E-learning tool

"Planning for Community-Based Adaptation to Climate Change"

Second Asia-Pacific Climate Change Adaptation Forum

Kenya Konno

FAO Regional Office for Asia and the Pacific

Overview

Developed by FAO in collaboration with University of Freiburg

Objective: A training and self-learning tool to support awareness raising and guide the planning for adaptation to climate change at local level with emphasis on agriculture

Target groups:

- field technicians and extension staff in agriculture and related sectors in developing countries
- governmental and non-governmental organizations engaged/interested in implementing CCA projects

4 interactive learning modules in EN, FR, ES

Table of contents

Key features

- Structured along a global perspective with specific field examples including videos from various countries

- Step-by-step guidance from ABC of Climate Change to Community Adaptation Planning and implementation

- Recognizes complexity of CBA planning and implementation: not “one size fits all” but provides variety of options for extension methods & approaches

MODULE 1: Climate Change

Session 3: Climate change and climate variability

Example event

Corresponding time series

WEBGEO applied

UNI FREIBURG

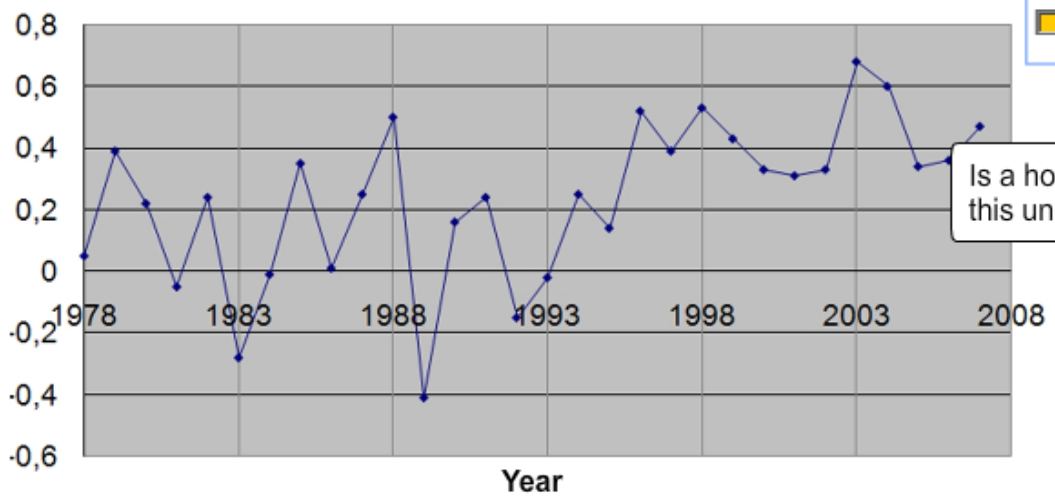
Start | Example event | Concepts | End

Corresponding time series

Extension service provided Michael and John with the following graph.

Understand the time series of the **annual mean temperature** during the last 30 years by following the discussion by Michael and John (in the bottom right).

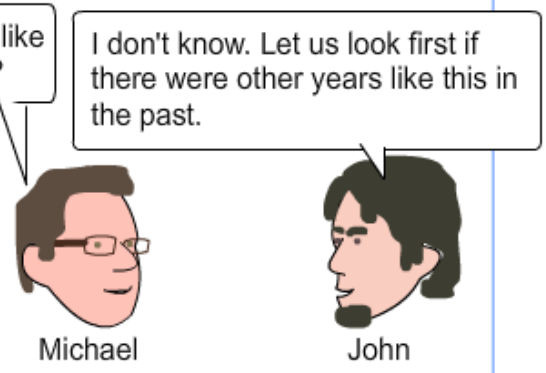
Deviation from annual mean temperature (°C)



30-year time series of annual mean temperature in Michael and John's village in Sudan.

- Mark this year
- Mark comparable or warmer years
- Mark colder years

Discussion of Michael and John



1 of 5 ▸ next

Page: 3 / 8 — Powered by WebKit Freiburg - Impressum — File: contents/fw_4_0030.swf ID: 2-2

MODULE 1: Climate Change

Session 6: Impacts of climate change

Impacts by phenomena

Exercise

WEBGEO applied

UNI FREIBURG

Start | Impacts by phenomena | Impacts by temperature increase | End

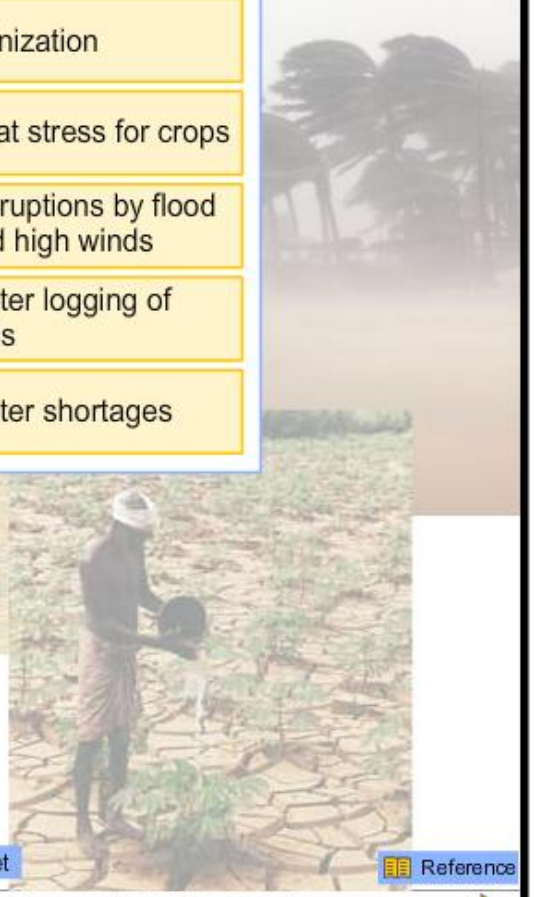
Exercise

Check if you have understood the discussion of impacts presented in previous slides.

Drag the impacts from the box on the right to the corresponding phenomenon in the table below.

Phenomena	Impact
Warmer and more frequent hot days and Increased frequency of warm spells and heatwaves over most land areas.	
Increased frequency of heavy precipitation events over most areas.	
Area affected by drought increases.	
Intense tropical cyclone activity increases.	
Increased incidence of extreme high sea level (excludes tsunami)	

- Salinization
- Heat stress for crops
- Disruptions by flood and high winds
- Water logging of soils
- Water shortages



Check answers | Reset | Reference

Page: 7 / 9 — Powered by WebKit Freiburg - Impressum — File: contents/fw_7_0070.swf ID: 2-6

MODULE 2: Climate Change and Food Security

Session 1: Examples of impacts on agriculture and rural livelihoods

Impacts on agriculture

Potential changes in crop production

WEBGEO applied

UNI FREIBURG

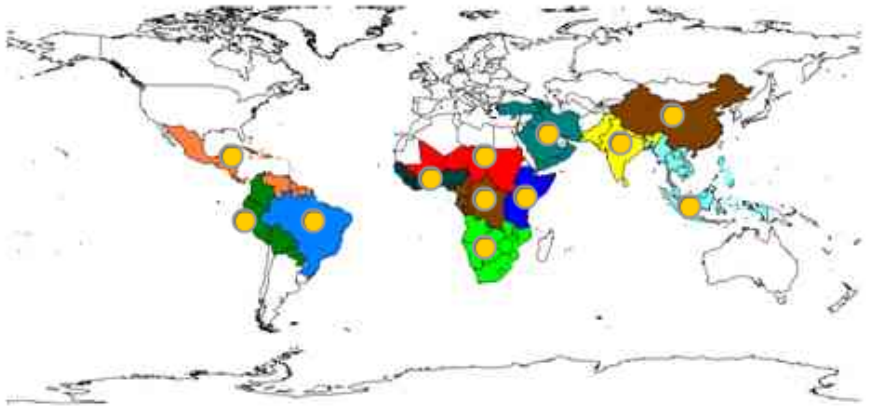
Start | Video examples | Impacts on agriculture | End

Potential changes in crop production

The map shows you possible changes in crop production by 2030 for the major food crops in tropical and sub-tropical regions.

Explore the map by clicking on the regions, or selecting them from the list. Identify potential losses **and** benefits. Then try to complete the exercise.

Changes in crop production



Reference

Exercise

In South-Asia losses due to climate change are predicted for many crops including ? .

In Southern Africa, ? is the crop with the single largest projected impacts.

Some crops are also expected to benefit from climate change, such as ? in Central America and ? in East Africa.

Check answers | Reset | Hint

Page: 6 / 9 — Powered by WebKit Freiburg - Impressum — File: contents/fw_12_0020.swf ID: 3-2

MODULE 3: Preparing CBA

CBA Planning Process

This scheme of community based adaptation shows the relevant steps and essential elements of the overall CBA planning and implementation process.

Women engaged in farm activities in Vietnam emphasizes gender sensitive adaptation

Enhancing community capacities to adapt to climate variability and change

- Assess current vulnerability, risks and local livelihoods
- Assess future climate risks
- Promote institutional capacities for adaptation
- Identify, validate and test suitable adaptation options
- Design location specific adaptation strategies
- Up-scaling and mainstreaming

Stakeholder Engagement and Feedback

Cross-cutting Actions

Community participation | Gender perspective | Cross-sectoral coordination | Policy advocacy

MODULE 3: Preparing CBA

Session 6: Identifying adaptation options

Process structure

Systematic documentation of adaptation options

WEBGEO applied

UNI FREIBURG

Start | Process structure | End

Systematic documentation of adaptation options

Check the relevance of the below typology for your own purposes/situation

- Crop improvement: drought/salt/water logging tolerant varieties
- Changing cropping calendar
- Alternative farming practices
- Water harvesting and water management
- Water saving/use efficiency
- Soil conservation (e.g. terracing)
- Seed storage methods
- Grazing and livestock feed management
- Pest/disease management
- Post harvest practices
- Energy efficiency practices

The **video** provides information about the typology of adaptation options for a drought prone region in Burkina Faso, West Africa

Video

Reference

Page: undefined / 10 — Powered by WebKit Freiburg - Impressum — File: contents/fw_23_0070.swf ID: 3-6

MODULE 4: Implementing CBA

Session 1: Community Mobilization

Contents

Objectives

Start Contents End

Objectives

The promotion of adaptation practices makes only sense if they find broader acceptance and application **by the community.**

Social mobilization at community level (i.e. community mobilization) **serves to**

- raise public awareness,
- improve information and knowledge dissemination,
- enhance engagement and motivation for actions,
- induce interactive and ongoing participation,
- mobilize adequate informal community set-ups,
- empower communities to plan their own local actions,
- initiate social learning, which includes collective behavior and institutional development.

☞ Reflect how the right hand example contributes to these objectives.

Exercise for cyclone preparedness

Cyclone preparedness exercise in Bangladesh demonstrating how normal people and how helpers act, others watch and learn.

Reference

Page: 2 / 11 — Powered by WebKit Freiburg - Impressum — File: contents/fw_26_0020.swf ID: 2-1

MODULE 4: Implementing CBA

Session 3: Testing Adaptation Practices

Testing and dissemination process

Guiding field demonstrations

Guiding field demonstrations

Clarify responsibilities

- Explain to farmers on the need for their contributions to field monitoring and need to establish a basis of comparison between "new" and previously applied practices.
- Communities must set-up a control plot for each demo with same conditions for comparison.
- Discuss with farmers how to carry risk of failure and the use of benefit from testing. Participating farmers/communities will own the benefits from the demonstrations.
- Agree on risk sharing between farmers and project or agency guiding the adaptation process in case of negative testing results.
- Set risk buffer funds aside accordingly.

Demand responsive technical support

- provide on the spot coaching to farmers
- organize training sessions as needed
- use suitable extension tools

The **video** above explains demand responsive technical support for implementation of integrated hedgerow technology in Nepal

Reference

Testing strategy

Current version is the result of in-depth field testing in developing countries through workshops in Nepal, Vietnam, Bangladesh, Philippines, Sudan, Dominica, Saint Lucia, Senegal.

Some key messages from the tool

- **Pro-active** and **anticipatory** adaptation approaches must be taken to address the short-term impacts of increasing climate variability on livelihoods but also help local communities prepare for long-term impacts
- Adaptation offers **no *one-size-fits-all* solution**. It must be an integrated, flexible process that considers the local context and must be tackled as an integrated part of **sustainable development**
- Most successful CBA practices need to be documented precisely as guidance for **replication and outreach**, and in order to ensure sustainability

Dissemination strategy

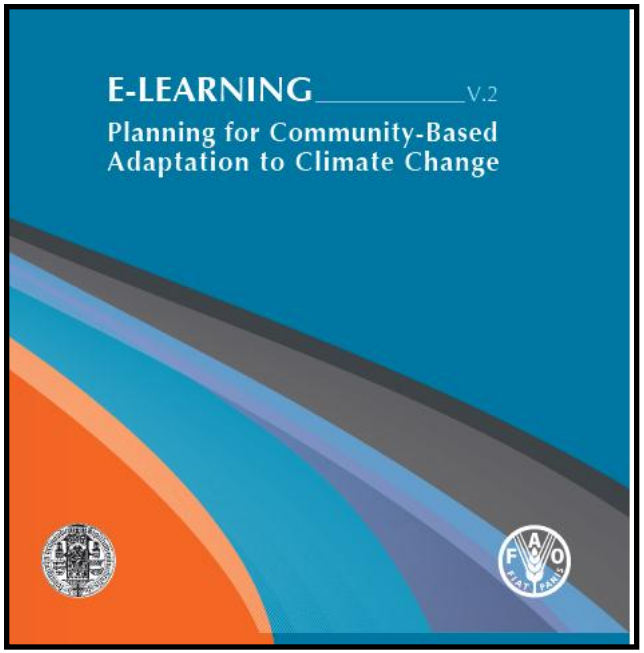
oStand-alone version of the tool freely available on the web:

EN **www.webgeo.de/fao-webgeo-2-intro**

FR **www.webgeo.de/fao-webgeo-2_fr**

ES **www.webgeo.de/fao-webgeo-2-intro_spa/**

or CD-version can also be ordered free of charge



o Two-day workshops combining self-learning with interactive training organized upon request

o Promotion through UN Platforms (ALM,UNCC Learn)

Thank you!

The e-learning tool is freely available at:

www.fao.org/climatechange/learning

Order CD-Rom version:

climate-change@fao.org