

The importance of improved hydromet services

Improving hydromet services is integral to strengthening resilience to extreme weather events and enabling economic development across Sub-Saharan Africa. Specifically, accurate hydromet information is a critical requirement for i) developing water resources for irrigated agriculture, hydro power and an improved water supply ii) better planning for health services iii) providing access to safe air and road transportation and iv) reducing the economic and social impacts of floods, drought and other extreme weather events. It also indirectly contains fragility and promotes peace-building.

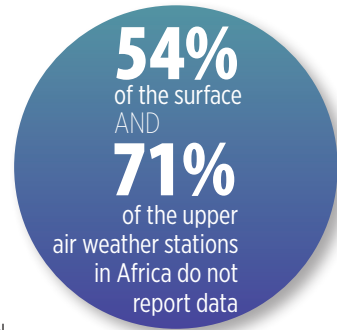
WHAT IS Hydromet is a shortened form of hydrological and meteorological observation systems and services.

Hydromet services as a public good

Hydromet Services are a key public good and contribute to improved governance by providing information to facilitate evidence-based and accountable decision making. Socio-economic studies indicate that the benefit to cost ratio of investing in hydromet is high, with returns of 1:3 to 1:15. Because the benefits span across many sectors, they are not always immediately evident.

Current status of Sub-Saharan African hydromet services

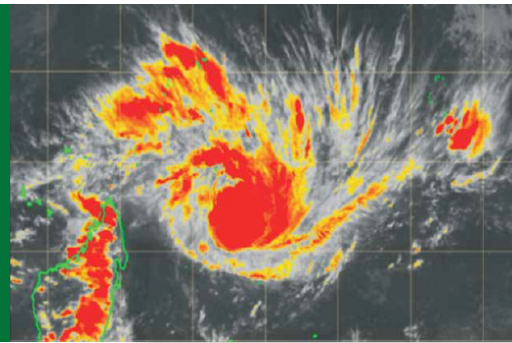
Most national hydromet services in Africa are unable to meet governments' and citizens' needs for weather, climate and hydrological information. A recent World Meteorological Organization monitoring survey showed that 54 percent of the surface and 71 percent of the upper air weather stations in Africa did not report data. In addition, funding from development partners is insufficient, often fragmented and pays limited attention to the issues of larger systems architecture and sustainability.



PARTNERS

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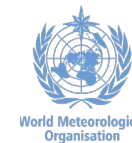
Reliable and real-time weather and climate information is a prerequisite for multiple sectors of the economy, including water, agriculture, transport, energy and public health. Increasing the accuracy of weather forecasts will save lives and livelihoods in Sub-Saharan Africa.



Strengthening Climate and Disaster Resilience in Sub-Saharan Africa Regional Framework Program to Improve Hydromet Services



AFRICAN DEVELOPMENT BANK GROUP
GROUPE DE LA BANQUE AFRICAINE
DE DEVELOPPEMENT



FRAMEWORK PROGRAM

A unique partnership for advancing climate and disaster resilience

Working together toward an innovative and joint approach, the World Meteorological Organization, African Development Bank and World Bank Group have formed a regional framework program titled, 'Strengthening Climate and Disaster Resilience in Sub-Saharan Africa', to support the modernization and strengthening of Sub-Saharan African hydromet services. The cooperation is built on the premise that joint efforts and strong partnerships are needed to support Africa as it adapts to climate change and reduces disaster risks.

Defining features of the Framework Program



Expected results

1. Timely and reliable forecasts at the regional, national and local levels leading to a reduction of the impacts of disasters on people and property;
2. Improved delivery of weather, climate and hydrological services to citizens and weather dependent sectors, and
3. Improved international and cross-border collaboration, including on drought, severe weather and flood warnings.

Resource Mobilization Target

Initially \$550-\$600 Million for about 15 countries and 4 regional centers

Flexible Financing Framework Approach

To meet this target, regular and innovative development financing is required from the World Bank, the African Development Bank, Global Facility for Disaster Reduction and Recovery (GFDRR), bilateral and multi-lateral development agencies, climate financing, existing—and possibly new—multi-lateral trust funds, and contributions from beneficiary governments.

PROGRAM COMPONENTS

1. National Level—Strengthening Hydromet Services

- **Improving Service Delivery and Development of National Framework of Climate services:** includes (i) development of new hydromet services and tools for decision-making in areas such as agriculture, disaster management, transport, water resources, hydro-electricity, fisheries, coastal zone management, public health and municipal land use planning; (ii) training in business development, and (iii) communication strategies. This involves working closely with the relevant sectoral agencies at national and sub-national levels.
- **Infrastructure Modernization:** includes observation networks such as radar, automated weather stations, rain and river gauges, upper air stations, information and communication technology facilities and support for the operation and maintenance of infrastructure.
- **Institution Strengthening:** includes strategy development, revisions to legal and regulatory frameworks and standard operating procedures, investment programming, training and capacity building, institutional reforms and support to project management and implementation.

2. Sub-Regional Level—Modernization of Regional Centers and Services

- Trans-boundary cooperation and information exchange (including training on hydromet forecasting, forecasting and early warning, climate modeling, improving protocols for data sharing);
- Standard operating procedures and protocols;
- Upgrading of regional information technologies and hydromet infrastructure, including use of national data in weather forecasting and climate modelling;
- Human resource development for WMO-specialized centers and regional hydromet agencies, and
- Operations, maintenance and financing strategies.

3. Regional/Global Level—System Integration and Knowledge Exchange

- Link global centers of excellence with regional and national hydromet agencies, and World Meteorological Organization (WMO) specialized centers;
- Provide advisory services for strategy development, infrastructure modernization and service delivery;
- Support a project preparation facility for priority hydromet infrastructure investments;
- Promote sharing of global and regional good practices, and
- Support program management and coordination.