

Funding information

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FATHUM POLICY BRIEF

Understanding the local context – A must for successful Forecast based Financing: The case of Amuria district

Executive Summary

The Amuria district flood risk profile research was part of the *Forecasts for Anticipatory Humanitarian Action* (Fathum) project. Makerere University, School of Public Health carried out the study.

Research findings:

- Amuria has a long history of flood risk that is further compounded by the occurrence other hazards such as drought, famine and disease epidemics.
- The main drivers of flood risk in Amuria district include the topography such as the swampy terrain, the amount of rainfall received and environmental degradation due to reduced forest cover
- The institutional structures for management of flood response in the district are present but are often hampered by lack of coordination and limited funding

Recommendations:

The Office of the Prime Minister and other stakeholders involved in flood response should:

1. Strengthen the DRM team at the district with the capacity and funds to coordinate flood response and early action at the district
2. Improve risk communication to target households that are illiterate with early warning messages in their local language
3. Undertake research to understand contexts extensively to develop interventions for greater impact

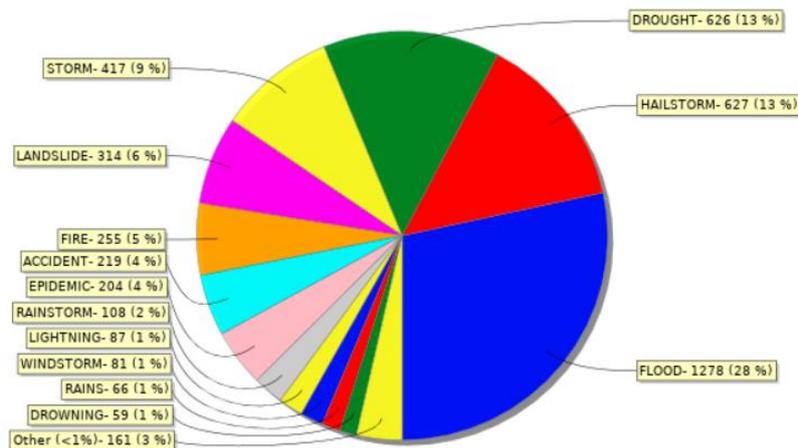
Introduction

Uganda suffers the effects of climate related hazards on almost an annual basis. Seasonal rains cause flooding, flash flooding, landslides that destroys lives, infrastructure, property and livelihoods. Between 1920 and 2013¹, a total of 1,102 people has been killed and 3,365,380 affected by climate/weather related disasters. Floods have taken the bigger portion of this with 1,278 events recorded over a period of 19 years ([UN Deslventar web platform](#)). The impacts of these hazards to a greater extent is often influenced by the context in which they occur. Even when the same hazard occurs in equal measure across different contexts, the result in an array of outcomes. This essentially means that the context is critical in determining the effect of a hazard.

A mapping of flood prone hotspots was conducted by the Uganda Red Cross through analysis of past disaster events and Eastern Uganda was identified as one of the hot spot regions for floods, with

¹ Dr Kitutu Kimono Mary Goretti, 2013: Study on the natural-hazards vulnerability and risk profiles in hot-spot areas as a support to Early Warning, Disaster Preparedness And Risk Reduction (EWDPRR) measures in Uganda; Uganda National Commission for UNESCO; Kampala Uganda.

Amuria district ranking high. In 2007, the country suffered one of the major floods in history in which over 300,000 people were affected.



Number of hazard events 2000 – 2019 (Source – <https://www.desinventar.net/>)

The reflections from these events called for more disaster preparedness to anticipate and manage disaster impacts. In response to this, the Uganda Red Cross with support from the German Red Cross launched and piloted an innovative approach of Forecast based Financing (FbF) in Amuria in 2015. The intervention sought to mitigate flood impacts by building community preparedness capacity before floods occur. FbF automatically triggers humanitarian funding based on an in-depth risk analysis and scientific weather forecast to implement pre-agreed early actions, all these within the framework of an Early Action Protocol (EAP) that stipulates the roles and responsibilities of each actor in the implementation of early actions. The EAP is activated in response to defined triggers and their thresholds.

To inform Fbf action for future intervention, it's important to understand who your target beneficiaries are, where they are and what their vulnerabilities and capacities are. Understanding the people, vulnerabilities and the reasons for this as well as exposure is critical in defining and addressing the impacts caused by the hazards such as floods².

In this brief we use the case of Amuria district in Eastern Uganda, an area that is frequently affected by floods to discuss the importance of understanding the local context in designing interventions based on the Forecast based financing approach.

Why Amuria district?

Amuria district has persistently experienced the extreme impacts of floods with the most adverse episode to date reported in 2007 when flooding and water-logging across eastern and northern Uganda gave rise to a major humanitarian response. (OCHA, 2008). An estimated 20,000 households were severely affected and 58,000 people displaced. With about 80 percent of crops destroyed by floods, the risk of food insecurity rose quickly (IFRC, 2009).

The floods also disrupted delivery of social and economic services such as education, health, trade and agriculture. This resulted in increased risk of communicable diseases especially as the flood waters receded. Malaria and diarrhoeal disease incidence increased by over 30%. (WHO, 2007).

² Amurai District Flood Risk Profile Report. <https://www.riskreductionafrica.org/partners-publications.html>

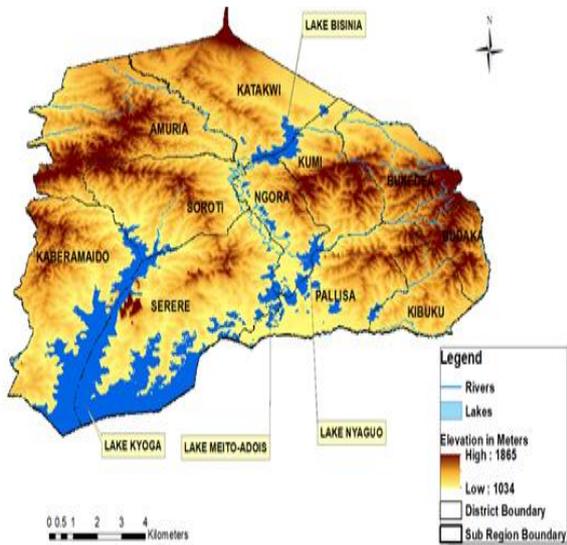


Fig 1: Location of Amuria district



Fig 2: A road floods in Amuria in 2007

What was the Research Approach?

The research on the risk profile of Amuria district was one three studies carried out as part of the *Forecasts for Anticipatory Humanitarian Action* (Fathum) project led by the U.K-based University of Reading. This study sought to gather information on the flood risk drivers, risk governance and flood early warning processes in Amuria district.

We utilized mixed methods in this study to understand the relevance of the local context in designing Forecast based actions. We conducted focus group discussions and key Informant interviews with communities that received Fbf assistance, URCS officials, district officials and the village Local leaders. We also reviewed secondary data from diverse sources such as district reports, government and UN reports and peer reviewed journal articles. It was undertaken by Makerere University School of Public Health in collaboration with the Uganda Red Cross Society and the RCRC Climate centre.

What did the Results Show?

<i>Who</i>	<i>Where</i>	<i>Governance issues</i>	<i>Underlying vulnerabilities</i>
<ul style="list-style-type: none"> Population approx.270,928 most at risk group: Children, women and the elderly 46% households live below poverty line Illiteracy level-37.6% (UBOS, 2019) Majority (81%) of households reside in temporary structures 	<ul style="list-style-type: none"> Low lying Swamy terrain Clay Soil type allows flooding High amount of rainfall Environmental degradation Frequent waterlogging and floods 	<ul style="list-style-type: none"> District disaster management structure present but non-functional due to limited funding Disaster planning active at height of disasters not before 	<ul style="list-style-type: none"> Multi hazards: floods, drought, pests and diseases Long history of civil unrest- LRA war and cattle raids The main livelihood source is agriculture Floods reduce Agricultural productivity significantly.



Fig 3: A grass thatched house destroyed by floods



Fig 4: Women transporting water from in dry spells from distant bore holes

Challenges to flood management in Amuria district

Weak legislation related to management of wetlands has provided a loophole for abuse of environmental resources as people encroach on wetlands. Local capacity for flood response in Amuria district is managed by District Disaster Management Committees (DDMCs). However, they are often plagued by lack of coordination and limited funding.

Recommendations

1. Policy and legislation implications (National action)
 - The Office of the Prime Minister should prioritize early warning by designating funds as contingency before floods occur since it occurs almost annually
 - Efforts to improve coordination between actors in flood response should include Fbf action in their earlier preparedness activities
 - Contingency funding for implementing early actions should be allocated and reserved by all actors involved in response for Amuria district
 - All stakeholders involved in flood response should undertake research to understand local environments extensively to develop interventions that are context specific and effective.
2. Operational and institutional implications (district level)
 - The DDMC DRM plans at the district should be evaluated to accommodate Fbf early actions that can be done before every flood event
 - To improve coordination of the different stakeholders involved in flood response, an Fbf focal person could be identified to oversee all Fbf work within the DDMC

References and useful resources

1. UBOS 2014a. National Population and Housing Census 2014 Area Specific Profiles Amuria District. Uganda Bureau of Statistics.
2. UBOS 2019. Uganda Bureau of Statistics, Statistical abstract 2019.
3. UNDP 2014a. TESO Amuria District June 2014 Profile Hazard, Risk and Vulnerability. UNDP.

FATHUM is a three-country study led by Reading University in the UK to strengthen forecasting and early warning systems in Uganda, Mozambique and South Africa. This multi-institutional, interdisciplinary project aims to improve forecast predictability, investigate complex disaster risk drivers, and implement Forecast-based Financing mechanisms (FbF) that enable effective, appropriate and impactful action before a disaster. This part of the study aims to understand the underlying flood risk drivers in Amuria District (Makerere University's study area), existing EWS and DRM capacity and institutional arrangements – how FbF could fit into local/national disaster risk reduction goals. **For further information please contact:**

Harriet Aber hlowalem@gmail.com or +256 702730650

Irene Amuron amuron@climatecentre.org

Dr Ailsa Holloway ailsaholloway@sun.ac.za; Prof. Chris Garimoi Orach cgorach@musph.ac.ug

4. UPFDRR 2013. Uganda Parliamentary Forum on Disaster.