Geophysical Research Abstracts Vol. 20, EGU2018-1199, 2018 EGU General Assembly 2018 © Author(s) 2017. CC Attribution 4.0 license.



## **Drought and Flood Mitigation Service for Uganda**

Gina Tsarouchi (1), Darren Lumbroso (1), Caroline Chambers (2), Tom Crocker (3), George Gibson (3), Mark Harrison (3), Paul Healy (4), Luca Innocente (5), Elma Jenkins (4), Richard Jones (3), Regina Lally (6), Andrew Lavender (2), Samantha Lavender (2), Arnaud Le Carvennec (4), Lisa Osborne (5), Heather Pitcher (5), Simon Reid (4), Stephanie Ties (7), Lucrezia Tincani (8), and Jamie Williams (7)

(1) HR Wallingford Ltd, Wallingford, UK (g.tsarouchi@hrwallingford.com), (2) Pixalytics Ltd, Plymouth, UK, (3) UKMet Office, Exeter, UK, (4) RHEA Group, Harwell, UK, (5) AA International & AgriTechTalk International, Aberystwyth, UK & Kampala, Uganda, (6) Databasix, Harwell, UK, (7) Environment Systems Ltd, Aberystwyth, UK, (8) Oxford Policy Management Ltd, Oxford, UK

Uganda is at high risk from a variety of hazards, which have the potential to adversely affect progress on poverty reduction and economic growth. The World Bank has estimated that at least 200,000 Ugandans are affected by disasters each year. The Government of Uganda has identified drought as the most severe disaster affecting the lives and livelihoods of its citizens.

There are currently significant levels of investment, across Uganda, into systems that collect and share early warning information on a range of hazards including floods and droughts. However, many of the current Early Warning Systems in Uganda do not appear to be sustainable from both a financial and technical point of view. They are mostly based on situational analyses and make little or no use of weather forecast information.

The Drought and Flood Mitigation Service (DFMS) is a project funded by the UK Space Agency, aiming to minimise the impacts caused by extreme weather events by improving the guidance provided to Uganda's agricultural, water management and disaster risk reduction sectors. The DFMS Early Warning Platform combines weather and hydrological forecasting with Earth Observation products, and provides information at range of temporal and spatial scales. The flexible platform provides a wide range of outputs such as historical monitoring data, forecasts, hazard maps and early warning alerts.

A consortium of specialist UK organisations, led by RHEA Group, are working in partnership with the Ugandan Ministry of Water and Environment and the Ugandan National Meteorological Association to collaboratively develop a service that will enable stakeholders to put in place early actions rather than respond to a crisis once it has unfolded.

Although the DFMS is still being developed, there are several lessons that could assist in paving the way towards a fully integrated National Early Warning System for Uganda. We aim to present some initial results covering the areas of forecast capability development, user engagement and co-production, project outputs and sustainability.