

The Global Climate Observing System and Sustainable Development—An Action Plan for Africa



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GCOS Regional Workshop Programme

"....to identify the priority capacity-building needs related to participation in systematic observation...."

- Goals of the Regional Workshop Programme
 - National reporting on systematic observation to UN Framework Convention on Climate Change
 - Identify regional and national needs and priorities for climate data, e.g., GCOS Baseline Networks
 - Develop Regional Action Plans for improving observing systems
 - Address resource mobilization issues
- Africa Regional Workshops
 - Eastern and Southern Africa: Nairobi 2002
 - Western and Central Africa: Niamey 2003
 - Mediterranean Basin: Marrakech 2005
 - Regional Action Plans



GCOS Africa Regional Action Plans Actions Addressed

- Observation Improvements
 - Surface Temperature/Rainfall, Upper Air, Ocean Measurements, Sea Level Rise
 - Greenhouse Gases, Carbon Sources/Sinks, River/Lake/Glacier Monitoring
- Information Availability
 - Data Rescue
 - Telecommunications
- Climate Applications
 - Health Sector
 - Agriculture
 - Water Resources Management
 - Disaster Prevention & Mitigation



GCOS Addis Ababa Workshop Genesis

- Africa Regional Action Plans
- G8 Gleneagles Summit Plan of Action Statement

G8 countries intend to support efforts to help developing countries and regions obtain full benefit from GEOSS, including GCOS...includes placement of observational systems to fill data gaps, developing regional capacity for analyzing and interpreting observational data, development of tools relevant to local needs

UK DFID Letter to Development Ministers



GCOS Africa Workshop "Climate Information for Development Needs: An Action Plan for Africa"

Broad Objectives:

- To seek common ground between the needs of users and providers of climate information, the development community, and national governments to justify financial investment in an integrated programme of climate risk management in Africa
- Agree to a way forward in addressing the issues raised by the GCOS Regional Action Plans and related studies, acceptable to all principal stakeholders
- When/Where: 18-21 April 2006 Addis Ababa, Ethiopia
- Host: UN Economic Commission for Africa



Outcome of the Workshop

- Enthusiastic support by key African institutions (AU, UNECA, Regional Economic Communities) for a programme to incorporate climate considerations into development decisions
- Recognition by all stakeholders that provision of climate data, information, and services is important to achieving the Millennium Development Goals (MDGs)
- Agreement to develop and implement an integrated climate risk management programme, from improving fundamental climate observations (as described in RAP projects) to offering sectorspecific climate services in support of the MDGs
- Launching of an important effort to raise awareness among African decisionmakers of the significance of climate to development
- Initial support by DFID, with potential future support by other G8 development partners, the EC, and the AfDB

Climate for Development in Africa Programme (ClimDev Africa)

- Purpose: To mainstream climate information into decision-making for African development
- A three-phase programme
 - Demonstration and planning: development of best CRM practices, pilot work that could be scaled up (3 years)
 - Scaling up toward sustainable development requirements (3-5 years)
 - Large scale implementation to meet MDGs and adaptation to climate change requirements (3-5 years)



Four Result Areas

- Policy: Awareness raising among politicians, central planners, and the public
- Climate Risk Management: incorporated in sectoral management, strategic MDG development planning, pro-poor strategies, etc.
- Climate Support Services: Developed to meet the priority needs of MDG decision-makers
- Observations, data management, and infrastructure: networks and infrastructure upgraded to provide essential data for above



Millennium Development Goals and Climate Some Examples

Poverty and Hunger

Disease

Environmental Sustainability

- Anticipation of rainfall/drought for agriculture planning
- Use of historical record to suggest optimal crop
- Preparation for malaria and other vectorborn disease outbreaks
- Effective reservoir management
- Managing conflicts between water uses



Stakeholders

- Providers of climate information--NMHSs
- Users of climate information
- The development community
- Intergovernmental institutions, regional, national, and local governments



Flood Management in Mozambique

- Historical met and oceanic data that would enable seasonal forecasts in the Southwest Indian Ocean are lacking
- Flood early warning depends on good climate & hydrologic data & would benefit considerably from a more representative & extensive network of stations



Food Security in Ethiopia

- Drought Early Warning System uses climate information in forecasting & monitoring
- Met Service limitations: not enough stations collecting local data & those working are not adequately representative of microclimates
- Quality of data also a problem & more skilled staff needed to collect & analyze data
- Use of rescued data helped to confirm link between El Nino and reduced rainfall
- Data required for new insurance contracts



Malaria Preparedness in Southern Africa

- Rainfall, temperature, humidity all influence malaria transmission
- Seasonal forecasting important—links to sea surface temperatures
- Malaria Early Warning System (MEWS) needs satellite data and ground-based measurements from met services. In Botswana, reliable & timely data...but in other countries amount of data limited



Agriculture in Mali

- Direct Interaction between Met Services and farmers
- Substantial increases in crop production where agrometeorological information used in farmlevel decision making
- 10-data bulletins incorporate both 3-month seasonal forecasts and data supplied by farmers themselves
- Enables farm-level adaptation to CV & thus C[^]

GCOS and Adaptation

- Better knowledge base → better forecasting & climate services → enhanced ability to adapt
- Importance of regional, national data as well as global data—denser networks are required for adaptation needs than for global CC needs → need to improve observations at all levels
- Importance of recovering historical data
- Importance of building support among the user communities, demand for climate information
- Importance of promoting greater collaboration between the providers and users of climate information