



Vol. 2  
Feb. 2019

## Save the date

### Maji Week Celebrations 16-22 March 2019

A week-long series of events in various regions in Tanzania under different themes



Construction of Simplified Sewerage system (condominal system) in Mwanza

# ATAWAS – Association of Tanzanian Water Suppliers

*'Serving Water Industry at Best'*

## Simplified Sewerage Systems in Hilly Informal Settlements of Mwanza

Mwanza is the 2nd largest city in Tanzania with population size of more than 800,000. About 70% of total population resides in unplanned informal settlements with no access to improved sanitation facilities. About 20% of population in Mwanza City lives in area with conventional sewer system. More than 80% rely on 'on-site' sanitation. In recent times housing in Mwanza City has extended into hilly areas around the city in unplanned manner. The nature of the landscape & topography makes it impossible to construct conventional sanitation facilities in the informal settlements. Until November 2016 almost all the informal settlements had no access to a formal sewerage system.

Lake Victoria Water and Sanitation (LVWATSAN) Project in collaboration with Mwanza Water Supply and Sanitation Authority (MWAUWASA) introduced alternative innovative sanitation technologies solution, the Simplified Sewerage System also known as Condominial Sewerage. This technology is commonly used in Latin American Countries and Asia. The system is suitable in peri-urban areas and informal settlements. Uses mostly smaller diameter plastic pipes with varying gradients which are easy to join by electro fusion method.

Compared to other sanitation options like communal

septic tank, Condominial system has low investment costs as well as low operational costs. It can be managed jointly by the services provider and the community. Easy to maintain-does not need/require complicated flow boosting devices. Community participation helps to achieve higher connection rates as well as rising awareness in hygiene promotion.

Waste water directly from homes enter the system via collectors (household connection chambers). The collectors convey the waste into larger pipes (trunk lines). Trunk lines convey the waste to the centralized treatment plants rapidly. No pre-settling required. Uses a little amount of water-even in intermittent flow, fecal matters can move each time there is a single flush. It can be installed and used in almost all settlements. Possible extension depending on the growth of the community.

This pilot project has been positively accepted by the community and proved to be one of the best sanitation solution in the informal settlements of Mwanza City. It has further improved sanitation and hygiene conditions among the beneficiary communities. Many people have officially requested for the extension of the simplified sewerage system to their homes. MWAUWASA is planning to upscale the project in other areas within Mwanza City.

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## Did you know ... ?

... That one of the functions of Basin Water Board is to monitor and enforce water use and discharge permits and pollution prevention measures.

*See more functions on the Water Resources Management Act, 2009*



*PBWB staff installing a Notice showing It is not allowed to do human activities inside the forest reserve and water source protected area. (Photo credit: PBWB)*

If you have any questions or suggestions, please Email us at: [info@atawas.or.tz](mailto:info@atawas.or.tz)

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## Recruiting Technologies to Support Sustainable Water Management Water Use Permits Inventory in the Usa River Sub-Catchment, Pangani Basin

Proper water management is essential due to the fact that water play a critical role in reducing poverty, improving health and increasing human productivity. Most Basin Water Offices do not have a comprehensive water allocation management system to facilitate enforcement, regulation, monitoring and allocation of water. This make it difficult to monitor the water use by private large farms and other users which results into loss of income to finance Water Resources Management activities in the basin.

Pangani Basin is one of the water stressed basins in Tanzania, where water demand exceeds water availability for most of the year. Study conducted on upstream part of Kikuletwa sub catchment showed that within a period of 18 years (2000-2018) the number of abstractors has increased from 11 to 118; comprising of 29% users with water right, 8% users with water permit and 63% without any license. A lot of pressure is exerted not only from abstraction but concentration of human activities around the water sources for social and economic activities which cause emerging conflicts between various water users.

In overcoming these challenges, Pangani Basin in collaboration with GIZ through the International Water Stewardship Programme (IWaSP) are working to improve decision making under Sustainable Water Management

(SUWAMA), a partnership around the Usa River Sub-catchment through recruitment of appropriate data collection, analysis and management tool –AkvoFlow. This technology is used to improve water permit inventory, which included permit verification and mapping of all water users in the Sub-catchment. The tool may be integrated with mobile phone which can be used to enter user data into the system. Initial results indicated existence of a huge number of users that had not been registered to-date.

PBWB plan to use the tool for water users to regularly update information, apply and renew their water use permit using their mobile devices. This will make water user data up-to-date, enhance accountability and governance of water resources. The use of tool is relevant for company sustainability but also attract more investment for catchment health and offer employment opportunities to communities around the catchment. Lessons learnt from Usa River sub-catchment area shows the importance of scaling up this approach to other catchments and basins. Recruitment of this or similar tool will make better decision making to the basins and private sector, particularly investors.

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## Our Partner:



### Ensol Tanzania

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