

**Regional expert meeting for Africa on**  
**‘Approaches to address loss and damage associated with the adverse effects of climate change, including impacts associated with extreme events as well as slow onset events, taking into consideration experience at all levels’**

**Venue: UNECA Conference Centre Addis Ababa, Ethiopia**  
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## **Session 2:**

### **Approaches for risk reduction**

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# 1. Range of approaches and tools that can be used

## *What have we learned?*

- Early warning systems (EWS) are necessary to reduce vulnerability and strengthen resilience.
- EWS must include better seasonal forecasting and improved information communication to users
- There are challenges using EWS : credibility, interpretation, packaging, accessibility, translation of the information generated and effective utilization for strategic decision-making and planning.
- Traditional mechanisms of predictions of weather patterns are also important but the challenge is how to integrate the scientific and the traditional.

## 1. Range of approaches and tools that can be used

### *What debate was there?*

- Community participation as end-users in timely manner.
- The role of the private sector.
- Clear identification of issues which are strictly social (e.g. social infrastructure such as hospitals, schools, roads, etc.), economic (e.g. farms with their corresponding losses during floods and droughts) and cross-cutting issues having social and economic characteristics e.g. destruction of cultural heritage by climatic events.

# 1. Range of approaches and tools that can be used

## *What were the conclusions?*

- The dependency of Africa on rain-fed agriculture, heightens Africa's vulnerability
- Sea-level rise may damage ecosystems and loss of biodiversity - impacts on tourism and infrastructure, loss of agricultural land, damage of ground water.
- Ecosystem loss maybe felt for a very long-time with dramatic effects, baselines are required
- Some economic, environmental and human losses which cannot be transferred and catered for solely by insurance mechanisms; governments are largely responsible for addressing these losses.
- The role of the private sector is still important
- Collaboration and involvement of all stakeholders and recognizing and using local/indigenous knowledge and skills.

## 2. Cost effectiveness of tools

### *What have we learned*

- Exposed communities already have indigenous capabilities to manage risk, there is need to better focus and provide support to the ways these communities manage the risks they face

## 2. Cost effectiveness of tools

### *What debate was there?*

- Are tools available and how effective are they, and what factors condition the different measures that are used to assess risk and the validity of using these measures for planning.
- Assessing cost effectiveness and properly quantifying 'avoided damage cost' requires a strong time element and importance of proper discounting.
- Capturing the choice of decision-makers between different options.
- the place of capacity building in relation to meteorological services to facilitate data generation and projections

## 2. Cost effectiveness of tools

### *What were the conclusions?*

- Cost effectiveness is dependent upon what kind of imminent loss/damage one is trying to mitigate.
- Significant effort must be focused on communities most at risk
- Difference amongst risk reduction tools can be established by using models that clearly calculate losses, with baselines to compare.
- The criteria for cost-benefit analysis should not be limited to the relative costs, but rather take a broad view of the range of drivers of that risk.
- Effective planning is key, and need to think clearly about climate models that are effective in factoring climate change in national development.
- Integrated planning which builds indigenous methods uses local governance and accounts for local priorities/goals for risk management is required.
- Urgent need to invest in capacity building in relation to meteorological services
- Strengthening the capacity of institutes already working on the ground
- Poverty alleviation must be seen as a cross-cutting issue in risk management.

### 3. The foundational resource requirements

#### *What have we learned?*

- The network of gauge stations in Africa is very poor – lack of physical infrastructure and personnel capacity; hence the inability to disseminate proper weather data.
- High initial costs for EWS can be addressed by pooling resources, building linkages and exploiting indigenous knowledge.
- Institutional framework requires the replication of structures at regional and district Levels.
- Social capital, e.g. indigenous knowledge, can play supplementary role in addressing climate change challenges.
- Over reliance on external financing, and lack of clear priorities leads to misdirection of external financing



### 3. The foundational resource requirements

#### *What were the conclusions?*

- Resources, whether human or financial are important for implementing agreed policies and strategies.
- Resources are needed both at institutional level and community level.
- Mainstreaming climate change into district level development plans
- Co-financing is important, and may reduce current frustration
- There should be prioritization of financing approaches.
- Different sources of resources should be explored other than the traditional donor funds
- Separation of funding for climate change from budgetary support from donors.
- Effort must be put to link local indigenous observation with the scientific stages of EWS development.

## 4. Lessons learned from existing efforts.

### *What have we learned?*

- case studies addressing early warning systems and risk reduction strategy
- In Mozambique, national disaster management institute was replicated as the Regional, Divisional and Local Levels.
  - The local Government system is very functional, and communication is key in the demystification and interpretation of forecasts.
- An effective community based early warning system has the potential of enhancing the resilience of the community
- Effective planning is a key.

## 4. Lessons learned from existing efforts.

### *What debate was there?*

- The reliability of the worthiness of these projects in reducing loss and mitigating damage.
- Can innovative (architectural) designs be effectively scaled down to household levels, using local materials?

## 4. Lessons learned from existing efforts.

### *What were the conclusions?*

- EWS combined with early action is important to safeguard reliability of EWS.
- On managing hazards - the availability of historical and real-time hydrometeorological data is important. This requires systematic and consistent observations of environmental parameters...
- Important lesson from Mozambique's experience on institutionalizing flood risk management, and the need to address risk reduction at all levels and capacity building at all levels.
- Documentation and literature required
- Need for community participation in the design and implementation.
- Attitude change, with bottom up approaches in the policy making processes.
- Cooperation amongst agencies
- Capacity for implementation and proper coordination are important issues.

