

KENYA

**NATIONAL
FEDERATION OF
AGRICULTURAL
PRODUCERS
(KENFAP)**



The "Farmers Voice"

Vision

"Empowered Kenyan farmers with a strong voice"

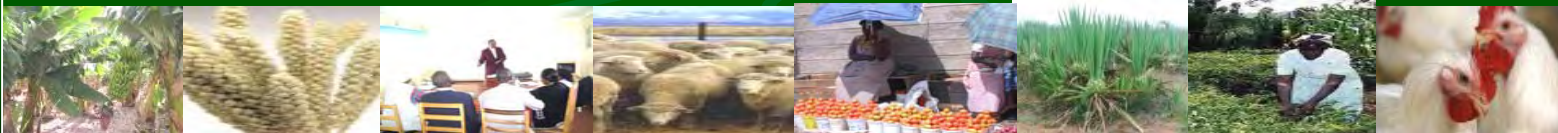
Mission

"To empower its members to make informed choices for improved sustainable livelihoods".

The Impact of Climate Change On Agriculture, Fisheries And Pastoralist

In Africa.

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Overview of agriculture sector in Africa

- Agriculture is undoubtedly the most important sector in the economies of most non-oil exporting African countries.
- It constitutes approximately 30% of Africa's GDP and contributes about 50% of the total export value, with 70% of the continent's population depending on the sector for their livelihood.

Overview of agriculture sector in Africa cont.

- The continent is particularly susceptible to climate change because it includes some of the world's poorest countries
- Eg in Kenya The more frequent and severe droughts caused by climate change are hitting farmers and pastoralists the hardest
- Nearly 80% of pastoralist's livestock was lost in 2005 during a severe drought.

Climate changes in africa

- 0.7°C increase over most of the African continent
- Rate of about 0.05°C per decade
- the five warmest years in Africa have all occurred since 1988, with 1995 and 1998 being the two warmest years.
- 25% decrease in rainfall has occurred over the African Sahel during the past 30 years.
- Recurrent flood and drought sometimes in same year

Climate change impacts are divided in two;

1. Biophysical impacts

- Physiological effects on crops, pasture, forests and livestock (quantity, quality);
- Changes in land, soil and water resources (quantity, quality); resulting in Reduction in soil fertility
- Increased weed and pest challenges/ manifestation of vector and vector born diseases; resulting from increase in temperature
- decline in yields and production;
- reduced marginal GDP from agriculture;

Climate change impacts are divided in two; **Cont'**

- Increased number of people at risk of hunger and food insecurity; migration and civil unrest.
- fluctuations in world market prices;
- changes in geographical distribution of trade regimes;

Climate change impacts are divided in two; **Contd'**

- Shifts in spatial and temporal distribution of impacts;
- Sea level rise, changes to ocean salinity;
- Sea temperature rise causing fish to inhabit different ranges.

2. socio-economic impacts:

- Decline in yields and production;
- Reduced marginal GDP from agriculture;
- Fluctuations in world market prices;
- Changes in geographical distribution of trade regimes;
- Increased number of people at risk of hunger and food insecurity; migration and civil unrest.

Drought and famine

- Drought - 50% shortfall in rainfall
- Droughts are often synonymous with famines.
- Consecutive dry years are reducing the ability of African societies to cope with droughts by providing less recovery and preparation time between events

Floods

- Floods result in people being made homeless and others losing their lives.
- Floods have devastating effects on livelihoods, destroying agricultural crops, disrupting electricity supplies and demolishing basic infrastructure such as roads, homes and bridges

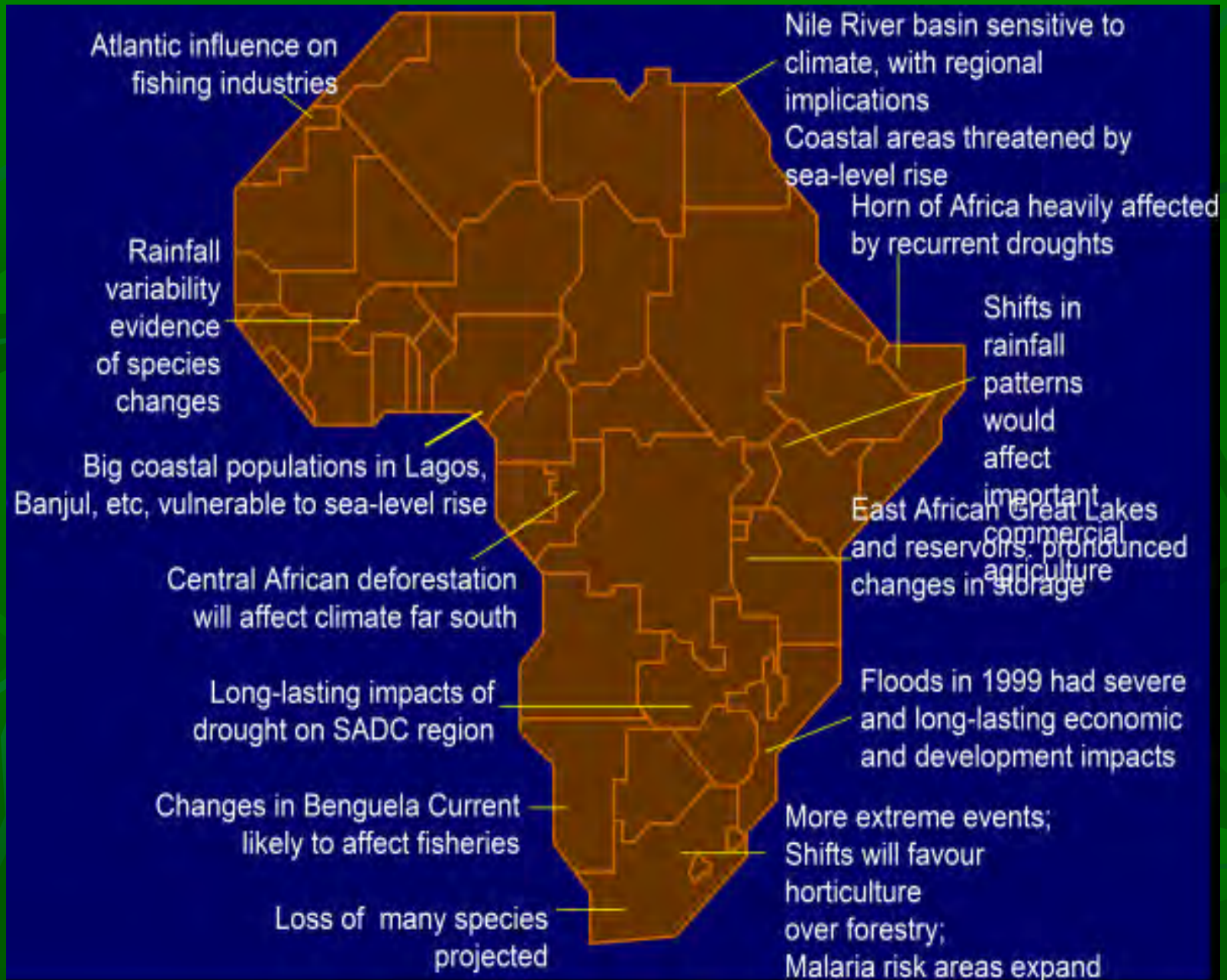
It is not uncommon for some countries to experience both droughts and floods in the same year; e.g. the flooding experienced in East Africa followed periods of extended drought.

Precipitation/Rainfall

- An average of a 25% decrease in rainfall has occurred in African Sahel during the past 30 years.
- I.e. a decrease in the number of rainfall events.
- Agricultural production reduces due to Shortage of rain which causes e.g. new seedlings to wilt and die off.
- The Increasingly variable growing season conditions (shifts in start of rainy seasons, length and quality of rains, etc) disrupt subsistence agricultural production leading to famine and severe loss of livelihoods

Continental warming

- Warming of approximately 0.7°C over most of the African continent during the 20th century is reported in the IPCC TAR (2001).
- Very high temperatures records have also been indexed e.g. the five warmest years in Africa have all occurred since 1988, with 1995 and 1998 being the two warmest years.





THE END

Thank you