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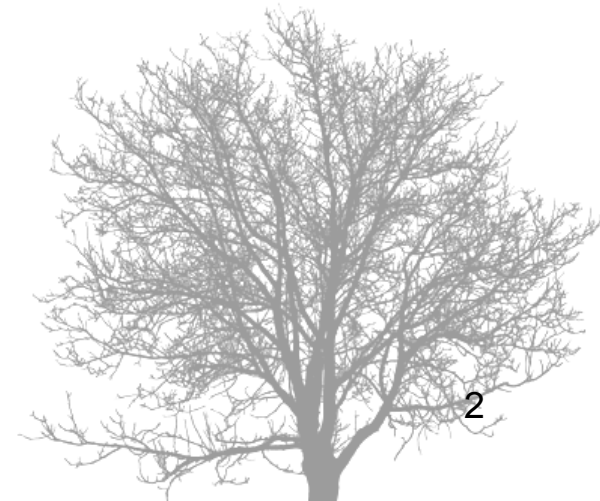
Vulnerability and Climate Change Hot Spots in Africa: Mapping based on Existing Knowledge

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Outline

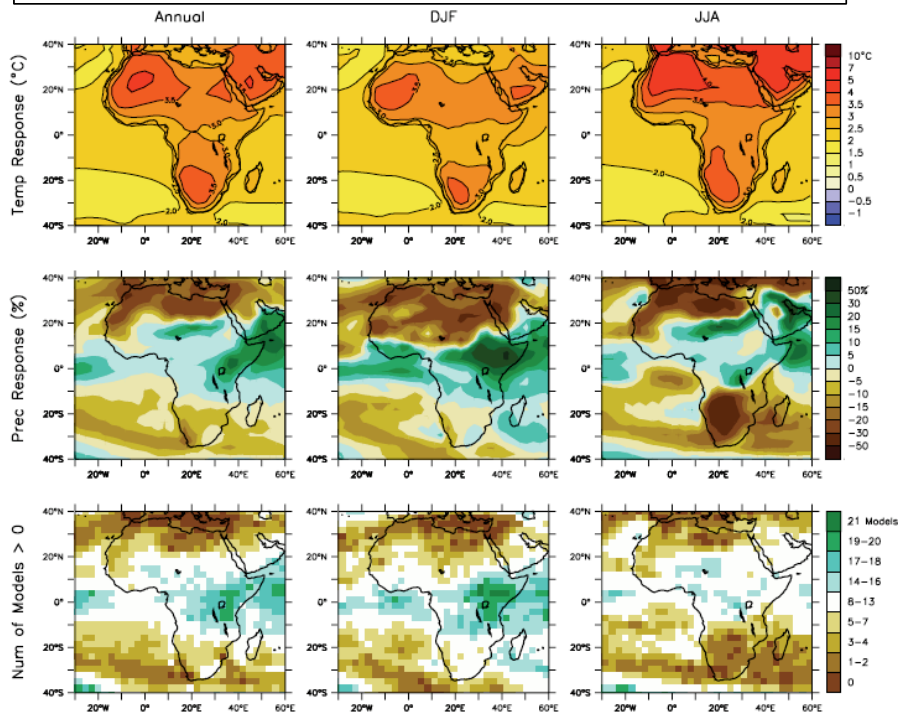
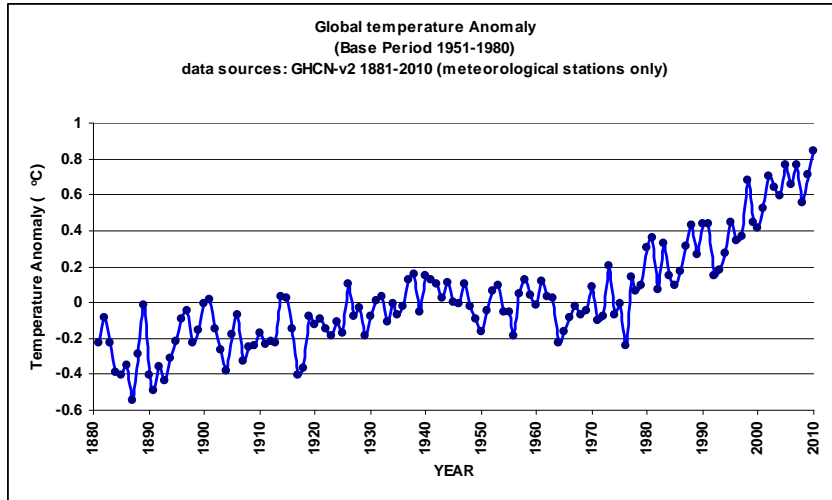
- Introduction
- Temperature and Rainfall Trend and Projection
- Extreme Events
- Vulnerability and Impact on different sectors
- The Role ACPC
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Introduction

- The warming of the climate system is unequivocal
- Climate change increases climate variability and threaten the attainment of MDGs
- A number of African countries experience extreme weather and climate e.g., the East African drought
- The rise of sea level of African coastal cities is eminent
- Vulnerability and Adaptation information needed to formulate policies that enable climate change to be mainstreamed into development at all levels

Temperature and Rainfall Trend and Projection



- Warming trend of 0.15 °C per decade
- Rainfall has decadal variability in Sahel and rainfall variability in East Africa associated with ENSO
- The temperature expected to further rise at the end of this century
- The rainfall will have an increasing trend in East Africa and in north and south Africa

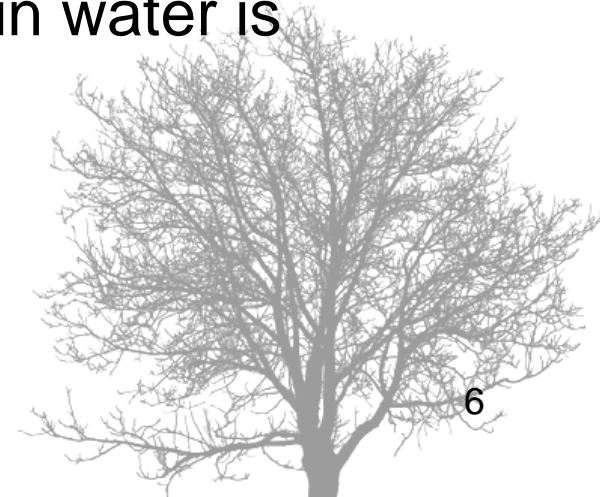
Extreme Events

- Extreme events such as droughts, floods and storms are increasing with time
- Hydro-meteorological disaster increased from 7 events per year in 1980s to 10 events per year from 2000-2006 in East Africa
- The tropical cyclone in the southwestern Indian Ocean is uncertain (whether it is increasing or decreasing trend)

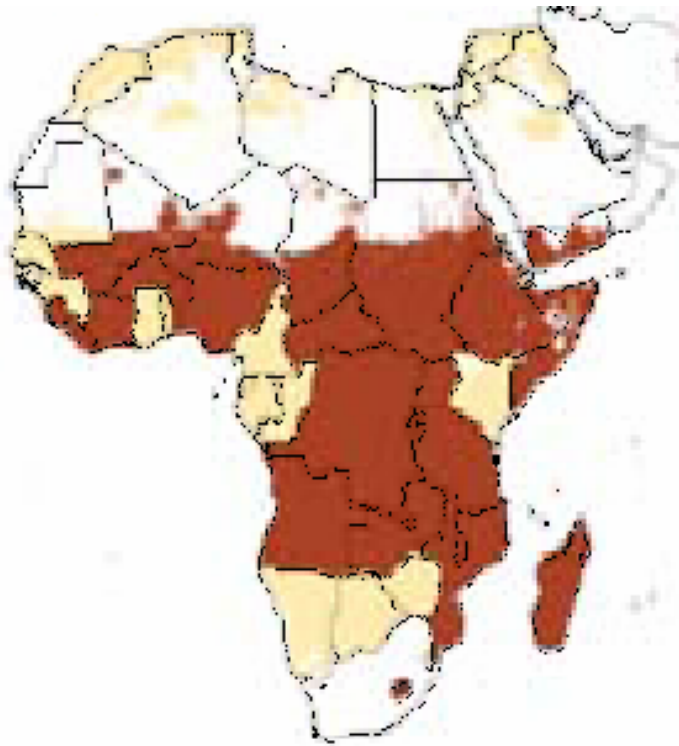


Vulnerability and Impact on Water Sector



- Climate change has no uniform impact in the continent
- Climate change will pose additional problem in semi-arid and arid parts of Africa
- The future projection indicated that 350-600 million people will be under water stress by 2050
- The impact of climate change in water is immense.



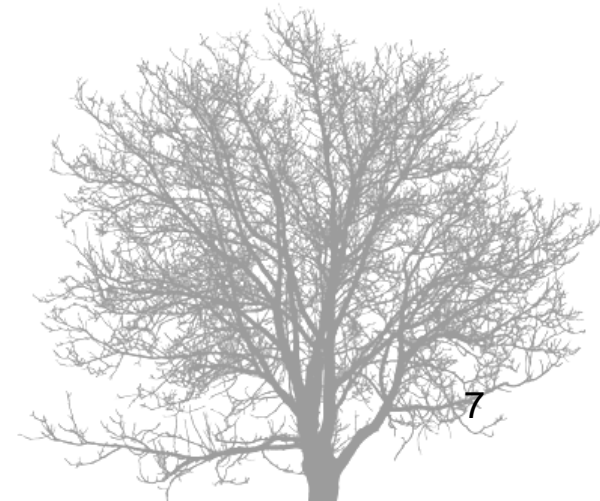
Vulnerability and Impact in Agricultural Sector



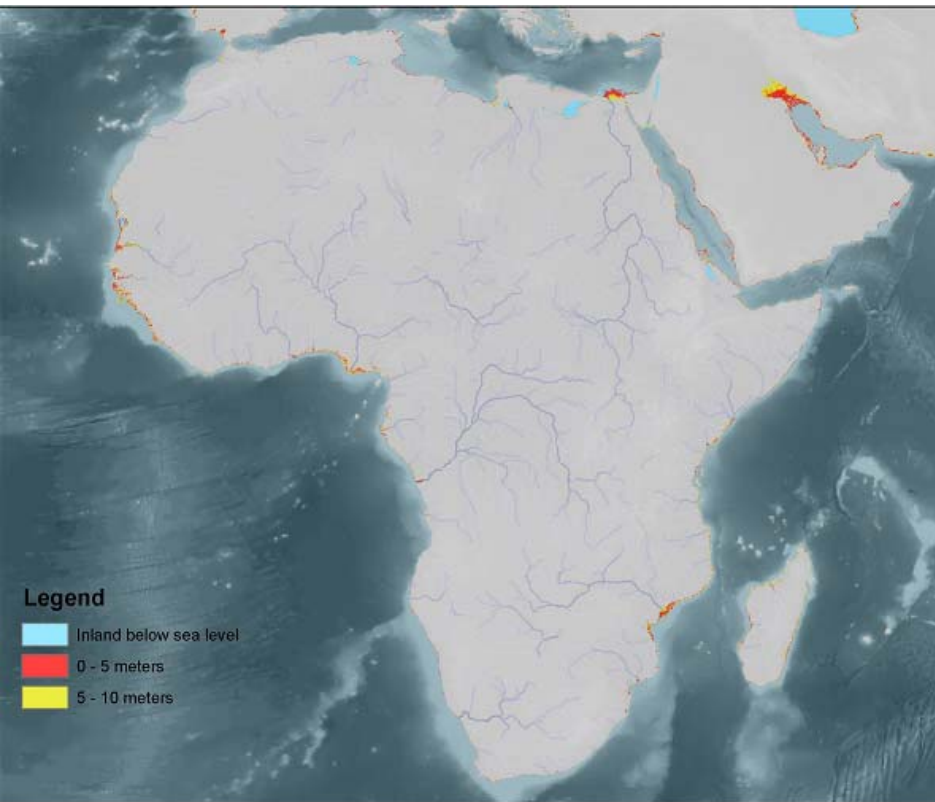
Stunting prevalence
% under 5 (2002-2008)

	<=40 (High capacity)
	> 40 (Low capacity)

- The agricultural sector is the most sensitive sector to climate change because most of the economies of African countries depend on it.
- Most of sub-Saharan African Countries has low adaptive capacity



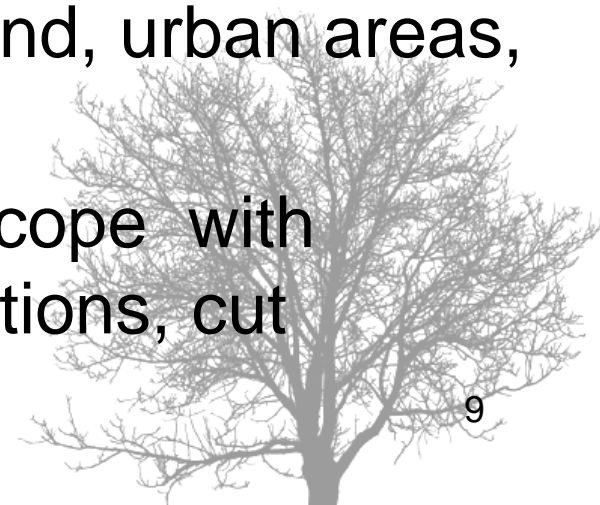
Vulnerability and Impact in Coastal Areas



- 40% of the population live in coastal cities of West Africa (under threat)
- The sea level is rising (0.17m 20thC and .48m 21thC)
- Coastal areas along river deltas are the most vulnerable as shown in the figure (Nile, Niger, etc.)

Vulnerability and impact in health Sector

- Extreme air temperature and air pollution are hazardous to health
- Floods, droughts and contaminated water can pose disease
- Climate change may exacerbate the epidemic of climate sensitive diseases such as malaria, cholera and meningitis
- The vulnerable hotspots are small island, urban areas, mountainous areas and children
- Adaptation strategies are proposed to cope with climate change (public health interventions, cut greenhouse gas emissions, ...)



The Role ACPC

- ACPC, working with various institutions and stakeholders will play roles to enhance science, focus on adaptation actions to the vulnerable climate change hotspots by
 - Identifying relevant interventions
 - brokering knowledge
 - doing advocacy work
 - building capacity
 - mobilizing resources and
 - devising ways to formulate appropriate policies by African governments



Recommendations

- The identified hotspots for climate change require further refined work to come up with critical issues
- Practical actions must be developed for the climate change hotspots for various sectors so as to reduce the risk due to climate disaster
- Policy makers must be made aware of the risks associated with these hotspots
- The climate hotspots has to be funded for adaptation through various sources.

Thank you

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For further information

