



Floods Disaster Preparedness Plan 2008: Teso, Bugisu and Pader

*Reducing the potential impact
of floods and water-logging on
already vulnerable communities*

Executive Summary

The flood crisis in 2007, which affected vulnerable communities across the Teso and Bugisu sub-regions, reinforced the need for a more rigorous flood early warning monitoring system and the need for better disaster preparedness and mitigation.

A floods lessons learnt workshop was organised in January 2008 aimed at improving the future emergency responses in the area, and determining priorities for disaster risk reduction in relation to potential future floods in Eastern Uganda.

This preparedness plan is an attempt to identify potential flood-related risks for 2008, implement the lessons learnt from the 2007 floods, and outline and mobilise resources for priority disaster response preparedness actions and projects that must happen before disaster strikes.

In total USD 269,600 is sought for projects that can be effectively implemented before the high-risk period in late August 2008. An additional USD 676,728 over three years will be required for the implementation of the RANET early warning system.

These projects are designed to meet the following objectives:

1. **Strengthening District Disaster Management Committees** in at-risk areas
2. **Increasing community awareness** of potential disaster risks, appropriate community preparedness strategies and action to take when disaster strikes
3. **Reinforcing infrastructure** in high-risk areas
4. Implementing an appropriate and effective **floods early warning system**
5. Development of a **comprehensive and inclusive contingency plan** for disaster response, incorporating lessons learnt from the 2007 floods disaster

Background

Unusually heavy rainfall from July to November 2007 led to severe flooding and water-logging across many parts of eastern and northern Uganda, including the districts of Amuria, Bukedea, Kaberamaido, Katakwi, Kumi, and Soroti in the Teso sub-region; Bududa, Manafwa, Mbale and Sironko in the Bugisu sub-region, Bukwo and Kapchorwa in the Sebei sub-region; Moroto and Nakapiripirit in the Karamoja sub-region; Lira district in Lango sub-region; and Pader district in the Acholi sub-region (see map).



The flooding affected an already highly vulnerable area of Uganda with the majority of households dependent on subsistence agriculture and where basic services are already severely overstretched. The most critical impact was in the Teso and Bugisu sub-regions, due in part to the severity of the flooding as well as the relative lack of existing capacity amongst government actors and humanitarian organizations to respond to needs. For this reason, the emergency response focused primarily on aid delivery and assistance activities in Teso and Bugisu.

A caseload of approximately 50,000 households (300,000 people) was estimated to have been affected by the flooding and to require immediate assistance to varying extents. Most were rendered food insecure by the loss of first season harvests (due in July/August) and delayed/small second season plantings. Whereas a two month “hunger gap” is the norm, the hunger gap was extended by the flooding up to 10 months. The next successful harvest is not expected until July 2008. Moreover, it will take at least two harvests for affected households fully to recover their losses.

In addition to damaged homes – the traditional mud brick architecture of the region rendered them particularly susceptible to the wet conditions prevalent in a flood – water and sanitation facilities were severely impacted by the flooding. Many flooded latrines collapsed, leaving the population afraid to use those remaining. A large percentage of water sources were also contaminated. In addition to the immediate threat posed by this situation, the damage to water and sanitation facilities increased the likelihood for waterborne disease outbreaks as flood waters receded. The incidence of malaria and diarrhoeal diseases and acute respiratory infections increased in the first weeks of the flooding, reportedly by as much as 30 per cent. However, the success of the overall response was epitomized by the prevention of any outbreak of epidemic waterborne disease, such as cholera, and the quick and effective response to an outbreak of measles in the Bugisu subregion.

The emergency response was complicated by the fact that access to many areas was nearly impossible due to roads and bridges being damaged and washed away by the flood waters. Indeed, the most affected communities were entirely cut off by land, leaving those wishing to assist them dependent on air and boat transportation for both assessments and aid deliveries.

While the Ugandan Meteorological Department seasonal forecast for the period June to August predicts near normal rainfall levels for the Teso and Bugisu regions, international forecasters are continuing to predict a 40% chance of above normal levels of precipitation for the period September to November 2008¹. If the heavy rains do re-occur, flooding and water-logging, and their negative effects on an already vulnerable population, will be once again inevitable across Eastern Uganda.

¹ The International Research Institute for Climate and Society – Colombia University.

Rationale and Key Assumptions

The lack of disaster response preparedness actions, and the lack of effective early warning systems, exacerbated the impact of the 2007 floods and also adversely impacted timely and efficient disaster response. It is against this background that the preparedness plan is designed: to avoid a repeat of the 2007 situation – and thus to limit the potential impact of floods and water-logging on already vulnerable communities.

It is assumed that Disaster Risk Reduction for the 2008 floods will take three phases i.e. Preparedness, Emergency Response and Recovery. This plan outlines the priority actions to be undertaken during the Preparedness phase.

The plan assumes that the major flood-related disaster risks for the affected regions will be population displacement, loss of lives and property including food stocks, damage to food crops and resulting food shortages, outbreaks of disease, soil erosion including leaching of iron nutrients, destruction of key roads and bridges hindering access, damage to infrastructure including schools and public health clinics, and contamination of potable water sources.

The plan has been developed in close collaboration with the Katakwi district local government and the District Disaster Preparedness Coordinators of Katakwi, Amuria, Soroti and Kaberamaido, and the wider humanitarian community through the cluster system.

Preparedness Objectives

To limit the potential impact of floods and water-logging on already vulnerable communities, this plan aims to:

1. **Strengthen District Disaster Management Committees** in at-risk areas
2. **Increase community awareness** of potential disaster risks, appropriate community preparedness strategies and action to take when disaster strikes
3. **Reinforce infrastructure** in high-risk areas
4. Implement an appropriate and effective **floods early warning system**
5. Develop a **comprehensive and inclusive contingency plan** for disaster response, incorporating lessons learnt from the 2007 floods disaster

Priority Activities

1. **Strengthen District Disaster Management Committees**

District Disaster Management Committees (DDMCs) have the lead role in both disaster preparedness and the assessment, coordination and monitoring of disaster response at district level.

A thorough understanding of emergency operations, plus specific training in disaster preparedness and response concepts, will ensure that the DDMCs in high-risk areas will discharge their leadership responsibilities effectively in 2008.

Strengthening the capacity of DDMCs will involve training on the following:

- Introducing the concept of Disaster Risk Reduction (DRR) to district leaders
- Orientation of the DDMCs on their Terms of Reference, including Information Management, relationships with the humanitarian community, and management of DDMC business
- Improving assessment, coordination and monitoring work of DDMCs; and
- Agreeing on way forward for an active, proactive and effective DDMC

The training is planned for July and August 2008.

2. Increase Community Awareness

Education of at-risk communities in the potential dangers of floods and landslides will allow them to more effectively prepare for, and respond to, disaster.

Public education and information campaigns in the pre-disaster phase will focus on:

- Understanding disaster risk and risk reduction measures
- Actions to take to safeguard lives, food stocks and other household assets
- Public health and hygiene messages
- Early warning messages

Clusters have been asked to develop specific targeted messages for this campaign.

Various message delivery mechanisms will be used, including radio talk shows, church services, school activities and village meetings.

When disaster strikes, these same mechanisms will be used to inform communities of actions that they can take to save lives and property, and provide details of health care services, shelter and transportation arrangements. Information on the evolution of the situation, and how to access humanitarian and recovery assistance will also be provided.

District Disaster Preparedness Coordinators and District Information Officers will lead this activity, supported by the humanitarian community.



3. Reinforce Infrastructure in High-Risk Areas

The floods and water-logging of 2007 led to widespread damage to transport infrastructure, isolating communities and also hindering humanitarian assessments and the delivery of much-needed relief supplies. In addition, many families sustained significant damage to their huts, and consequently their household goods and food stores.



Key transport infrastructure work that must be undertaken before the 2008 rains includes:

- Identification and reinforcing critical bridges and roads
- Identification and rehabilitation of alternative road to use when disaster strikes
- Support district governments in providing better access to communities through labor intensive road rehabilitation projects.

Flood resistant hut construction is also an urgent priority, especially for those living in low-lying swamp areas, particularly vulnerable to the heavy rains. A project supporting more effective hut construction is currently underway by the Uganda Red Cross Society (URCS).

4. Floods Early Warning System

One of the key lessons learnt from the 2007 floods was the need for an effective and appropriate early warning system that would monitor rainfall levels and deliver updated information to at-risk communities and the response sector on a timely basis.

As an early warning system Radio and Internet Technology (RANET) plays a major role in risk monitoring and can trigger a timely response to climate related disasters such as floods, drought, landslides or hailstones. This new technology for collection and communication of weather and climate information to rural communities has already been successfully implemented in Africa, including – in partnership with the Uganda Department of Meteorology – in some parts of Uganda.

The need for climate information in day to day decision making is increasingly important as increased weather and climate variability due to climate change is becoming common. This need is even more acute in flood-prone areas, especially those in and around the Kyoga basin. This region is characterised by low lying plains which puts the local communities at especially high risk during periods of excess rainfall.

5. Comprehensive and Inclusive Contingency Plan

Contingency planning is essential to ensure that response actors are as ready as they can be

Experience confirms that effective humanitarian response at the onset of a crisis is heavily influenced by the level of preparedness and planning of responding organizations, as well as the capacities and resources available to them.

Within a broader framework of emergency preparedness, contingency planning is essential to ensure that response actors are as ready as they can be to manage future uncertainty by developing responses to disasters such as the upcoming floods emergency.

Contingency planning should also be mindful of and linked with other initiatives on disaster prevention, risk reduction and early recovery.

A national contingency plan for floods will be developed under the auspices of the National Platform for Disaster Risk Reduction, led by central government and involving local authorities, the humanitarian community and the private sector. Lessons learnt from the 2007 floods will be incorporated.

The contingency planning exercise will be facilitated by the humanitarian community, and will be finalized before mid-July.

Project List

1. Strengthen District Disaster Management Committees

Expected Output	Activities	Partners	Funding Required (USD)
District Disaster Management Committees in the at-risk region able to effectively assess, coordinate and monitor disaster response	<ul style="list-style-type: none"> • Identification and registration of participants in the regions • Training for targeted DDPCs, DDMCs and other key district officials • Simulation exercises 	<p><i>Appealing Agency:</i> Oxfam GB</p> <p><i>Partners:</i> DDPCs, CAOs, OCHA</p>	USD 50,000

2. Increase Community Awareness

Expected Output	Activities	Partners	Funding Required (USD)
At-risk communities aware of flood and landslide risk and practical preparedness actions to save lives and livelihoods, and know how to access response providers in times of disaster.	<p>Teso/Bugisu</p> <ul style="list-style-type: none"> • Community meetings to discuss flood preparedness • Convey messages through the church and other public gathering events • Preparation of leaflets and brochures for dissemination to the public and in schools (in local language) • Broadcasts on local FM radio station (secure Air time) on both preparedness, early warning and what to do when disaster strikes • Radio talk shows on preparedness • Newspaper supplements to highlight floods preparedness • Provision of toll free mobile phones for community disaster assessments and relaying information on relief distributions and basic service provision <p>Pader</p> <ul style="list-style-type: none"> • Preparedness messages to every LC1, PDC and parish chief in Adilang, Patongo, Lukole and Lapono sub counties plus 450 Medair volunteers (hygiene promoters, community volunteer counselors, village health teams) • General awareness raising and preparedness message communication to 600 at-risk-households in Patongo sub county 	<p><i>Appealing Agencies:</i> Oxfam GB, Concern Worldwide</p> <p><i>Partners:</i> Local authorities, DDPCs, Church leaders, Community leaders, Elders and opinion leaders, SOCADIDO, OCHA</p>	<p>USD 120,000 (Oxfam)</p> <p>USD 5,000 (Concern)</p>
		<p><i>Appealing Agency:</i> Medair</p>	USD 4,600

3. Reinforce Infrastructure in High-Risk Areas

Expected Output	Activities	Partners	Funding Required (USD)
Transport infrastructure critical for ensuring continued freedom of movement and delivery of relief remain intact when disaster strikes.	<ul style="list-style-type: none"> Identification and reinforcing critical bridges and roads, and rehabilitating alternative roads to use when disaster strikes Labor intensive road rehabilitation projects. 	No projects submitted	Nil
Communities in high flood-risk areas are either relocated to higher ground or re-housed in flood resistant huts.	<ul style="list-style-type: none"> Rapid, district-led assessments to map high-risk communities and determine needs Demonstrations and guidance the process of constructing flood resistant huts, including provision of required materials Relocation of communities in high-risk areas to higher ground 	<p><i>Appealing Agencies:</i> URCS, UNHCR</p> <p><i>Partners:</i> District leadership, TEDO, Concern Worldwide</p>	<p>USD 50,000 (UNHCR)</p> <p>URCS funding needs are covered</p>

4. Floods Early Warning System

Expected Output	Activities	Partners	Funding Required (USD)
An early warning system to monitor weather and climate trends in the flood prone Kyoga Basin in order to improve the copying mechanisms and livelihoods of the flood affected communities.	<ul style="list-style-type: none"> Establishment of the RANET network of 15 stations to monitor weather and climate trends in the flood prone Kyoga Basin. Building the capacities of 15 local NGOs/CBOs and other stakeholders in the collection and analysis of weather and climate information using the RANET system in the flood prone Kyoga Basin. Promoting the dissemination and utilisation of weather and climate information among the local communities in the flood prone Kyoga Basin. 	<p><i>Appealing Agencies:</i> ECO (Ecological Christian Organisation)</p> <p><i>Partners:</i> Department of Meteorology (Ministry of Water and Environment)</p>	<p>Year 1: USD 328,432</p> <p>Year 2: USD 186,576</p> <p>Year 3: USD 161,720</p>

5. Comprehensive and Inclusive Contingency Plan

Expected Output	Activities	Partners	Funding Required (USD)
Response community, including national government, local authorities, humanitarian community and private sector better prepared to respond to the most-likely scenario of floods and landslides. Lessons learnt from the 2007 Floods response are implemented in the 2008 response.	<ul style="list-style-type: none"> Facilitation of national contingency planning workshop to: Analyse potential emergency risks Analyse the potential humanitarian impact and consequences of identified emergencies; Establish clear objectives, strategies, policies and procedures and articulating critical actions that must be taken to respond to an emergency, and; Ensure that agreements are recorded and necessary actions are taken in order to enhance preparedness. 	<p><i>Appealing Agency:</i> Oxfam GB</p> <p><i>Partners:</i> Ministry of Relief, Disaster Preparedness and Refugees, district authorities, humanitarian community and OCHA, private sector.</p>	USD 40,000