Second Annual Conference on Climate Change and Development in Africa

Theme:
Advancing Knowledge, Policy and Practice in Climate Change and Development

Emerging knowledge, science and partnerships for enhancing Africa’s negotiation position

Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX)

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Outline

The Report highlights

Africa’s exposure to climate change and extremes

Key Africa-relevant messages
The Report---

Responds to the need to address the gap in information related to climate extremes.

Explores relations and interactions between disasters resulting from extreme climates and development.

Demonstrates how the exposure to extremes and vulnerability to climate change can hinder development efforts.
The Report ---

• **Provides** scientific evidence, demonstrating that extreme events which used to occur infrequently & perceived today as ‘abnormal’ will be tomorrow’s ‘normal’ weather.

• **Examines** how human responses to Extreme Events and the consequent disasters could contribute to adaptation objectives.

• **Calls for** building cooperation and partnership with development partners and agencies working on disaster risk management and climate change adaptation.
Key Findings
A changing climate is leading to changes in extreme weather and climate events.

Increasing frequency & intensity of climate extremes.
Impacts from weather and climate events depend on:

- Nature and severity of event
- Vulnerability
- Exposure
Africa is vulnerable to different types of climate extremes

- Droughts
- Floods
- Heat Stresses
- Tropical Cyclones
Risk Factors

- rapid growth of informal settlements
- weak building construction
- settlements built near rivers and blocked drainage areas

Risk Management & Adaptation

- reduce poverty
- strengthen buildings
- improve drainage and sewage
- early warning systems

Projected: *likely* increase in heavy precipitation in East Africa.
Risk Management & Adaptation
drought in the context of food security in W. Africa

Risk Factors

- more variable rain
- population growth
- ecosystem degradation
- poor health and education systems

Risk Management/Adaptation

- improved water management
- sustainable farming practice
- drought-resistant crops
- drought forecasting

Projected: low confidence in drought projections for West Africa
High levels of vulnerability, combined with more severe and frequent weather and climate extremes, may result in some African coastal cities, being increasingly difficult places in which to live and work.

Risk Factors
- shore erosion
- saltwater intrusion
- coastal populations
- tourism economies

Risk Management/Adaptation
- Early warning systems
- maintenance of drainage
- Regional risk pooling
- relocation
Risk Management & Adaptation

Key Africa-relevant messages
Even without taking CC into account, disaster risk will continue to increase in many African countries as more vulnerable people and assets are exposed to weather extremes.

For exposed and highly vulnerable communities, even non-extreme climate events can have extreme impacts.

Case Study: Zimbabwe, 2008
Trends in vulnerability and exposure are major drivers of changes in disaster risk *(high confidence)*

Understanding the multi-faceted nature of both vulnerability and exposure is a prerequisite for designing and implementing effective adaptation & DRM strategies.
Integration of *local knowledge* with external scientific and technical knowledge can improve local participation in DRR & CC adaptation *(high agreement, robust evidence)*

Community-Based adaptation can benefit management of DR & climate extremes, but is constrained by the availability of human & financial capital & of DR & climate information customized for local stakeholders.
Appropriate and timely risk communication is critical for effective adaptation & DRM

*(high confidence)*

Explicit characterization of uncertainty strengthens Risk Communication (RC). Effective RC requires exchanging, sharing, and integrating knowledge among all stakeholder groups.

Among individual stakeholders & groups, perceptions of risk are driven by psychological & cultural factors, values, and believes.
Inequalities influence local coping and adaptive capacity, & pose challenges to DRM & adaptation

(high agreement, robust evidence)

These inequalities reflect socioeconomic, demographic, and health-related differences & differences in access to livelihoods & entitlements

A woman from East Sudan
A woman carrying Barely-Souss-Morocco
Nomads in Central Sudan
Risk sharing and transfer mechanisms can increase resilience to climate extremes at all levels.

These mechanisms provide means to finance relief, recovery of livelihoods, and reconstruction.

Uptake of formal risk sharing and transfer mechanisms is unequally distributed across regions and hazards.
Attention should be given to the temporal & spatial dynamics of vulnerability & exposure

(*high agreement, medium evidence*)

Given that the design & implementation of adaptation & DRM strategies can reduce risk in the short term, but may increase vulnerability & exposure over the longer term.
Low-Regrets Measures (LRMs) for current DRM are entry points for addressing projected trends in exposure & vulnerability, *(high agreement, medium evidence).*

Many of these LRMs produce co-benefits, help address other development goals, such as improvements in human well-being & livelihoods.

• It also helps minimize the scope for maladaptation.
Closer integration of DRM & Adaptation, along with the incorporation of both into local, national, & international development policies & practices, will provide benefits at all scales

(high agreement, medium evidence)
What is next?

The findings and key messages could help donors and MDBs frame their responses to the risk of future disasters & create a momentum for investments in DRR & climate resilient development in Africa.

It could also be used to set the direction for AfDB & other organizations to invest more on the **regional cooperation** in areas related to e.g. the development of improved early-warning systems based on science and technology.

**Need to ensure** that updated knowledge and scientific information made available to all stakeholders at different levels to help the most vulnerable protect themselves and their livelihoods against the new risks.
Thanks for more information
http://www.ipcc.ch/