



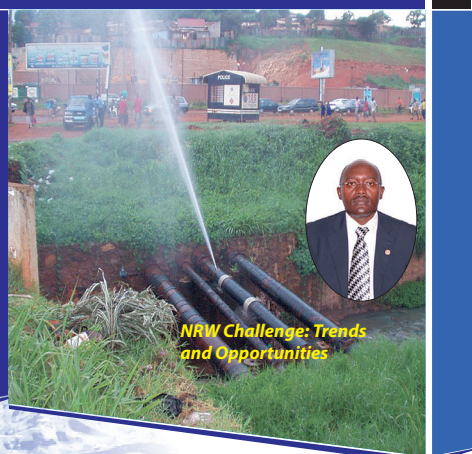
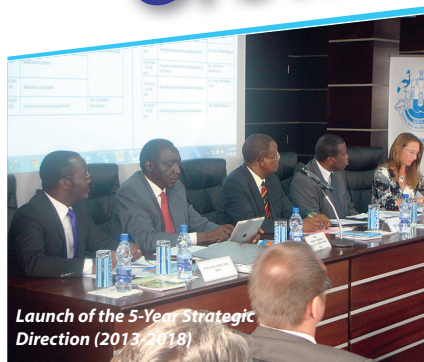
# The Water Herald

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Volume 4, Issue 3, October-December 2013



## Catalysts for Business Growth in WATSAN Utilities





# WATER HERALD

Catalysts for Business Growth in WATSAN Utilities

Volume 4, Issue 3, October-December 2013

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Design, Layout and Print:  
New Vision Publishers

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## MD's Foreword



**Dr Eng Silver Mugisha**  
Managing Director-NWSC

**T**he fundamental factors that underlie the quest for business growth in WATSAN utilities are homogenous and can broadly be stated as the quest for: (i) efficiency, (ii) service delivery, (iii) financial sustainability, (iv) improved service coverage with equity (including service to the urban poor), and (v) environmental conservation. However, various studies and literature are abound with the fact that WATSAN utilities are at varying levels of business growth, with many - especially in developing countries - still beleaguered with sub-optimal performance. The fundamental question - what are the underlying catalysts for business growth in WATSAN utilities?

True to the worldwide thinking in the past, governments around the world were disappointed with public utilities that were entrusted to deliver essential services such as water. This was because they were: plagued by inefficiencies, resource strapped, failed to meet the rapidly growing demands of the urban population, and they had total disregard to the plight of the urban poor populace.

To date, there has been a paradigm shift from the engagement of international private operators - as a panacea to the lackluster performance of utilities - to the adoption of pragmatic internal reforms by WATSAN utilities. Based on the National Water and Sewerage Corporation (NWSC) performance record, a number of factors can be adduced as catalysts for business growth, namely:

- a) Adoption of a long term corporate planning framework. Since 1997, the Corporation has operated within the auspices of 3-year Corporate Plan (CP) frameworks. This has provided NWSC with its broad and long term Vision and Mission, clearly articulating its goals and strategies.
- b) In tandem, NWSC has also operated within the framework of Performance Contracts (PCs) with the Government of Uganda (GoU) since 2000. This has resulted into a harmonious and cordial relationship with GoU, clearly spelling out the duties, responsibilities and obligations of both parties.



- c) Visionary leadership has also been at the vanguard of NWSC operations. The leaders at various phases of NWSC's growth have ensured that they fill up the gaps left by their predecessors, come up with renewed innovations, and performance enhancement programmes.
- d) Translating CPs and PCs into short term tactical performance enhancement programmes have also boosted business growth within NWSC. For example, the PC was translated into a series of increasingly ambitious and challenging internal PCs - with each of its operating areas. This effectively devolved NWSC operations into separate profit centres, each responsible for operational improvements. Additionally, NWSC implemented a plethora of short term performance enhancement programmes, aimed at addressing the prevailing critical challenges.
- e) The short term performance enhancement programmes need to be underscored with the key management tenets of staff empowerment, team work, autonomy, delegated authority, productivity, and accountability. These enable staff to take decisions, but remain accountable for their actions. Accompanying the empowerment of staff is the need to provide incentives for good performance, and reprimands for lukewarm performance.
- f) Establishment of an effective management information system - including the setup of a robust data base covering the operations of NWSC - at all levels is also a catalyst for business growth. An effective, accurate and up-to-date database is a prerequisite for any meaningful decision making process. Good data provides the foundation for effective problem solving and situation analysis, i.e. correct remedial action.
- g) Adoption of tariff changes aimed at promoting financial sustainability and efficient allocation of resources also promotes business growth. For example, there is need to insulate the tariff from erosion due to macro-economic factors such as inflation. Furthermore, access to services has to be the first call of service for utilities, since customers are the bloodline for sound utility survival.

- h) The recognition that the 'customer is king' and 'the reason a utility exists' is of paramount importance. This therefore calls for the improvement of the customer interface systems in order to provide first class services to consumers. These include the adoption of a customer friendly call centre and e-payment systems, among others.

It goes without saying, that all these catalysts should be underscored by a sound infrastructure base - capable of supplying customer needs and perceptions.

It is within the above-mentioned context that NWSC has currently formulated a 5-Year Strategic Direction (2013-2018). The 5-Year Strategic Direction is aimed at gearing NWSC for sound transformational changes within its operational and geographical mandate. The Strategic Direction is to be implemented through a tactical performance improvement programme (PIP) code named the STEP-UP-90 Programme. In summary, the 5-Year Strategic Direction is premised on the four perspectives of the Balance Score Card, namely: (i) business processes and growth, (ii) customer perspective, (iii) financial perspective, and (iv) learning and people perspective.

Indeed, the 5-Year Strategic Direction really captures the key catalysts of business growth, which include: visionary leadership, translation of long term CP measures into short term tactical strategies, staff empowerment, team building, and the placement of our customers at the centre of all the PIPs.

It is my strong conviction and belief that these renewed efforts will bear fruits, which will see NWSC services grow in greater leaps and bounds.

Thank you - For GOD and my country! ■



## Editor's Note



**Dr Martin Kalibbala**  
Chief Editor-Water Herald



## Dear Readers,

Several decades ago, our customers had no choice but to "pick items" from a limited menu of services offered by NWSC. Today, NWSC has positioned herself to respond to ever-increasing customer stimuli, i.e. customer expectations, needs and perceptions. This is a "180 degrees" paradigm shift in service delivery. Customer satisfaction cannot be forced or demanded - it must be earned - through credible service delivery. You see, any business growth worth its salt, must strategically place customer issues at the helm. That is why at NWSC, customer-centred performance improvement approaches, and innovations are emphasised.

This brings us to theme of the present issue of the Water Herald dubbed, "catalysts for business growth in WATSAN utilities." How can we ably discuss catalysts for business growth without hinging the discussions onto customer-centred approaches for better service delivery? Can the customer be left out in the cold while discussing utility business growth? Any other conflicting antidote - be it discussions, propositions, measures or tailor-made solutions - could probably be sound recipe for disaster.

Measurable business growth is a must for credible success, because in today's world, corporate culture does not tolerate - or endeavour to understand how to learn from - business failure. While discussing this theme, contributions must analyse and not moralise business growth issues. Also, the efficacy of these discussions might require multi-faceted approaches. Why? Because - for utility businesses - there might not be a "one-size-fits-all," off-the-shelf solution of how best utilities could catalyse growth.

Frankly speaking, utility businesses have no choice but evoke all possible means to ensure that rational and sound growth is realised. Many extrinsic forces are clearly alluding to this inevitable choice. For instance, world over, population growth has exploded in an exponential manner, and the numbers are staggeringly scaring! Here are the numbers. Global demographics depict that every sixty seconds, 160 people are born. This translates into 84 million people per year. A sizeable chunk of this demographic emanates from developing and underdeveloped countries.

Additionally, in 2011, United Nations (UN) demographers stated that the planet attained a population of seven billion. In retrospect, the human population clocked its first billion in 1802, and 130 years later - i.e. 1932 - it reached two billion. Thereafter, exponential growth began and 30 years later (1960) the planet had three billion. In 1988, we clocked five billion and six billion in 1999. What is the implicit message in all these daunting numbers? Essentially, every 12 years the earth gains another billion residents.

What basic need must all these global occupants have access to? Isn't it safe portable water? And whose mandate is it to provide it? Are utilities ready to measure up to the challenge within their business jurisdictions? By all means, the reality is that utilities must grow their businesses to accommodate and ably redress such issues. What is NWSC doing to grow her business to redress such daunting challenges? Please keep reading this issue to find out!

Recently, the management and Board launched the NWSC 5-Year strategic Direction (2013-2018). This corporate dossier discretely stipulates time-bound measures, strategies and milestones for sound business growth. Within the pages of this issue of the Water Herald, you will be able to get a "snapshot" of what, where and how NWSC is planning to catalytically steer into the future.

Wishing you pleasant reading ■



## NWSC 5-Year Strategic Direction and Corporate Plan: Catalysts for Business Growth

by Corporate Planning Department

### Introduction

The National Water and Sewerage Corporation (NWSC) is a public utility company whose mandate as defined in the NWSC Act section 5(1), is to operate and provide water and sewerage services in areas entrusted to it on a sound commercial and viable basis. NWSC operations have expanded from 3 towns in 1972 to 34 urban centres in 2013. It is worth noting that the Corporation's operations are cardinal to the achievement of the Government programmes, and therefore, the Corporation's achievements are intrinsically related to the overall achievement of the Government's policy objectives.

### Vision and Mission

The Vision of NWSC is "To be a Leading Water Utility in the World." The Corporate Mission is "To provide efficient and cost effective Water and Sewerage Services applying innovative managerial solutions to the delight of our Customers."

### NWSC Planning Framework

The NWSC planning framework is based on the Corporate Plan which is a three year planning cycle document. In tandem, since 2000, the NWSC has operated within the framework of a Performance Contract with the Government of Uganda. Within the overall framework of the Corporate Plan and the Performance Contract with Government, the NWSC has over the years adopted several high impact short term performance improvement programmes. The programmes included: 100 Days programme; Service and Revenue Enhancement Project (SEREP) I and II; Area Performance Contracts I, II, and III; Stretch Out Programme; One Minute Management Concept; and the Internally Delegated Area Management Contracts (IDAMCs). This was accompanied by financial and commercial reforms which comprised of strengthened MIS and tariff structure changes.

### Key Catalysts within the Long Term Planning Framework

The NWSC long term planning framework is defined by the following catalysts for business growth

- An expression of the Corporations futuristic aspirations through the Vision and Mission.
- An understanding and appreciation of NWSC's

situation analysis, including the status quo of performance, performance gaps and an assessment of the Strengths, weaknesses, opportunities and threats.

- This is underscored by a clear statement of the NWSC's baseline performance indicators.
- SMART goals and strategies which are grouped into long term and short term aimed at discerning between low hanging fruits or quick wins and long term Goals and strategies.
- A monitoring and evaluation matrix linking the goals to the strategy and verifiable indicators.

### NWSC 5-Year Strategic Direction (2013-2018)

The 5-Year Strategic Direction was championed by the appointment of Dr Eng Silver Mugisha after being appointed substantive Managing Director in August 2013. In his opinion, the 5-Year Strategic Direction (2013-2018) comes at a time when the Corporation is at cross roads, with a good historical performance record, but increasing demand for services across the urban divide in Uganda.

As Albert Einstein said, "the challenges we face today cannot be solved at the same level of thinking we were at when they were created. We therefore have to put on a new mind if we are to succeed in our search for solutions." This statement summarizes the predicament of increasing expectations and demands that the Corporation is currently faced with.

The 5-Year Strategic Direction is therefore aimed at gearing the Corporation for transformational changes in its operational and geographical mandate.

### Context of the 5-Year Strategic Direction

The 5-Year Strategic Direction was prepared within the following context.

- Firstly, it is aligned to the NWSC Corporate Plan 2012-2015, and therefore does not in any way conflict with the aspirations of the Plan.
- Secondly, it contextualizes the NWSC futuristic goals in a longer term perspective, which implies that the next Corporate Planning cycle will seamlessly flow in tandem with the Strategic Direction.
- Thirdly, it takes into account the strategic and dynamic overarching Government Policy direction of transforming the Ugandan economy from a peasantry



to a modern and prosperous economy as enshrined within the National Development Plan (NDP) and the Vision 2040.

- d) Fourthly, it is also aligned to the ambitious, and achievable urban water sector goal of achieving 100 % water coverage in the medium term through building of synergies via the expansion of the mandate of the Corporation to cover all the large Urban areas.
- e) Lastly, the Strategic Direction was formulated professionally through a consultative process involving all stakeholders, implying that the buy in process was comprehensively addressed.

### **Aspirations of the 5-Year Strategic Direction**

It should be noted that the undertakings and aspirations of the Strategic Direction are in alignment with the Corporate Plan and Performance Contract and are all geared towards achieving the following key outputs:

- Financial sustainability
- Infrastructure growth
- Increased coverage for water and sewerage services
- Learning and growth
- Improving customer care
- Meeting stakeholder expectations.
- 

In formulating the Strategic Direction, due cognisance was given to the history of the Corporation that has defined its current status, the existing NWSC Corporate Plan (2012-2015) aspirations and the various stakeholder expectations, key among which are the Government Policy expectations.

In summary, the 5-Year Strategic Direction is premised on the four perspectives of the Balance Score Card, namely: (i) business processes and growth, (ii) customer perspective, (iii) financial perspective, and (iv) learning and people perspective.

Key among the strategic focus areas will be increased coverage and supply reliability, improved asset management aimed at tackling the current water losses (non-revenue water), improved customer interface and satisfaction coupled with enhanced collaboration with stakeholders, increased revenue growth and mobilization of resources for investment, improved staff capacity development and welfare, and enhanced research and innovation.

### **Operationalization of the 5-Year Strategic Direction**

It is envisaged that the 5-Year Strategic Direction will be operationalized and streamlined through NWSC's annual budget, the respective Division Annual Plans (DAPs) and

One Minute Management Goals (OMGs) for the staff within the Divisions. The activities of the Strategy will further be cascaded to the various areas of operation in a bid to ensure collective responsibility and effectiveness in the implementation of the strategies. This will be undertaken through a tactical Performance Improvement Programme (PIP) code named the STEP-UP-90 Programme.

### **STEP-UP-90 Programme**

The STEP-UP-90 Programme encompasses the following ideals and philosophy:

- a) STEP stands for the following attributes
  - Service,
  - Teamwork and Team Spirit
  - Enthusiasm
  - Performance and Productivity
- b) The programme aims at improving (upping) the above mentioned attributes
- c) The programme will entail improving service reliability and customer services including response times to customer complaints etc. The "customer is the reason we exist".
- d) The programme will aim at improving teamwork and team spirit, which form the foundation for sustained performance improvements.
- e) The programme also aims at reviving staff enthusiasm with respect to work and NWSC service delivery efforts. It goes without saying that enthusiasm breeds energy and action; and this is a very necessary ingredient in ensuring that the 5-Year Strategic Direction and the implied action plans are indeed effectively implemented.
- f) The bottom line arising from service improvement, teamwork and enthusiasm is to improve performance of NWSC.
- g) While the programme is to run up to June 2014, it is believed the first 90 days are crucial and must be implemented successfully in order to generate the requisite momentum and to ensure downstream successes and achievements.

### **Financing of the 5-Year Strategic Direction**

As is always the case, growth and development comes at a cost. Therefore, the Corporation will explore different financing options to ensure that it fulfills the goals and objectives enshrined within the 5-Year Strategy. As a strategy, the Corporation will use a mix of financing options to cover its Operation and Maintenance, and capital investment costs. In a strict sense, all operation and maintenance costs, plus minor investments will be



covered from internally generated sources. On the other hand, the Corporation will mobilize funds for major capital investments using various financing options. These will include the options of market finance, concessionary loan financing, PPP arrangements, and grants from development partners and government, among others.

### Stakeholder Management

In implementing the 5-Year Strategy, the Corporation envisages to enhance collaboration with various stakeholders in order to ensure harmony and effectiveness in the implementation of its activities. The stakeholders the Corporation envisages to work with include: customers, government and all its partner institutions, development partners, NGOs, CBOs, media and civil society, among others. Implementation of stakeholder management activities will be promoted at all levels of the Corporation's interface with its stakeholders. Key among the tenets for this collaboration will be an open and focused dialogue with stakeholders, building synergies, improving effectiveness of the Corporations activities, increasing stakeholder buy-in of the activities of the Corporation, promoting transparency, effective communication, and value adding engagements. In carrying out these activities, the Corporation will enhance its accountability to its various stakeholders.

### Monitoring and Evaluation

Furthermore, NWSC will monitor the implementation of the Strategic Direction through the corporate scorecard system - coupled with an annual evaluation system. The proposed scorecard will greatly contribute to setting targets and performance criteria within the annual corporate budget and respective DAPs, and monitoring progress made by the Corporation in achievement of the set targets.

### Conclusion

In conclusion, NWSC is poised for greater heights as well as greater challenges. However, with the catalytic programmes and activities enshrined within the Corporate Plan (2012-2015) and the 5-Year Strategic Direction (2013-2018), NWSC is destined to achieve its key ten strategic goals. This is espoused by the fact that NWSC's overall strategy is underscored by the key catalysts for business growth, among which are: (i) visionary leadership, (ii) adoption of short term performance improvement programmes, (iii) staff empowerment and involvement, and (iv) continued recognition of our customers as the most valuable stakeholder ■

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### Services Offered at the NWSC-IREC Facility Include:

- \* Hosting of Conferences (local and international)
- \* Hire of facilities to corporate companies (for workshops, trainings, local exhibitions, meetings, professional debates, among others)
- \* Practical advisory services (performance improvement initiatives, vocational skills development, process benchmarking, etc)
- \* Hire and usage of state-of-the-art video conference facilities, and Business centre, knowledge management and library services
- \* Technical assistance
- \* Capacity building initiatives.



# Vocational Skills Development Initiatives: Operational Implications for NWSC and the Ugandan Water Sector

by Dr Martin Kalibbala



The Council for African Policy (CAP) released a new damning report on how the lack of vocational skills development (VSD) is greatly impacting the Ugandan job market (CAP, 2013). The report which was released on Tuesday, 15<sup>th</sup> October 2013 - dubbed, "Uganda's education policy review" - drew a clear link between VSD initiatives and their contribution towards national economic growth and development.

The report further reiterates that VSD institutes are underfunded, mis-constructed, understaffed, and poorly equipped (OECD, 2004). CAP further proposed that Government should revive its commitment to promoting VSD by allocating more funding to the vocational education sector. In this day and age, when training centers and entities are busy selling "6 steps to success" - and proposing pre-determined schedules which might be of little relevance to utility operations - there is need to emphasize tailor-made and home grown VSD solutions.

The United Nations (UN) estimates that Sub-Saharan Africa alone loses 40 billion hours per year collecting water - low access, poor infrastructure and lack of skills - which is the same as a whole year's worth of labor by the entire workforce in France (UNDP, 2009). Water can make an immense difference in African development if it is managed well and used wisely. Given clear policies, VSD initiatives and real commitments to implementation, water can be used to help eradicate poverty, reduce water-related diseases and achieve sustainable development (African Water Vision, 2001).

Lack of VSD initiatives for effective water management at shop floor level, is a key factor that contributes to the global water crises (OECD, 2004). VSD has been neglected in the national and international education policy agenda for many years in Africa, for a variety of reasons, namely: (i) mismatch between training and labor market needs, (ii) high training costs involved, and (iii) poor quality of training (DWA et al, 2012). Lately, policy makers in many African countries and development partners (DPs) have acknowledged the critical role that VSD plays in national development.

The past decade has seen NWSC grow from strength to strength in terms of corporate management and operational efficiency, and NWSC has become one of the leading water utilities in the region. In order to maintain or even exceed these levels, there is need to devise a cocktail of fresh strategies and undertakings, which must include VSD. Key among the tenets for strategies is the need for more innovation under which business is done.

The NWSC 5-Year Strategic Direction (SD, 2013-2018) comes at a time when the Corporation is at cross roads with a good historical performance record, but increasing pressure for services across more urban centres in Uganda. During the next five years, management hopes to contribute by focusing on the following key focus areas: (i) financial sustainability, (ii) infrastructure growth, (iii) increased coverage for water and sewerage services, (iv) learning and innovation, (v) customer delight, and (vi) meeting stakeholder aspirations.

Additionally, the overall strategy undertaken within the time frame of the NWSC 5-Year SD is clearly aligned to the four themes of the Balance Scorecard framework, namely: (i) business processes and growth, (ii) customer perspective, (iii) financial perspective, and (iv) learning and people perspective. This system strikes a balance between all aspects of NWSC's business.

In pursuing the key focus areas of the 5-Year SD, NWSC envisages to draw lessons, build on past successes, and espouse the elements of investment in infrastructure, provision of services to the urban poor, uplift the profile and delivery of sewerage services, undertake restructuring activities aimed at improving efficiency through creating regional structures, and enhance collaboration with various stakeholders, in a bid to create synergies for sustainable





socio-economic development and environmental protection.

Within the focus area of "learning and innovation," the NWSC 5-Year SD identifies training - capacity development (CD) - as a key strategic goal, commensurate with NWSC's core value of continuously developing and imparting relevant skills to staff, so as to improve customer service delivery. As a result, NWSC - under the Training and Development (T&D) Department - has continuously embarked on key CD initiatives geared towards performance improvement. In the context of NWSC, training is defined as a process of interactive participation, where staff are imparted with relevant, spot-on and tailor-made knowledge, with the aim of improving their performance.

No doubt, the NWSC 5-Year SD highlights the great need of delivering not only VSD training - but a wholistic service - from setting up VSD facilities in Gaba II and Kachung, to gap analysis of staff hands-on skills, to the assessment of their competencies developed during the tailor-made VSD courses. VSD at all levels is an essential factor for improving NWSC's operations, especially in the wake of the humongous DP's infrastructural investments to the tune of Euro 300 million. Thus, developing continuous VSD initiatives is the priority action for NWSC.

Moreover, effective VSD training, which can add value to corporate performance, is increasingly viewed as achievable via interactive activities between sectoral stakeholders, for the purpose of sharing rich experiences. Therefore, given NWSC's prominent role at regional and national water sector levels, it is time to venture into hands-on VSD, both to reflect the Corporation's continuous institutional development work and priorities.

The training and VSD functions in utility businesses need both pedagogical and paradigm shifts in order to ably meet the ever increasing and daunting customer expectations. This implies that utilities like NWSC in today's uncertain and changing world ought to re-invent these functions - from business as usual to business un-usual - for better customer service delivery.

Fortunately, in May 2011, the NWSC Board of Directors approved the concept of undertaking VSD initiatives and strategies. This was done under Board Paper No. 1360 dubbed, "concept paper - proposal to turn part of the KWTW housing units into a vocational skills development facility." VSD education and training for shop floor technicians and professionals has been a major challenge for decades.

To be highly effective, all NWSC VSD initiatives are planned to embrace three key levels, namely: (i) the existing systems, (ii) organizational level, and (iii) individual

level. These three levels must be in concomitance with each other - so that the VSD vehicle is properly set in motion - national laws e.g. BTVET Act (2008), NWSC Act (2000), Water Act (1997). At individual level, emphasis will be placed on the expertise and knowledge that each individual is envisaged to accumulate during their stay at NWSC. This can occur through formal and informal deliberate further training measures.

### **Rationale for Undertaking VSD**

Since the early 1990s, the Government of Uganda (GoU) and DP's have invested a lot in NWSC aquatic infrastructure. However, inadequate efforts have been made to build capacity for competent staff (e.g. plumbers) that are key in running and maintaining this expensive infrastructure. Tertiary and vocational institutions have neither assisted in addressing this needs gap, because the level of practical skills they impart is far below those required by the work environment. This is attributed to the fact that most of these vocational colleges have developed curriculums based on "chalk and talk" rather than "learning and doing."

On the other hand, a number of Uganda's vocational training institutions are quickly turning into tertiary institutions and universities. In the near future, many more vocational institutions are envisaged to tow the same line, implying that the quality and quantity of vocational/technical skills are subsequently dwindling with time - yet technicians and craftsmen play a key role in NWSC business and national economic development.

Hands-on VSD initiatives for blue collar artisan staff - at the bottom of the corporate pyramid - have been somehow lacking in the Corporation, yet approximately 25 % of NWSC employees are vocational professions. These vocational professions include: industrial plumbers (IPs), electro-mechanical technicians (EMTs), shift overseers, water quality technicians, customer service advisors, masons, artisans, technical assistants, among others.

It is very clear that potential employers like NWSC are not consulted or even involved when these vocational institutions are developing their curriculums - under the supervisory collaboration of the Directorate of Industrial Training-Ministry of Education and Sports (DIT-MoES) and Uganda Business and Technical Examinations Board (UBTEB) - so as to tailor-make employable courses, which suit employer needs. In addition, most of the tertiary institutions have poorly equipped workshops.

In order to redress this apparent VSD needs gap impasse - and to comprehensively develop the needed capacity of artisans and technicians in the water sector - NWSC with assistance and funding from the German International Cooperation (GIZ) embarked on developing



a robust VSD strategy for NWSC and the national water sector, and has initiated some first activities towards its implementation. The strategy clearly depicts ways how to address skills gaps - both in the medium and longer term - plus ways of inviting other DPs to join the initiative.

Within NWSC's jurisdiction, there has been a growing need to assess and address the VSD needs gap. In order to make some strides towards redressing these needs gaps, the T&D Department began with the industrial plumbing and electro-mechanical professions, and two other relevant occupations. NWSC - with the collaboration of DIT-MoES and funding from GIZ - developed (i) the occupational profiles, (ii) modules to use in training sessions, and (iii) test items to assess the level of the industrial plumbers' skills competence in the areas. These joint efforts and combined synergies between NWSC and GIZ are indeed vital.

All training materials are scoped and sequenced based on curriculums developed using the well-known international DACUM approach for effective skills development. The primary purpose of the materials is to be a reference for both theoretical and hands-on training sessions. Consequently, it is hoped that the re-skilled NWSC vocational workforce - ably trained under this VSD initiative - will competently operate and maintain all the water supply systems under NWSC's jurisdiction. The well trained VSD staff will: (i) enhance operational efficiencies, (ii) ensure better asset management, and (iii) enforce practical methods of reducing non-revenue water (NRW).

Where will the VSD training sessions be conducted? During the first half of 2013, GIZ supported NWSC in modifying Gaba II workshop building into a vocational skills development facility (Gaba II VSDF), located inside the water treatment works of Kampala. The facility was officially opened by the German Minister of economic cooperation and development, Dr Dirk Niebel on Saturday, 01<sup>st</sup> June 2013.

Gaba II VSDF comprises a double volume workshop, equipped with work benches, a training room capable of seating about 16 students for classroom training, an administrative office, plus a lockable storeroom. The classroom and tutor office are already furnished. The facility will be used to train IPs and EMTs. All the necessary tools and equipment will shortly be acquired with the assistance of GIZ. Also, plans are underway to construct another VSDF in Kachung, Lira district.

#### **Strategy to Strengthen VSD in the Ugandan Water Sector**

In view of the lack of appropriate training capacities within the Ugandan public TVET system - which was compounded

by failure to meet NWSC's VSD capacity needs - NWSC decided to address these needs internally. In order to support NWSC's intentions of VSD-internal trainings and upgrading initiatives, GIZ provided the necessary support and funding. As a result, the implementation of NWSC's VSD initiative has received visibility within the educational and water sectors of Uganda.

Consequently, on 11<sup>th</sup> October 2012, NWSC, DIT-MoES, and the Directorate of Water Development - Ministry of Water and Environment (DWD-MoWE) signed a Memorandum of Understanding (MoU) in a bid to combine synergies to improve the training of manpower on crafts and artisans levels relevant for the national water sector. As part of this MoU, DIT-MoES is mandated to support NWSC to register as a recognised VSD training provider - relevant for the water sector - and also accredit NWSC as an assessment centre, under the BTVET Act (2008).

As part of the Joint Water and Environment Sector (JWESSP), an overall capacity building strategy (CBS) for the Ugandan water and environmental sector (2012-2018) is in the process of being developed with the support of DPs (GIZ and DANIDA). The CBS will generally aim at skills development for artisans, vocational professions, and crafts persons within the water sector.

Additionally, the envisaged CBS shall be based on qualitative and quantitative needs perceived by key stakeholders. It will build on the remedial activities that have been initiated already as part of previous PEVOT and ongoing RUWASS programme support in Uganda. The main strand of the strategy comprises the establishment of permanent and sustainable skills development infrastructure, training of trainers (ToT) and capacities at Gaba II VSDF and the planned Kachung VSDF in Northern Uganda.

The prime objective of the NWSC VSD initiative is "to have well trained artisans and technicians who contribute to better water and sanitation service delivery in NWSC, and the Ugandan water sector." A competent workforce, with the right vocational/occupational skills and attitudes regarding installation, operation and maintenance of the technical infrastructure is an indispensable factor - if not a key pre-condition - of well functional water supply and sanitation systems countrywide.

To achieve this end, it is necessary to establish appropriate VSD capacities and infrastructure for NWSC and the Ugandan water sector. Therefore, the key outcome of the strategy shall be: "the establishment of Gaba II and Kachung VSDFs, which conducts standards-based skills development for artisans and technicians." Analyses have shown that prioritizing training for IPs and EMTs is



of great importance for proper functioning of water supply and sanitation infrastructure. Training and re-training of these key professions has been neglected in the past. The public vocational training system does not supply the calibre - quality and quantity with the right attitude - of people required.

Therefore, it is necessary to establish and operate the required capacities within the water sector itself. Gaba II and Kachung VSDFs will focus on re-trainings and refresher courses for key vocational professions. Training will extend to other trades - e.g. water quality technicians - at a later stage. Also, basic pre-employment training of fresh recruits and/or staff shall be considered later. For purposes of financial sustainability and optimal utilisation of VSDFs, it is also envisaged to use them for training similar cadres from other clients - e.g. utility companies in neighbouring countries, contractors, etc - through the External Services Unit (ESU) activities.

Water is central to human security, development and sustainable livelihood. Yet, one of the greatest challenges we face in the world today includes delivering and securing affordable water for every citizen. The UN recently confirmed that the world must meet certain targets regarding access to clean water. To tow this line, NWSC and GoU - in collaboration with key DPs like GIZ - have embarked on providing quality and equitable access to water and sanitation services.

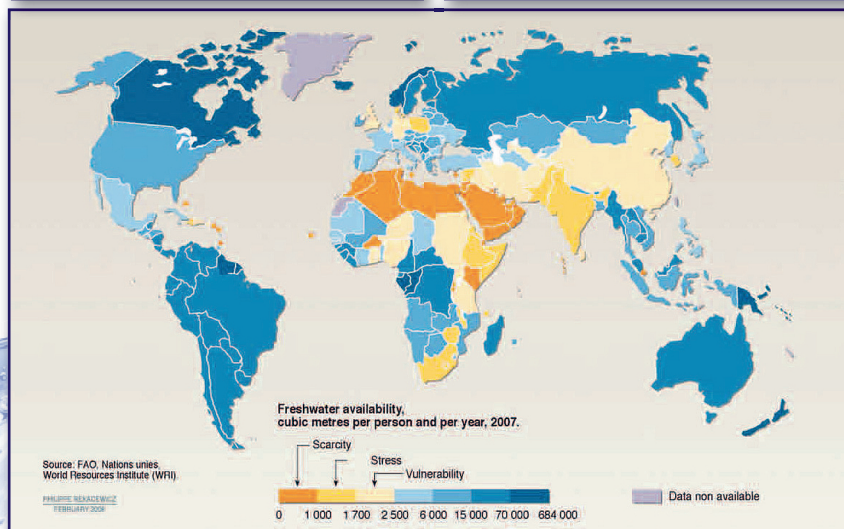
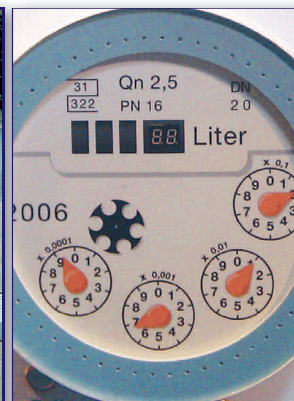
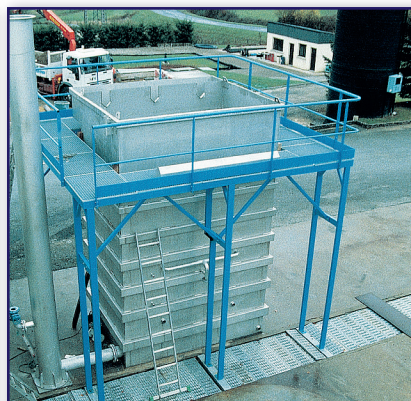
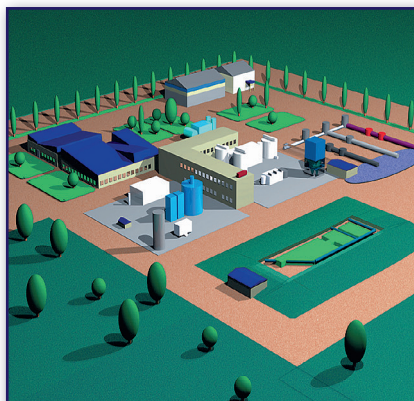
Currently, the NRW due to technical and commercial

reasons is estimated between 40-60 % in Uganda. Deficiencies in sanitation service delivery have led to the pollution of fresh water resources. Increased VSD training efforts are definitely required to disseminate knowledge for protecting the built environment and natural resources. VSD initiatives are impregnated with new favorable ways of sustainably managing and operating utility assets and infrastructure, and this can be achieved through a process of learning, transferring, acquiring new hands-on skills to replace the old way of doing NWSC operations.

Technology in global VSD technical operations and the accompanying knowledge are growing exponentially. In a nutshell, VSD knowledge is increasing - technology is running. Are African utilities aware of this daunting challenge? Are they ready or even prepared to catch up? ■

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## Profiles of the Current NWSC Board of Directors



Dr Eng Christopher Ebal (Ag Chairman - Board of Directors) - Dr Eng Ebal holds a Master in Business Administration from ESAMI/Maastricht School of Management, Netherlands and an MSc (Construction Management (with Distinction) from Loughborough University, UK and a BSc. Engineering from Makerere University, Kampala. His other post graduate qualifications include a Diploma in Project Management Swaziland and a Diploma in Business Administration, Jersey Britain and several certificates in various management disciplines. He is a registered civil engineer and a fellow of the Uganda Institute of Professional Engineers and has over 25 years of experience in the field of infrastructure and construction engineering.

He is currently the Head of Infrastructure in the Judiciary and a corporate member of UIPE and Chairman of Higstan Technical Services Limited, among others.



Ms Ruth Asiimwe Kanyaruru (Board Member) - Ms Kanyaruru holds a Masters Degree in Development Studies from the Institute of Social Studies (ISS) in The Hague, Netherlands and a Bachelor of Arts from Makerere University. She has undergone Post Graduate training in Project Planning and Management from Aalborg Technical College, Ramboll in Denmark and has served as a Policy Analyst in the Ministry of Information Communications and Technology (ICT). She is a Member of Rotary International and Women Peacemakers Programme (WPP).



Mr Daniel Nadhomi Luliro (Board Member) - Mr Nadhomi holds a Master of Arts (Geography) from Makerere University and a Bachelor of Arts Makerere University. He also holds a Masters in Geo-Information Science (ITC) Enschede Netherlands, and is a PhD fellow at Makerere University. He is currently a Lecturer in the Department of Geography, Geo-Information and Climatic Sciences.



Mrs Ziria Aliza Ndifuna (Board Member) - Mrs Ndifuna is a Financial and Strategic Management Expert who has served in various organisations in senior positions and roles as Chief Accountant, Senior Management Analyst, Principal Consultant, rising through ranks to become Head Consultancy Division and Head Entrepreneurship Division in Management Training and Advisory Centre (MTAC). She served as a National Expert and Institutional Specialist in the Uganda Government Restructuring and Re-organisation (1993-2000).

She has also participated in the divestiture of various government departments, including the department of Museums and Antiquities and, the department of Records and Archives. Mrs Ndifuna served as the Vice Chairperson of the Local Government Finance Commission for the period 1999 - 2008. She holds a Masters in Business Administration from Maastricht/ESAMI and a Bachelor of Commerce (Accounts) from Makerere University Kampala and several other Post Graduate qualifications in various fields.





Mr Denis Nduhura Mwebaze (Board Member) - Mr Nduhura holds a Master of Arts in Development Studies from the University of East Anglia, Norwich, United Kingdom and a Bachelor of Arts in Social Administration from Makerere University, Kampala, Uganda. Mr Nduhura holds the position of Country Director of Agency for Cooperation and Research in Development (ACORD), an Africa led International Alliance working for Social Justice and Development in Africa. He holds and has carried out several research and Consultancies for ACORD, World Food Programme, DANIDA, Plan International ASPSP/ Ministry of Agriculture, Animal Industry and Fisheries.



Dr Cecilia Atim Oyet (Board Member) - Dr Oyet holds a Bachelor of Veterinary Medicine (BVM) from Makerere University. She is a Board Member of "From Nobody to Somebody" and has pioneered the formation of Winning Women, the Women's Department of the Life Line Ministry, Rural Farmers' Scheme of formerly Uganda Commercial Bank at Lira Branch, and the Corporate Credit Section of Centenary Bank.



Eng Richard Cong (Board Member) - Eng Cong holds a Master's of Science (Water and Waste Eng) from Loughborough University, England and a Bachelor of Science from Makerere University Kampala, Uganda. He is the Ag Director, Directorate of Water Development (DWD), Minister of Water and Environment (MoWE). Eng Cong is a registered Engineer with the Engineers Registration Board (Uganda) and a corporate member of the Uganda Institution of Professional Engineers (UIPE) and also a member of National Council for Children.



Dr Eng Silver Mugisha is the Managing Director, NWSC. He holds a PhD in Civil Engineering (Makerere University). He has been in NWSC since 1994 and has been among the key champions in the design of almost all the performance improvement programmes that have been implemented in the Corporation since 1998; which resulted into the significant turnaround of NWSC's financial and operational performance. Dr Eng Mugisha has wide and long experience in institutional development involving public-private and public-public partnerships. He has published widely in numerous research journals of international repute.

He is the 1<sup>st</sup> President of the Scientific and Technical Council (STC) of the African Water Association (AfWA). Dr Eng Mugisha is a member of the International Water Association (IWA) Programmes Committee, which is responsible for the technical planning of congress programmes. He is also a research associate with the Public Utilities Research Centre (PURC), University of Florida, USA ■



### EXTERNAL SERVICES (ES) - BENCHMARKING VISITS

by Joseph Ndegeya, Dr Dorothy Kobel and Dr Rose Kaggwa

1. Uttarakhand State (India)
2. UN-Habitat workshop for water utilities in the East Africa countries
3. Thika Water and Sewerage Company (Kenya) brought in the Board and Top Managers for benchmarking in utility management
4. Tanzania Electric Supply Company (TANES-CO)
5. Taraba State Water Supply Agency (Nigeria) Board and Top Managers
6. Enugu State Ministry of Water Resources
7. Medical Stores of Tanzania
8. Ghana Water Company Ltd

### UTTARAKHAND STATE OFFICIALS

The delegation of seven senior officials from Uttarakhand State in India arrived in Uganda on 3<sup>rd</sup> February 2013 led by the Honourable Minister of Drinking Water and Education. They were generally well, alert and in good health throughout their stay in the country. They started the study tour at the Ministry of Water and Environment where they were given three presentations namely:

- a) Sector Management and Performance
- b) Experience with PSPs
- c) Planning, Financing and Development of Small Towns and Rural Growth Centres



The Commissioner for Urban Water and Sanitation Eng Dominic Kavutse (L) received the Uttarakhand delegation led by the Minister for Water and Education, Hon Mantri Prasad Naithani (R) at the Ministry of Water and Environment.



Eng Alex Gisagara (3<sup>rd</sup> L) welcoming the delegation



Business Relations and Development Manager Joseph Ndegeya (1<sup>st</sup> L) posed for a photo with some of the delegates





Mr Silver Emuding, GM Jinja making a presentation to the delegation    The Minister inspecting a public standpost at Buwenge Town

### Tanzania Electric Supply Company (TANESCO)

TANESCO sent in teams from Generation, Transmission and ICT to benchmark from NWSC performance and learn from their counterpart in Uganda namely, Uganda Electricity Generation Co. Ltd. (UEGCL)/Eskom and Uganda Electricity Transmission Co. Ltd (UETCL). They came in two teams (first one 15<sup>th</sup> - 19<sup>th</sup> and the second 22<sup>nd</sup> - 27<sup>th</sup> August 2013).

They had sessions in NWSC and UETCL, and later field trips to the power generation plants (both hydro and thermal) and sub-stations. Group discussions were also made to help the teams compile their findings and prepare for "take-homes".



Dr Rose Kaggwa (R) greeting the Team Leader Eng. Mhaiki



TANESCO team getting presentations at IREC



Eng D Mhaiki and Eng K M Bishaija led the team.



Group Photo of TANESCO Team 1





TANESCO Team at Namanve Thermal Plant and Sub-station. Eng Mawanda of UETCL guided the tour



At the Nalubaale Hydro-Power Dam Control Centre



Mr John Gerry (3<sup>rd</sup> R) of Bujagali Energy Ltd welcomed the TANESCO Team and briefed them on the PPP Bujagali Project



TANESCO Team touring the Bujagali Hydropower Dam



Generation Group formulating their strategies



Transmission Group in their session preparing take-homes



### Taraba State Water Supply Agency (Nigeria)



The Chairman of Board of Directors Mr. Nehemiah Dankano (L) led the Taraba delegation. Next to him is the GM Taraba State Water Supply Agency Eng. Musa Buba Siam



The Taraba delegation at the Opening Session by the NWSC Management represented by Dr Rose Kaggwa, Ag Chief Manager-Institutional Development and External Services.



Mr Richard Nzapfurundi (Reservoir Operator - in gum boots) briefing Taraba delegation about reservoir operations at Muyenga Hill



Taraba delegation toured Gaba Water Treatment Works and Plant Operations Engineer Charles Kiyimba guided them.



Ms Monica Wambi (L) welcoming Taraba delegation at Entebbe Area Offices



Taraba delegation toured Entebbe Area facilities including the water treatment plant

### Medical Stores of Tanzania

The Medical Stores of Tanzania are in the process of decentralizing their operations and establishing strategic business units and the scorecard management system. The delegation was here from 6<sup>th</sup> to 12<sup>th</sup> October 2013 to benchmark on decentralization process that NWSC has done. They had presentation at IREC by ES Experts and field trips to get first hand information from the implementers. They further toured NSSF Uganda and ABACUS for more experience sharing in the management systems.



Senior staff from Medical Stores of Tanzania were at NWSC to benchmark on establishing Strategic Business Units and using the Scorecard System







Part of the MSD Tanzania participants.



The GM Entebbe (Mr Jackson Turyahurira, 3<sup>rd</sup> R) met the staff of Tanzania Medical Stores and presented to them the Operations of a Strategic Business Unit under decentralisation.

### Ghana Water Company Ltd

GWCL was here between 7<sup>th</sup> and 11<sup>th</sup> October 2013 with the main focus on urban poor programmes undertaken by NWSC in Kampala. They had presentations from the staff that were in the programme from inception to implementation and the current Branch Manager.



Ghana Water visitors had presentations by NWSC facilitators at the International Resource Centre (IREC). From L to R is Nii Okai Kotei, Ms Faustine Boachie, Divine R K Morny, Cephas T Oguah and Kwabena Tabiri



Ghana Water guests posed with Dr Dorothy Kobel Manager External Services (3<sup>rd</sup> R) and J B Otema, Principal Sociologist (1<sup>st</sup> L).



They toured the Pro-Poor facilities pre-paid standpipe and slab type of toilet and ecosan latrine



Dr. Rose C Kaggwa, Ag CM-IDES (L) had a brief discussion with the Ghana Water delegation in her office



## Areas Performance Score Card, July 2013 - September 2013

by Christopher Mwandha and Beat Nabacwa

Area		July 2013 Performance				August 2013 Performance				September 2013 Performance			
		NRW	WR	COM (1000 US\$)	Incentive Earned (1000 US\$)	NRW	WR	COM (1000 US\$)	Incentive Earned (1000 US\$)	NRW	WR	COM (1000 US\$)	Incentive Earned (1000 US\$)
Kampala	Actual	38.8 %	53.1 %	4,684,528	193,608	39.1 %	57.0 %	4,045,194	159,852	38.9 %	58.1 %	4,178,557	166,693
	Target	35.0 %	53.2 %	4,941,326	1,085,924	35.0 %	53.2 %	4,941,326	1,085,924	35.0 %	53.2 %	4,941,326	1,085,924
Jinja	Actual	38.3 %	52.2 %	267,757	0	36.8 %	48.0 %	298,345	0	40.0 %	48.7 %	350,415	11,270
	Target	28.0 %	49.0 %	562,572	144,808	28.0 %	49 %	562,572	144,808	28.0 %	49 %	562,572	144,808
Entebbe	Actual	24.3 %	47.5 %	226,213	0	25.7 %	50.0 %	281,153	0	22.8 %	48.7 %	377,251	8,292
	Target	16.0 %	46.0 %	517,269	140,825	16 %	46 %	517,269	140,825	16 %	46 %	517,269	140,825
Mbale	Actual	10.4 %	65.8 %	61,157	0	9.8 %	68.0 %	77,262	4,622	9.9 %	71.1 %	103,304	9,721
	Target	9.0 %	69.0 %	132,671	94,183	9 %	69 %	132,671	94,183	9 %	69 %	132,671	94,183
Mbarara	Actual	13.2 %	54.1 %	152,191	0	11.9 %	59.0 %	183,508	6,315	11.5 %	61.0 %	226,538	7,027
	Target	8.0 %	46.0 %	394,961	101,649	8 %	46 %	394,961	101,649	8 %	46 %	394,961	101,649
Masaka	Actual	33.1 %	64.6 %	163,578	43,986	33.4 %	73.0 %	88,939	27,386	31.6 %	81.2 %	89,110	28,615
	Target	28.0 %	81.0 %	62,386	61,811	28 %	81 %	62,386	61,811	28 %	81 %	62,386	61,811
Tororo	Actual	10.6 %	108.2 %	-15,583	0	13.2 %	112.8 %	-17,418	0	14.1 %	120.2 %	-14,142	0
	Target	8.0 %	91.0 %	20,717	41,989	8.0 %	91 %	20,717	41,989	8.0 %	91 %	20,717	41,989
Soroti	Actual	13.2 %	65.8 %	30,950	5,402	14.0 %	76.6 %	31,816	5,875	13.8 %	85.0 %	30,756	5,370
	Target	11.0 %	70.0 %	59,257	38,705	11.0 %	70 %	59,257	38,705	11.0 %	70 %	59,257	38,705
Arua	Actual	36.8 %	114.4 %	-21,312	0	31.1 %	95.5 %	-2,525	0	29.9 %	105.3 %	-401	0
	Target	16.0 %	81.0 %	29,231	31,848	16.0 %	81 %	29,231	31,848	16.0 %	81 %	29,231	31,848
Gulu	Actual	24.6 %	60.9 %	15,738	0	23.7 %	65.8 %	31,842	819	23.4 %	66.3 %	36,552	1,161
	Target	17.0 %	52.0 %	133,416	47,124	17.0 %	52 %	133,416	47,124	17.0 %	52 %	133,416	47,124
Bushenyi	Actual	15.0 %	90.4 %	-5,319	1,653	15.0 %	103.9 %	-1,764	2,990	15.0 %	106.2 %	4,772	7,611
	Target	17.0 %	95.0 %	7,730	28,730	17.0 %	95 %	7,730	28,730	17.0 %	95 %	7,730	28,730
Kabale	Actual	14.2 %	74.8 %	26,999	9,095	13.4 %	76.6 %	28,089	9,484	12.1 %	79.3 %	34,309	13,002
	Target	10.0 %	91.0 %	17,870	40,385	10.0 %	91.0 %	17,870	40,385	10.0 %	91.0 %	17,870	40,385
Lira	Actual	12.9 %	66.0 %	65,488	3,988	13.2 %	69.0 %	69,706	4,210	13.4 %	77.2 %	59,763	3,174
	Target	9.0 %	68.0 %	93,984	53,387	9.0 %	68.0 %	93,984	53,387	9.0 %	68.0 %	93,984	53,387



Area		July 2013 Performance					August 2013 Performance					September 2013 Performance				
		NRW	WR	COM ('000 US\$)	Incentive Earned ('000 US\$)		NRW	WR	COM ('000 US\$)	Incentive Earned ('000 US\$)		NRW	WR	COM ('000 US\$)	Incentive Earned ('000 US\$)	
Fort Portal	Actual	18.7 %	70.9 %	31,980	3,193		16.0 %	67.6 %	37,100	4,735		16.3 %	67.0 %	54,884	8,402	
	Target	15.0 %	67.0 %	61,794	42,652		15.0 %	67.0 %	61,794	42,652		15.0 %	67.0 %	61,794	42,652	
Kasese	Actual	18.5 %	45.3 %	70,677	7,595		19.2 %	47.7 %	66,103	8,266		17.6 %	55.0 %	57,694	5,164	
	Target	15.0 %	53.0 %	67,008	29,386		15.0 %	53.0 %	67,008	29,386		15.0 %	53.0 %	67,008	29,386	
Hoima	Actual	29.2 %	84.8 %	-1,678	5,078		27.2 %	92.7 %	974	8,123		27.1 %	105.8 %	-7,194	4,745	
	Target	22.0 %	107.0 %	-1,431	35,237		22.0 %	107.0 %	-1,431	35,237		22.0 %	107.0 %	-1,431	35,237	
Lugazi	Actual	14.4 %	92.0 %	4,625	9,706		16.2 %	114.4 %	-7,801	6,538		16.2 %	131.8 %	-12,927	2,396	
	Target	20.0 %	115.0 %	-5,719	23,746		20.0 %	115.0 %	-5,719	23,746		20.0 %	115.0 %	-5,719	23,746	
Masindi	Actual	15.1 %	93.0 %	-26,036	0		14.2 %	92.6 %	-24,209	0		13.1 %	100.6 %	-15,627	1,857	
	Target	10.0 %	92.0 %	13,509	72,895		10.0 %	92.0 %	13,509	72,895		10.0 %	92.0 %	13,509	72,895	
Mubende	Actual	7.9 %	88.8 %	-12,859	2,976		7.7 %	99.5 %	-15,231	0		9.5 %	105.6 %	-14,972	0	
	Target	8.0 %	94.0 %	3,534	34,822		8.0 %	91.8 %	10,568	28,479		8.0 %	91.8 %	10,568	28,479	
Iganga	Actual	20.7 %	55.3 %	33,653	243		14.4 %	61.8 %	30,023	0		15.3 %	56.8 %	36,049	869	
	Target	19.0 %	47.0 %	49,946	23,526		19.0 %	47.0 %	49,946	23,526		19.0 %	47.0 %	49,946	23,526	
Kisoro	Actual	30.8 %	43.4 %	-37,300	0		33.9 %	63.4 %	-6,504	2,978		35.1 %	79.6 %	-8,732	3,350	
	Target	28.0 %	70.0 %	31,371	28,306		28.0 %	70.0 %	31,371	28,306		28.0 %	70.0 %	31,371	28,306	
Mityana	Actual	48.6 %	61.4 %	-8,308	3,349		44.8 %	96.0 %	-10,366	3,376		43.9 %	110.1 %	-9,709	4,764	
	Target	25.0 %	85.0 %	19,557	26,779		25.0 %	85.0 %	19,557	26,779		25.0 %	85.0 %	19,557	26,779	
Nebbi	Actual	33.4 %	104.6 %	-22,027	2,737		31.8 %	133.9 %	-21,332	2,779		32.0 %	217.3 %	-33,439	724	
	Target	20.0 %	129.0 %	-12,611	23,793		20.0 %	129.0 %	-12,611	23,793		20.0 %	129.0 %	-12,611	23,793	
Kitgum	Actual	0.2 %	110.0 %	-23,310	7,107		1.8 %	157.4 %	-26,178	7,277		12.2 %	176.7 %	-26,736	6,890	
	Target	20.0 %	120.0 %	-12,442	26,636		20.0 %	120.0 %	-12,442	26,636		20.0 %	120.0 %	-12,442	26,636	
Pader	Actual	33.6 %	259.6 %	-6,441	3,963		28.8 %	331.1 %	-10,089	3,337		28.6 %	389.1 %	-11,186	3,013	
	Target	15.0 %	156.0 %	-14,970	13,024		15.0 %	156.0 %	-14,970	13,024		15.0 %	156.0 %	-14,970	13,024	
NRW - Non-revenue water, WR - Working Ratio, COM - Cash Operating Margin, US\$ - Uganda Shillings																
Performance in a particular month represents the cumulative average performance from July 2013 to that particular month.																



<b>July 2013 Performance</b>	
Non-revenue Water (NRW):	The July 2013 performance indicated that only Bushenyi , Lugazi and Kitgum Areas achieved their NRW targets. All the other areas fell short.
Working Ratio (WR):	The following Areas achieved their working ratio targets, namely: Kampala, Mbale, Masaka, Soroti, Bushenyi, Kabale, Lira, Kasese, Hoima, Lugazi, Mubende, Kisoro, Mityana, Nebbi and Kitgum. The rest of the Areas were unable to achieve theirs.
Cash Operating Margin (COM):	With regard to cash operating margin, all areas were unable to achieve their cash operating margin targets, with the exception of the following Areas; Masaka, Kabale, Kasese and Lugazi.
Incentives Earned:	With the exception of Jinja, Entebbe, Mbale, Mbarara, Tororo, Arua, Gulu, Masindi and Kisoro, the rest of the Areas earned incentives during the month of July 2013.
<b>August 2013 Performance</b>	
Non-revenue Water (NRW):	During the month of August 2013, most of the Areas did not meet their NRW targets, except Bushenyi, Lugazi, Mubende, Iganga and Kitgum.
Working Ratio (WR):	Jinja, Mbale, Masaka, Kabale, Kasese, Hoima, Lugazi and Kisoro were the only areas that managed to achieve their working ratio targets. All the other Areas failed to achieve their targets during the month.
Cash Operating Margin (COM):	All Areas failed to achieve their COM targets - for the month of August 2013 - with exception of Masaka, Kabale, Hoima and Pader.
Incentives Earned:	With the exception of Jinja, Entebbe, Tororo, Arua, Masindi, Mubende and Iganga, the rest managed to earn incentives during the month of August 2013.
<b>September 2013 Performance</b>	
Non-revenue Water (NRW):	The performance for September 2013 indicates that only Bushenyi, Lugazi and Kitgum achieved their NRW target. All other Areas fell short of their targets.
Working Ratio (WR):	All the other Areas failed to achieve their targets, except Jinja, Kabale, Fort portal, and Hoima.
Cash Operating Margin (COM):	All Areas fell short of their targets except Masaka, Kabale and Pader. This was mainly attributed to escalated input costs.
Incentives Earned:	With the exception of Tororo, Arua and Mubende, the remaining Areas were able to earn incentives in September 2013.
<b>Overall Performance.</b>	
Non-revenue Water (NRW):	Only Bushenyi, Lugazi and Kitgum Areas managed to achieve their NRW targets throughout the period. Mubende and Iganga achieved the targets once i.e. in August 2013.



Working Ratio (WR):	Most of the Areas recorded a decline in their working Ratio over the period due to increased operating costs. Only Kabale and Hoima Areas were able to achieve their targets for the quarter.
Cash Operating Margin (COM):	The following Areas had the COM improve throughout the quarter (July - September 2013); Jinja, Entebbe, Mbale, Mbarara, Arua, Gulu, Bushenyi, Kabale, Fort portal and Masindi. This was attributed to improvement in collections and minimized costs. The Areas of Kasese and Lugazi had their COM declined through the period, however more effort should be put in reducing arrears, improving collection efficiency and minimizing expenditure.
Incentives Earned:	Areas have progressively earned incentives over the period - except Tororo and Arua which did not earn any incentive due to failure to achieve minimum standards for some performance indicators, particularly their COMs. For the period July - September 2013, a total of US\$ 876.7 million was transferred to Areas as incentives.

## Q&A with New NWSC Managing Director: Visionary Plans for Business Growth



### Q: Give a condensed background of NWSC?

**A:** The National Water and Sewerage Corporation (NWSC) was initially established by Decree No. 34 of 1972, following an earlier study on the need for improvement of water and sanitation services in the large urban centres of Uganda. The corporation was re-established and strengthened by the NWSC Statute of 1995 and the NWSC Act of 2000 (Cap 317), with the primary aim of revising the objectives, powers and structure of the Corporation and to enable it provide water and sewerage services on a commercially viable basis.

### Q. What is your role as the managing director of NWSC?

**A.** My role as the MD is to provide visionary and effective leadership to the NWSC team. I have to lead NWSC towards our vision of being, "A Leading Water Utility in the World." This is a vision we have for our customers and it is our desire that the customers experience the NWSC vision on an on-going basis through responsive, efficient, affordable, equitable, innovative and customer-oriented services.

### Q. How do you relate with staff, customers and stakeholders?

**A.** My relations with the staff, customers and stakeholders are based on the principles of situational leadership and on deeply knowing and acknowledging that it is my duty, obligation and opportunity to serve at the helm of NWSC. For the staff of NWSC, my approach is to maximize teamwork and performance accountability with a situational mix of democracy and charisma. For our customers, the approach and relations are based on our slogan, "The Customer is the Reason We Exist."

Customer relations are thus based on the customer voice because we have to strive to serve according to our customers' needs. NWSC cannot operate in isolation. We have to work with and alongside



stakeholders in the pursuit of our services. I thus view stakeholders as partners in the service delivery and this means that we recognize the supplementary and complementary roles played by our stakeholders in the NWSC services delivery and we relate with stakeholders on partnering principles.

**Q. As MD, what stakeholder value do you bring to NWSC?**

**A.** To our customers, I pledge improved supply reliability, increased access to services and increased and friendly customer service options. To the NWSC employees, I promise increased employee and job satisfaction as well as improved staff remuneration that is performance-based. To the government and the development partners, I commit to good governance in NWSC, increased service coverage (more than 85 %), improved capital investment efficiency and improved financial sustainability of the Corporation. To our providers and creditors, I pledge objective and transparent procurement of providers as well as a more effective credit management framework.

**Q. How do you intend to turnaround NWSC?**

**A.** In consultation with ministry of Water and Environment, I expect to increase the number of towns served by NWSC from the current 28 to at least 80 within five years. This will be a major transformation in NWSC and requires us to adapt accordingly. I thus intend to reorganize NWSC to have semi-autonomous regional structures to cope with the growth in coverage and ensure effective service delivery and customer outreach.

I will ensure that service reliability and service delivery are enhanced through infrastructure expansion and innovative business solutions and process re-engineering and this will include introducing a number of systems and policies such as the asset management system, enterprise resource planning, and risk management policy. I further intend to strengthen and expand partnerships, collaborations and stakeholder engagement modes for the improved governance, transparency, learning and service/performance accountability of NWSC. I will also embark on the diversification of NWSC's scope of services and income sources.

**Q. What are some of your major customer care initiatives?**

**A.** I have five major initiatives that I am pursuing in order to enhance customer care in NWSC and these include: (i) introducing web-based customer service options, (ii) strengthened and more relevant water councils, (iii) strengthening customer relations with the customer-account-management approaches, (iv) strengthening the call centre with improved coordination and monitoring roles and, (v) improving the customer voice and feedback.

**Q. What employee initiatives do you have in place?**

**A.** I am focusing on six initiatives that include the following: (i) rationalize employee costs with a view to increase staff remuneration, (ii) innovative staff welfare schemes like the matching funds strategy and housing, etc, (iii) a robust occupational health and safety framework, (iv) predictive human resource management and succession planning, (v) performance accountability and productivity measurement system for teams and individual staff, and (vi) R&D policies that encourage staff to innovate.

**Q. Under corporate social responsibility (CSR), what are the major activities that you are undertaking?**

**A.** In the past, we have been working with hospitals, babies' homes as well as destitute-homes, to mention a few, and we intend to maintain these relationships. In addition, we shall introduce new areas of CSR including the promotion of rainwater harvesting in the peri-urban not served by the NWSC pipe network. We believe this would be a very good input into the government's goal of reaching the 100 % water service coverage.

Further to rainwater harvesting, we have embarked on contributing to the broader sanitation improvement efforts although our mandate is limited to sewerage. We are constructing public toilets and working together with the central government and urban authorities to ensure that such facilities are sustainably operated to the benefit of the target communities. Other areas of CSR that we intend to scale up include environment protection, forestry, education and vocational training, etc.



**Q. How many customers do you serve currently? What are your future plans?**

**A.** We currently have about 317,000 water connections representing the population served of about 3 million people. This number of connections includes all consumer categories i.e. public stand posts (PSPs), domestic, commercial, industry, institutions and the government. The PSPs and domestic connections account for 80 per cent of the total connections. We plan to increase the water connections to at least 450,000 by June 2018 thus increasing the served population by about 50 %.

**Q. What are some of the key milestones for NWSC?**

**A.** Some the key milestones, we envisage in the next five years include the following: (i) rehabilitation and expansion of the water and sewerage systems for the following towns: Kampala, greater metropolitan Kampala-Wakiso -Mukono, Gulu, Arua, Mbale, Bushenyi, Masaka and Mbarara (ii) increased geographical coverage of NWSC from 28 to 80 towns, (iii) comprehensive asset management system, (iv) operational enterprise resource planning system, (v) automation of operational processes, (vi) electronic archiving and document management solutions, (vii) elevated sewerage services profile,

(viii) robust R&D framework and (ix) staff satisfaction surveys complemented with corrective action plans.

**Q. What major challenges do you face in your operations?**

**A.** The major challenges we face in our operations include: (i) deteriorating raw water sources, (ii) rapid urban population growth causing demand to outstrip our capacity and resulting in water shortages, (iii) water theft and illegal water use, (iv) counterfeit and poor quality products on the market and (v) inadequate physical planning to cater for rehabilitation and expansion of public utility infrastructure.

## NEW DAWN

- Rehabilitation and expansion of the water and sewerage systems for the key towns
- Increased geographical coverage of NWSC from 28 - 80 towns
- Comprehensive asset management system
- Operational enterprise resource planning system
- Automation of operational processes
- Electronic archiving and document management solutions
- Elevated sewerage services profile

## Young Water Professionals: Career Development Initiatives

by Gerald Ahabwe



### Background

Young people constitute up to 70 % in many African countries and they also form the biggest cohort of the un employed. What this means is that addressing the development challenges necessitates putting the youth at the center of development planning. We also know that youth energy and desire for change represent a substantial human resource potential in both quantitative and qualitative ways of innovation and institutional development. The quest to address the development agenda particularly for the water sector offers many opportunities in form of entry points for youth action.

Globally, both the International Water Association (IWA) and the African Water Association (AfWA) accentuate

that to fulfil the present and future needs of the water sector, continuous development of a workforce which is adequate in size, capable in skills and strong in leadership is required. The Young Water Professionals program therefore helps to build future leaders and as such, the role of young water professionals, is high on the agenda of the two great institutions. Other reputable organisations like the Global Water Partnership (GWP) and the African Ministerial Council on Water (AMCOW) have equally articulated youth strategies in their mainstream programs.

### **Vision and Mission of the YWP program**

The vision of the YWP program is to be a network that fosters knowledge sharing and learning in order to fulfil present and future needs of the water sector. The YWP mission is to address water challenges through empowering Young Water Professionals in knowledge sharing and offering a point of benchmark.

### **Objectives of the YWP program**

The four main objectives of the YWP program are; Career Development, Networking, Water Sector Support and Program relevance. In line with these noble objectives, one of our strategic approaches is to provide YWPs with support to enhance their career development through the development of resources, organization of a series of national Career Fairs and capacity building workshops.

### **Career Fair theme and objectives**

This year's annual Career Fair theme was 'Empowering the youths through innovative thinking.'. The Career Fair embraced different approaches not limited to interactive plenary sessions, paper presentations, exhibitions and discussions. The main aim was to strengthen the establishing of networks for YWPs and their contribution to the current debate and thinking on water related issues with the following specific objectives:

- i. To address key issues among the youth/students and expose them to how different career paths link them to the water sector.
- ii. To provide a forum for students across Uganda to share experiences and elaborate on their role in addressing the challenges facing the Water sector in Uganda
- iii. To sensitize young people in making appropriate career choices.
- iv. To establish networks for students regarding their career choices as well as with employers.
- v. To showcase innovations and entrepreneurial works across the Water, Sanitation and Hygiene (WASH) sector and create inter- sectoral linkages.

The Fair attracted 220 participants and exhibitors from

the following institutions; Makerere University, Kyambogo University, Makerere University Business School, Nakawa Vocational Training Institute, Uganda Industrial Research Institute, The Microsoft Innovations Center, Global Water Partnership (GWP), GIZ, JUNACO (TZ) Ltd, Uganda National Examinations Board (UNEB), Ministry of Water and Environment (MoWE) and the National Water and Sewerage Corporation (NWSC).

The Chief Guest at the Career Fair was Dr. Cecilia Oyet who heads the Human Resources Committee of NWSC Board of Directors. She observed that the world is increasingly becoming more competitive and therefore the future belongs to entrepreneurs and innovators. Youths were encouraged to cherish opportunities availed to them to participate in such Career Fairs and to always look up for the excellent spirit as this attracts success. She urged participants to continuously develop skills, be strong in will and leadership as they aspire to make a difference in the sector.

Other distinguished mentors to YWPs who graced the Career Fair included the Dr. Eng. Silver Mugisha (NWSC MD), Mr. Fagil Mandy (UNEB Chairman), Mr. Patrick Safari (Regional Coordinator for Eastern Africa, Global Water Partnership), Dr. Martin Kalibbala (NWSC Training Manager), Eng. Michael O'leary (GIZ Technical Advisor to MoWE), Eng. Sonko Kiwanuka (YWP-Uganda Chapter Patron) and Mrs. Teddy Tindamanyire (Principal Officer at MoWE - Environment Department).



Chief Guest, Dr Cecilia Oyet (NWSC Board member) and other mentors admire innovations of making paper from banana fibres by some YWPs during the Career Fair Exhibition.

Key messages from the Mentors to YWPs at the Career Fair

- i. Irrespective of one's career choice, each one has an important role to play in the smooth running of the invaluable water sector. Let's explore this further



like this: whereas the sector is in need of Engineers to design the water systems, we need Economists because water is a finite good (non-renewable) while Social scientists are needed to create demand for the water services. Technicians are required to maintain water systems; Chemists are needed to ensure water quality and to develop appropriate ways to maintain water quality while we also need Planners to synchronize water systems and other infrastructure as every town or village needs water. Information technology specialists are also much needed to develop and upgrade applications to manage water systems. The list is endless as it includes accountants, hydrologists, surveyors, statisticians, marketers and entrepreneurs—all to the service of the water sector.

- ii. Definition of the concept of Innovation: The ability to see what everyone sees, and then develop thoughts no one has thought in order to make what no one has made. Quoting John Maxwell in his book: Thinking for Change, it was noted that only 2.5 % of all people innovate! The remaining 97.5% just follow routines. This means that with Uganda's population of about 34 million people, only 850,000 have potential to innovate new products/services while the remaining 33,150,000 people are just consumers.
- iii. The major hindrances to innovation among the youth include; failure to take on challenges, inability to imbue positive emotions of desire, love, faith, hope, enthusiasm, joy while majorly possessing failure emotions like: fear, anger, greed, revenge, selfishness, superstition.
- iv. It was noted that many youths do not fire up their minds to operate largely and worse still, majority homes and schools do not offer the right environment for innovation. Many young people are apparently swallowed up by too much consumerism, dependency

syndromes, and comfort zones with little or no focus on big picture thinking, realistic thinking, all possibility thinking, strategic thinking, creative thinking and shared thinking.

- v. In order to stimulate innovation, young people are encouraged to take up leadership positions, engage in debates, group discussions, co-curricular (sports/ music dance and drama, drawing/designing, experimenting/ trying out, competitions and exhibitions.
- vi. The youth ought to develop a mind of an entrepreneur who sees an opportunity in every problem whereas ordinary minds see a problem even in an opportunity.
- vii. Youth need to be mindful of the kind of people they associate with for the adage goes "when you are surrounded by 09 fools, most likely you will become the 10<sup>th</sup>.
- viii. The youths should teach themselves emotional intelligence besides the knowledge acquired in formal systems of education. Emotional intelligence is about the ability to know oneself, self-respect and being disciplined.

In conclusion, allow me to reiterate the voice of the YWP Executive team headed by Gilbert AKOL, in extending our sincere appreciation to all institutions and development partners who continue to support our initiatives. We are truly grateful to the Management of NWSC for not only hosting us but also contributing immensely to the existence of the YWP program. Other Institutions which have continued to support YWP initiatives include the Ministry of Water and Environment, GIZ, GWP, WaterAid, ITRON, JUNACO (TZ) Ltd, GWP, DAVIS & SHIRTLIFF, SOGEA SATOM, USAID-FABRI, The Uganda Industrial Research Institute and the Institutions of Learning ■

*The author is the General Secretary - Young Water Professionals, Uganda Chapter*

WHAT  
DO YOU  
THINK

?

To comment on this article, please email up to 500 words to the Editorial Panel at: [editorial@nwsc.co.ug](mailto:editorial@nwsc.co.ug). A selection of comments received will be published in the next issue of the magazine. The Water Herald relies entirely on contributions sent in by NWSC staff, customers and other stakeholders. Articles should be 1000-2500 words long, with adequate illustrations and references. Please contact the Chief Editor for further information.



# PICTORIAL

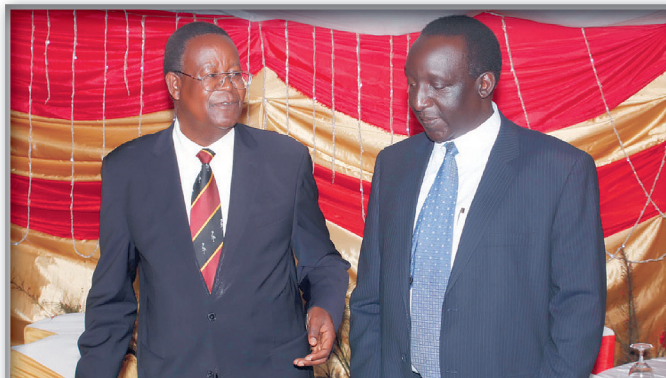
## End Of Year Party

Volume 4, Issue 3, October-December 2013

18<sup>th</sup> December 2013

# WATER HERALD

Catalysts for Business Growth in WATSAN Utilities





## NWSC Launches 5-Year Strategic Direction (2013-2018)



Prof Hon Ephraim Kamuntu (Minister of Water and Environment, centre) and Dr Eng Christopher Ebal (Ag Board Chairman NWSC, 2nd L), and Dr Eng Silver Mugisha (NWSC-MD, L) graced the launching ceremony of the NWSC 5-Year Strategic Direction (SD).



Eng Johnson Amayo (Chief Manager, Planning and Capital Development) gives a brief overview of the NWSC 5-Year SD (2013-2018) to the invited guests and NWSC staff.



Signing ceremony: Dr Eng Silver Mugisha (MD-NWSC) and a contractor's representative sign a construction works contract, as part of implementing the NWSC 5-Year SD.



A cross section of NWSC staff who attended the launching ceremony.

## Prime Minister officially opens UTAMU IT Workshop



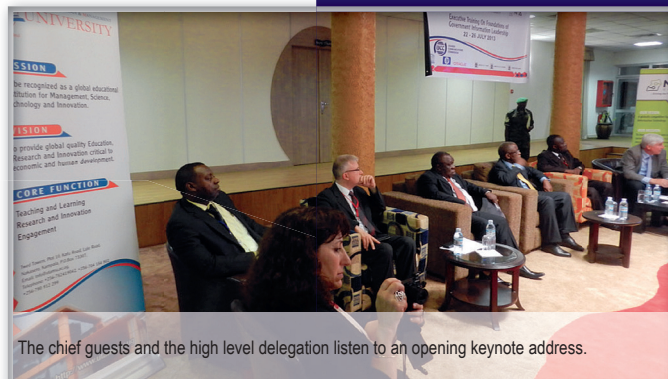
Hon Amama Mbabazi, Prime Minister of the Republic of Uganda officially opened the Uganda Technology and Management University (UTAMU) IT high level workshop.



Participants from eight countries across the globe attended the 2-day sessions.



Attention as the national anthem was played. Prof Vernasius Baryamureeba (UTAMU Vice Chancellor, 4th R) also graced the opening session.



The chief guests and the high level delegation listen to an opening keynote address.



# Some Famous Quotes on Water

Volume 4, Issue 3, October-December 2013

(source: [www.jperret.tripod.com](http://www.jperret.tripod.com))

When the well is dry, then we get to know the worth of water (Benjamin Franklin, 1746).

Water has become a highly precious resource. There are some places where a barrel of water costs more than a barrel of oil (Lloyd Axworthy, 1999).

Combating non-revenue water is like cycling uphill, there is no room for relenting (Ek Sonn Chan, 2010).

Water is the one substance from which the earth can conceal nothing; it sucks out its innermost secrets and brings them to our very lips (Jean Giraudoux, 1946).

All the water that will ever be is, right now (National Geographic, 1993).

More than one-half of the world's major rivers are being seriously depleted and polluted, degrading and poisoning the surrounding ecosystems, thus threatening the health and livelihood of people who depend upon them for irrigation, drinking and industrial water (Ismail Serageldin, 1999).

If you gave me several million years, there would be nothing that did not grow in beauty if it were surrounded by water (Jan Erik Vold, 1970).

Water is H<sub>2</sub>O, hydrogen two parts, oxygen one, but there is also a third thing, that makes water and nobody knows what that is (David Lawrence, 1929).

Water has no taste, no color, no odor; it cannot be defined, art relished while ever mysterious. Not necessary to life, but rather life itself. It fills us with a gratification that exceeds the delight of the senses (Antoine Saint-Exupery, 1939).

The crisis of our diminishing water resources is just as severe - if less obviously immediate - as any war time crisis we have ever faced. Our survival is just as much at stake as it was at the time of Pearl Harbor, during World War II (Jim Wright, 1966).

High quality water is more than the dream of the conservationists, more than a political slogan; high quality water, in the right quantity at the right place at the right time, is essential to health, recreation, and economic growth (Edmund S Muskie, 1966).

Children of a culture born in a water-rich environment, we have never really learned how important water is to us. We understand it, but we do not respect it (William Ashworth, 1982).

Of all our planet's activities - geological movements, the reproduction and decay of biota, and even the disruptive propensities of certain species (elephants and humans come to mind) - no force is greater than the hydrologic cycle (Richard Bangs & Christian Kallen, 1985).

Between earth and earth's atmosphere, the amount of water remains constant; there is never a drop more, never a drop less. This is a story of circular infinity of a planet birthing itself (Linda Hogan, 1990).

Filthy water cannot be washed (West African Proverb).

If you could tomorrow morning make water clean in the world, you would have done, the best thing you could have done for improving human health by improving environmental quality (William Clark, 1988).

In every glass of water we drink, some of the water has already passed through fishes, trees, bacteria, worms in the soil, and many other organisms, including people. Living systems cleanse water and make it fit, among other things, for human consumption (Elliot Norse, 1985).

Chesapeake bay is an immense outdoor protein factory (Henry L Mencken, 1940).

Estuaries are a happy land, rich in the continent itself, stirred by the forces of nature like the soup of a French chef; the home of myriad forms of life from bacteria and protozoan to grasses and mammals; the nursery, resting place, and refuge of countless (Stanley Cain, 1966).

Many estuaries produce more harvestable human food per acre than the best mid-western farmland. (Stanley Cain, 1966).

The estuary is the point where man, the sea - his immemorial ally and adversary - and the land meet and challenge each other (National Estuarine Pollution Study, US Interior Department, 1969).

The oceans are the planet's last great living wilderness, man's only remaining frontier on earth, and perhaps his last chance to produce himself a rational species (John L Cullney, 1990).

The marsh, to him who enters it in a receptive mood, holds, besides mosquitoes and stagnation, melody, the mystery of unknown waters, and the sweetness of Nature undisturbed by man (Charles W Beebe, 1906).

Only those people that have directly experienced the wetlands that line the shore can appreciate their mystic qualities. The beauty of rising mists at dusk, ebb and flow of tides, merging of fresh and salt waters. (Delaware Wetlands, 1972).

Ye marshes, how candid and simple and nothing - withholding and free, ye publish yourselves to the sky and offer yourselves to the sea (Sidney Lanier, 1878).

Wetlands have a poor public image, yet they are among the earth's greatest natural assets, mankind's waterlogged wealth (Edward Maltby, 1986).



## Jokes and IT Satire

by Ronald Azairwe



"Nurse, get on the internet, go to SURGERY.COM, scroll down and click on the 'Are you totally lost?' icon."



"It's the latest innovation in office safety. When your computer crashes, an air bag is activated so you won't bang your head in frustration."

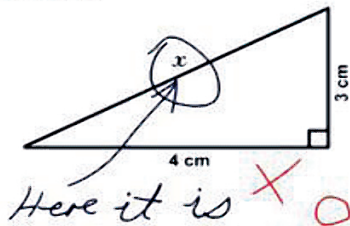


"You should check your e-mails more often. I fired you over three weeks ago."



Stupid computer keeps saying "you got mail"

3. Find  $x$ .



Ocular Trauma - by Wade Clarke ©2009

(d) Explain why phosphorus trichloride ( $\text{PCl}_3$ ) is polar.

God made it that way.

© Funnyexam.com

Solving equation by

$$\frac{1}{n} \sin x = ?$$

$$\frac{1}{n} \sin x =$$

© Funnyexam.com  $six = 6$

Joanna works in an office. Her computer is a stand-alone system. What is a stand-alone computer system?

It doesn't come with a chair

5. What do we call the science of classifying living things?

Racism.

© Funnyexam.com



## Procurement and Stake Holder Management in NWSC

by Nable Byaruhanga



The Government of Uganda initiated procurement reforms in 1997 which culminated into the enactment of the PPDA Act, 2003. PPDA Act (2003) was set up to have national (Central and Local) coverage where all government entities, including NWSC, are required to comply with procurement law. NWSC has procurement and disposal procedures as contained in the Logistics (Procurement and Inventory) Manual.

National Water and Sewerage Corporation, Procurement and Disposal Unit is dedicated to its vision of being the most efficient and customer focused Procurement department in the public sector in Africa; and its mission of providing the required supplies, works and services in a timely and professional manner to meet NWSC internal customer and external stakeholder procurement and disposal needs - in Accordance with the Public Procurement and Disposal of Public Assets Act and Regulations - and NWSC procedures, respectively.

Procurement and Disposal Unit is tasked with various responsibilities, among others, to ensure preparation of the consolidated procurement plan, ensure preparation of the statutory procurement and disposal reports, propose procurement and disposal policy amendments, timely value for money procurement, and disposal of goods in accordance with the PPDA Act, Regulations, Guidelines and procedures, ensure bidding/solicitations are in the required formats and are approved by relevant Authorities, review and present submissions to Contracts Committee, ensure approval of contracts documents by the Solicitor General, ensure approval of procurements by the NWSC Board, monitor contract implementation, performance and compliance of providers and provision of procurement professional guidance/advice to Top Management, Contracts Committees, user departments, etc.

A stakeholder in NWSC is an individual or group that has an interest in the proposed change and can influence or impact the success of the change (illustrated below). Stakeholder management involves building and maintaining relationships. It also involves preserving the active support and commitment of these people to the implementation of change, through program and/or project delivery. By understanding a stakeholder's motives and agenda it becomes possible

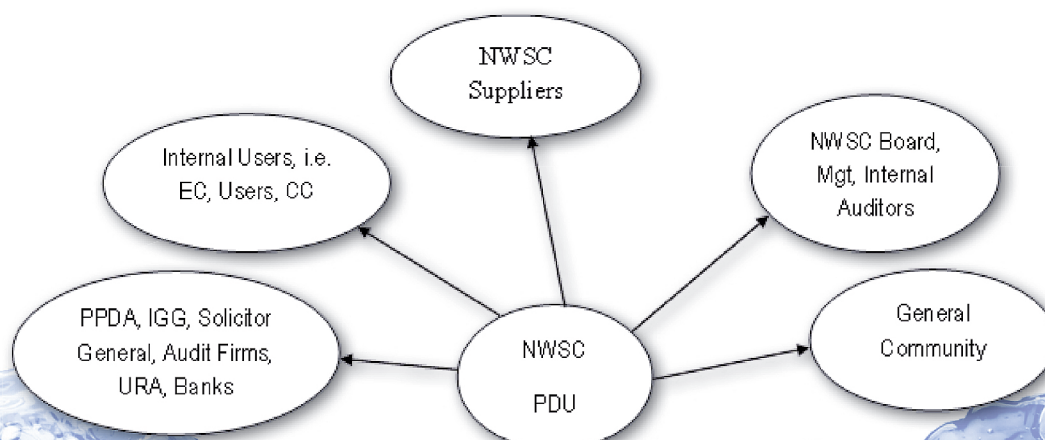
to influence the change process positively and to address issues that may be potential barriers to change.

One of the key factors in how successful our procurement team has been is the way in which we engage with our internal and external stakeholders, i.e. relationship management. If we are not on board with all stake holders, we would not be able to make the change that is required to improve the procurement process within NWSC.

We work with our clients - both internal and external - to professionally manage our stakeholder community by:

1. Identifying who our stakeholders are.
2. Defining their likely impact on our activities.
3. Identifying who will lead the relationship with these stakeholders.
4. Identifying who will work with the stakeholders.
5. Creating and implementing a stakeholder feedback and review process.
6. Working out how to manage newcomers to the organization.

NWSC -PDU values the importance of having good stakeholder relationships, and we have managed to identify our stake holders as identified into two groups at large i.e. external and internal customers. Internal customers include the end users





who requisition for services, supplies and works, and also help in the formulation of the procurement and budget plans for NWSC; we have the Contracts Committees, Management, Evaluation/Negotiation Committees and NWSC staff at large.

We liaise on a daily basis with these customers especially in consultations on how to procure quality services as per the procurement plan and financial year budget provisions, draft and improve performance indicators by providing daily, weekly and monthly status reports of the procurement processes of various items/services/works. The use of E-Procurement online System has made NWSC one of the first public institutions in Uganda to try an improved technological advancement, with the aim of making the procurement process faster and enable quick Requisitioner - PDU-End User interaction and approval process more efficient.

External customers include the Suppliers, PPDA, URA, Banks, Solicitor General's office and other personnel who are outside the NWSC jurisdiction of employment, we endeavor to maintain a good PDU-Supplier relationship by ensuring fairness and transparency in the bidding process, professionally interact to ensure adherence to the procurement acts and regulations in order to attain value for money and quality service delivery. We provide timely monthly reports to PPDA on the procurements and we have managed to ensure compliance with the PPDA act and regulations by the use of PPMS (Public Procurement Measurement Systems).

National Water and Sewerage Corporation Procurement and Disposal Unit has registered various achievement in the last three (03) years which include:

- The Corporation received an

award from PPDA for being the most compliant Procuring and Disposing Entity

- Prepared and implemented the consolidated Annual Procurement Plans for the FY 2009/10, FY 2010/11, and FY 2011/12
- Implementation of some E-procurement modules including Planning, Requisitioning and Bidding.
- Staff development through on job training and coaching such as e-procurement training.
- Continuous supply of water treatment chemicals, pipes and fittings
- Improved relations with our major stakeholders including our internal users, PPDA, Customs URA, Solicitor General's office, Ministry of finance, Contracts Committee, finance and accounts department
- Successfully concluded procurements under frame work contracting and implemented them for fuel, bulk chemicals, stationery, pipes and fittings, etc.

The PDU in its effort to perform its duties and also improve on its compliance has faced several challenges among other things which include:

1. Bureaucracy in NWSC and Lengthy public procurement process
2. Raising Procurement Requisitions (PRs) late
  - In view of statutory and administrative time frames , most procurement requisitions are submitted late and marked (urgent-immediate)
3. Unjustified Emergency Procurements.
  - Emergencies and when well justified, can be handled very fast

within the established procedures. Most urgent requirements are either not emergencies nor adequately justified by Users. "Urgent" procurements which are not emergencies frustrate PDU, Users.

- Lack of Clarity of specifications, terms of reference and schedule of works.
  - Most procurements are requisitioned without adequate and clear/detailed specifications, terms of reference; this delays the tendering process and may cause poor responses from bidders, less value for money and may lead to contract management problem
4. Too many Purchase requisitions for similar items.
    - There are too many requisitions for similar or commonly used items which are administratively costly and over work staff.
    - This is a clear indication of not aggregating requirements or deliberately splitting procurements to avoid a given procurement threshold which is a breach of procurement law.
    - Frustration by requisitions, PDU and stakeholders
  4. Too much paper work, delayed procurement and overworking of staff is frustrating to all involved. A very strong desire and inclination by Users, PDU and Management to put procedures aside in order to get results faster. This is worrying and may land all or some of us and NWSC in trouble
  5. Delayed payment of providers -leads to frustration of providers and loss of good will hence increased prices
  6. Capacity related challenges. Some Users, providers have inadequate capacity of the procedures.



7. Using a manual system to handle large volumes of paper work for some processes.
8. Weak contract management. There is a general laxity in contract management and inadequate capacity.

The NWSC-PDU has however formulated some strategies and proposals in addressing some of the challenges in order to maintain its progress towards achieving its vision and mission which include:

1. All Div/dept/areas should make realistic procurement plans, update them half yearly and adhere to them to the extent possible especially.
2. Heads of Div/dept/areas should ensure that statement of requirements (Specs, TORs and SOW) are researched, prepared, approved one month before the procurement requisition (PR) is raised and attached to the (PR) before signing PR.
3. Raising of PR should be based on realistic time frames and date items required stated on PR which should later be agreed or confirmed by PDU.
4. Emergency procurements must be accompanied by a justification that satisfies the requirements for PPDA. Reg 110.
5. Quarterly procurement & disposal sensitization meetings for Managers, CCs, PDUs and Users should be carried out.
6. The Procurement dept has set timelines for each procurement stage and this has been the basis for monitoring individual performance starting with Jan 2013 as well as Users' timeliness.
7. The Procurement dept will attach a desk officer for each dept to advise

and give feedback. Forms will be introduced for recording meetings and agreements that will form procurement file notes.

8. Each procurement desk officer will prepare a procurement specific activity plan and advise Users on at least 4 key stages on the status of the procurement or disposal. This will be a basis for monitoring timelines and individual performance.

The PDU also has plans for the next three years in a bid to improving its efficiency and customer. The plans include:

- Completing the automation of the procurement process
- Review of the Board approval threshold
- Strengthening procurement planning
- Capacity building for the people handling procurements like ; Contracts Committee, users
- Capacity building of procurement staff and User Departments in the application and use of the NWSC and PPDA procurement procedures, Regulations and Guidelines
- Establishing and implementing a monthly internal procurement performance and measurement system for monitoring of key procurement and disposal processes at HQ and Areas by 2014
- Upgrading the procurement and Disposal Archive through optimisation of space by obtaining a more efficient records management system and infrastructure by 2014 for safely keeping of procurement and disposal records for at least seven years.
- Strengthening PDU appropriately

to offer timely value for money procurement and staff delegated Area PDUs with at least one qualified procurement professional in each NWSC Area by 2016.

All stake holders at all levels have a significant role to play in the timely procurement and obtaining value for money Procurement, i.e. TEAM effort!

The challenges - of adhering to the bureaucratic procedures and lengthy process, while being efficient and cost-effective are not easy but we all are trying and can improve further - to make NWSC more of a model public entity. The Internal Audit Department undertakes quarterly audits to address the, "timely procurement" and advise on "an effective mechanism to stimulate timely procurement."

The PDU believes that to maintain our rating as one of the leading Water Utilities in the country need to pay more attention to Stake holder management in the procurement process. The PDU is strongly committed to continuous improvements in areas of accountability to stakeholders, procurement timeliness, information sharing, respect for the regulator guidance and opinions while conducting its routine work within the stipulated legal framework■



Ms Nable Byaruhanga, Ag Procurement Manager, during the PPDA Public Procurement Awards 2012



### Thika Water and Sewerage Company Ltd (Kenya)

Under the Global Water Partnership Alliance (GWOPA) Thika Water and Sewerage Co. Ltd. (THIWASCO) made a benchmarking tour between 16<sup>th</sup> and 22<sup>nd</sup> June 2013. The main focus was on best practices in water industry. They had presentations from NWSC facilitators and had field trips to key business units to interact with the staff with the hands-on experience.



Eng Alex Gisagara (2<sup>nd</sup> R) welcoming Thika Water delegation.



Dr G K Karanja (3<sup>rd</sup> R) Chairman of Thika Water posed for a snap with MDs and NWSC staff and Thika Water.



Eng Sharon Karungi (L) Branch Manager of Kitintale making a presentation to Thika Water Board and Management.



Thika Water delegation on field tour at Gaba Water Complex.

### Enugu State Water Corporation (Nigeria)



Enugu Water Commissioner Eng Michael Nwachukwu (R) and Director for Water Mr Fidelis Okeke (L) made a courtesy call on GM Kampala Water during the tour.



Enugu guests toured Kansanga Branch where they were received by the Branch Manager Mr Deo Serumaga (R standing).



Enugu guests at the GIS Office with tMr Akol Gilbert (R).



Enugu delegation had wrap up meeting with ES staff before returning home



# The NRW Challenge:

## Operational Trends and Opportunities for NWSC

by Dr Harrison Mutikanga



One of the major challenges facing National Water and Sewerage Corporation (NWSC) is the high levels of Non-revenue Water (NRW). According to the International Water Association (IWA), NRW is the difference between system input volume and water delivered to customers and billed (revenue water). NRW is made up of physical water losses (leakage and reservoir overflows), revenue losses (water theft and meter under-registration), and authorized unbilled consumption such as water for fire fighting and flushing mains. The quantity of water lost is a measure of the operational efficiency of a water distribution system and high levels of water losses are indicative of poor governance and poor physical condition of the water distribution system.

Whereas NWSC's NRW has reduced from 43 % (2000-2001) to 32.6 % (2011-2012), the annual reduction rate of 1 % per year is rather low compared to for instance Phnom Penh Water Supply Authority (PPSWA) in Cambodia that was able to reduce NRW from 48.1 % (1999) to 5.9 % (2009) (i.e. annual NRW reduction rate of 4.2 %).

According to the 2012-2013 annual performance report, NRW is on the increase in all the NWSC Areas, apart from Kampala Water where NRW reduced by 0.2 %. Notable NRW increase was in Jinja (from 21 % to 37 %), Entebbe (from 17 % to 22 %), Hoima (from 16 % to 29 %), and Lugazi (from 15 % to 26 %).

The annual volume of NRW for the 2011-2012 Financial Year was estimated at 21.8 million m<sup>3</sup> or 200 litres/conn/day. Water losses not only represent economic loss and wastage of a precious scarce resource, but may also trigger premature investment to develop new sources to keep pace with increasing demand. Leakage also often leads to service interruption and customer complaints, is costly in terms of energy losses and increases the carbon footprint of the service provider. Reducing water losses may delay costly system expansions, lower annual operating costs, make more water available to increase service coverage, and increase utility revenues. Whereas NRW reduction techniques are well known, various challenges have constrained NRW reduction in NWSC.

### Challenges of Managing NRW in NWSC

The challenges of reducing NRW in NWSC include the following:

**Water Audit:** A water audit is a system wide diagnostic approach for quantifying how much water is lost, tracking and identifying where the water is lost, why, and how it is being lost in order to develop intervention strategies for improvement. Whereas water audits are supposed to be done annually, they are hardly carried out in NWSC towns. Tracking water distribution input is complicated by the fact that most components of the water distribution system are located underground.

Recent water audits in Entebbe and Jinja under the African Water Association (AfWA) in partnership with USAID's FABRI Program for reducing NRW in Africa revealed weaknesses in NRW management including lack of equipment for water loss control, inadequate human resource capacity, unreliable data for water



balance calculations, poor customer meter management practices, lack of dedicated NRW reduction units and budgets. In Kampala where a monthly water balance is attempted based on the IWA water balance methodology, components are derived from unreliable measurements and many assumptions.

The production meters in Gaba are hardly calibrated by certified and independent specialists. Some production lines are not metered and others have very old bulk meters. This increases the uncertainty in the computed NRW indicator. Inadequate system input volume meter calibration and use of subjective correction factors renders the water balance figures to easy manipulation by some managers.

**Asset Management:** The subject of asset management has not been properly attended to. The high number of pipe failures (average of 1175 breaks/100 km) is an indicator of the poor condition of the underlying infrastructure and inadequate asset management. This is rather very high compared to average figures reported in Sub-Saharan Africa of 800/100 km/year.

Pipeline systems having an average annual pipe break ratio per 100 km of less than 40 are considered to be in an acceptable state. Network infrastructure asset management practice is based on the conventional approach of reactive asset management (asset fails first & then it is repaired/replaced) as opposed to proactive asset management (predict & prevent asset failure). Main breaks also represent an opportunity for contaminants to enter the distribution system. Every leak is a potential intrusion point for contaminants in case of a drop in network pressures.

**Intermittent Water Supply:** Whereas NWSC's water distribution systems were designed to supply water continuously, they often operate intermittently due to various constraints such as demand outstripping supply and intermittent power supply to the water treatment works. Reducing NRW in systems that supply water irregularly is very complicated as techniques used for leakage control such as pressure management, night flow analysis, and on-line detection become ineffective. Intermittent supply also induces pressure transients/surges in water networks increasing frequency of pipe bursts and leaks.

In addition, intermittent supply introduces air into the system that is often released via customer water meters at excessive speeds accelerating "wear and tear" of meter parts leading to poor meter performance. Lastly, customers elevated storage tanks installed to mitigate

against irregular supply have regulating ball-valves that induce low flows through the meters increasing meter under-registration.

**Meter management:** Although NWSC has had a universal metering policy since 1990, there is no complementary policy on meter management (selection, installation, sub-metering, maintenance, replacement etc.) and this has led to the installation of a variety of meter models which have degraded in accuracy over the years. There are over 300,000 customer meters installed in NWSC Towns with the dominant types being positive displacement (volumetric) meters.

Whereas volumetric meters are very accurate, they are very sensitive to particulates in water. Due to high frequency of bursts and leaks coupled with old corroded pipes, intermittent supply, poor pipe repair practices, and inadequate mains flushing, a lot of silt and other suspended particulates enter the water system and get lodged in the meter drive mechanisms halting meter movement (stuck meters) and increasing meter under-registration. This probably explains the high numbers of meter failures recorded in the meter laboratory and reported in the billing system as defective meters.

**Network Management:** the networks are not hydraulically zoned into pressure zones and District Meter Areas (DMAs) making it difficult for NRW management. Whereas most networks are administratively zoned for ease of commercially related activities (billing, revenue collection, and customer care), this analogy has not been extended to effective management of NRW. This complicates accountability of water supplied to the different operational Branches since it is not measured.

In the end no one is responsible for NRW as different players from various departments are involved. Tracking water losses on a system-wide basis is like searching for a needle in a haystack. The irony is that we continue to lament that the network is old and hydraulically unstructured, yet we continue to expand it in an unstructured way, compounding the problem. In addition, techniques such as the "Territory Management Concept" that has been applied successfully to reduce NRW in Manila become ineffective in the absence of DMAs.

The network management information system is inadequate and useful data such as pressure, flows, network condition, and events like pipe failure and causes is hardly documented. Often network management relies on knowledgeable technical staff (e.g. Uncle Sam in KW)



and most of them are about to retire taking with them vital system knowledge. Deficiencies in data collection and management coupled with insufficient knowledge on the underlying infrastructure conditions complicate network planning, analysis, and operation, and unavoidably lead to high water losses.

The speed and quality of repairs is often wanting due to often buried and inaccessible network control valves and inadequate skilled plumbers. The low leakage handling efficiency results into backlogs of un-repaired leaks reported daily in the Call-Centre database.

**Institutional Challenges:** There is no clear defined structure in NWSC that supports reduction of NRW other than in KW with a NRW reduction unit in the organization structure. This probably explains why NRW is on the increase in Areas with the exception of KW. However, the NRW Unit in KW is not well facilitated and lacks sufficient resources to tackle the NRW problem. For instance, the leak detection team has 3 staff (one technical supervisor, one plumber, and one driver) and the illegal use reduction team has 6 staff (one engineer, one technical supervisor, two plumbers, and two drivers).

In a personal conversation with EK Sonn Chan (former CEO of PPWSA), he laughed at these staff numbers in KW for NRW management and told me that in Phnom Penh city (almost equal in size to Kampala), they have over 40 staff for leak detection only to maintain their NRW at 6 %. The NRW Unit in KW is perceived to be of low status and for staff under the NRW Unit to be promoted they have to be transferred to other perceived more important departments like commercial.

As a result, well trained employees in water loss management are lost. Lastly, there is perceived lack of top management commitment - failure to realize that NRW reduction is: (i) not just an isolated technical problem; (ii) tied to overall asset management and operation; (iii) not a one-off activity (e.g. wet-storm, every drop counts, etc.), but one requiring long-term commitment. Finally, there is generally no clear sound policy and strategy for water loss management in NWSC.

**Financial Challenges:** There is no specific expenditure code for NRW activities in the NWSC budget complicating implementation of intervention measures. Usually, in case of financial constraints, NRW related activities are often the first to be struck-off the budget. Often repair materials run out of stock in the central stores delaying leak and burst repairs. The water loss problems are likely to be

compounded in the future as a result of the widening gap between ageing water supply infrastructure and investment. The corporation investment priority seems to favor increasing service coverage infrastructure (new mains extensions and connections) as opposed to asset management and O&M activities that reduce water losses.

### **Governance, Socio-economic and Cultural Aspects:**

The cultural uprightness of citizens, low income, and poor governance is at the root of the NRW problem. High levels of water theft are likely to be positively correlated with high levels of corruption. In Uganda, the laws are too weak and outdated to act as a deterrent to water theft. The fines levied in courts of law are often too low compared to the value of water stolen.

In addition, compiling evidence for illegal use cases is not always trivial and can be expensive. On the other hand, the authorities supposed to condone illegal use of water are often the culprits e.g. in Kampala city, the police usually abuse fire hydrants by collecting and selling water to earn extra income. Illegal use has taken another level in Kampala with a well-coordinated and specialized team of former staff laid-off during the restructuring exercise in 1999. Network vandalism and meter thefts are on the increase exacerbating the NRW problem.

In NWSC Towns, both the poor and the rich have been found using water illegally. Utility employees often connive with the rich customers to defraud the Corporation via illegal use of water, incorrect meter readings and billing adjustments. Some people still perceive water as a social good and not an economic good and will always find ways of using it illegally. Despite the challenges, reducing NRW do offer numerous opportunities for NWSC.

### **Reducing NRW provides Opportunities to NWSC**

The high water losses in NWSC's water distribution systems present an excellent opportunity of "un-tapped" water resources that have already been treated to drinking water standards and energized to reach customers taps. The total annual volume of NRW in NWSC has been estimated at 21,768, 042 m<sup>3</sup> for 2011-12 financial year. Recovering the volume of NRW and converting it to revenue water, the annual value of NRW (lost opportunity cost) using the average tariff of US\$ 2,115 per m<sup>3</sup> is US\$ 46 billion (USD \$ 18 million). However, reducing NRW to zero is unrealistic. Reducing the NRW volume by 40-50 % could generate additional annual revenues of about USD 8 million.



Assuming that 60 % of NRW in NWSC is leakage and using the least service level (public standpipe) with a water demand of 20 L/c/d for the urban poor, reducing leakage by 50% could potentially serve about one million more poor people. Reducing water losses would not only enhance NWSC's financial viability but would save a scarce water resource, increase water supply reliability, and reduce operational repair costs by about US\$ 1.7 billion annually (US\$ 1,000,000).

Cognizant of this huge opportunity, NWSC has initiated various intervention measures that include the following:

1. NWSC is implementing the Kampala Water - Lake Victoria Sanitation Project (KW LVWATSAN Project) whose objectives is to reduce NRW in Kampala from 38.9 % to 25 % by 2025 among others. Of particular interest is Package 1 (immediate measures for NRW reduction), Package 2 (network restructuring and rehabilitation), and Package 6 (accompanying measures including asset management and capacity building). Under the project, there are plans to engage the private sector in performance-target based NRW reduction projects that have been used successfully to reduce NRW in some Asian Cities.
2. Pressure management for leakage control, meter replacement using more robust velocity type meters, smart metering using Automated Meter Reading (AMR) for large consumers to minimize meter reading errors and improve customer consumption data management, strengthening of illegal use investigations and large meters monitoring, proactive leak detection, and water infrastructure asset management in Kampala. Training of Area Engineers on how to conduct water audits has also been initiated by the NWSC's operations Department.
3. Gaba II Vocational Skills Development Facility (VSDF) was commissioned recently to enhance hands-on-skills of vocational professionals, and the Kachung VSDF is also under way. This will enhance the quality of repairs and minimize re-occurrence of leaks and bursts, among others.
4. Lastly, with the guidance and wise leadership of the new Managing Director, NWSC has prepared a 5-Year Strategic Direction (2013-2018) that proposes key strategic interventions for NRW reduction including comprehensive asset management, network zoning into hydraulic zones and DMAs, integrated water meter management framework, multi-stakeholder

based illegal use reduction, robust productivity measurement system, research and innovation, and re-structuring and re-aligning of operations for efficient service delivery. This new Strategic Direction - based on a balanced score card approach - seems to be the long awaited vehicle that could sustainably tackle the NRW vice in NWSC ■



Old infrastructure and high pressures increase leakage.



Meter replacement program in Kampala.



Demand profiling for optimal meter sizing in Kampala.



## Catalysts for Business Growth in WATSAN Utilities

by Mrs Peluce K Egesa



**B**usiness growth is the only way to keep relevant in the current competitive market and also to ensure business continuity. However, there are many challenges that are faced by the business sector today, especially in the service sector. Like any service sector Water and Sanitation utilities services have challenges including; contamination of water sources, limited capital resources to carry out long-term investments, inadequate coverage and poor raw water quality among others. It is therefore, important that utility companies address these challenges through innovative business solutions aimed at customer focus and service expansion i.e. provide water and sanitation services with a business mind.

### 1.0 Catalysts of Business Growth

The catalysts of business growth in the Water and Sanitation Utilities may include Stakeholder management through Knowledge management and information sharing, Public Private Partnership, fostering growth through innovations and benchmarking with other utility companies among others.

### 2.0 Divine /Kingdom Way of Business Growth

In any business a customer is the most important person to grow business the reason why NWSC refers to her customers as kings "The Customer is the Reason We Exist"; this is not different from God's way of looking at business growth. Just as we focus on customers, God also focuses on his people to grow the business of His Kingdom.

God wants to partner with each one of us, he wants us to be stakeholders in His Kingdom, he wants to improve also the quality of our lives as water utilities want to give quality services. The Bible says in John 15: 5 I am the vine, you are the branches: He that abides in me and am in him, the same brings forth much fruit: for without me you can do nothing (KJV). Just as National Water and Sewerage Corporation or any other Utility Company cannot do without the existence of the customers us as individuals, as businesses we cannot do anything without God.

God has love for every human kind on earth and he doesn't want to lose anyone and as I earlier said, he is interested in everyone's relationship with him. That is the reason why Jesus came on earth and he selected disciples who would continue delivering the Vision of the "Kingdom of God". (Mark 16: 15-16 "And he said unto them, Go you into the entire world, and preach the gospel to every creature. 16- He that believes and is baptized he shall be saved; he that believes not shall be condemned.

Just like Utility companies ensure they have the best employees with experience, highly skilled and very hardworking so that they can fulfill their long term Visions, so is God. God's will for each one of us is to know WHO he is and be able to spread the message of his Kingdom to those who may not have knowledge about it. E.g. not everyone in Uganda knows about NWSC Services though they may be using them; however, through NWSC staff in the different areas of our operation; people get to learn and know WHAT NWSC is.

God is looking up to today for disciples in you and me to deliver the message of His Kingdom; The Bible says Luke 10: After this the Lord appointed seventy-two<sup>[a]</sup> others and sent them two by two ahead of him to every town and place where he was about to go. <sup>2</sup>He told them, " , to send out the harvest is plentiful, but the workers are few. Ask the Lord of the harvest, therefore workers into his harvest field.

In Economics we look at the most effective and efficient way to allocate the scarce resources that will eventually have value addition to the society, and in the Kingdom of God, there is what is referred to as "KingdomNomics": KingdomNomics is a discipline committed to experiencing maximum returns in life and eternity. In life, there are what we call "leading indicators" that predict future performance.



What you do today is an indicator of the kind of future you can expect.

KingdomNomics is using what is temporal and leveraging it for eternity. It is also about the leading indicators of your life. These leading indicators consist of a set of principles.

The organization of economics under the laws of God's kingdom. It's important to understand two key truths that provide the foundation for all of the principles related to KingdomNomics, it requires a different set of priorities, and requires that we have only God as our ruler.

Jesus makes this challenging statement about the investment of life: No one can serve two masters. Either you will hate the one and love the other, or you will be devoted to the one and despise the other. You cannot serve both God and money. (Luke 16:13)

The challenge here is that KingdomNomics requires incredible focus. We will serve money, or it will serve us—as we serve God. It's an all-or-nothing proposition. The human heart has room for only one ruler. Most people choose money for the love of "things." But in the New Testament, Paul tells Timothy that God "richly provides us with everything for our enjoyment" (1 Timothy 6:17).

When you choose God, "things" are much less of a problem. But if you choose money, you could possibly lose the blessing of God forever. As a matter of fact, you could fall into the traps of greed and excessive consumerism, finding you never have enough!

The Bible says in Mathew 6: <sup>19</sup> "Do not store up for yourselves treasures on earth, where moths and vermin destroy, and where thieves break in and steal. <sup>20</sup> But store up for yourselves treasures in heaven, where moths and vermin do not destroy, and where thieves do not break in and steal. <sup>21</sup> For where your treasure is, there your heart will be also.

C. S. Lewis, a 20th-century writer, put that verse in his own words: "Aim at heaven and you will get earth thrown in. Aim at earth and you get neither."

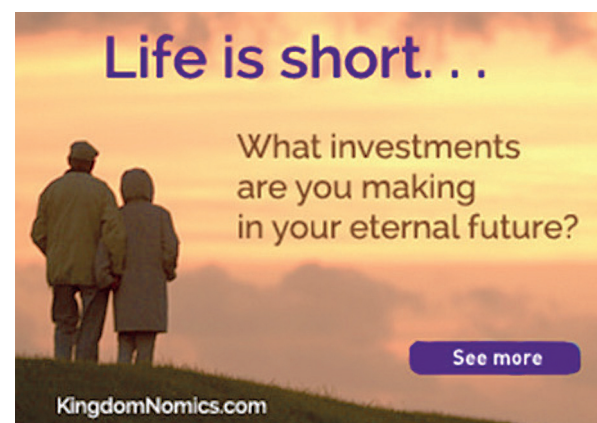
We are no less than God's investment capital in his creation.

If we give our lives to God—all of it, unreserved—we are aiming for heaven. And then we shall be amazed by what is "thrown in."

If we have, deeper love, for God and for people. We have stronger hope in everything—even the current state of our world—because we know it's all in God's hands. We feel a true peace, because we understand this truth: we are no less than God's investment capital in his creation. He invested in us in this world, and we are here to make a difference for him. He put us here to bear fruit (John 15:5).

Have you ever wondered why God has entrusted you with resources? KingdomNomics is living life by the principles defining value from God's point of view, as outlined in the Scriptures. We apply these principles in the decisions that determine how we invest our time, our talent, and our treasure, the "three Ts" of kingdom advancement.

KingdomNomics is using what is temporal and leveraging it for eternity. We all have time, talent, and treasure, and these are being consumed daily. The question is, by what? Are they being consumed for the sake of temporary pursuits, or toward things that are eternal? For those who take seriously the coming of a new life—one that follows earthly life—nothing could be more important. And yet so many of us live as if these decisions are trivial, expending those three Ts with little thought of the fact that what we do here echoes in eternity ■











GABA WATER WORKS  
NWSC Vocational Training Centre  
Official Opening by Hon. Dick Muleli, Federal Minister for Economic Cooperation and Development  
19 June 2013

"the customer is the reason we exist"

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