



Met Office

Case study: Rwanda Early Warning Service

“The EWS project has greatly improved our forecasting capability and has enabled us to deliver services that are important for protecting life and property.”

Anthony Twahirwa,
Meteo Rwanda



Working toward enhanced preparedness

Challenge

Western Rwanda is vulnerable to weather-related hazards, including flooding and landslides. The Government of Rwanda required enhanced weather information services to improve preparedness and ultimately reduce vulnerability and economic loss.

Solution

The Met Office worked with the Rwanda National Meteorology Agency (Meteo Rwanda), the Ministry of Disaster Management and Refugees Affairs (MIDIMAR), the Rwanda Environmental Authority (REMA) and the district administration to develop services and approaches to communication and response.

This project aimed to support the development and introduction of a pilot Early Warning System (EWS). This would provide better weather information services to disaster managers and the public in areas prone to extreme impacts of weather and climate.

At the start of the project, we assessed the existing situation against international best practice using the UN-International Strategy for Disaster relief (UN-ISDR) framework. This led to an agreed road map for implementation which covered: developing new EWS products; improving forecaster tools and capability; communications; and response. Based on the road map, the Met Office worked with Meteo Rwanda, REMA, MIDIMAR and other stakeholders to support:

- development of severe rainfall warning products;
- establishment of Standard Operating Procedures for EWS forecasts and warnings;
- development of preliminary thresholds for severe weather warning products;
- improvement of forecaster capability to deliver severe weather products;
- training on numerical weather prediction, seasonal forecasting and climate change modelling; and
- development of an institutional structure for early warning in Rwanda.

Benefits

The project aimed to promote a ‘people centred’ approach to early warning in addition to forming a sound basis for scaling up the service in the future.

Meteo Rwanda’s forecasters now better understand their roles and responsibilities as part of the EWS. Capability has been enhanced by improving forecaster knowledge and accuracy – they can now identify situations with the potential for environmental impacts caused by rainfall and issue appropriate advice and warnings. Meteo Rwanda is, as a result, issuing rainfall planning forecasts on a regular basis to disaster managers and is able to issue severe rainfall weather warnings to the general public to ensure they are better prepared.