



Africa Climate Conference 2013 15-18 October 2013, Arusha, Tanzania

AMCOMET, UNESCO, WMO SIDE EVENT 17 October, 2013 19:00 – 20:00 Manyara Hall

The Role of Climate Information and Services in dealing with Uncertainty in Water Resources Management

In response to major challenges related to the delivery of weather and climate services in Africa, the Integrated African Strategy on Meteorology (Weather and Climate) was developed by the African Ministerial Conference on Meteorology (AMCOMET)¹. The strategy was subsequently endorsed by the African Union, positioning weather and climate services as essential components in national and regional development frameworks in Africa. One of the principal pillars of the strategy is to enhance the production and delivery of weather and climate services for sustainable development. It further highlights the need to improve water resources management and related disaster response.

The UNESCO International Hydrological Programme (IHP) is an intergovernmental programme of the UN system devoted to water research, water resources management, and education and capacity building. Through international projects, UNESCO aims at establishing an international multidisciplinary network which will help to enhance resilience to changes, particularly climate change, through improved understanding of vulnerabilities, opportunities and potentials for adaptation.

The World Meteorological Organization (WMO) is a specialized agency of the United Nations. It is the UN system's authoritative voice on the state and behaviour of the Earth's atmosphere, its interaction with the oceans, the climate it produces and the resulting distribution of water resources. WMO is spearheading the Global Framework for Climate Services (GFCS) established in 2012 as a globally-coordinated collective that brings the organizations engaged in producing climate

¹ AMCOMET, a joint WMO-AU initiative, was established as the high-level mechanism responsible for fostering the political will to promote the provision of weather and climate products and services in support of socio-economic development.

services together with the stakeholders that need this information. The GFCS has identified water as one of the four priority areas for implementation.

Together these agencies recognize and acknowledge that access to climate information and services is fundamental to sustainable water resources management in the future, especially in a changing climate. Water resources managers have always managed their valuable water resources using a risk-based approach. Design of most hydrological structures is based on frequency analysis of long-time series of both rainfall and stream flow data. The operation of storages takes into consideration the variability of the climate and the implications for inflows over days and months ahead. However, it is necessary to provide relevant scientific inputs to help water resources managers to develop effective management and climate change adaptation strategies, considering the uncertainty related to climate change projections within the context of water resources decision making. How can we improve the content and delivery of climate information and services to better enable water resources managers to deal with these uncertainties? What are the current limitations in the science and understanding of climate variability and change? What mechanisms are in place to improve the dialogue between the service providers and the service users? Where do the gaps lie in Africa and how can we address them? A synthesis of these ideas will be offered to identify key issues and a panel discussion will focus on how the science and policy developments needed to address the key aspects of the emerging water crisis can be operationally addressed.

Programme

19h00 – 19:05	Welcome (Chair: Arame Tall)	
	Presentation	Speaker
19h05 -19h15	Contribution of the Global Framework for Climate Services to improved understanding and prediction of climate in Africa	Filipe Lúcio, WMO
19h15 -19h25	Leveraging the Integrated African Strategy on Meteorology in support of climate research and capacity development	Mamadou Bah, President, WMO Regional Association I
19h25 -19h35	Addressing water resources challenges through scientific cooperation	Anil Mishra, UNESCO
19h35 -19h55	Discussion	All participants
19h55 – 20h00	Closure	Chair