

DFID/WISER HIGHWAY Project

Strengthening of the Regional Meteorological Early Warning System in the Lake Victoria Basin

Africa's development, climate and resilience agendas are inextricably linked. Statistics show that about 90% of all natural disasters on the continent are weather and climate driven¹. Hydro-meteorological disasters that include floods, droughts, tropical cyclones, lightning strikes and landslides continue to cause heavy damages and loss of livelihoods and lives. There are indications that these disasters will increase in frequency and intensity. The economic cost of recorded weather related disasters in Africa in the last 20 years is conservatively estimated at 10 Billion USD² given widespread under-reporting of losses. An increase in the number of severe weather and extreme climate events, impact heavily on the world's poorest and most vulnerable communities.

Funding from Department For International Development (DFID) in the UK, through the Weather and Climate Information SERvices for Africa (WISER) programme was made available for the HIGH impact Weather IAke sYstem (HIGHWAY) project to address the need for improved, accurate early warning systems, which will be co-produced between scientists and users, to prevent deaths and damage due to severe convection and strong winds on Lake Victoria and in the East African Region.

This project aims to establish an Early Warning System (EWS) for the East Africa Region by working through mandated institutions from the international, regional and national levels to ensure the Regional EWS is effective and sustainable. The main collaborating institutions include: the World Meteorological Organization (WMO), the UK Met Office (UKMO), National Meteorological and Hydrological Services (NMHS) in East Africa, the Lake Victoria Basin Commission (LVBC) and the East African Community (EAC).

The desired impact of the HIGHWAY project is to increase use of weather information to improve resilience and reduce the loss of life and damage to property in the East African region. The key activities of Highway revolve around user engagement to understand and meet specific services needed through a co-production process. The users will be involved in the need analysis, the way products and services are packaged and distributed as well as provide feedback for improvement.

The approach would be to expand on existing projects (such as the Multi Hazard Early Warning Services (MHEWS) project in Tanzania, Aircraft Meteorological Data Relay (AMDAR) implementation in Kenya as well as the Severe Weather Forecast Demonstration Project (SWFDP) for Eastern Africa) to provide downscaled weather forecasts and severe weather warnings for communities and stakeholder groups in the East African region. At the end of the project a regional Early Warning System (EWS) should be in place which is accessible, operational and sustainable for all relevant users and based on a regionally agreed institutional framework, which can be translated beyond these partner countries and into the wider developing world.

Designing, planning and economic justification for improved early warning mechanisms would be a key component of HIGHWAY aiming at establishing a regional coordination mechanism for end user

¹ CRED's Emergency Events Data Base

² http://reliefweb.int/sites/reliefweb.int/files/resources/PAND_report.pdf

engagement to demonstrate the benefit of a regional platform for EWS to guarantee long term sustainability.

This project started on 1 Oct 2017 and will end on 31 March 2020.

LIST OF MAIN PARTNERS

World Meteorological Organization (WMO)

United Kingdom Met Office (UKMO)

National Meteorological and Hydrological Services in East Africa:

Burundi Meteorological Service (BMS)

Kenya Meteorological Department (KMD)

Rwanda Meteorological Service (Météo Rwanda)

Tanzania Meteorological Agency (TMA)

Uganda National Meteorological Authority (UNMA)

East African Community (EAC)

Lake Victoria Basin Commission (LVBC)