



Met Office

**Case study:
Mobile Weather
Alert service**

“This is a real demonstration of the importance of meteorological expertise to our society. It has also provided the Uganda Department of Meteorology with valuable feedback on the reliability of our forecasts for very localised conditions on Lake Victoria.”

Michael Nkalubo, Commissioner,
Uganda Department of Meteorology*

Photo: Michael Nsubuga / Twenty Ten /
Africa Media Online



Saving lives on Lake Victoria

Challenge

Lake Victoria in East Africa is the world’s largest tropical freshwater lake and provides a livelihood, directly and indirectly, to over 3.5 million people. Weather conditions on the lake can change suddenly with high winds and waves posing serious hazards to lake users. Severe storms occur over Lake Victoria at any time of year and historically, forecasting these extreme conditions was difficult. Local fishermen were unable to make informed decisions and prepare accordingly.

Solution

A free Mobile Weather Alert service was developed to provide forecast and warning information for lake users. The project was led by the World Meteorological Organization (WMO) with support from the Uganda Department of Meteorology, MTN, Ericsson, National Lake Rescue Institute, the Kalangala fishing community and the Met Office. This unique partnership combined mobile technology, weather forecasting and local knowledge to provide a localised Mobile Weather Alert service solution.

The Uganda Department of Meteorology accessed a range of numerical weather prediction models to enhance its forecasting capability. The Met Office contributed forecasts for the Lake Victoria area from our global model data and also from a new 4km resolution forecast model which helped to capture more realistic wind speeds and rain rates for the area.

Forecasters from the Uganda Department of Meteorology combined model and satellite data as well as other indicators to produce forecast guidance for the Lake Victoria region. This information was used for the Mobile Weather Alert service as lake users were sent ‘traffic light’ warnings via text message. Each warning colour represented a summary of the latest forecast, hazard rating and advice.

Benefits

Local fishermen now have the opportunity to plan and take appropriate action if difficult conditions are forecast. Storm warnings ahead of severe weather help reduce accidents and fatalities and are essential for users, helping them to make informed decisions to prepare accordingly.

A survey of 200 fishermen using the Mobile Weather Alert service found that 96% of respondents believed it had improved the safety of their lives showing the importance of this life-saving tool.*

The collaboration has helped to reduce fatalities and, in turn, lessened the impact that weather on Lake Victoria has on the local economy and poverty levels.

*Source: WMO press release, Mobile weather service improves safety of fishermen in Uganda. 2012

Met Office
FitzRoy Road, Exeter
Devon, EX1 3PB
United Kingdom

Tel: +44 1392 885680
Fax: +44 1392 885681
internationaldevelopment@metoffice.gov.uk
www.metoffice.gov.uk/international-development

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