





# Africa Climate Research for Development (CR4D)

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## The aim is to ...

- Provide a brief overview of the African Climate Research for Development initiative – features and proposed governance structure.
- Discuss the value of bringing climate related knowledge close to users' hands for Africa's sustainable development.







### Context: Need for improved climate science knowledge and predicting capability





# Africa's narrative is changing: Transformation through managing climate risks and opportunities is urgent



#### Forecast lead-time







### The African Climate Conference – ACC2013

Advancing climate research priorities to address users needs





### **Africa Climate Research Priorities**

### African Climate Science Frontiers: Addressing Priority Research Gaps to Inform Adaptation Decision-Making in Africa

### **Need for user-lead Research Frontiers**

In alignment with the critical information needs of African end-users, policy-developers and vulnerable communities, to adapt to a changing climate and manage risks in the 21st Century:

- -To support intra-seasonal risk monitoring and management to inform withinseason operations (5 to 40 days range)
- -To support strategic ahead-of-season planning (1-month to 12-months outlook)
- -To support longer-term strategic planning/policy development (next 1-10 years)

-To support Climate change adaptation policy development/planning (next 50+ years)

- -Assessing the current vulnerability due to recent climate events
- -Estimation of the impacts of climate variability and change
- -Decision making at local scales
- -Building credibility and confidence in predictions, across timescales
- -Mainstreaming climate services into policy formulation and decision making









### **Outcome of ACC 2013**

### Conference Statement

### outlining:

### - Ambitious, Coordinated Agenda for African Climate Research to serve Development

 Recommendations urging African institutions to establish sustainable Coordination platform on Climate Research for Development in Africa (under leadership of Clim-Dev Africa, WCRP, GFCS) > adopted during CCDA-3 conference

#### AFRICA CLIMATE CONFERENCE 2013 15-18 OctoBer 2013

#### ACC2013 CONFERENCE STATEMENT

#### PREAMBLE

The Africa Climate Conference 2013 (ACC2013) was organized by the World Climate Research Programme (WCRP), the Africa Climate Policy Centre (ACPC), and the University of Dar es Salaam with support from an international Scientific Steering Committee Representing a number of climate-focused institutions. It was held from 15-18 October 2013 at the Arusha International Conference Centre in Arusha, Tanzania. The Conference brought together over 300 stakeholders from Africa and around the world. It discussed the state of knowledge on the African climate system; identified current gaps in climate knowledge; identified priority areas and outlined an agenda to advance the frontiers of African climate research that will inform development and adaptation decisions; drafted a road map for mainstreaming climate information into decision making; and identified key African institutions to nurture research ideas and further develop them into pan-African research program proposals that enhance climate services. The ACC2013 brought together diverse experts in climate science research, applications, and policy to provide suggestions on translating climate information and knowledge to areas such as agriculture and food production, water resources management, risk management, health, and adaptation planning. The Conference participants, who included scientists, representatives of national, regional, and international organizations, development partners, and users of climate information, have agreed on the following:

#### IMPORTANCE OF THE PROBLEM

- Acknowledging that climate data, science, information, and knowledge are critical in all facets of development in Africa under a changing climate;
- Acknowledging the importance of a multi-sectoral research agenda that facilitates the efforts of national meteorological agencies to create enhanced national climate services for national development partners;
- Concerned that Africa is highly vulnerable to natural variations in climate and human-induced climate change and to associated extremes like heat waves, droughts, and floods;
- Noting the importance of addressing climate variability and climate change to the achievement of Africa's development and poverty reduction objectives;
- Noting that impacts of climate change include those on agriculture and food security, water resource management, sanitation and public health, energy, natural resource management, environmental conservation, ecosystem functions, tourism, transport, financial services, infrastructure, etc;

Partners Network

### **Africa Climate Research For Development Agenda**



### **Africa Climate Research Priorities**

Co-designed end-to-end multi-disciplinary climate research Improved Observation System and Delivery Scientific and Institutional Capacity Development Mainstreaming Climate Services and Integrated Research

Subseasonal to Seasonal Prediction Project for Africa (S2S) R. Graham (UK Met Office), A. Robertson (IRI), O. Ndiaye (ANACIM)

**Integrated Climate Science, Applications and Policy Research: HyVIC Project** F. Semazzi, R. Cornforth, H. Houghton-Carr, C. Bain, R. Anyah, R. Roberts, L. Xie, L. Ogallo, P. Waniha, A. Githeko, F. Mutua

Towards Robust Climate change projections over Africa: integrated CORDEX user-driven analysis

B. Hewitson, M. Shongwe

**Extremes Attribution & Prediction in Africa / Multidisciplinary Validation of Forecast Skill** ACMAD, ETCCDI, WMO DARE



### ClimDev-Africa Programme

### ClimDev-Africa:

 Position Africa at the frontier of climate science knowledge to allow vulnerable communities, governments and the private sector to translate advances in climate-related knowledge into effective policies, practices and planning processes for a climate resilient and sustainable development future

### Areas of intervention:

- 1. Provision of widely available climate information, packaging and dissemination;
- 2. Quality analysis for decision support and management practice;
- 3. Informed decision-making, awareness and advocacy







- Joint initiative of the WMO and AUC and is a body endorsed by the African Heads of States
- A high-level policy mechanism for the development of meteorology and its applications in Africa
- The **intergovernmental authority** on meteorology
- Vision: to have a framework of cooperation to support sustainable development through the sound governance of the science of meteorology
- Mission: to provide political leadership, policy direction and guidance in the provision of weather and climate services that meet societal needs



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### **Integrated African Strategy on Meteorology**

Weather and Climate Services



Increase

Political Support and Recognition of NHMSs and RCCs

Enhance the Production and **Delivery** of W&CS for Sustainable Development

Improve Access to in particular for Marine & Aviation Sectors

Support the Provision of **MET Services** W&CS for Charte Change Adaptation and Mitigaton

Strenghten **Partnerships** with Relevant Institutions & Funding Mechanisms



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# **Strategic Pillar 4**



### Areas of action

- Advocate for at least 5% of budgets allocated to NMSs and associated institutions be used for research and development
- Support legislation designating NMSs as leading authority on climate change science-based projections



# **Strategic Pillar 4**



### Areas of action (continued)

- Galvanize greater engagement between the climate and development communities
- Ensure a structured implementation of GFCS in Africa, and facilitate links between national and global GFCS implementation activities
- Liaise with relevant institutions and support the articulation of a common African position on climate change in international fora



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- AMCOMET has pan-African mandate to promote cooperation at all levels and advocate for informed decision making based on robust science in matters related to weather and climate
- Platform to help increase visibility and ensure a better coordination and coherence on programmes, in particular the structured implementation of GFCS in Africa, including the research dimension
- AMCOMET and its Integrated African Strategy should be leveraged to promote institutional partnerships and outcome-based programmes

### Clim-Dev Programme, AMCOMET and WMO Joint Oversight of the CR4D Agenda



**Climate Research for Development (CR4D) Agenda** 

### Ways forward

- There is a substantial need to bring cohesion from the fragmented Africa community and avoid duplication of effort for international investment to effectively engage in Africa-led science facilitate the emergence of a single voice to development agencies;
- Identify research priorities and strategies for answering future and present concerns
- Enhance and support coordinated engagement in Africa and encourage applied/operational and research collaboration ;
- Establishment of a user-demand driven approach for climate research to bridge the gap between climate information and the decision making;
- Prioritize the emergence of African science leadership in climate research, uptake and impact;
- Build a high-level dialogue between \*science-active\* African-research individuals and groups to build strategic cohesion;
- Build strategic partnerships with the international community;
- Build the demand for and capacity to use climate information and services (CIS) in decision making across Africa;

### There are enormous challenges ahead But together we can make it!



Please attend the CR4D side event for more details