

Université de Lomé
Faculté des Lettres et des Sciences Humaines
Master in Climate change and Humanity

Course name: Climate Change and Food Security

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Objectives

The main objective of this course is to investigate the multi dimensions and complexities of the issue of food insecurity in a climate change context in general and in West Africa in particular. The course aims at fostering a shared understanding of the major drivers of food insecurity and specifically the role of climate variability and changes. The course also introduces some of the technical and institutional options to address the problem in West Africa. The course ends with some examples of initiatives undertaken in West Africa to achieve food security in a climate change context and lastly explores potential research areas relevant for West Africa in the domain.

Articles and books of reference

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Teaching methods

Power point presentations

Questions and Answers sessions with students,

Oral test at the end of each chapter

Content

Chapter 1: Theoretical concepts

Food Security

Food Souverainity

Climate Smart Agriculture

Chapter 2: Population dynamics

Population and foodsecurity in a climate change context

Population dynamycs in West Africa

Population dynamics vs food production in westAfrica

Population of undernourished in westAfrica

Chapter 3: Policies and institutions

Agriculture and foodsecuritypolicyframeworks in Africa

Agriculture and foodsecuritypolicyframeworks in westAfrica (ECOWAP/CAADP)

Chapter 4:Foods production trends and variability

Cereal production in westAfrica

Per capita trends in westAfrica

Chapter 5 : Supplychains

Definition – composition

Impact of climate change on foodsypplychains in westAfrica

Most vulnerable part of foodsupplychains in a climate change context

Chapter 6 : Mitigation strategies

Climate change and foodinsecurity : responseasures

A continental approach to foodsecurity in a climate change context

Potentialbarriers to implementresponseasures

Chapter 7 : Biotechnology

Definition

Institutionalframeworks in Africa

Institutionalframeworks in westAfrica

Genetically Modified Organisms : advantages and disadvantages

Chapter 8 : Natural resources

Key natural resources for west Africa : water, forests, minerals, fisheries

Impact of climate change on natural resources in west Africa

ECOWAS endowment with natural resources

The role of natural resources for food security in a climate change context

Chapter 9 : Transboundary issues

Key transboundary issues for west Africa : water, migrations

Shared river basins

Shared ground waters (aquifers)

Other transboundary issues in west Africa

Chapter 10 : International Law and UNFCCC convention

Agriculture within international law

Regional regulations (ECOWAS)

Agriculture within UNFCCC : Warsaw and Lima Conferences of Parties

Chapter 11 : Methodologies and research

Research tools and methods

Case study : Fruits and vegetable supply chain in Senegal