

# Will Adaptation Priorities be left behind: African perspectives

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# **ADAPTATION** for enhanced implementation of the convention

- Reduce **vulnerability** and build **resilience** in the developing countries, especially **LDCs**, small island developing countries and **AFRICA** to adverse impacts of climate change

- Adaptation challenges in Africa: **Basic needs** food, water, health, shelter, ----

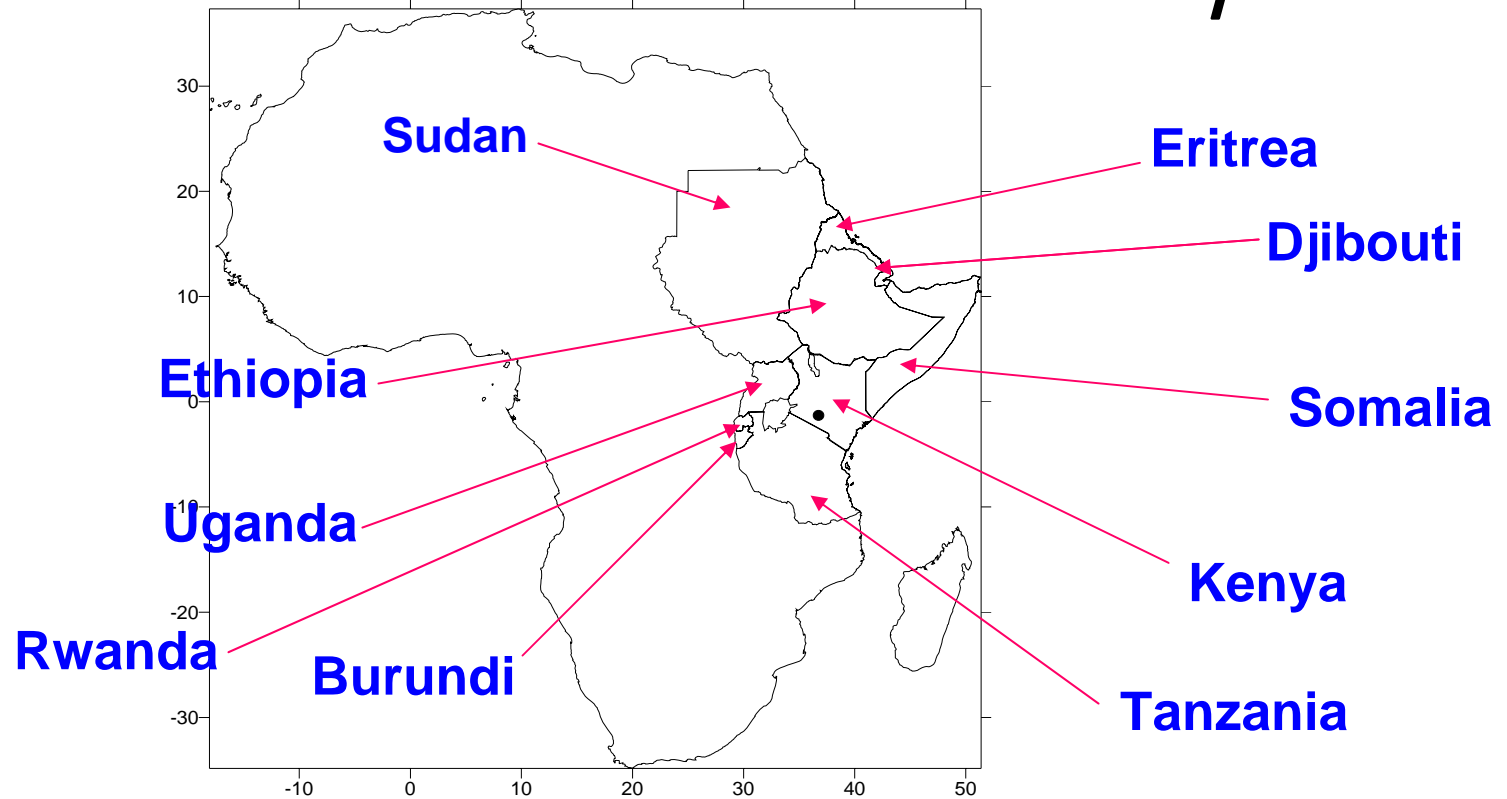
- **Science and Technology** needs

- Adequate, predictable, and sustainable financial resources

- Capacity building, etc

(Will Adaptation Priorities be left behind: African perspectives)

# *11 ICPAC MEMBER COUNTRIES* *REGIONAL PARTNERSHIP FOR* *REDUCING CURRENT CLIMATE* *RELATED RISKS: Most examples*



# **AFRICAN SITUATION: BASELINE information**

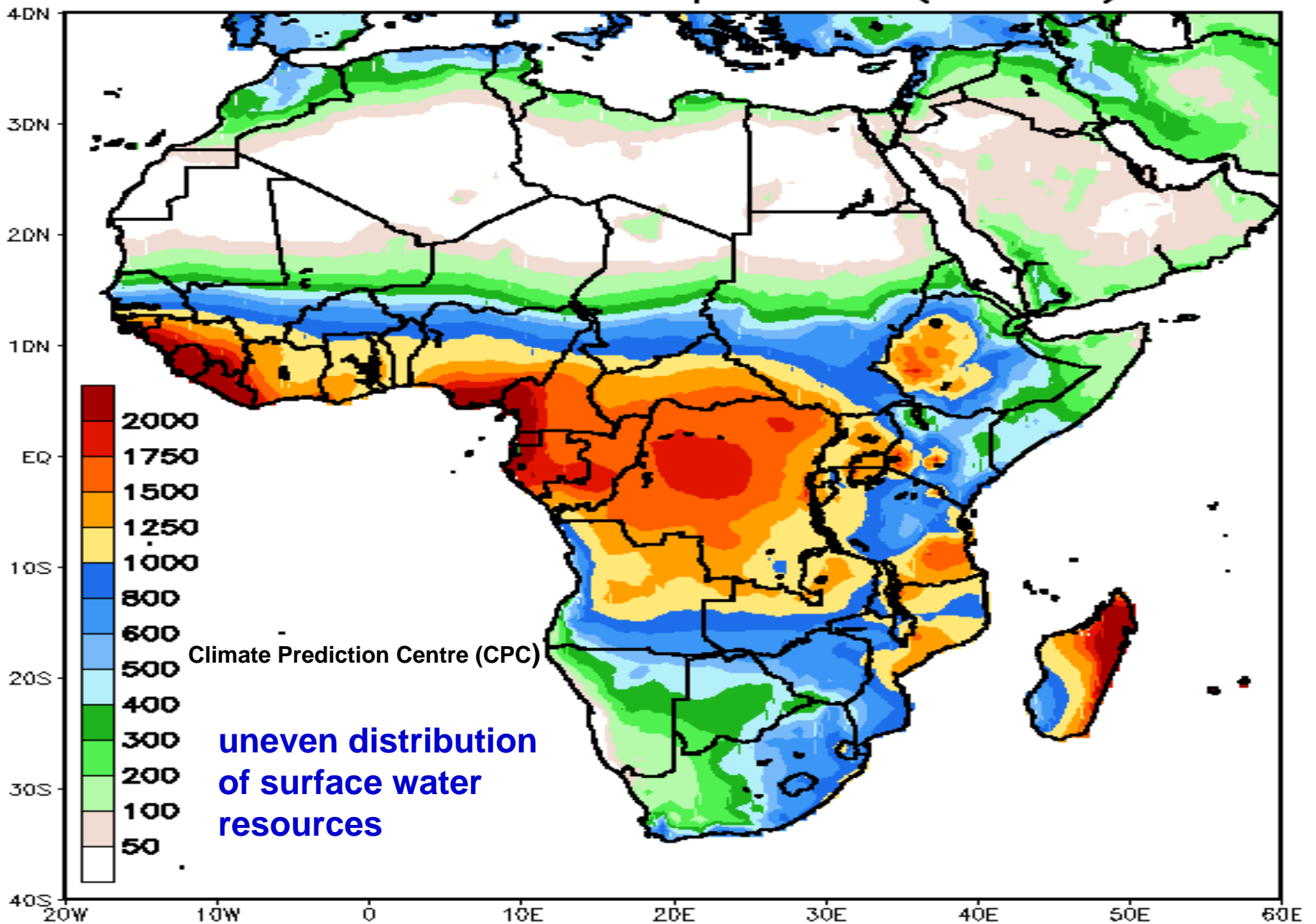
- **Future climate changes in Africa** do we know them well? **uncertainty**
- **Critical Adaptation issues from African perspectives:**
  - **Current climate challenges : Are we coping in Africa eg** Horn of Africa drought crisis
  - **Can we adapt to the future without addressing current climate challenges**
  - **Adaptation, Mitigation and Development**
  - **Adaptation Priorities in Africa: Are they being left behind**

# AFRICAN CLIMATE SITUATION: basic Facts

- **Most parts have HOT arid and semi Arid climate**
- **Poor soils;**
- **Unreliable precipitation;**
- **Water scarcity;**
- **Hot environment throughout the year;**



# Annual Total Precipitation (in mm)



# **CURRENT AFRICAN CHALLENGES**

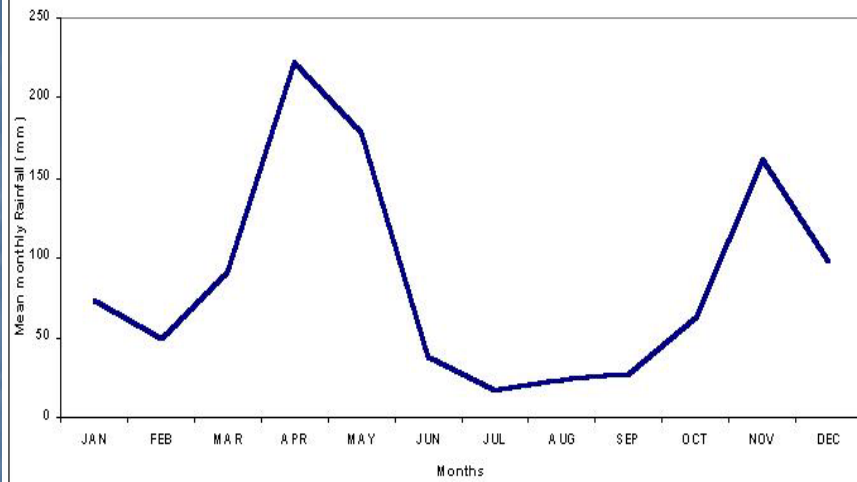
- **Geographically Africa has warm and dry climate**
- **Economies rely on climate sensitive sectors**
- **wide spread poverty**
- **The poor most vulnerable and they live in hazards prone areas**
- **Conflicts,**
- **Limited capacity : human resources,**
- **Africa is Unable to cope with current climate, how best to address future climate change challenges**

**WHAT** do we know about **current and future** climate change in Africa: **what do we adapt to?** **Regional / local climate scenarios** required to adapt?

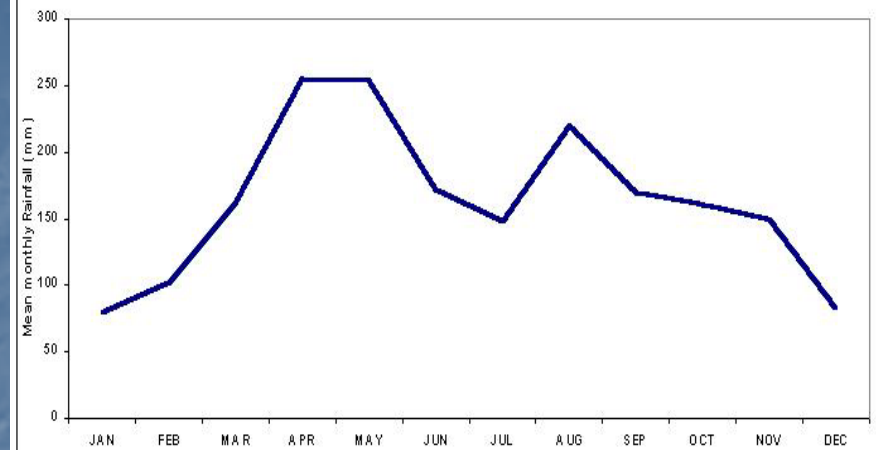
- Africa has complex climate systems**
- Poor data and observation; modeling; capacity**
- Poor knowledge of current and future climate**
- Some information from NMHSs, WMO , UNEP, IPCC and other sources**
- Examples from Greater Horn of Africa**



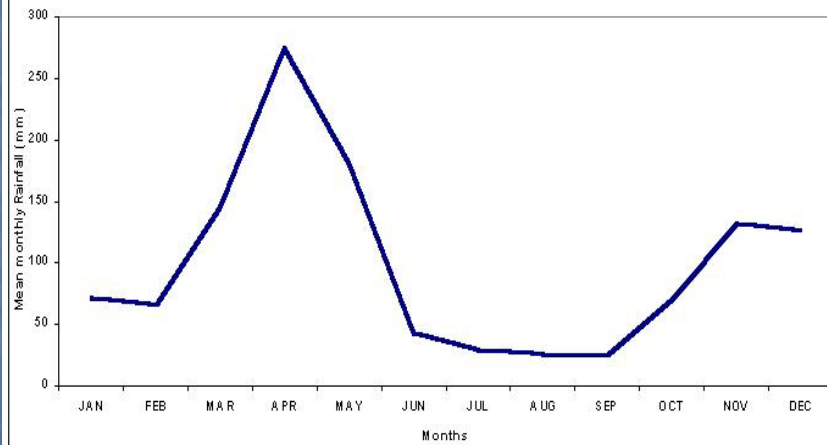
**Dagoretti**



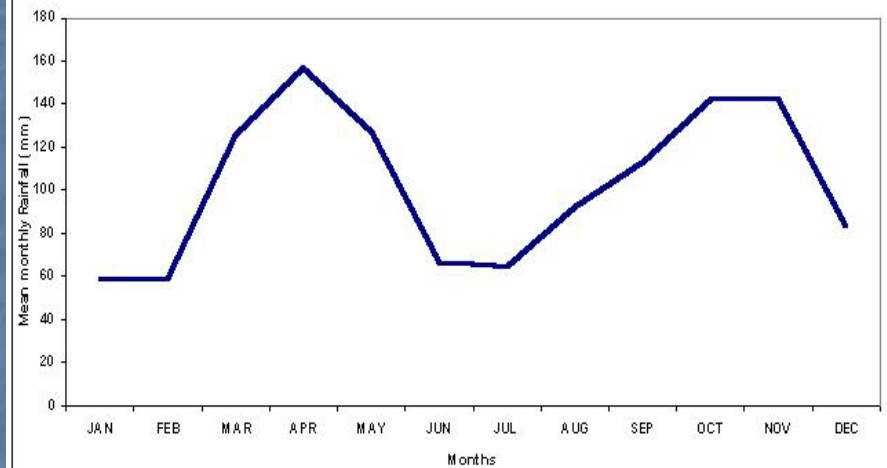
**Kakamega**



**Dar es Salaam**



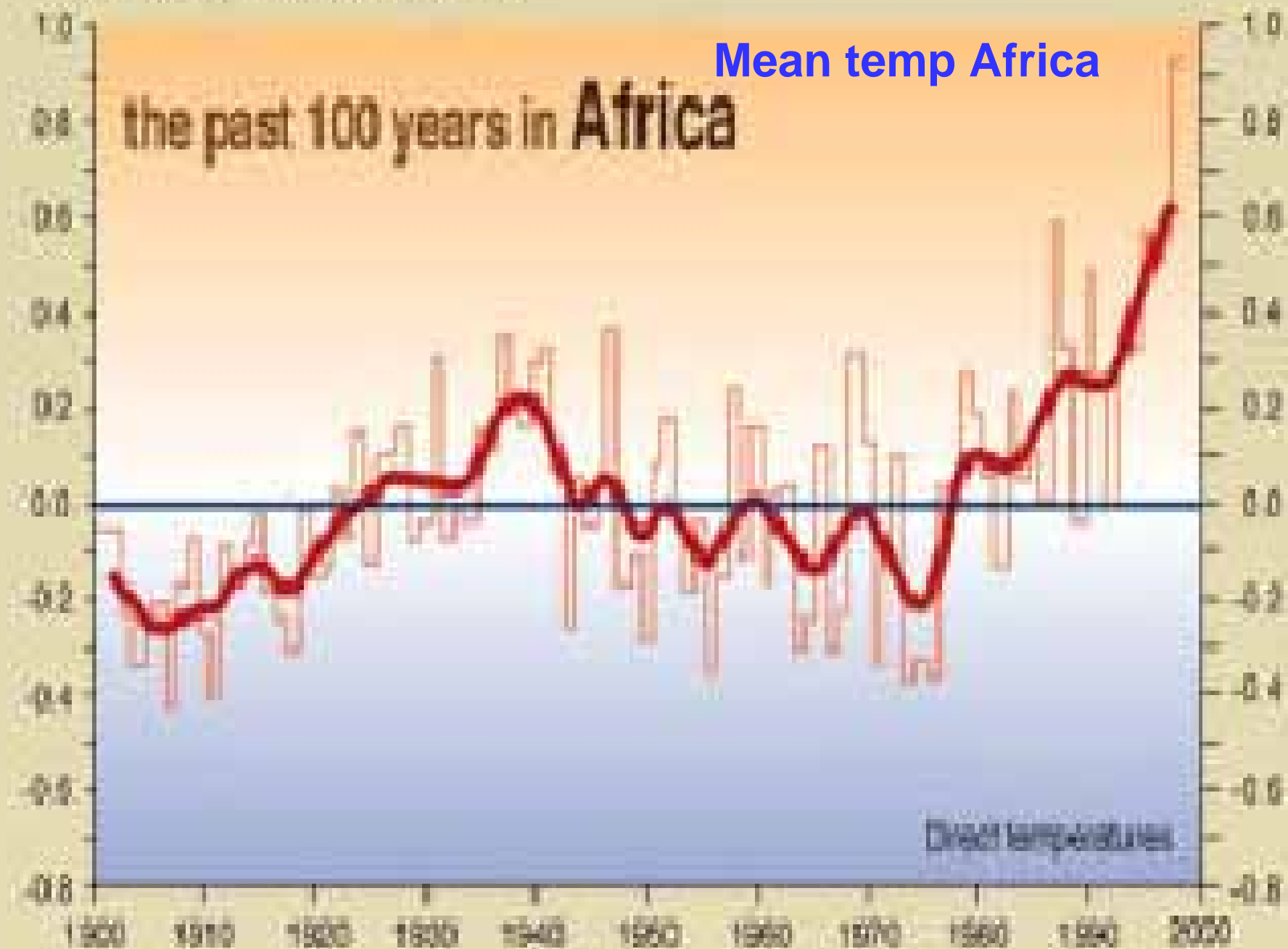
**Namulonge**



Mean temperature anomaly in °C

Mean temp Africa

the past 100 years in Africa



# Kilimanjaro glaciers melting



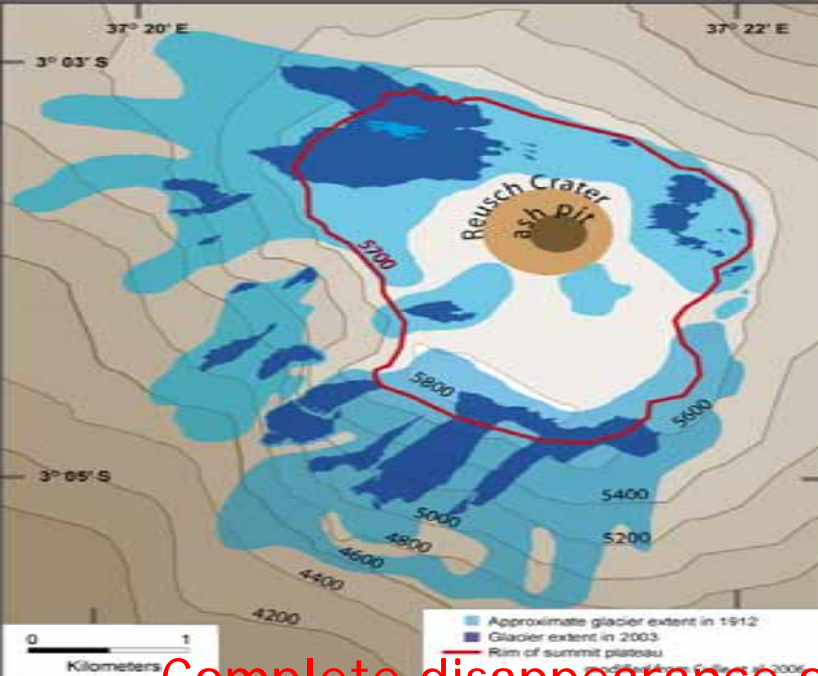
February 17, 1993

February 1993



February 17, 2000

February 2000



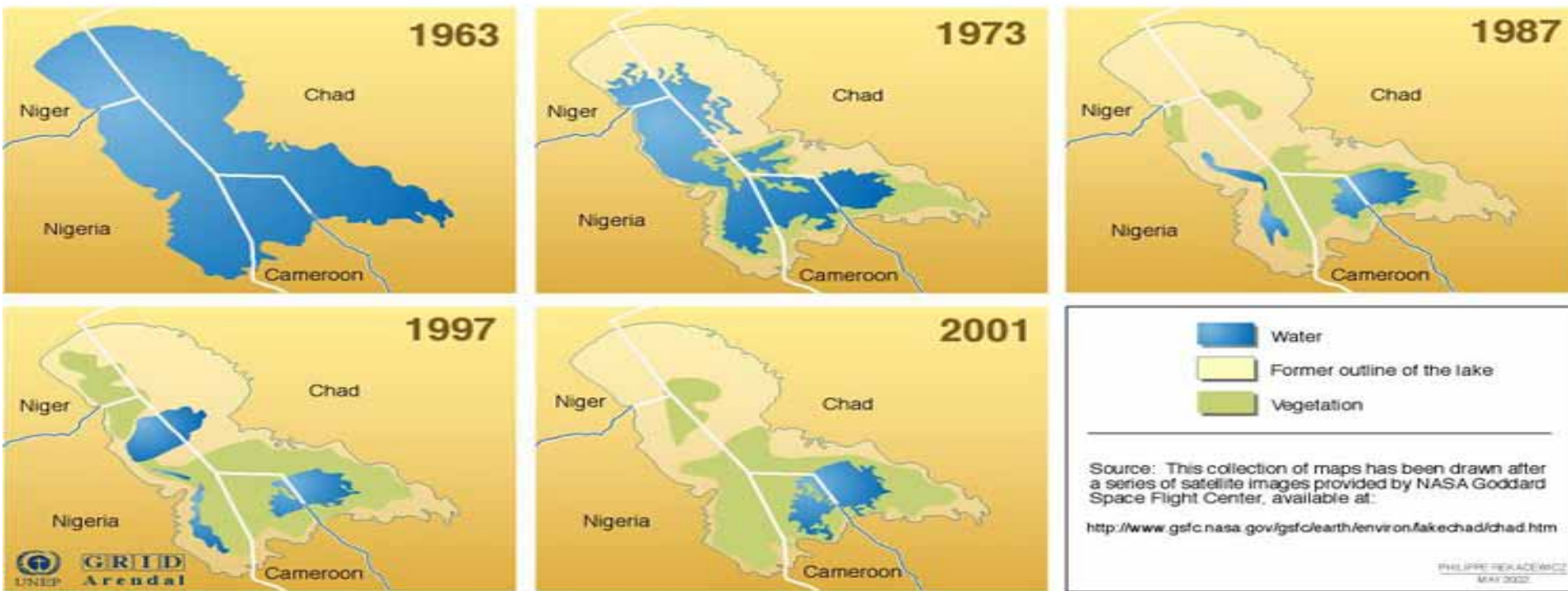
Complete disappearance of Kilimanjaro's glaciers by 2020

# Shrinking Lakes

## Changes in Lake Turkana levels

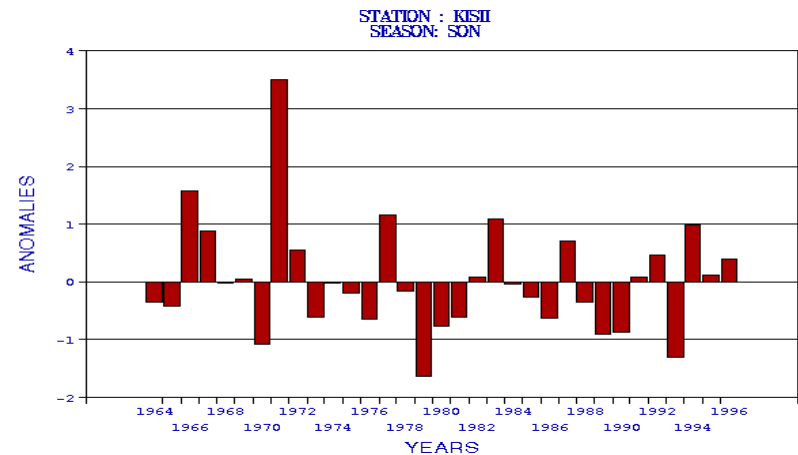
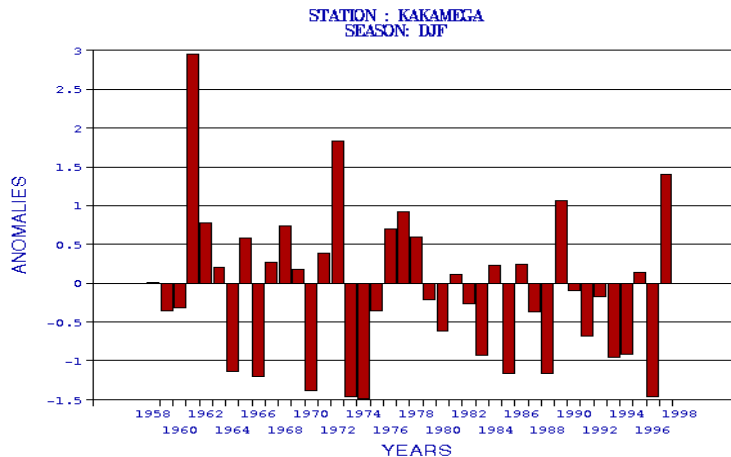
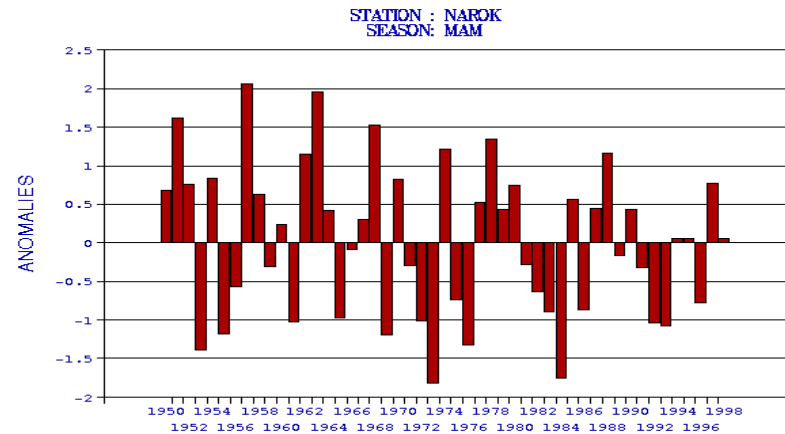
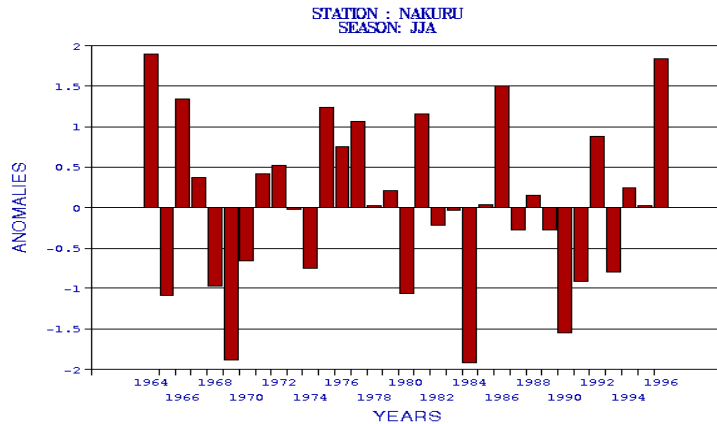


## The Disappearance of Lake Chad in Africa



# COMPLEXITY IN SEASONAL PATTERNS

## :Floods , Droughts VERY COMMON





## Current vulnerability to climate extremes





# Investments



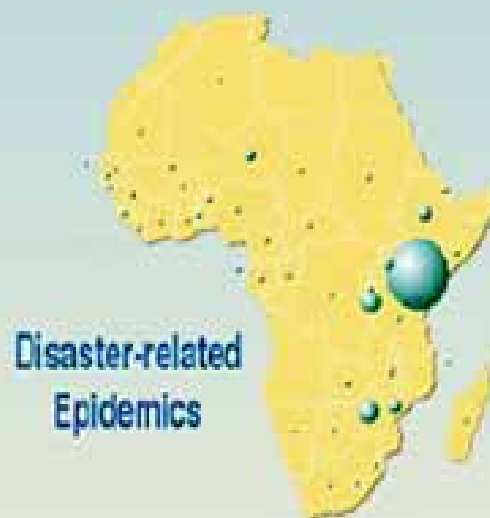
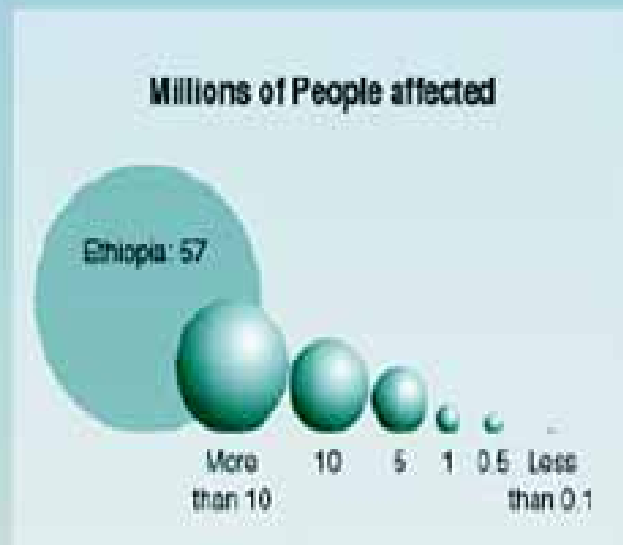
# INFRASTRUCTURE



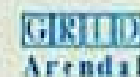
# CONFLICTS OVER RESOURCES



# Environment Refugees



Source: The Office of U.S. Foreign Disaster Assistance (OFDA), The Centre for Research on the Epidemiology of Disasters (CRED), International Disaster Database, [www.cred.be/emdat](http://www.cred.be/emdat), Université Catholique de Louvain, Brussel, Belgium



18110001 2012  
BASED ON A FIRST DRAFT OF THE RESEARCH  
LINE 2012



# Implications of Climate Change for Africa

Africa, one of the most vulnerable continents to climate variability and change.

## Climate Changes



Temperature



Precipitation



Sea Level Rise



## Health Impacts

Weather-related Mortality  
Infectious Diseases  
Air Quality-Respiratory Illnesses



## Agriculture Impacts

Crop Yields  
Irrigation Demands



## Forest Impacts

Forest composition  
Geographic range of forests  
Forest health and productivity



## Water Resource Impacts

Water supply  
Water quality  
Competition for water



## Impacts on Coastal Areas

Erosion of beaches  
Inundation of coastal lands  
Additional costs to protect coastal communities



## Species and Natural Areas

Loss of habitat and species

- **Current climate : impacts are already very devastative,**
- **Future climate change: will worsen vulnerability in the future if no adaptation to reduce vulnerability and build resilience**
- **Adaptation is no option in Africa**

# African Adaptation needs

- **Science: Knowledge:** research : local/  
regional scale climate change: where, when,  
why, how much, -----
- **Appropriate Technology ;**
- **Data and Observation**
- **Capacity development: Human resources;**
- **Financial resources**
- **Policy issues**
- **Coordination and Institutional**
- **Regional and international collaborations**
- **Advocacy, Education and awareness**
- **Adaptation, mitigation and development**

# **Adaptation: Africa being left behind ??**

- African Current vs future climate risks
- Socio-economic needs (Development) , adaptation and mitigation

## **Adaptation Actions**

- **The Bali action plan** ;
- The National Adaptation Programmes of Action (**NAPAs**) ;
- **Nairobi work programme** ;
- **Copenhagen Accord** ;
- **Cancun agreement**
- **COP17 ??? Durban**

**Thank you ALL**