Project Summary

Rwanda National Project (Enhancing Climate Information Services for Agriculture and Disaster Risk Reduction in Rwanda)

Introduction

The aim of this project was to increase the use of improved, co-produced and accessible weather climate services to inform decision for disaster risk reduction and agricultural sectors at national, subnational and community levels. This was achieved by working to enhance the capacity and processes at Meteo Rwanda and within local governments to co-produce and deliver a range of novel services such as seasonal climate information services and impact-based early warnings communicated directly to households.

Supported by: Fund Manager:

UKaid
from the British people

≋ Met Office

Capacity Development at Meteo Rwanda

The project supported Meteo Rwanda staff to generate and operate automated seasonal forecasts through the training of 4 staff at IRI and 8 more trained in Kigali. This included the initiation of a Rwanda Climate Maproom which acts as a web-based repository of climate information to support the development of seasonal forecasts for the agricultural sector. In addition, 168 local government offices and extension workers were trained on the use of the Rwanda Climate Maproom, and working with staff from Meteo Rwanda, supported the design of the Maproom content, recommending changes to its layout and content.

Development of a co-produced impact based early warning system

In the creation of a new impact based early warning system, the project applied two World Meteorological Organisation (WMO) initiatives, the Strategy for Service Delivery and its Implementation Plan (SDIP) and the Guidelines on Multi-hazard Impact-based Forecast and Warning Services (IBEWS). The delivery of the output followed a 4-step plan in its implementation. The first step involved a desk-based situation assessment and co-designing of the impact based early warning service at a number workshops with producers and user sectors. Product development then followed in consultation with Meteo Rwanda and other key stakeholders in the Environment and Natural Resources sector. Product prototypes were developed and adapted after completing the development of threshold-based impact tables in collaboration with other sector stakeholders to design the final product. The development of the impact tables by staff in the Forecasting Division of Meteo Rwanda provides a framework for efficient and effective operations of the impact based early warning system and a template for other services. Additionally, the service has been embedded in the institution's Quality Management System to ensure ensure the consistent production of it. The first Impact Based Early warning was issued on 13th January 2021

Communicating Weather and Climate Services

The project placed a huge emphasis on developing new relationships with key agriculture and media stakeholders for the communication of new services. This included the establishment of tripartite meetings between RAB, Meteo Rwanda and Radio Huguka to provide an opportunity for media experts in the interpretation of forecasting services and the drafting of broadcast scripts for radio listener clubs. These radio listener clubs bring together the farmers (25 members per club) to discuss a radio programme, and provide feedback about the content of programmes.

The Twigire Muhinzi agriculture extension approach was also used to co-produce climate services for farmers. This is where farmer champions from villages are trained and then receive climate information. The champions are then mandated to train their peers in their respective villages. Through these initiatives the project end line survey and focus group discussions showed that through the receipt of enhanced forecasting information, farmers were taking decisions leading to avoided losses per household of USD 61.6 per season. Through additional analysis, the project recorded total estimated avoided losses of USD 26,738,075.

Conclusion
Through the project's intervention, farmers in Rwanda are now able to anticipate and better prepare for climate shocks, which in turn has significantly raised the profile and credibility of Meteo Rwanda. Working alongside other stakeholders in national and local governments, as well as the media, means that the impact based early warning system is reaching hundreds of thousands of new households.