

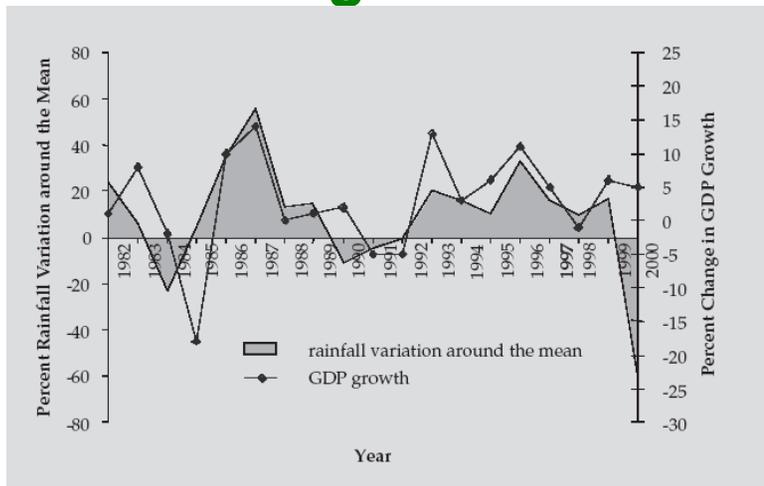
Transitioning to Climate Resilient Development: Perspectives on Community Level Action

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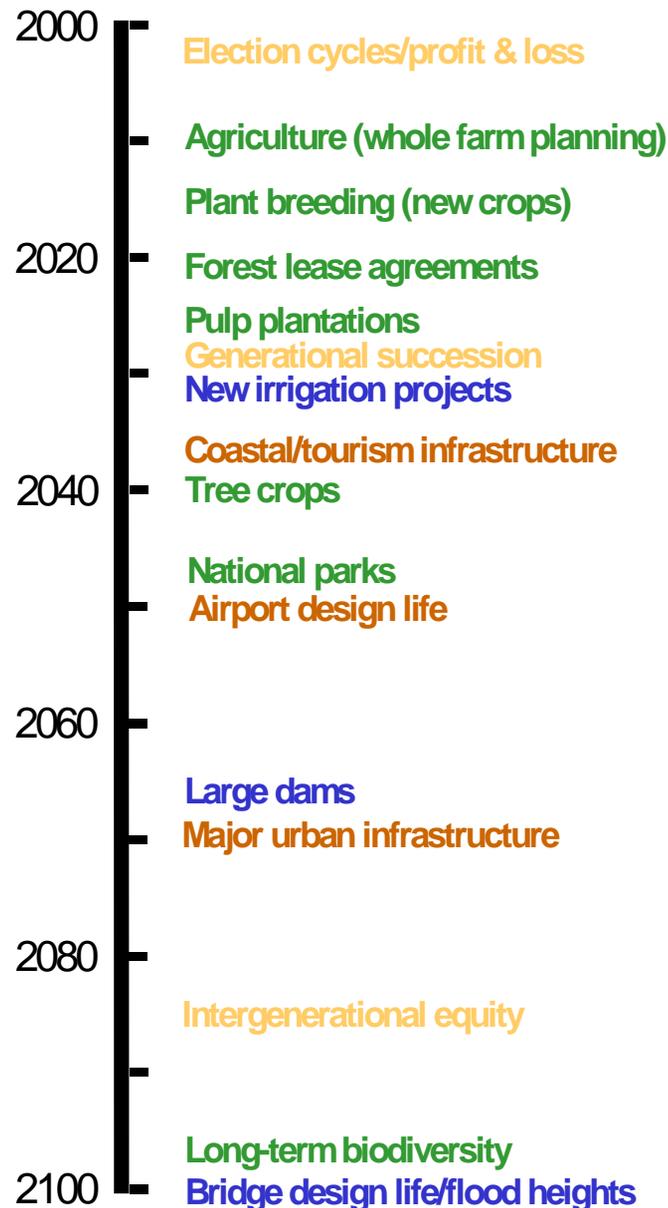


Addressing Climate Change – General Considerations



ADAPTATION starts today!

- Recognize that many developing countries are highly vulnerable to current climate variability
- Differentiate between adaptation at the local, national and regional level (recognize different time-horizons of interventions!)
- Prepare strategically for longer-term change, where necessary and possible



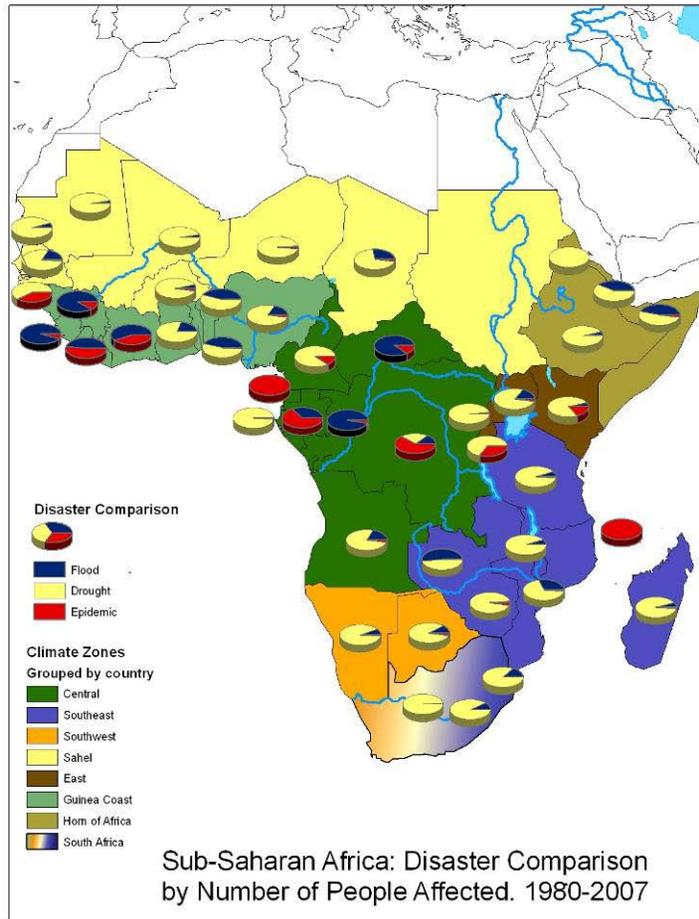
Source: World Bank

Example of different time-frames of activities

Natural disasters reveal the existing adaptation deficit

Example: Sub-Saharan Africa

Floods and droughts are the predominant natural disaster causes



Only or mainly **droughts**:

- West Africa (Sahel)

Droughts and floods:

- East Africa
- Horn of Africa
- Southern Africa
(due to strong ENSO signal)

Only or mainly **floods**:

- Central Africa

Climate related epidemics (e.g. Malaria, Rift Valley Fever):

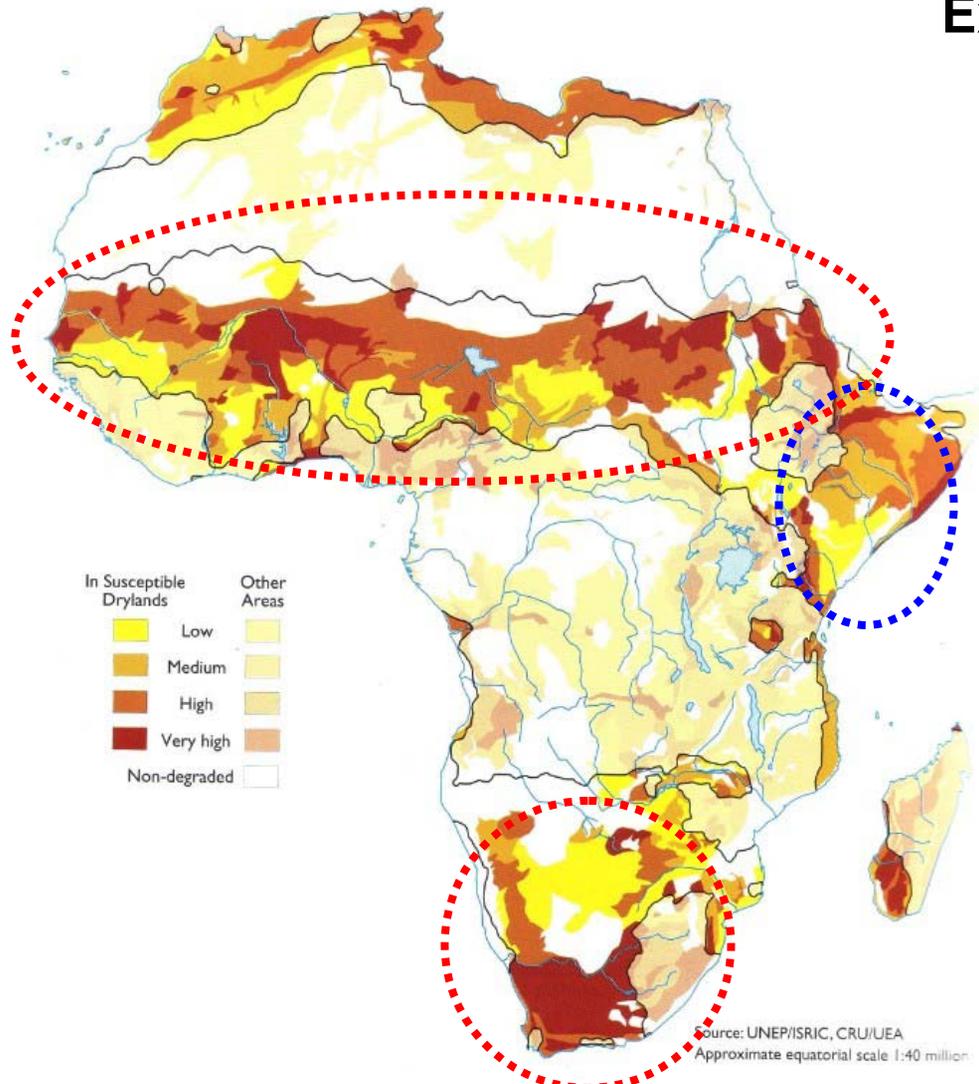
- East Africa (linked to ENSO)

CYCLONES:

Southern Africa, mainly Mozambique and Madagascar

It is not only the management of climate extremes that matters:
Environmental degradation affects land productivity and compounds vulnerabilities to current and future climate risks

Example: **Sub-Saharan Africa**



High land degradation levels and **adverse current/projected climate conditions:**

- Sahel (?)
- South Africa

High land degradation in dry areas with periodic flood risks & **intensification of rainfall events:**

- East Africa
- Horn of Africa (?)

Climate risks have to be addressed within the broader hazard and vulnerability context

Example: Peru, altiplano



Source: World Bank 2008

Multiple shocks within and across years impact on the community affecting livelihoods and productive assets:

- Floods
- Droughts
- Frost
- Hail
- Snow

Impacts compounded by:

- Weak integration of external information into local knowledge networks
- Lack of insurance mechanisms
- Lack of technological alternatives
- Erosion of social structures due to migration
- Limited understanding/access to local and regional governance structures

Some lessons for actions aimed at building resilience to climate variability and change at the community level:

On approach:

- Emphasis on managing current and near-term risks, while strategically preparing for medium to long-term implications of climate change where necessary (e.g. education, economic diversification)
- Need to manage entire spectrum of climate variability (including emerging trends)
- Need to address climate hazards in the context of other environmental & socioeconomic risks and constraints
- Strong operational linkages with (but not only):
 - Disaster Risk Management (reducing vulnerabilities to extremes, multi-hazard focus)
 - Sustainable Land Management (reducing compounding pressures on natural resources, enhancing food security)...

On use of climate information:

- Improve access to early warning systems, seasonal climate forecasts (where applicable)
- Trust-building exercise between information providers and users, e.g. need to understand local perceptions and knowledge systems
- Awareness building of spatial extent of disaster risk, relationship between environmental degradation and climate related vulnerabilities, downstream effects of local action, natural resource management options etc.

Community Level Climate Risk Management: Examples of Entry Points for Investments

- Improvement of information infrastructure, e.g. information dissemination through mobile phones, radios
- Training in sustainable land management practices, e.g. application of intercropping and soil conservation techniques
- Structural investments, e.g. water harvesting and storage structures, construction of storage facilities for seeds and forage, shelters
- Improvement of access to mechanisms which help to buffer against impact of climate hazards and facilitate recovery, e.g. credit and micro-insurance
- Provision of incentives, e.g. payment for ecosystem services, access to carbon finance (link of mitigation/adaptation through land-use)

Thank you.

Further reading:

Study:

- **World Bank 2008. Transitioning to Climate Resilient Development: Perspectives from Communities in Peru. Environment Department Paper # 115. Sperling et al.**

Papers by the Vulnerability and Adaptation Resource Group (VARG) on linkages btw. disaster risk management and adaptation to climate change:

- **Conceptual: Disaster Risk Management in a Changing Climate. Sperling and Szekely 2005.**
- **Case studies on Kenya, Vietnam, Mexico (with EC support)**

Further Information on Sustainable Land Management in Africa:

- **www.terrafrica.org**

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