Leveraging partnerships for water security

Reducing Non-Revenue Water in Uganda

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Tetra Tech Services – Resilient Cities

- Municipal Governance and Leadership
- Integrated Planning and Project Management
- Critical Infrastructure Design
- Climate-smart Investment
USAID PREPARED Project

- Climate change adaptation
- Biodiversity conservation
- Water supply, sanitation, and hygiene (WASH)
Non-Revenue Water (NRW)

- NRW = water supplied to supply network but not accounted for physically or commercially
- Bad metering, bad bill collection, bad response to fix leaks, illegal use
- Average NRW in East Africa is 37% and 33% in Uganda (2013)
- NRW a priority for Uganda National Water and Sewerage Corporation (NWSC)
NRW Strategy in Jinja/Iganga

1. Build NWSC service delivery improvement program
   - Enhance Existing NWSC Performance Based Programs
     - Quality Service Improvement Program (QSIP) implemented

2. Develop interactive customer support and outreach framework
   - Complete Baseline Customer Satisfaction survey
   - Develop Customer Engagement Framework and Strategy

3. Implement engineering and ICT solutions
   - Establish District Metering Areas
   - Improve Metering Policies and Practices
   - Improve real-time monitoring of meter performance
Improving NWSC Service Delivery

Quality Service Improvement Program (QSIP):

- Vision and Values
- Service Audit
- Actions to Improve Services
- Customer Service Training
- Validate Service Improvement

I feel privileged to work...
I have freedom to do...
There are opportunities...
The...
There is adequate...
I have relevant skills...

Bar chart showing responses to statements about job satisfaction.
As result of QSIP, NWSC introduced:

- Suppressed accounts, Non – Revenue Water, and Arrears Reduction Program (SNARP)
- Customer Relations Model (CRM)
Improving Customer Engagement

- Completed customer satisfaction survey
- Created 15 Water Community Communication Clubs (WACOCOs)
- Introduced local radio platform and aired 25 programs
- Addressed 70 churches, synagogues, and mosques
Improved Meter Performance

- Established 11 District Metering Areas (DMAs)
- Connected Water Mind Analyzers (WMAs)
- Piloted Radio Frequency Units (RFUs) to enhance metering reading and billing
- Installed “intelligent software” to monitor system flows and pressures
Results

- Reduced NRW from 45% to 20%
- Increased revenue by $650,000 over 18 month period
- Decreased response time to repair leaks and bursts from 12 to 2 hours
- Connected an additional 3,000 people to public stand pipes using increased revenues from NRW reduction program
- NWSC Board decided to replicate Jinja NRW model to all its 200+ utilities
Lessons Learned

- Focused internal reflection (e.g., QSIP) key to improving performance
- The WACOCOs and NWSC’s outreach enhanced customer awareness
- Increased customer awareness improves transparency, infrastructure planning, and service satisfaction
- Staff more attentive to customers and their complaints
- Customers can become allies in reducing water theft

*Technological solutions must be combined with improved service delivery and increased customer satisfaction*
Thank you!