Project Summary

CRISPP (Coastal Resilience and Improving Services for Potato Production in Kenya)

Introduction

The purpose of the CRISPP project was to develop a set of co-produced climate information services that could deliver transformational change in the dissemination and impact of weather and climate information across Kenya. This involved providing enhanced access to decision-relevant weather and climate information for households in Kenya's coastal region, and the improved use of climate information for the country's potato sector.

Supported by:

Fund Manager:

The generation of demand led and downscaled forecasts across a range of timescales

Following a co-production methodology, the project supported the generation of demand led and downscaled forecasts across multiple timescales. The project brought together producers, users and intermediaries to identify needs, design the services for user needs and test their effectiveness in helping to improve livelihood and organisational decision making. The intermediaries included County administrations of the four target Counties, NGOs, media and local organisations, while the users comprised, principally, vulnerable households, agricultural smallholders, fishermen, the shipping sector and the County Government. County Directors of Meteorology (CDMs) were trained in the use of different forms of software to support the production and downscaling of forecasts, and a set of standard operational procedures (SOPs) developed to underpin their consistent generation. The project has developed forecasting templates for routine production by the Kenya Meteorological Department (KMD) covering: county specific seasonal forecasts, county specific monthly forecasts, county specific weekly forecasts, regional wide daily forecast, and a regional wide daily marine forecast. Additionally, production staff at the National Forecasting Centre and the CDMs have worked to consult upon the requirements for climate information products across a wide range of user groups in the coastal region; revised their production and communication based on their feedback; and, been trained on their continued dissemination beyond the end of the project.

Creation of County Climate Information Service (CIS) Plans for Kwale, Mombasa, Kilifi, and Taita Taveta

CDMs were trained on the production of their CIS plans, encompassing both the skills to complete their drafting, and the consultation exercises they would need to undertake to gather user feedback to inform the content. In parallel the project undertook an extensive exercise to determine the demand for weather and climate information at an institutional level and the appetite to support the validation of the CIS plans. This was undertaken with support from the Kenya Red Cross Society (KRCS) who led on delivery of the stakeholder workshops and the distillation of much of the feedback for presentation to the CDMs. Generation of the CIS plans across the project counties has been highly beneficial in strengthening CDMS' engagement in County Governments, supporting County Government planning, and directing infrastructural assistance provided by complementary initiatives. For example, in Kwale, members of the County Government, particularly those from the Environment Committee, participated in the plan's development and are keen to integrate the County CIS plan within Kwale's Climate Change Bill. The development and operationalization of the plans has significantly benefited through alignment with a range of complementary climate-resilience strengthening projects including the

Ada Consortium in Kwale and Kilifi, the ASDSP in Kwale, Mombasa and Taita Taveta, KCEP KRAL in Taita Taveta and Kilifi, and ACREI in Taita Taveta. Establishment of Communications Channels to Support the Dissemination of Weather and Climate Information Services.

The project devised and implemented a communication strategy to identify and train intermediary organisations that represented a broad spectrum of the region's key economic sectors. These were drawn from a mixture of direct users of weather and climate information, co-producers and those who add advisories, and those who disseminate solely to their specific networks. Training included dissemination through mixture of email, radio, face-to-face meetings, and social media. This reflected the project's intent to a) reach as large an audience as possible with the forecasts generated by KMD b) recognise the importance of designing communications methodologies that can continue to be delivered at little or zero cost following the project's conclusion. Additionally, the project undertook (i) Training and continuous mentoring of the CDMs on transmitting their forecasts through a range of channels (ii) Training radio stations and other media outlets on the interpretation of forecasts (iii) Providing feedback channels from users to CDMs. This has led to a substantial increase in the numbers of people able to access KMD's forecasts, with over 300,000 households accessing improved weather and climate services.

The improved use of climate information in business decisions in Kenya's potato sector

The project engaged potato value chain actors from all levels of the potato value chain from Research and Development to Processing, as well as key supporters in the national and county governments. Potato farmer groups and cooperatives, seed producers, processors and insurance and credit providers were trained to increase their baseline understanding of climate change and the application of weather and climate information. From this, information on the climate risks for different stakeholders and different business decisions were co-produced and translated into functional requirements for the end service. A Participatory Scenario Planning (PSP) Workshop was held in 2019 Uasin Gishu to educate local farmers on the weather information development process, and to offer advisories based on the seasonal forecast for the OND season.

Co-production of weather and climate services applicable to the potato sector. Through engaging and training potato stakeholders, information on the climate risks for different stakeholders and different business decisions were co-produced and translated into functional requirements for the end service. The engagement process emphasised the need for interpretation and translation of information, and for both climate information at the seasonal timescale, as well as longer-term climate information on the way that climate change will affect potato-growing areas in Kenya,

in order to inform strategic investments in the potato value chain. The project team (led by the Met Office) prepared a report on projected climate change impacts on potato production in Kenya. Additionally, led by Climate Yetu, the project has trained 93 end users (potato farmer groups and cooperatives, seed producers, processors, insurance and credit providers, and agricultural officers) on the fundamentals of climate change, and how to utilise weather and climate forecasts.

Conclusion

Overall, the project has extended access to weather and climate information services to over 300,000 households in the coastal region, and instigated a step-change in the provision and use of KMD's services at the county level. Furthermore, capacity and interest have been built among potato processors on the use and utility of weather and climate information for business decision-making. Several processors are now at a point where they understand the value of climate services products, and are potentially willing to pay for these, providing a potential revenue stream to KMD. At a county level, relationships have been built in Uasin Gishu and Nyandarua which have created the platform for a much more coordinated approach to the issue of climate change in the potato sector.