Reforming Nigeria's Urban Water Sector for Better Services Delivery

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Keywords: Water sector reform, Public Private Partnerships, Millennium Development Goals, Water management, civic engagement

The Bread of Life Development Foundation and WaterAid Nigeria submit this abstract jointly.

The Bread of Life Development Foundation is a Water policy advocacy NGO and monitors the implementation of the urban water sector reform projects in Nigerian to mainstream pro poor concerns. WaterAid Nigeria Urban work seeks to support urban utilities in their reform process while facilitating the setting up of community involvement in governance, which will ensure sustainability and protect the interest of the poor.

Introduction

In Nigeria, Water supply is a state responsibility. And to this end state governments have created State Water Agencies (SWAs) to manage and operate systems for water service delivery in all Urban and in some semi-urban areas. Generally, the SWAs have failed to water services to the people. Most SWAs do not recover their operating expenses from their own revenues, and remain dependent on state governments for subsidies.

To address this problem, the Federal Government in 2002, launched the 1st National Urban Water Sector Reform Project in 2004 at the Federal level in Ogun and Kaduna states, and the 2nd NUWSRP 2005, at the National level and in Lagos and Cross Rivers.

The Urban Sector Reform projects are aimed at improving water governance, encouraging private sector financing of water supply projects throughout the Federation; and specifically to improve delivery of water services to urban residents in the four states by launching Public-Private Partnerships (PPPs) for the management of the water boards. The states are to serve as model states, and if the PPP experience is successful in the states, project will be replicated in other states in the country in the future. The World Bank is financing the 1st and 2nd NUWSRP with a $120m and $220m International Development Association IDA credit respectively.

Issues

The perfomances of almost all previously finaced World Bank financed water projects in Nigeria have been unsatisfactorily and the projects unsustainable. There is therefore an apprehension within civil society groups that this may be another of such. Moreover, the implementation of the on going National Urban Water Sector reform projects raises critical questions of water pricing and water access to the Urban poor within the water distribution areas. There exists therefore a need to mainstream pro-poor concerns into the project, and also increase public understating and participation in the project. The citizens need to be armed

with adequate information to monitor the Water Sector reform projects, and ensure its transparency and openness.

In November 2006, WaterAid Nigeria commissioned the Bread of Life Development Foundation to carry out a research on the on going 1st and 2nd World Bank financed Urban Water sector reform programme, particulalry its implementation in Lagos, Nigeria's most populous state. The objectives of the study include: to outline key contextual issues relevant to the success of the implementation of the 2nd NUWSRP; and also to analyzes the project components with a view to identifying its strengths and/or shortcomings in relation to pro poor programming among other objectives.

Presentation of the results/findings

1. The study confirms the widely held belief that the performance of the public water utility in terms of regular supply, water quality and customers service is poor, appalling and dismal.

2. Public acceptance of the reform agenda: one of the findings of the study is that quite substantial number of households users surveyed offered support for private sector participation in water services delivery. What accounts for this? Consumers have been offered very poor services by the public water utility, and they felt if Public Private Partnerships in water supply could solve the problem, so be it.

3. The Lagos State Government does not strictly adhere to World Bank's policy and recommendations on project implementation. These include proper constitution of a Water Governance Structures- State Project Implementation Unit, a Project Steering Committee, public disclosure of environmental impact assessment, civic engagement, transparency and openness, and surprisingly on pro poor focus.

4. The level of project implementation is low partly because the World Bank Country office in Nigeria does not have the human capacity to monitor project implementation in an effective and timely manner. Most projects preparation documents are often referred to the World Bank Headquarters in Washington resulting in delays in project implementation. Also partly because an independent State Project Implementation Unit had not been properly constituted by the client.

5. Water consumers and the urban poor are ignorant of the reform process. They are largely uninformed on the reform process by the Government and also excluded from civil society debates on the reform process.

Conclusions and recommendations

Civil Society groups and in deed the World Bank should ensure that the Nigeria Government and Government agencies at the Federal and in the Client states implementing the Urban Water Sector strictly adhere to project guidelines and waters State be properly constituted immediately and be allowed to independently run its activities.

As part of the reform process, there should be an organizational restructuring within the State Water Board, to accommodate the set up of a “Pro poor unit”.

Training courses should be organized to increase the technical capacity civil society groups to monitor the project and they are also expected to initiate programmes of engagement

The convocation of a Stakeholders Forum on water sector reform as a platform for civil society-government engagement.

The World Bank should increase the human capacity of its Country office in Nigeria to supervise project implementation in an effective and timely manner.

Water Services Management in Latin America: Public or Private? Discussion Based on Four Cases Studies

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Keywords: Latin America, public-private partnerships, water services , management, water governance

Presentation of the topic of the research paper

This research paper reviews and discusses elements within the water services sector with the aim of analyzing the appropriateness of public versus private models of providing and managing water and sanitation services. It advocates for reforms to inadequate national water policies and management frameworks that do not aim for cost-efficient use and reliable universal access to potable water. To achieve efficiency in the use and allocation of water, and affordability of prices in its delivery to consumers, private participation in the water services sector might bring benefits and should not be discarded just because of a political or ideological position. Better management practices, along with well-suited institutional arrangements, are needed to meet the Millennium Development Goals (MDGs) on water supply and sanitation; it does not matter if water services are run by a public or a private entity, what matters is what type of arrangement is best suited to provide the service efficiently, improving coverage and at the lowest costs possible, while taking into consideration the socioeconomic, cultural, and physiological importance of water for every person.

In Latin America, where the four case studies presented in this paper take place, the subject of privatization of public services is still today a source of controversy within the debates of public administration reform. The design, or redesign, of institutional and regulatory frameworks to manage water resources and services is in a transitional phase.

Findings and Conclusions

The case studies presented in this paper, Buenos Aires, Cochabamba, Cartagena de Indias, and Santiago de Chile, are cases in which there has been private participation in the water services sector. Each case presented shows its own particular experience with regards to governance, the institutional arrangements, and the particular socioeconomic conditions that were in place at the time of the private sector's participation. They also have particular results of that experience. Indicators that are measured include the percentage of population with access to water and sanitation services before private sector's particpation, the trigger to promote change and include the private sector in a traditionally public-managed sector, type of bidding process to contract the private sector, the institutional arrangement set up, challeneges during the period of performance, percentage of population with access to water and sanitation at time 2, and its relation with the Millenium Development Goals. The paper concludes that private sector participation in water services in Latin America may increase the possibility of reaching the targets established in the MDGs, but that can only happen if: 1) an appropriate financial scheme for water tariffs is in tune with the costumers ability to pay, 2) a solid institutional arrangement and a regulatory framework are in place, 3) an active citizen participation at the community level is present, where solutions for water problems should grow (bottom-up perspective) byconsensus.

Phnom Penh Water Supply Authority: Radical Reforms Transform War-Torn Utility

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Keywords: Phnom Penh Water Supply Authority, nonrevenue water reduction, cost recovery, urban water supply, institutional reform

Cambodia 's Phnom Penh Water Supply Authority (PPWSA) can now proudly claim service efficiency, greater water productivity, and increasing consumer base. But it needed radical measures to transform itself from a decrepit and war-torn water supply system with missing water and missing customers.

Looking Back

In 1993, the state of Phnom Penh's water supply system was prime evidence of the devastation left by Cambodia's 20-year civil war and the Khmer Rouge rule.

PPWSA, the Government-owned water supply utility whose capacity has shrunk to 40% between the 60's and early 90's, was barely functioning. Employees were demoralized and underpaid. Only 25% of the population had water, and only 13% of connections were metered. Only 28% of the water produced for the system was actually sold, with the collection rate not even reaching 50%. Illegal connections were rampant, contributing to the 72% nonrevenue water. Even worse, the authority's employees were responsible for much of the water theft. They were installing illegal connections at US$1,000 per connection and receiving kickbacks from large consumers in exchange for lower meter readings.

Culture of Change

Upon his appointment to PPWSA in 1993, Ek Sonn Chan, with assistance from external funding agencies like the Asian Development Bank, initiated a "culture of change" within the organization, starting with the education and motivation of PPWSA's staff. This was followed by a flurry of reforms, including

- streamlining the organization's workforce
- improving collection levels
- rehabilitating the whole distribution network and treatment plants
- minimizing illegal connections and reducing unaccounted for water
- increasing water tariffs

Today, PPWSA's water service covers 100% of the inner city Phnom Penh and is being expanded to surrounding districts, with priority given to urban poor communities. In particular, PPWSA now serves 15,000 families in 123 urban poor communities, giving the poor extra privileges such as subsidized tariffs or connection fees, installment connection fees and more.

Non-revenue water has also decreased from 72% to 8%, while collection efficiency is now at 99.9%. Its 147,000 connections, up from 26,881 in 1993, bring reliable and safe drinking water to all of Phnom Penh's one million inhabitants 24 hours a day.

Lessons from PPWSA's Experience

Here are some lessons from PPWSA's experience:

- Water Doesn't Have To Be Free. PPWSA demonstrates that access to water does doesn't have to be free and that the urban poor will be considerably better-off paying for safe, piped water than they would be buying water of questionable quality from private vendors.

- Cost Recovery is Vital. By developing a tariff structure where the utility fully recovers its cost of water production and transmission as well as operation and maintenance, PPWSA has become financially viable and is now able to invest in the water infrastructure.

- The Operator Must Be Autonomous. Although the PPWSA is still government-owned, it has enough autonomy to develop its payment structure and culture with an enthusiastic and motivated staff responsive to consumer demand, and efficient operations where revenues pay for infrastructure development.

- Government Support is Crucial. The tariff restructuring, which paved the way for PPWSA's greater revenues, would not be possible without the support of the Government of Cambodia and the development agencies.

- Civil Society Must Be Involved. The remarkable increase in bill collection and reduction in illegal connections highlights the importance of involving users and civil society in a service that they want and are willing to pay for.

- Investing in Staff Yields Radical Results. Today's PPWSA employees are hardworking, responsible and self-motivated. PPWSA professionalized its workforce, building its technical capacity and instilling in its employees a work ethic of discipline, competence and teamwork.

When Ek Sonn Chan introduced the "culture of change" to PPWSA, he started the utility on the road to recovery. With each reform that PPWSA has taken, he has been its driving force, leading his staff and the community by example, and highlighting the need for a champion who will carry the reform from idea to action.

PPWSA has shown that through a transparent environment where water utilities have sufficient autonomy, where tariffs can cover costs, where service is equitable to all and where there is the active involvement of staff and civil society, clean water targets can be met.

Enhancing Water Utility Management through Regulation by Incentives in Zambia

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Keywords: regulation, incentives, commercial utility, management, water

Scope of the Paper

Zambia has decentralised and commercialised water supply and sanitation services to address the challenge of bringing clean water to every household – especially the poorer ones. Commercial water utilities (CUs) which are publicly owned but privately operated have been established throughout the country starting in 2000. An independent regulatory agency, the National Water Supply and Sanitation Council (NWASCO), has been set up to regulate these service providers. NWASCO using several tools such as service level agreements, guidelines, benchmarking and comparative competition has fostered performance improvements among the CUs. Since the onset of these reforms significant progress has been achieved in WSS service delivery particularly the service hours, quality of water and customer care. In this paper, we will analyse the impact of regulation by incentives on the improvement of performance of water utilities in Zambia.

The Commercial Water Utilities have been established as private companies by the Local Authorities with Board of Directors appointed from public and private sector as well as civil society. The institutional set-up is conducive for improved management of WSS services. There are, however, still major hurdles to overcome. In the current set-up, two major weaknesses for persisting underperformance of some utilities have been observed:

1. Weak Management largely due to public service mentality; lack of commercial mindset with mainly technical focus

2. Weak Corporate Governance: good structures in principle but poor implementation; weak supervision of management by boards e.g. failure to replace underperforming managers

Regulation in an environment where corporate governance and the commercial mind set of doing business are weak requires innovation beyond traditional regulatory instruments. In such a situation, managers are not necessarily deterred or motivated by the prospect of a fine by the regulator for non-compliance to certain issues. Therefore, additional incentives are needed to ensure compliance and improved management of WSS services. In Zambia, some of these have already been implemented and generated some positive results.

Results and Findings

Attitude and motivation of the top management of any company is the key to performance improvements. Especially former public service workers have to be continuously educated and reoriented to adopt a more commercial and business approach in running of water services. Setting the right incentives by the regulator can be an important external motivation

to speed up this process. The following are some of the findings on regulatory incentives in the Zambian case :

- The incentives used in regulation have to be designed in a way that will drive the management of utilities to achieving set targets. Therefore, the regulator first needs to know what will drive the management in their particular environment.

- In Zambia, a very powerful tool has turned out to be the emotional incentives. All managers would want their CU to come out as the best in the highly publicised annual awarding event. It is a major embarrassment for the managers if their Board and their customers hear about a CU being last. On the other hand, a good ranking in a benchmarking exercise published by the regulator will increase amongst others the employability of the top management and increase their market value. Managers of poor performing CUs are under pressure from the customers for better service delivery.

- The application of emotional incentives is a highly cost efficient way of improving the management performance of service providers. A successfully tested scheme in Zambia comprised mainly the procurement of several trophies as well as small monetary awards of USD 5,000 and less.

- Financial Incentives are an effective tool to achieve very specific regulatory targets. Financial incentives help to reach the set targets much faster. Additionally, financial incentives are very useful in getting the CUs to aim at targets which may not necessarily be CU priorities such us extension of WSS service to poor urban areas.

- Financial incentives are most efficient within the framework of incentive regulation when targeted directly at senior management. Managers make greater efforts when they are personnally benefiting from incentives compared to the situation where the CU as a company receives additional funds. The managers set the priorities in the company and will use a wide range of instruments (e.g. an internal incentive scheme) to direct the other personnel to go on the path they have chosen. Given the limited resources that are usual at the disposal of the regulator for an incentive scheme, it is not advisable to include personnel beyond the top management even though this is often considered as unfair in the African context.

Conclusions and Recommendations

- A prerequisite for the introduction of regulation by incentives is the availability of adequate capacities and regulatory instruments to properly assess the achievement of targets. Otherwise, the regulator risks losing its credibility.

- Regulation by incentives is a means to make regulation more effective in an environment where the commercial mindset and weak corporate governance is prevailing.

- The Zambian experience clearly shows that the combination of emotional and financial incentives is most effective in bringing about improved utility management. Emotional incentives are particularily cost effective.

- The introduction of special incentives in regulation can have a major impact on achieving regulatory targets in cases where they deviate from the CU priorities.

- Introducing regulation by incentives in Africa can hasten significantly the improvement of utility management and the attainment of the Millennium Development Goals (MDGs) for water supply and sanitation.

Rural Water Supply System Service Delivery
- Experience from Sri Lanka -

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Keywords: rural water, decentralization, local authorities, operation and maintenance, sustainability

An estimated 78 percent of Sri Lanka's 20 million population live in rural areas with water supplies that are largely traditional and rudimentary, commonly not meeting accepted basic standards of quantity, quality and convenience. To improve this situation the government has, over the past 15 years, implemented several large-scale Rural Water Supply (RWS) projects. Although legal responsibility for provision of safe rural water supplies lies with Local Authorities (LAs), they are institutionally immature; have weak human capacity and are financially constrained. Consequently they have failed to perform as desired and oversight of RWS has fallen by default to Central Government agencies.

The initial Community Water Supply and Sanitation Project (CWSSP) (1993-1999), supported by the World Bank, piloted a community-based approach to service delivery and management, where Community Based Organizations (CBOs) were involved in RWS system design, construction and management. Implemented through a central Project Management Unit (PMU) and local Project Implementation Units (PIUs) working directly with the CBOs, the project did not appreciably involve LAs in service delivery. A similar community based approach was adopted by the Asian Development Bank assisted RWS Project (1998 – 2006) but did involve LAs as a partner for service delivery, anticipating their active involvement as an Operation and Management (O&M) back-up support agency for CBOs, who would manage the water systems. These two projects provided water services to some 2 million people.

To-date there have been no detailed project evaluations, but monitoring data show service delivery under these projects was generally successful, with quantitative targets being exceeded. Although CBOs are managing most of their RWS systems effectively, nevertheless, the main drawback in this approach is the lack of back-up support by project management or by LAs during the commissioning and O&M stages.

The follow-up World Bank-supported 2nd CWSSP (2003-2009) attempted to address this vital sustainability issue by piloting a highly decentralized project implementation strategy. Project design was based, inter alia, on the notion that testing decentralization on a limited scale would probably fail as entrenched central agency vested interests would resist such reform. It was thus decided to support a more comprehensive and aggressive decentralization model than in the earlier projects. For the first time in Sri Lanka, LAs were given the responsibility of implementing a large community-based RWS project, with the Central Project Unit acting principally in an advisory and monitoring role. Under this project, by end of 2006, approximately 180 sub projects serving some 180,000 people had been completed and were in operation.

However, recent studies show that so far, there is no indication of LAs emerging as effective and mature institutions for RWS service delivery. LAs are still constrained by: (i) lack

experience in, and empathy for, community-based program implementation, and (ii) conflict of priorities having responsibility for all municipal demands such as solid waste management, rural roads and drainage. It seems probable that the potential benefits of RWS decentralization will remain illusory while the overall LA system remains weak. The problems of LAs are one of Sri Lanka's big national issues and therefore need to be addressed holistically from a national perspective. A key lesson learned is the difficulty of sustaining LA interest in RWS activities once project support is withdrawn. This is understandable as LAs are not resourced to provide adequate O&M support to CBOs for activities such as pump repairs, well flushing and water quality testing. Experience has also shown that channeling RWS projects through LA requires much effort, diluting the project's main focus on community-based participatory development. Although devolution of key functions to LAs may be an appropriate long-term solution, LA capacity limitations preclude short-term success. Due to the difficulties experienced working with LAs, many donors prefer other service delivery models. LA capacity development is a slow process which will need substantial resource allocation as well as sustained political will and commitment. But from a rural community perspective the practical issues of scheme timeliness, reliability, affordability and sustainability are probably more important than the issue of "centralized" vs. "decentralized" approach to service delivery.

Experience suggests that scheme sustainability depends largely on project implementers achieving effective service delivery and building CBO capacity sufficient to manage their RWS systems in a transparent and community-responsive manner. Although the LAs oversee the program, the present RWS service delivery approach effectively devolves decision making and implementation / management responsibilities to participating communities. To date this approach has proven to be the most appropriate and successful RWS model for Sri Lanka, with CBOs are not only managing RWS services successfully, but also venturing into other rural infrastructure and socio-economic development activities. On the basis of this experience, the CBO is clearly the key to RWS implementation, management and sustainability. A "strong" CBO, irrespective of the level of decentralization adopted, is better able to find the most appropriate solution for any required O&M back-up support. The conclusion is that stronger community development effort and appropriate technical solutions in service delivery are the keys to successful and sustainable RWS development. So attempts to reform delivery mechanisms, must ensure that "people centered", "demand responsive" and "community plan/construct/own/manage" concepts proven to be successful are repeated and adopted.

The Reform and Modernization Process in the North Governorate Water Administration, Jordan.

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Keywords: Water Utility Policy, Milestone Concept , Managing Consultant, Public Commercial Company, Private Sector Participation

In 1997 the Government of Jordan embarked upon a privatization programme, the goal being to orient Jordan's economy towards the private sector and best present Jordan to the international financing community.

The objective of the programme includes increasing the efficiency of enterprises, consolidating public finances, attracting private investment into the economy and deepening the financial markets.

In response to a parliamentary request, the Government developed a strategy for the privatization programme including Concession Agreements and Management Contracts.

It has been noted that the major underlying and significant contributing factor to the privatization success to date has been the emerging and unequivocal support at the highest level for privatization transactions.

As part of the privatization process promoted by the Government of Jordan, the Ministry of Water and Irrigation (MoWI) has produced a number of key policy documents, including Jordan's Water Strategy, Ground Water Policy and Water Utility Policy. These documents amongst others form the framework within which integrated water and wastewater services shall be provided within the country. Key issues within the Water Utility Policy relate to Private Sector Participation, Water Pricing and Cost Recovery and the various components of the institutional setup of the Water Authority of Jordan (WAJ).

In addition, MoWI published in April 2003 a paper on "The Concept of Commercial Companies in the Water Sector" in its drive to improve the provision of water services in Jordan, through which the Ministry of Water and Irrigation (MoWI) declared its adoption of a strategy of corporatization and increased private sector participation. An interim step in this regard - and part of the overall strategy - is the definite intention to establish water companies in the whole of Jordan which can be utilized in conjunction with a private operator, working under different PSP arrangements (e.g. service contracts, management contracts, leases, or concessions), or independently as a direct water services provider.

The Water Authority of Jordan (WAJ) is the Government Agency established to provide water services throughout the Hashemite Kingdom of Jordan in accordance with WAJ Law No (18) of 1988 and amendments thereto. WAJ discharges its water services through locally based units known as Water Administrations. The Northern Governorates Water Administration (NGWA) was formed in 2001 from the amalgamation of the predecessor units of the WAJ serving Ajloun, Jerash, Irbid, and Mafraq Governorates into one unit with financial, technical and administrative separation from WAJ HQ.

In 2002, MoWI decided to assign a private Management Contractor for NGWA to increase the efficiency and to secure the long term sustainability of the water and sewerage systems in the North, which to a substantial extent were financed and supported by German Technical and Financial Cooperation, but the tendering process failed to appoint a Management Contractor and was abandoned in 2004.

As a result, options for the future management orientations in NGWA were discussed and it was agreed to establish a Milestone Concept which serves as a "road map" to reach the final target for NGWA, i.e. the establishment of an independent, commercially operating Public Company working with Private Sector Participation options.

The Milestone Concept included several immediate and intermediate actions to be taken such as granting NGWA management a higher degree of autonomy in the fields of Staff Policy, Maintenance and repair budget, Water Loss Reduction Programs, and the assignment of a Managing Consultant to support NGWA for a period of three years with more than only advisory functions and integrated into NGWA management in line functions. Details of its role and responsibilities as well as his integration into NGWA management were formulated as a result of the review of the organization and business processes of NGWA, and with this NGWA has to reach an operating ratio of 105 % and a balanced cash flow until the end of the contract period of the Managing Consultant to establish in the Northern Governorates a commercially operating Public Company with full autonomy.

This paper will be analyzing the Jordanian experience in its Northern Governorates through the milestone concept elaborated, the concept and roles of the Managing Consultant assigned and the institutional model developed to better serve the population through the achievement of the MDG's.

Uttaranchal: Leading the Way in Implementing WATSAN Reforms on Sector Wide Approach (SWAp) – A Case Study

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Keywords: Sector Wide Approach(SWAp), Uttaranchal Sector Program, Rural Water Supply Sanitation, VISION 2012, MDGs

Swajal Project (Uttaranchal Pradesh Rural Water Supply and Environmental Sanitation Project) was implemented in 857 villages of Uttaranchal from 1996 to 2003, on the principles of community empowerment and demand responsive approach. The Project, implemented with the World Bank's assistance, aptly demonstrated that the rural communities can plan, implement, operate and maintain their water supply and sanitation schemes if they are empowered to take their own decisions. It also proved that Voice and Choice of the community are cardinal principles for the success of community based projects. The Project received satisfactory performance ratings in the Implementation Completion Report (ICR) by the World Bank and was praised by sector specialists across the world.

Scaling up Water and Sanitation (WATSAN) Reforms

The success of Swajal Project triggered the Government of India (GoI) to introduce the principles of community management in its Rural Water Supply and Sanitation (RWSS) policy. Consequently, in the year 1999, the Sector Reforms Project (SRP) was launched as a pilot project in selected 67 districts spread over 27 states across the country. The Government of Uttaranchal (GoUA) took up the entire district of Haridwar under SRP and 103 water supply schemes were implemented by User Water and Sanitation Committees in 89 Gram Panchayats and 2 forest villages.

Buoyed by the success of the pilot Sector Reforms Project, in December 2002, the GoI launched the Swajaldhara Program, on the principles of community management, all over the country. The Government of Uttaranchal (GoUA) already on the path of reform mode has implemented 25 schemes and about 70 schemes are in different phases of implementation. The GoI funded Total Sanitation Campaign (TSC), launched state-wide in 2003 is another community based sanitation project emphasizing on IEC, HRD, and capacity-building activities to increase awareness and generate demand for sanitary facilities. TSC has raised the sanitation coverage from the earlier 20% to 34%.

GoUA's Sector VISION 2012

GoUA has prioritized RWSS as a key area of its development agenda in its Tenth Plan (2003–07). GoUA has envisaged universal coverage of safe and potable water and sanitation by the end of its Eleventh Plan (2008–12), to meet the Millennium Development Goals (MDGs).

The Sector Vision 2012 clearly reflects the commitment of GoUA in replicating reforms and empowering the Panchayati Raj Institutions (PRIs),which are the local government bodies, as envisaged in the 73rd Constitutional Amendment Act of India as: "The rural local government in partnership with rural communities, shall plan, design, construct, operate, and maintain their water supply and sanitation schemes; so that they get potable water and attain health and hygiene benefits; GoUA and its sector institutions shall act as supporter, facilitator, and co-financier and as per need shall provide technical assistance, training and cater for bigger

construction works and sectoral contingencies. The institutional, legal, and financial changes will be brought in by 31st March 2007 and ultimate realization of the VISION will be expected in year 2012."

Continued support of the World Bank

The success of the Swajal Project and the GoUA's commitment to RWSS sector reform demonstrated through the state's sector vision and RWSS sector policy outlining the reform principles evoked the World Bank's interest to assist the GoUA for the follow on Swajal Project. The detailed deliberations of Project Management Unit (PMU),the organization entrusted with project preparation, GoUA and GoI with the World Bank ultimately converged in the shape of Uttaranchal Rural Water Supply and Sanitation Program or Uttaranchal Sector Program.

Uttaranchal Sector Program

The program has adopted a consistent policy for RWSS service delivery statewide and sector-wide in accordance with the GoI's Swajaldhara guidelines and the World Bank's Country Assistance Strategy (CAS) and is being implemented on a Sector Wide Approach (SWAp). Uttaranchal has added another feather in its cap, another first by becoming the first state in India and Asia to implement the SWAp. Uttaranchal, for sure is on the right reforms track.

SWAp essentially represents an approach wherein "most significant public funding for the sector supports a uniform sector policy and expenditure program, under government leadership, adopting common approaches across the sector, and progressing towards relying on government procedures to disburse and account for all public expenditure, however funded." To put it explicitly, SWAp means a state investment program to achieve the vision goals for RWSS for the next 5 years. All funds including the WB loan will be under the same policy framework as well as operational rules for project cycle, procurement and disbursement.

The agreement with the World Bank for the Sector Program has been signed in October 2006 and the first batch of the program is already underway in the planning phase.

The Challenge

In order to meet the Vision 2012 targets of 100% access to safe rural water supply and sanitation, a total of approximately 3 million rural people (50 % of the State's population) will need to be provided with access to improved water supply and about 5 million (80 % of the State's population) to sanitation. The major challenge would be mobilising sufficient resources to provide access to RWSS services. Additional challenges include policy and institutional strengthening to plan, design, construct and operate rural water supply and sanitation systems. This will require human resource development at all levels to enable PRIs and Sector Institutions utilise and manage the increased level of anticipated investments in the sector.

Uttaranchal, as ever before, will come up strongly, to make the Vision come true.

Progress and Prospects on Water Sector in Lebanon

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Keywords: Lebanon, , Water management, Water sector reform, Legislation, Environmental sustainability

When Lebanon emerged from a prolonged period of civil unrest in the early 1990s, the water sector like other infrastructure sectors in the country was in very poor condition. At the time it was estimated that water availability from the public system was 60% less than in 1975. In order to escape the problems of the existing system and make a rapid recovery, the government prepared a sector reform program centered on the establishment of an institutional structure that would enable commercialization of the delivery of water supply and wastewater services. The previously existing institutional structure of the water sector in Lebanon consists of the Ministry of Energy and Water (MEW), 21 local Water Authorities, the Litani River Authority, plus over 200 local Water Committees. Other Ministries such as Environment, Municipalities and Health play important complementary roles, particularly with respect to wastewater. The strategy was to consolidate the existing Water Authorities into a number of relatively autonomous institutions of sufficient size to enjoy reasonable economies of scale and with the power to generate financial resources, enter into financial agreements, execute projects, and with the power to generate financial resources, enter into financial agreements, execute projects and utilize the private sector for operation and maintenance through management contracts and, ultimately, leasing or concession contracts.

Actually, the water sector in Lebanon is on the verge of a transition that is not well defined. Change is happening, but the reform agenda is incomplete and the official policy appears to be in a state of flux. Although three restructuring laws were passed during 2000 and 2001, their implementation has been delayed. The new laws provide a general framework for sector restructuring, but the implementation regulations will be the key determinant of the actual outcome and timetable of the process. Therefore, although the formal legal structure has been changed and its details are in the process of being elaborated, the new structure has not been implemented yet and the actual institutional and operational reality on the ground is still substantially that of the past.

The actual water sector faces considerable difficulties. The principal issues identified are high physical water losses, an inefficient and inequitable tariff system, and general disarray in the sector stemming from historical circumstances and the scarcity of human and financial resources. The latter issue is being addressed, to some extent, through the sector reforms and private participation initiatives discussed in the next two sections below. The first issue, physical losses, is being addressed by ongoing projects but will continue to require significant financial investment for years to come. Metering is necessary in order to fully asses the extent of the problem. Metering is also a necessary precondition to addressing the second issue, the tariff system.

Since 1992, over half a billion dollars has been spent on rehabilitation of water and wastewater systems, with half that amount again still under execution and another half billion under preparation. By the middle of the present decade, the Government will have invested over $250 for every man, woman and child in Lebanon. Despite the enormous investment taking place, the impact has so far only been felt in the few places where new systems have

become fully operational, and the underlying institutional issues have thus far been addressed largely on paper only. For a majority of consumers, conditions are not greatly changed from the past, but change is coming. For example, there is still not a single operating secondary wastewater treatment plant in the country, but there are about a dozen currently under construction or under preparation for coastal areas, and quite a few more in process for inland communities.

The planned, and desperately needed, sector and institutional restructuring is still in the very earliest stages. The law, which in its present form delivers only half of its original promise, has yet to be implemented. The consensus within the government and among donors and stakeholders that led to the drafting of the law in the first place is not strong. There continue to he significant, if not always clearly stated, differences of opinion over the extent of continued reform, pace of implementation, and form of private sector participation that should he pursued at this stage, particularly between the Prime Minister, the High Council on Privatization, the sector Minister, the leadership of the Water Authorities and their Parliamentary backers.

The paper begins with an explanation of the water sector reforms, leading up to the passage of new laws in 2000 and 2001. It then explains the current situation in the sector and the current status of implementation of the sector reforms, ending with a discussion on current initiatives in private sector participation and recommendations for enhancing sector, project, and environmental sustainability.

Evaluation of Water Supply and Sanitation Delivery Services in Tanzania: Ten Years after Sector Reforms

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Keywords: water supply, sanitation, delivery services, sustainability, evaluation

Tanzania has since its independence in 1961 embarked on provision of basic services to her people. One of these services is Water Supply and Sanitation delivery services. Safe water and sanitation contribute to enhancement of the quality of life through improved general health conditions and well being of the people. Due to lack of safe water and sanitation, many parts of Tanzania has been experiencing the incidences of water and excreta-related sicknesses which are high resulting in periodical outbreaks of cholera and a high rate of diarrhoeal diseases accounting for a hundreds lives every year particularly under 5 year. Existing data on the incidence of water-borne, water-related and water-washed diseases indicate that these are mostly prevalent where people use contaminated water or have little water for daily use and as such these diseases account for over half of the diseases affecting the population and more than 80 percent of Tanzania's population living in rural areas. The principal of institution of a two – pronged intervention in terms of both water and sanitation improvement is a well-known approach for ensuring improvement of the health of the communities. However, the poor, most of who live in rural areas, have limited access to clean water for domestic use and crop production and adequate sanitation. Economic benefits are achievable indirectly through improved health and time saved from the drudgery of carrying water overlong distances.

The year 1995 – 2005 (Third Phase of Tanzanian Government) witnessed the major changes in economic reforms in the country. It was the time that the Water Supply and Sanitation sector in Tanzania underwent reforms. The primary objective of this evaluation is therefore to assess the performance of the Water Supply and Sanitation Program and its contributions to the water and sanitation services delivery system in Tanzania. The aims being to document experiences and "lessons learned" in relation to the preparation and implementation of future activities in the Water Supply and Sanitation (WSS) sector.

The evaluation focused on the qualitative impact of the project in relation to the development objectives of the programme. Three studies, applying qualitative methods, were undertaken (1) a consumer/household (services) study, (2) a human resources development study, and (3) an institutional capacity study. The studies were undertaken in a participatory manner. The idea was to have the end-users assess the impact of the WSS. The evaluation was carried out in two phases: namely a desk study of relevant background papers and reports etc and synthesis of the information obtained.

It has been found out that, with regard to physical installations the achievements are quite impressive. The access to safe and clean water in rural areas nationally is averaged at 53% and 73% in urban areas. However, with regard to the distribution of services to all sections of

the population and changes in the behaviour with regard to water use and sanitary practices the program has failed. Many water installations are located within the premises of rich and influential people. To a lesser extent the program has been successful in promoting the use of sanitary latrines, but it has been unsuccessful in promoting a change in sanitary practices. The majority of the rural population continues to bathe and wash utensils and cloth in ponds, rivers and canals, the banks of which are also used for human defecation and watering of livestock. On the human resources development, the Water Rwegarulira Institute which trains water experts for sustainable management of water resources and provision of rural and urban water supply services had, up to the end of 2004, enrolled 451 students which is equivalent to 84% of its fully capacity contrary to what was in 1995 which had the capacity of accommodating only 300 students equivalent of 55% of its full capacity. On the institutional capacity, the water resources management in Tanzania is now under nine (9) river basins contrary to none before 1995.

The sustainability of consumer benefits is threatened by problems with water quality. However, throughout the implementation too little attention has been given to water quality monitoring. The study is recommending that for sustainable water supply and sanitation delivery systems, the involvement and the participation of all stakeholders is important in order to achieve sustainable access, efficiency, equitable use and adequate protection and conservation of water.

Water Service Reform on the Divide, Experiences with Descentralized Management of Water Services in Small Towns in Nicaragua

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Keywords: water supply and sanitation, small towns, descentralisation, alternative management models, Central America

Water supply and sanitation in Nicaragua is in crisis: hardly any urban systems have full-time water supply and non-accounted for water is as high as 56%. In facing this crisis, large urban centres get top priority, whilst smaller towns have to find their own solutions.

As in many countries, the water and sanitation sector in Nicaragua is divided between a rural and an urban subsector. This division obscures the fact that a quarter of the country's urban population (25%) lives in small towns between 2000 to 20.000 inhabitants, presenting a mixture of rural and urban lifestyles. Of a total of 153 municipalities in Nicaragua, 95 small towns fall into this range. At the moment the management of most of these systems fall under the Nicaraguan Water and Sewerage Company (ENACAL), that also manages the water systems in larger cities. Discussions about reform of this centralized management model started only recently: the new National Sector Strategy for Water and Sanitation, includes different proposals for desconcentration and decentralization of services but does not make a clear analysis of the situation of small towns.

Such reform proposals have sparked strong and emotional debates, relating them to privatization and leading to comparisons with the situation of the national electricity company. For most of the population, discussions about management reform have neither been clear nor transparent regarding the future of water supply services in the country. In spite of this, there are about 26 small towns in the range of 2000-20.000 inhabitants that already have alternative management models for their water supply system. Their local experience and solutions contain many potential lessons for the reform process.

Some cases started off as community-led rural systems, where water companies were subsequently formed, whilst others created a small water company after receiving funds for construction that did not flow through ENACAL. Again others were constructed and initially managed by ENACAL, but later transferred to the municipality. In addition to these 26 cases, some systems remain formally managed by ENACAL, but are de-facto co-managed by local government. In this paper, management models and reform processes in 7 small town systems are described and analysed.

After receiving the systems' management, most operators embarked upon new, sometimes very personalized strategies to deal with their problems, ranging from source protection to neighbourhood discussions and demand management, leading to improved income and control over irregularities. Such strategies are urgently needed so as to avoid future investment costs that cannot be afforded, because even though revenue may improve, this still does not cover depreciation nor major maintenance costs.

For all of these systems,however, the vicious cycle of high non-payment rates, low incomes, poor maintenance and investments, and deficient service delivery is the main issue of concern. Most systems lack micro measurement, which is considered costly in both purchase and maintenance, and leads to resistence from users. Service delivery is deficient in both quality, quantity and opportunity, as water may arrive as seldom as once a month, while sanitation is generally absent..Impacts on the poor population, especially female headed households, are severe.

In spite of advances made with regard to the most urgent issues, most systems that are not directly managed by ENACAL, still lack basic management tools (financial, administrative, technical) and the compliance of necessary legal requirements. Such issues are often not taken into account by municipalities as they tend to focus on the expected social gains of improved service delivery. However, this organizational and legal vulnerability affects the systems' sustainability, as well as possibilities to obtain new investments. In addition, national standards for service delivery are the same for all urban systems, which makes it almost impossible for small operators to comply. Though generally these standards are not applied by the regulatory body, their continual incompliance can lead to revocation of the system to ENACAL.

One of the major topics of discusion regarding management reform in the water sector, is the capacity of the small operators, whatever their legal status. Comparison of different cases, however, shows that it is not so much the existent capacity of the operator which is decisive for good management, but more the institutional capacity of the municipality combined with solid local participation structures that ensure good decision making.

With regard to the technical capacity of the operators, their small scale requires the development of external service providers. An example are systems with electrical pumps, where many small operators do not have the means to employ the necessary specialists. A group of rural systems in Matagalpa, however, is solving this by sharing a technician.

In conclusion, the particular situation of water supply and sanitation services in small towns in Nicaragua requires a strategy tailored to their needs, reality and rationality. It is a segment of the water and sanitation sector that has enormous potential both in achieving the MDG´s as well as enhancing local economic development. The study and comparison of existing experiences with alternative management models provides both a wealth of lessons learned as well as an opportunity to develop management tools, legislation and benchmarking schemes appropriate for this range of systems. It also enables different actors to develop the necessary support capacity for the change process that may be as important or more important in achieving sustainable service provision than the management model itself.

Consumer Attitude and Trust in Accra Water Supply (Ghana)

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Keywords: water supply, consumer survey, private sector participation, Accra, Ghana, customer care

Accra water system is going through fundamental change. A major grant from the World Bank in January 2005 has enabled large investments in the water sector. Management of Ghana Water Company Limited is being reformed toward Private Sector Participation. Contracts were signed with "Vitens International of the Neatherlands" and "Rands Water Services Pty of South Africa" in November 2005.

In the global development debate and ambition to move toward a sustainable development, "consumer participation and involvement" is repeatedly being highlighted as a prerequisite for a sustainable future, which is also reflected in policy documents emerging around the world. The Ghana Water Policy, the Ghana Poverty Reduction Strategy, the European Water Framework Directive and the EU Water Initiative: Water for Life, are examples of policy including issues on water management.

For the water sector to live up to regulation and the underpinning policies in decision-making as well as to consumer preferences, an increased understanding of the consumer perspective is needed. Studies on consumer attitude have traditionally taken place on controversial products such as GMOs (Genetically Modified Organisms) but for consumer studies related to water supply, assessments of Willingness-to-Pay (WTP) are predominant. However, the consumer aspects on water supply are much broader than WTP and consumer costs.

This study captured the consumer perspective of Accra water supply, thus the interface between the user, the technical system and existing water policy/legislation. The survey was limited to Accra and its inhabitants (household consumers) that are supplied with pipe-born water (shared or private tap) or that depend on water tanker service. This division by itself created an even geographical distribution of the study as water supply is segmented in Accra. In the survey 300 consumers, one of each category participated.

The study finds the existence of national policy statements in consonance with regional and global directions seeking to address accessibility and other water supply service issues for the consumer. There is a clear regulatory framework by the Act that established PURC to protect and safeguard consumer interest. The identified consumer criteria for trust include accessibility, reliability, willingness and ability to pay, cost of water (that matches value of service), handling of complaints, and enforcement of consumer-oriented policies. The study shows accessibility as being of little significance to private consumers but of critical interest to shared and tanker water consumers. In descending order private water consumers generally rank trust criteria as reliability, water quality, customer care, affordability and then accessibility whiles for shared consumers, it is reliability, accessibility, affordability, quality, customer care. Tanker water consumers indicated their rank as reliability, accessibility, quality, affordability and then duty of care.

The study confirms the fact that private tap consumers have easiest access to water (although delivery cut offs are common) while shared and tanker water consumers have more difficulty in accessing water. The majority of consumers experience water supply interruptions irrespective of the supply means but consumers of shared water source most likely suffer from supply interruption and consumers are not adequately informed prior to service interruptions. Radio and television media are used by GWCL to communicate interruptions and radio is perceived serving consumers most effectively. However, in spite of the established media of communication with consumers by the utility company, a majority of consumers perceive water supply interruptions as inconvenient.

There is general lack of consumer understanding of the billing or charging system with private consumers having the best understanding of their bills. A considerably high proportion of consumers consider the current amount they pay for water as high. Consumers of tanker water spend the highest proportion of their household income on water for domestic usage. Consumers of tanker water source are less likely to get the quantity of water needed, in addition they have the pay the most for water. At the same time, consumers of tanker water source have the lowest income levels. A slight majority of consumers are willing to pay for water service improvements. Consumers' quest for better services is reflected in their response to willingness and ability to pay. However, the desire for a better service delivery is not mirrored by the proportion of income they are willing to part for the desired improvements.

The study reveals weak consumer knowledge but earnestness for information relevant to water quality. A slight majority of respondents has had water quality problems and may or may not have formally lodged a complaint with the utility provider or regulatory bodies. Water quality problems are mostly dirt contamination, water colouration, odour, bad taste and algae contamination. Respondents resort to boiling, sedimentation and filtration as ways of improving upon their drinking water quality.

The perceived consumer responsibilities include wise use of pipe water, reporting of problems to utility provider, timely payment of water bills and asking for bills if not submitted by utility company.

The study suggest that private water consumers most likely have a positive rating of satisfaction (i.e. good to excellent) with pipe water services whiles shared and tanker-water consumers attach moderate to bad rating of satisfaction to pipe water supply services. In general, most private consumers rate their trust in water supply from moderate to very high while a considerable majority of shared and tanker water consumers rate their trust from moderate to very low.

Management Contracts: Impacts on Services Improvement in Effective Institutional Environment. Lessons from Experience.

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Keywords: management contract, emerging countries, water & sanitation, South Africa, Algeria

In many developing countries, urban water and sanitation utilities are poorly managed, invest few or no resources in infrastructure maintenance, give low priority to wastewater collection and treatment and leave aside a large number of families. Inefficient water services are usually correlated with poor local or national sector governance.

Countries or municipalities that have decided to reform their public services in the water sector have at their disposal different tools that can be used according to local characteristics. The "management contract" in which management reform in the form of financial, operational and technical improvements are entrusted to a experienced private operator, while the authority retaining full decision on investment priorities and tariff, has proved to work efficiently when there is a genuine political commitment to reforming public services.

The proposed paper will analyze the impact of two management contracts on service improvements implemented in countries with very different characteristics but similar will of reforming public services: Johannesburg in South Africa and Algiers, in Algeria.

Johannesburg

On 1 November 1995 elections were held for Johannesburg's first democratic local government. By 1997 the City was in a grave financial crisis. Local government in Johannesburg, like that across South Africa, depends largely on its own revenues to finance operating costs. During the days of anti-apartheid resistance boycotts of service charges were a key weapon of struggle. Despite the new democratic process, residents were reluctant to resume paying taxes and utility bills, since services did not improve significantly.

In 1997, the city of Johannesburg was close to bankruptcy. The council launched an ambitious plan called Igoli 2002 that would significantly improve service delivery and development while maintaining strict financial discipline. Three municipal utilities were concerned by this plan: City Power, Johannesburg Water and Pikitup, the solid waste collection and disposal service.

In January 2001, the new City of Johannesburg combined the four water and sanitation departments to form Johannesburg Water, a wholly-owned public company responsible for all water and sanitation services provided in the City. One of the unique features of Johannesburg Water was the signing of a management contract with a specialist water and sanitation management consortium to help the utility finalize, set-up and solve pressing service delivery challenges. The performance driven contract, valued at R 25 million, was awarded to a consortium led by the Ondeo Services (part of the Suez Group). This contractor, known as JOWAM, was responsible for placing a 12-member technical assistance team in the utility. This reduced to two members over the course of the contract as local staff gained expertise.

The main objective of the management contract as envisioned by the City of Johannesburg in 2000 was to build a sustainable water and sanitation Utility in particular through an appropriate transfer of skills. The management contract between Johannesburg Water and JOWAM started 1 April 2001 and ended 30 June 2006. It has been extremely successful in the sense that it allowed Johannesburg Water to become a sustainable utility and has generated solid achievements in terms of customer service, environmental protection, cost effectiveness, financial results and training and development of personnel.

Algiers

In Algeria, water management issues became increasingly critical in the last 20 years. Population growth in cities, repetitive droughts, decay of infrastructure by lack of dedicated financial resources and poor management of resources and services created increased pressure on national authorities for sector reforms. In the capital city of Algiers, the situation has become increasingly critical leading to significant service restriction, financial difficulties and environmental damages.

In 2005, the government of Algeria adopted a new water law aimed at improving water resources management and institutional reforms.

One of the first tangible element of the water law was the creation in Algiers of a single entity in charge of water and sanitation services the "Société des Eaux et d'Assainissement d'Alger" SEEAL, an autonomous utility 100% state-owned with the major mission to modernize water and wastewater infrastructures and systems and guarantee 24 hour water distribution to the residents of the city. At the end of 2005, SEAAL signed a management contract with Suez Environment with the objectives to mobilize and transfer operational expertise, train local staff, modernize utility management, rehabilitate and extend water and sanitation infrastructure. The main commitment is to ensure water distribution to the residents of Algiers 24 hours a day by the end of 2009. The government will finance the rehabilitation and development of infrastructure representing an estimated cost of Euros 200 millions per year.

Suez Environment has mobilized 27 managers and experts that work full time with the national staff of SEAAL to reach this objective. Based on the success of this first public-private partnership, the national authorities have planned to apply the model of management contract to 11 additional major cities of the country. A bidding process is already underway for 3 cities.

Conclusions

These two examples demonstrate that there are two fundamental parameters for water and sanitation services improvement: a strong political commitment to implement sector management reforms and the dedication of water experts and professionals to the modernization of water utilities that work at rehabilitating and expanding water and sewerage systems, improving customer services and strengthening human resources management.

The communication will show concrete illustrations of progress achieved based on key performance indicators.

Decision Process on Allocating Water for Ecological Purposes within the San Francisco River, Brazil

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Keywords: basin management, ecological flows, participation, social involvement., decision making

A hydrographic basin of the San Francisco River (SFR) covers six Brazilian states (Goiás, Minas Gerais, Bahia, Pernambuco, Alagoas e Sergipe) and involves 502 municipalities, including the Federal District. Besides regional diversity and variety of institutions involved (federal, state and municipalities), there is a high degree of heterogeneity and complexity in all instances related to water management in this large river basin.

In a year 2001, a SFR Basin Committee (SFRBC) has been officially established, and one of its first actions has been to initiate broad discussions about water allocation along the river course, including determination of required (desired) ecological flow in most downstream part of the basin accordin to the Water Plan that has also been approved recently. Minimum river flows are adopted, hawever, and in a way, arbitrarily, mostly based on the controlled regime of the hydro-electric plant Xingo; that is, without dedicated scientific analysis and justification. Therefore, a necessity for additional studies became obvious, especially with focus on required ecological flows in lower river corridor and its effluents, and this in such a way to determine maximum water flow that can be charged for consumptive uses.

Allocation problems so far has been analyzed in search for best compatible water availability and water demands by primarily respecting quantitative aspects and situations which exists in different regions. By defining allocation per region and per uses within regions an attempt has been made to define limits, criteria and priorities in defining appropriate water rights for the whole river basin. Actually, different actions are underway to preserve participation of relevant entities, directly and/or indirectly, in related WC´s decision making procedures to minimize or avoid possible future conflicts.

Water allocation for environmental purposes in practice appears as the most important issue within the first pass of negotiation process. A knowledge about necessary amount of water for preserving fundamental functions of aquatic ecosystems in most downstream parts of the river, including its confluence with the Atlantic Ocean, has a direct influence on all upstream demands. Therefore, it became obvious that there is a general conflict between water uses for other purposes and of its allocation for environmental (ecological) needs. It was understood that new environment must be created which will optimize, in multi-objective and multicriteria sense, present differences coming from high vulnerability of environment and diversity of socio-economic problems related to extremely different ranges of indicators referring to upstream richness accompanied with high demographic density, downstream poorness with a very low one.

This paper present most recent research results related to implementation of the decision-making process aimed to support negotiable allocation of a environmentally acceptable water

flow in most downstream part of the San Francisco river. Multiple actors and multiple criteria are involved in a methodology that has been developed to motivate and facilitate effective participation of different actors and entities, especially those coming from the social sector. Incorporation of social actors, such as users and organized civil community appeared essential within the decision-making process because they give legitimacy and empower actions of the SFB Water Committee who's competency is to arbitrate water conflicts within the basin.

To come up to the well structured hierarchical decision-making trees and to adopt proper methods and instruments that will support decision-making, a necessary inclusion of specialists from different disciplines is assured, such as from hydrology, biology, geology, economics etc. Diversity of disciplines involved is fundamental for proper definition of all decision elements, from goal, objectives and criteria sets, to valuable and plausible alternatives. Being the core part of this paper, developed methodology serves to ease negotiation process within the WC and to integrate various aspects that influence variable flows and different participants that are involved in both using water or deciding about it on a participative basis; and all this is made by strictly following statements in the National Water Law.

A methodology is based on a leading premise that any water flow regime can be determined based on technical and scientifical criteria, but that a social involvement is of fundamental importance and cannot be avoided in any instance. Having in mind: a) composition of the SFRBC for such a large basin such as the San Francicso river basin, and b) number of 60 official members, and by respecting different socio-economic and political background -- a necessity for participative modeling and conducting the decision process within the Basin Committee has been supported by recognized methods and tools coming from multicriteria decision-making and social choice theory.

Assessment of Management Practices in a Public Water Utility: A Case Study of the Namibia Water Corporation

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Keywords: New public management, water utilities, water services, NamWater, market-orientation

More than 90% of urban water supply and sanitation services in developing countries are provided by public utilities. However, public provision of the services has been inherently ineffecient. As a result a number of initiatives have emerged in recent years in many developing countries with a common goal to improve service delivery to the public. With the aim to bring about effeciency in water services, the government of Namibia created the Namibia Water Corporation Limited (NamWater, which is a sole bulk water supplier throughout the country. NamWater provides water to an estimated 1.2 million people out of Namibia's total population of 1.8 million. Since its inception in 1998, however, NamWater has been experiencing poor services and financial performance. This paper presents the findings of a case study that examined the management practices/approaches of NamWater over 5 years (2001-2006)and made comparison to the New Public Management (NPM) paradigm. The focus of the NPM approach is to mirror private sector methods of managing and organizing so that public utilities would accrue the benefits of effectiveness, efficiency and flexibility which are often associated with the private sector. The study covered NPM core-ideas such as corporate culture, market-orientation, customer orientation, delegation of authority to the utility and within the utility, accountability of results within the utility as well as externally. The study was caried out in Namibia in the period January to June 2006. The study tools used were a combination of literature review, interviews and questionaires.

On the degree of autonomy, it was established that NamWater has a high degree of autonomy, although the government approves it tariff adjustments and sourcing of external financing.The utility is subject to strong reporting frameworks including submitting financial audits and annual performance reports to the governement. The utility is embraces a notion of good corporate culture and adheres to sound management practices. NamWater demostrated a strong market orientation and outsourced both core and non-core functions/tasks to the third party to improve effeciency. Benchmarking of services and performance was only done on an adhoc basis over the last five years. The utility's customer orientation was not well developed and lacked customer care centre, customer satisfaction surveys and a customer charter. NamWater was rated poorly by 80% of customers as lacking customer-focus. On delegation of authority within the utility, NamWater's senior management delegated operational authority to lower management to facilitate flexibility and eliminate unncessary bottlenecks. The lower management is held accountable for results by the senior management which in turn account to the management oversight agency (Board of directors). NamWater's performance indicators for the past 5 years fall well within the proposed World Bank yardstick of well-performing developing countries water utilities.

It was concluded that NamWater's management pratices generally adhered to the NPM paradigm but elements of NPM were not fully and consistently implemented. There are no robust methods of ensuring sufficient accountability indicated by the lack of performance contracts between the utility and the government and between the Board of directors and the senior management. Namibia has no drinking water quality statutory instrument that the government (regulator)can use to enforce compliance. There is also no customer customer charter that the utility is bound to when dealing with customer issues.

It is recommended that NamWater should consider developing performance contracts as well as customer charter to ensure accountability. The utility should be more customer focused to enhance customer trust and willingness to pay for services. Benchmarking activities must be consolidated in order to improve service delivery. The government must set-up a regulatory body which shall among other tasks, be developing water quality standards.

Monitoring and Evaluation – A Key Factor in the Reforms in the Water Sector.

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Keywords: water, reforms, monitoring, evaluation, millenium

Ghana, like many developing countries, is in the process of reforming its water and sanitation sector. Earlier reforms in the sector started in the 1970s, a few years after the incorporation of the then Department for Water supply under the Ministry of Works and Housing. The reforms focused on restructuring the Water Supply Department into a more viable public institution. This involved mainly management restructuring, training and technical assistance. The restructuring further looked at decentralising authorities from the central office in the capital to the 12 political regions to improve management of the operations of the over 180 systems spread throughout the country. The earlier reforms however failed to meet the objectives of reducing waste and making water more accessible and affordable to the population. This necessitated further reforms in the sector. Current reforms which started in the 1990s after what is considered to be the failure of the reforms of the 1970s, sought to go beyond technical assistance and decentralisation process to unbundling of the water sector to specific institutions, and the introduction of the private sector in the operations of the water supply systems.

The objective for both the earlier and current reforms, like many reforms in the water and sanitation sector, was increased access to affordable services. Of particular concern was the situation of the poor and in the case of Ghana one key success indicator was greater access by the poor to affordable water. While the earlier reforms focused on restructuring the institution for water supply i.e. the Ghana Water Company Ltd. (GWCL), the current reform process looks beyond the institution and looks at the sector as a whole. The current reforms have thus led to the unbundling of the sector to several institutions, with many responsibilities being separated from the GWCL and transferred to newly created institutions. In respect of this, since 1996, operations of small water supply systems have been hived off from the Ghana Water Company Limited for Community management; Public Utilities Regulatory Commission has been established, ending the self regulatory role of GWCL; Water Resources Commission has been established to manage the water resources and the Private sector has been introduced into water supply operations.

Despite all these innovations, it is increasingly becoming clear that the sector is yet to meet the challenges confronting it particularly with regard to providing affordable water supply to the poor. The missing factor appears to be lack of effective monitoring and evaluation. Without effective monitoring and evaluation mechanism, minor flaws in the process go undetected until they escalate into major bottlenecks which finally lead to failures in the reform process. Effective monitoring of Ghana's early reforms would have revealed in the early stages the flaws in the low tariffs and the subsidies. Rather than providing affordable water to the poor, it was discovered almost twenty years later that the subsidy was rather benefiting the rich who were connected to the system and that the low pricing was rather leading to deterioration of the utilities, lack of access to services, and inequity, as a result of low revenue and inadequate subsidies for effective operation and maintenance.. An effective monitoring and evaluation as a continuing process in the operations of the water will forestall

the unending cycle of reforms in the sector and provide more targeted solution to sector problems.

Long-term reviews of management processes, while considered important should complement, and not a substitute continuous monitoring and evaluation which offer greater opportunity for corrective measures at early stages of reform processes.

As part of the current reforms in the sector, the private operator has been mobilised since June 5, 2006 and has started operations. As a result inadequate monitoring and evaluation mechanism within the GWCL, there is fragmented baseline information to assess the performance of the Private Operator. The introduction of the private sector is premised on the fact that a strong utility management is key to achieving the objectives for sector improvement, greater access to potable to water supply at affordable rates especially the low income groups, cost recovery through efficiency gains, better service delivery, and long-term stability, and that the private operator has a demonstrable expertise in this area. However, will these be achieved without proper monitoring and evaluation of their operation?

The MDG targets for on the other hand, does not make it clear what access really means. The access-baseline will thus differ from country to country. Recent study of the coverage of water supply in Ghana by one the UN agencies put access to urban water supply in Ghana as 80% and notes that Ghana is on its way to achieving the MDGs for water, while a study by GWCL places accessibility at 59%. For every country and for Ghana in particular there is need for a strong coordinated monitoring and evaluation process with a well-defined baseline, data management scheme that is able to collate all activities in the sector including contributions made by NGOs, Churches, individuals. Without this, in spite of the spate of reforms in the sector, the achievement the MDGs will be a mirage and will be dependent on who is presenting the report.

Private Sector Participation and Regulatory Reform in Water Supply: The Middle East and North African Experience

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Keywords: Institutional reform, Middle East and North Africa, Private sector participation, Regulatory reform, Water legislation

This research project has been conducted under the scientific direction of the OECD Development Centre and has been funded by the European Commission within the sixth framework programme. It is part of the International Research Consortium "Understanding Privatisation Policy: Political Economy and Welfare Effects - UPP Project" coordinated by Fondazione Eni Enrico Mattei (FEEM, Italy). More information is available at: http://www.privatizationbarometer.net/upp

The Middle East and North African area (MENA) faces one of the most important water crises in the world. The combination of aridity, foreign dependency, climate impacts, misallocation of the resource and escalating human demand make water supply a primary issue for health, economy and poverty reduction in this region. In this context, institutional reform of the water supply sector is of great interest. The aim of this study is to examine the water regulatory framework in MENA countries and the development of private sector participation in the context of urban water crisis.

The research is divided into four parts.

The first part presents the scope of private sector participation in water supply and its different forms around the world. An extensive review of empirical tests and case studies on the effect of private sector participation in water services has been conducted. This survey shows that private sector participation per se in water supply does not systematically have a positive effect on efficiency and that reforming the water supply institutional framework is an essential prerequisite for delegating water services.

Then, the study focuses on the MENA experience. It compares the institutional organization of the water supply sector and recent regulatory reforms in Algeria, Egypt, Jordan, Morocco and Tunisia. This part is based on a detailed examination of laws, decrets and official publications in MENA countries and on the inventory of the majority of private water contracts in the region.

The third part of the research deals with the development of a Water Sector Analysis Scorecard based on 10 indicators (water resource, water use, management of water, water pricing and metering policy, water institutional framework, private sector participation in water supply, desalination, projected investments in water and wastewater services, impact of demography and economic conditions) and 50 sub indicators.

In the fourth part, the scorecard is applied to MENA countries. Based on the experience of the different countries in reforming the organization of the water supply sector, the study proposes major regulatory reforms for Algeria, Egypt, Jordan, Morocco and Tunisia and

concludes on the future of private sector participation in water supply in each of these countries.

The Water Sector Analysis Scorecard of this study has revealed great differences of organization among MENA countries.

In Tunisia, water and sanitation operators are very efficient in comparison with other MENA countries. However, some improvements could be made by decentralizing the management of water and by corporatizing local water utilities. Moreover, the tariff setting policy needs to be reformed: prices must reflect the local effective cost of water by being set regionally instead of nationally. Differences of prices among users have also to be reduced; the high level of cross subsidies does not seem sustainable in the long term.

In Algeria, the recent regulatory reform of water services is very ambitious and is expected to be fruitful in the short term. Corporatization of public operators, progressive water tariffs and decentralization are of the many reforms that will improve efficiency in the water sector. The institutional framework has been rationalized and is now well structured.

Egypt started a couple of years ago to restructure the organization of the water sector. The government is currently in the process of decentralizing water policy to the local level. When effective, this reform will reduce inefficiencies due to the very centralized administrative system. The corporatization of local water operators could also facilitate monitoring cost and would ensure a productive competition among water providers. In addition, tariffs are not set at a viable level and need to be increased in order to guarantee the financial sustainability of the water policy in the long term.

In Morocco, the reorganization of the water supply sector started ten years ago. River Basin Organizations, decentralization, corporatization, sustainable progressive tariffs are of the major reforms. The well defined institutional environment permits now true competition between private and public sector. This policy has led to success and will be even more fruitful in the coming years.

In Jordan, the overall situation of water scarcity is concerning. Private sector participation in Amman has led to some improvements, but a broad institutional reform of the water sector is necessary. The organization of water authorities and their respective responsibilities need to be rearranged with a clear separation between political, strategic, regulatory and operational roles. Political interferences in regulatory/monitoring activities must be reduced. Decentralization and corporatization of local water operators would allow efficiency gains. Another problem lies in tariff setting: tariffs are set too low in general and water for agriculture is over subsidized.

The full version of the study is available on the website of the OECD:
www.oecd.org/dev/wp

The scorecard developed in this study is a valuable tool to analyze the institutional organization of the water and sanitation sector and to assess the future of private sector participation. The methodology is intended to be replicated for other countries in the future. This scorecard is now being implemented at the OECD for a broad review of private sector participation in water supply and sanitation infrastructure in thirty developing countries.

Irrigation Management Reform in Asia: Lessons from Low Successes & How to Walk the Last Mile for Effective Service Oriented Management.

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Keywords: Irrigation, Management, Performance, Services, Re-engineering

Since the mid 1990s, the landscape of the irrigation sector has been rapidly changing. Massive reform of irrigation, through IMT and PIM, and of the whole water sector, has continued and, as a result, tens of thousands of WUAs have been created to take over irrigation management essentially at lower levels.

There are several ways to look at the reform and its achievements. If reductions of state irrigation budgets and numbers of WUA created are the measures of success, the reforms may be considered a success. If irrigation system performance, improvements of service to users and sustainable financing are the litmus test however, achievements are much more modest to say the least.

Promotion of the needed irrigation reforms in contexts where these meet strong opposition certainly induces many reform promoters to insist on positive aspects and ignore the negative ones with the hope that time will bring necessary improvements, but shedding blind eyes on the initial results from the field can be extremely dangerous for the reform. FAO considers that a thorough evaluation of results on the field is necessary and that, in view of initial successes and failures of reform models and processes, reform of the irrigation sector probably needs a second breath, based on a rigorous analysis of what has been achieved, what are the gaps and the remaining challenges. A first step in this reform agenda is to go to the field and evaluate things, and then to initiate a thorough thinking process on how to proceed.

Results of FAO work in Asia show that the reforms generally have not resulted in improved service to farmers, and poor service delivery to WUAs by upper levels of management is a major constraint to their viability, while WUAs and farmers are still not associated to major decisions on system management objectives. The reasons for these disappointing results range from faulty design to a lack of dedication in implementation of the reform process. What is clear though is that the absence of tangible results has progressively grown as one of the main obstacles to support for the reform, especially by farmers, and it is therefore critical to assess results and why these are so disappointing.

Often the process of reform which can be compare to the re-engineering approach carried out in the professional business, from a top-down management through command and control to one more balanced in terms of sharing decisions and costs, has proved much more demanding than many reform promoters had previously thought. This has created gaps in the achievements. Thousands of water users associations (WUAs) have been created but many have been left without adequate professional capacity. Thus, they have been unable to operate effectively the system for which they are responsible and to provide service to their users as they should.

The last mile of the reform should be walked. A full reform or re-engineering process needs to examine not only the institution, the legal system, the social aspects of rural society, but also needs to re-engineer the operation of the irrigation system and ensure appropriate skills at all levels of the command area.

As part of a consistent approach, FAO has been promoting and assisting agencies and managers in Asia in the adoption of modernization concepts for the upgrading and management of large irrigation systems. FAO has been collaborating with many governments, irrigation departments, managers, donors and research institutions and carrying out capacity development programs for hundreds of engineers and decision makers. It also has assisted in designing national strategies for modernization and preparing investment projects.

This paper presents i) the results of the jointly made evaluation of Water Users Association in 22 irrigation systems in 11 different countries in Asia using a Rapid Appraisal Procedure (RAP) to evaluate various dimensions of performance ii) the lessons learnt from these evaluations, and iii) how to address the shortcomings of the reform process through targeted interventions and capacity building of the irrigation managers.

From the review of achievements of irrigation reform in Asia, the paper suggests how to walk the last mile of the reform, and ensure professionalism in the new irrigation business and a real effective promotion of Service Oriented Management. It describes briefly the methodology developed by FAO to partition large command areas into cost-effective practical management units to sustain professional systems operation, and to build consistent modernization plans with WUAs and federations of water users associations (FWUAs). This methodology is called MASSCOTE – an acronym from MApping Systems and Services for Canal Operation Techniques.

Local Meets Bank: Lessons from the Guanajuato State Water Programme.

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Keywords: decentralisation, reform, institutions, IWRM, sustainability

Guanajuato State, located at the central part of Mexico, is in the middle of the Lerma-Chapala basin, with a critical scarcity that gives rise to frequent conflicts and jeopardizes the conservation of water bodies as well as the region's development. Since 1996, the State authorities began implementing a reform in the water sector. In 2000, a State Water Program for the long term was proposed, and a mid-term programme began being implemented, in terms of three main objectives linked to the improvement of knowledge, planning and participatory management of water budget balance recovery; to the improvement of coverage and quality in public services; and in setting up proper institutional mechanisms for an adequate financial, technical, legal and cultural support for water management measures. Some relevant outcomes were achieved. In this context, the implementation of the first World Bank's programme for strengthening local capabilities in different sectors, by means of a direct agreement with a sub-national government, took place.

The State Water Plan was partially based in a set of documents which had been produced under the sponsorship of international organisations, so the implementation of the World Bank's project was rather smooth in terms of technical coordination. Nevertheless, through the implementation process, some adaptation shortcomings showed up, dealing with administrative issues such as with the procurement processes or the participation of municipalities in the tender processes and execution of the actions. The substitution, overlapping or adaptation of new external administrative procedures had some negative as well as positive consequences for the State's institutional capacities and the programme's performance. In the other hand, the implementation of the World Bank's programme helped the state water authority to lever some actions within the State Government itself, which were normally subject to difficult negotiations within each years' budgeting process, such as water monitoring, financial and technical support to social participation, capacity building and communication issues.

In terms of the implementation of a program for the reform and strengthening of institutional settings for water resource management, some lessons can be proposed:

a) IWRM implies going beyond isolated capacity building efforts and assessing the improvement in the coordination and exchange of information and resources which occur between the entities dealing with water management within a basin.

b) Conceiving sustainability as the dynamic equilibrium in the use and preservation of natural, infrastructure, financial, human, technological, institutional-legal and cultural resources within a given context, an IWRM program should deal consciously with the evaluation, development and monitoring of these assets through coordinated efforts between all the parts of the system.

c) Investing in institutional strengthening is instrumental to ensure a greater impact, permanence and stability of infrastructure programs; those investments should be, nevertheless, carefully analyzed in order to ensure they promote the improvement or construction of better processes, institutions and methods which take the sector's capacity to a higher level of performance, measurable in specific parameters

Even though a more formal approach is needed, some initial findings are proposed. The local settings and capacities level seem to have been instrumental to achieve an effective technical coordination. Nevertheless, the rigidity of administrative procedures, within the Bank as well as within the recipient organization, lead to non negligible consequences in the performance of the programme, because of the delays produced during the adaptation phase without considerably increasing the degree of control or accountability of the local administrative procedures. The way in which an intervention program affects the existing rules and practices defines the extent on which this intervention will affect local capabilities, but this influence cannot be globally evaluated as positive or negative, since it can improve the efficiency or stability of some positive processes, but can also contribute to block them or even create or reinforce negative ones. The analysis of the roles and relationships within a water management system, as well as an assessment of the way in which an external intervention will influence their overall performance is an issue which deserves more attention. In a multi-institutional setting, creating stable and distributed capabilities and setting up leverage mechanisms seems to be fundamental. Finally, an ethical consideration should be introduced into the analysis, since initial conditions of stability and accountability shape up the extent of the influence and effectiveness of any institutional reform program, whether it is locally promoted, externally supported or both; at least, a trade-off occurs between the need of optimizing the size of the program and the usual will of amplifying the infrastructure investment components, regardless of the achievement of realistic institutional improvements.

Management Reforms in the Water Supply and Sanitation Sector: The Potential of the New Public Management for Improving Services

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Keywords: Public Sector Reforms, New Public Management, Developing Countries, Water Supply and Sanitation , Utility Management

The vast majority of the world's water utilities are public utilities. Although exact figures on the level of private sector participation in the water supply and sanitation sector do not exist, it is estimated that the number of people served by private utilities is limited to about 200 million (OECD, 2003). This would leave more than five billion people who receive water services from either public water utilities or independent systems. The general consensus is that provision of water services will remain in the public sector for many years to come, especially in low and middle-income countries.

In many low and middle-income countries, however, public water service providers have failed to provide consumers with adequate water supply and sanitation services (Nickson, 2002; Mwanza, 2004). Apart from problems of service coverage of less than 60% (WHO/UNICEF, 2006), other problems that plague water utilities include high unaccounted-for-water (UfW), which often averages between 40%-60% and overstaffing (Mwanza, 2005). Moreover, the service providers are often confronted with financial problems due to a combination of low tariffs, poor consumer records and inefficient billing and collection practices (Foster, 1996; Mwanza, 2004; World Bank, 1994).

In response to the poor performance of many public water utilities, several reform paths have been promoted over the past decade(s). Firstly, management of the water utilities was delegated to the private sector through concession contracts or other contractual arrangements. The second reform strategy kept management of the utility within the public realm, but concentrated on introducing management principles and practices associated with the private sector in the public water utility. This second form of reform appears to be increasingly popular (Franceys and Nickson 2003; Schwartz 2006) and has been referred to as the New Public Management (NPM). The New Public Management originated in New Zealand and the United Kingdom in the early 1980s. Since then, NPM has become something of a generic term to describe a market-oriented and output-based management model for the public sector with an increased emphasis on accountability for results and user-orientation organizations (Peters, 1996; Kettl, 2000; Harrow, 2002; Budding and de Groot, 2003). In general, NPM reforms in the water supply and sanitation sector aim to achieve the following objectives:

1. Increase the level of autonomy of the utility (to let the operate as independent agencies);

2. Separate regulatory tasks from service provision;

3. Create (quasi-)competition in the water sector;

4. Increase tariffs to cost recovering levels and increase customer-orientation of the utility;

5. Increase accountability for the results produced by the utility.

These objectives should not be seen in isolation, as independent objectives, but rather as interdependent reform objectives. In this article we explain the interdependency of these objectives and review specific management reform measures introduced in water utilities in low and middle-income countries to achieve the objectives described above. These reform measures include the use of performance contracts (Uganda), 'agencification' of water utilities (such as in countries like Namibia, Brazil and Zambia through the establishment of government-owned companies operating under private law), the establishment of independent regulatory agencies (in countries such as Zambia, Peru, Colombia and Kenya), implementing customer charters (Uganda), establishing neighborhood customer management offices (Hai Phong, Vietnam) or establishing water watch groups (Zambia), raising tariffs to levels approaching cost-recovery (Zambia, Guanajuato, Mexico), and the increasing use of benchmarking (such as in Vietnam, Zambia).

Although in a number of countries, such as most notably Uganda, instituted reforms have been successful and have been cited as an example for other countries to follow, this paper raises some questions regarding the potential of NPM-style reforms in the water and sanitation sectors of developing countries. First of all, the question is if the performance improvements witnessed in Uganda are fully attributable to NPM-reforms. Reforms often consist of several simultaneous changes (Pollitt, 2003), making it difficult to conclude what the impact of the NPM reforms have been. A second question concerns the pre-requisites which must be in place prior to the implementation of NPM-style reforms. Without these pre-requisites (such as a formal public sector, reliable judicial system, etc.) the potential impact of NPM-style reforms may be limited. A third question relates to the dependency on government and donor support that successful utilities continue to display even after reforms have been implemented. If, in the near future this support is withdrawn or reduced because of political turmoil or other reasons, it will most likely have an immediate impact on the performance of the utilities.

This article concludes that elements of the NPM can lead to providing better services, as is illustrated by success stories such as the NWSC in Uganda. However, implementation of NPM reforms must not be seen in isolation but may complement other reform measures. Secondly, NPM-style reforms are most successful if they take place in an environment which is conducive to these reforms. This means an environment in which pre-requisites for such reforms are in place (such as, for example a well-developed system of contract law) and in which continued government and donor support is guaranteed. In short, NPM can only be successful if these reforms are complemented by other reforms, can build on the required pre-requisites and only if they receive pro-longed supported by other relevant stakeholders.

Public Water Utility Reform: From Best Practice to Best Fit

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Keywords: public sector reform, utilities, water and sanitation, corporatization, urban services

In the past decades, many governments have tried to make state-owned water utilities more efficient but few have succeeded in turning them around into effective and viable organizations. The most recent wave of reforms had a strong focus on private sector participation. In the past few years, there has been an increasing realization that private sector participation can help, but it will not suffice to get sustainable services to all.

The major transition of most utilities in the 1990s has not been from central public provision to local public provision. Another important 1990s trend was the drop in public, private, and donor sources of investment funding significantly reduced opportunities for network expansion or performance improvement. Despite these changes, the problems that utilities face are similar to the ones in the past.

The emphasis on private sector participation in the 1990s led to a shortage of rigorous analytical work on public service delivery. This paper is one of several studies to fill this knowledge gap. It looks at public utilities that have been successful in turning around their performance and becoming more efficient service providers.

The objective of this paper is to summarize new approaches to public utility reform. The paper is based on a dozen case studies, consultation with sector professionals and a literature review.

Attributes

There is no perfect model for public utilities that guarantees good performance. A review of 15 case studies in 11 countries using a standard analytical framework validated a series of common attributes of well-functioning utilities. These attributes are customer orientation, autonomy and accountability. The attributes apply to the relationship between the utility and the environment in which it operates as well as to the internal functioning of the utility. The paper introduces two tools to map public utility reform processes.

Tools

The tools to achieve these attributes vary, but certain patterns of high potential practices are emerging. These include corporatization, the use of public-public performance agreements, enhancement of consumer accountability, and capacity building.

Corporatization is the process of transforming a utility that is embedded within a municipality or ministry into a public organization with its own corporate identity. Performance of corporatized utilities varies widely. Well functioning corporatized utilities have a number of factors in common, including board composition and mandate, asset ownership, and the

discretion of utility management in key areas. In addition the state exercises its ownership function clearly. Multiple ownership can improve autonomy of corporatized utilities.

Performance agreements can clarify the objectives for a public utility – and their relative weight - between the government and the utility, its corporate oversight board or its managing directors. They thus can make it easier to hold managers and boards accountable for performance. Most inherent limitations of contracts plans cited in the 1990s are still valid. However, in the past decades the potential of performance agreements has been enhanced by the emergence of financial bonuses for individual staff and increased competition between decentralized utilities for central government funds.

Consumer accountability can help depoliticize balance the accountability framework of utilities and can help prevent political capture. Traditionally, utilities lack of consumer accountability reflects the fact that they are dependent on governments, financially and in other ways. The belief that citizens were effectively represented by politicians, who in turn connected with utilities, was challenged in the 1990s. This led to an increased interest in direct accountability from utilities to consumers. Consumer accountability is achieved through a combination of consumer accountability mechanisms, such as information channels, complaint mechanisms, advisory groups, board membership.

Capacity building can be defined as the process to provide individuals and institutions with the capacities that allow them to perform in such a way that the sector as an aggregate can perform optimally. Capacity building is a long term process which requires a mix of approaches that focus on learning new skills through applying them. Providing individuals and institutions with the motivation to implement their newly acquired skills is critical. There is a growing realization that capacity building should be demand driven and more responsive to real world needs. As a result the landscape of trainers now increasingly includes local training institutions, consultants, and operators.

Conclusion

As a conclusion, the paper provides a short discussion of opportunities and challenges of public sector reform going forward. Successful reforms combine measures to improve the institutional environment with utility-focused steps. There is a substantial difference between reforms that are desirable and reforms that are feasible. Reform – in reality – is often an incremental process, and reformers will (temporarily) have to put up with less-than-ideal solutions. The selection of reform measures will have to be based on the best-fit rather than the best-practice.

In the past years, changing governance regimes have created windows of opportunity in some countries. The emergence of a stronger civil society has put pressure to deliver better services. Technology has increased the ease of information exchange. New practices have been introduced within public organizations such as performance-based pay for management and staff. The threat of private sector participation has moved some public utilities into action.

Public sector reform is difficult and intrinsically political. It is not a quick fix or an easy alternative to private sector participation. Public reform requires financial, human and knowledge resources.

Better Water Services Operation Through Local Franchising

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Keywords: Water services, Operation, Franchising, South Africa, SMME

In South Africa, the rapid rate of construction and commissioning of new water services infrastructure is severely challenging the municipal institutions to which have been given the responsibility for operating and managing this infrastructure. Current institutional approaches, together with lack of capacity and skills, are in some instances inadequate to support the main aim of the new infrastructure programmes, viz to improve the access of the poor to basic services.

Even in the well-resourced municipalities, although the service may be reliable, efficiencies are sometimes unacceptably low -- water losses, for example, are significant, due largely to a legacy of underfunded maintenance budgets and inadequate maintenance practices, a generic problem in many developed countries, and more so in many developing countries.

Given the changes in the customer base of municipalities, and changes in technology and new service levels, innovative thinking and approaches to water service delivery are required. But even if all the existing institutions were coping with the water services delivery responsibility, there would be good reason to investigate alternative institutional models, on the grounds that it needs to be found out if alternatives:

- could be more cost-effective, and/or
- could allow existing roleplayers to focus on their other responsibilities, and/or
- could offer a range of other advantages (including greater community participation).

Internationally, it has been recognised that there is a need for partnerships between public, private and civil institutions to achieve water services delivery objectives. The variety of partnerships that has been implemented, viz. private sector concessions, Build-Operate-Transfer (BOT), Build-Operate-Train-Transfer (BOTT), etc., has enjoyed mixed success overseas and in South Africa. These have generally been "big business" partnerships for large scale contracts, and generally investment (public or private) in new infrastructure plays a prominent role.

There is an alternative service delivery institutional model that is suited more for the ongoing operation and maintenance of water services systems, rather than for investment in new infrastructure -- and that is friendly to small business and local economic development. This alternative is the franchising of water services. However there is little experience of this approach anywhere in the world, and no experience in South Africa -- although some partnerships have some of the characteristics of the franchise approach.

To address this, the South African Water Research Commission (WRC) initiated a study to explore the concept of franchising, its relevance to the water services sector, and its prospects as an institutional option for water services operations and management. The study found that the franchising concept, if applied to water services delivery, could in favourable circumstances both alleviate problems encountered in and raise the efficiency of water services delivery. At the same time, franchising would have the added advantage of stimulating small business activities.

A key is the incentive, to franchisor and franchisee alike, to improve efficiency.

The study, completed in 2005, described at a conceptual level how a water services franchise model could be made available to emerging entrepreneurs, and concluded that this could be the basis of a viable business. The franchise would be in respect of a component of the value chain that is suitable for small business because it can be readily systematised. The study indicated opportunities in the water services delivery chain, and recommended that these be further explored.

The study found that the great need for alternative water services provider systems, and for local economic development, is indisputable, and that there is through water services franchising potential to simultaneously:

- more consistently deliver water services to specification;
- improve water services efficiency; and
- promote local economic development, SMME development and (a major objective of the South African government) the empowerment of Black people who were disadvantaged by previous government policies.

A major follow-up study is currently under way, to further explore and establish the concept of franchising of water services. The key objectives are:

1. To further explore the concepts of franchising and its relevance to the water services delivery chain.
2. To identify and determine those elements in the water services delivery chain which offer the greatest scope for franchising.
3. To develop franchising models for the areas identified by the research, taking inter alia the legal, regulatory, financial and technological aspects into account.

The World Water Week presentation will summarise the findings of the follow up study, which, by the time of the conference, will be nearly complete.