In order to maximise the benefits from water and environmental sanitation, urban water utilities need to improve their performance and therefore enhance the efficiency service delivery. This paper presents an innovative approach to utility management improvement taken by National Water and Sewerage Corporation (NWSC) Entebbe Area in partnership with the Water Utility Partnership (WUP), WEDC and Severn Trent and with support from SIDA. The paper discusses the participatory approach taken by all the parties in developing a five year solution oriented strategic plan and equipping the local staff with the necessary knowledge and skills to execute the plan. The partnership approach used is a crucial part in developing a sustainable performance improvement program; because the local staff have knowledge of the prevailing situation and problems in the organisation and the external experts (consultants) have knowledge of best practices and experiences from different parts of the world. The paper draws conclusions on how this approach can be introduced by other utilities in other low income to improve management performance.

### Introduction

Low income countries especially in Africa are faced with a big challenge of utility management and performance improvement in order to realise the MDGs. A number of options have been tried in an attempt to address this problem including private sector participation whereby Multinational companies have been contracted to run some of the utilities in Africa. However recent trends indicate that the largest water multinational corporations are acknowledging that they cannot make money from the poor countries, and therefore they can’t provide them services (David Hall, PSIRU, 2003). This position has compelled the major players in the water sector to devise alternative approaches in addressing this problem.

Water Utility Partnership (WUP) is an organisation established to address the key challenges facing water utilities and their partners in the region by building a partnership among African Water Supply and Sanitation Utilities and other key sector institutions, to create opportunities for sharing experiences and capacity building. In order to achieve its objectives, WUP initiated a Project in 2001 aimed at improving Utility Management and Reduction of Unaccounted for Water (UFW) which was funded by Swedish International Development Agency (SIDA). The project was awarded to Severn Trent Water International (UK) in association with the Water Engineering and Development Centre (WEDC), Loughborough University (UK), who constituted the consultancy and backstopping team.

The project provided support to water and sanitation institutions in five African countries of Uganda, Kenya, Tanzania, Lesotho, Benin and Congo to improve the management of water and sanitation services, mainstream services to the urban poor within utility management and thus make progress towards meeting the MDG targets.

### Background information on NWSC Entebbe

National water and Sewerage Corporation (NWSC) is a utility parastatal body, which is wholly owned by Government. The NWSC operations have grown from three towns in 1972 to 17 Towns at present. These towns include Kampala, Jinja (including Njeru), Entebbe, Mbale, Mbarara, Masaka, Tororo, Gulu, Lira, Kasese, Fortportal, Kabale, Bushenyi, Soroti, Arua, Lugazi and Mukono. The latter operations represent an urban population of about 2.1 million people (about 75% of the urban population).

NWSC Entebbe Area was selected as a pilot Area in NWSC due to its high level of UFW of 30% at the inception of the project. Like other towns of NWSC, Entebbe Area has undergone a number of strategic, purpose-oriented short-term performance improvement programs since 1998. These include 100-days’ program, Service and Revenue Enhancement Program (SEREP) I and II, Area Performance Contracts (APCs), I, II and III, Stretch-out program, One-Minute Management program and the currently ongoing Internally Delegated Area Management Contracts (IDAMCs). Since their introduction, the internal reforms have had positive impacts on the performance of NWSC and Entebbe Area in particular. Table 1 below highlights the achievements realised by the Area between 1998 and 2001 just before the WUP project.
Table 1: Trend of performance indicators for NWSC Entebbe (Source: NWSC)

<table>
<thead>
<tr>
<th>Indicator Prior Change Programs in 1998</th>
<th>Indicator Prior the WUP Project in 2001</th>
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</thead>
<tbody>
<tr>
<td>Unaccounted For Water (UfW) (%)</td>
<td>44</td>
</tr>
<tr>
<td>Total Accounts (Numbers)</td>
<td>3,000</td>
</tr>
<tr>
<td>Suppressed Accts (Numbers)</td>
<td>890</td>
</tr>
<tr>
<td>Annual Billings (Billion Uganda Shs)</td>
<td>1</td>
</tr>
<tr>
<td>Collection Efficiency (%)</td>
<td>74</td>
</tr>
</tbody>
</table>

The success realised under these programs is mainly attributed to the following key factors:

- Board and top management commitment and support
- Purpose-based SMART targets and adequate facilitation to enable achievement of the set targets
- Proper planning at both the operational and strategic levels, with clear vision, mission, goals and objectives
- Bottom-up approaches adopted during the design and implementation of the programs which strengthened program ownership and support
- Reduced bureaucracy in operations, staff empowerment in decision making and encouraging a culture of boundary-less ness in day to day operations.
- The partnership approach emphasized during the implementation of the programs with significant “support and we-work-together” attitude by all stakeholders.
- Tailor made monitoring and evaluation arrangements and benchmarking possibilities to compare performance of one Area with another and sharing experiences on ways of further improving performance
- Tailor-made performance incentives (both financial and non-financial) as critical performance drivers

Despite the above achievements, NWSC-Entebbe Area acknowledged that there was still room for improvement especially in the area of UfW. The WUP project also presented the Area with an opportunity to consolidate the performance improvement trend and also develop a five-year strategic Performance Improvement Plan (PIP) which was operationalised through the short-term performance improvement programs.

The process of developing the PIP was a great experience for the Area and unique one, compared to the previous consultancy experiences. The approach adopted was demand-driven where the consultants or the technical team played a supportive and backstopping role and the staff of the Area where given the opportunity to brainstorm and devise means/strategies of addressing the problems identified.

### 3.0 WUP Project Implementation Process

#### 3.1 Performance Audit of the organisations

The first phase of the project involved carrying out a performance audit of the Area with the aim of identifying the strengths, weaknesses, opportunities and threats of the utility. This was done by a trained team of experts who worked hand in hand with the Areas staff. The audit process was executed using questionnaires and an audit manual which was distributed to the Area before hand with clear instructions for the preparation of the audit, to ensure that staff were aware of what was expected of them. Completion of the audit exercise was followed by preparation of the report of the findings and results which was presented at a joint workshop, where members from different countries deliberated and made contributions to the activities for the next phase.

In the case of NWSC the audit exercise established that although NWSC Entebbe had registered various improvements in the recent past, there were still many areas that needed further improvement. For instance, although UfW had reduced to 30%, the performance had stagnated and there was still need to build capacity in various UfW management aspects to bring this figure further down. Major weaknesses identified included:

- Organisation structure that does not fully address UfW/Revenue management needs.
- Inadequate Management Information Systems
- Inadequate Operation and Maintenance procedures
- Weak Asset management procedures
- Inadequate application of Planning tools e.g. financial modelling.
- Lack of district meter areas that would help monitor UfW on smaller geographical areas.
- Lack of meter replacement policy (systematic criteria/plan for replacing meters before they fail)
- Lack of flow measurements and use in metering leading wrong metering in some cases.
• Weak network management procedures e.g. inadequate pressure records and controls/management.

3.2 Training for Capacity-building

A two weeks’ training workshop was organized in Durban South Africa in December 2003. The workshop was aimed at equipping skills and knowledge to the participants necessary for developing and implementing a bankable PIP. The training focused on familiarizing the participants with the principles applied in the technical, commercial and financial operations of modern water utilities. A participatory approach was employed during the workshop and variation of learning methods were used which included; lectures, case study presentations and discussions on the subjects highlighted above. Field visits were also organized to Durban Metro and Umgeni Water to provide practical field demonstrations. The workshop also provided an opportunity for participants to learn from each other and appreciate other organisations’ ways of doing things.

The output of the workshop was a PIP framework and an Action Plan for UfW for each utility developed by members of the respective utility. This framework was presented to the participants and there was plenty participation, interactions and exchange of ideas between the utility managers and resource persons.

3.3 Development the PIP and UfW Pilot Areas action plan.

After the training workshop and development of the PIP framework, the trained staff fresh with the knowledge and skills acquired championed the process of developing the PIP in the Area. For the case of Entebbe this was done through a number of workshops organised at Area level and fully supported by NWSC Head office. During these workshops, just like for most NWSC programs, all staff were free to make contributions in analysing the problems and devising strategies and actions to addressing the identified problems. The PIP was developed putting the following into considerations;

• A market oriented approach with the main focus on customers
• Due consideration to the environment and the poor
• Investment and operational costs recovery from tariff revenues

During the process of developing the PIP the Area received adequate backstopping and pro-active assistance from the consultants. This was done through visits to Entebbe and assistance from their home offices.

The general outline of the PIP was as follows: - Background information on the project; the analysis of the present status of the utility using both PEST and SWOT tools; the vision of the utility, its mission, goals and objectives (where the organisation wants to be); the strategies to be employed (how it wants to get there); resource requirements (financial and non financial) and progressive monitoring and evaluation mechanism. The PIP also included a financial plan showing the cash flow derived from the PIP strategies and the financial model.

An Action plan for UfW was incorporated into the PIP and the Area was demarcated into three UfW zones of; Airport, Kigungu and surrounding areas (named Zone I), Katabi Sub County, Baita and surrounding areas (named Zone II) and the Town Centre and surrounding areas (zone III)

The draft PIP and UfW action plan for each utility was distributed to the rest of the utilities and later presented at a joint workshop organised in Lusaka. This was aimed at sharing experiences, ideas and developing strategies for completion of the plans.

The draft PIP was fine-tuned to incorporate ideas gained from Lusaka workshop and the final document was produced in December 2004.

All through these stages, there were continuous consultants’ visits to the utilities to give the necessary support as well as monitor the progress of the PIP and the UfW Action plan. At the utility level, NWSC Entebbe management adopted workers participation approach in coming up with the PIP. The approach of discussion/brainstorming by committees and general meetings, learned from the stretch out program, was applied to generate ideas and strategies, for purposes of universal ownership at the end of the day.

4.0 Implementation of the PIP

4.1 PIP Implementation process

The PIP for Entebbe Area is five year strategic plan which is being operationalised through IDAMC program where the Area prepares annual business plan. The business plans are developed from the PIP and there is a periodic evaluation of the performance of the Area and updating the PIP. Under the IDAMC arrangement staff earn incentives for achieving the set out performance objectives which has been a driving force in achieving the strategies within the PIP.

4.2 Results registered so far

A number of achievements have been registered since the launch of the PIP for Entebbe Area. These have been summarised below:

• New UFW/Revenue sensitive structure has been put in place and is now functional. This has benefits of enhanced performance through stronger accountability.
• Better Management Information Systems have been put in place e.g. all offices have been facilitated with computers which are net worked locally and also
with other NWSC offices. Organised systems are in place to capture and make use of field information. More are under plan and will continue to be implemented accordingly.

- Enhanced debt management policy that allows for systematic follow up of customer debts and debt settlement agreements by use of a simplified debt management information system.
- District meter Area (3No) have been put in place leading to reduction of UFW from 30% to now 24%.
- Enhanced understanding and application of UFW causes and management techniques that have lead to:-
  - Putting in place a meter management policy (meter database i.e. type, age, condition, manufacture, recommendations, calibrations etc) now in process.
  - Pressure measurement and control through, for example, use of pressure reducing valves is now in place.
  - Right sizing of meters through matching meter sizes and flows.
  - Acquired UFW management equipment e.g. listening sticks, data loggers, monometers etc.
- Putting in place Asset Management policy (Asset database e.g. classification, condition, remaining lives, replacement plans etc) now in process.
- Enhanced operations and maintenance policy e.g. proper and complete documentation of our operations and maintenance planning and execution.
- Better Planning enhanced by financial modelling (matching water demands and supply/capacities, expansion planning, matching revenue and expenditure requirements, planning and building a case for tariff adjustments, among others).
- Enhanced Personnel Planning and Development to meet organisation needs especially training needs identification, planning and execution.
- Enhanced customer care policy e.g. faster and effective ways of customer complaints handling, consumer educational programs options, urban poor service options etc.

3. In such projects as the WUP one where consultants are used, it’s more benefiting to the Utilities for consultants to give guidance and support functions and leave the beneficiaries to carry out the work themselves for purpose of ownership, appreciation and easy execution.

4. Board and Top management commitment is very critical for successful implementation of projects/improvement plans.

5. Consultants’ suggestions/recommendations are not always the only ways forward. They need to be taken in the perspective of the organisations needs, beliefs and resources.

6.0 Conclusions

Many low income countries especially in Africa are unable to fully meet the demand for water and sanitation services. This is despite decades of governments and donor supported investments and consultancies. Experience has shown that the locals have better knowledge of the prevailing situations and the consultants have better knowledge of best practices around the world. In order to maximise the benefits from both parties, there need to encourage a partnership and participatory approach by all stakeholders in order to address the challenges faced by Africa. The WUP project provides a practical benchmark for all future consultancies in low income countries.

References
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5.0 Learned Lessons and Conclusion

A number of lessons have been learned from this program and other programs undertaken by NWSC over time. These include:-

1. There is always a room to improve our organisations.

2. Worker involvement in planning improvements is important as it leads to ownership of the plans and makes the implementation smooth.