

Will Adaptation Priorities be left behind: African perspectives

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IGAD CLIMATE AND APPLICATIONS
CENTRE (ICPAC) www.icpac.net

and

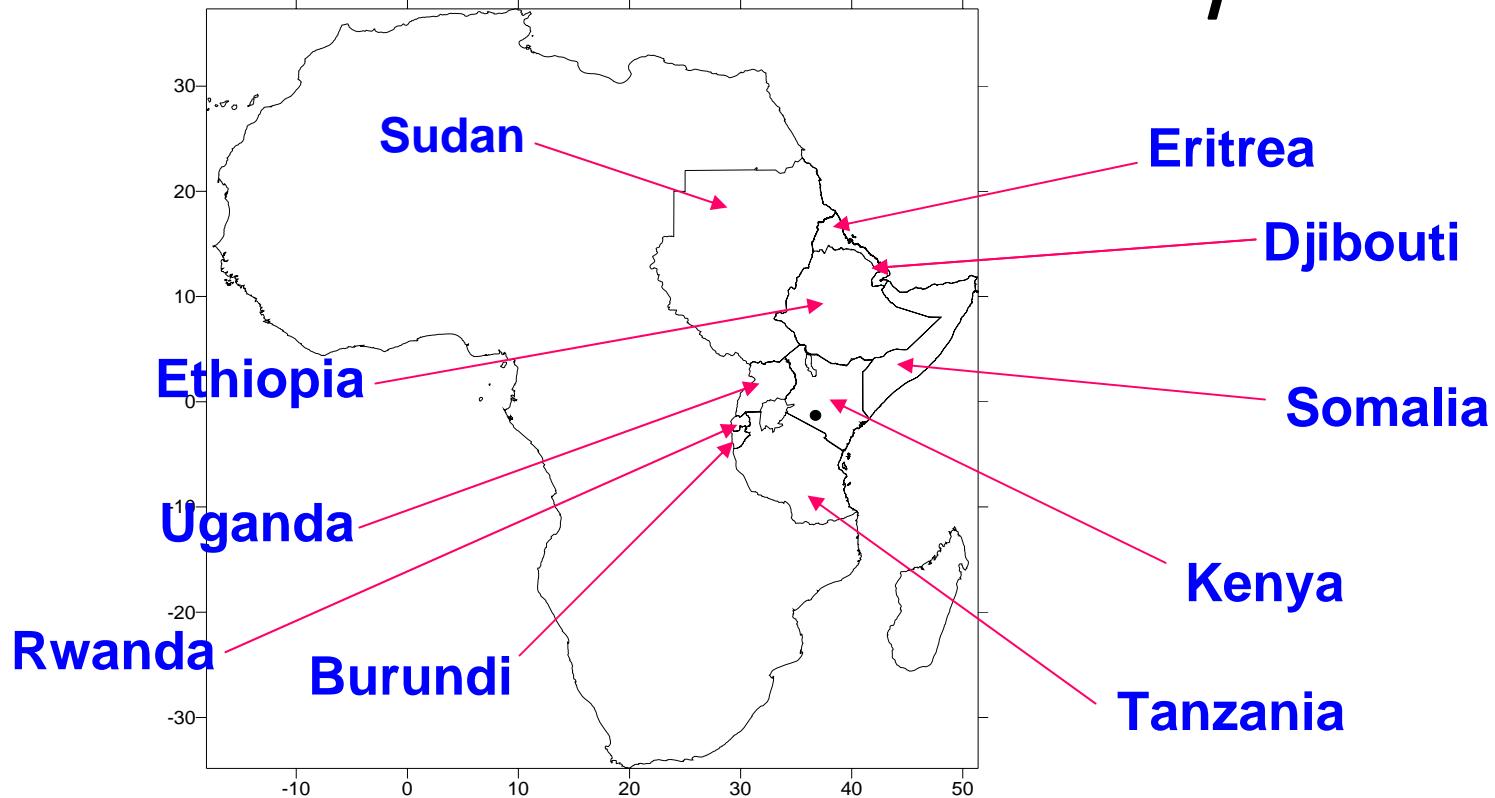
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ADAPTATION for enhanced implementation of the convention

- **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;**

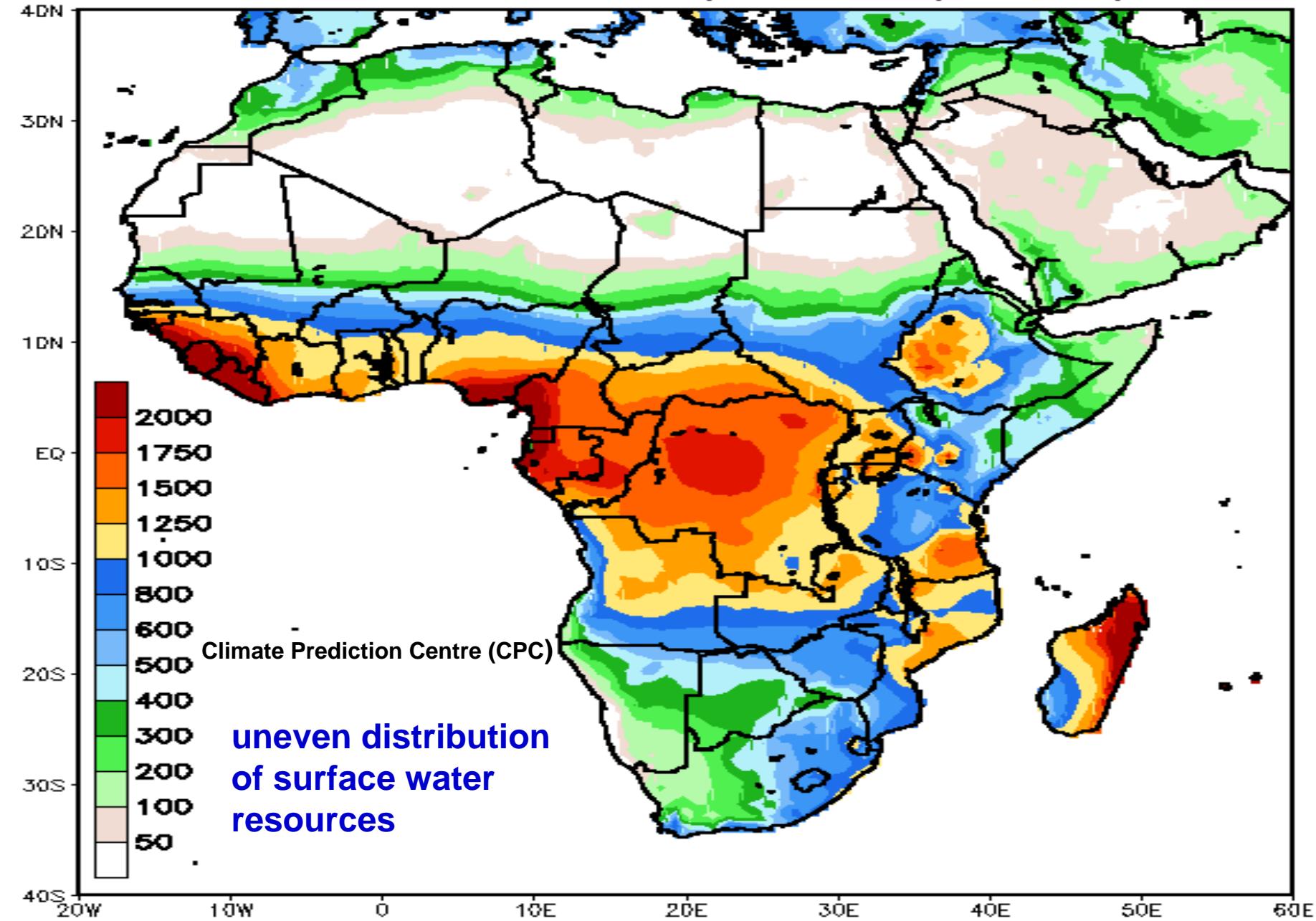
- **Water scarcity;**

- **Hot environment
throughout the**

year;



Annual Total Precipitation (in mm)



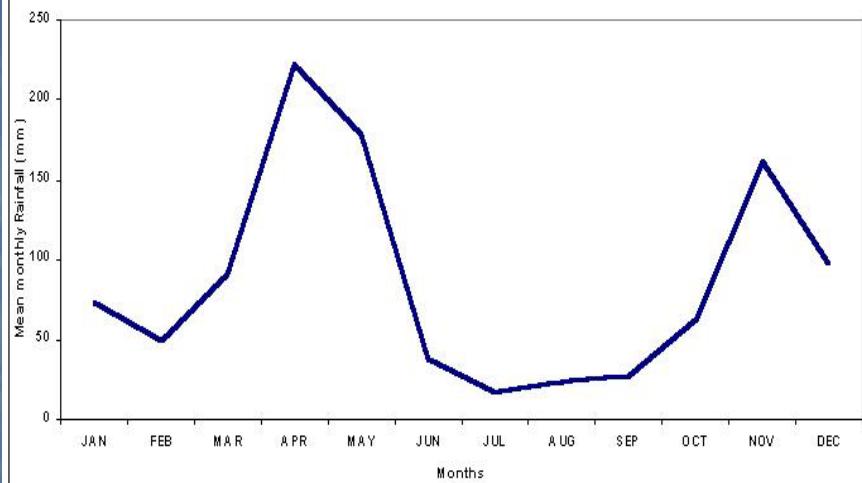
CURRENT AFRICAN CHALLENGES

- 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

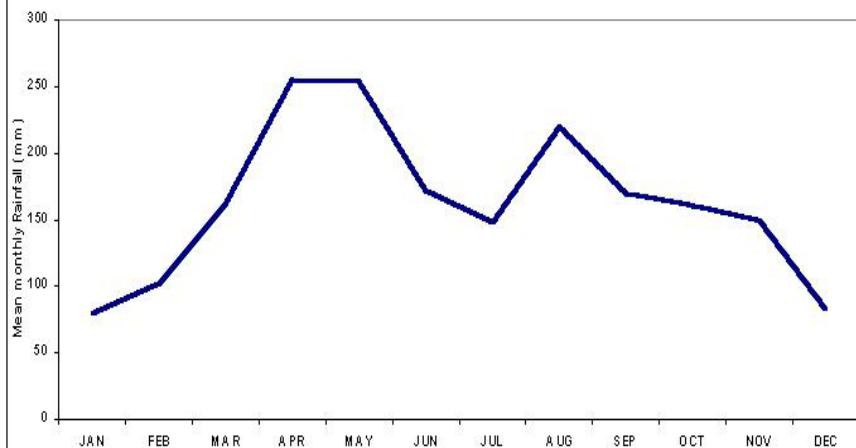
WHAT do we know about **current and future** climate change in Africa: **what do we adapt to?** **Regional / local climate scenarios required to adapt?**

- 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

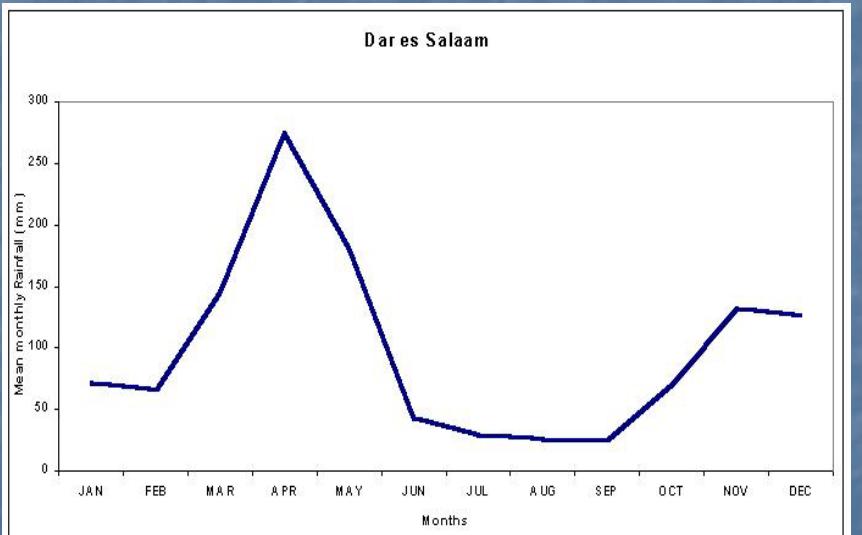
Dagoretti



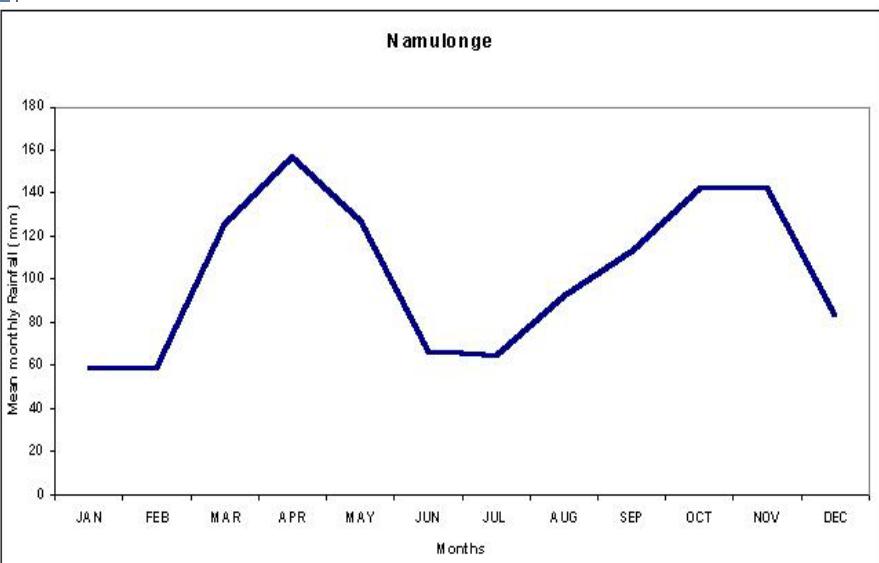
Kakamega



Dares Salaam



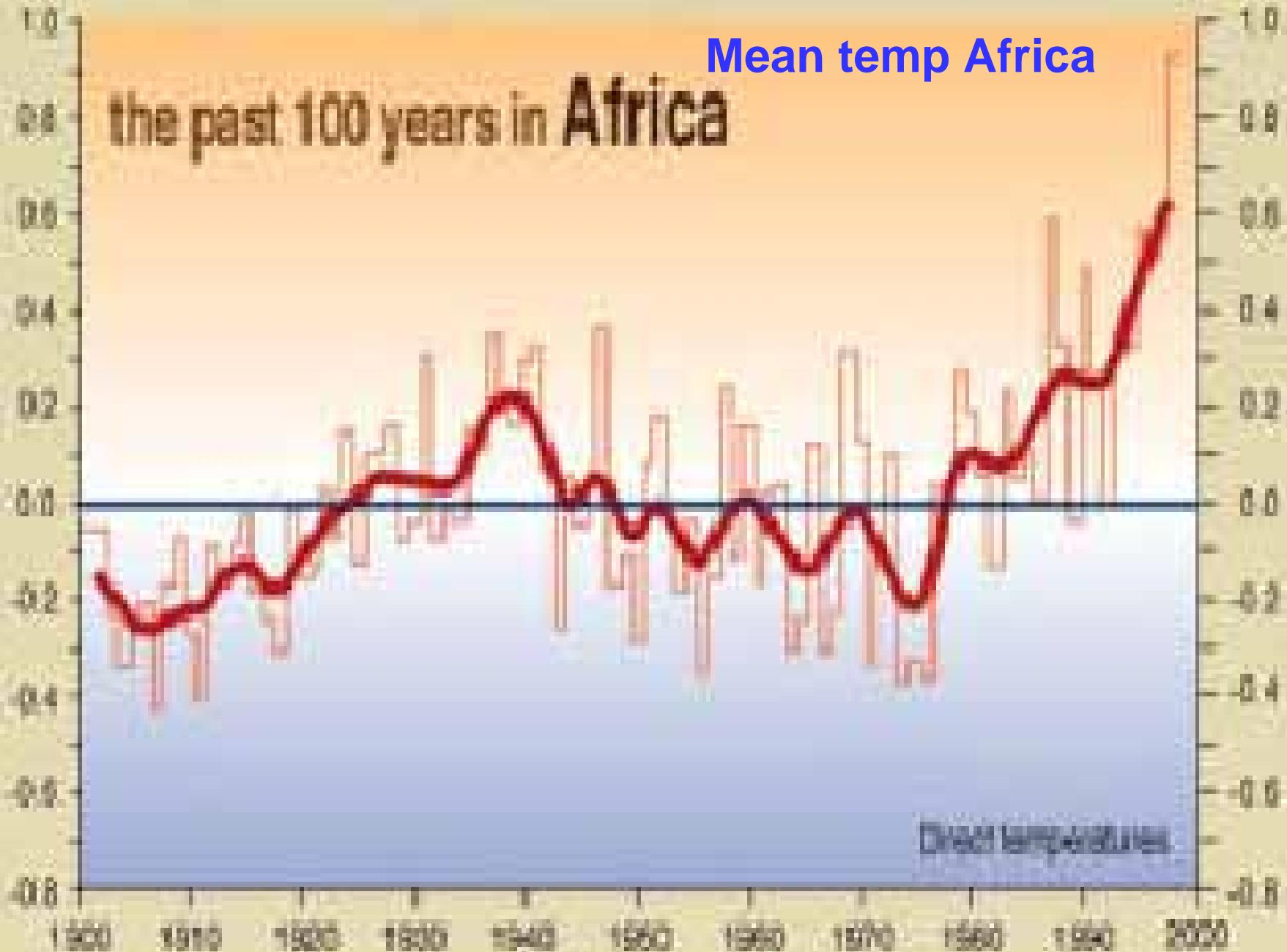
Namulunge



Mean temperature anomaly in °C

Mean temp Africa

the past 100 years in Africa

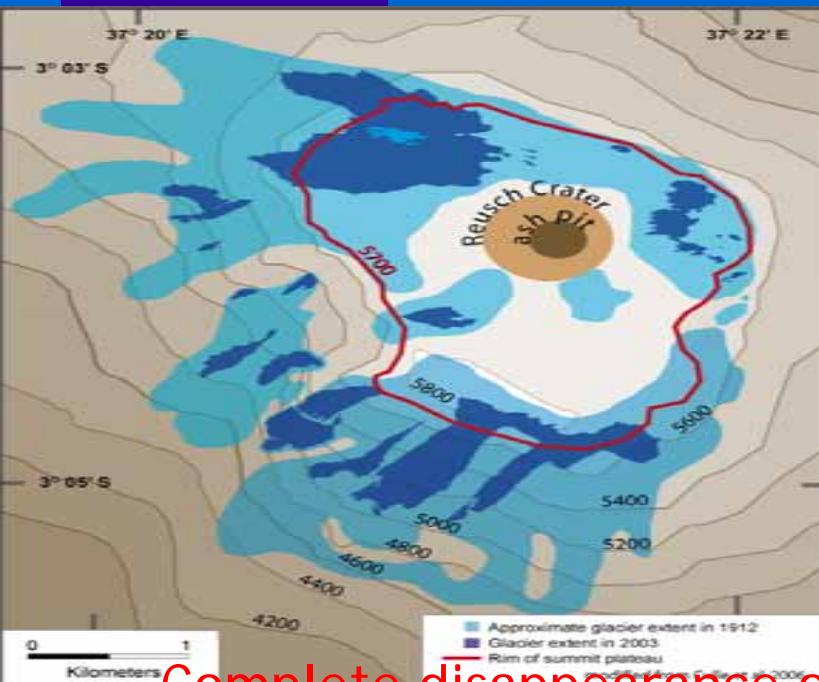


Kilimanjaro glaciers melting



February 17, 1993

February 1993



February 21, 2000

February 2000



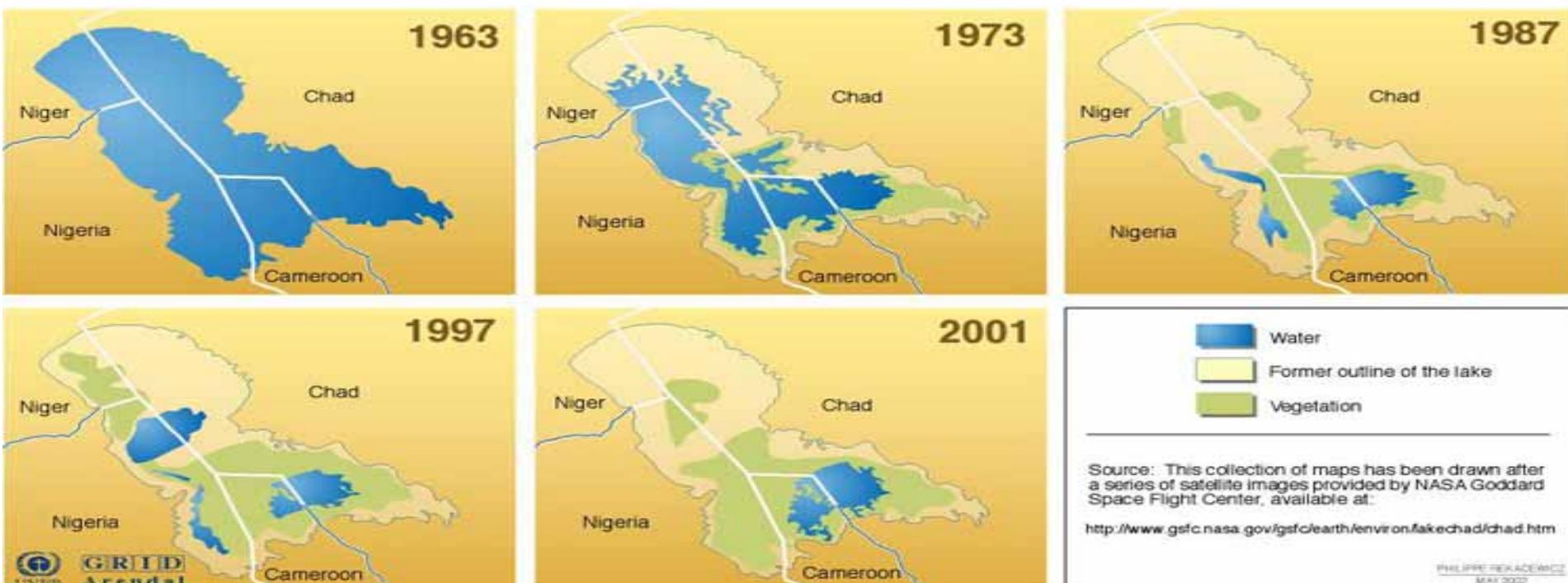
Complete disappearance of Kilimanjaro's glaciers by 2020

Shrinking Lakes

Changes in Lake Turkana levels

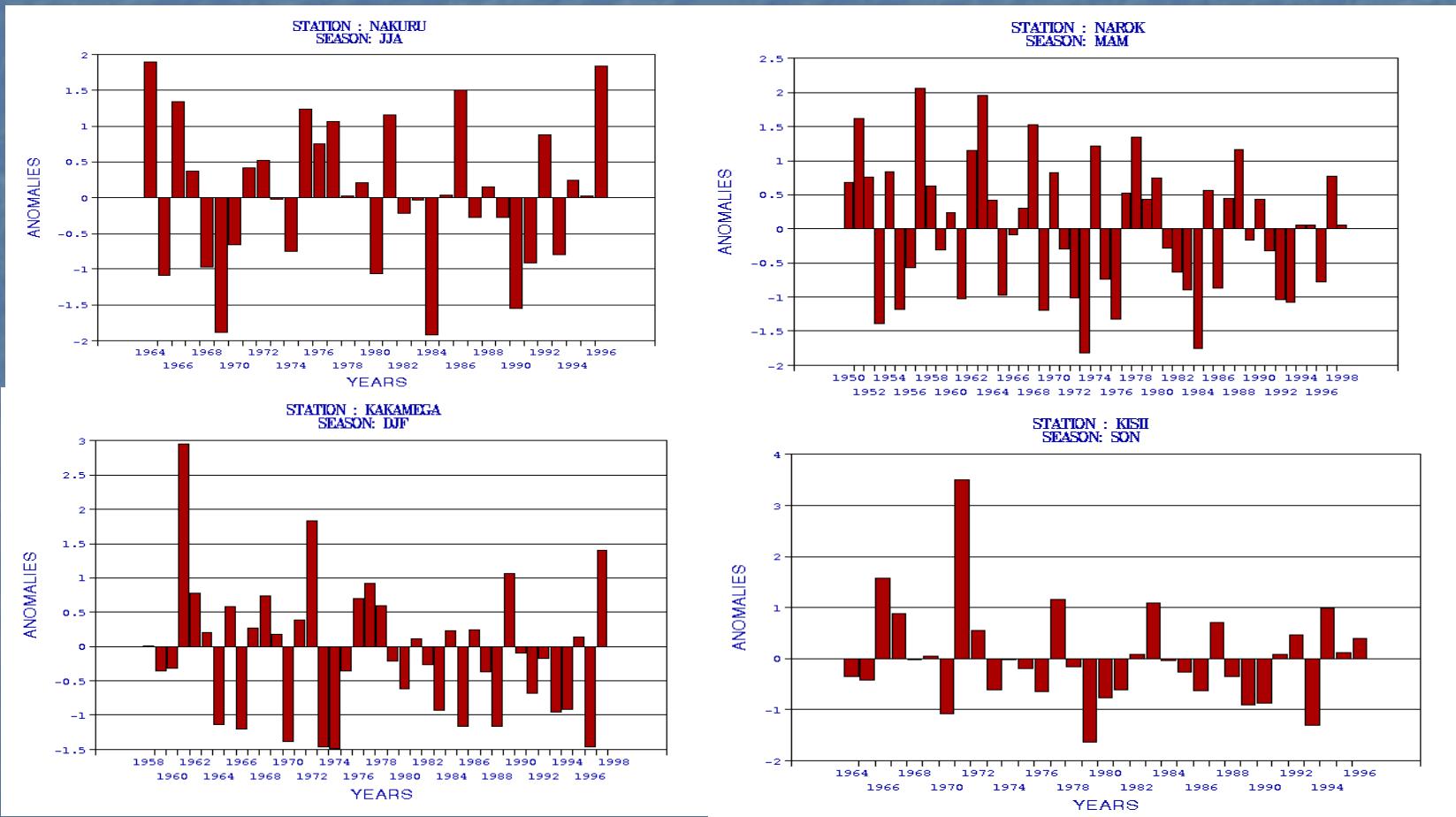


The Disappearance of Lake Chad in Africa



COMPLEXITY IN SEASONAL PATTERNS

:Floods , Droughts VERY COMMON



Current vulnerability to climate extremes



Investments



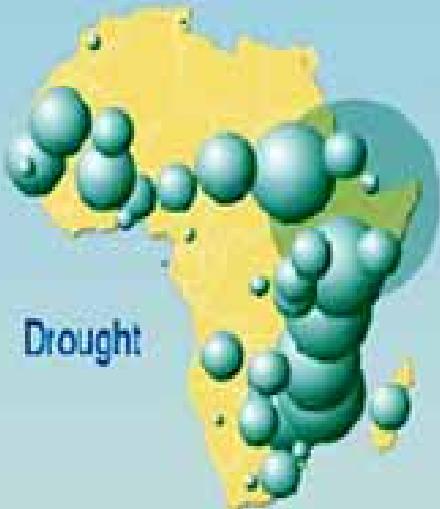
INFRASTRUCTURE



CONFLICTS OVER RESOURCES



Environment Refugees



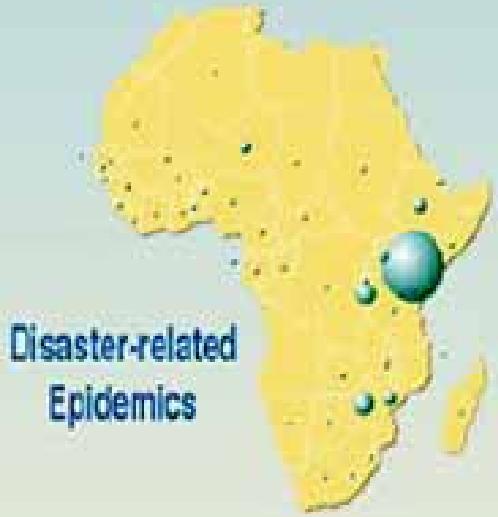
Drought



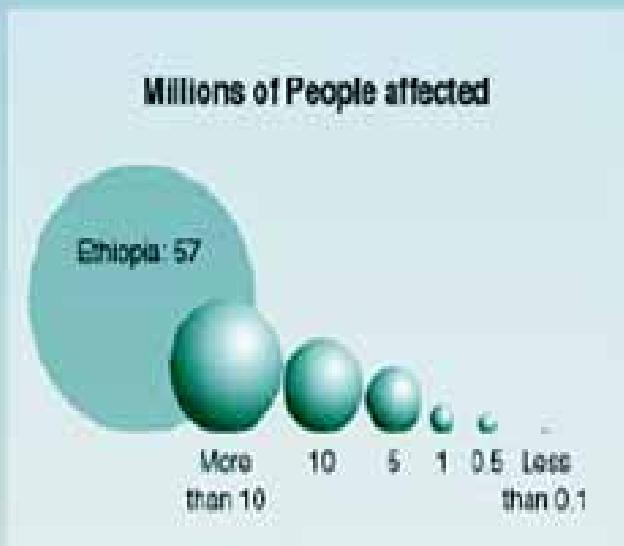
Famine



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/emdat, Université Catholique de Louvain, Brussels, Belgium



UNEP



GRID
Arendal

DATA FROM DISASTER MONITORING CENTER
UNISDR

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

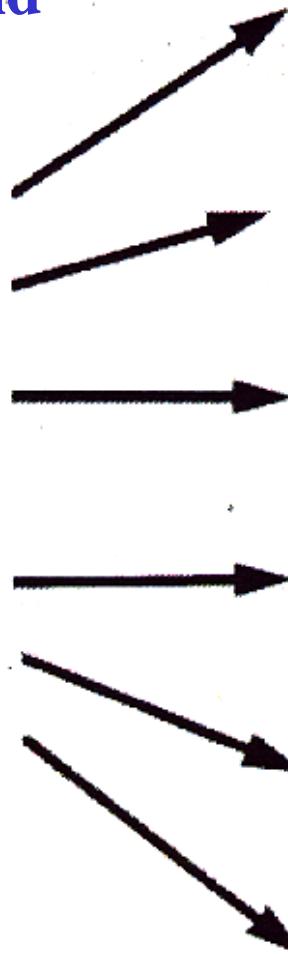
Temperature



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