

# POLICY BRIEF



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**UNDERSTANDING CLIMATE CHANGE IN MALAWI: THE  
IMPACTS AND POLICY PERSPECTIVE**



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### What is Climate Change?

Climate is a general description of the average temperature and rainfall condition of an area over time. Naturally climate changes over time. However today there is great evidence that the world's climate is changing faster than normal because of human activities. Scientists have been measuring the temperature of the air and oceans on the earth for many years and have noted the steady rise in the average temperature of the earth, this is caused by greenhouse gases.

Greenhouse gases naturally blanket the Earth and keep it warmer than it would be without these gases in the atmosphere. This is called the Greenhouse Effect. Over the past century, the Earth has increased in temperature and many scientists believe this is because of an increase in concentration of the main greenhouse gases: carbon dioxide, methane, nitrous oxide, and fluorocarbons. This is causing rise in the earths temperature. The major contributing gas is CO<sub>2</sub>. and many human activities such as bush fires and vehicle exhausts release this gas.

### What are the impacts of climate change?

- Frequent storms, desertification, droughts in some areas and floods in others
- Collapse of ecosystems which are sensitive to temperature change
- Higher incidence of vector-borne diseases and water shortages
- Large scale human population shifts
- Losses in economic sectors such as agriculture
- Threats to infrastructure, health and food security
- Melting of ice caps in the northern and southern pole which is making the sea level to rise



Forest fires contribute to an increase in Carbon-dioxide levels

Malawi has already experienced such catastrophes attributed to the change in climate. Examples are the severe drought conditions in 1991/92 extreme flooding events with flash floods in 2000/1. These droughts have had irreversible and damaging effects on crop and livestock production.

Some of the areas that have been greatly affected by climate change in Malawi include:

Nsanje	Floods
Chikwawa	Floods, Droughts
Phalombe	Droughts, Landslides
Salima	Floods
Karonga	Floods
Ntcheu	Flash floods
Kasungu	Drought

**What can be done?**

People need to produce less carbon dioxide and methane. Malawi does not produce much of these gases. However, Malawians can speak out at international meetings and gatherings and ask other nations to produce less.

Forests and other natural vegetation take in a lot of carbon dioxide from the air. Therefore by protecting forests and natural grasslands, we reduce the amount of carbon dioxide in the atmosphere and hence the increase in temperature of the earth.

Since some of the effects of climate change are already here with us we can reduce the harmful effects of these changes by taking care of the environment. This includes protecting the existing forests, planting more trees and conserving wetlands. Farmers can plant a variety of fodder and cash crops so that some at least will survive droughts or floods.

Living spaces for wildlife to move from one area to another helps wildlife to cope up with climate changes

Complying and responding to the needs and requirements of the United Nations Framework Convention on Climate Change



Forests act as sinks for carbon dioxide



Animals like these are also affected by the effects of climate change

The following serves as a guide into the policy and legal framework related to climate change and disaster risk reduction in Malawi. An understanding of these initiatives will provide an opportunity for communities and stakeholders to make informed decisions on the matters that relate to climate change and disaster management.

Malawi signed and ratified the United Nations Framework Convention on Climate Change (UNFCCC) in June 1992 and April 1994. The ultimate goal of the UNFCCC convention is to achieve, in accordance with conditions of the convention stable greenhouse gas concentrations in the atmosphere. The convention obliges countries to among other things formulate, publish, and regularly update national and where appropriate regional programmes continuing measures to mitigate climate change, co operate in preparing for adaptation to the impacts of climate change ,develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture and for the protection and rehabilitation of areas affected by drought, desertification and floods.

## Economic Instrument

### Malawi Growth and Development Strategy

The purpose of MGDS is to serve as a single reference document for policy makers in government, the private sector, non governmental organizations and co-operating partners on government's socio-economic development. It is a strategy that will be in process for the next five years 2006/7 – 2010/11. It deals with issues that are related to economic growth and development.

The MGDS outlines five thematic areas:

Sustainable growth, social development, infrastructure and good governance. The issues of HIV and AIDS, science and technology, gender and empowerment are streamlined within these themes.

The document also mentions issues of disaster risk management. The key strategies that have been identified include:

Enhancing disaster risk management

Developing and strengthening institutions responsible for disaster risk management

Instituting necessary disaster risk management mechanisms

Implementing mitigation measures in disaster prone areas

Integrating disaster risk management into sustainable planning at all levels

Developing and strengthening coordination of institutions in disaster management and relief services

Establishing an early warning system for Malawi and

Timely provision of emergency relief assistance to affected populations while measures shall be instituted aimed at improving mitigation and rehabilitation of areas affected by disasters

Another key issue addressed in the MGDS is conserving the natural resource base, increasing productivity and protecting natural resource. This strategy recognizes that sustainable use of natural resources contributes to many of the goals of MGDS. This includes fisheries, forestry, wildlife and the environment.. Thus the goal is to improve management of fish species, forest and wildlife biodiversity and reduce environmental degradation and conserve the natural resource base while contributing to economic growth

## Environmental Instruments

### National Environmental Action Plan

Malawi launched the NEAP in 1994 after recommendations that were put forward at the earth Summit that took place in Rio De Janeiro, Brazil in 1992. NEAP highlights and identifies several environmental problems these include

- High soil erosion
- Low soil fertility
- Deforestation
- Overgrazing
- Over fishing
- Loss of biodiversity
- Water resources degradation and depletion
- Human habitat degradation
- Air pollution

### Climate change

The aim of NEAP is to develop Action plans in all districts that are designed to mitigate impacts caused as result of the above mentioned environmental problems. These action plans are developed after the completion of the State of Environment Reports (SOER).

### National Environmental Policy

The NEP (2004) addresses climate change in relation to air quality. The policy objective is to minimize the adverse effect of climate change and variability. As a framework the NEP is

expected to guide lead agencies in agriculture, fisheries forestry, energy, industry and water resources management in so far as their activities affect the environment and natural resource management. The key strategies include:

- Strengthening the existing national climate/meteorological database

- Assessing and monitoring the potential impacts of climate change on functioning ecosystems, vegetation patterns and carbon sinks

- Using climate data to help guide land use and economic development

- Promoting regional and international cooperation for effective exchange of climate information and control of transboundary atmospheric air pollution

### The National Strategy For Sustainable Development

The National Strategy for Sustainable Development (2004) provides more concrete actions for implementing the principles of NEP and other instruments. The NSSD addresses climate change under theme 3 of the Johannesburg Plan of implementation of the World Summit on Sustainable Development (WSSD). The theme deals with protection and management of natural resources for economic and social development.

The NSSD call upon governments to :

Reduce world poverty by 50% by 2015 through provision of appropriate weather and climate information and mitigate effects of drought and floods through improved use of climate and weather information and forecasts, early warning systems, land and natural resources management, agricultural practices and ecosystem conservation.

## **Disaster Management**

### **Disaster Preparedness Act (1994)**

The Disaster Preparedness Act was established after the flash floods that occurred in Phalombe . It provides some framework for disaster management. The key provisions deal with the institutional framework for dealing with disasters such as floods , disease, food crisis and others. The Act establishes the offices of Commissioner for Disaster and Relief, a National Disaster Preparedness and Relief Committee Planning subcommittee and civil protection plans, provision for the establishment of civil protection areas, participation of volunteers in civil protection, powers on civil protection officers, gives the president power to declare national disaster and creation of a National Disaster Preparedness and Relief Fund.

## **Strategy on Disaster Management**

### **The National Adaptation Programme of Action**

The NAPA proposes a list of priority areas and these include

A) Improving community resilience to climate change through development of rural livelihoods by:

Improving access to potable water

Improving water management

Improving storage systems for seed and reserves

Promoting sustainable utilization of dambos and wetlands and river valleys under sustainable dimba cultivation

Diversifying crops and livestock

Promoting low cost nutrition supplements

Raising and improving awareness

B) Restoring forests in the Upper, Middle and Lower Shire Valley catchments to reduce siltation and the associated water flow problems.

C) Improving agricultural production under erratic rains and changing climatic conditions

D) Improving Malawi's preparedness to cope with droughts and floods

E) improving climate monitoring to enhance Malawi's early warning capability and decision making and sustainable utilization of Lake Malawi and lakeshore resources

**Conclusion**

Climate change has adversely affected the Malawian nation and the effects are especially felt by smallholder farmers. The lower Shire Valley is the most affected area. Crops and houses have been washed away by torrential rains and floods prompting humanitarian aid. The Malawian Government has designed National initiatives designed to curb these problems however the challenge lies in the implementation of these initiatives. There is need therefore to enhance the capability of all stakeholders to be able to implement these initiatives. There is need also for better coordination among key stakeholders bearing in mind that these initiatives require a multi-sectral approach.

## ABOUT CEPA

Centre for Environmental Policy and Advocacy (CEPA) is a not for profit public interest non-governmental organization. CEPA seeks to contribute to the development of environment and natural resources management best practices in Malawi and the Southern African Region.

As a think tank organization, CEPA provides advice and conducts research in environment and natural resources management policies and legislation with a view to designing appropriate interventions for promoting sustainable environment and natural resources management.

Our work concentrates on sound environmental governance; in this respect, issues of accountability, institutional strengthening and representation are at the core of our activities.

### Our vision

An equitable and just society that values sustainable environment and natural resource management

### Our mission

To be a think tank for ideas and action oriented research institution of environment and natural resource management in Malawi and Southern Africa

### Our goal

To promote policy formulation and implementation for sustainable environment and natural resource management