Services rendered

Establish feasible water supply zones

Establish a baseline NRW data & a water

Create a database for all networks within the 8 WSPs

Component analysis & calibration of a network analysis model for NRW reduction

Staff capacity building & on-the-job training

Preparation of tender documents for supply & installation of meters, valves & repair kits

Preparation & supervision of Performance-Based Leakage Reduction & Management Services Contracts for 2 WSPs

Duration

09/2016 - 11/2017

Total Project Value

381.600.000 €

Consulting Value

956.920 €

Contractual Form

Service contract in collaboration with IncoWest and DMP

Key Figures

Service area 79,700 km² with population of 4,3 Mio people

Non-Revenue Water (NRW) Reduction and Network Modelling for 8 Water Utilities
(Kilifi, Malindi, Lamu, Tavevo, Kwale, Mombasa, Tana River & Bulk Water)

Marema Springs are one of he major water sources for the coastal region

The Project:
• Water sector reforms are facing a number of challenges; among them is the NRW and existing networks which are not modeled to control and reduce NRW.
• The National Water Strategy aim at improving water and sanitation services in view to internal (Vision 2030) and external goals (Millennium Development).
• The existing networks in the coastal region around Mombasa are up to now not modeled in line with NRW control and loss reduction to improve the actual regional water and sanitation coverage.
• The sustainability of the water utilities in the region is at risk due to high levels of NRW and large part of network not yet being modeled. The average NRW is estimated as 40%.

Tasks performed:
• Ensuring that significant economic, social and environmental benefits are realized through new technologies, water saving and reduction of NRW in 8WSPs
• The Consultant undertook a detailed technical diagnosis of the networks including leak detection and NRW reduction measures.
• Services included network modeling of the existing infrastructure using modern technology and approaches like GIS and water demand management and integrating these into the existing documentation.
• The consulting services assisted in introducing and institutionalizing best participatory management practices to decrease water demand deficit through improved operational efficiency, water saving and reduction of NRW in 8 WSPs.
• Carrying out modeling of the existing water networks for the 8 WSPs with the objective to control, reduce NRW and create a database of the networks.

Country	Source of Funding	Client
Kenya	World Bank (WB)	Coast Water Services Board (CWSB)