Climate Observations

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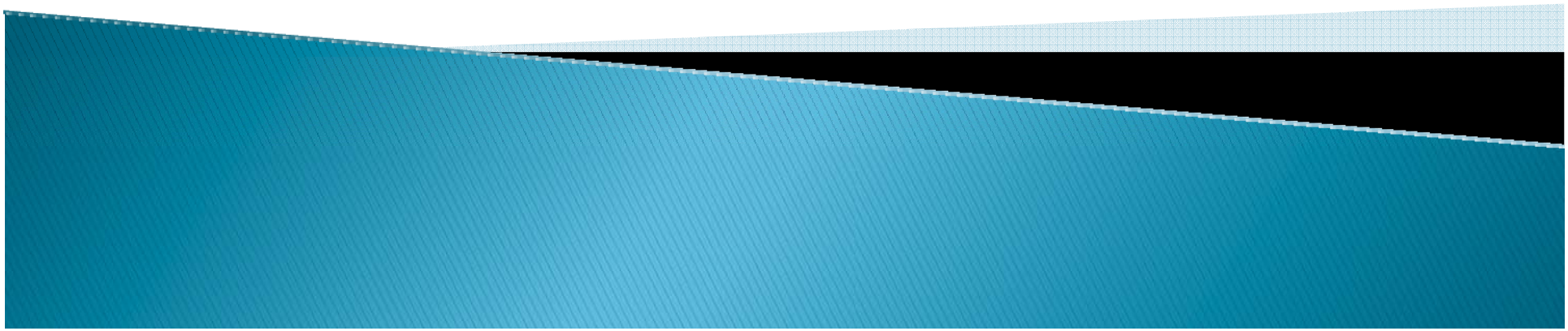
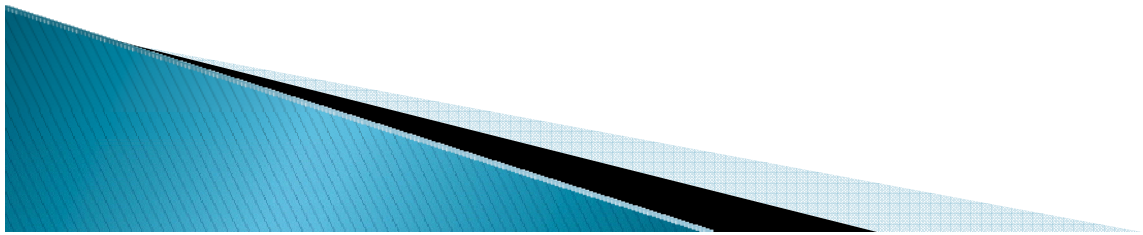


Outline

- Importance of Climate Observations
- COP Guidance
- Need for Monitoring and Action
- LDCF and SCCF Supported Climate Observations
- Summary

Importance

- LDCF and SCCF support concrete adaptation actions
  - Reduce Vulnerability
  - Increase Adaptive Capacity
  - Transfer of Adaptation Technology
- Sound climate observation information
  - For design and planning of effective adaptation actions
  - To be informed of future risks
  - Ensure resilience and sustainability



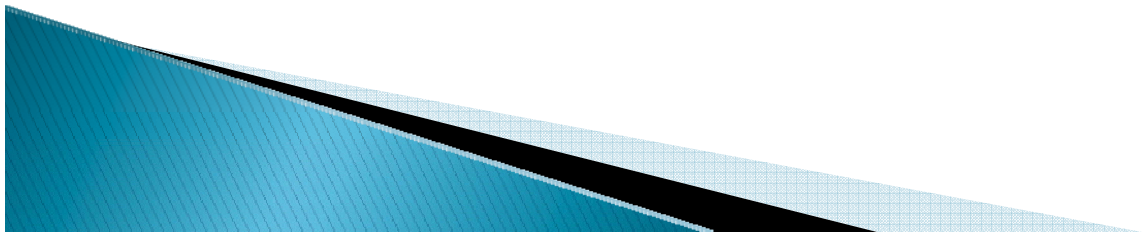
COP Mandate

- Consistent with Decision 5/CP.7, (paragraph 7, iv,)
- The LDCF and SCCF help strengthen existing and, where needed, establishing national and regional systematic observation and monitoring networks (Sea-level rise, climate and hydrological monitoring stations, fire hazards, land degradation, floods, cyclones and droughts).

Observation for Adaptation

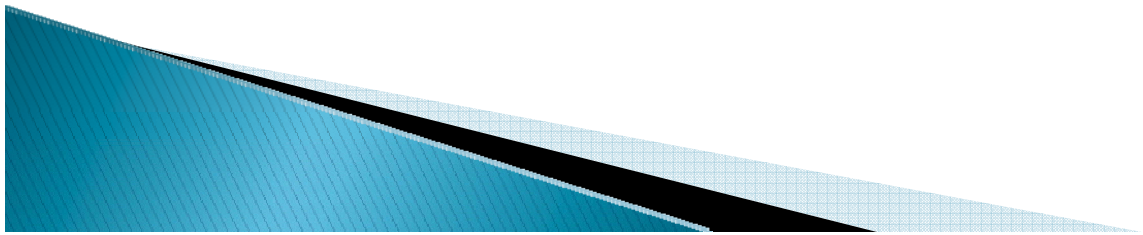
- LDCF
  - To address the urgent and immediate adaptation needs of the 48 LDCs.
- SCCF
  - To support both long-term and short-term adaptation activities in all vulnerable developing countries

- LDCF and SCCF support climate observation initiatives that help vulnerable communities cope with present and future climate change risks.



Climate observation for Early Warning Systems

- EWS disseminate timely forecasts prior to extreme weather events, and strengthen community emergency preparedness
- Effective EWS
  - Builds on historical climatological, hydrological, bio-geophysical, and socioeconomic information.
  - Includes uncertainties
  - Able to forecast/predict weather conditions
- In most LDCs and some developing countries, this data is hard to find or non-existent.



EWS and LDCF/SCCF projects

- Over 30% of LDCF/SCCF projects have an EWS-related component

- USD 116 million contributed towards projects with EWS components

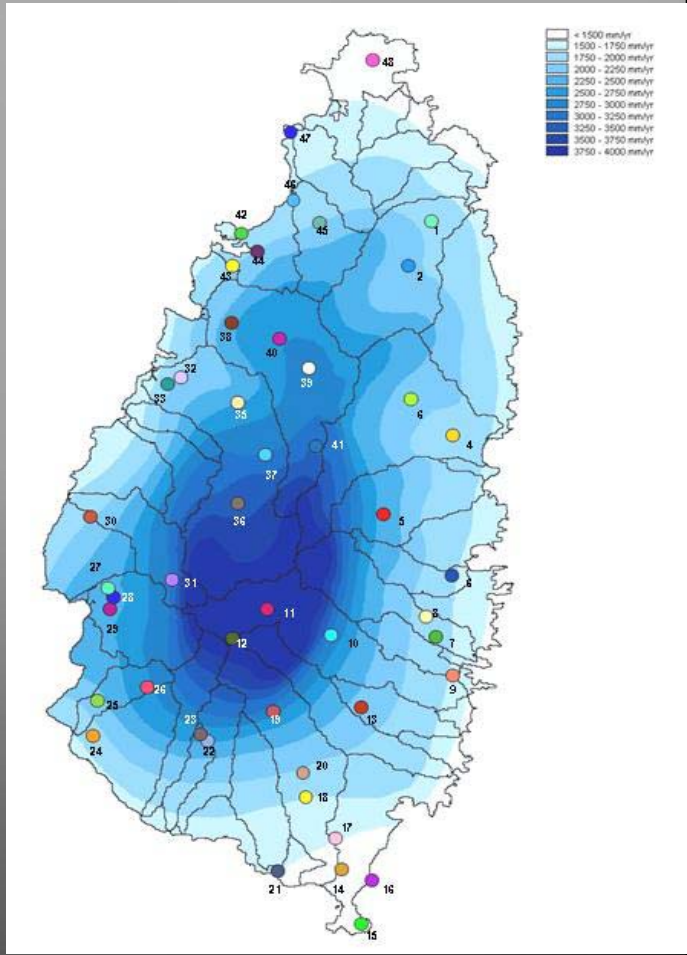
- Few Examples:

a) GLOF preparedness – LDCF- UNDP project: "Reducing Climate Change-induced Risks and Vulnerabilities from Glacial Lake Outbursts in the Punakha-Wangdi and Chamkhar Valleys"- Bhutan
b) Disaster risk reduction – LDCF – World Bank project: "Sao Tome and Principe Adaptation to Climate Change" – Sao Tome and Principe.
c) Identification of climate-resilient crops – SCCF- UNDP: "Coping with Drought and Climate Change"- Mozambique
d) Rehabilitation, protection and management of watersheds – SCCF – World Bank"Adaptation of Nicaragua's Water Supplies to Climate Change" – Nicaragua

Climate Observation for Water management:

Implementation of Pilot adaptation measures in coastal areas of Dominica, St. Lucia and St. Vincent & the Grenadines

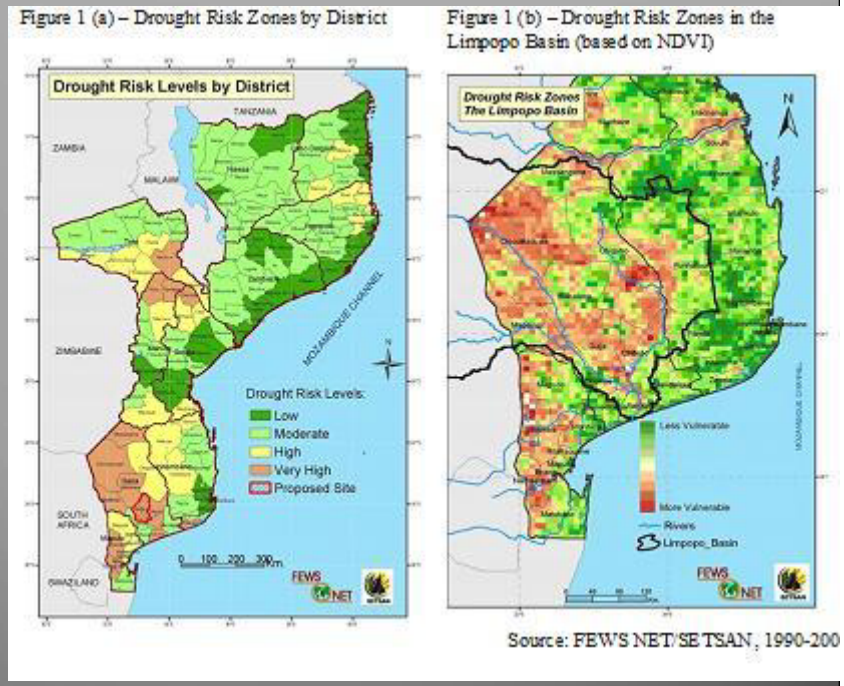
- CC Challenge: Water Stress
  - Rainfall patterns are changing
  - More frequent droughts and heavy rains
- Spatially disaggregated rainfall pattern
  - Precipitation monitoring in St. Lucia
- Information integrated into Climate Change Policy and Adaptation Plan of the country
- Location specific water management program
  - Rain harvesting
  - Drought resistant crops



Precipitation level is much higher in the center of the island

Climate Observation for Drought Management:
"Coping with Drought and CC" (Mozambique) Implemented by UNDP

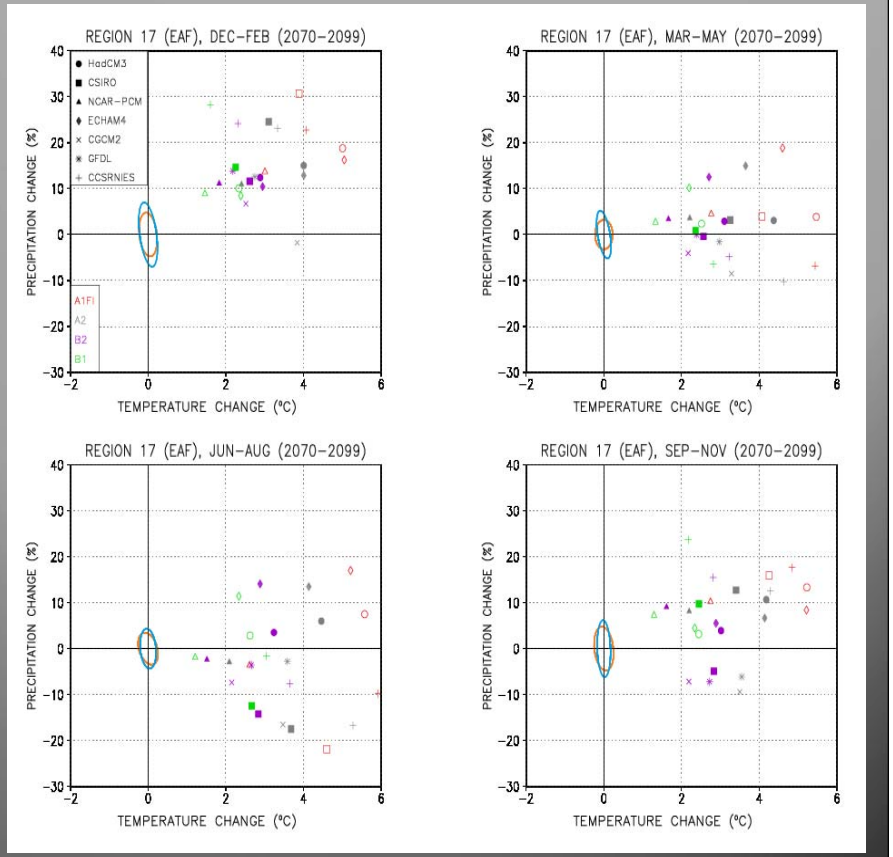
- **CC Challenge:** Increased drought and its effect on local farmers and pastoralists
- Collaborations with local communities, the National Institute of Meteorology (INAM), and the Southern Africa Development Community (SADC) Drought Monitoring Centre
- Develop an EWS to disseminate info to farmers/pastoralists in a timely fashion.
- Supplies seasonal forecast information to farming communities and integrate feedback from local communities in improvement of such information systems.
- Weather and climate information is ultimately used to identify suitable drought-resilient crops, like sweet potato, cassava or sorghum and in determination of areas where livelihood diversification would aid in climate change adaptation.



Use of Climate Observation Data in Identification of Drought Prone Areas

Climate Observation for Strategy Development and Planning: "Adaptation to Climate Change in Arid Lands (KACCAL) Project" (Kenya) Implemented by World Bank/UNDP

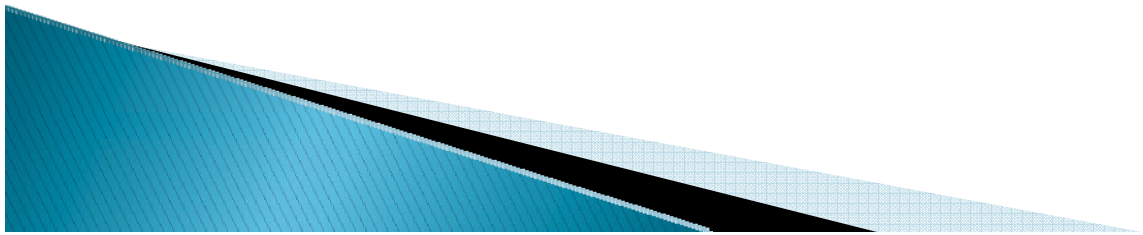
- Monitoring climate and weather variables
  - To improve availability of climate risk information at national and regional level
- Set of climate scenarios and projections developed and adjusted to regional and provincial levels
- Increased likelihood of extreme dry and wet conditions.
  - additional strain on human health, food security, water resources and the rural livelihoods.
- SCCF resources to help
  - integrate a longer-term perspective in planning and interventions at the local level
  - Improve the information chain between scientific climate related knowledge to strategic adaptive response to climate change risk at local level.



Seasonal projected changes in temperature and precipitation for Eastern Africa compared to 1961-1990 climatic conditions

Summary

- Importance of sound hydrometeorological information realized and reflected in LDCF/SCCF efforts
- LDCF/SCCF has integrated climate observation information in projects to deliver effective and sustainable benefits to communities
- LDCF/SCCF is putting more efforts into collection of climate information, and in effective prediction of weather and climate information relevant to the needs of developing countries.



Thank You!

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SCCF: http://www.thegef.org/gef/sccf