

**Turning Around Struggling State-Owned Enterprises in Developing Countries:
The Case of NWSC-Uganda**

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Abstract:

Performance monitoring based on outputs (customers served, volume delivered, and service quality) has characterized oversight agencies in the water sector. An orientation involving detailed information on inputs, production processes, and information sharing has been associated with micromanagement, excessive (bureaucratic) reporting requirements, and managerial interference. Such micromanagement and burdensome reporting schemes can curtail operational innovation and creativity. However, in situations where managers lack full operating knowledge and capacities, proactive and consultative monitoring and regulation can yield benefits. This study presents NWSC's approach to performance monitoring (and 'self-regulation'). Experience in Uganda shows the value of more comprehensive monitoring (and interactive feedback) as a complement to traditional performance metrics. NWSC focuses on promoting improvements in technical processes and input selection—to deliver quality service to customers, expand the network and gain the confidence of stakeholders. The approach has involved aligning performance improvement initiatives with the organisation's financial performance and team development levels. Internal governance has focused on accountability, transparency, and teamwork. The case concludes with observations on managing organisational rigidities and moving towards full cost-recovery. Organizational incentives and information flows must allow managers to reduce performance barriers (rules and procedures) that do not make sense. However, full cost-recovery cannot be achieved over night: the timing must take into account the socio-economic situation of the citizens; targeted subsidies and grants can be used to fill financing gaps. African Proverbs are interspersed throughout the article to underscore key themes.

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1. Introduction

“A person, who never travels, believes his mother’s cooking is the best in the world.”

(Kiganda, Africa, Proverb)

Lessons from others provide perspective and enable decision-makers to identify strategies that might be more effective than those currently in use. Given the importance of water infrastructure investments and operations, improving performance of the sector is a high priority in emerging markets. An earlier study details the historical background and performance improvement initiatives that have been implemented within National Water and Sewerage Corporation (NWSC) since 1998 (Mugisha et al, 2004a). This article builds on that background, describing what NWSC has done up to 2006. NWSC is a public corporation wholly owned by the government of Uganda, having been established in 1972 by decree No. 34 (*during the time of President Idi Amin Dada*). The corporation’s legal position was strengthened by NWSC Statute No. 7 of 1995, which was later incorporated into the NWSC Act of 2000. Under the new legal framework, the powers and structure of NWSC were revised to enable the Corporation operate on a commercial and financially viable basis. Accordingly, the Corporation is currently mandated to manage water and sewerage services in 19 Urban Areas under its jurisdiction.

In 1998 NWSC was not a healthy organization. The World Bank noted in its report² that: “Over the last 10 years, the GOU in partnership with the World Bank and Other Donors have made significant investments (over US \$ 100 million) in the Urban Water and Sewerage sector. These investments have contributed immensely in rehabilitating the existing infrastructure under the NWSC management. Unfortunately, these investments have not been matched with the necessary efficient commercial and financial management capacity that can ensure the delivery of sustainable services in the medium to long-term”. 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 large and inefficient labour force with conflicting and overlapping roles, high unaccounted for water (more than 50%), poor customer service, low collection efficiency (about 71%), substantial accounts receivables (Days Receivable Ratio of about 420 days) and corruption within the work force, especially field staff. In addition, the corporation had to contend with a number of threats, including debt servicing obligations coming due and a VAT law that compelled NWSC to pay taxes on any increases in bills. However, Government was willing to give support to pro-active managers and the economy was relatively stable. Nevertheless, improving operational and financial performance was essential to prevent further deterioration.

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

Later sections outline corrective actions undertaken to turnaround performance (more details can be found in Mugisha et al, 2004a, b and 2005). In addition, the paper presents underlying reform drivers and performance outcomes. The latter sets the context for evaluating the relative importance of different reform measures and the sequencing of those steps. In particular, the NWSC monitoring approach focuses on customer protection and improvements in technical processes and input usage. The paper demonstrates to managers of poor-performing utilities the benefits of new initiatives. Such initiatives are not painless, nor can they guarantee success. However, citizens and political leaders are finding the status quo unacceptable: organizational transformation based on feasible commercial plans and team initiatives can improve performance. The paper concludes with observations on avoiding managerial rigidities and moving towards full cost-recovery frontier.

2. Initiatives Undertaken to Turn Around Performance

“The hunter in pursuit of an elephant does not stop to throw stones at birds.”

(Ugandan proverb)

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

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

- *100-Days programme*, a high-impact programme focused on reversing operational and financial inefficiencies.
- *Service and Revenue Enhancement Programme*, aimed at restoring customer confidence in the ability of NWSC to deliver services.
- *Area and Service Performance Contracts*, focusing on making distribution areas reach commercial sustainability: managers had the authority to take important decisions and were accountable for outcomes.

The Corporation had to improve operating margins by reducing bureaucracy, increasing staff productivity, and encouraging worker involvement. These programs were designed to improve morale, especially confidence of managers to dramatically alter the

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

- *Stretch-Out Programme*, emphasizing teamwork.
- *One-Minute Management Programme*, creating procedures for promoting individual performance accountability, a problem identified when teams were the focus of organizational development.

At present, NWSC is implementing *Internally Delegated Area Management Contracts* (IDAMCs) aimed at giving more autonomy to Area Managers (Partners), defining roles and responsibilities more clearly, and creating better incentive plans that allocate more operating risks to Partners. To rationalise 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: collaborations allow managers to learn about the strengths and weaknesses of peer companies. To facilitate such exchanges, NWSC carries out regional networking through a recently established “External Services” Unit. Through this Unit, the Corporation has established a mechanism for sharing experiences and rendering consultancy services to outside companies, on a cost-covering basis.

The 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, these initiatives provide lessons for others. Recent activities provide examples of cases that help other organizations better understand how to create value. These initiatives include:

- Reducing accounts receivable and uncollectibles: Kampala Revenue Improvement Project (KRIP): 1998 - 2001, Under Gauff J.B.G
- Monitoring managerial performance--Kampala Water Supply and Sewerage Area Management Contract: 2002 - 2004: ONDEO Services.
- Evaluating the impacts of rate design--Tariff Review
 - Reduced connection/reconnection fees
 - Tariff Indexation against Inflation
- Expanding customer base--New Connection Policy aimed at giving free access for pipe lengths up to 50m (with a nominal fee of about US\$ 30).
- Modernizing information technologies--Computerization of systems (billing, financial, procurement, payroll, voice over IP, lotus notes, customer complaints tracking, call centre etc).

- Improving customer services--Introduction of account-debit system with local banks, account-balance checking system with local telephone companies.

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

3. Main Performance Considerations

“Between imitation and envy, imitation is better.”

(Ekonda proverb, Democratic Republic of Congo)

The main ingredients to NWSC performance improvement programmes have two orientations: Internal and External. Internally, NWSC developed a programme design outlining clear roles and responsibilities; bottom-up approaches to strengthen programme ownership and support and SMART (Specific, Measurable, Achievable, Realistic and Timely) targets that were later strengthened through use of “stretched” (tougher) targets. 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 NWSC expected their professionals to deliver innovative programs. In addition, NWSC instituted strong incentive systems and equitable gain sharing plans to minimize employee skirting tendencies (Mugisha et al 2005). 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

Externally, the corporation enjoyed significant Government support, which resulted into debt freeze and non-interference with the corporation’s management. Being somewhat insulated from political pressures meant that managers could focus on commercial issues in the early years of reform. Instead of fending off powerful political leaders who sought jobs for relatives for network expansion for their constituencies, managers could devote their scarce resources to more productive activities. At the same time, donor support in the form of financial and technical assistance added to the capabilities of the 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 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 programmes, implemented in NWSC from 1998 to 2005. The initiatives have had positive impacts. Notably, service coverage has increased from 48% to 68%. The water network coverage increased by 45% (850 Km of water mains extensions; 710Km from internally generated funds and 140Km from external funding). In addition, new connections increased from 3,317 to 22,218 per year. As a result, total connections are up from 50,826 to 125,000. Unaccounted for water has fallen from 51% to 34% (Kampala is 40% while other Areas is now only 16%). Metering efficiency has increased from 65% to 98%, while connection efficiency (proportion of active connections to total connections) has improved from 63% to 91%. On the financial side, annual turnover has improved from about US\$ 11M to US\$30M. Because of this performance, operating Profit after Depreciation has improved from losses of US\$ 0.4M to a surplus of US\$ 2.2M. Positive cash flows have financed network expansion and enabled maintenance programs to be scheduled and implemented.

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

5. Performance Monitoring Approaches

“If you do not listen to good advice, you will be embarrassed in public.”

Oshiwambo (Namibia)

Performance monitoring is a key mechanism in the reform process since it allows top management to review past trends, identify current baselines, establish targets, and determine whether those targets are met. Without underlying data, decision-makers cannot make “informed” decisions: staff performance cannot be evaluated, nor can incentives be introduced in a systematic manner. Although process benchmarking is widely used in developed countries (Alegre, et. al. 2000), the costs of such comparisons (and detailed record-keeping requirements) can be prohibitive. Water utilities in developing and transition economies have focused on output (metrics) performance

indicators: labor productivity, uncollectibles, or other core ratios. Regulators and performance monitors often lack information on inputs and production processes. The production chain may not be well documented or monitors may lack the technical skills to evaluate activities.

The rationale for focusing on output has been the perceived oversight costs and possible interference associated with process evaluations. Smith (2002) observes that monitoring inputs or processes rather than outputs or outcomes tends to reduce the firm's incentives to search for and apply lower cost ways of achieving the result. This concern ought to be balanced against potential benefits in developing countries where the service providers are still in a critical stage of institutional development. International operators, often brought in to transfer “best practice,” are initially ignorant of the local network—technologies and operating conditions. Those who should be “in the know”, the local operators, can be mired in an organizational culture that does not promote excellence, are indifferent to waste, and lack strong incentives for high performance. The two possible operators, therefore, have limitations that can lead to sub-standard performance. The “arms-length” regulator/monitor is left with inadequate data for evaluating progress or understanding opportunities for improvement. Within NWSC, managers have reconsidered the implications of arms length regulation—concluding that there are gains from more active partnering between service provider and the performance monitor. The overriding factor is not the “interference” and “cost” of such an interface, but the opportunity to provide improved services to the citizens at reasonable costs.

Monitoring Technical Processes and Inputs

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

(African Proverb)

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

The formal communication complements informal meetings and other information exchanges, enabling utility managers to access a menu of performance improvement strategies. NWSC specialists at the “center” also share ideas learned from individuals and

with the managers of local utilities, who decide for themselves whether the information about “best practice” is applicable to their situations. Ultimately, what matters is performance since they (and their staff) are rewarded for achieving targets. Those incentives involve bonuses of up to 50% of salaries.

The performance monitor representing the “center” established a “checkers” system³ emphasizes processes and technologies. Under this system, the monitor and the local service provider agree on a certain set of performance criteria related to systems and activities that need to be performed. These targets involve managers engaging in a range of activities clustered under general, engineering, finance, management services and customer care. Such monitoring ensures that the service provider works professionally, avoids asset stripping, and promotes continuous improvements in operations. Compliance is checked on un-announced basis and consistent failure negatively affects the job-tenure of operating teams.

The NWSC Checkers System has been a significant driver of the corporation’s internal reform initiatives. The system has incorporated a comparative competition activity through which Areas have vigorously competed for successful compliance. In this benchmarking activity NWSC emphasises cleanliness of premises, orderliness of offices, corporate image, and systems operation and maintenance. There is no doubt that the checkers innovation has greatly strengthened the processes and technologies as well as the delivery of outputs. In addition, the corporate culture is affected by attitudinal changes induced by a mix of partnering and monitoring. Areas have improved their efficiency to earn incentives: decision-makers see concrete benefits from improving input usage and strengthening production processes. In Kampala for example the checkers system improved the new connections implementation processes, reducing the lead time for installation and improving 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 Areas have improved compliance for preventive maintenance programmes, operational procedures and safety nets. Last but not least, staff discipline has improved, even as individuals strengthened their inter-personal skills so that teams could perform more effectively.

Thus, the checkers system has contributed to meeting organizational objectives. The Partners (local managers) are happier because they know what they are expected to put in place. Time, perhaps an individual’s more scarce resource, is put to better use. Once the system was put in place and its credibility established, checkers spent little time carrying out the checking activities. They do not waste the Partners operational time, as was the case before there was a conscious effort to strengthen accountability and improve

³ The system was instituted under the stewardship of Dr. William T. Muhairwe, the CEO of NWSC, since 1998.

managerial incentives. The follow-up on identified issues is handled in a more consistent and effective manner, so issues are not swept under “*the carpet*”. Many managers at Head Office receive copies of the checkers findings, helping to increase follow-up accountability.

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

Monitoring Customer Protection Processes

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

(Akan, Ghana)

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

There are two major approaches used in NWSC to capture customer complaints and compliments. The first process involves capturing formal customer complaints. These relate to the package of services observed by customers, related to service quality, product quality, or other features of the product. Complaints reflect reductions in customer’s willingness to pay. To promote prompt corrections, customers are encouraged by respective utility managers to put in writing any of their concerns or observations about service gaps. In NWSC most reported gaps relate to erroneous billings, estimated

bills, no water, illegal connections, unfriendly staff and service delays. No system is perfect. Therefore, the efficiency and effectiveness of NWSC utility managers is judged from the response quality and time taken to resolve reported cases.

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

In the same way, complaints can also be captured through telephone communication between the customer/public and the utility staff. NWSC has recently modernised this activity through a call centre facility that enables quick phone-receipt of complaints by dedicated staff and easy transmittal to appropriate action centres. The feedback on actions taken is managed through the same facility, where strict managerial enforcement procedures have been adopted. Throughout the 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 NWSC, the potential for slow responses and delays during workload peaks require strong oversight capabilities (for monitoring performance) and incentive/penalty mechanisms to ensure improvements over time.

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

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

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

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

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

(Mpongue Proverb)

The above initiatives illustrate processes adopted at NWSC. The successful implementation of these performance enhancement initiatives suggests that the conventional wisdom regarding non-performance by public companies is incorrect. The NWSC experience clearly shows the benefits of focusing on what works – there is no single textbook solution to the myriad problems facing water utilities, especially in low income countries. Most of these problems are caused by the local managers, poor organizational cultures, citizen non-payments, and political intrusiveness. Thus, citizens in emerging countries are the sources of problems, and ultimately, the change-agents who can address those problems. It is unrealistic to expect that solutions can be developed by persons who are not familiar with the source of the problems.

Who is best placed to know the problem and the solution? Is it the problem causer or outsider? 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! However, it is essential that the internal governance system provide the right incentives and a good framework to enable such people to diagnose the situation and come up with solutions. Developing sound incentives requires several steps: strong leadership articulates the right vision for the company, guides staff in problem analysis, and motivates them to come up with strategies to address gaps. It has been established that this ought to be a continuous process. The principle “*never be satisfied with the status quo*” works well for any business, including water supply—where the challenges are clear.

Conventional thinking reflects the view that managerial practices under public management settings are fundamentally flawed, reflecting frustration with poor performance of public companies. Sometimes that poor performance is attributed to the non-economic objectives given to public enterprise (such as job security, employment, or regional development), so standard financial performance measures may be inappropriate. The situation has been most problematic in “basic needs” infrastructure utilities where governments say that they do not want citizens to lack access to clean water or to suffer the health impacts of contaminated water. However, 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’: privatise such companies. However, an independent consultant for NWSC remarked, “governments should never expect to privatise their problems to international companies and think it will work” (Richards, 2003). Indeed, the private sector participation experience at NWSC suggests that ‘international operators’ do not come to manage problems but to earn returns on their investments. They 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 (their lack of needed skills and misunderstanding of local conditions) or external circumstances (their reasonable expectations regarding institutional changes were unfulfilled).

Fortunately, international operators do not have a monopoly on approaches to improving performance. From NWSC's experience, excellent performance can be "home-grown", but such an outcome requires a set of conditions. "*Do it yourself*" works if the implementing team has strong leadership, the right tools (legal framework), appropriate skills, and a clear set of (shared) objectives.

Why have so few water utilities been reformed and transformed? Is it necessary to fire current managers and start from scratch? Current managers have knowledge and skills, but they often lack the incentives to make the extra effort and make some difficult decisions. For many utilities, local managers, are the starting points for improvements in performance. In the case of NWSC, Dr. Muhairwe's insistence on self-actuated internal reforms paid off in this regard. Initially, some stakeholders thought that NWSC problems needed *imported* management. The Management and Board insisted that they had the tools and vision that more than matched capabilities of outsiders. Of course, weak performance would have been evidence that the reform team was incapable of turning the organization around. That meant establishing baselines, identifying past trends, and setting realistic targets. No longer were numbers proprietary (or, as has been the case for many public enterprises, "unavailable": transparency and accountability guided the process). Data reflected reality, not the wishful thinking of managers or the hopes of politicians. The results supported the team's confidence and gained stakeholder support

In some cases, particular stakeholders 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) on national investment opportunities for the firms they champion. Other stakeholders represent international banks, which support the policy "flavour of the month". While both groups can provide capital through a variety of arrangements, they can prematurely damage initiatives that the company is planning and/or implementing. "Conditionality" becomes another word for "policy being dictated by those who are unfamiliar with issues" on (and under) the ground. Communicating with such groups and convincing their representatives that the local team can succeed requires a substantial investment of time. 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 NWSC entered the process, managers realized that they needed to identify their roadmap, accept constructive advice, respect differences of opinion, and ensure that company values and objectives were at the centre of everything. International consultants have a role in the process, but the ultimate decisions cannot be delegated to professionals who lack a deep understanding of national institutional constraints and unique local opportunities.

7. Matching Performance Improvement Initiatives to Prevailing Conditions

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

(Bahunde or Hunde Proverb, Democratic Republic of Congo)

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

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

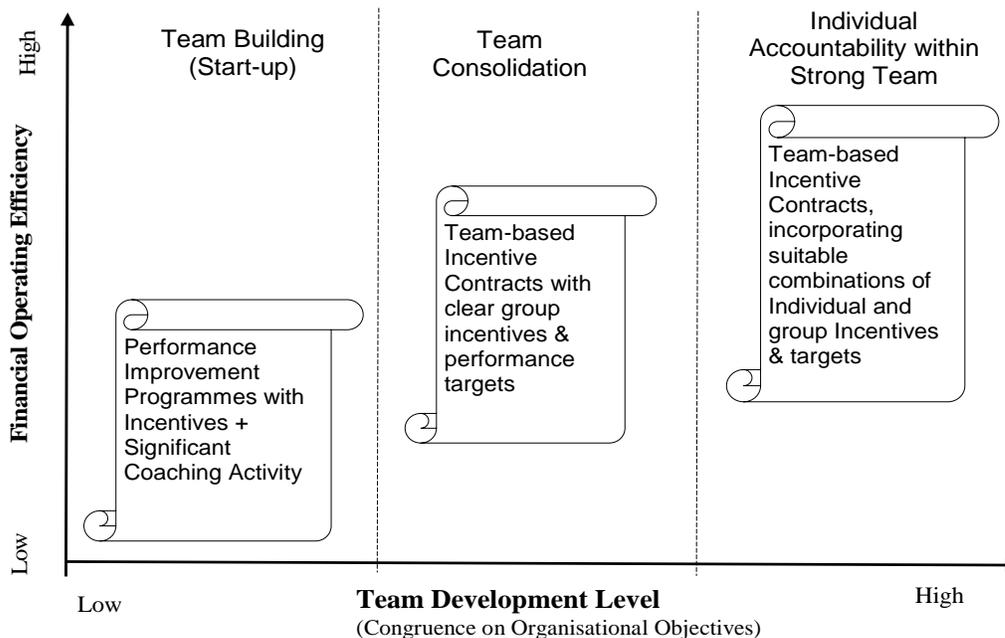


Figure 1: Performance – Incentive Contracts Development Path

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

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

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

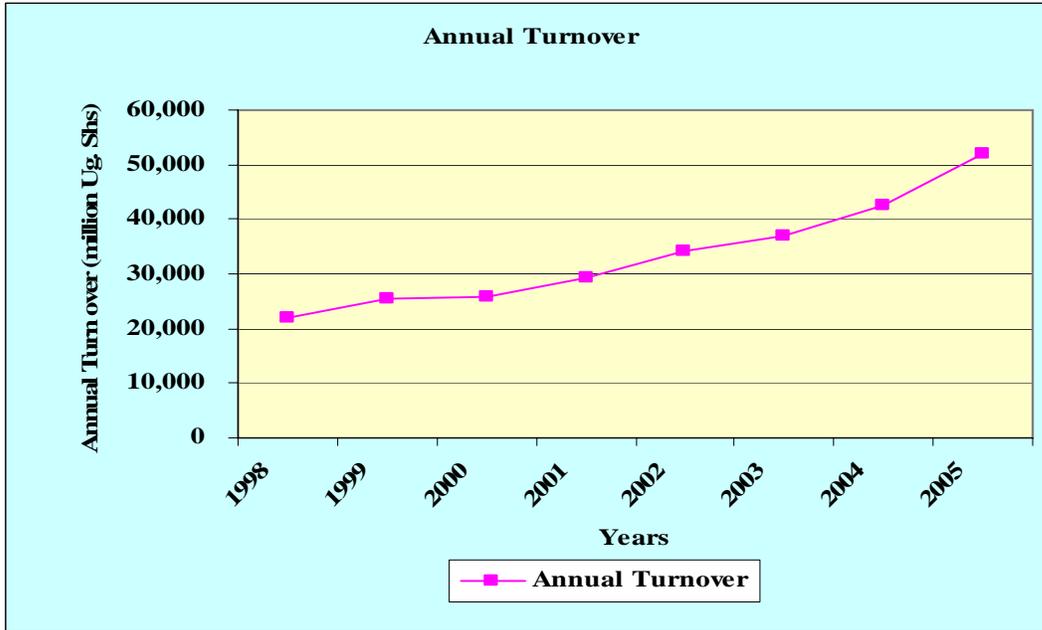


Figure 2: Revenue Collection Improvement for NWSC, Uganda

In particular, the annual turnover in NWSC-Uganda, has improved by about two and half times, over a period of seven years. According to Mugisha et al (2004a), these trends were due to a series of change management programmes, following a generic path outlined in figure 1.

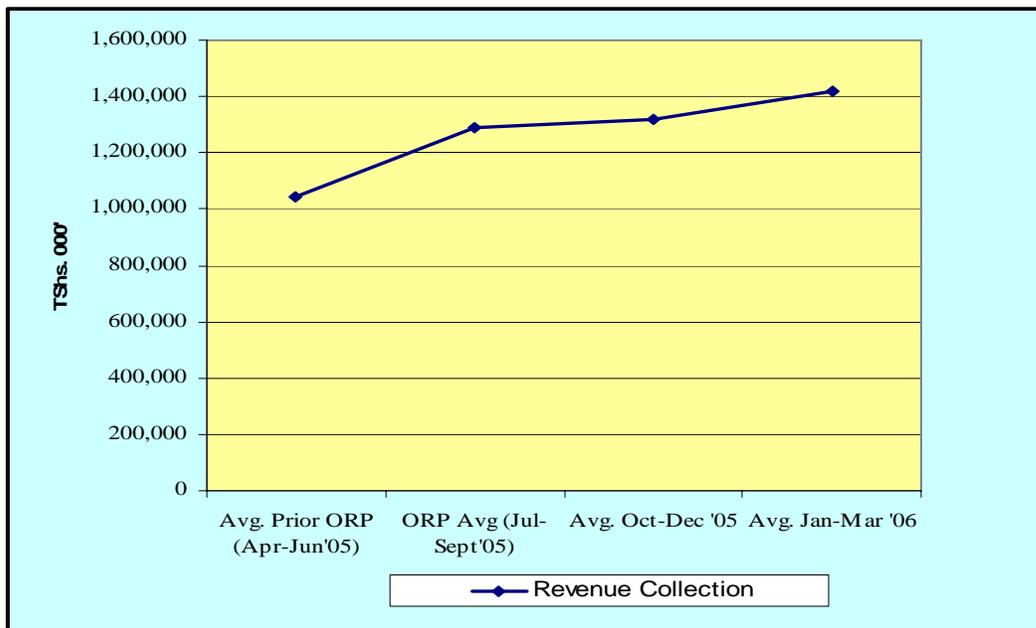


Figure 3: Revenue Collection Improvement for DAWASCO, Tanzania

Figure 3 shows revenue collection trends for DAWASCO, after the termination of the City Water Company lease contract in May, 2005. The NWSC-Uganda, through its

External Services unit, worked with the successor management, following the improvement path in figure 1, to design a 3-month Operation Rescue Plan (ORP). Thereafter, a “Win-Win” Programme was designed, again with assistance from NWSC-Uganda. These two series of programmes have led to significant improvement in the financial performance of DAWASCO.

8. Managing Organisational Rigidities and Inflexibilities

“If the rhythm of the drum beat changes, the dance step must adapt.”

(Swahili Proverb, East Africa)

Sometimes, managing public organisations is marred by a multiplicity of managerial and procedural rigidities (described in studies of public enterprises, see Boycko, Shleifer, and Vishny, 1996 and Megginson and Netter, 2001). Managers in bureaucracy-ridden utilities in low income countries can easily fall prey and become prisoners: constructing the very bars that hold back good performance. Pretending there is no problem is a natural response: those bureaucratic procedures may once have had justifications. However, the cumulative effect of rules, strict hierarchical reporting systems, and required committee approvals imprison initiative and destroy ideas for improving performance. The leadership at NWSC has insisted that managers *‘break all rules and procedures’* that do not make sense and which are, therefore, roadblocks to innovation. They are urged to put performance and service delivery to the forefront. Some managers, out of laziness, would rather hide behind walls of formal rules and detailed procedures. Their preference of form over substance hurts performance! 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 most likely repercussions of bureaucratic inaction include logistical outages, poor performance, and long down-times. If a firm stance is not taken early, meetings will be full of 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 these information sets shape the management style, enhancing institutional order (not rigidity) and promoting fairness. When observations are difficult to document (i.e. they are somewhat subterranean), further investigation is warranted. The emerging patterns are likely to capture part of the reality that must be addressed: requiring managers to make meaningful strategic decisions.

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

One factor supporting the favourable outcome to date is the performance contract between NWSC and the Government of Uganda represented by Ministry of Water and 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.

9. Realities about Moving Towards Cost Recovery Frontier

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

(Ngoreme, Tanzania)

Perhaps the most difficult managerial task in developing countries, after turning the organization around, 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 requires significant tariff increases (doubling, tripling and sometimes quadrupling). The mantra of “raising prices” is drowned out by outraged cries about affordability and helping the poor. Tariff increases require a thorough structured analysis of citizens’ willingness and ability to pay. We know that water that is trucked to peri-urban areas is much more expensive than piped water, but citizens already receiving service will revolt against substantial price increases.

In developing countries, especially in Africa, the economies are still evolving and cannot support huge tariff adjustments. Such actions would lead to customer anger and civil disobedience. This would, in turn, have negative effects on the company’s ability to collect bills, leading into poor cash flows. In the wider context, such developments would of course have damaging impacts on the political setting of the country, which may boomerang on the company’s managerial opportunities. No manager wants to hear that his/her company’s actions are a cause of poor performance on the political scene. On the other hand, of course, it is not proper for a company to fall prey of excessive political log-rolling and that is why countries formulate rules and standing orders to counteract such tendencies. Such actions disrupt network expansion and severely compromise the company’s ability to equitably distribute water supply services to the citizens of the country.

On the other hand, price freezes do not make sense either. NWSC experience has demonstrated that there are benefits from following an *incrementalist approach*, indexing the tariff nominally against inflation, foreign exchange and key input price changes. If there is to be a real tariff increase, it should be done in such a way that its effects are not dramatic: the bill increases are hardly unnoticed by the customers and the public. This long term approach, of course, with time, takes the tariff to cost-covering levels without causing undue citizenry agitation and unrest. Of course, care must be taken that such tariff changes are not used to finance company managerial inefficiencies. That is why tariff adjustments should not be looked at in a simplistic manner. Managers should not be in the habit of “*every time there are cash-flow problems, we should increase tariffs*”. The starting point must be optimisation of production processes and minimisation of technical inefficiencies. If this activity does not improve the company’s financial situation, the manager can then justifiably consider a tariff review. This suggestion means that the issue of full cost recovery should be tackled in a phased manner. Big investments like treatment plants, transmission mains, big network systems etc cannot easily be financed through revenues generated from tariffs. These can be financed through grants from development partners or government subsidies. However, such grants must be properly targeted and implemented in an efficient manner.

10. The Role of Donors

“Water that has been begged for does not quench the thirst.”

(Soga ,Uganda)

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

For any 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 incentives mechanisms described in the overview of NWSC reforms. In addition, the NWSC must seriously consider its future dealings with development partners. The potential application of the “arm-twisting syndrome” needs to be pre-emptively stopped, without losing access to the ideas and expertise that often reside in multinational organizations. If the present momentum of NWSC-donor collaboration continues, the prospects are good for continued reform and, ultimately, the creation of a viable commercial enterprise.

11. Concluding Remarks

“There are forty kinds of lunacy, but only one kind of common sense.”

(African Proverb)

The NWSC case reflects common sense since it builds on principles that have demonstrated their worth. The lessons from the NWSC experience also show the value of experimentation and decentralization—without losing contact with experts at the centre. First, a hard working and committed Board of Directors with a good mix of skills is necessary if an organisation is to make meaningful progress. In addition, a dynamic utility management and staff team motivated by clear vision, mission and objectives is fundamental to success. Furthermore, it is necessary to secure government and donor commitment to support key initiatives like the debt freeze, pension reform, and payment of government debts. In addition, the following factors have been the pillars of reform: promoting managerial autonomy through decentralization, strengthening information systems via monitoring and evaluation programs, and providing incentives to managers through comparative competition and financial incentive packages associated with

meeting targets. Organizational behaviour change towards strong customer and commercial orientation has also improved the financial viability of NWSC.

Furthermore, monitoring/regulation of both technical and customer protection processes is very important in water utility management. It requires prompt responses, managerial discipline, reasonable flexibility, and (ultimately) understanding on the part of the monitor. A customer complaint does not always mean that the operator is under-performing. It is the *action velocity* and minimisation of repeat complaints that determine the operator's efficacy. On the other hand, monitoring of technical production processes must not interfere with the operator's decision making portfolio. Micro-management is likely to significantly hamper managerial innovation. The approaches applied in NWSC are feasible and possible in developing country utilities where operational effectiveness is far inside the frontier. Often, policy makers and managers in developing countries believe that outsourcing operations management is a panacea for achieving efficiency gains. While outsourcing can be a good means in itself, it must be well conceived and instituted at a time when the clientele managers themselves feel that they can manage but simply have peak workloads that make them less productive. If outsourcing comes because local managers are simply weak and have minimal capacity to solve their own problems, this incompetence is likely to translate into an inability to manage Principal-Agent relationships. The (outside) Agent that they blindly brought on board is in a position to take advantage of informational asymmetries: those overseeing utility performance will never get out of this quagmire. The client has better chance by trying a "*we can do it ourselves*" approach.

In addition, there is need to diagnose the company's performance situation with respect to financial performance and team development to determine the next course of action. If the financial performance and teamwork among managers and staff is low, leader/managers need to start with simple performance improvement programmes, incorporating tailor-made incentive plans and targets. In tandem, the teams need to be coached and developed to improve performance. It is from this point/stage that the company can progressively move into more complex internal contracting arrangements incorporating individual and group commitment plans. While implementing these performance improvement plans, managers ought to know how to deal with internal managerial rigidities and inflexibilities that hamper performance. These can be potential performance barriers if the managers do not have the self confidence to 'demolish' them wherever they do not make sense. Finally, realities about moving towards the cost recovery frontier need to be addressed. There are not many water companies that can easily attain this performance level in developing countries. The movement towards such frontier needs to be sequenced to minimize adverse effects on the citizens. Targeted subsidies/grants can be used to fill financing gaps, while moving towards cost recovery.

REFERENCES

- Alegre, Helena, Wolfram Hirnir, Jamie Melo Baptista and Renato Parena (2000). *Performance Indicators for Water Supply Services*. IWA Manual of Best Practices. London: IWA Publishing
- Boycko, Maxim, Andrei Shleifer, and Robert W. Vishny. 1996. "A Theory of Privatization." *Economic Journal* (March): 309-319
- Demski, Joel S. and David, E. M., Sappington (1991), "Resolving Double Moral Hazard Problems with Buyout Agreements," *RAND Journal of Economics* 22(2): 232-40.
- Matta, Nadim and Patrice Murphy (2001). "When Passionate Leadership Stimulates Enduring Change: A Transformational Capacity Development Anecdote from Uganda," *Capacity Development Brief*, World Bank Institute, Number 13, October.
- Meggison, William L. and Jeffrey M. Netter. 2001. "From State to Market: A Survey of Empirical Studies on Privatization." *Journal of Economic Literature* 39(June): 321-389.
- Mugisha, Silver, Sanford V. Berg, William T. Muhairwe, "Using Internal Incentive Contracts to Improve Water Utility Performance: The Case of Uganda's NWSC," May 2005 (forthcoming, *Water Policy*).
- , Sanford V. Berg and Gaddi Ngirane Katashaya (2004a). "Short-Term Initiatives to Improve Water Utility Performance in Uganda: The Case of the National Water and Sewerage Corporation," *Water21*, June 50-52
- , Sanford V. Berg, and Heather Skilling (2004b), "Practical Lessons for Performance Monitoring in Low-Income Countries: The Case of National Water and Sewerage Corporation, Uganda," *Water 21*, October: 54-56.
- Richards, Tony (2003), "Global Trends in Private Sector Participation in the Management of Water Supply and Sewerage Services and the Impact on Sector Reforms in East Africa", Working Paper, NWSC-Uganda.
- Savedoff, William and Pablo Spiller, editors (1999), "Spilled Water: Institutional Commitment in the Provision of Water Services," Inter-American Development Bank, Washington D.C., pp.1-248.
- Smith, Warrick (2002), "Perspectives on Regulatory System Design: Infrastructure for Development: Private Solutions and the Poor," Working Paper, Public Utility Research Centre, University of Florida.
- www.afriprov.org (Proverbs)
- Xu, Lixin Colin and Shirley, Mary M. (1997), "Information, Incentives, and Commitment: An Empirical Analysis of Contracts between Government and State Enterprises," June, World Bank Policy Research Working Paper No. 1769.