
CHAPTER NINE

COPING WITH WATER RELATED DISASTERS

9.1 Introduction

In Uganda water related disasters such as droughts, floods, landslides, windstorms and hailstorms contribute well over 70% of the natural disasters and destroy annually an average of 800,000 hectares of crops making economic losses in excess of 120 billion shillings. Economic losses resulting from transport accidents and fires and other climate related disasters are estimated at shillings 50 billion annually.

It should, however, be noted that it is difficult to establish the exact social and economic impacts of most of these disasters due to lack of a systematic approach and mechanism for collection of such data and information in the country. In most cases government and other relief agencies are only interested in offering relief aid to the affected persons during such disasters but no effort is made to comprehensively assess and document causes, extent and the social and economic impacts of the disasters. Worse still, as soon as the disaster has been contained, it is totally forgotten and no effort is made by any one to document the lessons learnt for future reference.

The vulnerability of many Ugandan communities to water related disasters is growing by the day due to many undesirable human activities such as deforestation, ecosystem degradation, environmental pollution, social unrest, transport accidents, urban and wild fires and poor land use in many parts of the country. It is well within our powers to do something about this. Better decision-making, improved planning, effective risk management, innovation in development and environmental protection activities - these are the human activities that can reduce the vulnerability of communities. To this effect, risk assessment and disaster reduction should be integral parts of all sustainable development projects and policies. Sustainable development projects and policies can significantly reduce the number and impact of disasters by building sustainable communities that have the long-term capacity to cope with and or withstand the hazards.

9.2 Major Water-related Disasters in Uganda

Past experience in Uganda shows that El Nino and Lanina episodes are the principal causes of the most severe water related disasters in Uganda. During a Lanina year chances of drought conditions, often leading to famine conditions, during the period November to April/May of the following year are increased especially over the eastern areas of the country. On the other hand during an El Nino year chances of intense flood level rains are increased during the period October to December over most parts of the country. The intense flood level rains are reflected in increased incidences of intense lightening and thunderstorms, hailstorms and windstorms/gust winds. The widespread flooding leads to destruction of life and property and increased outbreaks of waterborne diseases such as cholera and dysentery.

The strongest El Nino experienced in the recent past was the 1997/98 El Nino, which resulted in one of the worst widespread record floods witnessed by the country in more than

50 years. The floods mainly affected the eastern and central parts of the country, where several people died, transport infrastructure was damaged, crops and homes were destroyed and thousands of people were displaced from their homes. There were severe landslides experienced in the mountainous parts of eastern Uganda where many people and homes were buried and a lot of property destroyed. The moderate El Nino of 2002 also resulted in moderate floods also centred over the eastern areas of the country.

On the other hand during the 1998/99 Lanina there was severe drought experienced especially in the south-eastern part of the country. There were massive crop failures in many parts of the country, which resulted in widespread famine. It had to take the intervention of Government and other relief agencies to avert the human suffering that was unleashed by this drought. The drought mostly affected the “cattle corridor” where there was total lack of pasture and water for livestock. This resulted in a massive exodus of livestock to other less affected districts in search of pasture and water. This led to an outbreak of conflicts, cattle diseases and deaths of livestock.

Table 9.1 below shows some of the major documented water related disasters that have been experienced in Uganda in the recent past with their associated impacts.

Table 9.1 – Water Related Disasters in Uganda

<i>Year</i>	<i>Nature of Disaster</i>	<i>Impacts</i>
1961/62	El-Nino Rains	<ul style="list-style-type: none"> ✓ Extensive floods experienced in many parts of the country; ✓ Destruction of Roads, Bridges, houses, crops, and property worth millions of dollars (actual loss not established); ✓ Drastic rise in the water level of Lake Victoria (by 2.5 M submerging all major infrastructure along the lake shores.
1993/94	Drought and Famine	<ul style="list-style-type: none"> ✓ Over 1.8 million people were affected due to lack of food, water, and inadequate pasture for livestock.
1997/98	El-Nino Rains	<ul style="list-style-type: none"> ✓ Landslides killed 53 people in total, and over 2,000 people were displaced. ✓ Roads, Bridges, houses, crops, and property worth more than US\$ 20 million were destroyed.
1999	Drought and Famine	<ul style="list-style-type: none"> ✓ Over 3.5 million people in 28 districts were affected by lack of food and a large number livestock suffered from inadequate pasture and water.

(Source: PEAP, 2004)

9.3 National Disaster Preparedness and Management Strategy

Following recognition of the severe socio-economic impacts of both natural and man-made disasters, Government decided to establish a fully-fledged Ministry in charge of disaster preparedness and management. The Ministry is under the Office of the Prime Minister. The Ministry is charged with the responsibility of coordinating all national disaster management and planning efforts. The Ministry liases with all other relevant

government institutions to ensure proper planning and coordination of all disaster related interventions in the country.

Government has also developed a Disaster Preparedness and Management Strategy whose key objective is to establish national and local capabilities to ensure that all the known natural and man-made hazards do not result into disasters and in the event that they do, the people affected can continue to meet their minimum needs for food, water, shelter, health, and security through their own efforts and minimal external appropriate assistance.

The fundamental principle underlying the Strategy is the recognition that the costs of responding to disasters once they strike far exceed the costs of disaster prevention and risk reduction activities. Indeed, worldwide, a three-fold multiplier has been found between effective disaster mitigation and emergency response. Further more the savings in relief costs due to mitigation is not a one-time saving; the value of disaster mitigation also saves response time and disaster victims/workers lives, etc. For example, during the 2002 El Nino, with a very small financial support from GTZ, the population was sensitized and prepared three months in advance and subsequently no person died when the El Nino and landslides eventually occurred.

The Strategy aims at creating an integrated and multi-sectoral approach to planning, preparedness and management of disasters in order to ensure sustained productivity and socio-economic development.

Government is also considering developing climate based Disaster Management policies and practices aimed at minimizing the population's vulnerability levels to climate based hazards and to save lives and livelihoods when such disasters occur. The desired policies are to focus on providing early warning information of approaching disasters, predicting and mitigating their impacts on the country, the population and people's livelihood, preparing for and managing the disaster. Government's intention is to come up with a comprehensive integrated National Early Warning System (EWS) for food security and overall disaster prevention, mitigation and overall management.

9.4 National Disaster Preparedness and Management Policy

The overall objective of disaster preparedness and management in Uganda is to save lives and livelihoods, and to reduce Uganda's vulnerability to likely disasters, in cooperation with local communities, NGOs, local and international donor organizations, and enhance the country's capability to contain or minimize the social and economic effects of disasters.

The National Disaster Preparedness and Management Policy sets the overall policy goal and objectives for disaster management in Uganda. The overall policy goal is:

“To promote, in relation to disasters, prevention, preparedness, mitigation, response and recovery to be implemented in a manner that integrates disaster management with development planning and programming.”

The main Policy objective is to ensure that the people of Uganda can avoid serious social and economic disruptions as a result of disaster events. Underlying these broad policy objectives are certain key principles, which will guide policy development and implementation. These include:

- (i) The adoption of a multisectoral approach to disaster management;
- (ii) Capacity building for key national and local stakeholders to effectively participate in all disaster management initiatives;
- (iii) Establishment of a comprehensive and effective early warning system for impending disasters;
- (iv) Integration of gender concerns in all disaster management plans and intervention; and
- (v) Adoption of an inter-agency coordination and collaborative mechanism for disaster management.

The Policy provides a broad framework for harmonization of sectoral and cross-sectoral policy objectives, principles and strategies relevant to disaster management in the country.

9.5 Challenges of Coping with Water-related Disasters

Water related disasters cause a disruption of economic activities and a consequent loss of production. This affects the preparedness, mitigation and recovery processes/stages of the disaster management cycle. Secondly, disasters usually cause enormous losses in life equipment and property worth million of shillings. These would have been very useful and instrumental in the response and recovery stages of disaster management.

Natural disasters especially drought earthquakes and landslides lead to the destruction of farmlands and livestock leading to famine and household food security undermining the mitigation and recovery stages in disaster management. The socio-economic dislocation and the destruction of the physical infrastructure inhibit the speed of recovery, rehabilitation and increase the expense of future mitigation.

The loss of shelter, the exposure to the elements, the increased economic and physical vulnerability all result in risen morbidity and mortality rates; further undermining the process of recovery and rehabilitation.

The disasters also cause an ecological breakdown/environmental erosion, pollution, and destruction of the environmental base. This erodes the base for the recovery process as well as limiting the speed of the rehabilitation.

Natural disasters often lead to political and social instability. This is because they often lead to displacement, unemployment and as a result political discontent and civil unrest. This usually undermines the processes of mitigation, rehabilitation and recovery.

9.6 Future Outlook

Based on the lessons learnt in the last five years, Government is now refocusing its efforts towards a more holistic approach to disaster management in Uganda. Government is in the process of further strengthening the enabling policy, legal and institutional framework required to address cross-sectoral disaster management issues. There are also plans to strengthen the national and local capacity for disaster preparedness and management in the country. This will go hand-in-hand with the enhancing the existing administrative and coordination mechanisms for disaster preparedness and management in the country.

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