



DEVELOPING RADIO PARTNERS

## Focus: Climate Change and Flooding

The Zambian Meteorological Department is warning that 36 districts are likely to experience flooding this year. Districts in this alert are the northern, southern, Lusaka and central provinces.

The last time Zambia experienced severe flooding was in 2009 – occurring in the western, northwestern and southern provinces.

The damage to homes, businesses, roadways and other infrastructure was at five million dollars.

The floods affected 20,000 households and destroyed 5,000 homes in the Southern Province alone.

Damage to crops was estimated to be in the millions of dollars – and with the loss of crops, comes the loss of a farmer's livelihood.

It also means food shortages, particularly in rural areas. Food relief does arrive, but it often comes late.

In urban areas, houses are left under water. Flooding in urban and rural areas bring about diseases -- especially waterborne.

Deforestation – which triggers climate changes -- is one of the leading factors of historic rainfall and flooding.

In addition, rapid population growth as well as changes in land use patterns has increased human vulnerability to floods.

In this week's bulletin, we will look at how agriculture and rapid population growth lead to floods.

# The Weekly Information Resource Bulletin

The goals of the Weekly Bulletin are:

- Bring listeners in the project area the latest information on natural resources, the environment and agriculture
- Focus on solutions, what works and what people can do
- Encourage listeners to share both their questions and solutions (African solutions for African problems)
- Raise awareness of issues that need to be discussed to affect public policy.
- Bring the latest solutions and practices that have relevance to this region from around the world
- Identify and link other NGOs working in the region share the project interests and goals
- Give the participating journalists guidance and tips on their reporting on these issues

## The Problem: Floods and Climate Change

Agriculture plays an important role in the development of the economy – and ensures there is enough food. When flooding wipes out the crops, it creates food shortages.

The area that is mostly affected by floods in the country is Kazungula district in the southern province which tends to experience flooding more frequently than the other districts. The main reason is deforestation.

When all the trees are cut and the ground is bare – there is nothing to absorb all the rainwater – hence the flooding. Trees and plants act as a natural barrier to slow water as it runs off the land. Roots bind the soil and prevent it from being washed away.

There is also the issue of population increase. The district of Kazungula is rapidly growing. It lies at a border area and many people are moving there to set up business – and that has led to the indiscriminate cutting of trees to set up settlements.

The drainage system in most of the settlement areas is often non-existent. Without proper drains, there is no place for the water to go – leading to massive flooding.

Where drainage systems do exist, they are often blocked. For instance, the drains that have been constructed in the city of Lusaka are often blocked with garbage that is not properly disposed. This makes the situation even worse – causing water to back up and creates more flooding.

The type of agriculture practiced also has an effect on flooding. For instance, farming practices such as the chitemene system that involves cutting down trees is likely to lead to flooding problems.

Farmers should consider practices that don't involve cutting down trees -- practices such as organic and permaculture techniques – where there is no soil loss or toxic chemicals involved in the farming process.

## Activities for Journalists

The effects of floods on the farming community is quite severe, the recent heavy rains have shown again how water can destroy crops. A farmer who has already planted crops may lose everything if not given adequate information even before planting. Therefore, farmers need to be given information about weather patterns early so that they know which crops should be planted.

Under the Disaster Management and Mitigation Unit (DMMU) there is an early warning mechanism through SMS. The people in an area are sent text messages urging them to move from the areas that are expected to flood. This is still a pilot project, but with time it can prove to be an effective method to warn people -- as most people in the country have mobile phones.

Most of the farmers still practice agriculture where they cut down trees to create more space for farming. This type of agriculture is very destructive to the environment in that they kill trees and the vegetation needed to absorb the water. There is a strong need to educate farmers on good farming practices that will not only prevent flooding, but also helps enrich the soil.

In urban areas, some of the drains have collapsed due to poor construction. There is a need to hire experienced contractors who are able to construct drainage system that can last for a long time.

Most rural areas in Zambia need to raise more crops in order to ensure there are no food shortages. A growing population leads to a need to expand the space needed to raise more crops. Thus, population growth contributes to environmental damage.

In Kapiri Mposhi in the Central Province, young girls are often forced to quit secondary school and get married. This ultimately leads to children having children and placing

greater demand on natural resources. There is a need to work with local leaders – including chiefs, headmen and citizens to encourage girls to stay in school and not marry at an early age. There is need to sensitize the community about high population growth and its impact on climate change.

Use your radio station to help your community understand that rapid population growth and bad farming methods can cause devastating floods.

Have a discussion with a few people from your area and ask them why they think there has been such severe flooding. Do they think it was caused by deforestation?

Interview an officer from the early warning system operated by the Disaster Management and Mitigation Unit (DMMU) and ask how the system is working? Is everyone receiving the warnings via SMS? Where is the system weak? How can it work better? How often are warnings sent out? Ask him about government plans to avoid and limit future flooding. Are flood management plans being put in place?

Interview a climate change expert about how deforestation contributes to severe flooding. What does the expert recommend?

Are energy saver stoves available in your community that burn on recycled products such as briquettes? Discuss the harmful effects of charcoal briquettes on the environment and how their production requires tremendous cutting of trees.

### Useful Links

Mr. Emmanuel Mutamba, Team Leader, Green Living Movement, 0977891826

Mr. Chileshe Musonda, Coordinator, Zambia Climate Change Network, 0977226277

Mr Teddy Kabunda, Humanitarian coordinator (OXFAM) also sits at Disaster management and Mitigation Unit, 0977655952