

Program Profiles

*A series highlighting key
GFDRR-supported initiatives*

Strengthening Climate and Disaster Resilience in Sub-Saharan Africa

REGION: AFRICA
FOCUS: PREPAREDNESS



PARTNERS:

The Regional Framework Program to Improve Hydromet Services in Sub-Saharan Africa is a joint effort between the African Development Bank, the World Meteorological Organization (WMO), the World Bank Group, and the Global Facility for Disaster Reduction and Recovery (GFDRR).

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PROGRAM DESCRIPTION:

Nearly half of all surface and 75% of upper air weather stations in Africa do not report data, jeopardizing a crucial component of the country's climate and disaster resilience. Reliable and real-time weather and climate information is a prerequisite for multiple sectors of the economy, including agriculture, transport, energy, and public health. Increasing the accuracy of weather forecasts will save lives and livelihoods in Sub-Saharan Africa.

The Regional Framework Program to Improve Hydrometeorological Services in Sub-Saharan Africa aims to improve hydromet services on the national, sub-regional, and continental levels. At the national level, the program seeks to modernize or build infrastructure such as radar, automated weather stations, and others, as well as strengthen institutions and service delivery. Sub-regional efforts will include standardizing procedures to promote trans-boundary collaboration, while Africa-wide efforts will ensure hydromet services across the continent will be linked to regional and global centers, improving data and promoting partnerships.



GFDRR
Global Facility for Disaster Reduction and Recovery

BACKGROUND:

From 1970 to 2012, communities around the world suffered more than 8,800 hydrometeorological disasters, resulting in 1.94 million deaths and \$2.4 trillion in economic losses. The frequency of these disasters, along with associated damages, has increased nearly five-fold in the same time period, with recent years seeing some of the most powerful and destructive hydromet events on record, from Hurricane Sandy in the United States to Typhoon Yolanda in the Philippines.

With more than 75% of disaster losses attributable to weather and climate extremes, understanding how, when, and where these events form and evolve is vital to curbing their growing impacts.

Advancements in technology and predictive modeling are better-enabling governments and other organizations to provide effective early warning systems that help safeguard lives and assets. Every dollar invested in hydromet services delivers socioeconomic benefits of at least \$3, while many studies indicate benefits exceed costs more than 10 times.

APPROACH:

Africa is particularly vulnerable to droughts, flooding, tropical cyclones, landslides, and other hydromet-related disasters. The Regional Framework Program to Improve Hydromet Services in Sub-Saharan Africa will focus on reducing the risk of these events, and better protecting social and economic progress throughout the region.

The Program will seek to accomplish this through three main components:

- 1) strengthening national hydromet systems,
- 2) modernization of regional centers, and
- 3) regional system integration and global knowledge exchange.

The Program will also leverage partnerships and promote cooperation, especially through scaled up investment financing from development institutions.

CONTACT:

Vladimir Tsirkunov
vtsirkunov@worldbank.org
www.gfdr.org/hydromet



FUTURE GOALS:

Improvement of hydromet and early warning services through sustainable integrated investments can save thousands of lives a year globally and provide between \$4 billion and \$36 billion per year in economic benefits through increased productivity and avoided asset losses. This will be critical in lifting the millions out of poverty around the world whose livelihoods are at risk of climate shocks. The GFDRR-supported program in Africa will focus on modernizing and strengthening hydromet service delivery through better forecasting, accessible weather data, and improved international collaboration to help prevent future disasters, and will serve as a model for other regions looking to build climate and disaster resilience. Ultimately, the wealth of new data enabled by this program can also be used to help stimulate local and regional economies, as valuable weather information benefits the agricultural sector, water resources, renewable energy, and more.