## **Hydromet in Africa**

# Hydromet Services help countries in Africa increase resilience to natural disasters, save lives, and strengthen public and private investments.

African governments, academia, private sector leaders, and international organizations are committing themselves to provide improved weather, climate, and hydrological information, known collectively as hydromet. Put in real world terms, communities can access real-time weather forecasting, long-term

drought prediction tools, and advanced water monitoring systems among other useful hydromet services.

Using these services, communities can have the early warning needed to evacuate areas when disasters hit, businesses can make effective water-related decisions that affect their industry, and government agencies can effectively tackle climate change based on the latest information.

#### What is hydromet?

Hydrology + Meteorology - a science that deals with atmospheric, weather, water, and climate phenomena

Hydromet services provide real-time weather, water, early warning, and climate information and data critically needed for growth and sustainable, climate-resilient development in Africa.

Improved hydromet services enhance productivity and contribute to shared growth across a range of sectors, not least of which includes agriculture, transport, energy, urban planning, and health services. Hydromet information also strengthens the enabling environment for private and public investment in development. Statistics have shown that investment in hydro-met services has a scale of 1:7 return on investment. Hydromet services also save lives. Advanced early warning using reliable hydromet data can make the difference on whether fishermen head to sea before a cyclone or a town evacuates due to an impending flood.

### The Challenge

Africa is at a critical juncture. The continent has made significant achievements in development over the last few decades, but climate and disaster risks threaten present and future development gains. These risks affect 10 million people annually, yet hydromet services are presently not equipped to meet the needs of society. Weather and climate related disasters are reversing development gains, setting countries 10 to 20 years back.

In fact, Africa has the least developed weather, climate and hydrology observation network, with only 1/8 of the required density and less than 300 weather stations that meet the World Meteorological Organization (WMO) observation standards. As climate change exacerbates current weather conditions, sea levels will rise and flood into cities, cyclones and storm surges will hit the coasts, and heat waves and droughts will hamper farming and agriculture, leaving millions food insecure and crippling

economies. African countries face a combination of risks, but effective hydromet services can offer a solution to these challenges.

#### **The Response**

Funding and commitment are key. To meet the dire need for modernizing hydromet services, the African Development Bank (AfDB), World Bank Group, World Meteorological Organization (WMO), French Development Agency (AFD), World Food Programme (WFP), and the United Nations Development Programme (UNDP) collaborate to implement a program that modernizes these services at national, sub-regional and regional levels. These efforts are strongly backed by the European Union, the multilateral Climate Risk Early Warning System (CREWS) initiative, and the Government of Japan. The Green Climate Fund (GCF) has also offered critical guidance and direction to the development of the program, and has started funding the program's implementation on the ground.

The Africa region is additionally committing to improve hydromet services. Leaders know that the availability of global and regional weather and climate monitoring forecasting systems means that, with relatively modest investment, African countries can substantially improve their such services. Events such as the upcoming AMCOMET Africa Hydromet Forum, further highlight the regional commitment to improve hydromet services for greater shared prosperity.