

# Will Adaptation Priorities be left behind: African perspectives

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IGAD CLIMATE AND APPLICATIONS  
CENTRE (ICPAC) [www.icpac.net](http://www.icpac.net)

and

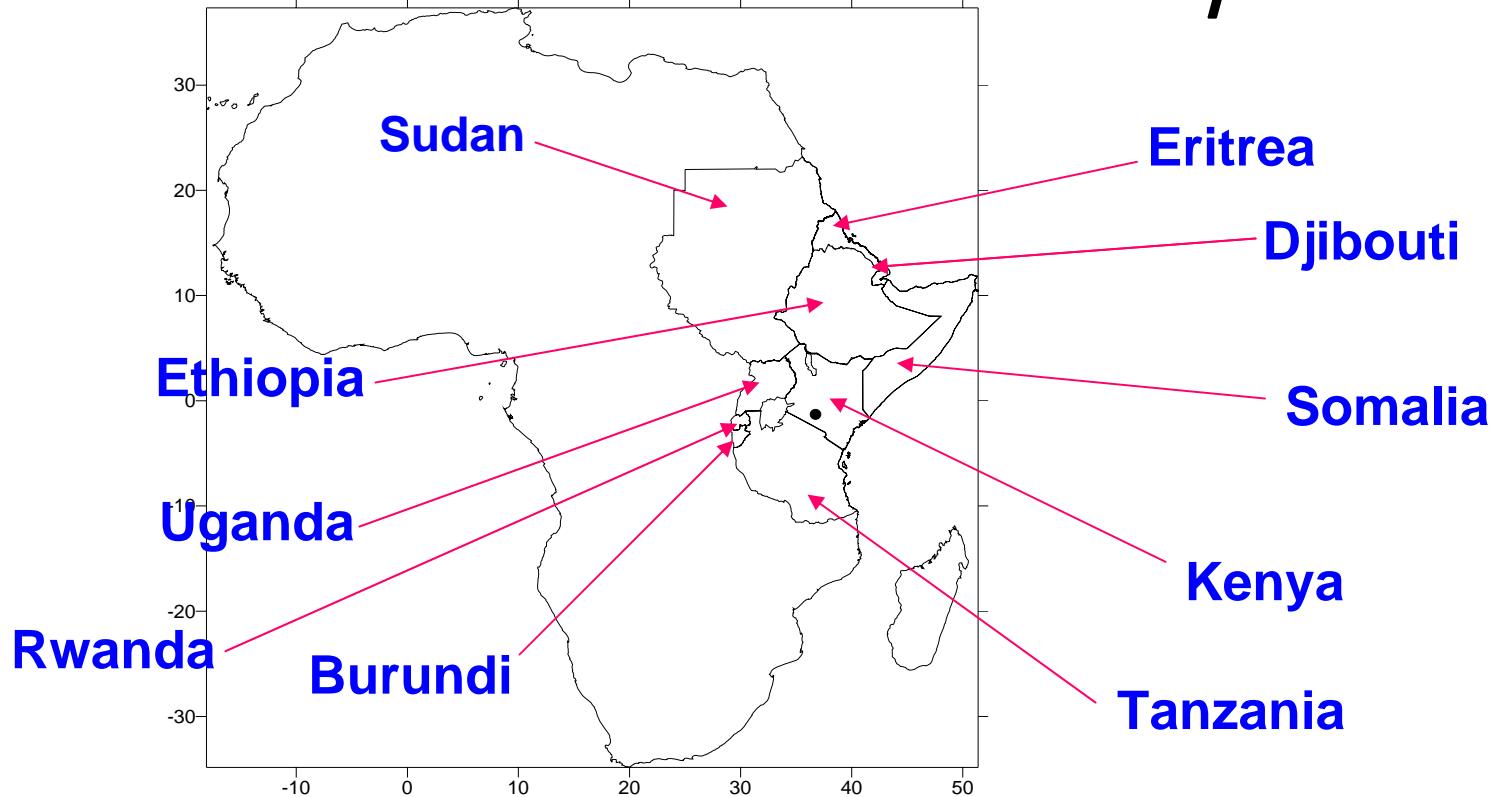
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# **ADAPTATION for enhanced implementation of the convention**

- **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;**

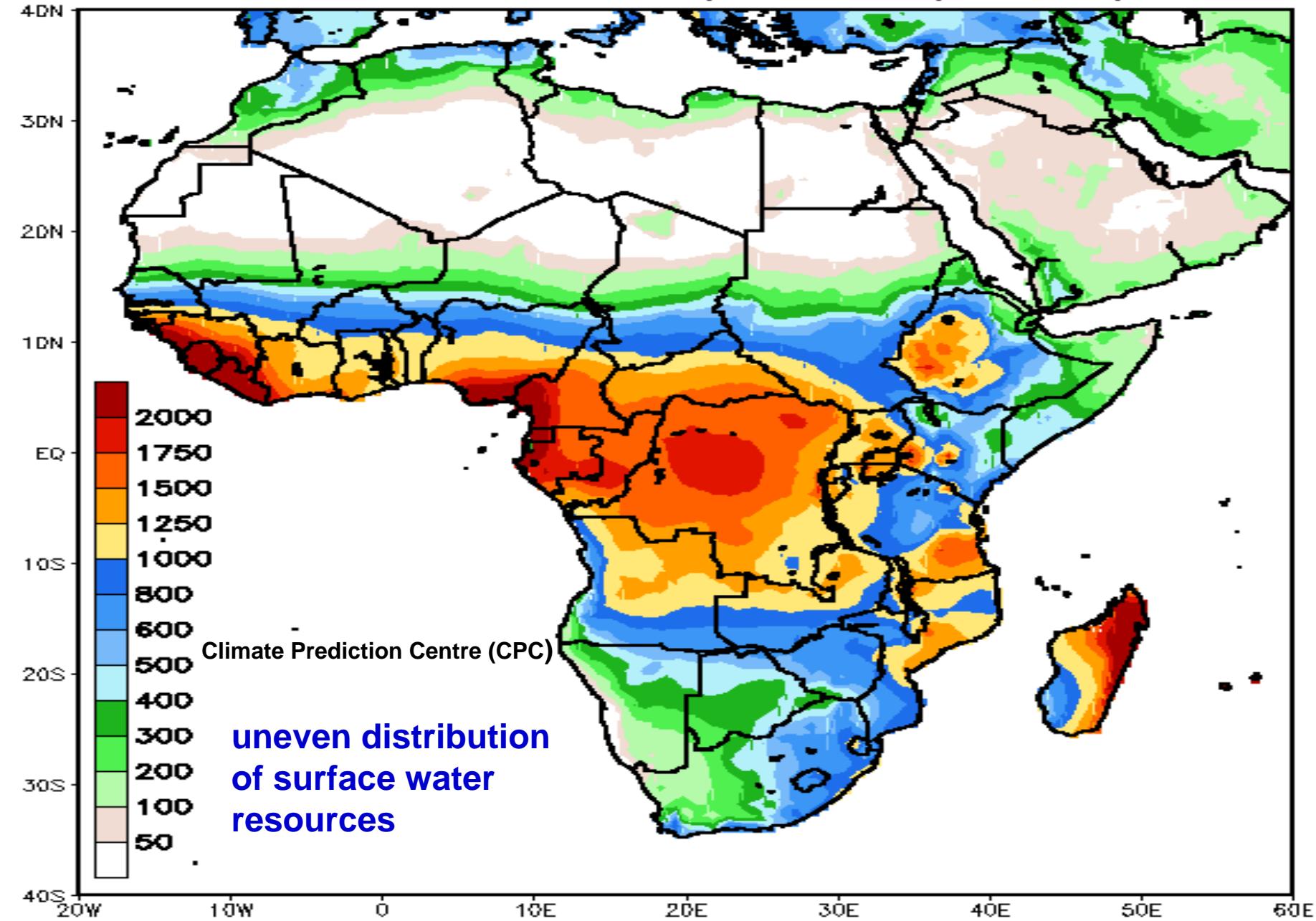
- **Water scarcity;**

- **Hot environment  
throughout the**

**year;**



## Annual Total Precipitation (in mm)



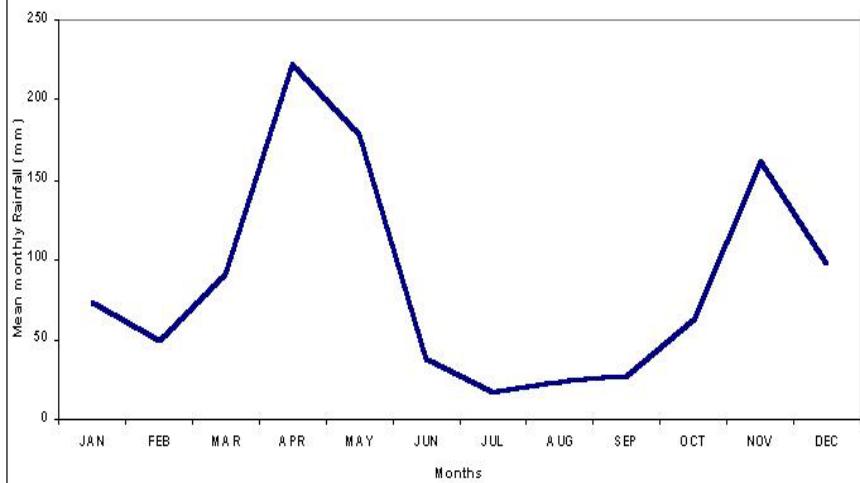
# CURRENT AFRICAN CHALLENGES

- Geographically Africa has warm and dry climate
- Economies rely on climate sensitive sectors
- wide spread poverty
- The poor most vulnerable and they leave 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

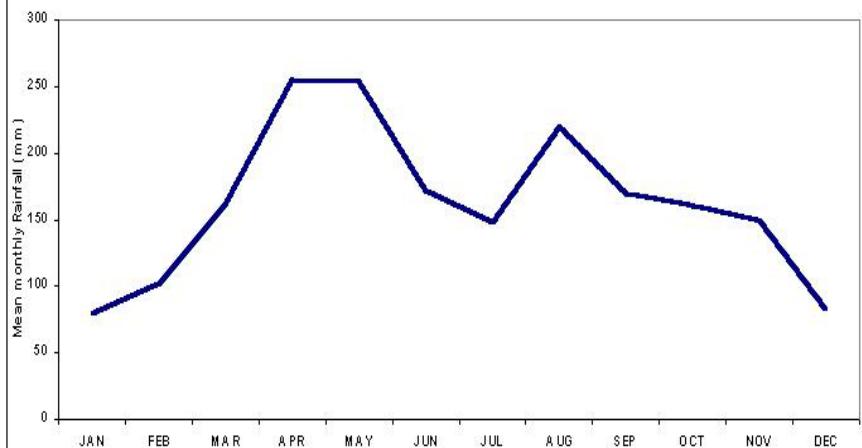
# WHAT do we know about **current and future** climate change in Africa: **what do we adapt to?** **Regional / local climate scenarios required to adapt?**

- 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

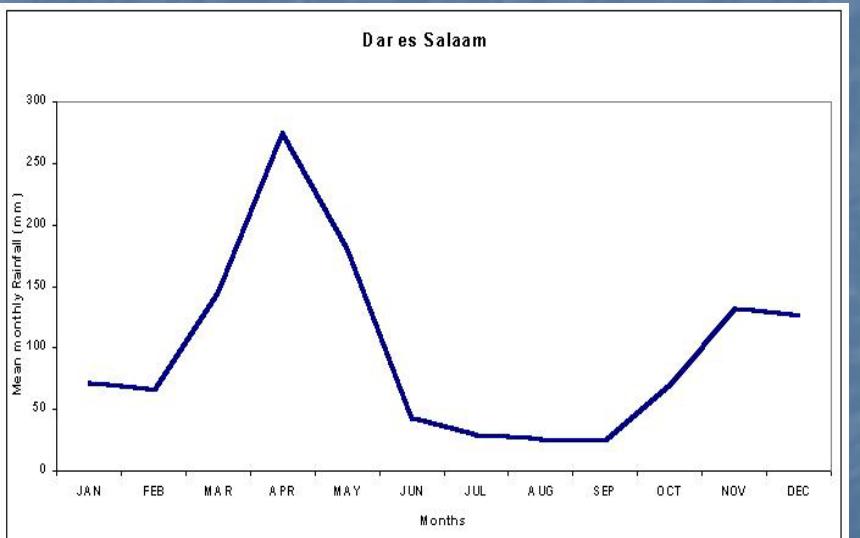
Dagoretti



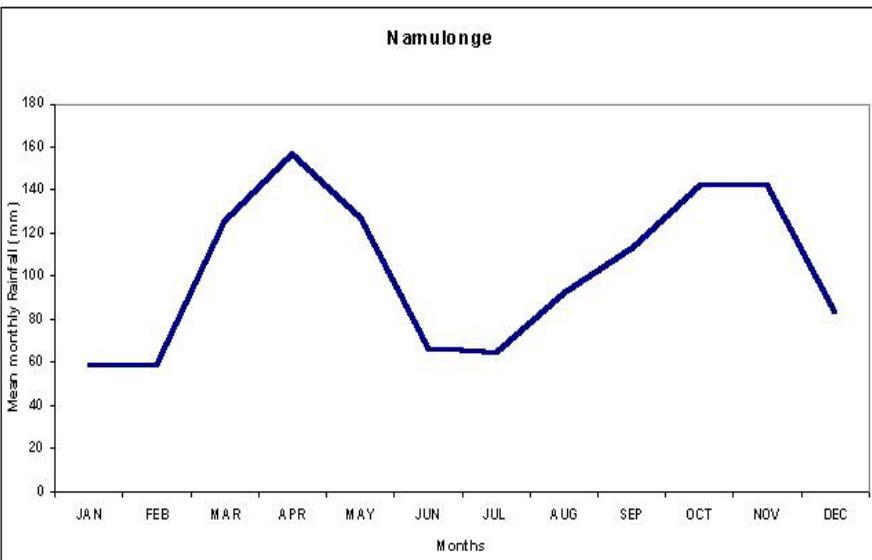
Kakamega



Dares Salaam



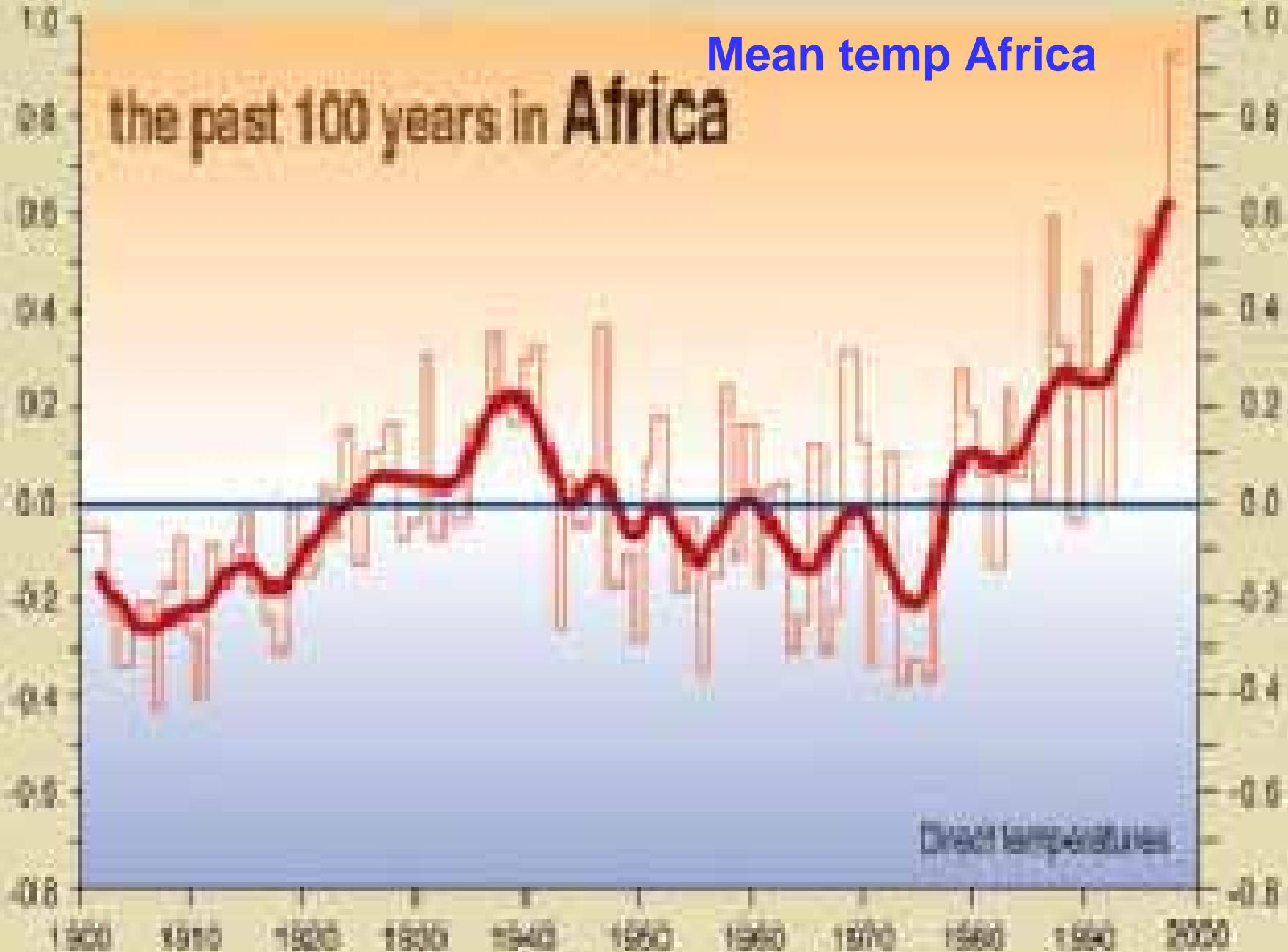
Namulunge



Mean temperature anomaly in °C

Mean temp Africa

the past 100 years in Africa

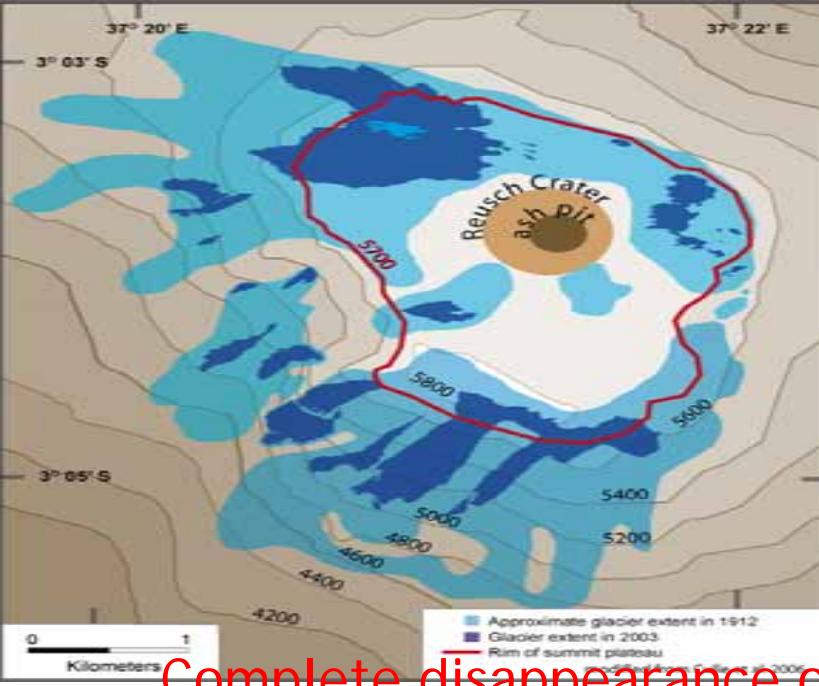


# Kilimanjaro glaciers melting



February 17, 1993

February 1993



February 21, 2000

February 2000



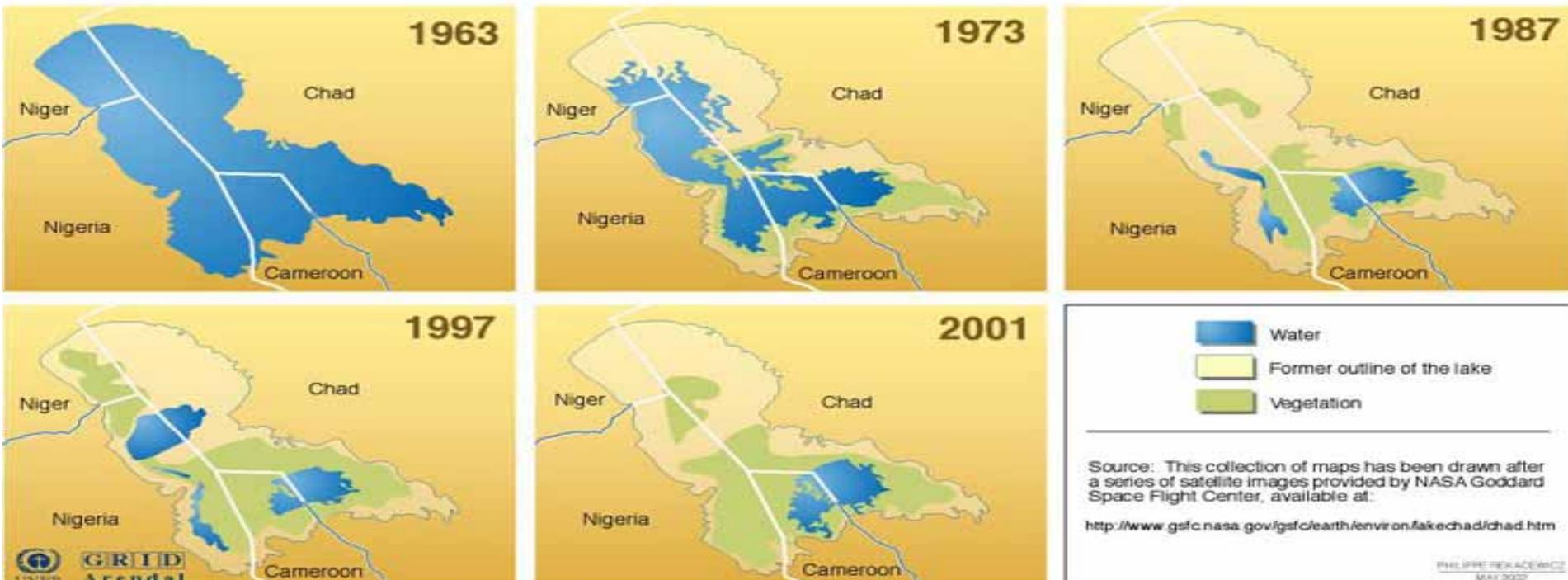
Complete disappearance of Kilimanjaro's glaciers by 2020

# Shrinking Lakes

## Changes in Lake Turkana levels

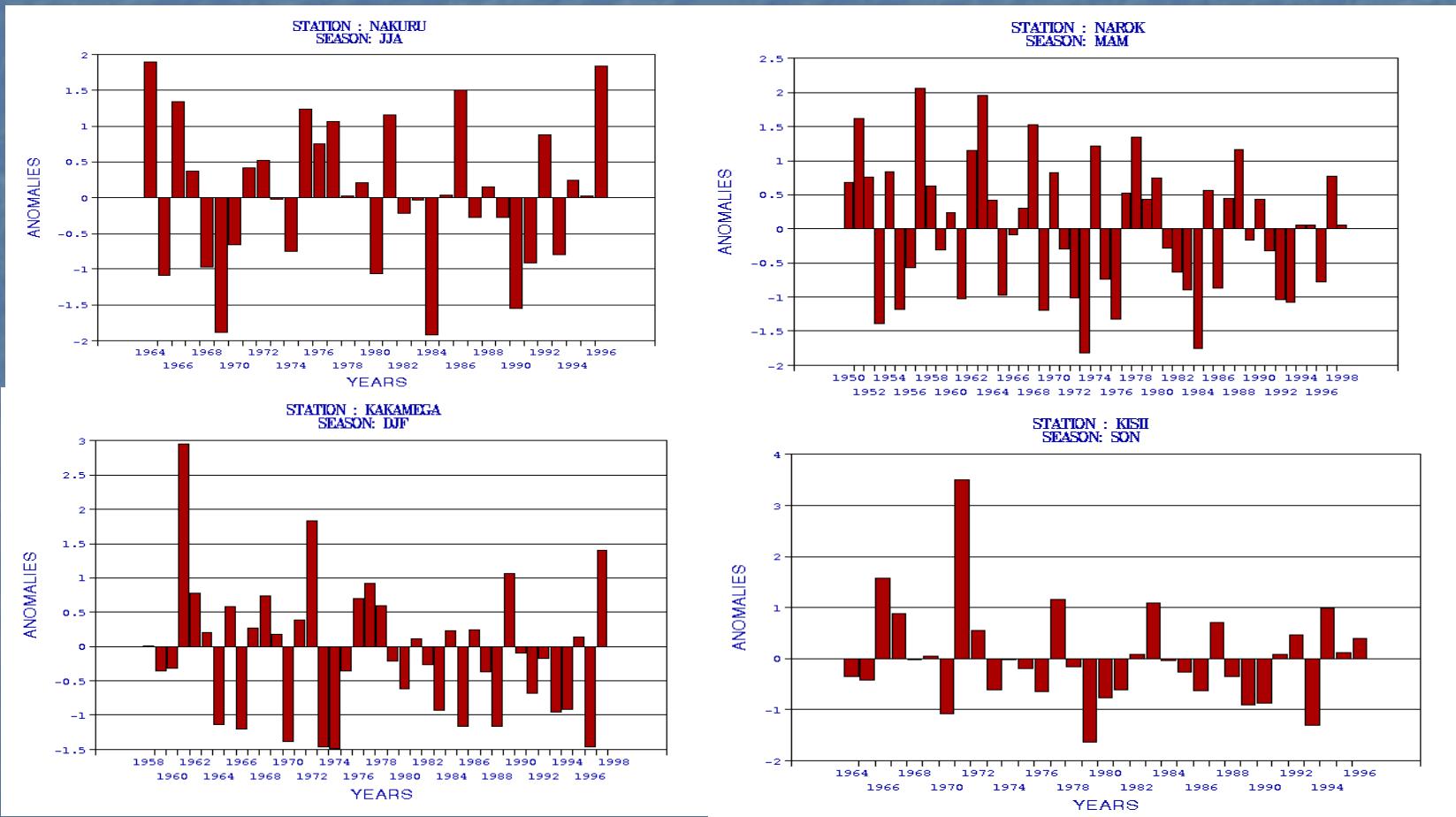


## The Disappearance of Lake Chad in Africa



# COMPLEXITY IN SEASONAL PATTERNS

## :Floods , Droughts VERY COMMON



## Current vulnerability to climate extremes



## Investments



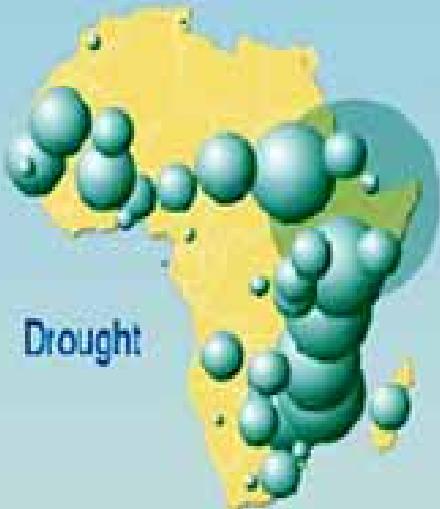
## INFRASTRUCTURE



## CONFLICTS OVER RESOURCES



## Environment Refugees



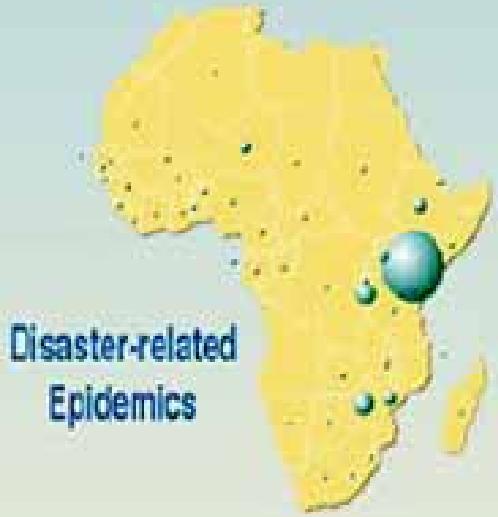
Drought



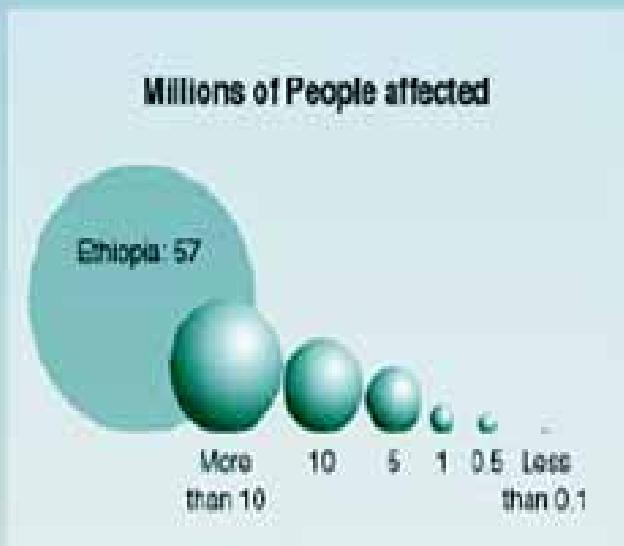
Famine



Flood



Disaster-related  
Epidemics



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/medat](http://www.cred.be/medat), Université Catholique de Louvain, Brussels, Belgium



UNEP



GRID  
Arendal

DATA FOR CLIMATE CHANGE MONITORING  
GRID ARENDAL

Source: UNEP – Vital Water Graphics, 2005

# Implications of Climate Change for Africa

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

## Climate Changes

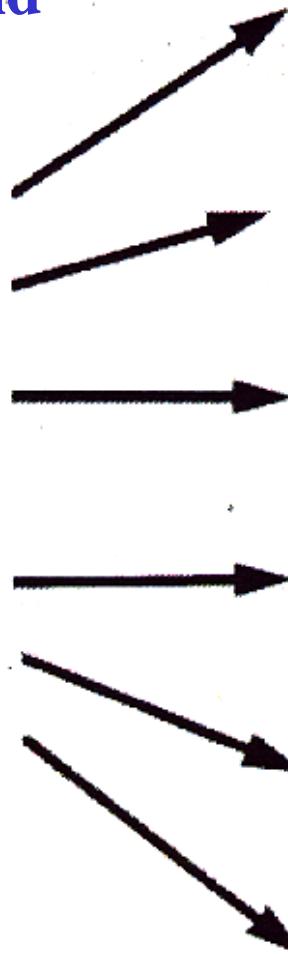
Temperature



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 devastating,
- 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