Implementation of Water safety plan (WSP) to tackle climate change challenges - KIWASCO Experience.

A presentation by George Oluoch Odero, WSP Team Leader, Kisumu water and Sewerage Company (KIWASCO), Kisumu , Kenya.

Introduction

KIWASCO was established through the reforms that took place in the water sector nationally and based on the decision to privatize essential services.

- The Company was established in July 2003 as an independent company after the transformation of the water and sewerage department of the Kisumu Municipal Council.
 - The core objective of KIWASCO is to make the water and sewerage services provision a commercial activity that generates sufficient revenue to sustain its operations.
- We have two major treatment plants, Dunga and Kajulu and serve residence of Kisumu town with water services.

Climate changes experienced

- Extreme weather conditions like floods and drought.
- Drought leads to the challenges like;
 - Reduction to the river volumes, hence lack of sufficient water to treat and supply, those who do not get reliable supply may turn to unsafe sources.
 - Increased cost of operations (a lot of pumping to meet demand)
- Floods bring about problems like;
 - Destruction of pipelines;
 - Poor raw water quality as result of siltation of the water source,
 - Landslides and erosion of soil around the treatment plant exposing the plants installation to danger.

How WSP help in dealing with challenges.

- the major challenges we face as a result of climate change is Flood and drought.
- We plan to deal with these challenges by adapting to the change, anticipating what might happen next and absorbing the shocks when they come. Hence the implementation of the WSP.
- some of these challenges are brought about by activities in areas that are traditionally out of our operation range. So this calls for meaningful stakeholder engagement.
- For proper maintenance budgeting process WSP form a very critical input, especially the upgrade plan.
- Management procedures and supporting programmes helps in standardizing our process for sustained operations.

Information needed for better planning.

- Climate data like precipitation, both the current, and forecasted data. This helps in designing interventions in the catchment that are useful in climate change mitigation and adaptation.
- Data like the vegetation cover, drought assessment, are also useful in the planning on the resources uses. And for planning for the operation at the utility.
- Information on land use in the catchment to help manage the water resources better. Unhealthy practices discouraged and substituted with sustainable practices. So the information current land use and planned use are very important.

Existing options & what more is needed.

- Data and information sharing among the relevant stakeholders. Kisumu county is in the process of putting in place a committee that will oversee the implementation of water safety planning in the county.
- Through such engagement, relevant stakeholders, including the basin authorities, utilities, government agencies which are involved actively in collection of climate data shall share the data and also plan activities together. Hence better management of climate change risks.
 - Tools that can make the process easier and efficient are needed, DSS shall be very useful.
 - More cooperation and engagement among the stake holders.
 - More knowledge sharing and benchmarking to share best practices.

Before the Kajulu plant weir, January 2018



After the Kajulu plant weir (January 2018)



Before weir in May 2018



Access road to the intake



Access road to the intake



Kajulu plant may 2018





Any question, additions, suggestions.