



Mwanza Urban Water Supply & Sanitation Authority (MWAUWASA)



Panel Discussion (Focus on Lake Victoria Basin)

Water Supply Issues and Challenges Using the Flood & Drought Management Tools

Presented to the International Delegates Attending an Event on Planning for Floods and Droughts (Reflections on Future Opportunities) Held on 02/10/2018 at the United Nations Conference Room 3, Nairobi - Kenya

Presented by a Water Utility Panelist:
Mr. Meck Manyama

MWAUWASA COMMERCIAL MANAGER AND WATER SAFETY PLAN (WSP) TEAM LEADER





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Panel Discussion Members from Invited Water utilities

- **Dr. Silver Mugisha**
 - Managing Director – National Water and Sewerage Corporation, Uganda
- **Mr. Meck manyama**
 - Commercial Manager and WSP Team Leader – Mwanza Water Supply and Sanitation Authority, Tanzania
- **Mr. George Odero**
 - Water Production Manager and WSP Team Leader – Kisumu Water and Sewerage Company, Kenya

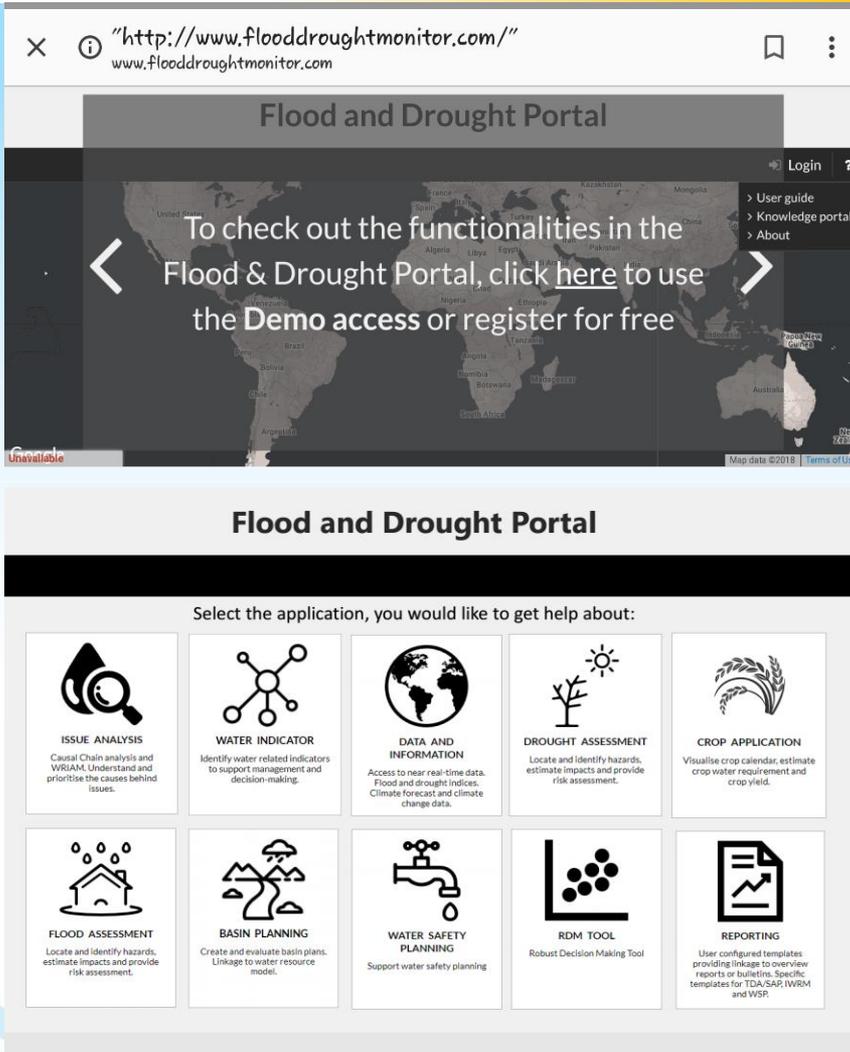
Introduction

- Water production capacity is **108,000 m³** per day
- Actual demand is now above **117,000 m³** per day
- Coverage is **90%** of water supply network while sewerage network is **23%**
- Collection efficiency is **98%**
- NRW - an average of **34%**



Capri-Point Water Intake and Pumping Station

What do We Think about the FDMT (as a Water Utility)?



- It is going to be a useful tool to help MWAUWASA in planning and getting prepared for addressing water supply challenges emanating from climate changes that affect the water utility infrastructure
- It is a supportive tool for the water utility in effective operationalization of the Water Safety Plan (WSP)
- It adds value to operations and sustainability of the water utility

Climate Change Experience: (Severe Drought)



Mwauwasa abstraction point at Capripoint water intake.

- The first experience was in 2006 when there was a severe drought which resulted in declining of the Lake Victoria water level
- A project for extending and deepening of Mwauwasa abstraction point was carried out
- Fear and tension on assurance and reliability of water supply business

Climate Change Experience: (the Aftermath of Recent Heavy Rains)



- One of the climate change effects:
 - Heavy rain results which occurred in the 2nd Quarter Apr - Jun 2018
- It had a critical and serious impact for water shortage in the City (pipe bursts - two 600mm raising and gravity mains)
- The breakdown took about 10 days
- Utility revenue dropped
- Pressure on political inquiries
- High cost of materials and equipment – pipes and fittings, crusher dust materials, heavy machinery equipment, etc.

Climate Change: (Effects on Piped Water Quality)

- It wasn't easily considered that flood whose aftermath is mostly destructive and prone to polluting water quality can be a major cause to public mistrust and complaints over the water utility
- Due to unpredictable climate change, there is need for the water utility's preparedness to consider, emphasize and apply FDMT in its operations.



Existing Financial Challenges

- WSP implementation both as per its requirements and **in the context of climate changes** still face financial challenges to make it **fully effective** (For example, in terms of legal framework – no material procurement is allowed for overstocking; budget constraints – you cannot budget for “uncertainties”)
- **Unexpected high cost of materials and equipment due to adhoc and unpreparedness approach to react on the negative impact of climate changes**

Recommendations

- The FDMT is a very useful tool especially for the water utilities around the three basins (*Lake Victoria - East Africa, Volta - West Africa and Chao Phraya - Bangkok, Thailand*) where and for which the FDMT project development was intended and tested accordingly
- IWA should therefore consider and arrange for conducting training to more users i.e. water utilities in Tanzania in terms of capacity building to key technical staff of the user-utilities



Thank you

