State-Owned Enterprises: NWSC's Turnaround in Uganda

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Abstract: Oversight agencies in the water sector emphasize performance monitoring based on outputs, such as customers served, volume delivered, and service quality. However, bureaucratic tendencies can curtail operational innovation and creativity. In situations where managers lack full operating knowledge and capacities, proactive and consultative monitoring and regulation can yield benefits. This study reviews the results of Uganda's National Water and Sewerage Corporation's (NWSC) approach to performance monitoring (and "self-regulation"). The purpose of this study is to outline corrective actions undertaken by the NWSC Management and Staff to turn around performance, the sequencing of those steps, and the outcomes from this reform program.
The NWSC focuses on promoting improvements in technical processes and input selection. Improvements in service quality and network expansion resulted from aligning performance improvement initiatives with the organization's financial performance and team development. The program's success required managing organizational rigidities and moving towards full cost-recovery. In particular, organizational incentives and information flows encouraged managers to reduce rules and procedures that hindered strong performance. African Proverbs are interspersed throughout the article to underscore key themes and lessons for those designing, implementing, and evaluating infrastructure sector reform initiatives.

1. Introduction

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

Lessons from others can provide perspective and enable decision-makers to identify strategies that might be more effective than those currently in use. Given the importance of water infrastructure investments and operations, improving performance of the sector is a high priority in emerging markets. An earlier study outlined the historical background and performance improvement initiatives that have been implemented within the National Water and Sewerage Corporation (NWSC) (Mugisha et al., 2004a). This article extends that analysis, describing NWSC activities from 1998-2006. The purpose of this study is to outline corrective actions undertaken by the NWSC management and

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staff to turn around performance, the sequencing of those steps, and the outcomes from this reform program.

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

The NWSC is structured in such a way that there is a head office, which acts as an asset holding arm. There are also service providers (operators) in large towns that carry out the day-to-day operations management in those towns. The head office is responsible for large-scale investments, asset management, operations support, and performance monitoring. Since 1998, there has been a progressive increase in managerial autonomy granted to the service providers through structured internal incentive contracts.

In 1998, the NWSC was not a healthy organization. The World Bank noted in its report[2] that: "Over the last 10 years, the GOU [Government of Uganda] in partnership with the World Bank and other donors has made significant investments (over US$100 million) in the urban water and sewerage sector. These investments have contributed immensely to rehabilitating the existing infrastructure under the NWSC management. Unfortunately, these investments have not been matched with the necessary efficient commercial and financial management capacity that can ensure the delivery of sustainable services in the medium to long-term." This conclusion, based on a thorough analysis, found that the corporation had sound infrastructure, abundant water resources, and enabling legislative framework. However, the corporation had a large and inefficient labor force with conflicting and overlapping roles, high unaccounted for water (more than 50% lost through leakage and theft), poor customer service, low collection efficiency (only about 71%, so 29% of the customers did not pay their bills), and corruption within the work force, especially field staff. There was a running monthly deficit of about Ushs 348 million (~US$300,000) despite a high average tariff of Ushs 1,100/m^3 (US$1.00/$m^3$). In other words, the NWSC was nearly in a state of bankruptcy. In addition, the corporation had to contend with a number of threats, including debt servicing obligations and a value added tax law that compelled the NWSC to pay taxes on any increases in bills. On the other hand, the government was willing to give support to pro-active managers and freeze the corporation's debt of about US$100 million for some time to give the corporation a chance to recover, if serious managerial efforts were initiated. Thus, improving operational and financial performance was essential to prevent further deterioration.

This paper outlines the corrective actions undertaken by NWSC management and staff to turn around performance[3], the sequencing of those steps, and the outcomes from this reform program. The paper demonstrates the benefits of new initiatives to policy-makers, analysts, and managers of poor-performing utilities. Such initiatives are not painless, nor can they guarantee success. However, citizens and political leaders in developing countries are finding the status quo unacceptable: organizational transformation based on feasible commercial plans and team initiatives can improve performance.[4]

2. Initiatives Undertaken to Turn Around Performance

"The hunter in pursuit of an elephant does not stop to throw stones at birds."
(Ugandan Proverb)

Staying focused is crucial for reform champions. Sometimes an impending crisis becomes a catalyst for change. In an effort to address managerial inefficiencies in the NWSC, the government appointed a new board of directors. The new board was comprised of representatives from local governments, business community, professional bodies, ministry of environment, ministry of finance, ministry of water, ministry of health, and small-scale industries. The composition and structure of the board enabled it to exercise its functions properly and to shield the corporation from political interference and patronage. The new board, in turn, appointed a new managing director, Dr. William Muhairwe[5], who was given the mandate to re-think strategies for performance improvement (Matta and Murphy, 2001). The appointment led to an emphasis on commercial viability, utilizing "customer care" as an organizing theme. The board and new management also pursued the approach of having performance contracts with the government where roles and obligations were clearly spelled out. Fortunately for the new team, management and staff were aware that the ship would "sink" if nothing was done to remedy the situation. Dr. Muhairwe decided to adopt the approach of working with everybody. Ultimately, all the change management programs that are outlined hereafter were mainly implemented by incumbent staff, who fortunately had acquired sufficient technical skills in the past.[6] Changing organizational behavior and the work culture became the focus of the new initiatives.

At the tactical level, the new board and management came up with a series of programs:

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

The corporation had to improve operating margins by reducing bureaucracy, increasing staff productivity, and encouraging staff involvement in the work processes of the corporation. The NWSC management also collaborated with the union to reduce excess staff by half from 1,800 in 1999 to 900 staff in 2001, without any industrial unrest.[7] The NWSC designed these programs to improve morale and to instil confidence in managers who were able to alter the expectations of operating staff. Two other initiatives promoted organizational change:

• ***Stretch-Out Program*** (2002-2003) emphasized teamwork through work involvement and reduction of "boss-element" typical of bureaucratic organizations. For example, the program promoted informal Fridays, where all staff wore NWSC "T-shirts," symbolically demonstrating that staff at all levels were making contributions to achieve a common objective.

• ***One-Minute Management Program*** (2003) created procedures for promoting individual performance accountability. The program promoted individual staff accountability by asking each person to come up with a vision, mission, and goals describing his/her planned role in achieving corporate objectives. The achievement of goals was then a subject of periodic appraisals and incentive awards.

Currently, the NWSC is implementing *Internally-Delegated Area Management Contracts* (IDAMCs) aimed at giving more autonomy to area managers (partners[8]), defining roles and responsibilities more clearly, and creating better incentive plans that allocate more operating risks to partners. By passing more risks to partners, the head office is able to encourage more innovation and work commitment. In this regard, the partners are paid through increased incentives for taking on these risks. To rationalize the monitoring and evaluation activity, a "checkers" system has been introduced to strengthen the IDAMC implementation process, emphasizing both processes and outputs.

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

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

- Reducing accounts receivable and uncollectible accounts: Kampala Revenue Improvement Project (KRIP): 1998 - 2001, under Gauff J.B.G;
- Improving financial performance through enhanced monitoring of managerial performance: Kampala Water Supply and Sewerage Area Management Contract: 2002 - 2004, Ondeo Services.
- Evaluating the impacts of rate design: Tariff Review (since 2001-to date)
  - Reduced connection/reconnection fees
  - Tariff indexation against inflation
- Expanding customer base: New Connection Policy, which the NWSC introduced in 2004, aimed at giving free access for pipe lengths up to 50m (with a nominal fee of about US$30).
- Modernizing information technologies: Computerization of systems (billing, financial, procurement, payroll, voice over IP, lotus notes, customer complaints tracking, call center, etc). The NWSC implemented major computerization

initiatives in 2003, and these were funded by the German Development Cooperation through the GTZ (the German foreign aid agency).
- Improving customer services: Introduction of account-balance checking system with local telephone (2003) and direct-debit (DD) system with local banks (2006). The administrative costs of these initiatives are minimal and are being met through internally generated funds.

These initiatives illustrate the range of managerial and engineering programs introduced to promote financial sustainability and to improve credibility with consumers and government agencies.

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

3. Main Performance Considerations

"Between imitation and envy, imitation is better."
(Ekonda, Democratic Republic of Congo Proverb)

The main ingredients to the NWSC performance improvement programs have two orientations: internal and external. Internally, the NWSC developed a program design outlining clear roles and responsibilities: bottom-up approaches to strengthen program ownership and support and SMART (Specific, Measurable, Achievable, Realistic, and Timely) targets that were later strengthened through the use of "stretched" (tougher) targets (for the Stretch Out Program). The NWSC also introduced competition for managerial responsibility through business plan preparation and expressions of interest. Although incumbent managers had information advantages, the process forced incumbents to review their current processes and personnel. Their "competitors" gained experience in preparing plans and budgets. Furthermore, there were some switches that alerted all managers that the NWSC expected their professionals to deliver innovative programs. In addition, the NWSC instituted strong incentive systems and equitable gain sharing plans to minimize employee shirking tendencies (Mugisha et al., 2007). As the organization's leaders gained a handle on past trends and baselines across the eight to ten distribution companies, they were able to develop tailor-made monitoring and evaluation (M&E) arrangements and benchmarking activities. [9]

Externally, the corporation enjoyed significant government support, which resulted in debt freeze and non-interference with the corporation's management. Being somewhat insulated[10] from political pressures meant that managers could focus on commercial issues in the early years of reform. At the same time, donor support in the form of financial and technical assistance added to the capabilities of the organization. Customer and public confidence in NWSC performance improvement initiatives turned out to be another external factor that motivated staff to innovate further. Pride based on genuine accomplishments also gave confidence to mid-level managers that they were on the right track.

4. Accomplishments and Challenges (1998-2005)

"A forest cannot be cut with a broken axe."
(Bantandu Proverb)

Leaders need the right tools to transform an organization. In this case, the tools involved the introduction of change management programs. The reform initiatives from 1998 – 2006 have had positive impacts. Notably, service coverage has increased from 48% to 70%. Water network coverage increased by 52% (1,300 Km of water mains extensions, primarily from internally generated funds). In addition, new connections increased from 3,317 to 23,312 per year. As a result, total connections are up from 50,826 to 148,312 (or 70% of target population served, from a population base of 1.7 million people as at 2006). Unaccounted for water (through leakage or theft) has fallen from 51% to 29% (Kampala is at 34%, while other areas are now at 15%). Metering efficiency (proportion of metered accounts to total accounts) has increased from 65% to 99.6%, while connection efficiency (proportion of active connections to total connections) has improved from 63% to 93.9%. On the financial side, annual turnover has improved from about US$11million to US$34million. Because of this performance, operating profit after depreciation has improved from losses of US$0.4million to a surplus of US$3.0million. Positive cash flows have financed network expansion and enabled maintenance programs to be scheduled and implemented.

Despite the accomplishments, the NWSC still faces challenges in the area of sewerage where the coverage is about 10%. The sewerage investment costs are inherently very high, and the corporation is currently finding it hard to devote resources to such investments, given the payoffs to other uses of those funds. The NWSC faces the challenge of serving the poor communities where cost recovery is questionable. The infrastructure in such communities is very poorly planned and extending services to such areas involves significant difficulties. Nevertheless, the organization continues to explore cost-effective ways to carry out this task.

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

5. Performance Monitoring Approaches

"If you do not listen to good advice, you will be embarrassed in public."
(Oshiwambo Namibia Proverb)

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

The rationale for focusing on output has been the perceived oversight costs and possible interference associated with process evaluations. Smith (2002) observes that monitoring inputs or processes rather than outputs or outcomes tends to reduce the firm's incentives to search for and apply lower-cost ways of achieving the result. This concern ought to be balanced against potential benefits in developing countries where the service providers are still in a critical stage of institutional development. International operators, often brought in to transfer "best practice," are initially ignorant of the local network—technologies and operating conditions. Those who should be "in the know," the local operators, can be mired in an organizational culture that does not promote excellence, can be indifferent to waste, and can lack strong incentives for high performance. The two potential strategies (monitoring inputs vs. outputs) each have limitations that can lead to sub-standard performance. The "arms-length" regulator who monitors only output is left with inadequate data for evaluating progress or understanding opportunities for improvement.

Within the NWSC, managers have re-considered the implications of arms-length regulation—concluding that there are gains from more active partnering between service provider and the performance monitor. Thus, the cost of interference (potential micro-management) must be balanced against the opportunity to provide local managers with techniques for improving services at reasonable costs.

6. Monitoring Technical Processes and Inputs

"If you want someone more knowledgeable than yourself to identify a bird, you do not first remove the feathers."
(African Proverb)

Withholding information reduces the likelihood that problems will be correctly identified. In the NWSC, the performance monitor[11] has established a monthly magazine called the *Water Herald*. This magazine provides a benchmarking platform for utility managers to describe their innovations, identify binding constraints and receive credit for achieving targets. The magazine captures the "dos" and "don'ts" experienced in the previous month, outlining how peers can adapt good practices and avoid pitfalls. The magazine also displays a monthly metrics performance scorecard detailing the relative performances on key performance criteria and how much incentive awards were earned by staff and water utility managers in particular areas.

The formal communication complements informal meetings and other information exchanges, enabling utility managers to access a menu of performance improvement strategies. NWSC professionals at the headquarters also share ideas learned from individuals and managers of local utilities, who decide for themselves whether the information about "best practice" is applicable to their situations. Ultimately, what matters is performance, since local managers (and their staff) are rewarded for achieving targets. Those incentives involve bonuses of up to 50% of salaries[12].

In May 2005, the performance monitor representing headquarters established a "checkers" system[13] that emphasizes processes and technologies. Under this system, the monitor and the local service provider agree on a certain set of performance criteria related to systems and activities that need to be performed. These targets involve managers engaging in a range of activities clustered under general, engineering, finance, management services, and customer care. Such monitoring ensures that the service provider works professionally, avoids asset stripping, and promotes continuous improvements in operations. Compliance is checked on an unannounced basis and consistent failure negatively affects the job-tenure of water utility managers. They may end up losing their jobs and/or responsibilities because of breach of internal contracting obligations.

The NWSC checkers system has been a significant driver of the corporation's internal reform initiatives. The system has incorporated activities that promote competition among local water utilities for successful compliance with the internal reform objectives. For example, the NWSC benchmarks cleanliness of premises, orderliness of offices, promotion of the corporate image, and strong systems operation and maintenance.

In addition, the corporate culture is affected by attitudinal changes induced by a mix of partnering and monitoring. Local water operators have improved their efficiency to earn incentives: managers see concrete benefits from improving input usage and strengthening production processes. In Kampala, for example, the checkers system improved the new connections implementation processes, reduced the time for installation, and improved the technical quality of the work done in the field. In addition, compliance has greatly improved in meeting financial regulations, following procurement laws, and adopting other managerial procedures. In terms of technical capabilities, the local utility managers (operators) have improved compliance for preventive maintenance programs, operational procedures, and safety. Last but not least, staff discipline has improved, even as individuals strengthened their interpersonal skills so that teams could perform more effectively.

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

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

7. Monitoring Customer Protection Processes

"A family is like a forest. When you are outside, it is dense; when you are inside, you see that each tree has its place."
(Akan, Ghana Proverb)

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

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

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

In the same way, complaints can also be captured through telephone communication between the customer/public and the utility staff. The NWSC has recently modernized this activity through a call center facility that enables quick phone-receipt of complaints by dedicated staff and easy transmittal to appropriate action centers. The feedback on actions taken is managed through the same facility, where strict managerial enforcement procedures have been adopted. Throughout the organization, managers are evaluated based on their prompt and timely customer feedback. The challenge in this activity is how to ensure timely and satisfying responses to customer concerns. In water utilities undergoing reform, like the NWSC, there are likely to be slow responses and delays during workload peaks; improvements require strong oversight capabilities (for monitoring performance) and incentive/penalty mechanisms to ensure improvements over time.

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

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

The methodology in the above questionnaire approach includes an open-ended question, allowing the survey assistant to ask the visiting customers if they have any other complaints or compliments outside the scope of the questionnaire. This process provides a variety of customer observations; these are sent directly to the principal monitor, with copies to the chief executive officer and other top NWSC managers. The principal monitor then reviews these customer responses and observations and asks the responsible process engineer or local manager to address the issues and give feedback on actions taken. The challenge with this open-ended approach is that a significant number of issues can be raised in a very short time. Therefore, it is important that the monitor adopts a flexible and partnering approach, viewing the complaints or suggestions as opportunities to address customer concerns; the customer comments are not used to punish the operating utility. No water system is immune to customer complaints. So it is important to manage the emerging complaints by acting quickly. The operator must be evaluated on prompt remedies and an overall reduction of complaints.

This approach to customer relations management has improved customer perceptions about the NWSC services. For instance, the annual average proportion of customers satisfied with the NWSC's service quality has improved from 70-75% in 2000 to 85-90% in 2006. The main service quality aspects, which are routinely surveyed, include pressure at the taps, quality of water, accuracy of bills, reliability, and customer/staff interactions. Inadequacies/shortfalls are routinely identified; the documented weaknesses are addressed in subsequent performance-improvement efforts.

8. Putting Emphasis on What Works: The Right Mindset Matters

"Do not throw away the oars before the boat reaches the shore."
(Mpongue Proverb)

The successful implementation of these performance-enhancement initiatives across the NWSC's operating units suggests that the conventional wisdom regarding non-performance by public companies is incorrect, more so when reforms are under way. The NWSC experience clearly shows the benefits of focusing on what works: there is no single textbook solution to the myriad of problems facing water utilities, especially in low-income countries. Most of these problems are caused by the local managers, poor organizational cultures, citizen non-payments, and political intrusiveness. These groups are potentially the change-agents who can address those problems. Familiarity with the problems can be an advantage when attempting to solve them, although this is not always the case.

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

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

When the water utilities lack cash flows, those responsible for public funding recognize that using limited Treasury resources to finance inefficiencies is not sensible, so promised funding disappear: the situation remains bleak. This dilemma has often led to what could be called "desperate solutions:" privatize such companies. However, an independent consultant for the NWSC remarked, "governments should never expect to privatize their problems to international companies and think it will work" (Richards, 2003). Indeed, the private sector participation experience at the NWSC suggests that "international operators" do not only come to manage problems; they must earn returns on their investments. They will exit and leave the country if the combination of their skills and the institutional environment lead to low cash flows. Those cash flows may be low because of internal problems such as lack of needed skills and misunderstanding of local conditions or external circumstances related to unfulfilled expectations regarding institutional changes. This fact partly explains why the NWSC could not continue contractual arrangements with international firms (Gauff engineering and, later with Ondeo/Suez water system operator).

Fortunately, international operators do not have a monopoly on approaches to improving performance. From the NWSC's experience, excellent performance can be "home-grown," but such an outcome requires a set of conditions. Do-it-yourself works if the implementing team has strong leadership, the right tools (legal framework), appropriate skills, and a clear set of (shared) objectives. Nevertheless, if current managers have knowledge and skills, they often lack the incentives to put forth the extra effort and make some difficult decisions. For many utilities, local managers are the starting points for improvements in performance. In the case of the NWSC, Dr. Muhairwe's insistence on self-actuated internal reforms paid off in this regard. Initially, some stakeholders thought that the NWSC problems needed *imported* management. The management and board insisted that they had the tools and vision that more than matched the capabilities of outsiders. Of course, weak performance would have been evidence that the new MD and his reform team were incapable of turning around the organization. That meant establishing baselines, identifying past trends, and setting realistic targets. No longer were numbers proprietary or simply "unavailable" as is the case for many public enterprises: transparency and accountability guided the NWSC reform process. Data reflected reality, not the wishful thinking of managers or the hopes of politicians. The results supported the team's confidence and gained stakeholder support.

In some cases, particular stakeholders (consultants, reform managers, and technical advisors) might overestimate institutional problems (or underestimate the capabilities of state-owned enterprises). Such groups must be handled carefully, since their actual intentions may not be consistent with public statements (or with local values or aspirations). Some of them are representatives of stakeholders (such as national donor agencies) who identify national investment opportunities for the firms they champion. Other stakeholders, such as those representing international banks, might support the policy "flavor of the month." While both groups can provide capital through a variety of arrangements, they can prematurely damage initiatives that the company is planning and/or implementing. "Conditionality" can become another word for "policy being dictated by those who are unfamiliar with issues" on (and under) the ground. Communicating with powerful multilateral donor agencies and convincing their representatives that the local team can succeed requires a substantial investment of time. However, that investment is necessary: in some cases, the dialogue leads to better plans; in others, the local team is able to persuade these important stakeholders that the highest payoff will come through local talent, insulated from volatile political forces. As the NWSC entered the process, managers realized that they needed to identify their roadmap, accept constructive advice, respect differences of opinion, and ensure that company values and objectives were at the center of everything. International consultants can have a role in the process, but the ultimate decisions cannot be delegated to professionals who lack a deep understanding of national institutional constraints and unique local opportunities.

9. Matching Performance Improvement Initiatives to Prevailing Conditions

"The new moon cannot come until the other has gone."
(Bahunde or Hunde, Democratic Republic of Congo Proverb)

Most utility companies in developing countries are characterised by inadequate performance resulting in poor technical and financial operating efficiencies. The cycle of poor performance has often resulted in inadequate cash generation by these companies, which in turn affects payment of staff salaries, basic infrastructure maintenance, and network expansion. Consequently, employees, both line workers and managers, suffer from morale problems. Without a sense of team spirit and clear managerial objectives (and incentives for reaching those targets), the system becomes dysfunctional. In addition, utility managers lack knowledge regarding how to address performance inadequacies that result in poor financial operating efficiencies and low team development levels. Figure 1 below outlines a practical performance improvement path, based on the NWSC-Ugandan experience, when a water company has the following characteristics:

a. The company is potentially able to attain financial viability but is instead operating far inside the production possibility frontier.
b. The company employees (managers, professionals, and laborers) have different perspectives and aspirations regarding company performance objectives.
c. The company employees have significant shirking tendencies.

Figure 1: Performance – Incentive Contracts Development Path

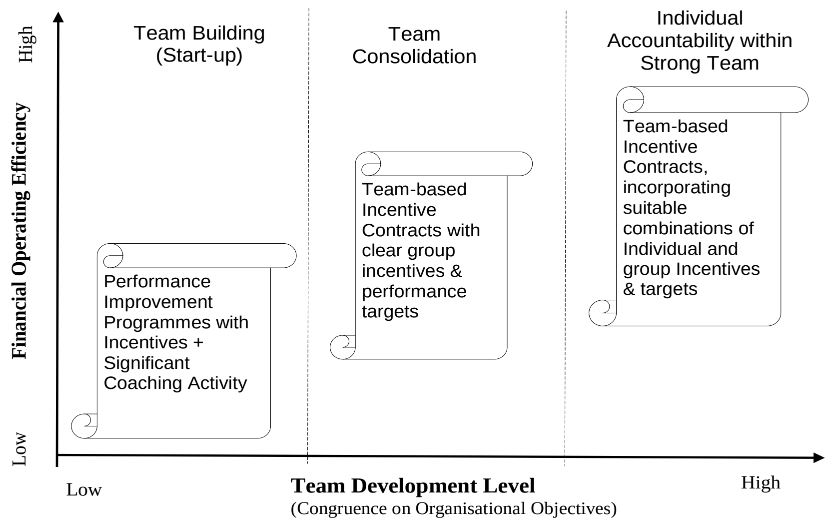
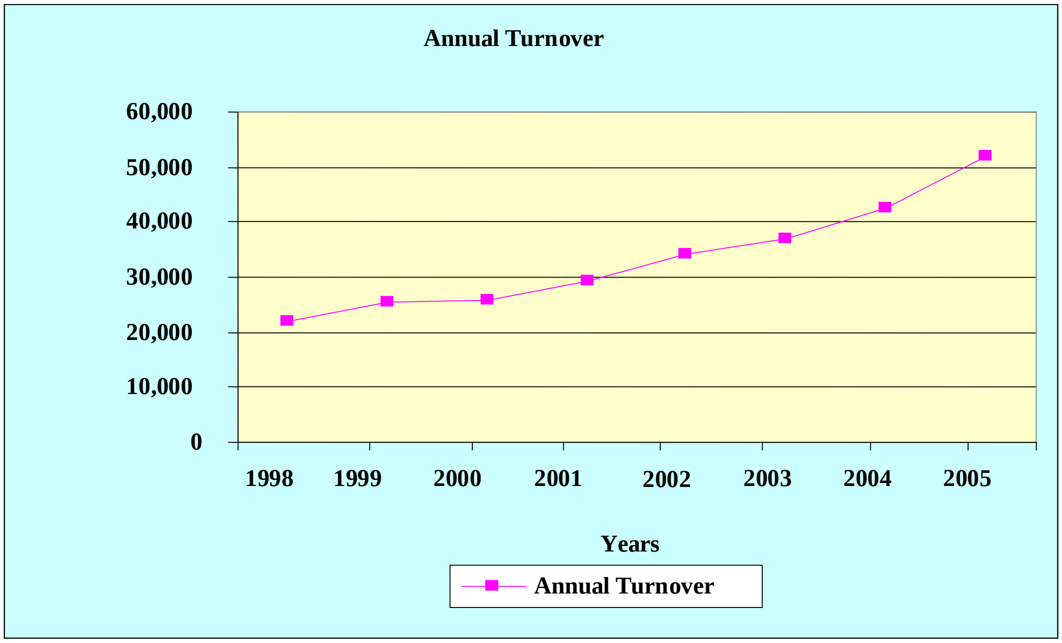


Figure 1 illustrates how, based on the NWSC-Uganda experience, utility companies with low financial operating efficiencies and low team development levels can focus on performance initiatives incorporating tailor-made incentive plans and coaching. Managerial coaching is important at this stage, as a start-up activity, to build strong performance teams and to re-align organizational and individual objectives. At this stage, the established performance targets must incorporate high-impact financial improvement indicators (e.g., cash collections). Once the financial operating efficiency of the company improves, the accruing efficiency gains will help to alleviate cash-flow problems. On the other hand, the combination of managerial coaching and associated performance gains tends to promote teamwork among managers. Once this consolidation has been achieved, the company can move into the advanced stage of performance road-mapping through internal incentive contracting between the center (principal) and the operating arm (agent). As discussed in Mugisha et al. (2007), such internal contracting arrangements must incorporate clear group targets and incentive plans. [14]

Once the teams have been consolidated and financial operating efficiency improved, the company can move into more complex internal contracting arrangements incorporating both individual and group commitments. The individual contracting element strengthens individual performance accountability within a team and ensures equity in handling workloads. The approach is important in re-aligning the agent's behavior to the principal's interests. According to Demski and Sappington (1991), once proper gain sharing plans have been incorporated in such contracting arrangements, they help to mitigate counter-productive activities where employee shirking cannot be documented conclusively to any third party and so is not verifiable.

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

Figure 2: Annual Turnover (Revenue) for NWSC, Uganda (million Ug. Shs)



In particular, the annual turnover in the NWSC-Uganda has more than doubled over a period of seven years. According to Mugisha et al. (2004a), these trends were due to a series of change management programs, following a generic path outlined in Figure 1. DAWASCO also improved its revenue collection under a focused program.

Figure 3: Revenue Collection Improvement for DAWASCO, Tanzania

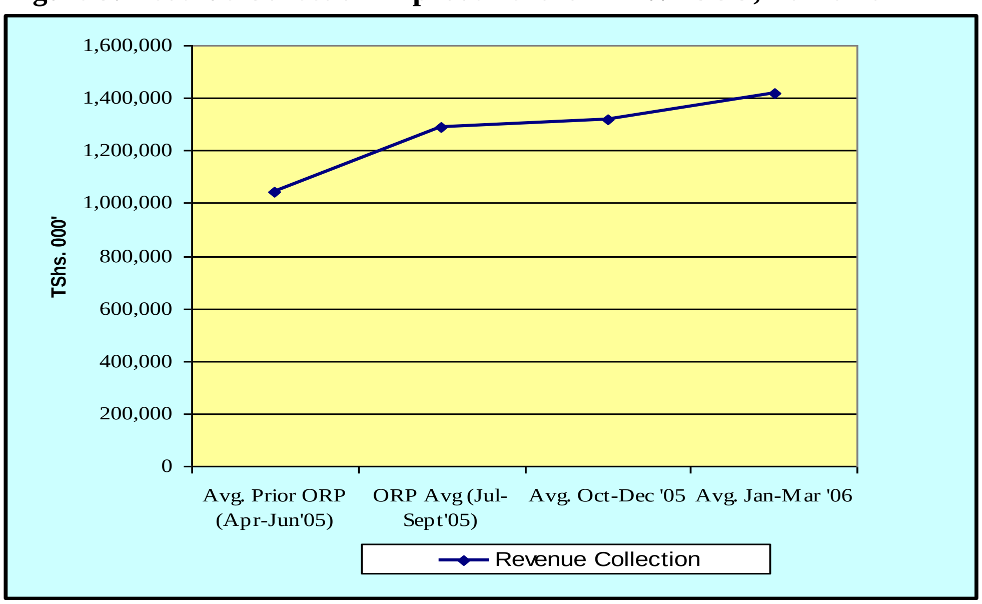


Figure 3 shows revenue collection trends for DAWASCO after the termination of the City Water Company lease contract in May 2005. The NWSC-Uganda, through its External Services unit, worked with the successor management, following the improvement path in Figure 1, to design a three-month Operation Rescue Plan (ORP) for

DAWASCO. Thereafter, a "Win-Win" Program was designed, again with assistance from the NWSC-Uganda. These two series of programs have led to significant improvement in the financial performance of DAWASCO.

10. Managing Organizational Rigidities and Inflexibilities

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

Sometimes, managing public organizations is marred by a multiplicity of managerial and procedural rigidities (described in studies of public enterprises, see Boycko, Shleifer, and Vishny, 1996 and Megginson and Netter, 2001). Managers in bureaucracy-ridden utilities in low-income countries can easily fall prey and become prisoners: constructing the very walls and bars that hold back good performance. Pretending there is no problem is a natural response: those bureaucratic procedures may once have had justifications. However, the cumulative effect of rules, strict hierarchical reporting systems, and required committee approvals imprison initiative and destroy ideas for improving performance. The leadership at the NWSC has insisted that managers "break all rules and procedures" that do not make sense and which are, therefore, roadblocks to innovation. They are urged to put performance and service delivery to the forefront. Some managers, out of laziness, would rather hide behind walls of formal rules and detailed procedures. When managers are content with form, to the neglect of substance, performance suffers. Leaders need to identify these excuses for what they are: substitutes for responsible decision-making, where outcomes are measured and publicized. If non-performing managers refuse to change their attitudes, they need to be jettisoned—their continued dead weight contaminates an organization, dragging down performance. The results of excessive bureaucratic behavior include service outages, poor customer relations, and long down-times. If a firm stance is not taken early, meetings will be dominated by perfunctory reports and uninformative studies that do not drive the institution forward.

Apart from "rules and procedures," there is often a tendency of adhering to strict managerial and leadership theories. Managers forget that these theories were developed through research activities in different parts of the world, some of which may have different operating properties from their own. The NWSC approach has been that these theories are simply guidelines and some principles might not apply in certain circumstances. Management of water supply is (in a sense) simple, but continuous improvement requires innovation due to the transient nature of the challenges involved. Managers need the flexibility to try "this and that," so they take risks and obtain rewards when they are successful. Good leaders listen and receive information from both formal and informal sources. A key task involves sorting out what might be correct and what might be mere allegations and/or misperceptions. All this information aids to shape the management style, enhance institutional order (not rigidity), and promote fairness. When observations are difficult to document (i.e., they are somewhat subterranean), further investigation is warranted. The emerging patterns are likely to capture part of the reality that must be addressed: requiring managers to make meaningful strategic decisions.

In the same vein, various forms of favoritism (tribalism and nepotism) must be addressed frontally, since these are common governance problems in developing countries. The problem is normally double-edged. First, the influence of tribalism and nepotism in making important managerial decisions leads to bias and in most cases demotivates the staff. In such cases, it appears that "Who you know, not what you know, matters." Nevertheless, the fear of making decisions because of perceived accusations of tribalism and nepotism may deprive the institution of useful performance enhancement possibilities and damage other incentives. The manager is left to make serious trade-offs, taking risks to create value for the organization. *Decisions delayed, are efficiencies denied*. The manager's job is, therefore, daunting in this case. At the NWSC, the approach has entailed staff involvement, explanation of the factors contributing to the decision, objectivity in the presentation of the case, and transparency regarding the choice. Ultimately, managers must earn the trust of colleagues—that is achieved through a track record that reflects high performance and authenticity in all that is done.

One factor supporting the favorable outcome to date is the performance contract between the NWSC and the Government of Uganda represented by the Ministry of Water and Ministry of Finance. The targets and reporting procedures have institutionalized accountability, without introducing a separate agency to monitor the firm. At some point, current arrangements will come under review. However, the arrangements have been beneficial to date, in contrast to patterns observed elsewhere. Xu and Shirley (1997) surveyed the issues surrounding contracts between state-owned enterprises and government ministries: they did not find productivity improvements resulting from such performance contracts. It may be that the second generation of performance contracts have benefited from the experiences of others. [15]

11. Realities about Moving Towards Cost-Recovery Frontier

"If you refuse the elder's advice, you will walk the whole day."
(Ngoreme, Tanzania Proverb)

Perhaps the most difficult managerial task in developing countries, after reforming an organization, involves moving towards the full cost-recovery frontier. The issue of full cost recovery has, of recent, become a "rigid" position taken by some stakeholders, arguing that water companies must reach this stage as soon as possible. The NWSC experience has shown that premature price increases ultimately choke off reform within water companies. First of all, the cost-recovery idea is good but politically unachievable in the short to medium term, especially in developing countries. Reaching this frontier could require significant tariff increases (doubling or tripling current prices). The mantra of "raising prices" is drowned out by outraged cries about affordability and helping the poor. Tariff increases require a thorough analysis of citizens' willingness and ability to pay. We know that water that is "trucked" to peri-urban areas is much more expensive than piped water, but citizens already receiving service will revolt against substantial price increases.

In developing countries, especially in Africa, the economies are still evolving and cannot support substantial tariff adjustments. Such actions could lead to customer anger and civil disobedience. This would, in turn, have negative effects on the company's ability to collect bills, leading to poor cash flows. In the wider context, such developments would of course have damaging impacts on the political setting of the country, which may boomerang by politicizing price—constraining the company's managerial opportunities. No manager wants to hear that his/her company's actions are a cause of political unrest. On the other hand, of course, it is not proper for a company to fall prey to excessive political log-rolling; that is why high performance countries promote transparency and citizen participation, formulate rules that reinforce company legitimacy, develop strategies to counteract such tendencies. Political unrest disrupts network expansion and severely compromises a company's ability to equitably distribute water supply services to the citizens of the country.

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

Of course, care must be taken that such tariff changes are not used to finance company managerial inefficiencies. That is why tariff adjustments should not be looked at in a simplistic manner. Managers should not be in the habit of thinking "Every time there are cash-flow problems, we should increase tariffs." The starting point must be optimization of production processes via reduced technical inefficiencies. If these activities do not improve the company's financial situation, the manager can then justifiably consider a tariff review. Thus, the issue of full cost recovery should be tackled in a phased manner. Large investments like treatment plants, transmission mains, and significant network expansions cannot easily be financed through revenues generated from tariffs. These can be financed through grants from development partners or government subsidies. However, such grants must be properly targeted and implemented in an efficient manner. Ultimately, access to international bond markets at investment grade interest rates will close the gap—but that requires years of well-documented high performance.

For regular price adjustments, the NWSC utilizes an annual tariff indexation policy, which is based on a formula that was negotiated between the corporation and Uganda's Ministry of Water. The indexation formula is as follows:

$T_1 = T_0 (A\Delta i + B\Delta fi\Delta fx + c\Delta k)$ Whereby;

T_o	=	Tariff level at end of year zero
T_1	=	Indexed tariff for the next year
A	=	Proportion of tariff associated with local salaries and locally sourced Goods, based on audited financial accounts of the previous year
Δ	=	Change
i	=	Domestic retail price index as published by the Uganda National Bureau of Statistics and based on the underlying inflation rate
B	=	The proportion of the tariff associated with foreign costs (foreign inputs in the production process based on the audited financial accounts of the previous year)
fi	=	Foreign retail price index based on the United States Bureau of Labor Statistics
fx	=	US dollar to shilling exchange rate based on the Bank of Uganda mid exchange rate as of June 30th of each financial year
c	=	Proportion of tariff associated with electrical power, based on % of electricity cost to total cost as a proxy, using the audited financial accounts of the previous year
k	=	Price of electrical power per unit

Source: Statutory Instrument 2004, No. 44

Because of this policy, the corporation has been able to link its rates to input price escalation. Prior to the indexation process, there had not been a tariff increase since 1994, except for adjustments to finance new water connections free of charge to customers within a distance of 50 meters from the NWSC water mains. This adjustment, carried out in 2004, only resulted in a 10% increment. The average tariff now stands at about US$ 0.6 per cubic meter of water consumed. Over the last seven years, the NWSC has improved managerial efficiencies to the extent that, currently, the tariff covers all operating costs (including depreciation) and financing costs. In addition, the NWSC covers 50-60% of its capital expenditure requirements. Given that the NWSC's financial situation has improved over the years through efficiency improvements and cost containment activities, it is clear that managerial initiatives are resulting in movement towards the cost-recovery frontier.

12. The Regulatory Framework

"If you watch your pot, your food will not burn."
(Niger Proverb)

There is no independent regulatory commission for water in Uganda. The NWSC is, to a large extent, "self-regulated." The corporation is structured into two components: an operating arm and an asset holding and monitoring/regulation arm. The asset holding/monitoring arm is responsible for performance regulation, tariff proposals, operations support, and investments. The tariff is proposed by the NWSC and approved by the Ministry of Water, after consultation with a technical arm in the ministry. In addition, technical regulation (water abstraction and water resource use) and environmental regulation are carried out by the Directorate of Water Development and National Environment Management Authority.

The functions performed by sector regulatory commissions elsewhere are handled by a Performance Review Committee (PRC, based in the Ministry of Water); the PRC regularly reviews and evaluates the performance of the NWSC with respect to the performance contract with the government. In carrying out its functions, the PRC checks reported performance achievements to establish their accuracy and authenticity; subsequently, it makes recommendations on performance gaps and strategies for moving forward. One shortfall with this approach is that the PRC's allowances (for travel, meetings, and for authenticating records) are paid by the NWSC, bringing into question the oversight committee's full independence from the operating utilities and the asset holding company.

13. The Role of Donors

"Water that has been begged for does not quench the thirst."
(Soga ,Uganda Proverb)

There is evidence that the NWSC is on the right track for meeting operational costs as well as the costs of computerization, depreciation and retooling, and financing costs; in addition, there is a surplus for contingencies. However, the delivery of water and sewerage services is too costly for the NWSC to handle by itself. Therefore, the corporation will continue to request donor support for its long-term capital development projects in order to improve its services to the rapidly growing urban population. The corporation has earned credibility, through its performance. Donor confidence and support have led to increased long-term capital investments being incorporated into the Medium Term Expenditure Framework financed by government and donors. At some point, international capital will be available.

For any organization to continue to receive external support, it must maintain the confidence of donors and (in the long run) investors. Donor confidence is based on performance, which in turn, depends on adopting the types of monitoring and incentive mechanisms described in this overview of NWSC reforms. In addition, the NWSC must seriously consider its future dealings with development partners. Caving into the "arm-twisting syndrome" can be destructive although the dialogue needs to continue, so the organization does not lose access to the ideas and expertise that often reside in multinational organizations.[16] If the present momentum of the NWSC-donor collaboration continues, the prospects are good for continued reform and, ultimately, the creation of a viable commercial enterprise.

14. Concluding Remarks

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

The NWSC case reflects common sense, since it builds on principles that have demonstrated their worth over time. The lessons from the NWSC experience also show the value of experimentation and decentralization—without losing contact with experts at the center. First, a hardworking and committed board of directors with a good mix of skills is necessary if an organization is to make meaningful progress. Second, a dynamic utility management and staff team motivated by clear vision, mission, and objectives is fundamental to success. Third, it is necessary to secure government and donor commitment to support key initiatives like the debt freeze, pension reform, and payment of government debts. Finally, additional factors have been pillars of reform: promoting managerial autonomy through decentralization, strengthening information systems via monitoring and evaluation programs, and providing incentives to managers through comparative competition and financial incentive packages associated with meeting targets. Organizational behavior change towards strong customer and commercial orientation has also improved the financial viability of the NWSC.

Furthermore, monitoring/regulation of both technical and customer protection processes is very important in water utility management. It requires prompt responses, managerial discipline, reasonable flexibility, and (ultimately) understanding on the part of the monitor. A customer complaint does not always mean that the operator is under-performing. The speed of response and minimization of repeat complaints determine the operator's credibility with customers. On the other hand, monitoring of technical production processes must not interfere with the operator's decision-making portfolio. Micro-management is likely to significantly hamper managerial innovation. The approaches applied in the NWSC are possible in developing country utilities where operational effectiveness is far inside the frontier. Often, policy makers and managers in developing countries believe that outsourcing operations management is a panacea for achieving efficiency gains. While outsourcing can be cost-effective, it must be well-conceived and implemented during periods of peak demands or when specialized skills are unavailable in-house. If outsourcing arises because local managers are simply weak and have minimal capacity to solve their own problems, this incompetence is likely to translate into an inability to manage principal-agent relationships. The (outside) agent that is brought on board is in a position to take advantage of informational asymmetries: those overseeing utility performance will never get out of this quagmire. Replacing or re-training weak managers supports a "We can do it ourselves" approach to improving service delivery.

In addition, decision-makers must diagnose the corporation's performance with respect to financial sustainability and team development to determine the next course of action. If the financial performance is weak and teamwork among managers and staff is low, leader/managers need to start with simple performance improvement programs, incorporating tailor-made incentive plans and targets. In tandem, the teams need to be coached and developed to improve performance. It is from this starting point that the company can move into more complex internal contracting arrangements incorporating individual and group commitment plans. When implementing these performance improvement plans, managers ought to know how to deal with internal managerial rigidities and inflexibilities that hamper performance. These can be potential performance barriers if the managers do not have the self-confidence to "demolish" them wherever they do not make sense. Finally, managers need to address the pace of movement towards the cost-recovery frontier. Few water companies can quickly attain this performance level in developing countries. The movement needs to be sequenced to minimize adverse effects on the citizens. Targeted subsidies/grants can be used to fill financing gaps, while moving towards cost recovery. State-owned enterprises come in a variety of forms and are present in a number of industries, especially infrastructure: weak performance should not be tolerated. Thus, public discussions need to occur, so citizens become educated about the issues, feasible objectives are established, and political leaders are held accountable for the promises made at election time. [17]

"Having a good discussion is like having riches."
(Kenya Proverb)

Notes

[1] Before the new legislation, the NWSC was operating under a decree. The powers of the corporation were constrained through cumbersome reporting requirements to the minister (government). The NWSC was not allowed to freely outsource operations management. There were a lot of overlaps in role definition between the government and the corporation. The new NWSC Act of 2000 was aimed at streamlining these inconsistencies.

[2] World Bank Aid Memoiré Document (1998), Project Evaluation Report to NWSC Management.

[3] More details on the reform measures can be found in Mugisha et al., 2004a, b, and 2007.

[4] Other African nations have also instituted programs for improving public service: Rugumyamheto (2004) outlines Tanzania's steps for reform.

[5] Dr. William T. Muhairwe is a management specialist trained in economic and business management and has been managing public companies for more than the last 15 years in

Uganda and abroad. Since 1998, he has been the managing director of the National Water and Sewerage Corporation, a state corporation that was almost collapsing. Through his initiatives, Dr. Muhairwe has implemented innovative change management programs that have successfully turned around NWSC from a loss-making organization to a profit-making government parastatal which is now a benchmark for best practice both nationally and internationally among water utility organizations.

[6] Wubneh (2003) focuses on the factors that facilitate and hinder capacity-building in Africa. The NWSC had strong engineering capabilities in 1998.

[7] Kelman (2006) argues that crisis can inhibit responses by government organizations in the area of downsizing. This case study suggests that extreme pressure can improve organizational performance, but management needs to address employee issues in a participatory manner.

[8] Under the IDAMCs, the head office enters into an internal non-legalistic contractual arrangement with partners in areas. The partners are a team of senior managers in the Areas/Water utilities, who are bound together by a Partnership Deed detailing how business shall be conducted during the period of the internal contract. The partners are headed by a lead partner, who is the accounting officer of the water utility/Area.

[9] Walker and Boyne (2006) emphasize the importance of planning and flexibility in improving governmental performance. Their empirical work (and associated case study) analyzes initiatives taken by the U.K. Labour government to reform services.

[10] Through a series of performance contracts with the government of Uganda, roles and obligations were clearly defined, leading to significant non-interference from the government. The donors also desired clarity in governance and improved accountability; they urged the government to let NWSC operate autonomously. Once the NWSC started showing positive performance results, key government officials (including the president) gave the corporation scope for further innovation since improved performance was seen as a way to reduce what would otherwise be a significant burden on the central treasury.

[11] It should be recalled that the NWSC is made up of the head office (performance monitor) and the water utilities (service providers). The head office also carries out large investment planning and implementation as well as professional assets management.

[12] NWSC salary structure is determined by the board of directors and is generally competitive among Ugandan companies (public and private). Coupled with incentive payments, this partly explains why staff members are motivated and committed to continuous improvements.

[13] The system was instituted under the stewardship of Dr. William T. Muhairwe, the managing director of the NWSC, since 1998.

[14] Berg and Muhairwe (2006) identify eight steps taken by the NWSC: leaders identified trends, established baselines, selected measurable goals, designed internal incentives, established lines of communication, developed and implemented strategies for dealing with external threats, ensured accountability by assigning responsibilities to leaders and teams, and reviewed results. These steps reflect sound management processes—here applied to an organization in need of reform.

[15] For a survey of reform in infrastructure industries, see Armstrong and Sappington (2006). Although they focus on competition and liberalization, they provide an excellent overview of issues associated with improving the performance of network industries.

[16] Caulfield (2006) reviews the role of bilateral and multilateral donors in African government reforms. In terms of regional trends, she underscores the significant impact

of stakeholder perceptions and notes the importance of performance contracting in East African nations.

[17] In a democracy, public enterprises are ultimately responsible to elected officials, so the objectives they establish are the ones to be focused upon by organization leaders (Cohen and Eimicke, 2002). One explanation for the success of the NWSC is that citizens saw the improvements in service quality and coverage, which led to broad political support for the reform effort.

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