

Developing climate services for and on behalf of UK government

Building capacity through climate service development



# Developing demand-led climate information services in Western Kenya

## Executive summary

- Low levels of availability and uptake of climate information services in Western Kenya can have serious consequences due to the direct impact weather has on people's lives and livelihoods.
- User engagement was crucial in developing a range of forecasts across different timescales for fishermen and farmers, and exploring new communication channels to extend the reach of the forecasts.
- More timely and relevant forecasts are being disseminated, with thousands of households estimated to be receiving the information, improving their ability to use forecasts for livelihood-related decision-making processes.

## Background

Availability and uptake of climate information services in Western Kenya has generally been low because many people consider the services irrelevant. This has serious consequences due to the direct impact that weather has on lives and livelihoods, particularly for people working in the fishing and agricultural industries. Designing weather and climate information services directly informed by the needs of end-users therefore has huge potential consequences in terms of supporting broader developmental goals for the country.

## Weather and Climate Information Services for Africa (WISER) programme

The WISER programme, funded by UK aid from the UK government's Department for International Development (DFID), identified a need to improve climate information services in Western Kenya. As part of the WISER Western project, the Met Office, Kenya Meteorological Department (KMD) and CARE International worked in partnership to deliver a greater range of climate information services more tailored to the specific needs of end users in the Kenyan counties of Kakamega, Siaya, Trans Nzoia and Kisumu.

## User engagement

The project partners undertook a comprehensive assessment of the climate information needs of key groups across the project counties. Part of this work enabled us to gain understanding of awareness levels of weather impacts and how weather and climate information is communicated and used. Engaging with users included inputs from government ministries, national and local non-governmental organisations (NGOs), community groups, media organisations, religious organisations, as well as focus groups within farming and fishing communities.

## Demand-led services

User insights enabled the development of a series of standardised templates for producing county-specific daily, weekly, monthly and seasonal forecasts. These included forecasts specifically aimed at farming and fishing communities based around Lake Victoria. Templates aimed to improve the quality, uniformity and timeliness of forecasts produced by County Directors of Meteorology (CDMs), and strengthen communication channels between KMD and the CDMs.

## Reaching more people

At the same time, research was undertaken to establish the most effective channels of communication for weather and climate information. A comprehensive assessment of the media landscape identified the most appropriate means of dissemination including the internet, local radio and SMS.

In addition, it was decided to expand the range of delegates attending Community Climate Outlook Forums (CCOFs) and to host them earlier. This helped ensure that a wider range of weather and climate information users can make timely livelihood decisions, based on forecasts and accompanying advisory information.

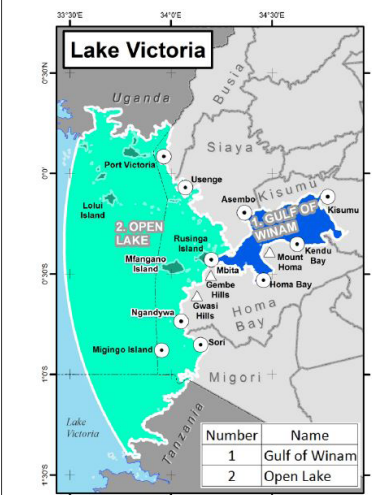
As a result of this project, improved communications between KMD and the CDMs has enhanced the level of service which CDMs can offer by providing more timely and relevant forecasts. They have also embraced a broader range of communication methods so that forecasts reach more people. Thousands of households have received the new forecasts, significantly improving their ability to use this information for livelihood-related decision-making processes.

*“It has rained enough for planting in Kiminini just as the KMD forecast on their weekly weather forecast update that planting be done on or around 25 March 2017.”*

**Moses Biketi**  
County Crops Officer  
Trans Nzoia County

*“This is a very good initiative and at the Ministry of Agriculture we can use the products, especially the seasonal forecast, to now rework our extension services. This way, the services we provide will be specific and very user-need defined”*

**Dominic Eyre**  
Ministry of Agriculture representative  
Trans Nzoia County



**Advisory to fishing craft**

Number	Name
1	Gulf of Winam
2	Open Lake

**Green Saturday** - no weather related hazard expected.  
**Green Sunday** - no weather related hazard expected.

**Period covered by forecast:**  
08.00 Saturday 15<sup>th</sup> to  
06.00 Sunday 16<sup>th</sup>

**Summary**

**Saturday 15<sup>th</sup> October 2016**  
Light Easterly winds in the Gulf of Winam will give way to light Westerly breeze in the afternoon. There is a high probability of rain in the night. Visibility will be moderate. Overnight winds in the Gulf will be Variable.

*In the open lake zone light Easterly winds in the morning will give way to light Westerly in the afternoon. Visibility will be moderate. There is a chance of rain near the Ugandan coast overnight*

**Sunday 16<sup>th</sup> October 2016**  
Light Easterly winds in the Gulf of Winam will give way to light Westerly breeze in the afternoon. There is a high probability of rain in the night. Visibility will be moderate. Overnight winds in the Gulf will be variable.

*In the open lake zone light Easterly winds in the morning will become westerly in the afternoon. Visibility will be moderate. There is a chance of rain overnight.*

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## Zone 2. Open Lake

Saturday 15 <sup>th</sup> October 2016	Wind speed and direction	Rainfall/ Cloud cover	Rainfall distribution	Visibility	Navigation conditions
<b>Morning</b>	<b>E</b> Light wind	Sunny intervals		Good	<b>No warnings in force</b>
<b>Afternoon</b>	<b>W</b> Light wind	Light rain		Good	<b>No warnings in force</b>
<b>Night</b>	<b>Var</b> Light wind	Light rain		Moderate	<b>No warnings in force</b>
<b>Sunday 16<sup>th</sup> October 2016</b>					
<b>Morning</b>	<b>E</b> Light wind	Sunny intervals		Moderate	<b>No warnings in force</b>
<b>Afternoon</b>	<b>W</b> Light wind	Light rain		Moderate	<b>No warnings in force</b>
<b>Night</b>	<b>Var</b> Light wind	Light rain		Moderate	<b>No warnings in force</b>

Sample forecast products for Lake Victoria

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