamil Nadu Water Supply and Drainage Board (TWAD) in the south Indian state of Tamil Nadu. The major state level utility reform exercise titled, ‘Democratisation of Water Management’ was

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<sup>1</sup> [http://www.undp.org/water/about\\_us.html](http://www.undp.org/water/about_us.html), accessed on 12/06/2006

<sup>2</sup> See for example the United Nations World Water Development Report, ‘Water for Life, Water for People’, Challenge 11, ‘Governing Water Wisely for Sustainable Development’. “The water crisis is essentially a crisis of governance ... Weaknesses in governance systems have greatly impeded progress towards sustainable development and the balancing of socio-economic needs with ecological sustainability”.

launched in early 2004 and is still continuing at the time of writing this paper in June, 2006.

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## 2. Water governance reforms: The context and perspective

According to the Government of India, coverage of safe drinking water to the rural populace rose from a mere 18 per cent in 1974 to 95 per cent in 2002. This was achieved because of the huge investments made by governments in India and technological intervention in countrywide and state-wide programmes. One of the key components of the water policy of the early 1970's, when large scale water supply schemes were launched nationally, was the strategy to tap ground water.

The consequent strain on ground water aquifers,<sup>1</sup> better described as an 'assault' on the natural water system, was so high and occurred at such a speed that there was no way that the water table could recharge and refill itself during monsoons. In the state of Tamil Nadu, it is common for water tables to have declined to as much as 300 metres in some of the western districts. As one commentator describes it, "The triumphant success of well-drilling in India is now helping to shape a potential catastrophe".<sup>2</sup>

Over-exploitation and droughts have reduced the annual per capita availability of fresh water to 840m<sup>3</sup> in Tamil Nadu. This is much below the national average of 1200m<sup>3</sup> and is also below the 1000m<sup>3</sup> level which is the international measure of 'water scarcity'. Severe water stress will impact long-term availability of drinking water and in turn the productive livelihoods of the people of the state, especially the vulnerable.

### 2.1 Changing policy paradigm: Shift to community participation, decentralisation and reducing the centrality of public managers

This dismal situation of acute water stress growing in the 1990's is the context for the important policy shifts that swept the water sector worldwide, affecting India as well. These reforms focused on enabling greater community involvement in water schemes, with genuine emphasis on ensuring gender participation, and also changing the rules of the water game with the hitherto all powerful water technocrats, who decided on all water schemes, to act as just one - and not the only - player in the water sector.

In the new water regime, potential water users were brought into the centre stage of making decisions on choice of technology, choosing location and site schemes, implementation of schemes and future maintenance. Schemes would henceforth not be free as before, users would need to bear part of the capital costs of new schemes and agree to pay user fees. They would also have to take charge of managing the schemes in conjunction with the local village body, the village 'panchayat'.

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<sup>1</sup> To illustrate, nationally the number of power driven pump sets tapping ground water rose from around 25,000 in the 1950's to more than 20 million by end of 20<sup>th</sup> century. (Planning Commission Report).

<sup>2</sup> Maggie Black and Rupert Talbot, (2005), 'Water a Matter of Life and Health: Water supply and Sanitation in Village India', Oxford University Press, London.

### 2.2 The challenges of ensuring water governance reform

Whatever the nature of sector reform initiated in the last two decades, of the many problems characterising the water crisis, four stand out:

1. The issue of a significant and growing section of marginalised people still being excluded from provision of water service. The continued prevalence of large numbers of 'unreached' people, be it in rural or urban areas, poses the paramount challenge.
2. The continued prevalence of inequity in the distribution of water.
3. The problem of water sustainability covering the entire gamut of water management issues from effective management of water sources to conservation and preservation of water bodies and sources.
4. An uninvolved technocracy with an entrenched mind set.

Any attempt of trying to bring about water sector reform would need to thus address these four core areas if any sustainable solution was to be found. It is within this framework that the governance reform in TWAD<sup>1</sup> was undertaken.

### 2.3 The crisis of water in Tamil Nadu

Similar to the experience in many other states during the initial periods of the 1970s, a virtual water revolution was ushered in through the introduction of hand pumps in different parts of the states. The ubiquitous hand pumps became the symbol of provision of protected water supply. However with the advent of pumped out, piped water supply, a major change swept both the water providers and local communities. Slowly, yet strongly, the emphasis shifted from introducing hand pumps to introducing powered pumps. The bore pumps and the overhead tanks now replaced the former hand pumps, as symbols of water service and delivery. Both communities and engineers embraced the technology centred, investment-heavy piped water systems as the panacea for water supply problems.

It is significant to note that in terms of distribution, 64.8 per cent of water supply schemes rely on piped water supply and only 18.4 per cent on hand pumps according to the National Family Health Survey of 1998-99. In the rural areas of Tamil Nadu, deep bore wells constituted 77 per cent and shallow bore wells 11 per cent - 88 per cent of all sources of water supply relied on bore wells for water.

In Tamil Nadu, 96 per cent of all sources of water are based on groundwater. The phenomenal spurt of piped water schemes across the state in the eighties and

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#### <sup>1</sup> Background to TWAD:

The Tamil Nadu Water Supply and Drainage Board (TWAD) was constituted under the Tamil Nadu Water Supply and Drainage Board Act (1970) for the purpose of regulation and development of drinking water and drainage in the state of Tamil Nadu barring the Chennai Metropolitan Area. TWAD as an autonomous corporation set up by the State Government, thus had exclusive mandate over all drinking water projects in the state.

The Board is responsible for investigation, design, execution and technical assistance. Operation and maintenance functions are generally the responsibility of local bodies. Administratively, four regional offices, each headed by a Chief Engineer, handle the field work of TWAD. Functions such as design, planning and research are done in a centralized manner from the Head Office in Chennai (formerly Madras).

TWAD prepares its own budget for execution and operation of projects which is approved by the Government of Tamil Nadu. The chief funding sources are from the Government of India, the state government, loans from financial institutions (such as the Life Insurance Corporation and Housing and Urban Development Corporation) and the World Bank.

nineties had its eventual impact on ground water tables. Out of the 385 water 'blocks' in the state, 138 were identified as over-exploited, 37 as at critical levels, 105 as semi-critical and 8 as saline. Only 97 blocks were identified as safe. Meanwhile, of the total 81,587 rural habitations in the state, about 27 per cent are affected by quality. Of these affected habitations, about 25 per cent do not have safe sources.

Overall, a challenging scenario presented itself to all those concerned about and involved with water at the start of the new millennium. Despite occasional good monsoons, the first five years of the new millennium witnessed the cumulative impact of years of poor rainfall in Tamil Nadu. Near drought conditions did little to help recharge already precarious ground water tables. Unregulated mining of water and un-coordinated use for irrigation and industry only exacerbated an already precarious situation.

Technocratic approaches of the agencies providing water did not lend themselves adequately to stakeholder inclusive methods and lacked capabilities to enhance peoples' participation. Absence of a sense of ownership and alienation from meaningful association led to a lack of involvement of the users and stakeholders in water management and reluctance to participate in ensuring sustainable drinking water use practices.

Coupled with an outdated approach and complaints of inefficient service delivery, the water crisis presented itself as a complex multidimensional problem calling for inputs from a variety of disciplines, perspectives and experiences.

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### 3. Democratising water management: The process

The current change process was launched at the end of 2003 in the background of both the acute water crisis detailed above, and the changing institutional paradigm in which the water engineers were no longer seen as only the sole providers but were to play a different and expanded role of being 'social engineers' and 'facilitators' of community participation in the first phase, and of competing with other players in a vastly changed water supply scenario in future phases.

It was apparent that older perspectives and responses were not only insufficient but also inappropriate in dealing with the challenging situation which presented itself to the TWAD Board in early 2004. It was equally clear that there was no alternative to launching a serious introspection of current perspectives underlying TWAD's style and nature of functioning. TWAD also needed to review its relations with the community and other stakeholders including political executive, the willingness of individual engineers in the organisation to critically re-examine their mode of functioning, relationship with the community and personal issues of values, ethics and behaviour.

Given the imperatives of a crisis of water delivery mixed up with the challenge to the future relevance of the organisation, the rural water division of TWAD decided that the only way forward was not to regurgitate old solutions but to start afresh: by going back to ask fundamental questions about the need and relevance of the public utilities, the values and vision it should embody, distortions and corruptions in

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practice, and the shape of future direction of change efforts to reinvent a role and relevance for itself.

In effect, TWAD launched an ambitious process, covering the entire state-wide department, of personal change and institutional transformation. Towards this end, almost the entire population of engineers covering all levels underwent personal, group and collective exploration and discussion of issues in small groups of 30-35 persons each, in intensive residential workshops of 5 days.

The change process was structured around interventions at three levels:

### **1) Workshop: Space for exploration**

Where engineers could critically examine, explore and debate issues relating to personal, professional and institutional issues;

### **2) Village/Community: Site for experimenting with learning**

The place where engineers forge new relationships based on norms of equality, equity, democratic functioning, respecting dignity, ensuring reaching the unreached and emphasizing collective solution finding.

### **3) Workplace: Sphere for internalising learning into formal systems**

The work spot as the place where the formal system impacting the work environment and performance had to be the site in which changed values, norms and visions of functioning had to be rooted.

Given the hierarchical nature of relations within any bureaucracy, it was important to create a training context which promoted a sense of egalitarian relationship amongst participants, free exchange of views uninhibited by official positions and an atmosphere promoting critical discussion. A traditional Tamil cultural tradition called the *koodam* was adapted to present day circumstances and made the basis for interaction amongst all participants.

Between May 2004 and June 2006, 350 engineers, from the senior to the youngest engineers, were involved in core workshops over five days. The aim at these workshops was to evolve a broad consensus amongst all engineers that they needed to accept the imperative of change management. First of all this had to be at a personal level and thereafter be willing to be part of the collective effort to work internally in changing working culture, response patterns and sense of accountability and responsibility, and externally to build strong bonds of egalitarian relationships with the stakeholders in particular and community at large, around issues of community ownership, participation and democratic functioning.

Each participant was encouraged to initiate two small change projects, one in their immediate work area and another in work with the community. The plan of action included a time-line and set of indicators to evaluate their own functioning.

As the change process gathered momentum, a change management group came to be formed to study made up of volunteers who came forward to champion the change process within and outside the organisation. Care was taken to ensure that the change management group was as diverse as possible, accommodating people from different age groups, experiences, educational backgrounds and regions.

### 3.1 Change processes: Intervention design

There were three broad areas for intervention.

#### 3.1.1 Attitudinal transformation

Amongst individuals – covering the manner in which individuals perceive their own roles and functions and nature of relationship between themselves, the Water Board and the community at large.

Within the organisation – encompassing the manner in which the organisation relates to the ordinary citizen who is now being addressed as a ‘consumer’ of the services offered by the Board, with the privilege of rejecting the services of the Board in favour of other private players.

Amongst key stakeholders – the larger change effort will also have to include changes in the way other stakeholders and the community at large also perceive the relevance and importance of the Board and the services it offers.

#### 3.1.2 Perspective changes

Recognising that the thrust of all service delivery institutions, and in particular in the water supply sector, should be *‘reaching the unreached’* in a manner ensuring equity and based on norms of social justice.

We can highlight some of the more important components of the perspective changes that needed to be brought about in the internal functioning of the water utility’s functioning.

#### **Shift from access to service delivery:**

This approach, in effect, was rooted in the view that the citizen being supplied with water was considered not merely a consumer served by the water delivery system but as a citizen, a key stakeholder with a right to safe, adequate and regular water. By acknowledging the right of the citizen, the water department was recognizing and reflecting a shift, in self perception, from being sole determinants of all water related policies, planning and implementation to being one of several, albeit important, players in the water field.

#### **Shift from providers to partners:**

The water providers responsible for delivery of services were also accountable for the outcomes (ie, effectiveness with which they performed and ensured satisfactory delivery of the services, acknowledging these to be a right of the citizens). While acknowledging ‘citizenship’ rights, the arena of citizen responsibilities in managing a scarce resource were brought into the frame of the partnership that the TWAD functionaries sought to put in place with the communities accessing drinking water.

#### **Shift to sustainability enhancement approach:**

The changed perspective of examining system performance around issues of efficiency and effectiveness is grounded in a much more pressing imperative; ensuring the sustainability of the water system involving issues of conservation and scientific, rational and appropriate use of water. The sustainability approach would

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have to be rooted in a holistic, integrated and multi-dimensional perspective on changes in the water sector.

### 3.1.3 Institutional transformation

Encompassing issues of bringing about changes in the institutional culture of the organisation focusing on issues of internal democratic functioning, respect for individuals, norms of relating. In general creating an enabling working environment and responsive work culture amongst all levels of the utility personnel.

Emphasising the importance of creating relationships based on respecting dignity, self respect and self-dependence of all persons and groups who, together, have to partner the enormous task of preserving nature and water systems for future generations

Renegotiating relationships with all other stakeholders inside and outside the water sector.

Energising new partnerships amongst key stakeholders through values of equity and social justice and evolving a shared vision of ensuring 'reaching the unreached' as the core thrust of the water delivery system.

### 3.2 Critical issues: Dimensions of the challenge

1. One of the most important concerns was to strengthen water security by ensuring the supply of an adequate amount of safe drinking water to all citizens of the state in a manner which does not further endanger the already precariously poised water system.
2. Another focus was to encourage and enable active partnerships between government departments, local bodies, actual stakeholders and wider representatives of civil society, with a shared goal of building sustainable water systems.
3. To initiate concrete efforts towards institutional transformation of both formal and traditional water management systems, to ensure restructuring water access systems which would realize new norms of conservation, appropriate use of technology, knowledge and skills, and approaches based on values of equity and social justice thereby resulting in better functioning of the water institutions and effectiveness of water delivery services.
4. Equally importantly, to focus on working towards reviving traditional water bodies and management systems while sensitizing and empowering stakeholders and the local community to play a more active and intense role in managing the water systems.
5. To achieve convergence and coherence in policy formulation, planning and implementation to bring about 'Convergent Community Action' by bringing together state service provider community and officials with an informed, involved and active community.
6. To create a sense of common ownership, identity of interest and understanding of mutually complementary roles of the various stakeholders aimed at enabling sustainability of water systems.



7. Focus on capacity building of different stake holders including government officials, women and local communities, local bodies, NGO representatives and elected representatives.
  8. The eighth concern is strategic utilization of the technocratic and managerial expertise of the state agencies as the starting point to transform the organisation into a more people focused, community responsive and publicly accountable organisation.
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### 4. Outcomes

A few months after the initiation of the change management process inside TWAD, the impact of the process started to manifest itself. It became apparent that the first batches of engineers, charged with a new sense of purpose and given the space and encouragement to not only critically re-examine prevailing water management practices but to actually experiment with newer approaches were changing practices in the field.

This was particularly so as one of the main issues in the change process initiated was to persuade participating water engineers to evolve a set of parameters to evaluate in a critical manner the context of water schemes in the villages during the field visit. These covered issues of a socio-economic analysis of the need for new water schemes, community wise, studying the supply aspect in the context of sustainability and environmental considerations, issues related to recovery of operation and maintenance costs and contribution to capital costs, the importance of sanitation schemes and the willingness of village residents to accept changed sanitation methods.

In effect three broad categories of actions were being implemented:

1. The need, necessity and relevance of proposed water schemes was being self-critically reviewed in terms of the need for new investment, exploring the potential of expanding, rejuvenating or repairing existing water schemes, reviving abandoned or non-completed schemes.
2. A conscious attempt was made to evolve a new mode of relating with the community. The initial efforts to improve relations with the community produced almost instant result the moment engineers started relating with the community as people and not subjects. Though subsequent responses, especially requiring stakeholders to assume additional responsibility and involvement required far greater effort, the fact that engineers were visiting and working with them to find solutions struck chords with local people.
3. Specifically searching out the disadvantaged and ensuring their inclusion.

It was in the initial period, during the fourth batch of workshops in August 2004, that the first major breakthrough was made which was to have a profound impact in the very paradigm's functioning.

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In the course of the discussions relating to the type of challenges confronting the department and the type of strategies that needed to be adopted, a tentative proposal got articulated which evoked very intense response from almost all the participants. This related to the strategic thrust in the sector of technology driven ever increasing cycles of investment.

As participants reflected on constraints and pressures arising from target oriented schemes a critical view slowly emerged articulating the need to take stock of the situation, study the existing pattern of schemes and to make course alterations as found necessary. This found articulation in the form of a draft resolution, which after many rounds of discussions throughout the length and breadth of the state-wide department was finalised as follows:

### **Box 1. The Maraimalai Nagar Declaration:**

- **We will evaluate the existing schemes and ensure that the schemes are put into optimal use first**
- **Then rehabilitation will be undertaken wherever necessary along with revival of traditional sources**
- **This will be taken up before taking up any new schemes in the block**
- **We will aim at 10 per cent increase in coverage with the same budget.**

The momentous significance of the Maraimalai Nagar Declaration becomes apparent when we consider the fact that TWAD, like many other state controlled autonomous public utilities, is not supported for its revenue from state budgets, but instead depends on revenues earned from schemes it implemented. For many years, TWAD Board was entitled to 13 per cent of all budgeted schemes, from which it would need to take care of salaries, operating expenses and other costs. By this logic, the more number of schemes TWAD undertook the greater would be its earnings. Apart from leading to reduced earnings, there was apprehension in the minds of engineers about future financial stability or viability of the TWAD given the sweeping changes overtaking the water sector and the slow advent of the private sector in the water arena.

Seen against this background, the unanimous acceptance of the Maraimalai Nagar Declaration was not just historic but a very courageous break from the past paradigm. In effect the engineers were voluntarily accepting reduced earnings by agreeing that before they undertook fresh or new investments they would:

1. Evaluate existing schemes and ensure that they were put to optimal use first
2. Rehabilitate old or existing schemes
3. Examine the possibilities of reviving traditional sources
4. Only after exhausting all these stages, if there was still need for fresh investment, they would recommend and implement new schemes.

Initially there was resistance and opposition to the declaration within the organisation. Some saw in it a criticism of past policy; others saw it as striking at the core of the functioning of the organisation and as potentially damaging to the department. Yet

others saw it as articulating something they had felt often, but had not yet put together as a perspective for action. In order to evolve a consensus, discussions were initiated at formal and informal level throughout the organisation on the Maraimalai Nagar Declaration.

Despite the contested nature of the Declaration, slowly a consensus evolved that the Declaration was not only acceptable but also required to be pushed inside the organisation, with the involvement of other stakeholders as well. The process of widening the consensus and ensuring implementation was strengthened by bringing on board District Collectors, policy makers, opinion makers and members of civil society. The involvement of local people was strategically important as they had grown used to the idea that tackling water scarcity could only be through new schemes involving sinking new bore pumps and constructing overhead tanks.

As the state level discussion on the Maraimalai Nagar Resolution progressed with more engineers implementing it in the field, a critical issue forced itself: where were all these change efforts going?

### **4.1 Institutionalising Change Management: Formation of the Change Management Group (CMG)**

The increasing acceptance and implementation of MM Nagar declaration pushed the change process to the next phase emphasizing the need for formation of a core group at the state level, which would spearhead all change activities. The nature, spread and impact of different change projects initiated system-wide had to be coordinated, planned, monitored and supported. This led to the formation of a Change Management Group (CMG) at the state level.

Building on the spirit of the *koodam*, CMG members were those who volunteered to be part of the exercise. Their work as CMG participants would be over and beyond their regular work and they would not get any special concessions or rewards for being CMG members. Care was taken to ensure that the CMG was a representative body having representatives from different age groups, covering all the regions of the state and having a cross section of people. The newly formed CMG evolved its own mandate for functioning: (i) To work further on the outcome & strategize for change; (ii) To develop skills in managing change through Pilot Projects; (iii) To be an in-house group to dialogue with the rest of the system and to (iv) Empower individuals and groups through in-house capacity building and creating a core team to envision and lead the change process. The Statewide CMG originally had 43 volunteer members.

### **4.2 Creating a new vision**

The need to have a larger vision of the future course of the utility's functioning became an imperative. To chart out the contours of a broad vision for the TWAD Board, a collective exercise was initiated. In the first phase, the 43 members of the CMG, the body of engineers who had volunteered to pioneer the change process, sat for a collective exploration of issues confronting the water sector in general and the crisis looming in the water supply sector in the state, and evolved a draft vision. The draft vision was taken up for discussion within the department state-wide. In 15 districts the vision became the subject of discussion with elected representatives, CBOs, NGOs and other stakeholders in the 145 pilot village panchayats. The final form of the Vision that came to be evolved is as follows:

### **Box 2. Our dream: Secure water for all, forever**

#### **Our vision**

- 1. Conservation of nature as a guarantee for future water**
- 2. Vibrant, revived and recharged water bodies**
- 3. Assured, equitable and sustainable water for all**
- 4. Successful community managed water supply system through active participation including women and the poor**
- 5. Safe disposal of solid and liquid waste for a clean and healthy environment**
- 6. Cost effective technology options to ensure local maintenance and sustainable financial management**
- 7. Formation of a Common Water Regulatory Authority for judicious use of water for all sectors.**

The newly evolved Vision went far beyond the realms of what a water engineer would generally be engaged in. For the first time, the utility's functionaries saw their role as guardians of not just water resources, but of conserving nature itself. Accepting a broader mandate for themselves freed them from viewing their roles in a narrow, limited manner allowing for greater creativity and innovation in their functioning.

To breathe life and to give concrete shape to the Vision, in the next phase, the CMG took each component of the Vision and evolved a detailed action plan to realize each of the dreams. The details were so fine tuned they included a proposed time line of activities, parameters for evaluating progress, the varieties of stages to be traversed and so on. What resulted was the creation of a detailed template of action to guide the water engineers. The creation of the template for actualizing the vision and its implementation as a community based project in over 100 villages came to be known as, 'Total Community Water Management'.

Encompassing the Vision, the CMG sets itself to work with the community towards:

- improved systems and system management for better service delivery
- protecting and improving the source potential
- revival of traditional water bodies for other uses and recharge
- ensuring equitable water supply especially to weaker sections
- a clean environment in and around water points
- regular disinfection practice and periodical water quality testing
- better O&M practice for low user cost
- judicious use of scarce water and to undertake conservation measures
- practice of waste water reuse and recycling
- 'Reaching the unreached'

The change management and capacity building intervention was from the beginning, conceptualised keeping in mind the field reality. The field projects were the testing grounds for experimenting the learning of the workshops. In a sense, the project villages were the experimental workspace to implement many of the concepts learnt through the exploratory process of group learning in the workshop.

The state-wide projects involved about 80 Rural Water Supply sub divisions of TWAD Board. The focus of the project was to take up a holistic approach to water supply by

involving the community in formulation, implementation and subsequent management of water supply system including reviving of traditional practices. The fruits of this new way of thinking and working, started manifesting early, highlighting the potential of such change processes in improving the delivery systems of vital services.

It is against this backdrop of continued experimentation, learning, exploration and action that we now turn attention on the main outcomes. The following tables highlight the impact of the new perspectives in 140 Village Panchayats (VPs) where pilot change projects were implemented.<sup>1</sup>

**Box 3. The main outcomes as of end-April 2006** (From 472 villages under 145 Panchayats across 29 districts)

**Contribution:** Rs.1.42 crores contributed by 50,896 households in 145 village panchayats, in 29 districts reflecting their sense of ownership

**Investment cost:** Overall reduction by 40-50 per cent: average project costs are Rs.1827 per household, while regular schemes are Rs.4580

**Low cost options:** 50 per cent of schemes are now rehabilitation such as pipeline extensions instead of more expensive options

**Savings:** Savings of between 8 per cent to 33 per cent have been achieved over the regular budget. Operation and maintenance expenditure reduced to Rs.18.6 per household

**Equity:** 65 per cent of schemes were for groups where the majority were below the poverty line including scheduled castes

**Sustainability:** 90 per cent households are undertaking rainwater harvesting; 150 traditional water bodies revived

### 4.3 Shift 1: Choice of technology option

One indicator about the extent to which the Declaration was being implemented is to see the type of choices engineers were able to persuade local village panchayat heads and the community to adopt in the 140 VPs. The first of the following two tables shows that all the 140 pilot villages chosen for implementing the change projects had water supply levels less than the government stipulated 40 lpcd (litres per capita per day). Thus, the selected villages, as per water supply requirements, needed new interventions for water supply.

<sup>1</sup> Note: Although there were 145 VPs where change projects were introduced, data for the present report could be collated completely only for 140 VPs.

**Table 1. Nature of scheme opted in CMG villages**

Description	No. of Schemes	Percentage
Hand Pump, Mini Power Pump	28	8
Individual Power Pump	128	39
Extension of Pipe Line	23	7
Expanding existing sources	33	10
Rehabilitation of old schemes	97	30
Combined Water Supply Schemes	8	2
Scheme Improvement Programme	13	4
<b>Total</b>	<b>330</b>	<b>100</b>

From the department's perspective what is most important in the choice of schemes shown above is that the more investment centred schemes, the IPPS and CWSS, constituted only 41 per cent of schemes selected. Rehabilitation of old schemes was as high as 30 per cent, extension of pipe lines to serve new areas 7 per cent and source augmentation 10 per cent. In all, 47 per cent of schemes finally decided for implementation and executed in the 140 pilot village panchayats included alternate options as the first choice. This was breathing life to the Maraimalai Nagar Declaration. As we shall shortly see this approach was to have a major impact in the cost effectiveness of schemes.

It will help to gain a better appreciation of the implications of the above mode of functioning only if we consider the water supply levels of the chosen 140 villages. All the 140 village panchayats chosen had a supply level less than 40 lpcd. Of them, 50 per cent of the villages had supply levels less than 20 lpcd indicating acute water scarcity, and another 34 per cent had supply levels ranging between 20-30 lpcd. The significance of the choice of technology is that engineers and community members jointly explored different technology options in the context of the new vision and charter for work and finally consciously chose not just cost effective solutions but also environmentally sustainable choices.

#### 4.4 Shift 2: Finding more cost effective solutions

Nearly 50 per cent of schemes have low capital intensive (ie, cheap) focusing mostly on rehabilitation: extending pipeline, mini power pumps or hand pumps. This reflects a different way of decision-making, based on community ownership, choice and willingness to manage the operating costs. The following two tables highlight this process.

**Table 3. Cost range of schemes**

Cost Range (Rs. In '000s)	No. of VPs	Percentage
< 100	2	1
100 to 500	36	26
500 to 1,000	46	33
<b>&gt; 1,000</b>	<b>56</b>	<b>40</b>
<b>Total</b>	<b>140</b>	<b>100</b>

The full implication can be gauged when we consider the capital cost range per household where there is an emphasis on most households paying the lowest costs for schemes.

**Table 4: Capital cost range per household**

Cost range per household (in Rs.)	No. of VPs	Percentage
< 1000	57	41
1001-2000	48	34
2001-3000	21	15
3001-4000	7	5
4001-5000	4	3
5001-6000	1	1
> 6000	2	1
<b>Total</b>	<b>140</b>	<b>100</b>

One of the most significant impacts, which portray the inherent potential of this process of personal and institutional change, is the reduction in the capital cost per household by 40 per cent in the project villages. It has been found that the average cost per household in non-pilot schemes was about Indian Rupees (Rs) 4436 (on habitation basis) whereas in the pilot batch the average cost is only Rs.1555 (on village basis). In real terms this means the possibility of additional coverage of 400,000 households every year, within the same budget.

### 4.5 Shift 3: Towards community involvement

As a measure of the involvement of the community and its sense of ownership, the project has envisaged 10 per cent of the capital cost as a community contribution, in cash or labour. Over a period of one year, the community has contributed Rs.14.2 million in cash. Over 56,000 households have contributed to implement water supply or recharge schemes in 145 village panchayats. One of the more significant features has been better targeting of villages in terms of those truly requiring improvement.

In the project about 65 per cent of the schemes have targeted villages with more than 50 per cent BPL population. This is in sharp contrast to the generally low targeting of regular schemes.

### 4.6 Shift 4: Towards savings

In line with the Maraimalai Nagar declaration many of the districts have taken up vigorous scrutiny of all investment proposals, in the search for sustainable and cost effective solutions. The savings over the annual budget have been as high as 18 per cent of the regular budget in Namakkal district, 36 per cent in Tiruvallur district and 44 per cent in Erode district. In fact in Namakkal, the district team has utilised the savings to take up a unique community participatory source rehabilitation programme in 220 habitations by involving the community in decision making and financing the projects.

### 4.7 Shift 5: Towards conservation

The finiteness of water availability was a constant message of the project. The community was encouraged to take up ground water recharge activities including revival of traditional water bodies as a first step to revisit historical practices of

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community living and sharing of scarce resources. Water balance studies informing the status of water availability at micro level, for the village, was carried out in all the 145 village panchayats and shared with the community. The community also participated in the physical implementation of 45 ground water recharge schemes. In all the project villages special Grama Sabhas were convened on 2 October and 26 January to take up cleaning and revival of traditional water bodies.

An important component of this shift was also the initiation of many programmes leading to better waste water disposal methods, which was identified as one of the essential elements in the new Vision.

### 4.8 Shift 6: Towards reducing operations and maintenance expenses

Adoption of appropriate technology options, ensuring timely maintenance thereby reducing potentially expensive replacements in the future, regulating hours of pumping and supply, maintaining both adequate quality and quantity all had an effect in the nature and functioning of water systems at each village. The regulation of pumping hours included (i) ensuring that the power of the bore pump was according to norms and higher end pumps were not used by the village panchayats and (ii) maintaining a cap on the hours of pumping based on the ensuring balance between quantity of water available in the source and quantity required for supply. This had a major impact in reducing the hours of pumping thereby impacting on electricity costs. Equally importantly, from the angle of sustainability of water source, the regulation of pumping hours ensured the replenishment of the water source.

In monetary terms, the following table highlights the potential inherent in the new paradigm of operation. It is noteworthy that the O&M expenditure in these villages reduced by about 25 per cent while the revenue generation improved by 70 per cent leading to improved financial sustainability of the schemes.

**Table 5: Operations and maintenance cost comparison**

O & M Cost	Regular VPs	Pilot VPs	
	2004-05	2004-05	2005-06
O & M Expenditure Average per VP pm (Rs)	23,908	16,041	12,182
Tariff Collection Average per VP pm (Rs)	3,048	3,501	4,756
Collection as a percentage of expenditure	12.75 per cent	22 per cent	39 per cent

### 4.8 Shift 7: Towards sustainability

Apart from choice of appropriate low cost, people friendly technology, the TCWM initiative led to a plethora of innovative schemes. For example tree plantations were taken up in a big way and hundreds of tree saplings have been planted in more than 120 villages. Though accurate estimates are yet to be compiled, it is estimated that the number of saplings number in the thousands. In Palangarai village in Tirupur block of Coimbatore district alone, more than 7,000 saplings have been planted with over 80 per cent survival rates. This, with the construction of almost 32 check dams has led to the water table in the village rising up from 1200 feet to 800 feet.

Other efforts have included revival of water bodies in the form of desilting water tanks, ooranies and the like in over 120 of the 140 villages which formed the pilot initiative. Rain water harvesting was revived and restored in 90 per cent of the



villages and new forms of solid and liquid waste were introduced. Soak pits, kitchen garden and construction of septic tanks, not the domain of the regular engineer, became the norm.

### 4.9 Other results

The growing confidence of the local community with the engineers translated into direct involvement in the water supply system. As the results of an independent impact study sponsored by UNICEF showed, the impacts of a changed perspective of functioning was not only felt by the local people in the form of changed behaviour and response from the water engineer, they also could see the causal link between that and the improvement of water supply in their villages.

The UNICEF study on 'The Impact of Change Management Training on TWAD Engineers' was conducted by AJ James. James notes that, without any investment by the government, and with public participation, the following outcomes have been reported so far:<sup>1</sup>

- Formation of Village Water Supply Committees for self-management of water supply in all 145 village panchayats
- Roof rainwater harvesting in 90 per cent of all households with public participation and contribution
- Reduction in O&M expenditure by 10-30 per cent by reducing pumping hours and supply hours to match actual requirements
- Revival of around 140 traditional water bodies
- Segregation of solid waste into degradable and non-degradable wastes and disposal into common compost yards or at household level in about 80 villages
- Construction of household soak pits in about 50 villages
- Tree planting in schools, backyards and along streets by the community (especially children) in 110 villages

Discussing the summary results of the study, James notes, while the change management approach deliberately did not set down a 'blueprint' for community mobilization and participation, a few common elements are visible on the ground:

- **Engineer behaviour:** Trained engineers' interacted with village communities in pilot habitations differently from untrained engineers in Swajaldhara habitations. They were more willing to behave as part of the community and also involved them in discussions on possible solutions to specific water supply problems.
- **Involvement and awareness creation:** Trained engineers also made a special effort to spread awareness among women and SC households. Also, their insistence on maintaining records of water pumping hours, water supply hours and electricity meter readings, and their efforts to discuss water costs and tariffs and link these to costs of water supply, served to spread the awareness of these important aspects of water supply.
- **Water conservation and tariffs:** Detailed discussions by trained engineers of costs and tariffs helped raise awareness of the need for water conservation

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<sup>1</sup> A.J. James, (2006), 'DRAFT FINAL REPORT on 'QUANTIFIED PARTICIPATORY ASSESSMENT OF THE IMPACT OF CHANGE MANAGEMENT TRAINING TO ENGINEERS, December 2005 – March 2006 Submitted to the Tamil Nadu Water Supply and Drainage (TWAD) Board Chennai, 31.3.2006, Pragmatix Research and Advisory Services

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and to collect water tariffs. Trained engineers also motivated communities to agree to pay a monthly charge of Rs. 10 for the use of public tap stands, and to remove 'pit taps', which is not paralleled in the Swajaldhara habitations.

### 4.10 Reaching the Unreached: Response of Women and Scheduled Castes (Dalits)

The most important finding of the Impact Assessment study relates to the paradigm shift that is slowly impacting the functioning of the state level utility: the shift to focusing on 'reaching the unreached'. Thus, in the response of women's groups in the Pilot villages where change experiments had been implemented, 76 per cent reported that the water engineer visited the village regularly, met and interacted with them; 84 per cent reported that the engineer behaved as a community member; and 61 per cent that all this led to joint identification and actual implementation of solutions.

About 78 per cent of the Dalits in the Pilot villages reported that the water engineer was regularly visiting the Dalit habitations; 80 per cent said that the engineer provided them the space and encouraged them to talk and participate in village meetings; and 57 per cent reported that action was initiated on solutions identified for problems of water supply.

The study highlighted the importance of institutional and policy support to the water engineers to ensure that the gains made in the last two years were consolidated and taken forward. Equally, the study emphasizes the need to focus more attention on deeper levels of community involvement and participation, with care to ensure involvement of marginalized groups.

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## 5. Conclusion

At the end of two years since the introduction of a new paradigm or perspective of functioning, much has been achieved, but much more needs to be done. Several issues are clear.

Future interventions seeking to address the water crisis cannot and should not follow the time worn, stereotyped, and jaded way of seeking and pumping in new investments of money and technology while continuing to ignore the more pressing issue of reforming water governance. The issue of governance ultimately is also political as it concerns dealing with issues of power, authority and money. Greater transparency, openness and democratic functioning threatens not local communities but power elites, inside and outside government be they officials, planners, politicians and the new breed of professionals who are now ubiquitous – the consultants.

The work in Tamil Nadu shows that investing in governance reform is so hugely cost effective – the training costs are pitifully low compared to the cost of investing in technological options. Then again, when solutions are sought to be found from within – be it within the culture and practice of the water utility, or from within the traditional and cultural practices of communities, new bonds of relating are forged. Bonds which are based on the intuitive and learned genius of the land, which is the only way the change process can get anchored and grow.

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This then should be the thrust for international agencies- to persuade, and if persuasion does not work, to pressure governments to initiate measures to bring about greater attention to the three legs of the new paradigm:

- Reaching the unreached
- Equity
- Sustainability.

It is only through such attempts that we can ensure that there are drops of water for our grandchildren and their grandchildren. As one water engineer of the TWAD Board remarked, "It's the only gift we can give to the unborn 5<sup>th</sup> generation who we will never see but who will experience the wisdom of the path we have now begun to travel".

Are international institutions, intelligentsia and concerned citizens of the world listening?

July 2006

# Developing Public-Public Partnerships

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Why and how not-for-profit partnerships can improve water and sanitation services worldwide

By Antonio Miranda

A paper prepared for a seminar on 'Reforming public utilities to meet the water and sanitation Millennium Development Goal' at the UK's Department for International Development, 4 July 2006, organised by the World Development Movement and WaterAid.



### 1. Introduction

Public-Public Partnerships (PUPs), although much needed since the public sector began to struggle to deliver water and sanitation to the poorest, is a term invented as a reaction to the global push for Public-Private Partnerships (PPPs). It is important to be clear what we mean by the two terms.

First, PPPs, largely launched as the great idea to solve the problems of bringing investment into the water sector worldwide, is a very inaccurate expression to define the relationship between government, the contracting party who defines the object and who pays, and private sector – the deliverer of the goods and/or services and who receives the payment, and gains the corresponding profit. Such a relationship could not be named a partnership, even if both sides are making some form of financial contribution. At least in theory, PPPs are about developing new infrastructure facilities, both to expand and improve, the existing network, but on the basis that a profit can be made. PPPs are, in one word, businesses.

PUPs, however, are not about new facilities, or big enterprises. PUPs are exclusively about capacity-building, about solving on-the-ground problems through transfer and exchange of knowledge, on a not-for-profit basis. Although the name seems to define partnerships exclusively within the public sector, we would expect to include, for instance, civil society organisations and trade unions. Moreover, PUPs are able to cover the full range of water and sanitation issues – for example, from a technical detail of a particular type of pump or filtration system, to modern staff management; from a new, brilliant way to fix old cast-iron pipes, invented by someone who works in a small village, to the most up-to-date technology for billing and revenue collection. PUPs are, in one word, co-operation.

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### 2. Why PUPs?

While there may be a few public water operators with a commercial outlook that might not be willing to co-operate with others on a not-for-profit basis, we expect that most will be keen to share their knowledge in the areas in which they are successful, on a not-for-profit basis. They not only want to give a helping hand to those in need, for altruistic reasons, but also for more practical reasons: to promote their expertise, and to raise their institutional and political visibility, and at the same time giving new opportunities for development to their staff.

On the other side of the problem, the operators in need (usually, but not always, the less developed ones) may not have the technical expertise nor the financial capacity to hire consultancy services to do the work; actually, there are public operators which cannot even understand and describe properly the problems they are living with.

For all those reasons, PUPs effectively bring together those in need and those willing to assist. Roles that can be simultaneously played by one single operator, who needs

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assistance on some issue and, at the same time, is an excellent performer (hence an offerer) on another aspect.

Some initiatives on PUPs have already been seen in places in Africa, Central and South America, Asia and Europe, and between regions. Compared to the global potential of PUPs, however, those cases – in terms of number – are insignificant. Also, in these existing cases there is a great emphasis on north-south, or “developed-not developed” partnerships. While not a problem *per se*, they certainly should not form the major part of the PUPs. There is enormous advantage and potential for south-south co-operation, mostly within the same continent, perhaps between close cultures and within a common language.

Overall, it is expected that all public operators have something positive to share, both on the best and also on the worst practices. Commonly, the later teaches more than the former.

Finally, there is the issue of sustainability, meaning the survival and never-ending improvement, along the years, of the good changes and reforms brought with the process of learning. It is common that in developing and under-developed countries the public operators might be sensitive to elections – a new political leader may make deep changes to the way the operator is governed, for good and for bad. Such an influence generally comes mostly from the number of managers that can be temporarily hired, and/or from the lack of transparency and accountability. PUPs should provide a better stimulus for institutional reforms, with implementation being carried out with an eye on the long term sustainability of the utility.

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### 3. Why PUPs do not happen?

In spite of the alarming needs, and of the mentioned willingness of many good operators, the main obstacles for a massive occurrence of PUPs worldwide are:

- the absence of a forum or platform, governed by appropriate rules, where the needs and offers from different utilities are available and can be assessed and negotiated, by interested parties
- the lack of funds to finance this platform and to cover the costs of the PUPs that might emerge
- the local legislations existing in many cities and countries, which are an impediment to the spending of local water revenues (or the municipal budget) on dealing with problems somewhere else.

Of course, while some public operators will never be interested in entering into a PUP in any circumstances, the remaining hundreds (maybe thousands) of utilities that we expect would be interested in PUPs could have a major impact on progress towards the MDG on water and sanitation – that being, to halve by 2015 the population without safe water and adequate sanitation.

Very pragmatically, the accomplishment (or at least the efforts towards it) of the MDGs on water and sanitation depends on the improvement of the public sector, which delivers for more than 90 per cent of the piped population worldwide.

Regardless of any ideological preference, that figure will not change, even slightly, within the next nine years (until 2015); therefore there is no other way but to invest in the improvement of the public sector's performance.

In fact, it is perceptible by several international financial institutions (IFIs), the World Bank included, that this reality is now being acknowledged. However, there has yet to be any real, practical move in this direction, at least not with the necessary evidence of willingness – real money.

The donors and IFIs' past experiences in general seems to have brought two different, but predictable reactions against PUPs. First, the promotion of PPPs and other forms of private sector participation, and at the same time the disparagement of the public sector, has left an ingrained cultural bias against the public sector within donor governments and institutions which is difficult to change. Secondly, there has been resistance from donors to invest in capacity building instead of infrastructure works.

Once the donors are able to think over their previous positions, a lot of time, and political and financial investment is required to assess new approaches regarding the public operators, including how to promote efficient, sustainable, accountable, transparent, democratic, and fair-tariff practisers, in both developed and developing countries. I hope that this might lead ultimately to a situation where a substantial part of the IFIs' management staff will be looking at public providers and how to scale up successful public provision, through solutions from within the public sector itself and from other co-operative partners.

If the ideological prejudice and institutional obstacles against the public sector outlined above are removed, the role of PUPs becomes very apparent. As PUPs are not about cement and steel works, and are not-for-profit, they are extremely low-cost. Participants could only expect to recoup their salaries, travel, and subsistence expenses.

A one-digit percentage of the IFIs' annual investment budget on water and sanitation would be enough to cover the costs of hundreds, maybe thousands of PUPs worldwide. Moreover, it would not be "more money", but a simple re-allocation of the existing budget, for a much better purpose – after all, many works are overly under-utilised or just abandoned, for lack of institutional and technical capacity.

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#### 4. Concept

A considerable number of publications in recent years mention PUPs, under a broad range of different examples.

The water and sanitation area is related to a wide spectrum of issues – public health, housing, environment, education, social and economic development – and has been the arena of aggressive disputes on the roles of public and private sector for delivering the services.

The fact is that donors have found very significant resources to fund PPPs – from international, regional and national mechanisms, to easy access to credits and

technical assistance. There is no corresponding arrangement for PUPs. The most likely practical demonstration of PUPs will be partnerships involving, on the one side, the public operators in need, and on the other side, the offer of expertise from public operators, NGOs, communities, trade unions, academy, research institutions and related bodies. The common denominator for any arrangement within this broad range is the motivation for co-operation on a not-for-profit basis.

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### 5. Types of PUP

In recent years, a variety of forms of local co-operation or partnerships have developed between the public water operators, communities, trade unions and other key groups.

In its 2005 report, “Public-public partnerships in health and essential services”, the Public Services International Research Unit (PSIRU) concludes that PUPs can include a wide range of different types of actors.<sup>1</sup> A defining feature is that these are partnerships in which there is no for-profit private sector involvement. PSIRU identifies the following key types of PUPs:

- Partnerships between two public authorities
- Partnerships between public authorities and communities (and/or NGOs as well as with trade unions)
- Development partnerships (with an international dimension)
- International associations.

There can be also partnerships between public authorities (operators included, of course) and research and academic institutions, for instance. The actual feature to distinguish PUPs is the not-for-profit, co-operative motivation. That condition attended, virtually any stakeholder can play a role in a PUP, even perhaps the private sector, as long as there are safeguards to be made against an inappropriate use of the term to make arrangements which are essentially business.

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### 6. Recent experiences on PUPs

We are aware of a range of existing PUPs arrangements. Many of these models can be described as new forms of partnerships between the public water operators, communities, trade unions, civil society groups and other key actors.<sup>2</sup>

**Public-collective partnership in Cochabamba (Bolivia):** Democratic control over the public utility SEMAPA (via citizens elected onto the company's board) and a

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<sup>1</sup> Hall, D., Lethbridge, J., Lobina, E. (2005). *Public-public partnerships in health and essential services*. PSIRU. London.

<sup>2</sup> Examples taken from: Transnational Institute and Corporate Europe Observatory; and Balanyá, B. Brennan, B. Hoedeman, O. Kishimoto, S and Terhorst, P (eds). (2005). *Reclaiming Public Water Achievements, Struggles and Visions from Around the World* Transnational Institute and Corporate Europe Observatory. The Netherlands. January 2005. <http://www.tni.org/altreg-docs/publicwater-pr.htm> and Transnational Institute and Corporate Europe Observatory. (2006). *Public Water for All* Transnational Institute and Corporate Europe Observatory. The Netherlands. March 2006.



strong role for local water committees in distributing bulk water supplied by SEMAPA to the unconnected peri-urban areas.

**Public-Workers Partnerships in the province of Buenos Aires (Argentina):** In Argentina the water operator of the province of Buenos Aires OSBA has established a foundation to advance low-cost technologies and provide advice to other public operators. The water company Sapem in the Argentinean province of Tucuman has benefited from this.

**Public utility-public utility partnership (Indonesia):** The public water company PDAM Tirtanadi has supported other smaller utilities in Northern Sumatra through an Operational Cooperation Contract, a domestic PUP.

**Communitarian water delivery in Venezuela:** Local communities, the water utility and elected officials co-operate in communal water councils

We are also aware of PUPs involving Swedish, Japanese, French and Dutch public water companies working to support weaker public utilities in countries in Central and Eastern Europe.

Porto Alegre in Brazil is probably the most well known example of successful public water delivery based on democratisation. It combines participatory budgeting with strong civil society participation in management of the water utility (a model often described as 'social control'). This goes further than dialogue with water users. It involves transparency of the utility's operation, democratic control over key financial decisions and citizen's participation in priority-setting during planning phases. The aim is to avoid the flaws of past models of public water management and secure genuine public-ness in public service delivery. Public-ness can be defined as a commitment to the public interest and accountability to the public.<sup>1</sup>

There is often a keen willingness from citizen coalitions to actively engage in implementing improved public options for water and sanitation. However, substantial political change and legislative reforms are needed to allow these approaches to be implemented. In many countries, the best way forward may be to promote more effective regulatory oversight of public utilities. The question is, based on local circumstances, how to ensure that public principles, such as transparency and accountability, are central to the way public utilities are run?<sup>2</sup>

The fact is that the latest successful experiences have the capacity to overcome the trauma of some past failures on twinning and other arrangements for previous attempts at PUPs. It is a matter of having adequate research on the reasons behind the cases; the lessons are all there. But in any successful case, some features were common. The role of NGOs, unions and other actors is essential. This can involve taking advantage of advocacy opportunities, building political support and assisting in the brokering of partnerships to ensure that sound public principles remain at their core. With sufficient political and financial support PUPs have a great potential to speed up improvements in public water delivery.

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<sup>1</sup> With thanks to Transnational Institute and Corporate Europe Observatory. (2006). *Public Water for All* Transnational Institute and Corporate Europe Observatory. The Netherlands. March 2006.

<sup>2</sup> With thanks to Transnational Institute and Corporate Europe Observatory. (2006). *Public Water for All* Transnational Institute and Corporate Europe Observatory. The Netherlands. March 2006.

### 7. Breakthrough: A global mechanism

Aiming to overcome one of the main obstacles for massive PUPs, the present author offered to the United Nations Secretary-General's Advisory Board on Water and Sanitation (UNSGAB), in October 2005, the conception of a mechanism able to run a global network for PUPs. The original idea has developed since then, with substantial support from Public Services International, which is also represented on the Board.

During the 4<sup>th</sup> World Water Forum (Mexico, 16-23 March 2006), the UNSGAB announced its Compendium of Actions, which aims to help achieve the on water and sanitation. Amongst others, the Compendium of Actions proposes the creation and implementation of a global mechanism to promote Water Operator Partnerships (WOPs).

The rationale behind the mechanism is simple: the greatest capacity for improving public water and sanitation operators is within the operators themselves. Given that most water operators are local or municipal; given that even modest improvements in many of these operators will go a long way to meeting the MDGs; given that no current organisations have the capacity to reach the many thousands of water operators, then the best source of capacity in principle is directly from amongst the operators themselves. The mechanism will allow these operators to systematically communicate amongst each other and with any other organisations or institutions that can be of help, without having to wait for donors, IFIs or other organisations to establish contacts and develop projects.

The PUPs mechanism would be managed by a team who will provide an internet-based platform which will allow participants to establish, of their own volition and initiative, the bases for partnerships. Operators and others will register on the internet site, using set information screens which will allow them to describe their situation. This system will use database software to create matches among the registrants according to the general descriptions of the problems (demands) and expertise (offers). Then, a list of possible partner(s) will be sent to the demander, who will be able to contact the offerer(s) for details, and will then be able to select the most appropriate partner(s).

Many of the partnerships will be at a very low cost. Where there are significant costs involved, a number of options can be considered:

- a fund could be created to be accessed by PUPs partners, based on a number of criteria;
- the PUPs finance demands could be presented systematically to donors or development banks for support;
- the more wealthy PUPs partner may be able to finance out of their own solidarity funds. The partner costs are to be, always, on a not-for-profit basis.

The PUPs management team should be hosted by a legitimate, credible, broadly-accepted body – therefore, transparency and accountability are essential, also because one of the functions of the PUPs management team will be to facilitate access to necessary financing. The current proposal under debate in the UNSGAB is

to house a small PUPs management team within UN Water, which will allow the necessary linkages and networks among other key international, regional and national actors. The PUPs should seek oversight from a wide range of stakeholders representing the broad spectrum of groups involved in the sector.

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### 8. UNSGAB 'WOPs'

During the 4<sup>th</sup> World Water Forum (Mexico, 16-23 March 2006), the UNSGAB announced its Compendium of Actions (COA), which aims to help achieve the on water and sanitation. Amongst others, the COA proposes the creation and implementation of a global mechanism to promote water operator partnerships (WOPs), which is not exactly the same originally proposed idea.

The difference between PUPs and WOPs, as proposed by the UNSGAB, is the possibility of participation of the private sector as a partner, (although also on a not-for-profit basis).

Although this inclusion was recognised as welcome in times of a wider debate about the role of the private sector in water services, for many stakeholders and specialists - the present author included - there is just no need for it. The private sector has already more than enough room to promote its business, and worse still, this inclusion may cause more confusion and problems than real benefits.

Nevertheless, the UNSGAB committed to some very welcome actions to take forward this proposal, including:

- Advocate the use of WOPs and demonstrate their potential importance and benefits; conceptualize the basic mechanisms for WOPs operations
- Develop, in cooperation with public utilities associations, a prototype of a database and Internet-interface for operating the WOPs-matching mechanisms
- Initiate discussions with IFIs to strengthen the WOPs model and gain their commitment to the WOPs
- Review annually the outcomes of WOPs and assess their contribution.

Meanwhile, the UN Secretary-General was requested to give strong support to the WOPs programme, including specific encouragement to national governments to aid its implementation. UN-Water will be asked to coordinate support from among UN agencies and the United Nations Department of Economic and Social Affairs (UNDESA), in cooperation with appropriate bodies, will develop a database and Internet-interface for operating the WOPs-matching mechanisms. This Internet-interface will be field tested before its use is broadened to cover other regions. Relevant IFIs will be asked to provide financial and technical support to the WOPs programme.

### 9. Moving forward: Roles for donors and stakeholders

While no-one seems to actually oppose the idea of PUPs, there seems to be a general consensus that international political and financial will are needed for their implementation, especially in order to set up a mechanism to promote and facilitate PUPs.

On that basis, the UNSGAB proposal must be studied by all the water and sanitation stakeholders – there is no better starting point. Proposals for modification, suppression and addition, can be effective if properly justified and if made on time.

Although the UN mechanism may be the clearest proposal to emerge for PUPs so far, it cannot be seen as the sole way to promote PUPs. Of course, there are a range of other initiatives which can be created or supported by donors and IFIs, jointly or individually.

Governments, donors and IFIs can collaborate on the funding of the UN mechanism, which will be implemented very soon. That would be very welcome internationally by the entire range of stakeholders, in a manner that will bring visibility and broad political acceptance for the collaborators.

On the other hand, though, governments, donors and IFIs can create a facility, or a fund, to stimulate and to promote PUPs outside the UN initiative. Applications can be received and contests can be made, so that the most promising candidates to PUPs can be financed; there are ways to avoid excesses on duplication of efforts.

Key criteria must include transparency, accountability and multi-stakeholder watchfulness; they will bring the ultimate guarantee of quality, useful partnerships on-the-ground, hence avoiding misfeasance and mismanagement. Whatever the model adopted for promoting and funding PUPs, it will need to be monitored very closely.

The natural, multiple stakeholders – governments, civil society organisations in general, trade unions, academic and research institutions, donors – must be mobilised to ensure a more public-oriented reform in the water and sanitation area. Currently, a plethora of international mechanisms support PPPs (such as the Public-Private Infrastructure Advisory Facility and the Private Infrastructure Development Group) and there is no formal, international support for PUPs.

In other words, the most welcome initiatives for promoting PUPs might combine multi-stakeholder supervision with the autonomy of an efficient mechanism, exclusively dedicated to promote the development of the public sector through PUPs. That is the expectation for the WOPs under the UN umbrella, and so it should also be the aim of any other initiative.

If we really want to take seriously the need to improve public water operators to enable them to reach the MDGs, then we must also take seriously – and quickly – the initiatives and mechanisms that can be of help in this area. PUPs are not the only way, but surely they are one of the most relevant ways to provide, universally and within the shortest timeframe, safe water and adequate sanitation – a human right that has been inexcusably neglected so far.