

## Climate Services to Revitalize the Water Sector in Kenya

Weather and climate services are crucial support services for daily management of the water sector. The Water sector mission in Kenya is to contribute to national development by promoting and supporting integrated water resource management to enhance water availability and accessibility under the Ministry of Water & Sanitation and Irrigation (MoW). This includes provision of policy direction and guidance following weather predictions and guidelines. The Ministry has dedicated state agencies that contribute to its efforts towards increased safe water availability and accessibility for various purposes. Among activities that relate to weather and climate services include issuing advisory on the areas likely to experience floods during rainy seasons and areas likely to experience severe water shortage during drought conditions and necessary precautions to undertake during every circumstance, issuing early warnings to downstream communities if there is a possibility of dam breaks or dam(s) overflow and taking measures to ensure adequate safe water provision to avert water borne disease outbreaks during expected and actual water stress periods. Currently, the main climate related challenges in the sector mainly revolve around water quantity; either too little water, too much water or water quality degradation.

The Ministry's involvement in the process was a valuable experience. As a hydrologist representing Ministry of Water & Sanitation and Irrigation (MoW), I had a chance to interact with various actors and understand better the role of actors and relationships with climates services both in Kenya and the region. The process provided an opportunity to highlight weather data gaps at sub-national level that the Kenya Meteorological Department (KMD) can provide to support water resource management at county level. The gaps also reminded us that as a sector, there is need to improve hydrological monitoring networks to provide data and information to be included in the forecasts.



Users and producers of climate information engaged in the WISER sponsored co-production Workshop at Gracehouse Resort, Nairobi, Kenya

Stakeholders in the water sector have a duty to timely disseminate weather forecasts, expected impacts and necessary precautions to other stakeholders within and outside the water sector. Throughout the co-production process I was able to network and make new contacts. As a result, I am currently receiving daily, weekly, monthly and seasonal forecasts promptly after being added to the mailing list. This has eliminated delays on my side and I am now able to inform decision making and planning without further delay. The sector will be better placed to undertake timely and more accurate hydrological modelling through incorporation of improved weather and climate forecast information.

Using the information generated in the co-production process, the team involved developed two climate services guidelines to support the implementation of MoW's mandate. These guidelines delineated key climate information needed by the water sector, the stakeholders, their roles and contributions to the services roll out. The guidelines are key contributions to the ongoing revamp of the sector.

My take from the co-production experience is that for our services to be more efficient and more effective, all stakeholders must stop working in silos, we must work as a team during co-designing, co-development and co-delivery of climate services. I recommend that future works on co-production and user engagement in climate services support the KMD to enhance its infrastructure, information which can be used later evaluate the effectiveness in water services management and delivery.

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**WISER W2-SIP project**