BEST PRACTICE

Minor investments in NRW reduction can bolster First Access to -or Safely Managed- Water Services

TOPIC:
Ringfencing revenues from initial investments in NRW at DMA level

COP:
Water Distribution

WOP: WOP-Kenya

Enriching Life

MORE INFORMATION:

CHALLENGE

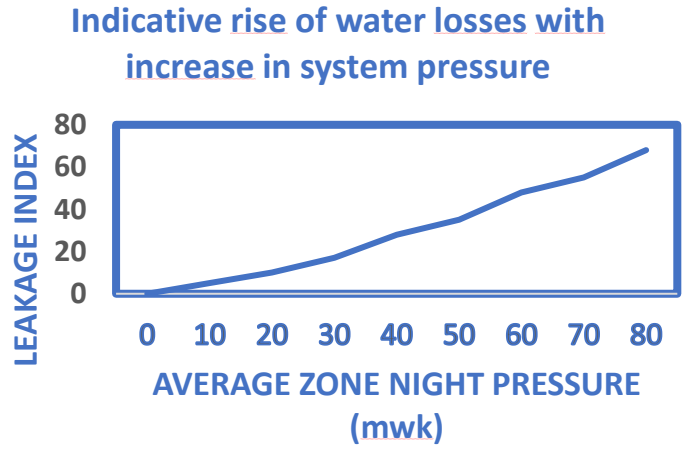
NAWASSCO, a Kenyan water utility serves 400,000+ residents in Nakuru. For many years it faced budget constraints for essential NRW reduction investments. This led to further rising NRW levels, reduced revenues, higher operational costs, and limited financing options; a downward spiral leading to unsustainable operations.

Through a long lasting WOP with VEI, NAWASSCO started with the DMA approach to systematically detect and combat their water losses. Initial investments of €30,000 in Eastmore, Mawanga, and St. Mary DMAs induced system repairs and replacements, resulting in an 88,000 m^3/year NRW reduction, recouping the grant in a year. This was the start of a massive replication programme.

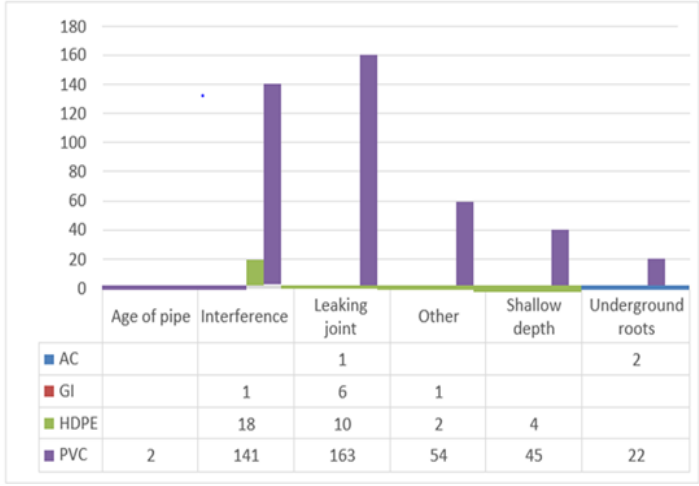
APPROACH

It is common knowledge that for a systematic approach towards reducing water losses one is to create hydraulic islands and develop water balances. This helps to identify whether losses are physical and/or commercial Embracing the DMA, NAWASSCO took advantage of the WOP and its initial capital and human investments in asset replacement and water balances created a quick win: NRW reduced and water sales went up. By creating a revolving fund (ringfencing the gains in revenues) it bolstered financial stability, service coverage, and service quality. These endeavors have enabled NAWASSCO to allocate resources more effectively and lay the groundwork for its current financial sound operational framework and sustainable future.

Inadequate operational regimes induce water losses



Findings of inadequacies at DMA level: leaking joints, interferences, ageing assets, poor construction, and lack of system maintenance – causes for water losses

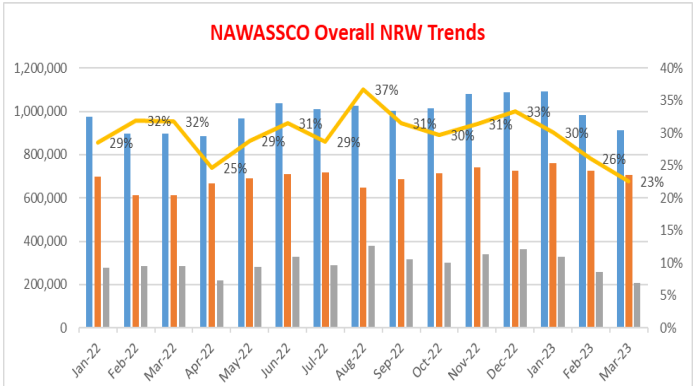


	Age of pipe	Interference	Leaking joint	Other	Shallow depth	Underground roots
AC			1			2
GI		1	6	1		
HDPE		18	10	2	4	
PVC	2	141	163	54	45	22

Ministry of Foreign Affairs of the Netherlands

RESULTS

A NRW reduction from 36 to 30% created new opportunities for first access or safely managed water service levels for 3000 people. The revolving fund effectively financed necessary operational interventions using internally generated resources. These ringfenced resources acted as a precursor to attract and secure additional funds from local and/or international financing institutions.



SUCCES FACTORS

To implement the 'DMA approach' on a utility-wide scale, it's vital to prioritize incremental but strategic operational investments to enhance efficient water use within infrastructure development projects primarily focused on expanding network coverage. On top of that it needs systematic data collection staff and data analysis skills to generate MIS.

DOCUMENTATION

Background information on this good practice for NRW reduction based on a revolving fund can be found within the CoP Water Distribution and in its CoP library.

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OTHER

The Global Water Operators' Partnerships Alliance (GWOPA) helps water operators help one another to provide quality services to all. GWOPA is an international network alliance supporting water operators to engage in WOPs - peer support exchanges between two or more water operators, carried out on a not-for-profit basis with the objective of strengthening operators' capacity and performance to provide better services to more people (www.gwopa.org). WaterworX is a major Dutch WOP program engaging over 50 water operators in their joint effort to capacitate peers, strengthen their work processes, and ultimately improve performance (www.waterworx.org).