
KEY TOPICS IN PUBLIC WATER UTILITY REFORM

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Water Working Notes are published by the Water Sector Board of the Sustainable Development Network of the World Bank Group. Working Notes are available on-line: www.worldbank.org/water. Working Notes are lightly edited documents intended to elicit discussion on topical issues in the water sector. They disseminate results of conceptual work by World Bank staff to peer professionals in the sector at an early stage, i.e. "works in progress". Comments should be emailed to the authors.



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Acknowledgements

- This report builds strongly on various projects financed by the Bank-Netherlands Water Partnership.
- The backbone of this report is the 11 case studies on well-performing utilities carried out by the BNWP project on Modes of Engagement with the Public Sector. The authors wish to gratefully acknowledge the lead roles that Aldo Baietti and Klaas Schwartz played in the BNWP project. Some project outputs have already been published in different reports, notably “Characteristics of Well-Performing Public Water Utilities (Water Supply & Sanitation Working Note No. 9, World Bank 2006) by Aldo Baietti, William Kingdom, and Meike van Ginneken, and the PhD thesis of Klaas Schwartz (Managing public utilities – an assessment of bureaucratic and New Public Management models in the water supply and sanitation sector in low- and middle income countries, UNESCO-IHE, Delft 2006). This report adds new knowledge obtained through additional literature review and consultation with sector professionals to operationalize the evolving know-how on public utility reform.
- Many thanks to our peer reviewers: Oscar Alvarado, Maria Vagliasindi, Carlos Velez, and Jonathan Kamkwala as well as to the numerous sector professionals who provided inputs at roundtables and presentations, including a two-day international workshop jointly organized by WaterAid and the World Bank in August 2004, two half-day workshops with Bank staff in spring 2002 and spring 2004, two Water Week sessions with Bank staff, clients and partners during Water Weeks, and a session at the WWF4 in Mexico in March 2006 and a session at Stockholm Water Week in August 2007.
- Thanks to Eric Dickson for putting together the world map on decentralization.

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EXECUTIVE SUMMARY

Urban water supply services have traditionally been provided by state-owned water utilities. In the past decades, many governments have tried to turn state-owned water utilities into effective and viable organizations—with mixed success. Why have some public utilities become more efficient service providers, while others have not been able to break the vicious cycle of low performance and low cost recovery? This report presents a framework of attributes of well-functioning utilities and how they have introduced key institutional changes. It aims to help water and sanitation sector practitioners choose and apply public utility reform approaches.

The report concludes that structural trends are altering the landscape in which water utilities operate and that these alterations offer opportunities for change. The major transition of most utilities in the past decades has not been from public to private operation, but from centralized to decentralized public provision. Fiscal squeeze has hit utilities hard: as public budgets decreased in the 1990s, infrastructure investments dropped disproportionately as governments have few discretionary spending categories. Under budgetary pressure, many public institutions have adopted new management tools, often borrowed from the private sector, to complement more traditional bureaucratic tools. Many countries have democratized, and an emerging civil society—including a consumer movement—has put pressure to deliver better services.

Attributes

There is no perfect model for public utilities that guarantees good performance. But well-functioning utilities share common attributes:

- **autonomy** – being independent to manage professionally without arbitrary interference by others;
- **accountability** – being answerable to other parties for policy decisions, for the use of resources, and for performance; and
- **consumer orientation** – reporting and “listening” to clients, and working to better meet their needs.

These 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.

Institutional measures

The tools to achieve these attributes vary, but certain patterns of high potential practices are emerging. Institutional measures to make public utilities more effective include corporatization, public-public performance agreements, consumer accountability tools, and capacity building.

Corporatization is the process of transforming a department that is embedded within a municipality or ministry into a public organization with its own corporate identity: either a statutory body functioning under public law or a government owned company incorporated under company law. Corporatization is one means of balancing external accountabilities. A corporatized utility has a separate corporate oversight board, which acts as a buffer and a bridge between the management of the utility and its owners. Although performance of corporatized WSS utilities varies, they generally outperform departments. The effectiveness of corporatization is determined by how some critical factors are legislated and how consistently this legislation is adhered to. Critical success factors include board com-

position and mandate, asset ownership, and the discretion of utility management in key operational areas, such as human resources. Governments as owners must balance protecting the state's interest as an owner of assets with its interest in better services for citizens. This can be done by explicitly prioritizing objectives, financing all mandates, and by clearly defining who within the public administration will carry out the ownership function and how. Diversifying ownership can reduce the risk of capture by one actor. This can be done through partial sale of the utility to users or private investors or through aggregation, in which multiple local governments own a single utility.

Performance agreements can clarify the objectives of a public utility—and provide a relative weight for the stated objective—between the government and the utility, its corporate oversight board, and its managing director. Thus, these agreements can help hold managers and boards accountable for performance. Public – public performance agreements range from informal short term plans (such as business plans) to more formal and longer-term agreements that specify sanctions for performance (such as contract plans). Failure of agreements is often due to introduction within a hierarchical procedure-based environment in which utilities have no autonomy to improve the efficiency and effectiveness of their operations. A good agreement is simple and short and specifies responsibilities of each party including a small and realistic set of indicators, reporting requirements, and sanctions for performance. Agreements can prompt parties to focus on results and strengthen the relationship between parties by giving them periodic opportunities to discuss progress and problems. The process of introducing, updating, and monitoring an agreement is at least as important as the longer-term accountability through formal enforcement. Agreements require monitoring, data analysis, and impartial application of sanctions.

Giving consumers the right to hold utilities accountable can help balance the accountability framework of utilities and can help prevent political capture. Measures to increase consumer accountability range from timely information to consumers to involvement of consumers in decision-making. For consumers to effectively participate in the WSS sector, they need not only a mechanism to participate but also the knowledge and skills to use that mechanism effectively. Consumer accountability is achieved through a combination of one or more consumer accountability mechanisms. Examples of such mechanisms include survey instruments, complaint mechanisms, advisory groups, and board membership. Instruments are interlinked: Introducing one specific accountability mechanism often generates subsidiary gains in other mechanisms. The effectiveness of tools depends on how they are designed and implemented. The challenge is to choose a “suite” of tools to ensure that all service users can engage with the utility or at least have their concerns and views heard and responded to.

Capacity building can provide individuals and institutions with the right knowledge and skills to translate decisions into effective management actions. Capacity building programs are more successful and are more likely to be sustainable when they respond to demands expressed by those to be trained—government agencies and utilities at the national and local level, consultancy firms and contractors, as well as users. Reform changes the logic of management and requires new skills such as customer service and contract management, as well as technical skills such as asset management. Capacity building interventions adapt over time to respond to local circumstances. Tools include on-the-job training, professional networks, short-term private sector participation and twinning, ongoing professional support, practical training programs, and development of tools and materials. Capacity building has to be accompanied by measures designed to motivate staff to implement their newly acquired skills, including hard performance based rewards and the introduction of soft corporate culture changes.

Combining and sequencing measures

The key to sustained improvements in performance is combining and sequencing various measures to best fit a given situation. Each of the described measures is a necessary but insufficient part of a reform process to improve the performance of a public utility. Designing a reform process should start with an analysis of the present status, defining the objectives of reform, and defining the areas where quick progress can be made. However, as reform is a long process that will be set back by obstacles, reformers should be prepared to adjust to changing pressures and circumstances.

A typical reform path will always combine measures to change both the utility's environment and utility reforms. That is, improvements in the environment in which the utility operates are likely to have only a limited impact if the utility does not have the systems or internal capacity in place to take advantage of it. By the same reasoning, internal reforms are limited by what can be supported by the environment.

Reform programs usually begin when utility performance is declining and some specific event focuses attention on the poor service and creates the momentum for change. Once reform is triggered by a crisis, it is an incremental process. While many reform measures should progress at the same time circumstances seldom allow this. There may however, be critical paths in that some reforms are prerequisites for others. A typical reform process features three main stages; crisis management, recovery and stabilization, and expansion. After these three stages, a period of maintaining progress follows.

Conclusions: From best-practice to best-fit

Public sector reform combined with sufficient investment in infrastructure can contribute to cost-effective, reliable, and safe water supply, along with improved sanitation. It is not a quick fix but a long process of limited, but sufficient institutional changes. Nor is it an easy alternative to private sector participation.

This report presents a framework and suggestions for reform agendas to move to best-fit approaches, taking one step at a time. No tool in isolation can turn around failing utilities. Neither is there a sure fix recipe to combine these tools for success. Utilities cannot be turned around in isolation, and successful reforms combine measures to improve the institutional environment and its interaction with the utility with utility-focused steps.

A closer look at both successful and failed reform process shows that what counts is not so much *what* measures are chosen, but in *how far* and *how* they are implemented. Reforms need to start with what can be done in practice. Many reforms have failed because their goals were too ambitious or not matched by the appropriate resources.

Reform processes include technocratic measures but are dialectic in nature. Public sector reform changes the status quo, and those who are possibly detrimentally affected by them will oppose change. While many promising reform measures in the sector revolve around separating the political realm from service provision, full isolation of service provision from politics is neither attainable nor desirable.

Success stories have made the most of windows of opportunity—often triggered by crises. Change should focus on areas where prospects for early success are high. Early visible, tangible results provide returns for reform minded politicians within one political cycle. Public reform requires financial, human and knowledge resources. In the end, the initiation and, eventually, the success of reform processes depend on people. Ideally, leadership will be present at all levels. In any event, someone has to start the process and many successful reform processes start with the installation of a champion within the utility who functions as an agent of change.

1. INTRODUCTION

In the past decades, many governments have tried to make state-owned water utilities more efficient but few have succeeded in turning around their utilities into effective and viable organizations. Since the 1950s there have been several waves of reforms. The most recent one—in the 1990s—had a strong focus on private sector participation. In the past few years, there has been an increasing realization that while private sector participation can help, particularly using national and regional operators, it will not suffice to deliver sustainable services to all.

This report is aimed at policy makers and utility managers in World Bank client countries, as well as those who interact with them in defining and implementing reforms (e.g., donor agency staff, civil society leaders, and consultants). The aim of the report is to present institutional measures and propose how they might be introduced within the overall reform process. The four measures comprise: (1) corporatization, (2) public-public performance agreements, (3) consumer accountability, and (4) institutional capacity building. The report provides a context of the overall sector challenges and introduces a framework of attributes of well-functioning utilities.

The emphasis on private sector participation in the 1990s led to a shortage of rigorous analytical work on public service delivery although there has been more attention in recent years¹. This report helps to fill this knowledge gap and should be seen as one among a generation of reports to build knowledge needed to operationalize public utility reform approaches. The report does not enter in the polemic about who should provide water supply and sanitation services. It recognizes that private sector participation is one option to improve the efficiency of WSS utilities.

This review is part of a broader program to help utilities in developing countries provide better water supply and sanitation services. Annex 1 provides an overview of other recent and ongoing World Bank knowledge pieces on urban utility reform.

This report is based on consultation with sector professionals through workshops² and interviews in addition to research undertaken under a BNWP (Bank-Netherlands Water Partnership) financed project to investigate *Modes of Engagement with Public Sector Water Supply and Sanitation in Developing Countries*³. This research included case studies on well-functioning utilities as along with a literature study on both successful and failed reform processes. This report expands on the paper by Baietti et al by assessing a small number of the key institutional issues identified in that study in more depth. While this report does not discuss financial aspects of reform in detail, the authors recognize that financial reforms are often indistinguishable from institutional measures.

¹ See, for instance: Blokland et al., 1999; Nickson and Franceys 2005; USAID/ARD, 2005; Baietti et al., 2006; Schwartz 2006.

² Workshops included a two day international workshop jointly organized by WaterAid and the World Bank in 2004 (Wateraid, 2004); two half day workshops with Bank staff in 2002 and 2004; two Water Week sessions with Bank staff, clients, and partners during Water Week 2003 and 2005; a workshop with IHE staff and local consultants in August 2003; a session at the fourth World Water Forum in Mexico in 2006; and a session at the IWA World Congress in Beijing in 2006.

³ Baietti et al., 2006 provides a more detailed analysis of the case studies.

1.1 Reading the paper

The rest of the report has eight chapters.

Chapter 2 describes how decentralization and fiscal squeeze have been major forces of change in the WSS sector, and how the problems that utilities face are similar to the ones in the past.

Chapter 3 describes what constitutes a well-run public utility. Although there is not a standard model, the chapter explains how well-performing utilities have certain attributes in common. It also introduces a tool to map the accountability framework of a utility.

Chapters 4 to 7 focuses on various reform measures to make public utilities more effective. These include corporatization (chapter 4), the use of public-public performance agreements (chapter 5), enhancement of consumer participation (chapter 6), and institutional capacity building (chapter 7). Each of these measures is a necessary but insufficient part of a reform process to improve the performance of a public utility.

Chapter 8 provides guidance on how to assemble the measures described in chapters 4 to 7 into a coherent reform program which is tailored to meet the specific needs of a city or a country over time.

As a conclusion, chapter 9 provides a short discussion of opportunities and challenges of public sector reform going forward.

2 CHANGING REALITIES BUT THE SAME OLD CHALLENGES

This chapter explains how changes in governance regimes have influenced the environment in which public utilities operate. It concludes, however, that most of the challenges faced by utilities have remained the same. These reasons include poor governance at national and local levels, lack of incentives and accountability, and poor technical and managerial capacity. As a result most people in developing countries are still being served by low-performing utilities or do not have access to piped water supply at all.

2.1 A paradigm shift but little real change

Urban water supply services have traditionally been provided by state-, or municipally-owned, water utilities, many of them bureaucratic and non-responsive monopolists. As part of a general move to market-led systems in the 1980s and 1990s, a new paradigm emerged to transform utilities into more modern service delivery organizations.

Introduction of the new, more market-led paradigms—often devised in well-governed countries—has, however, been slow in developing countries. One reason for this is that WSS reforms in developed countries are less controversial as service coverage and quality is high and tariffs at cost-recovery tariff levels represent an insignificant part of consumers' expenditure. Secondly, in well-governed countries, the new utility models are supported by strong and formal mechanisms for enforcing rules, budgets that control spending, and transparent and fair civil service systems. Fast track approaches that draw on successful approaches in developed countries to try and improve developing country utilities, have often failed—mainly because they have been applied to the water utility in isolation without considering the environment in which it operates. The realization of this has more recently led to more firmly embedding utility reforms into broader governance reforms in the sector and beyond.

An often-cited successful turnaround of public utility performance took place in the 1990s in Australia. The Australian central government transformed the sectoral set-up throughout the country, spurring lower tier governments to reform their institutions, improve performance and lower the price of service delivery. But even in Australia—a country with a strong governance regime and good capacity—reforms have taken over 15 years to be completed, well beyond the initial timetable of five to seven years set by Government (Box 1). It is unlikely that turning around utilities in less conducive environments will require less time.

2.2 The real shift: decentralization

The major transition of most utilities in the 1990s has not been from public to private operation, but from centralized to decentralized public provision (Figure 1). Asian countries including Pakistan, the Philippines and Indonesia (Box 2) undertook drastic decentralization programs. In many Latin American countries (for example, Argentina, Chile, Colombia, Panama and Peru) national monopolies were broken up into hundreds of municipal providers as part of a wider devolution process across all areas of government. Rapid decentralization after the political turnaround in Eastern Europe and Central Asia devolved the responsibilities to lower tiers of government while financial means and capacity mainly remained at the center. In Africa the picture is more mixed, with many countries remaining relatively centralized while some are decentralizing rapidly (for example, Ethiopia and Tanzania).

WSS decentralization was often the byproduct of a wider reform of the state. As a result, local governments found themselves in charge of service delivery while lacking the capacity to step up to their role. In many countries, the change from service provision and hierarchical control to a facilitating role

Box 1 How the Australian central government played a strategic role in stimulating reform

In Australia, the provision of water supply and sanitation is a responsibility of state governments. The central government has been an important driver for change in the WSS sector through its 1995 National Competition Policy (NCP). The NCP was a multi-sectoral package of reforms, which combines enabling measures, mandatory requirements, and financial incentives. In the WSS sector, the NCP rewarded states and territories that achieved certain institutional and financial milestones, such as transparency of subsidies, introduction of performance monitoring, and public consultation. While annual payments were low (most states received about 0.7% of their total receipts this way), they provided sufficient incentive to secure commitment to reforms.

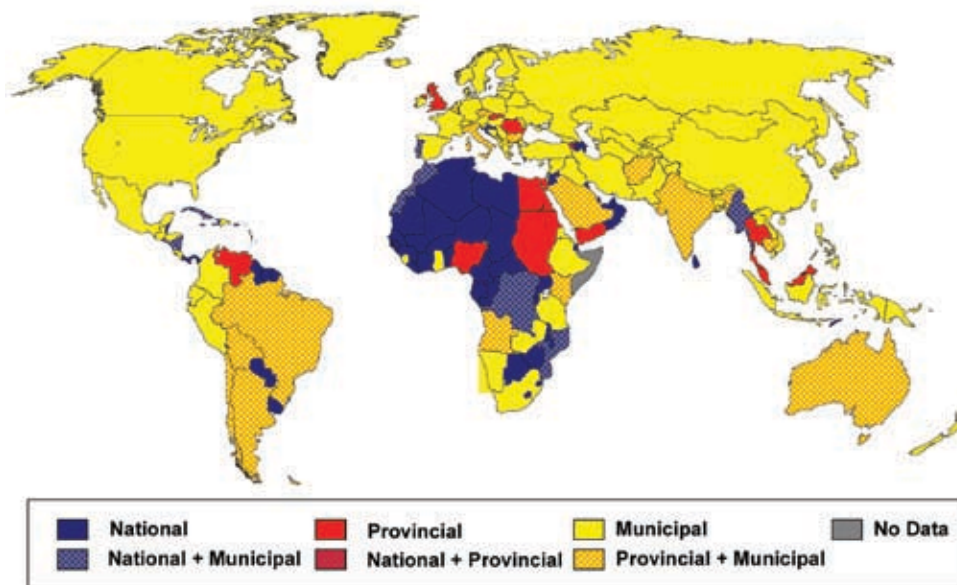
The actual reform path was left to the discretion of the states. This has led to a number of institutional models, including state utilities, municipal utilities, and aggregated utilities serving multiple municipalities. All utilities are government owned companies. In some states, independent regulators regulate tariffs, while in other states state or local governments regulate tariffs. Tariffs have increased but consumption has decreased, due to extensive awareness campaigns. As a result average water bills decreased by 5.5 percent between 1996 and 2001.

Source: WSP, 2004.

immobilized line ministries and other central government agencies. These capacity problems, combined with unclear responsibilities, often blocked the potential to render governments more accountable to citizens.

In some countries, central and local governments picked up on their role. One such country is Colombia, where the central government pioneered sound WSS policies, including decentralizing responsibilities for the WSS service provision to local governments. It established a legal framework that clearly separates service provision from policy making. The key to success in the Colombian water sector reform has been the development of homegrown solutions, and at times, skillfully adapting models used elsewhere to the particular circumstances and culture of Colombia (Box 3).

Figure 1 Tier of government responsible for the provision of water supply



Source: Developed by authors.

Box 2 How decentralization in Indonesia left local governments with many responsibilities and few resources

Indonesia is characterized by a three-tier unitary government structure governing 26 provinces and about 330 districts spread out over some 13,000 islands. Despite its size and diversity, until 1999 Indonesia was highly centralized with 94% of government revenue collected by the central government and 60% of sub-national spending financed by central transfers.

Triggered by the financial crisis in Southeast Asia of 1997, the resignation of the Soeharto government and the weak public support for the Habibie government, demands for political and fiscal decentralization increased in 1998. Under pressure, the Indonesian Parliament hastily adopted two drastic decentralization laws in 2001. Under these laws all public service delivery functions except defense, foreign affairs, monetary and trade policy and legal systems were decentralized to sub-national governments in a 'big bang' fashion. Responsibility for WSS services was devolved to districts and cities, with provinces playing a coordinating role.

The drastic decentralization process presented a number of serious threats to service delivery. Most notably, the districts and cities that became responsible for the provision of WSS services overnight had little capacity to provide these services. Even now, a number of years after decentralization, their capacity still requires considerable strengthening.

Source: Ma and Hofman, 2000.

2.3 An additional limiting factor: fiscal squeeze

Utilities require funds for investments to expand WSS systems. In the 1990s a drop in public, private, and donor sources of investment funding significantly reduced opportunities for network expansion or performance improvement.

Box 3 How reforms in Colombia were spearheaded by few local authorities and replicated by many

In the early 1990s a major restructuring of the water and sanitation sector took place in Colombia. The right of municipalities to provide WSS services was confirmed in the constitution. A 1994 law established a legislative and regulatory framework for the sector that emphasizes efficiency of service provision through the introduction of competition in the sector.

Colombia's reforms were spearheaded in two cities, Cartagena and Barranquilla. Both municipalities contracted out operation of the water utility to a mixed company. The mixed companies are jointly owned by the municipality, a private operator, and local private shareholders. The municipalities remain the owner of the infrastructure. Reforms included capacity building for local authorities. Water supply coverage improved substantially and more than 80 percent of new connections were in poor neighborhoods. Services also became more efficient and reliable: taps now function 24 hours a day, the introduction of metering reduced losses, and response time to consumer complaints was dramatically reduced.

Around the same time, the public Bogota Water and Sewerage Company (EAAB) recovered itself from a deep financial crisis, with the help of a government rescue operation. Substantive increased in average tariff improved revenues in real terms. After the recovery, EAAB obtained a credit rating, which enabled the utility to implement a one billion dollars investment program between 1996 and 2003. In 2003, EAAB hired three private firms to provide consumer services, and signed a 20-year BOT contract for a water treatment plants. EAAB also established an in-house sophisticated planning department and modern management information systems. In the period 1996–2003, EAAB provided services to two million additional (mostly poor) inhabitants of Bogota.

Another well-performing public utility is EMP, the municipally-owned multi-sector utility that is in charge of water supply, sanitation, solid waste management, electricity, natural gas distribution, as well as local telecommunications in Medellin and its neighbouring municipalities.

As the performance of the utilities in the large cities improved, consumer satisfaction grew. Mayors of other cities became interested in reforming their utilities. Their political constituents are water consumers as well. Success in a few cities became a catalyst for scaling up reforms elsewhere. The central government now supports service improvements in smaller cities and towns through budgets based on policy and pro-poor targeting criteria and creating specialized service providers.

Source: WSSSB, World Bank, 2008

Many countries found themselves trapped in a “fiscal squeeze”. As infrastructure is one of the few discretionary spending categories of governments, it bears a disproportional share of the decline in public investment when budgets are squeezed.

Despite much international attention to the importance of private financing, few utilities in developing countries have gained access to private capital. Poorly developed domestic capital markets and a dearth of creditworthy utilities obstruct access to local currency financing in most developing countries. Only a few dozen municipalities in transition and developing countries (with the exception of Mexico) have international credit ratings (Standard and Poor, 2003).

A last source of funds for developing countries is overseas development assistance (ODA). Donor grants and loans are a minor financing source for WSS in most countries, and ODA to the water sector has declined since middle of the 1990s (OECD, 2006).

2.4 The same old challenges

While decentralization has changed the size and nature of utilities, they face the same challenges as their centralized predecessors—and often have inherited their debts. Often the challenges are enhanced by increased water scarcity, as competition for water resources intensifies due to population growth and urbanization, and resource availability changes over time due to climate change.

Most utilities are locked in a vicious spiral of weak performance incentives, low willingness to pay by consumers, insufficient funding for maintenance leading to deterioration of assets, and political interference. The vicious spiral is largely a consequence of ineffective political institutions coupled with the monopolistic nature of the sector. Politicians often prefer to abstract the short-term value of the utility through patronage and are reluctant to set cost recovering tariffs or efficiency targets necessary for long-term sustainable service provision. Utilities have been allowed to give priority to protecting the members of their organization or political masters over service improvement. Corruption is a persistent challenge in the sector, ranging from petty corruption at the consumer interface, through collusion between contractors, and kickbacks in contracting. Consumers, especially the poor, have lost out.

WSS reforms remain impeded by dysfunctional governance regimes that limit accountability and set perverse rules of the game. Without improvements in broader governance regimes, many measures to reform water utilities are not implemented, have limited impact, or are soon reversed.

2.5 Probably the largest challenge: triggering reforms

Reform efforts face considerable opposition from those who will be hurt by reform—which are often vocal groups such as connected middle-class consumers who receive service at low cost and those who benefit from corruption. In fact, even after implementation of reforms, attempts to ‘undo’ the reforms may persist. As a result, reforms are often only triggered by crises that create a consensus that the present situation is unacceptable. This can be a drought, an unacceptable drop in service levels, or a financial crisis—which often influence only one city within a country. Political shifts, such as decentralization or elections, and external pressures, such as donor pressure, can also trigger reform. Political shifts often change the political economy at the national level and offer an opportunity for all utilities in a country to change. Examples of this are the fall of communism in Eastern Europe and the end of apartheid in South Africa.

Raising awareness about the dismal state of the sector and the slow but ongoing downward trajectory of the sector is probably the main challenge in sector reforms. Such awareness should then, ideally, act as a catalyst for reform and improved performance. However, the lack of beacons of good practice make it harder for stakeholders to understand a vision of a well-run sector such that a win-win situation can be created to benefit most of the stakeholders. Only by building a coalition for change

and by creating and locking in quick wins can meaningful and sustainable reform processes be implemented.

2.6 Further reading

- Foster, V. 2005. Ten Years of Water Service Reform in Latin America: Towards an Anglo-French Model. Water Supply and Sanitation Sector Board Discussion Paper Series, Paper No. 3. Washington, D.C.: World Bank.
- Gómez-Ibáñez, J. 2007. Alternatives to Infrastructure Privatization Revisited: Public Enterprise Reform from the 1960s to the 1980s. World Bank.
- Schick, A. 1998. Why Most Developing Countries Should Not Adopt the New Zealand Model. World Bank Research Observer.
- Schwartz, K, and M. Schouten. 2007. Water as a political good: revisiting the relationship between politics and service provision. In *Water Policy* 9, 119–129.

3 ATTRIBUTES OF A WELL-FUNCTIONING UTILITY AND ITS ENVIRONMENT

There is no model for public utilities that guarantees good performance. A review of fifteen case studies in eleven countries using a standard analytical framework validated a series of common attributes of well-functioning utilities⁴. These attributes are:

- **autonomy** – being independent to manage professionally without arbitrary interference by others;
- **accountability** – being answerable to other parties for policy decisions, for the use of resources, and for performance; and
- **consumer orientation** – Reporting and “listening” to clients, and working to better meet their needs.

These 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. Of course, the two levels influence each other. All these attributes then rely on having good technical and managerial capacity in the utility in order to maximize the potential that their introduction will bring.

3.1 Accountability and autonomy within the utility

Well-functioning utilities have moved away from the traditional hierarchical setup towards flatter decision-making structures in which management and employees are held accountable. Accountability has to be grounded in good and timely information on what is going on. Only if process and performance data are readily available can those that are responsible for certain tasks be held to account. Measures to enhance accountability in a utility include business plans, standard processes and streamlined procedures, cost accounting techniques that link resource use to outputs, and decentralization of responsibilities to lower tiers of management. Of course, the optimal level of internal decentralization depends on the size of the utility. Box 4 gives an example of the combination of measures that the Public Utilities Board in Singapore has taken to increase internal autonomy and accountability.

Box 4 How the Public Utilities Board (PUB) in Singapore has decentralized responsibilities

PUB is a multilayered organization. Many operational decisions are made at lower levels. The PUB Financial Manual stipulates expenditure approval ceilings for various management levels. Internal communication is maintained through a set schedule of regular meetings. Business processes and systems—such as a performance measurement system and automated complaint tracking—are key to PUB’s success. All key business processes within PUB have attained ISO 9001:2000 certification. PUB outsources 25 percent of the operating budget following public procurement rules. Performance indicators are reported bi-monthly to the Board of Directors and published annually in the annual report. Internal decentralization of responsibilities is made possible by flexible and transparent hiring and promotion, a culture of learning, and transparent systems that put accountability and autonomy with departmental heads.

Source: Baietti et al., 2006.

⁴ See Baietti et al., 2006 and Schwartz, 2006. The review also found that market orientation (making greater use of markets and the introduction of market-style incentives) is less critical for well-functioning utilities and is often only implemented in later stages of reform.

Studies of ill-performing utilities consistently point to faulty human resources practices as one of the main reasons for failure⁵ Utilities are often grossly overstaffed. Labor reform is seen as critical to performance improvements. However, it is one of the most politically charged and difficult areas of reforms, as labor unions are often vocal and well connected. Labor reforms replace traditional utility employment (high job safety, good pensions, low stress, and low salaries) with more incentive-based approaches. This often goes hand in hand with more transparent hiring, firing, and promotion practices. Reform packages should allow for sufficient resources to adjust the number of staff in utilities to efficient levels. Measures to increase accountability work if accompanied by capacity building of those getting more responsibilities. See Table 1 for a summary of how these practices have been adopted in selected well-functioning utilities around the world.

Table 1: Overview of human resources situation in eleven well-functioning utilities

<i>Utility, Country</i>	<i>Public Sector Pay Scales</i>	<i>Who sets salaries</i>	<i>Rewards/penalties to MD for achieving performance targets</i>	<i>Reward/penalties to staff for achieving targets?</i>	<i>Staff subject to annual performance evaluation?</i>	<i>Factors that influence promotion and salary</i>	<i>Annual staff turnover</i>
AQUA, Poland	No	Management/Board	Rewards, but no penalties	Yes	Yes	Performance review, certification, longevity	1% to 2%
HPWSC, Vietnam	Yes	Ministry/Management	Yes	Yes	Yes	Performance review	5.2 % in; 0.9% out
JNB Water, South Africa	No	Management/Board	Yes	No	Yes	Performance review, longevity	4.9%
NWSC, Uganda	No	Board	Rewards, but no penalties	Yes	Yes	Performance review, longevity, union bargain, education	< 10%
ONEA, Burkina Faso	No	Board	No	No	Yes	Performance review	6.60%
PUB, Singapore	Yes	Management/Board	Yes	Yes	Yes	Performance review, longevity	2.20%
PWD, USA	Yes	Municipality	No	No	Yes	According to the Civil Service Rules	N/A

(continued on next page)

⁵ See, for instance, Hoffer, 1995, Nickson and Franceys, 2004.

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SANASA, Brazil	No	Board	Rewards, but no penalties	Rewards only	No	Skills and qualifications	2.1%
Scottish Water, UK	Yes	Government	Yes	Yes	Yes	Performance review influences open selection	N/A
SIMAPAG, Mexico	No	Government	No	No	Yes	Performance review, education.	4.3%
SONEDE, Tunisia	Yes	Government	No	No	No	Longevity, performance review	N/A

Source: Baletti et al., 2006.

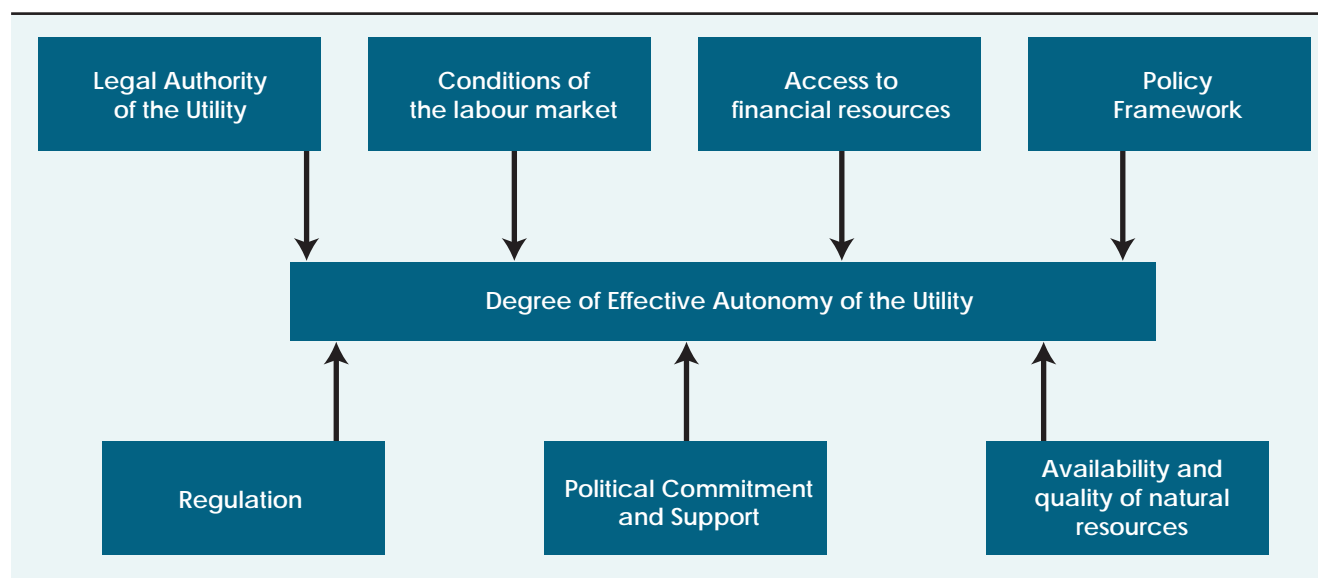
Benchmarking water utility performance over time and between companies can be a powerful tool for management to improve performance by comparing how well their organization does in comparison with similar organizations, and can also help external stakeholders to hold the utility accountable for results. Outsourcing, internal contracting and fee charging between departments can improve internal accountability by introducing (quasi-) competition. These kind of competitive mechanisms keep utility staff aware of the need to deliver results in an efficient manner. The water utility in Santiago, Chile provides a good example of increasing efficiency orientation by competition between external contractors through outsourcing as well as competition between utility employees and external contractors (see Box 5).

Box 5 How EMOS S.A. (Santiago, Chile) used outsourcing to increase efficiency

EMOS S.A., the water utility in Santiago, Chile, took up outsourcing as a company policy in the early 1980s. The main reasons for this policy were to cut cost and to improve service quality. EMOS awarded contracts on either lowest cost basis or on the best combined offer of price and quality. EMOS's outsourcing policy ensured that there were at least two parallel contracts for each activity. This ensured competition and benchmarking, including between third parties and departments within EMOS. EMOS did not outsource activities that were more efficiently performed by EMOS staff. However EMOS staff had to show they were able to undertake these activities more efficiently than others. Partly due to outsourcing, EMOS staff was reduced from 2400 (in 1977) to 1700 (in 1989). Over time, EMOS became a utility mainly employing high-skilled technical and administrative personnel. EMOS employees were trained in procurement and supervision of contractors. Within its outsourcing policy, EMOS required contractors to hire a certain percentage of ex-EMOS employees.

Source: Blokland 1999; Sjodin, 2006.

Figure 2 Factors that influence effective autonomy



Source: Schwartz, 2006.

3.2 Accountability and autonomy of the utility and its environment

The way in which a utility functions is intrinsically linked to the environment it operates in. The relation between the utility and its environment is characterized by the utility's accountability to, and autonomy from, entities that exert direct power or influence on the utility.

Well-functioning utilities have a considerable degree of autonomy combined with an accountability framework that balances various external forces, while poorly performing utilities mostly have a low autonomy⁶. The legal authority bestowed upon a utility is often restricted in practice by the external environment. The effective autonomy of utilities is thus lower than its legal authority. Figure 2 shows a number of factors that influence the effective autonomy of a utility.

The allocation of authority to a utility must be accompanied by the duties to give account for results. A utility functions in a web of accountabilities to a variety of actors and groups. A balanced web of accountabilities to multiple actors can prevent capture by one actor. The nature of accountability to each actor depends on the functions it fulfils vis-à-vis the utility. Often actors combine various functions. The main functions include:

- Policy-making – setting principles that guides the management of a given organization. This function normally lies with various tiers of government.
- Ownership – owning the utility⁷. In the case of public utilities, this function lies with one or more government agencies.
- Regulation – setting, monitoring, enforcing and changing the allowed tariffs and service standards for utilities (Groom, 2006). This function can lie with the government agency that owns the utility or with another government agency.

⁶ Hoffer, 1995; Nickson & Franceys, 2003; World Bank, 2003; Schwartz, 2006; Baietti et al., 2006.

⁷ Utility ownership can differ from asset ownership: In public management models asset ownership can either be (a) in the hands of the same governments who own the utility, or (b) in the hands of the utility (see chapter 4).

- Financing – providing financial resources both in debt and equity. This function is normally shared by consumers and governments, and sometimes with private investors and donor agencies.
- Demand for Service. This function lies with the consumers of the utility.

The degree of accountability to any actor depends on the actor's ability to sanction the utility for good or bad performance. To a large extent, financial flows determine accountability, as one of the most powerful sanctions is the (threat of) withdrawal of or potential extension of financing. Thus diversifying sources of financing is part and parcel of creating balanced accountability.

Governments often combine the function of ownership with those of financing, policy-making, and regulation. In practice, the main mechanisms for governments to hold utilities accountable is the exercise of their ownership rights through proper corporate oversight mechanisms and through performance-based financing. While much attention has focused on increasing accountability for results through regulating public utilities, applying independent regulation to government-owned water utilities has had little effect on performance. The main reason for this is that regulators lack the sanctions to back up enforcement of rules; financial sanctions will hurt the consumer or the government/owner more than the utility. Regulation can create competing streams of advice, providing trusted comparative information, and increasing transparency and public participation. (Box 6).

Box 6 Regulating government owned utilities

Economic regulation refers to the organizations and rules that set allowed tariffs and required service standards. Private utilities are regulated to control their monopoly power. Government ownership is another way of doing the same thing. Governments can direct the utilities they own. In the case of departments of ministries or municipalities, this is done through the normal line of command in civil service. For corporatized utilities, this is done through the oversight board.

Regulation can only complement ownership, not replace it. There are a number of circumstances in separating the regulatory responsibilities from the government's responsibilities as owner that make sense:

- When government-owned companies, in effect, are asked to pursue similar objectives to those of private utilities, they may need to be regulated in the same way and for the same reason as private utilities.
- An independent regulator may protect governments from political pressure, making necessary tariff increases easier to introduce.
- A competent independent body can be an alternative source of information, benchmarking and scrutinizing the utility, and forcing the utility to disclose information and answer criticisms.

Independent regulation of public utilities has often failed to deliver the expected outcomes. The principal reason is the inability to apply sanctions. Effective regulation requires the ability to reward good performance and punish poor performance. A refusal of a regulator to grant a tariff increase to a privately owned utility due to an assessment of inefficiency can move the private owners of the utility into action by threatening their profits. If the regulator punishes a publicly owned utility for inefficient performance by refusing it a tariff increase, the government-owner will likely cover this deficit through taxes or a cut back on expenditure. In either case, the public suffers.

When a government wants to separate the ownership, policy, and regulatory functions, it has a spectrum of options: from no regulatory oversight at one end to a full-fledged "independent regulator" at the other. In between, a number of options exist, such as a unit in a government ministry that develops a competence in water utility monitoring or an independent body that issues public reports on the efficiency and service performance of the utility but does not set tariffs and service standards.

Whatever option is chosen, it makes sense to use existing organizational competencies in carrying out the new role. It is essential to build in ways to discourage poor performance and encourage good performance. Without rewards and sanctions, the regulatory mechanisms used to control private utilities are unlikely to be effective in changing the behavior of publicly owned water utilities.

Source: Groom, et al. 2006.

The relationship between a utility and its consumers is always determined by the latter's function of demanding services. However, the nature and degree of accountability to consumers depends on the degree to which the utility gets its income from consumers. Consumer orientation is thus closely related to external accountability.

Other actors can be introduced in the accountability framework to balance the powers. Providing performance targets for access to external financing precipitates a strong accountability mechanism. The commercial regulation that accompanies private finance requires minimum standards of financial management and reporting. Donors also usually employ covenants on use of funds, such as cost recovery targets and external audit requirements.

3.3 Consumer orientation

Consumer orientation is the degree to which utilities report and listen to their consumers and work to better meet their needs. Consumer orientation increases the accountability of the service provider to its consumers and thus helps depoliticize the provision of services. It matches supply and demand for services and stimulates innovation, as the utility investigates improvements to increase consumer satisfaction as efficiently as possible.

Traditional utilities have a low consumer orientation since they are financially dependent on governments. The belief that citizens were 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.

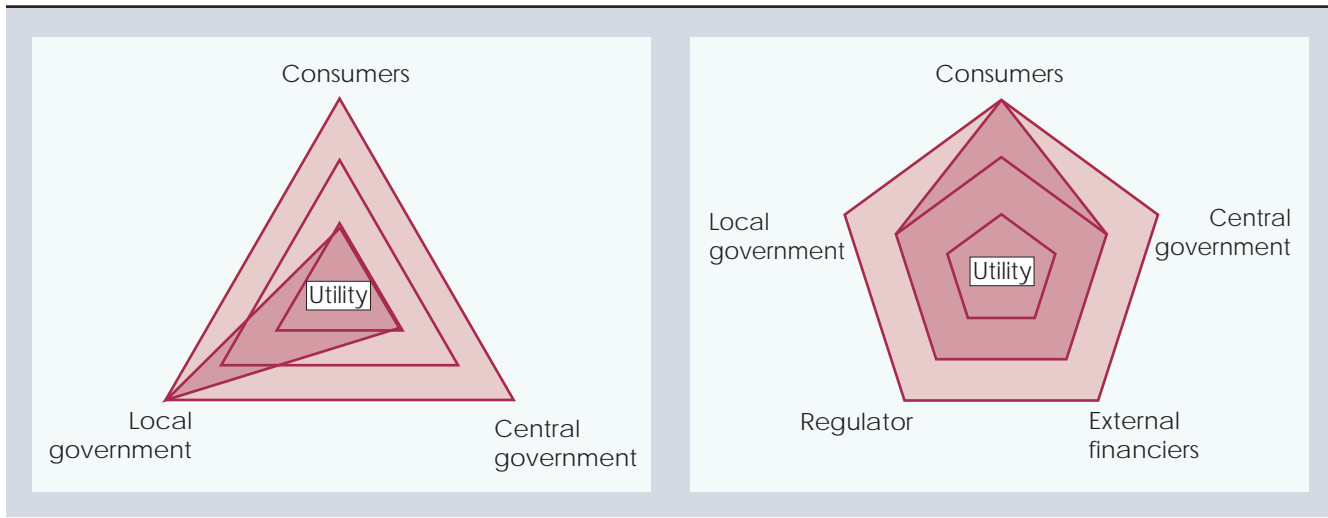
Progress on consumer orientation depends on the political and institutional conditions in various countries. In places where consumers increasingly became organized and informed, a new alliance emerged between utility managers and consumers. Sector professionals realized that well-informed consumers are interested in good and reliable services yet do not always demand the lowest price. Utility managers realized that measures to improve services and information to consumers were within their mandate and that better services could ease the political opposition to tariff increases. Higher tariffs support turning passive service recipients into consumers with rights and responsibilities and create a counterweight to the power of an owner. Improving consumer orientation requires a balance between measures to improve services and measures to increase income from consumers.

3.4 A mapping tool to assess a utility's accountability framework

Mapping the accountability framework of the utility to actors in its environment is a useful tool to analyze the functioning of the utility. In this mapping tool (Figure 3), each corner of the diagram represents an actor that the utility is accountable to. The surface area represents the relative degree of accountability to various actors. The tool is a visual illustration of the balance of powers around a utility and than an exact metric of accountability.

The accountability framework of unreformed utilities is often skewed towards one actor, whose powers are not balanced by others. The powerful actor is often the local government that combines the functions of ownership with these of financing, policy-making, and regulating. A more balanced accountability includes more actors, and thus more corners in the diagram. It also includes more balanced accountabilities to various actors, and thus a larger surface area. To a large extent, financial flows determine accountability and thus the shape of the diagram. Of course, introducing more actors can also introduce confusion on accountability and thus lessen accountability. The point here is to reduce the dependency of the utility on one dominating actor which can bypass rules and decision making processes, not just to have an ever increasing number of lines of accountability for the sake of it.

Figure 3 A skewed and a balanced accountability framework



Source: Developed by authors.

3.5 Translating the attributes into reform measures

Consumer orientation, autonomy, and accountability drive good utility performance. Chapters 4 to 7 introduce a number of reform measures that enhance these key attributes. Corporatization (chapter 4) focuses on improving the autonomy and accountability between the utility and its environment as well as the internal accountability by separating the corporate oversight function from service provision. The use of public-public performance agreements (chapter 5) can also improve external accountability. The enhancement of consumer participation (chapter 6) improves consumer orientation as well as the external accountability framework. Institutional capacity building (chapter 7) is a basis for all other reform measures discussed.

3.6 Further reading

Baietti, A., and P. Raymond. 2005. "Financing Water Supply and Sanitation Investments: Utilizing Risk Mitigation Instruments to Bridge the Financing Gap." Washington, D.C.: World Bank.

Schwartz, K. 2006. *Managing Public Utilities – An Assessment of Bureaucratic and New Public Management Models in the Water Supply and Sanitation Sector in Low- and Middle-Income Countries*. PhD Thesis. Netherlands: Delft

World Bank. 2004. *Operational Guidance for World Bank Group Staff: Public and Private Sector Roles in Water Supply and Sanitation Services*. Washington, D.C.: World Bank.

4 CORPORATIZATION

Corporatization (also known as ‘commercialization’) is the process of transforming a utility that is embedded within a municipality or ministry into a public organization with its own corporate identity. Corporatization is one means of balancing external accountabilities. Corporate utilities have an oversight board to set and monitor performance of the utility, thus reducing the potential for on-going political interference that can otherwise occur.

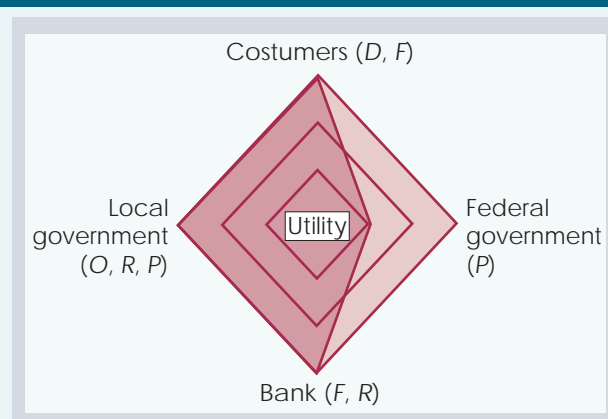
Corporatization was implemented in many countries from the 1960s onwards. Its impact on service delivery was questioned from the late 1980s, when privatization was seen as a superior reform option. Corporatized utilities provide the majority of WSS services in many European countries including Belgium, Germany, Greece, Italy, The Netherlands, Portugal, Scotland, and Sweden. Corporatization is also common in Latin America and Oceania. The few studies on the effects of corporatization that exist conclude that corporatization improved effectiveness and efficiency, but that results have been mixed⁸. Many corporatization processes in developing countries have been notional changes rather than material reform. Material reforms require that governments give up some of their power and grant real autonomy—combined with accountability—to the corporatized utility.

4.1 Uncorporatized utilities

An uncorporatized utility is a department within a municipality or ministry. Sometimes the water supply department is “ring-fenced”: it has separate financial accounts. Departments—even when ring-fenced—usually provide poor services because they are easily captured by political interests. The exception is the United States, where ring-fenced departments fund their capital expenditure from bond proceeds. The utility’s strong accountability to private financiers limits the municipality’s interference and balances the accountability framework the utility functions in (Box 7).

Box 7 How bond holders balance accountabilities of Philadelphia Water Department (USA)

The Philadelphia Water Department (PWD) is a ring-fenced municipal department. The management of PWD reports directly to the mayor. Its operating expenditure is funded entirely from revenues. A mixture of revenues, bond proceeds and federal grants (only 2 percent) fund capital expenditure. PWD’s revenue bonds are rated by Moody’s (Aaa/VMIG) and by Standard & Poor’s (AAA/A-1+). PWD is not subject to the regulation by the State’s Public Utility Commission. The municipality combines the functions of owner, de facto regulator and policy maker. Both the City and the PWD have to meet a number of covenants in the revenue bond contract. PWD has to meet debt service cover ratios. The City has to grant financial independence to the PWD and the non-retention of monies collected on behalf of the PWD. The private financier thus balances the accountability framework the utility functions in.



Source: Tagg, D. 2003.

⁸ See, for instance, Shirley, 1995; OECD, 2004; Gomez, 2007.

4.2 Corporatized utilities

A corporatized utility has an independent corporate status and a separate corporate oversight board. The corporate oversight board (or *board of directors*) is responsible for monitoring and steering the performance of the service provider. It acts as a buffer and a bridge between the management of the utility, and its owners, the local municipality. The utility management is responsible for service provision within the board's approved course-of-action guidelines. The role of service provision is thus separated from the role of corporate oversight, which in turn is separated from policy making, ownership, and regulation—which remain with the government.

The term *corporatized utility* (or *state-owned enterprise*) refers to two distinct legal institutional forms:

- **Statutory bodies** function under public law and enjoy autonomous corporate status under a special law or act drawn up specifically for the utility in question. Other common names for this form of organization are: *parastatals*, *statutory agencies*, or simply *agencies*.
- **Government-owned companies** are utilities that are incorporated under company law, but the government retains ownership of the shares of the company. Other terms for government owned companies include *public enterprises* and *government-owned PLCs*.

Performance of corporatized WSS utilities varies widely. The effectiveness of corporatization is determined by both the legislation governing statutory bodies or government-owned companies, and consistent adherence to this legislation. In general, corporatized utilities function best if they have the same legal form and are subject to the same laws as other commercial enterprises. Thus, in theory, government owned companies are more effective than statutory bodies. However, in practice the distinction is less clear since special legal provisions curtail the autonomy of both statutory bodies and government owned companies⁹. The rules governing corporatized utilities can be defined in various pieces of legislation: (1) sector laws, (2) laws governing all statutory bodies or government owned companies, and (3) specific pieces of legislation governing one corporatized utility such as articles of association.

In addition the way in which the government exercises its ownership function is critical. Multiple ownership can further improve autonomy of corporatized utilities balancing the power exerted by a single owner. Each of those factors is briefly discussed below.

4.3 Critical success factors in corporatization

Critical success factors in design and implementation of corporatization include board composition and mandate, asset ownership, and the discretion of utility management in key operational areas.

4.3.1 Composition and mandate of the corporate oversight board

The key to creating a real buffer against day-to-day political interference is not whether a board exists but how it functions. The mandate and composition of the board have to be well defined and insulated against political capture:

- **Composition of the board.** The following are essential for a stable composition:
 1. Fixed and staggered terms for board membership.
 2. The Managing Director (MD) should not be member of the board.
 3. Criteria and procedures for the appointment of board members should be made public, and appointments and fees should be advertised.

⁹ See, for instance, Blokland et al, 1999; Palmer Development Group, 2002 ; OECD, 2002.

4. Board membership should exclude those with a conflict of interest (i.e., elected officials).
 5. Non-concentration of membership of the board. This can be obtained in various ways, for instance through stakeholder representation and election of (part of) the board. The latter makes the board more autonomous from its owner, who can otherwise control the board through the various stakeholders it appoints.
 6. Requiring experience in governance of public sector institutions, in finance, or in the water sector can make the board more professional.
- **Mandate of the board.** As a minimum, the mandate of a board should include the power to hire and fire the MD, approve the business plan, approve the annual accounts, and make strategic decisions (including major investments) on behalf of the owner. The relation between the board, the owner, and the MD of the utility should be clearly defined. Responsibilities between board and service provider can be formalized through contracts or business plan, coupled with performance-based remuneration of the MD and the management team (see chapter 5). The board should have formal regular meetings with its MD and should report periodically to the owners. In some countries (such as the United States) board meetings are open to the public.

4.3.2 Asset ownership

Countries with a civil law tradition often prohibit divestiture of WSS assets from the government, even to statutory bodies or government-owned companies. In these countries (including many countries in Africa and Latin America), corporatized utilities therefore often do not own the assets they operate, but rather lease them from the government. In Anglo-Saxon common-law tradition assets are often divested to corporatized utilities. Asset ownership increases autonomy of corporatized utilities as investment planning is undisputedly their responsibility and managers have incentives to invest wisely and increase the value of the company.

4.3.3 Transparency and disclosure

Well-functioning corporatized utilities are subject to the same high accounting and auditing standards as private companies—including an annual independent external audit. However, many corporatized utilities continue to only use government procedures, which are nearly always reflect lower standards. In addition to fulfilling auditing requirements, disclosure of financial and non-financial information increases the accountability of corporatized utilities. Disclosure by public utilities can consist of ex ante and ex post reporting. Ex ante reporting includes disclosure of objectives, board members and management, and future plans. Ex post reporting includes financial and other accounting information as well as non-financial information, such as performance indicators and changes in board membership and management.

4.3.4 Financial procedures

Well-functioning corporatized utilities have a responsibility that is distinct from that of the state in relation to creditors. Some government-owned companies have used their revenues as the basis for borrowing on the strength of their own credit. A company that owns the assets it operates can use those as a guarantee for debtors. Other utilities use their owner as a guarantor. This can increase the accountability of the owner, but also let creditors assume that there is an implicit state guarantee on all debt of the utility. Autonomy of a utility is limited if the municipality borrows funds on behalf of the utility and then channels them to the utility.

4.3.5 Insolvency and bankruptcy procedures

Mimicking private sector insolvency and bankruptcy procedures increases the pressure on management to manage wisely. Statutory bodies are nearly always protected from insolvency and bankruptcy procedures through special laws or acts enacted especially for them. Creditors of many government-owned companies cannot press their claims and initiate insolvency procedures. Of course, the likelihood of bankruptcy and closure of a WSS utility is limited in practice as it fulfills a natural monopoly providing essential services to the community. In some corporatized utilities, for instance in The Netherlands, managing directors and board members are personally liable for debt that can be plausibly attributed to mismanagement; therefore the threat of personal bankruptcy provides strong incentives to the board members to ensure the water company remains financially viable.

4.3.6 Personnel and procurement rules

Exemption from government rules is often used as an argument for advocating for corporatization. In reality many statutory bodies and government-owned companies are not exempt from government regulations on personnel and procurement. For instance, a review of eleven well-performing WSS utilities indicated that all followed public procurement procedures, and the majority followed part of public personnel regulations (Baietti et al., 2006). Some corporatized utilities have found ways to circumvent public personnel rules by the introduction of bonuses on top of public pay scales. For instance, the Hai Phong Water Corporation in Vietnam provides two-part salaries: a *hard* part that is set by the Ministry of Labor and Social Affairs, and a *soft* part that is set by specific company policies. The soft part of the salary is on average two to three times higher than the hard salary. It should be remembered, however, that taking away public sector rules might give those that control public utilities the freedom to use it for their own patronage.

4.4 The way the government exercises its ownership function

Shareholders in companies are normally responsible for attending shareholder meetings and selection of the corporate oversight board. Their objective is to gain dividends on the equity they provide. However, governments who own utilities have additional policy goals such as provision of services to the poor, employment creation, and environmental protection. Some of these objectives might be implicit but no less important in practice. Typically the utility is not reimbursed for its social mandates. Also, governments and the institutions they own (such as the army, schools, hospitals, etc) often are some of the worst offenders of non-payment of utility bills. Especially in countries with low coverage rates, this can deprive the utility of an important source of income as the government's bill may account for up to twenty percent of revenues.

A government has to balance protecting the state's interest as an owner of assets with ensuring that the utility carries out its policy objectives. Ideally, all objectives should be made explicit, prioritized in an open manner, and all mandates financed.

A first step is to clearly identify who in the owner government exercises the ownership function. In some countries and cities, the ownership role is centralized in a unit responsible for government-owned enterprises in more than one sector. In some countries (or cities), a line ministry (or sectoral municipal department) is responsible for the ownership function. This can be combined with a coordinating body that standardizes certain procedures for government-owned utilities and enterprises. A centralized approach has two advantages: it separates the ownership function from regulation and policy making, while at the same time creating a unit with competency in asset management. Johannesburg provides an example of how separating policy and regulation from other functions improved a utility's management. The city has separated the roles of owner, policy maker and regulator and has documented its expectations of the water utility (Box 8).

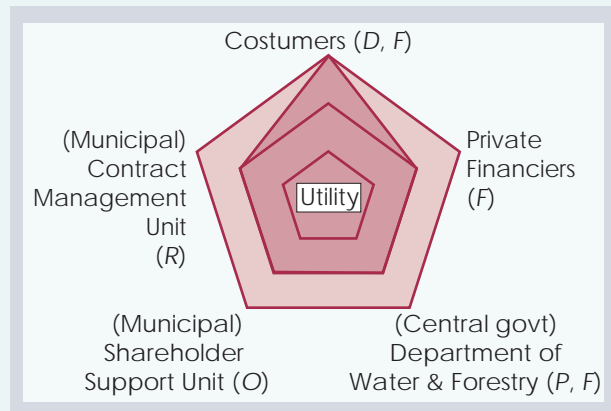
Box 8 How the city of Johannesburg (South Africa) separated its policy making, ownership and regulation functions

In 2001, the City of Johannesburg, as part of a broader initiative to reform local government, established Johannesburg Water (Pty) Ltd as a government owned company.

Johannesburg Water delivers services specified in a Service Delivery Agreement (SDA) between the municipality and the utility. The SDA sets out the performance standards, the procedure to develop an agreed business plan, requirements for asset management, financial obligations, and reporting requirements. The SDA is monitored by a Contract Management Unit (CMU) established within the municipality to oversee all the municipal service entities.

In addition to the SDA, the municipality also entered into a Sale of Business Agreement (SBA) with Johannesburg Water, which set out the sale price of the business and how this would be paid by the company. This agreement, combined with the Articles of Association (AoA) and by-laws of the company, sets out the objectives and expectations of the municipality as the sole owner of the company. The ownership role within the municipality was initially with the Department of Finance but subsequently a Shareholder Support Unit (SSU) was created in the Office of the City Manager.

Thus, while the municipality retains a triple role of policy maker, owner and regulator, it has gone some way to clarify and separate these roles. The ownership role lies with the SSU, much of the regulation role has been passed to the CMU (although the municipal council still approves the tariffs), while the council retains its policy making role. Through this separation each party can focus on the implementation of its assigned responsibility. While the municipal council has ultimate veto over the actions of the CMU and the SSU, the parties have maintained the separation of powers as envisaged in the reform process.



Source: Kingdom, W.

4.5 Multiple utility ownership

When a utility is corporatized, it typically remains in the hands of a sole owner. This means that the utility remains ultimately dependent on one actor that can bypass the corporate oversight board. For instance, a comparative study of five utilities in Mexico shows that only two out of five municipalities had boards constituted as prescribed in the statutes of the utility, while the other boards were directly appointed by the mayor despite rules to the contrary (Schwartz, 2006).

Diversifying ownership can reduce the risk of capture. This can be done through partial sale of the utility to private investors. For instance the São Paulo State Government holds just over half of the shares of SABESP, the Sao Paulo utility, with the remaining 49.7% in the hands of private stockholders (Box 9). Alternatively, the municipality can sell or donate part of the shares of a utility to consumers and to managers/staff. This is a far reaching effort that increases consumer orientation dramatically (Box 10) as well as providing incentives to employees.

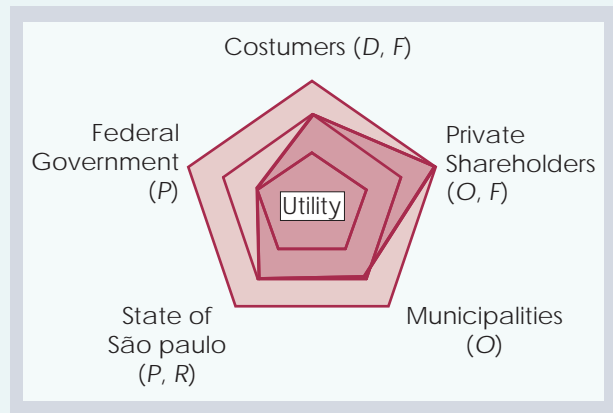
Alternatively, aggregation of utilities into larger geographical areas can introduce multiple minority owners. Aggregation is the grouping of several municipalities into a single administrative structure for the provision of services. Assets can either be divested to the aggregated utility or remain with the individual governments. An aggregated entity, by its nature, is either a statutory body or a government owned company. Its corporate oversight board comprises of representatives from multiple municipalities. The board will balance the needs of the various member municipalities. The ability of any single municipality to unilaterally influence the activities of the utility is limited (Environmental Resources Management et al, 2005). An illustration is Water Company Limburg in the Netherlands (Box 11).

Box 9 How multiple ownership through public listing balances accountabilities in SABESP (Sao Paulo, Brazil)

SABESP serves 25 million people in 368 municipalities in the State of São Paulo in Brazil. SABESP is a mixed economy, open capital company. The company operates WSS services under a concession. The São Paulo State Government holds 50.3% of its shares. The remaining 49.7% are in the hands of private stockholders. 22% of stocks are traded on the New York Stock Exchange and 27.7% of stocks are traded on the Brazilian stock exchange (Bovespa).

The accountability to multiple owners has reduced the interference by the public owner. It has forced the company to professionalize its management and improve its corporate governance. Transparency in the company has increased: Results are made public on a quarterly basis followed by a conference call where investors, analyst and the general public have direct access to company management.

As a result, service has improved. In 2005, the company achieved 100% water coverage with very small service interruptions (up from 96% with frequent interruptions in 1995). Sewerage coverage has increased from 70% to 78%, and treatment from below 30% to 63% in ten years.



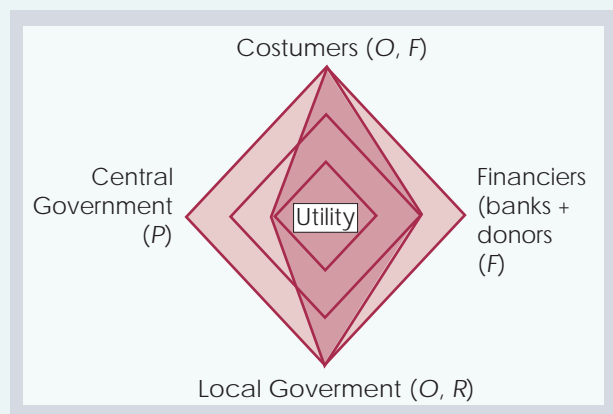
Source: World Water Forum, 2006.

Box 10 How consumer co-ownership balances accountabilities in APC (Puerto Cortes, Honduras)

Till the mid 1990s, water services in Puerto Cortes, a port city in Honduras, were managed by a national utility (SA-NAA). Performance was low and water supply coverage was 62%.

In 1994 the Municipality of Puerto Cortes acquired asset ownership of the WSS system, and in 1995, operation and maintenance were decentralized. A municipal water department was made responsible for WSS service provision. In 1999, the municipal department was corporatized into a government-owned company, Aguas de Puerto Cortés (APC). APC leased the infrastructure from the municipality, which retained asset ownership. APC improved metering and introduced community participation in tariff setting. It improved collection, and reduced illegal connections and leaks. Infrastructure was improved and expanded with donor support.

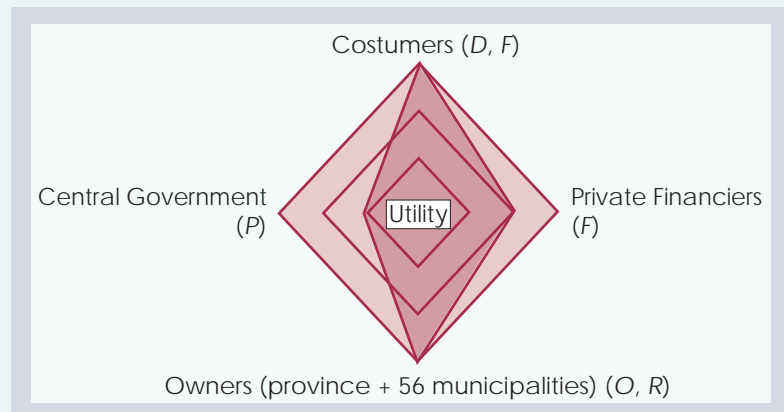
In the early 2000s, the City of Puerto Cortés sold part of its shares of APC to consumers. The City currently keeps less than 20% of the ownership of the company. The multiple ownership arrangement has improved the accountability of APC to its consumers. At present, APC has reached 92% water supply coverage. Service has increased from 12 hours to 24 hours a day. Unaccounted for water has decreased from 50% to 30%.



Source: Urbina, 2007.

Box 11 How aggregation helps to balance accountabilities in WML (The Netherlands)

The Water Company Limburg (WML) in the Netherlands is a government-owned company in which 57 government entities (the province and 56 municipalities) own the shares. The largest shareholder owns 23% of the shares. Decisions in Shareholders' Meeting are by common majority, and consensus amongst shareholders is essential for actions to be approved. As the multiple government owners represent different geographic areas, the shareholders represent consumers in various parts of the service area.



Source: Schwartz, 2006.

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5 THE USE OF PERFORMANCE AGREEMENTS

Public utilities are often confronted with a range of objectives to consider—without clear guidance on how to weigh or trade off these objectives. Performance agreements can clarify the objectives for a public utility—and provide a relative weight for the stated objectives—between the government and the utility, its corporate oversight board, or its managing directors. Therefore, performance agreements can make it easier to hold managers and boards accountable for performance.

Many development agencies advocated the use of performance-based agreements (or *contract plans*) between government and utilities as a means to improve sector performance in the 1980s. Contract plans were especially common in francophone countries, including many in West Africa. Their impact did not meet expectations, and they went out of vogue in the 1990s.

Most inherent limitations of contracts plans cited in the 1990s are still valid¹⁰:

- The effective use of any type of contractual arrangements assumes a set of pre-requisites, such as the existence of a legal and administrative framework for enforcement, which may not be fully present in many countries
- Most agreements are dictated by the one party (the principal) without giving the other party (the agent) a realistic choice to opt out.
- Sanctions for public entities are hard to impose.
- Many agreements had too many performance indicators that were hard to measure, not independently verified, and lacked baseline values
- All agreements or contracts (whether public or private) in the WSS sector face an information imbalance between contracting agents. Utilities have a great deal of information that the government contracting body lacks. Those with an information advantage—understandably—use it to negotiate attractive conditions.

However, in the past two decades three developments have enhanced the potential of performance agreements:

- The emergence of financial bonuses for individual managers and staff as an incentive to enforce performance.
- The increased competition between various municipalities and their utilities for funds from the central government after decentralization.
- Increased quality of performance agreements, partly based on the experience in design of PSP contracts.

As a result, the spectrum of public – public performance agreements (*agreements*) has been broadened, and varies from informal short term plans to more formal and longer term agreements that specify sanctions for performance:

- Business plans: Short term (often annual) informal agreements between owners, boards and utility.
- Contract plans: Formal long term agreements that include incentives and penalties for the utility as a whole.

¹⁰ See, for instance, Nellis, 1988, Shirley et al., 1995, Shirley, 1998, Batley 1999.

- Performance based intergovernmental transfer systems: Formal agreements between the central government and local authorities and utilities that specify performance and corresponding grant or loan allocations.
- Performance based agreements with managers and staff: Formal agreements between the utility and individual managers or staff members.

Recent experience with performance agreements shows that the process of introducing, updating and monitoring an agreement (also referred to as *contractualization*) is at least as important as longer-term accountability through formal enforcement. Performance agreements cannot turn around failing utilities. However, agreements can establish the rules of the game, define objects and obligations, and develop a climate of confidence. They prompt parties to focus on results and strengthen the relationship between parties by giving them periodic opportunities to discuss progress and problems.

A short discussion of the various types of agreements is given below. This is followed by a discussion on critical success factors for all agreements.

5.1 Type of agreements

5.1.1 Business plans

Business plan are short-term agreements—often focusing on the next year, but within a longer term (e.g., five-year) framework. They are often developed on a rolling basis. A business plan typically includes performance targets, investment, financial and operations plans, as well as a procurement strategy and a communications plan. Business plan can include bonuses to managers and staff for reaching or exceeding targets, but normally has a low formality.

Business plans are often introduced as a first step toward the delineation of responsibilities of the parties and the establishment a culture based on agreed performance of the parties and delivery of service. They are a good tool to align expectations among staff and management, between managing director and board, and between board and owner. The business planning process increases the capacity of those involved to understand, manage and oversee the water supply service. Business planning is an iterative process, which is adjusted over time to take into account actual performance and changed circumstances.

5.1.2 Contract plans

A contract plan is a negotiated agreement between a government acting as the owner of a utility and the utility itself that specifies the performance to be produced in a certain period of time.

Contract plans are binding agreements between a utility and its owner that are—in principle—enforceable by law. They are somewhat similar to PSP contracts, such as management contracts and leases/affermages.

The contract plans of the 1980s mostly focused on sanctions for the utility as a whole in the event of failure to deliver against agreed targets. These sanction were either monetary (e.g., grant or loan allocations), revocation of license of utility, or public exposure. Recent contract plans introduce incentives for individual managers as a driver for change. In other countries contract plans have improved communication (Box 12) even while there are no sanctions in the agreement. Auditing and publication of data is important for this.

Box 12 How the performance contract of ONEA (Burkina Faso) increased communication

The performance contract between the government of Burkina Faso and its national utility ONEA includes thirty-four technical, financial, and commercial indicators. The implementation of the performance contract is submitted to the review of an external auditor. A follow-up committee for the implementation of the performance contract exists. This follow-up committee includes nine members representing the government, three members representing ONEA and one member representing consumers. The committee meets three times a year and drafts a report on the performance indicators, which is then submitted to the board of directors. The performance contract does not provide for penalties or rewards for failing to achieve or achieving the set targets. The contract does allow for modifications if economic, financial or social conditions change dramatically.

Source: Baietti et al., 2006.

5.1.3 Performance based intergovernmental transfer systems

Decentralization has introduced a new competition between municipalities, broadening realistic sanctions to hold entities accountable. Traditionally, central governments have used their grants to local governments and utilities to bail out poorly performing utilities. Since the late 1990s, however, some governments have managed to change the use of their financing by making their transfers conditional on the milestones in reform or on the performance of local governments or utilities. Intergovernmental grants and loans have proven to be a strong driver for reform, since control of the money is an expedient sanction, especially in countries that lack the financial resources to fulfill all needs.

Performance based intergovernmental transfer systems around the world have shown good results. Australia's federal government provided grants to states to reform the water sector. The South African government used central fiscal incentives to support reform of urban services, including water and sanitation. Ethiopia has recently introduced a simplified system that provides grants for reforms and loans for investments to towns based on a series of institutional and financial milestones. India's federal government is exploring a similar policy instrument—the City Challenge Fund—to create incentives for general urban reform, including municipal services. Several countries in Latin America are also using fiscal incentives, such as Brazil, Colombia, and Ecuador.

5.1.4 Agreements with managers and staff

The above text concentrates on agreements between the utility, its board, and its owners. Within the utility there are also opportunities to establish an incentive framework for the performance of managers and staff. Agreements with individual managers or staff can provide monetary incentives upon achieving performance indicators and sometimes introduce negative sanctions (including dismissal) if performance is not achieved.

A strong performance evaluation system for staff has to be in place before employees can be held accountable (and rewarded) for the results that they produce. Often performance-based payment has been introduced from the top, with a new management team hired on a performance basis to turn around a utility.

5.2 Critical success factors

In order to be successful, agreements have to adhere to a number of critical success factors including gradual introduction, providing room to deliver, and proper design and implementation.

5.2.1 Gradual introduction

Countries that have used agreements as a positive force, have introduced them gradually and as part of a wider set of reforms. As a first step to increase accountability, informal agreements—which

Box 13 How performance agreements were one element of a broader reform program in Uganda

The NWSC Act of 1995 provides NWSC a degree of autonomy. In 2000, the Government of Uganda (GoU) introduced a three-year Performance Contract (PC1) with NWSC. NWSC's debt service obligations were suspended in return for a commitment to operational and financial improvements and an increase in coverage that reflected GoU policy objectives. A 2003 second Performance Contract (PC2) continued suspension of debt service and specified that NWSC's debt would be restructured to a sustainable level. A review committee monitored the implementation of the agreement. The main sanction of the agreements is in the forms of bonuses for managers and staff. During the period of these contracts, NWSC's management has initiated far-reaching internal reforms. More autonomy was transferred to the Area Service Providers. NWSC initiated internal performance based contracts with Area Service Providers ("Areas").

Source: Mwoga, 2004.

delineate responsibilities but do not specify specific sanctions—were introduced. These informal agreements enhance performance by prompting the parties to the contract to focus on results and strengthen the relationship between parties by giving them periodic opportunities to discuss progress and problems. Formal agreements that include sanctions can only be introduced when performance evaluation systems are functioning properly. Introducing positive sanctions in formal contracts has been more productive than introducing negative sanctions.

5.2.2 Providing room to deliver

Performance agreements can only improve performance if utilities have the discretion to improve the efficiency and effectiveness of their operations. Often, agreements fail to produce the desired effect if they are introduced within a hierarchical procedure-based system in which utilities have little effective autonomy. In many developed countries this model has changed over the past decade into a more flexible approach that combines a limited set of basic rules with incentives. For instance, New Zealand introduced agreements with government-owned companies that were fully autonomous, functioned under commercial law, owned their assets, and operated within a simplified set of rules. But some developing countries have made progress. For instance the Government of Uganda gave the national utility certain autonomy and then introduced a contract plan (Box 13).

5.2.3 Design

Failure of agreements is frequently due to bad design. In some countries, careful contract design has prevented many of the problems observed in the past. However, many agreements remain very complex, leading to misuse by one of the parties. Designing public-public agreement requires resources. There has been little effort to develop standard contract clauses and implementation guidelines¹¹.

A good agreement is simple and short. It specifies:

1. Responsibilities of each party including performance targets: A contract should only contain targets that are controlled by the contracted party.
2. A small and realistic set of indicators: The number of indicators should be limited and stable over time, and should be measurable—ideally by independent third parties.
3. Reporting requirements: The contract should specify format and frequency of reporting on progress on indicators.

¹¹ In contrast a large volume of work is available on the design of private sector contracts, such as management contracts, leases/affermages and concessions.

Box 14 How data from the program contract of SONEDE in Tunisia are used

As do other government-owned utilities and enterprises in Tunisia, SONEDE, Tunisia's national public water supply utility, signs five-year program contracts, which set performance objectives between SONEDE and the Government. The latest contract includes twenty-three technical, financial, and social indicators that are realistically achievable. The program contract does not provide for penalties but provides for a review upon request of one of the parties. It requires SONEDE to annually publish information about coverage, operational and financial indicators.

The implementation of the program contract is ensured by a follow-up unit which includes five members: a representative from the line ministry as the Chairman, the CEO of SONEDE, the State Controller, and representatives of the Ministry of Finance, and the Ministry of Economic Development and International Cooperation. This unit meets once a year, to review the annual financial and implementation reports, and to recommend follow-up measures to be taken.

Source: Ghariani, 2004.

4. Realistic sanctions for (not) complying with performance targets: Sanctions can be monetary or non-monetary and can include penalties for underperformance. Additionally, bonuses may be used to reward over-achievement and over-performance in relation to the performance targets.

5.2.4 Implementation

A fourth reason that agreements fail to produce the intended result is poor implementation. Agreements require monitoring, data analysis, and impartial application of sanctions.

Setting up a strong unit that deals with collecting, analyzing, and disseminating information about the utility is a sensible first step when introducing agreements. Requiring utilities to audit their financial and technical data gives more reliable data. While this is common practice in public – private partnerships, it is still quite rare for public utilities.

Once data are available, they can be used as a base for discussing present status and future planning of the utility. The creation of a structure that brings together various stakeholders is a useful second step of implementation, as shown by the use of program contracts in Tunisia (Box 14).

Sanctions can only be applied when monitoring systems are functioning properly. Regular and transparent performance evaluations for staff are a prerequisite for performance related salaries. Contract plans and intergovernmental transfer systems require dependable data on the functioning of the utility as a whole.

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6 Consumer accountability tools

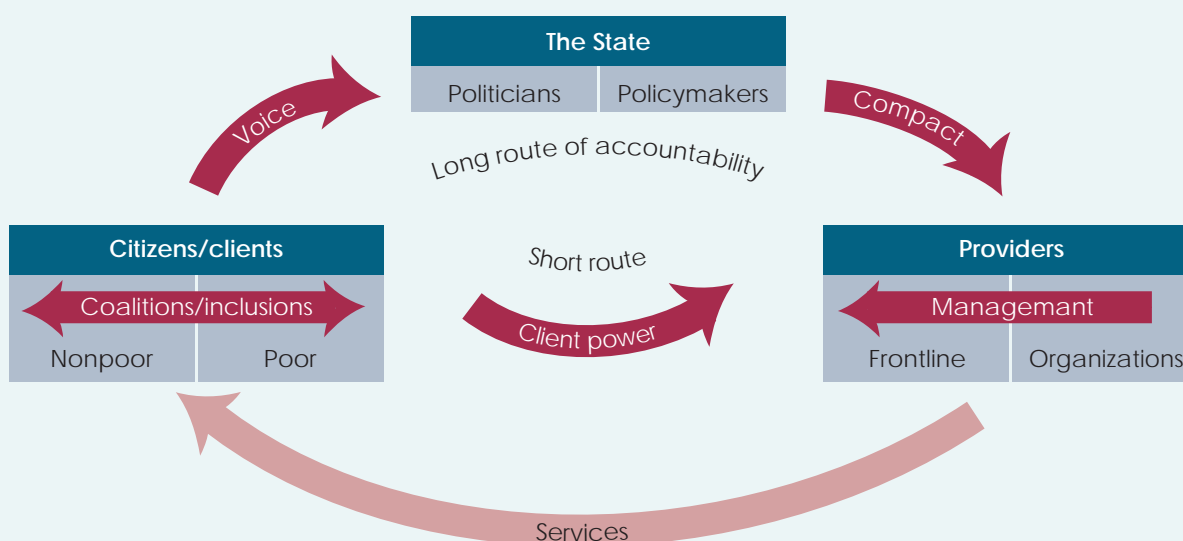
At the core of consumer orientation, accountability, and financial autonomy lies the relationship between the utility and its consumers. Service providers who do not take into account users' priorities and preferences risk losing the trust and cooperation of the community that they are supposed to serve. The result is often service deterioration, further alienating users.

Giving consumers the right to hold utilities accountable can help depoliticize and balance the accountability framework of utilities and can help prevent political capture.

Traditionally, utilities are dependent on governments—financially and in other ways. While their captive clientele usually make some contribution for their services, consumers can only demand better services through elected government officials. Recent trends including democratization, the emergence of civil society, and better information technologies have increased the possibilities for consumers to hold utilities directly accountable. It should be noted that consumer participation, by its nature, only increases accountability to connected people served by utilities. Citizen's voice through politicians remains important for the unserved (Box 15).

Box 15 The long and the short route of accountability

The World Development Report (WDR) 2004 illustrates two routes of accountability between citizens/clients and service providers. In the long route, elected representatives convey citizen needs and concerns to service providers—in a relationship known as voice—and attempt to translate these into operational standards, terms and processes for service delivery by entering into explicit compacts with service providers. In the short route, citizens exert direct client power on utilities to ensure optimal service delivery. The WDR argues that for a public service delivery system to function successfully, each of the three elements of voice, compact and client power is necessary. The triangle of relationships between citizen-policymaker (voice), policymaker-utility (compact), and citizen-utility (client power) must be complete, and each side equally balanced in vitality and strength. Should any of these relationships be weak, it distorts the system's ability to sustainably produce quality services over the long term.



Source: World Bank, 2003.

Measures to increase consumer accountability range from timely information to consumers to involvement of consumers in decision-making. The relatively easy pay off of increasing consumer accountability is confirmed by its early introduction by private operators coming into the WSS sector. Better responsiveness to consumers—beyond reliability of the actual service—can increase utility income substantially and are critical for the credibility of subsequent tariff increases.

Tools for accountability cannot—in isolation—provide sustainable water services. However, tools for accountability can effectively contribute to this goal, through improving utility practices and the utility's policy and institutional environment. Correct chosen and properly implemented, tools for accountability have contributed to better performance in many water utilities around the world.

This chapter discusses a number of consumer accountability tools and discusses how a suite of accountability tools can be determined for a specific situation.

6.1 Tools for accountability

A spectrum of practical tools exist to make utilities more accountable to their users. Tools for accountability range from information, to consultation, participation, and recourse.

6.1.1 Information

A first step in consumer participation is the provision of better information to individual consumers, communities and consumers at large. Information tools include publication of annual reports, information provided at service centers or with bills, and structured outreach programs. Technical jargon will have to be translated into plain language that users can understand.

6.1.2 Consultation

While information provision is a one-way process, consultation involves actively seeking and listening to users' opinions. In this case, consumers provide feedback, but the utility is not held to acting upon the feedback. Surveys, if designed collaboratively for the purpose, can help utilities to understand and respond to users' preferences as well as chart utility performance. More interactive consultation tools include public hearings and advisory committees. Many utilities collect the opinions of their consumers. It is remarkable how few of them actually use the collected information systematically to improve service to their consumers. In other cases, feedback is taken into account selectively—only when it is convenient for the management or staff of the utility.

6.1.3 Participation

In the case of formal participation, utilities oblige themselves to take into account consumers' views in the process and content of policy-making. Tools allowing user participation in decision-making include giving consumer representatives formal voting rights on utility oversight boards or regulatory committees. At the extreme, this can extend to consumer ownership of a service provider. Involving consumers in service provision, by fixing leaks for instance, can be a way of ensuring accountability as well as simply getting the job done. Consumer participation at the community level has a strong track record in areas where a tradition of communal organization and collective action exists. An at-scale example of this is the PROSANEAR program in Brazil, which has provided a million poor people with piped water supply and sanitation (Box 16).

6.1.4 Recourse and redress

A service provider can only be considered to be fully accountable if users have some way of calling them to account (recourse) and then, if justified, to obtain an appropriate response (redress). Some mechanisms (such as complaints mechanisms and charters) are internal to the service provider, while

Box 16 How Brazil expanded WSS services through flexible community participation approaches

PROSANEAR is a water supply and sanitation program for providing first-time services to low-income communities in Brazil. It was first launched as a World Bank-financed pilot project in the mid 1990s. After extending services to one million urban poor, PROSANEAR became a national program financed fully by national funds.

PROSANEAR has a flexible learning-by-doing approach. Each state water company has been free to choose its own procedures to incorporate participation. Three models of participation emerged:

- The engineer-activist model, the engineering consultant was also a dedicated social activist.
- In the participation specialist model, professional community participation facilitators work jointly with design teams led by engineers.
- In the hygiene education model, health educators focused on changing knowledge, attitudes, and practices, rather than on service provision per se.

The principal lessons of PROSANEAR are that communities should participate fully, right from the preparation stage through to the post-works stage, cost recovery, tariff policy and operation and maintenance responsibilities should be discussed and agreed upon by all stakeholders during project preparation. Water and sanitation interventions should be carried out as part of a local area development plan, and critical complementary investments should be identified early in the process.

Source: World Bank. 1996.

Box 17 How the complaint redressal systems of Delhi Jal Board (India) do not satisfy consumers

Customers of the Delhi Jal Board, the water utility in Delhi, India have access to a two-tiered complaint redressal system. DJB has a publicly announced Citizen's Charter, which sets service and complaint redressal standards and timelines. Consumers may file complaints over the telephone to DJB's centralized call room, to its twenty-one zonal offices, or to its three water emergency offices. If their complaints are not adequately addressed, they can complain to the District Consumer Disputes Redressal Forum.

VOICE, a Delhi based consumer action group, surveyed consumers who had water-related cases pending in Delhi's District Consumer Disputes Redressal Forum (DCDRF). The survey used four parameters: accessibility, user-friendliness, responsiveness, and accountability. The survey revealed that the complaint system scored low on accessibility: most consumers had to travel over 5 km to pursue complaints with DJB and over 10 km to the consumer forums. Half the respondents reported they had missed three days of work to pursue their complaint. Respondents were very negative on user-friendliness: Over 80% found DJB staff irresponsible or highly irresponsible. While 96% of respondents considered the DCDRF procedures simple, over half of respondents found DCDRF front line staff rude, evasive, and unconcerned. In terms of responsiveness, over half of consumers had to wait over six months for orders. Accountability was also deemed low, as DJB only acted on half of the cases to implement the order of the DCDRF.

Source: WSP, 2007.

others are external such as public service ombudsmen. In most jurisdictions there will be some scope for recourse to the courts, including in some cases high courts interpreting constitutional rights. While utility complaint mechanisms exist in most utilities around the world, many of them barely function. Often, at least part of the problem lies with the inability of a utility to respond to complaints that it receives. Also, utility managers might regard complaint handling as a marginal aspect of the business. A well documented example of how the transaction costs of using complaint mechanisms can be considerable for individual consumers while many complaints are not resolved is New Delhi, the capital of India (see box 17).

6.2 Criteria for choosing a suite of tools

Consumer accountability mechanisms that work in one context may not be feasible or effective in another. Tools need to be tailored to sectoral frameworks and to a country's institutional context and cultural setting beyond that of the WSS sector. A well-functioning consumer accountability mechanism should be effective, inclusive, efficient, and sustainable.

The first test for consumer accountability mechanisms is whether they are effective in producing results. Accountability is not achieved through a single all-embracing tool. The challenge is to ensure that a system is in place through which all service users have effective access so that they may engage with the utility or at least ensure that their concerns and views are heard and responded to. An effective suite of tools combines tools for explicitly defined objectives. Tools perform different functions: They may communicate key information to users or help utilities to understand users' preferences and ensure their participation in key decisions; they may build trust and a habit of engagement between user and utility. The effectiveness of tools also depends on how they are designed and implemented.

However, an effective mechanism has limited merit if it is not inclusive. A tool that targets individuals can be inclusive if it is equitably available to all. The inclusiveness of collective tools (covering all customers or the entire citizenry within a jurisdiction) depends on how user representatives are selected and appointed. Consumer accountability mechanisms can be captured by special interest groups (for instance a political party) or by a subgroup of consumers (for instance consumers with house connections, excluding those with lower service levels). Consumers are not a homogenous group and special measures are required to reach out to those which have no voice in collective mechanisms or lack access to individual information or redress tools. Particular attention must be paid to ensuring that the specific needs of women, minority groups, and poor communities are met.

A third test is efficiency. Tools of accountability often have considerable costs for both utility and users. Some mechanisms are cost-efficient for the utility but involve a high non-monetary cost for consumers, as they are time-intensive. Integration of tools for accountability into normal operational management ensures that they are cost effective and also that they are linked to internal performance management and monitoring systems, strengthening the incentive for staff at all levels to adopt a user-focused approach.

A last test is sustainability over time. Ad hoc accountability mechanisms that are initiated by civil society activists and embraced by well-meaning utility staff or civil servants can only start a process. For instance, in Ukraine, consultations initiated by community and consumer groups organized to address drinking water quality challenges in the wake of the Chernobyl nuclear disaster culminated in new drinking water legislation (Box 18). Experience shows that tools that are introduced by external parties have often been difficult to sustain because of their complexity and their cost. Experience shows that impact is greater when mechanisms are institutionalized. Integration of tools for accountability into normal operational management is associated with organizational excellence. Ways to institutionalize participatory mechanisms include strategic plans, rules and procedures for utilities as well as customer charters. Participatory mechanisms can also be inscribed in law. For instance, over the last decade, the growing prevalence of laws requiring the disclosure of official information has helped to pierce the secrecy of utilities.

6.3 Matching tools to local circumstances

Tools for accountability will not in themselves solve physical problems of service delivery, although they may enable a utility to address infrastructure planning and development in a more effective way. This does not mean that tools for accountability should simply be abandoned in difficult circumstances; indeed, it is precisely in these situations that they are most needed. What it does indicate is that the right tools should be chosen explicitly to match the local circumstances.

Consumer accountability tools must be combined with other practical organizational measures that build accountability and client focus into utility structures, and reinforces those concepts through effective performance management systems—such as corporatization and performance agreements.

Box 18 How consultation tools that were initiated by civil society in Ukraine were adopted by the state

Consultations that community and consumer groups organized to address drinking water quality challenges in the wake of the Chernobyl nuclear disaster were later formalized by legislation.

The response of the Soviet government authorities to the 1986 Chernobyl nuclear incident in Ukraine notoriously showed a reluctance to acknowledge that a calamity had happened, increasing the existing mistrust of official pronouncements. Local group MAMA-86 was established shortly before Ukraine was established as an independent republic in 1991. It sought to respond to fears about water pollution and to campaign for better environmental safety.

MAMA-86 has since expanded its focus to the entire water supply and sanitation sector. The activities of MAMA-86, combined with other local initiatives, resulted in the establishment of informal local stakeholder committees to open up decision-making in the water services sector. These committees evolved into more formal advisory bodies, often under the aegis of reforming mayors. They include representatives from municipalities, service providers, and civil society. Their mandate and practical functioning varied considerably depending on the receptiveness of individual local authorities. Their multi-stakeholder oversight became a requirement for tenders with private operators as well as for performance agreements of public utilities. Committees also scrutinized and approved consumer contracts. The consultation mechanisms were formalized by national legislation in 2000 (which the NGOs (non-governmental organizations) helped to draft) following Ukraine's ratification of the Aarhus convention in 1999.

This case shows how an independent initiative by an NGO can be formalized if it has political support. The stakeholder committees were replicated across the country because different municipalities faced similar problems: while water supply coverage was near 100 percent, the infrastructure was decrepit and drinking water quality was poor.

Sources: Muller et al., 2008.

While accountability tools require political will, political will does not emerge in isolation from activity at the level of the community—and it may often be mobilized by community action, to which structured mechanisms of accountability can contribute.

Different tools are appropriate at different stages of utilities' evolution. Many tools for accountability can only be introduced when there has been some progress in the broader process of institutional development. For consumers to effectively participate in the WSS sector, they not only need a mechanism to participate but also the knowledge and skills to use that mechanism effectively. On the other hand, the need for accountability will, by definition, be greater in the less conducive environments. There is a strong tension between the need for tools (which is higher in less conducive environments) and the potential of tools to effect change (which is lower in less conducive environments).

Where a utility is pre-functional, simple measures to share information about the state of the organization and informal consultation on consumers' priorities will be critical. User involvement in the execution of certain utility functions can help build trust. As utilities mature, utilities will often introduce basic customer service systems, such as complaint processes, informal consultation processes, and probably surveys. Tools of accountability are an intrinsic part of the overall toolkit of management and oversight systems of mature utilities. At this stage, tools can help to prevent utility performance from slipping or its capture by politicians. Utilities and users often prefer tools that keep the doors open for their participation but are dormant for most of the time—reducing transaction costs for consumers—such as notice periods for public comment, as well as collective representation through membership of oversight boards. Surveys and publication of service data (in the form of annual reports and other targeted consumer information products) will continue to play an important part. Information sharing and structured consultation processes are vital when high-impact decisions are being taken on future investment priorities and service levels as well as on organizational structures and the possible involvement of the private sector.

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7 Capacity building

Decisions can only be translated into effective management actions if various actors have the right knowledge and skills, and have some incentives to do better. Capacity building can be defined as the process of providing individuals and institutions with the abilities and powers 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 that requires a mix of approaches focused on learning new skills through applying them.

In the 1950s and 1960s, development agencies invested millions in capacity building, with limited impact. By the end of the 1960s, emphasis turned to institutional reforms, first through corporatization and performance contracts, and later through privatization and consumer participation. Donor agencies remain important financiers of capacity-building efforts. Target audiences have broadened to include local and central government officials—to address broader governance issues—as well as user groups.

Many donors, governments, and training institutions recognize the need for more demand-based and flexible capacity building approaches, but all face obstacles to implement them. Many training institutions are not in touch with the implementing agencies to understand what skills and knowledge need to be imparted. Donor agencies are under pressure to deliver training that can be quantified and attributed to certain interventions. While tied aid is diminishing, training programs are still sometimes carried out through training institutions in donor countries. Sometimes local actors choose international trainers as a matter of reputation, rather than experience at the job at hand.

Traditional training tools do not suffice to create sustainable change. Capacity building needs to respond to rapidly changing real world needs and should build on existing skills and indigenous knowledge. Local leadership can improve the likelihood of sustainability. A broad range of capacity-building tools have emerged, such as on-the-job training, professional networks, short term private sector participation and twinning, ongoing professional support, practical training programs, and development of tools and materials. Trainers and trainees are overlapping groups in many of these approaches. A critical factor in realizing the potential of capacity building is providing individuals and institutions with the motivation to implement their newly acquired skills. This includes changing the corporate culture within utilities.

This chapter discusses the audience of capacity building, topical areas and skills, capacity building approaches, and how to motivate people to use their acquired skills.

7.1 Whose capacity to build?

Many countries suffer from skills shortages at a national and local level, both within government agencies and within utilities. Training should focus on these as well as consultancy firms and contractors, who can be hired by various parties. The latter is especially important for smaller utilities, which cannot afford to have all knowledge available in-house, and, as such, depend on external professional support. Consumers and their representatives need to be included in capacity-building efforts.

7.1.1 Local governments

At the local level, the knowledge of the WSS sector has been traditionally concentrated in the utility. A special area of attention in decentralized environments is how to reinforce and expand the capacity of municipalities, who are to a large degree responsible for policy setting, ownership, and regulation.

Capacity-building efforts that help municipalities to collect and analyze information, and to set and enforce incentives for good performance by the utility or its managers, are crucial to successful reforms. If the policy making and ownership functions are not well-resourced—and commonly they are not, especially in regard to the ownership function—the utility will fill the vacuum.

7.1.2 Central governments

Training is also required at the national level. For central governments, decentralization is not the end of their involvement but the start of assuming a new role. National and provincial agencies, for example, may need assistance in shifting from design and construction to monitoring, providing incentives, and advocating policy changes.

7.1.3 Utilities

Reform processes often require a shift in skills within the utility. New management, along with professional and technical skills are required to deal with the organizational change that springs from reform programs and the cultural issues that are involved. New concepts like customer service need to be understood and departments established to implement them. Enhanced operational skills will be necessary to respond to the new standards that reforms impose for the reliability and quality of the water supply.

7.2 What to teach: Topical areas and skills

Capacity building programs are more successful and are more likely to be sustainable when they respond to demands expressed by those to be trained. A number of assessment tools have emerged to identify the immediate needs and demands of institutions.

Reforms change the logic of management from long understood principles of patronage; serving politicians rather than consumers requires new skills. Capacity development should specifically focus on:

- Leadership development by identifying and training leaders.
- Change management, to help in changing institutional set-ups and corporate culture.
- Contract management for contracts between government agencies and with private sector and non-governmental organizations.
- Technical skills such as asset management.

7.3 How to teach: from classroom to learning by doing

Reforms require a combination of capacity-building interventions that change over time to respond to local circumstances. This section discusses a number of approaches that need to be applied in combination: on-the-job training, professional networks, short term private sector participation and twinning, ongoing professional support, more practical training programs, and certification and development of tools and materials.

7.3.1 On-the-job training

Probably the most common and arguably the most effective way of training is through working with colleagues on the job. While on-the-job training is an implicit capacity-building tool in many organizations, supporting and rewarding organizations themselves for investing time in mentoring and transferring knowledge will support its use. Decentralization of responsibilities within an organization is a powerful tool to increase on-the-job training opportunities, not only for staff's present jobs, but also for internal growth within the organization. For instance the use of staff working groups in SANASA in Brazil is a way to develop the professional growth of its personnel by gradually providing them more responsibility and training (Box 19).

Box 19 How SANASA (Brazil) uses decentralized working groups to develop its promising staff

Operational decisions in the water utility SANASA in Campinas, Brazil, are prepared by working groups within the organization. Working groups are established for the purpose of making a recommendation for a specific issue. They consist of employees who have a particular expertise on the topic under review. The working group drafts a recommendation, which is then forwarded to management and in some cases the corporate oversight board. In reality, management endorses almost all recommendations. Areas in which recommendations are formulated by working groups include tariff structures, procurement, and salary structures. The decentralized working group model has proven to be a strong tool to optimize use of the utility's most qualified personnel. It has also scouted high potential staff, and broadened their range of responsibilities. This helps to attract and maintain qualified, experienced and motivated personnel. Professionals inside and outside of the utility see the model as a key ingredient to the good performance of SANASA during the past years.

Source: Aguiñaga, 2004.

7.3.2 Professional networks and certification

New technologies have created new ways to build capacity. Information can now be summoned instantaneously through the Internet. Partnerships between people and institutions across the world can take place directly without formal intermediaries. Professional networks have blossomed using these new technology options. Professional organizations can play a key role in the establishment of certification programs as a way to consolidate good practices and formalize what people learn from their peers. Some utilities have worked with local professional, technical, and craft associations to develop programs which provide competence certification for employees who complete training courses and take up responsible appointments in the utility. Box 20 gives an example of how, in South East Asia, a network of utilities took the lead in building capacity.

7.3.3 Professional support through short term private sector participation and twinning

Management and service contracts were traditionally viewed as a first step for moving into deeper and expanded private sector participation. Management contracts are now increasingly seen as a way to improve the performance of a public utility, as part of a larger process of utility reform as it remains under public management. However, traditional management contracts did not provide incentives for knowledge transfer. The prospect of further PSP actually provided a disincentive for operators

Box 20 How the South East Asian Water Utilities Network builds capacities

The South East Asian Water Utilities Network (SEAWUN) was established in 2002 as an initiative of the directors of water utilities in the region. These directors realized that water utilities in the region could enjoy significant benefits by sharing experiences and common problems or issues, and by developing a regional network for communications and joint activities.

One of the key objectives of SEAWUN is to assist its member water utilities to improve efficiency in operation and management, achieve financial viability, and advocate for reforms in the sector to improve the policy environment. SEAWUN also provides consulting services to member country governments on mechanisms and policy reforms for the water sector.

In order to realize this objective SEAWUN members agreed an initial development program with four key components:

1. Performance Benchmarking, with the intention of developing a data book for South East Asian utilities;
2. Training and Human Resources Development, including the development of a professional certification system;
3. Full Cost Recovery, with a focus on identifying key challenges and sharing experiences; and
4. Unaccounted-for Water Reduction, including the identification of "centers of excellence" and the development of training and partnering networks.

Source: Kingdom and Jagannathan, 2001.

to build up the local public utility. Data on the performance of management contracts as a short-term contractual tool to build capacity are scarce but point to mixed results.

Twinning between public organizations also has a mixed record. While, the public utility that provides knowledge does not have the disincentive of a prospect of a longer term contract, it also has little accountability to deliver the promised support. The success of twinning has depended on the goodwill of the twinning partners, and has often been abandoned as key motivated personnel moved on.

In recent years, a new generation of contracts and agreements are emerging which blur the lines between private sector participation and public-public arrangements. They increasingly focus more on transfer of know-how, and at the same time, provide employees with a more secure environment and include specific mechanisms to facilitate return to public management.

7.3.4 Ongoing professional support

Ongoing technical and operational support systems might be needed to provide professional support to utilities. This is especially crucial to smaller operators in small cities and towns and which have limited in-house resources. Box 21 gives an example of how municipalities in Estonia established a flexible and tailored support system that provides individual municipalities and utilities with professional support for non-routine operations.

7.3.5 Continuous practical training programs and development of tools

Traditional training programs focused on formal training for personnel before they started their careers. However, policy, legal and institutional reforms require staff to gain new skills during their career. Often these skills can best be learned from other practitioners. However, training and knowledge institutions still have an important role to play to match supply and demand and to develop standard tools and mate-

Box 21 How municipalities set up an effective professional support company in Estonia

In 1995, the national WSS utility in Estonia was liquidated and its functions decentralized to the municipal level. A new private company, Eesti Veevärk, was established in 1993 to provide municipal utilities with professional support. The rationale was the conviction that small individual municipalities would not be in the position to attract and retain specialized professional staff that would be needed in the modernization of the country's WSS sector.

Eesti Veevärk was set up as a joint stock company fully owned by municipalities. Ownership transferred to the when they were established as government owned companies in 1998. The company combines three functions: professional support, financial intermediary, and procurement agent of spare parts and equipment. Eesti Veevärk does not receive any subsidies. It has to sell its services for fees in a competitive market. Utilities can opt to use their own staff or contract any private agency to provide the service.

The original number of owner municipalities amounted to 29. Shares were freely tradable among municipalities. Ownership was of special interest to municipalities as it was a precondition to receive concessional project funding channeled through Eesti Veevärk. Municipalities remained as shareholders even without benefiting from the external project financing. Recently, one municipal utility (Tartu) has acquired a majority shareholding.

Over time, competition has increased as the local private sector has grown. Eesti Veevärk is now de facto converting into a consulting engineers' company with special expertise in project management, technical services (particularly network rehabilitation), and preparing feasibility studies in the water sector.

Eesti Veevärk played an important role in the WSS reform process in Estonia in the 1990s. It was crucial for allowing small municipalities to access external financing. It also provided a commercially viable local provider of professional services in an era where modern thinking was scarce. The rapid and successful creation of a professional apex institution within the relatively short time period of five years was most of all due to the strong will of the Estonian government to modernize. However, substantial external technical assistance was an important catalyst.

Source: Nordstrom, S., and K. Ringskog. 2003.

rials for public utility reform. There has been little effort to develop sound contract terms, standard contract clauses and implementation guidelines. In contrast, a large volume of work is available on the design of private sector contracts, such as management contracts, leases/affermages, and concessions.

7.4 Motivating people to make use of acquired skills

Capacity building can provide individuals and institutions with the tools and skills to improve water supply and sanitation services, but does not necessarily provide them with the motivation to do so. A combination of hard performance-based rewards and the introduction of soft “corporate culture changes” can motivate staff to implement their newly acquired skills.

Corporate culture plays an important role in the reform process. Establishing a change in corporate culture in an organization depends on capable managers with adequate leadership skills. The direction of change should be clear to all employees—an organization needs a shared sense of vision and mission. Training activities develop the shared commitment of the employees. A good example of combining training with soft and hard tools to motivate staff is the Public Utilities Board in Singapore (see box 22).

7.5 Further reading

Alaerts, G.J., F.J.A. Hartvelt, and G.M. Patorni, eds. 1991. *A Strategy for Water Sector Capacity Building*. UNDP/IHE, International Institute for Hydraulic and Environmental Engineering Report-24, New York/Delft.

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Box 22 *How PUB (Singapore) has increased its efficiency through a combination of measures*

The Public Utilities Board (PUB) is a statutory body that has continuously improved its performance over the years. These improvements are being achieved through the development of a culture of excellence within the organization.

PUB recruits staff as and when necessary without specific constraints. Hiring and firing at all levels is based on merit and qualification. PUB determines its own salary scales using government salaries as guide. Staff salaries are competitive with those in the private sector. The board, with the approval of the Minister, and after consultation with the Public Service Commission, appoints the Chief Executive Officer. Set hiring committees involving various management levels within PUB make other appointments.

A systematic and objective approach is adopted for the career development of staff. The performance of employees is evaluated yearly through a staff appraisal exercise. Employees may be rewarded in the form of performance bonuses or promotions. Those who display high potential are groomed. Staff members rotate within the organization to wider experience and perspectives. Poor performers are counseled and advised how to improve on their performance. If adverse performance persists, dismissal is an option. Absenteeism is low. Employee turnover is about 2.2% and this are mostly due to retirement.

An extensive training plan focuses on professional and competency development, and corporate culture and supervisory development. Emphasis is placed on the selection and training of frontline staff who come into direct contact with consumers.

Source: Baietti et al., 2006.

8 The process of improving and institutionalizing performance

Improving performance will require implementing a combination of many of the measures described in the previous chapters. This requires an ongoing investment of time and political effort. This chapter provides guidance on how to assemble the measures described in chapters 4–7 into a coherent reform program which is tailored to meet the specific needs of a city or a country.

This chapter is laid out in three parts:

- Interaction between the utility and its institutional environment
- Stages in reform
- Tailoring reforms to the specific situation

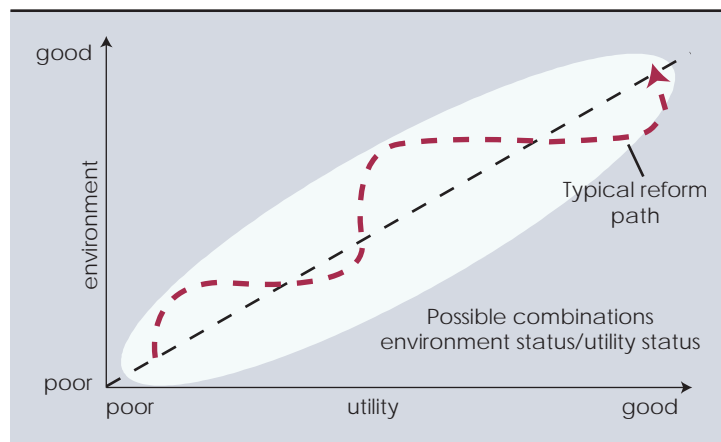
8.1 Interaction between the utility and its institutional environment

Reform involves an interaction between the utility and the institutional environment in which it operates. The reforms that can be undertaken by a utility depend on the opportunities available in the institutional environment in which it operates. Similarly, improvements in the institutional environment in which the utility operates are likely to have only a limited impact if the utility has insufficient internal capacity to make the most of this (beneficial) situation. Plotting the various reform measures against an environment and a utility axis is a useful exercise.

Figure 4 illustrates how reform steps in the utility and the environment are combined and sequenced into a coherent reform program. A typical reform path will always evolve around the diagonal axis that combines environment and utility reforms. Indeed it is likely that any action that moves the reform path too far away from the diagonal is unsustainable. That is, improvements in the environment in which the utility operates, are likely to have only a limited impact if the utility does not have the systems or internal capacity in place to take advantage of it. By the same reasoning internal reforms are limited by what can be supported by the environment.

The reform program in Uganda illustrates how steps in the reform process in the utility and the environment can be combined and sequenced into a coherent reform program. The reforms made the utility

Figure 4 Relation between internal and external reforms



Source: Developed by authors.

as a whole, its business units, and individual employees, more accountable for outputs. This has led to substantial improvement in service delivery (Box 23).

8.2 Stages in reform

Reform programs usually begin when utility performance is declining and some specific event focuses attention on the poor service and creates the momentum for change. A number of factors can trigger the reforms. These include:

- Sector crises – shortage of water caused by a drought; unacceptable levels of service; financial crisis and inability of governments to continue to subsidize the sector.
- Political shifts – elections; implementing a decentralization policy for water.
- Threats and opportunities – the threat of privatization; donor pressure; persuasive analysis and argument; a serious pollution of a water source; health problems arising from unsafe drinking water.

Box 23 How the utility and the environment interacted in Uganda to produce reforms

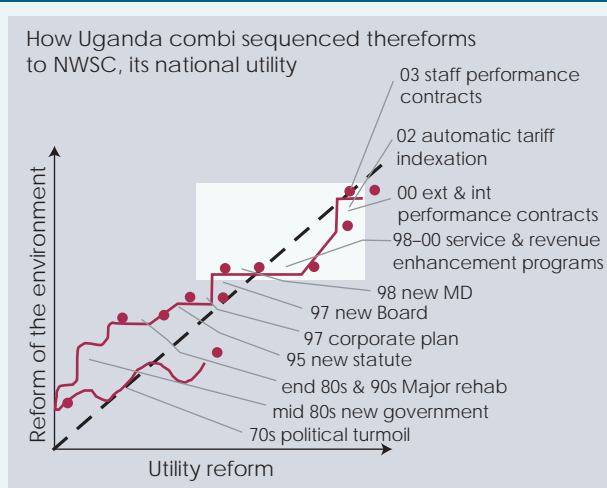
The graph below shows how reforms in the National Water and Sewerage Corporation (NWSC) and reforms in the environment in which it operates interacted in the past two decades.

During the 1970s and 1980s, Uganda was in public turmoil and the performance of NWSC declined considerably. Between 1986 and 1997 NWSC, with international donor support, rehabilitated and expanded its infrastructure. However, managerial practices were not improved so poor service provision continued.

A new Board of Directors (BoD) was appointed in 1997, which in turn appointed a new Managing Director in 1998. Having a new management team presented an opportunity to review past performance and implement improvement strategies.

From February 1999 onwards the management of NWSC has sequentially implemented a number of programs. More autonomy was transferred to the Area Service Providers ('Areas'), along with defined performance targets and accountability for results. The "100-Days Program" and the "Service and Revenue Enhancement Programs" resulted in better specification of targets for the Area Service Providers. These programs also increased commitment from the Head Office to provide logistics to enable different Areas to implement programs.

At the same time, the Government of Uganda introduced a performance contract with NWSC to increase accountability for results and to provide the utility with incentives

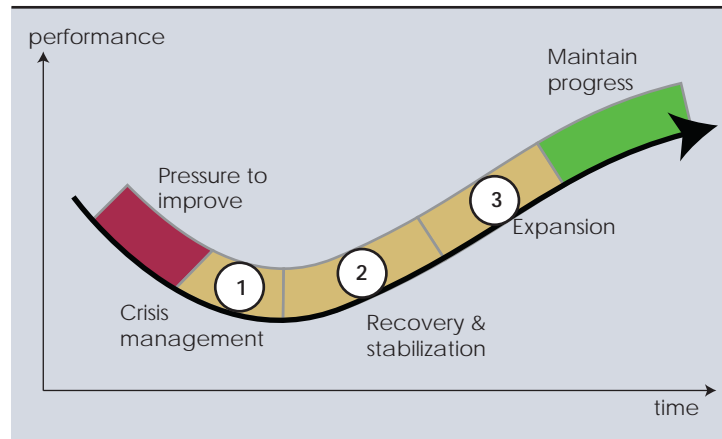


ability for results and to provide the utility with incentives for good performance. In 2002, automatic tariff indexation was introduced. In addition the "Stretch-Out Program" resulted in a higher level of staff commitment by improving internal communication and setting tougher performance targets and corresponding incentives. A "One-Minute Management" was introduced to further enhance individual staff's accountability for achieving targets. The Ugandan reforms have delivered results. It is obvious however that despite improved efficiency consumers have to pay more for the benefits being delivered.

Indicator	1999	2002/03
Water supply coverage	54%	63%
Unaccounted water	42%	39%
Staff per 1000 connections	21	11
Tariffs (Ushs/cubic meter)	881	1015

Source: Aguiñaga, E., H. Ghariani, H. and J Mwoga. 2004.

Figure 5 Stages of reform



Source: Developed by authors.

These external factors, which provide the impetus for reform, can also help reconcile people to the radical changes that the reform program may bring. Once reform is triggered by a crisis, it is an incremental process. Utility reform measures are interdependent. While many reform measures should progress at the same time circumstances seldom allow this. There may however, be critical paths in that some reforms are prerequisites for others. A typical reform process features three main stages; crisis management, recovery & stabilization, and expansion. After these three stages, a period of maintaining progress follows (Figure 5).

Box 24 shows how various reform steps in Hai Phong (Vietnam) changed the accountability framework of the utility. Initially the concentration of functions in one actor skewed the accountability balance. Diversifying sources of financing created a more balanced framework.

8.2.1 Stage 1 – Crisis management

This is a relatively short stage that very badly performing utilities go through when immediate measures are taken within the utility to remedy (or partly remedy) the key problems that have triggered the momentum for reform.

The crisis management phase can be compared to a bankruptcy procedure of a commercial enterprise, focusing on removing immediate threats and developing a recovery plan. In commercial enterprises a turnaround agent might be brought in at the request of the owner to recover profitability of the failing entity with payment made on the basis of a success fee. Such an approach could be applied to water utilities but it is rare and the authors are aware of only one, undocumented example, in the Jamaica Water Company in New York State, USA.

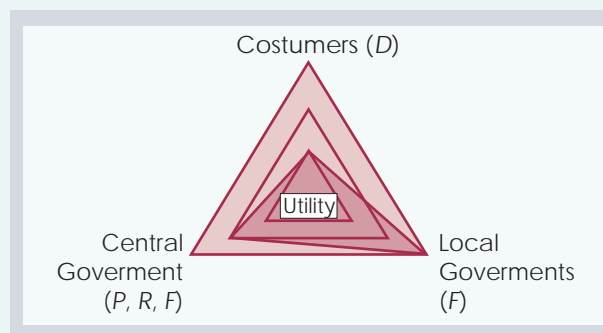
The goal of this stage is to make some immediate improvements that give the utility fiscal space to plan and begin a reform process. Often, the appointment of a new management team that champions the changes in the utility kick off the reform effort. Initial measures usually include dealing with unmanageable debts. If not yet done, the water department's accounts are ringfenced to improve financial transparency. In parallel, crisis cash management is put in place to make the most of the low cash flows at hand until such time as cash flows can be increased.

The short-term measures in this phase often center in the utility, while longer term measures to improve its environment are prepared in parallel. Indonesia provides an example of how participation in a fi-

Box 24 How reforms of Hai Phong Water Supply Company (Vietnam) were sequenced

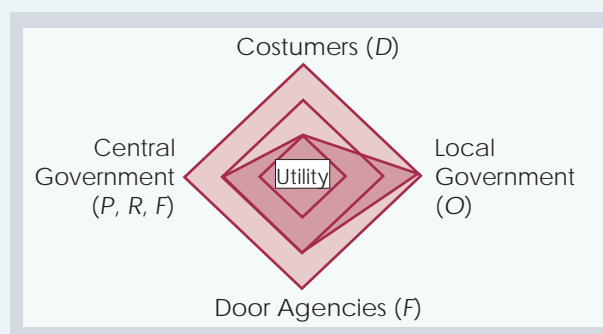
Crisis management

In 1993, Hai Phong Water Supply Company was mostly accountable to the local authority (its owner, the Hai Phong Provincial People Committee) and the central government. Service provision to consumers was very poor and cost-recovery was low. An acute water shortage triggered riots against the utility. One utility employee was killed. As a reaction, the HPPC changed the utility management team and gave a clear mandate to the new director.



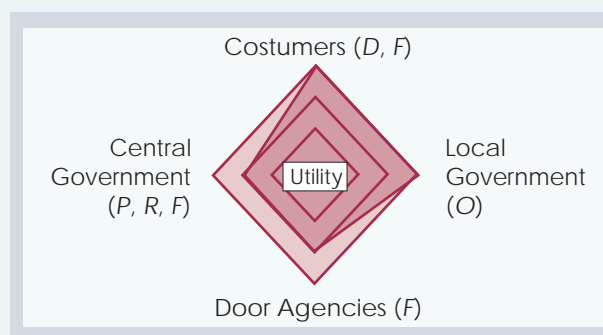
Recovery and stabilization

Reforms to stabilize HPWSC started in 1993 through a number of interrelated steps. The new management spent much effort at changing the corporate culture of the utility, and building ownership for the reform process. The director used his membership of the People Council as a platform to generate support from the government for reforms and tariff increases. International donors supported the change process financially. HPWSC received the autonomy to terminate service delivery to defaulters and to decentralize most of its functions to the phungs, wards with 10,000 to 15,000 inhabitants. Each phung got a local utility office responsible for complaints and billing and collection. The utility upgraded the network and installed meters. The local authority increased tariffs three times in between 1993–1997. As tariff increases kept step with improvements in service, collection rates improved. Staff were trained extensively. HPWSC introduced performance-based pay scales for management and staff.



Expansion

Since the late 1990s HPWSC has been in a second phase of reform to improve its efficiency and expand its system. The utility developed internal standard processes using measurable performance indicators. Owner and utility now agree on annual performance targets to make the utility more accountable. Since 1998, accounts are audited by independent auditors. In 1999 the utility started expanding its water supply system. Recently the utility has started participating in a national benchmarking exercise. Overstaffing remains an obstacle to further efficiency gains because the utility has no autonomy to adjust its staff numbers.



Results

The reforms implemented in Hai Phong produced remarkable results that have been sustained and improved over time as the summary table illustrates.

Indicators	1992	2001	2007
Service Coverage (%)	68	85	95
Staff/1000 connections	N/A	5,2	4,5
Metered (%)	0	91	99
UFW (%)	73	43	23
Billed consumption (%)	81	90	99
Total revenue (US\$)	0.6 M	3,9 M	9,6 M

Source: Schwartz, 2006.

Box 25 How a financial rescue program for Indonesian water utilities dealt with unmanageable debt

In 1997/98, the Indonesian Rupiah was devalued by a factor of almost 9 times. This increased the cost of imported goods and the financial exchange components of investment costs, causing the financial status of many public water utilities to deteriorate tremendously. 63% of PDAMs were in arrears on their debt service payments. Systems deteriorated as new investments were postponed. This led to lower service quality and high unaccounted for water (average 40%).

The financial crisis triggered a set of reforms. A financial rescue program was set up for ailing PDAMs. Under this Financial Recovery Action Plan (FRAP), utilities can reschedule debts by agreeing to a number of measures, such as:

- Implementation of immediate and regular tariff increases.
- Reclassification of customers into higher tariff classifications.
- Accelerate increases in connections if the water capacity exists.
- Control staff numbers.
- Reduce unaccounted for water.
- Improve collection period.
- Improve water quality and quantity.

Besides PDAM management, the Ministry of Finance and the local Government also participate in FRAP. Only after the PDAMs opportunities and resources are exhausted are the MOF and local governments asked to step in with financial relieve or support through debt rescheduling or equity contributions.

Source: Baietti, A. 2001.

financial rescue program depended on a number of broader measures by utilities to ensure that the utility would not fall back into crisis mode (Box 25).

8.2.2 Stage 2 – Recovery & stabilization

After the immediate crisis management actions, a stage of recovery and stabilization starts. This stage typically lasts several years, and most measures described in chapter 4–7 start in this stage.

Measures to improve efficiency, to increase revenue, and to improve services must be combined. Higher tariffs require utilities to be more responsive to the expectations of the customers. Meeting these expectations increases a customer's willingness to pay and helps generate a sustainable income stream. At the same time measures to get the financial and institutional framework right are implemented to sustain the upward spiral of performance improvements. The interaction between increasing tariffs and improving customer services is aptly illustrated by developments in SIMAPAG, the water utility in the city of Guanajuato, Mexico (Box 26).

8.2.3 Stage 3 – Expansion

Expansion of water supply and sanitation to previously unserved areas requires major capital investments. Only when a utility is recovered and stabilized, can it expand its services in a financially sustainable manner. The expansion stage can take a number of years, depending on the original service coverage and quality and the objectives that are set.

The use of debt can assist a utility in expansion, but it has to be done prudently and with the assurance that tariff levels will be able to cover the additional related obligations. If tariffs cannot be adjusted due to political sensitivity the government can decide to provide predictable subsidies that can be borrowed against.

Box 27 shows how Phnom Penh Water Supply Authority went through the stages of crisis management, recovery, and stabilization to create financial autonomy. Only after establishing this stable base was the utility able to expand its networks into poorer areas.

Box 26 How various reform measures interacted to recover and stabilize SIMAPAG (Mexico)

In the 1990's a monthly increase was introduced to slowly raise tariffs to levels closer to cost-recovery, thereby increasing the financial autonomy of the utility. Every month the tariffs were increased by 1.1%. Awareness campaigns to explain the need for raising tariffs to customers were implemented and raised their willingness to pay. However, a customer-unfriendly bill payment system was an obstacle to raising billing and collection ratios. In response to customer complaints, SIMAPAG established an automated system to charge for water services and made it easier for consumers to pay their bills. Between 1996 and 2001 the income received from users increased by 280% from approximately \$141,000 to over \$400,000. As SIMAPAG's customers started paying the increased tariffs they became more demanding, insisting upon higher service standards (Nieto, 2003). The utility—again—responded and improved service quality. The regular increases in tariffs have forced SIMAPAG to develop a stronger customer orientation, which has led to continued improvement in service levels. The result is an upward spiral of increasing service quality accompanied by increasing cost recovery.

Source: Schwartz, 2006.

8.2.4 Maintaining progress

Unfortunately every story of reform success seems to be counterbalanced by a story of sudden decline after years of good performance. Utilities cannot be made immune to political capture, nonetheless, barriers can be put in place to minimize the risk of a takeover by any one party or person. Several of the researched utilities regressed during the duration of the project, often because of interference by incoming politicians.

Box 27 How Phnom Penh Water Supply Authority (Cambodia) created financial autonomy as a stable past to start investing in network expansion

Phnom Penh Water Supply Authority (PPWSA) is the largest water supply utility in Cambodia, serving the Phnom Penh metropolitan area. Supported by the World Bank, PPWSA underwent a major turnaround between 1997 and 2004, going through several phases.

First, in a short crisis management phase, a new management team was recruited. Their remuneration included incentives on financial performance, collection rates, and reduction of unaccounted-for water. The PPWSA was restructured to become a government-owned company.

In a second stage of recovery, customer surveys were introduced. An automated billing system replaced often-corrupt bill collectors. These new billing and collection systems were accompanied by a public information campaign. Meters were installed for all connections. Heavy fines were introduced for illegal connections. Innovative technology was introduced to reduce leakage in the distribution system.

In a third stage of stabilization, a management system was implemented that fully automated accounting and management information. A long-term projection model was used to define cost recovery scenarios. Based on these scenarios a new tariff structure was introduced. All stages of reform were accompanied by capacity building through, among others, a twinning with Brisbane City Enterprises, regulatory training for government officials, and seminars on sector reform.

The results of the reforms are impressive (see table). Following the stabilization of the utility, pilots in poor communities are now introduced to start the expansion phase. At the same time PPWSS is repaying its debt early to further improve its cash flow.

	1997	2004
Connections	39,000	133,777
Total revenues (billion R)	14.196	50,442
Netincome (billion R)	-0.74	28.6
Unaccounted for water	65%	16%
Average tariff (m ³)	895 R	965 R
Accounts receivable	156 days	30 days
Operating ratio	0.6	0.35
Collection ratio	89%	100%

Source: WSSSB, World Bank, 2006.

Locking in progress starts in the early stages of reform. A number of measures can be taken during reforms to 'lock in' progress in the future:

- Upfront confidence building measures can help gain widespread stakeholder support for the process. Bringing in diverse views from the start of the reform process will not only lock in progress made but also improve the outcome of reform.
- Putting information in the public domain enables more parties to understand performance changes and put pressure when declines are apparent. Certification systems and benchmarking by governments, regulators or consumer associations can make backtracking more visible.
- Capacity building of external actors can create active "watchdogs" of utilities and local government. Community-based organizations and the media can play an important role in maintaining performance by drawing the public's attention to shortfalls in service standards and making sure that utilities do not become complacent after early reform successes. Professional associations have, in many countries, also played a dual role as a knowledge bank and watchdog.
- Perhaps the strongest mechanisms to reduce the potential for backtracking on reforms is the access by utilities to private investment. Private financiers normally hold the utility management, its board and its owners to a high level of transparency and accountability. To lose the confidence of investors and lenders through backtracking—both on reform and on improved financial and institutional performance—can have a major, and public, impact on the utility.

Box 28 How SIMAPAG (Brazil) used ISO certification to become more autonomous

Measures to lock in progress are never watertight. For instance, the management of SIMAPAG (Brazil) was aware that the local government—as their sole owner, policy maker and financier—had a strong leverage over the utility. They introduced the ISO-9000 certification system as a measure to make the good performance of the utility more visible. The utility hoped that pressures from other actors could counterbalance the local government. However, these measures did not prevent the entire management of the utility being replaced following the municipal elections in 2005 and the utility might well regress.

Source : Schwartz, 2006.

8.3 Tailoring reforms to a specific situation

The key to sustained improvements in performance is to combine and sequence various measures for the best fit in a given situation. Designing a reform process should start with an analysis of the present status, definition of the objectives of reform, and definition of the areas where quick progress can be made. However, because reform is a long process that will, by definition, be set back by obstacles, reformers should be prepared to adjust to changing pressures and circumstances.

8.3.1 Planning reforms

Bringing in diverse views will improve the outcome of reform. Many groups have an interest in the delivery of safe and sustainable water supply. While those that govern the sector may be concerned with overall performance, individual households are principally interested in the quality, reliability and costs

of the service that they receive. Labor unions, environmental advocates, service providers and other interest groups may each have differing views on how reform should be implemented. It is therefore essential to develop consultative processes which are genuinely inclusive, transparent and well-informed.

Creating and mobilizing political commitment in the planning stages of a reform process is critical for its success. Maintaining the political commitment throughout the reform path and beyond should be an explicit goal of a set of reform measures. Turnaround of a utility will normally span multiple political cycles.

The behavior of utilities is not principally defined by nominal rules, but the way in which they are applied over the course of time. So reform is about more than introducing legislation, and should include "soft" change management measures.

Planning a reform process includes the following steps:

- **Analyze the present situation.** Establishing the present status of a utility can be carried out by systematically reviewing a utility and its institutional environment.
- **Define the objectives of the reform.** Analysis should lead to a series of objectives for reforming the utility and the institutional environment. Barriers that stand in the way of achieving these objectives should also be identified.
- **Define a set of reforms and how to implement them.** A situation analysis combined with specific objectives can be translated into a reform program that delivers the agreed-upon objectives. Such a reform program is likely to be unique to each utility because the broad institutional environment and the capacity of the utility will differ from location to location.
- **Decide on a sequence for implementation.** Once reform activities are chosen, decisions must be made about the most advantageous timing. Some activities may be needed in the initial stage of the reform process, whereas others may be more suited to a later stage in the program.

8.3.4 Adjust when necessary

Even a reform process that is carefully designed to be the best-fit solution for a given situation will have to be adjusted over time. It is never possible ever achieve all the planned objectives, nor will changes take place without unforeseen results. Additionally, reforms will have to respond to changing pressures and circumstances. Obtaining a balance between locking in political commitment to stay on course and leaving flexibility is difficult.

8.4 Further reading

Baietti, A., and P. Raymond. 2005. Financing Water Supply and Sanitation Investments: Utilizing Risk Mitigation Instruments to Bridge the Financing Gap. Washington, D.C.: World Bank.

Public Private Infrastructure Advisory Facility and World Bank. 2006. Approaches to Private Participation in Water Services: A Toolkit. Washington, D.C.: World Bank.

9 Conclusion: opportunities for scaling up public water utilities reform

In the past two decades some public utilities have become more efficient service providers, while others have not been able to break the vicious cycle of low performance and low cost recovery. What can we learn from the successes and how do they differ from other less successful attempts?

9.1 A framework: successes show common threads

Successful utilities have certain attributes in common: Accountability, autonomy and consumer orientation. Well-functioning utilities have a considerable degree of autonomy combined with an accountability framework that balances various external forces. Material reforms require that governments give up some of their power and grant real autonomy—combined with accountability for result—to the utility. A key component of accountability and financial autonomy is the relationship between the utility and its consumers. Within their own organizations, utilities have moved away from traditional hierarchical frameworks toward flatter decision-making structures that hold employees to account for the results of their actions.

The tools to achieve these attributes vary, but certain patterns of practices with high potential for success are emerging. Corporatization—the process of transforming a utility that is embedded within a municipality or ministry into a public organization with its own corporate identity—is one means of balancing external accountabilities. Diversifying ownership—through aggregation service delivery into a utility co-owned by multiple municipalities or partial sale of the utility to users or private investors—can further reduce the risk of capture. Performance agreements can clarify the objectives for a public utility—and provide a relative weight for the stated objectives—between the government and the utility, its corporate oversight board or its managing directors. The process of introducing, updating and monitoring an agreement is at least as important as their formal enforcement. Agreements can establish the rules of the game and prompt parties to focus on results. Giving consumers the possibility to hold utilities to account can help balance the accountability framework of utilities. Decisions can only be translated into effective management actions if various actors have the right knowledge and skills. Capacity building is a long-term process which requires a mix of approaches that focus on learning new skills through applying them.

9.2 A focus on implementation

The reform paths presented in this report do not differ fundamentally from those propagated in the 1980s and the 1990s. However, a closer look at both successful and failed reform process shows that what counts is not so much what measures are chosen, but in *how far* and *how* they are implemented.

The focus of this report is to give a structured description and assessment of different reform measures based on a set of case studies, a literature review, and discussions with sector professionals. However, much more work needs to be done. Findings from one country can only be extrapolated with caution to other circumstances. It is inherently difficult to attribute better service delivery to individual reform measures. Despite the complexity of quantifying performance, it is important to create more empirical data on the practical benefits of reform steps.

What is clear, based on the limited information that is available, is that many reforms have failed because their goals were too ambitious or not matched by the appropriate resources. There is a substan-

tial gap between reforms that are desirable and reforms that are feasible. Reforms need to start with what can be done in practice. Making everything a priority often stifles all action.

Implementation depends directly on the level of ownership of those involved. Donors have at times played a perverse role. Donor interventions that promised resource in return for commitment to take certain measures did not lead to sustained change. Moreover, donors often prescribed standard recipes, when, in fact sustainable progress is made only when a utility uses tools that are uniquely suited to its needs. This is not only true for public reforms, but also contributed to the failure of some private sector participation transactions.

9.3 Recognizing the political nature of reforms

Water is a political good. Reform processes include technocratic measures but are dialectic in nature. The involvement of politicians in the WSS sector is often one of the causes of the poor performance of many public water utilities. In this perspective, many promising reform measures in the sector revolve around separating the political realm from service provision. In reality, however, the full isolation of service provision from politics is neither attainable nor desirable. In fact, nearly all successfully reformed public utilities have been able to do so because of active political support.

Public sector reform changes the status quo. Those who are possibly detrimentally affected by them will oppose change. In fact, even after implementation of reforms, attempts to 'undo' the reforms may persist. What this means is that public water sector reform processes need to identify confidence-building measures that increase capacity and trust among stakeholders who, traditionally, are suspicious of handing power to others. Communication will be important, as will open and transparent monitoring in relation to set milestones. Creating change requires incremental steps including building managerial capacity, confidence, and experience. However, it also means that change should focus on areas where prospects for early success are high. Public support will only build if there are visible, tangible results from the changes that are advocated.

One of the basic challenges of the sector is how to make progress within one political cycle after decades of neglect. The success stories have made the most of windows of opportunity. Because changes are difficult, they will be undertaken only when there is a powerful need and a demonstrated demand for change. Reforms are often triggered by crises, such as a drought, an unacceptable drop in service levels to customers, or a financial crisis. Political shifts, such as decentralization or elections, can also trigger reform. A third category of triggers includes external threats and opportunities, such as a threat of privatization or external donor pressure.

9.4 A changing landscape

A number of structural changes taking place in countries around the world are altering the landscape in which water utilities operate, thereby offering opportunities for change. These include decentralization, democratization, and changes in public management.

Decentralization has probably been the most influential change in the water and sanitation sector over the past decades. It does not guarantee service improvements, but it offers a number of opportunities. Decentralization introduces a new kind of quasi-competition, by benchmarking performance between various municipal utilities. Central governments can spur reform by allocating money to municipalities and utilities that perform better. Different models of reform can be piloted and change can be made more gradually and sustainably.

Many countries have democratized. An emerging civil society—including a consumer movement—has put pressure to deliver better services. This pressure has been enhanced by new technologies that enable instant information exchange. In many countries, the government has forced itself to put infor-

mation in the public domain through corporate laws governing public utilities or freedom of information acts.

Many public institutions have adopted new management tools, often borrowed from the private sector. Successful public utility reforms combine these new public management tools with more traditional bureaucratic tools. Fiscal constraints exert heavy pressure to improve financial performance. The threat of privatization has also pushed some public institutions to improve performance. Trends include the use of benchmarking, outsourcing, and performance-based pay for management and staff.

9.5 The importance of leadership

In the end, the initiation and, eventually, the success of reform processes depend on people. Ideally, leadership will be present at all levels—central government, local government and utility. In any event, someone has to start the process. Central and local governments have a crucial role to play in building leadership within utilities. Many successful reform processes start with the installation of a champion within the utility who functions as an agent of change.

Public reform requires financial, human and knowledge resources. Mobilizing the financial resources for service improvements requires convincing politicians that the benefits of change are greater than the status quo. Politicians must be presented with the data on the often very large costs that the status quo imposes on all parties. Furthermore, reforms must provide returns for the politicians who are willing to make changes. This requires that the reform program must be viewed as a 'good thing' by sufficient numbers of people who will consider voting for the politician championing the reform. In other words, visible, tangible results have to be created quickly.

9.6 From best practice to best fit

The selection of reform measures will have to be based on the best-fit rather than the best-practice. No tool in isolation can turn around failing utilities. Neither is there a sure fix recipe to combine these tools for success. Successful reforms combine measures to improve the institutional environment and its interaction with the utility with utility-focused steps. Utilities cannot be turned around in isolation; the social organization and political culture of the society in which utilities are embedded have major effects on the way that they function.

This report presents a framework and suggestions for reform agendas to move to best fit approaches, taking one step at a time. It is hoped that this report will generate discussion and lead to the further development of tools for decision makers and utility managers to undertake sensible reforms so that all consumers, including the poor, will receive better services.

Public sector reform is not a quick fix but a long process of limited, but sufficient institutional changes. Nor is it an easy alternative to private sector participation. Reform is not an end in itself but in combination with sufficient investment in network infrastructure can contribute to cost effective, reliable and safe water supply and improved sanitation.

Annex 1: Overview of recent and ongoing World Bank knowledge work on urban utility reform

In the past few years, the World Bank has implemented a program to help utilities in developing countries provide better water supply and sanitation services. This annex provides an overview of recent and ongoing World Bank knowledge pieces on urban utility reform. For an updated and complete list, please check on www.worldbank.org/watsan.

Decentralization

Ten Years of Water Service Reform in Latin America: Towards an Anglo-French Model

Utility governance

Characteristics of Well Performing Public Water Utilities

Consumer Cooperatives: An Alternative Institutional Model for Delivery of Urban Water Supply and Sanitation Services?

Models of Aggregation for Water and Sanitation Provision

Ways to improve water services by making utilities more accountable to their users: A review

Private sector participation

Public Private Partnerships for urban water utility in developing countries – Facts and lessons from the last 15 years of experience. Forthcoming

The Challenge of Reducing Non-Revenue Water (NRW) in Developing Countries. How the Private Sector Can Help: A Look at Performance-Based Service Contracting

Innovative Contracts, Sound Relationships: Urban Water Sector Reform in Senegal

Engaging Local Private Operators in Water Supply and Sanitation Services: Initial Lessons from Emerging Experience in Cambodia, Colombia, Paraguay, The Philippines, and Uganda

Financing

Financing Water Supply and Sanitation Investments: Utilizing Risk Mitigation Instruments to Bridge the Financing Gap

Financing Water Supply and Sanitation Investments: Estimating Revenue Requirements and Financial Sustainability

Economic regulation

Economic Regulation of Urban Water Supply and Sanitation Services: Some Practical Lessons

Explanatory Notes on Key Topics in the Regulation of Water and Sanitation Services

Taking Account of the Poor in Water Sector Regulation

Subsidies

Water, Electricity and the Poor: Who Benefits from Utility Subsidies?

Pro-Poor Subsidies for Water Connections in West Africa: A Preliminary Study

Extending services for the poor

Getting the Assumptions Right: Private Sector Participation Transaction Design and the Poor in South-west Sri Lanka

Water for the Urban Poor: Water Markets, Household Demand, and Service Preferences in Kenya

Annex 2: Reference list

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