

Leveraging partnerships for water security

Reducing Non-Revenue Water in Uganda

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- ❖ 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)



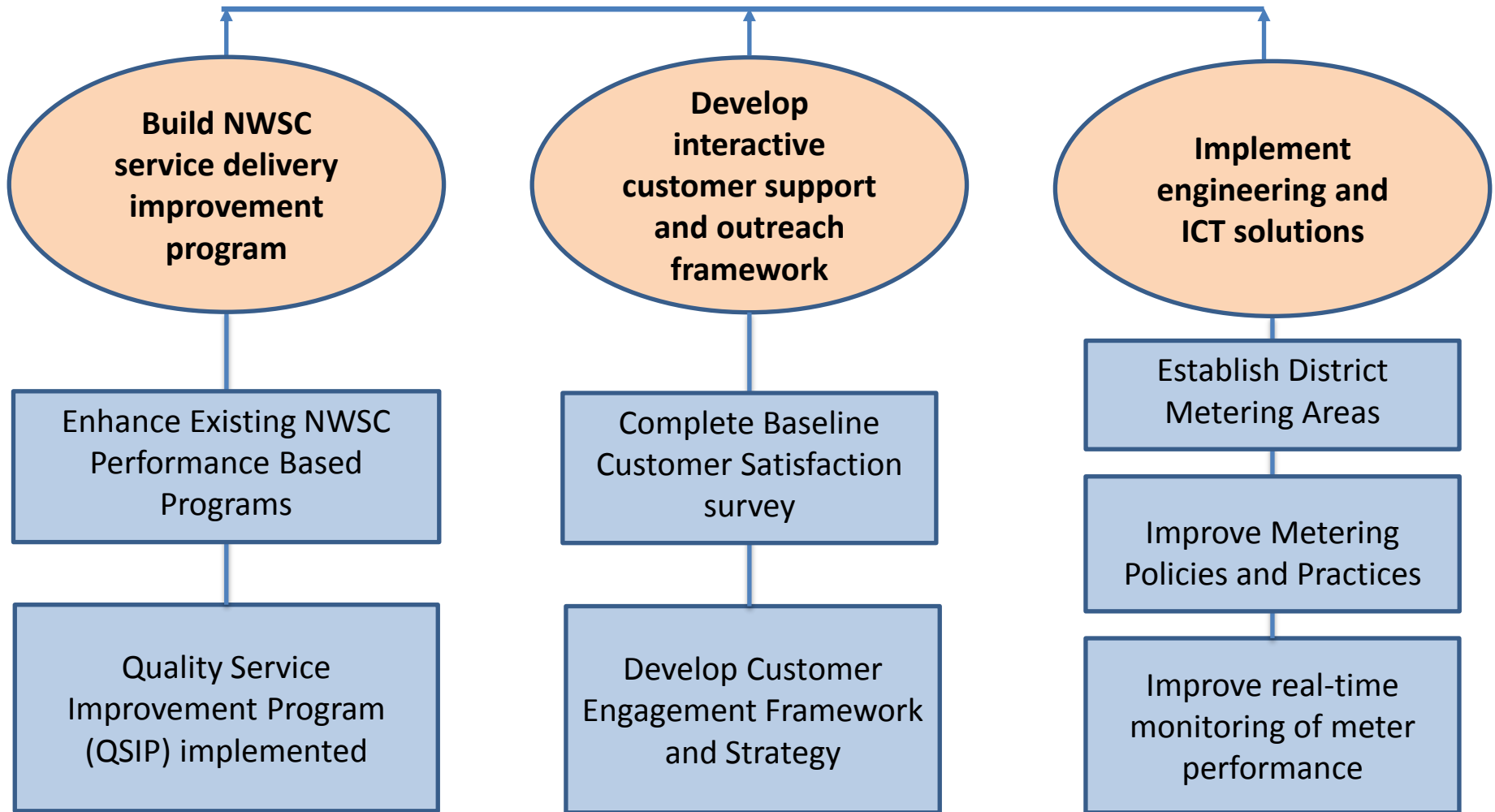
Non-Revenue Water (NRW)

- ❖ 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)

System Input Volume	Authorized Consumption	Billed Authorized Consumption	Billed Metered Consumption Billed Unmetered Consumption	Revenue Water
		Unbilled Authorized Consumption	Unbilled Metered Consumption Unbilled Unmetered Consumption	
	Water losses:	Apparent losses	Unauthorized consumption	Non Revenue Water
			Metering inaccuracies and Data Handling Errors	
		Real losses	Leakage on Transmission and Distribution Mains	
			Leakage and Overflows at Storage Tanks	
		Leakage on Service Connections up to point of Customer Meter		

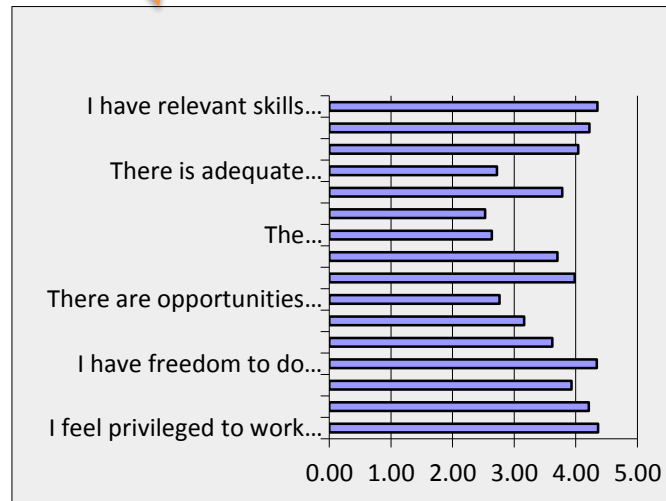


NRW Strategy in Jinja/Iganga



Improving NWSC Service Delivery

Quality Service Improvement Program (QSIP):



As result of QSIP, NWSC introduced:

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



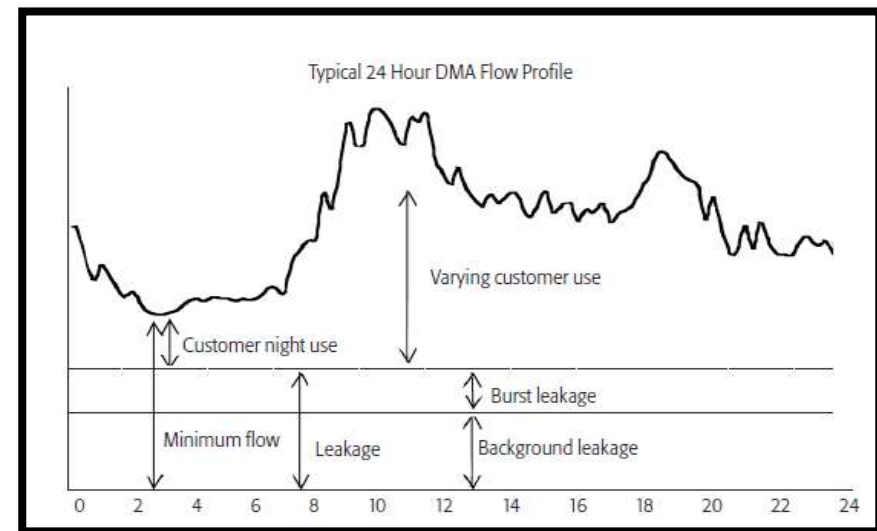
Improving Customer Engagement

- ❖ 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!

