



# **Investing in the production and uptake of climate information services and the role of climate research in development policy and planning**

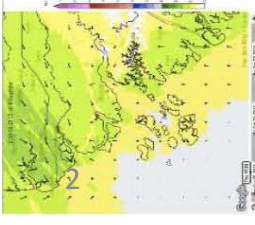
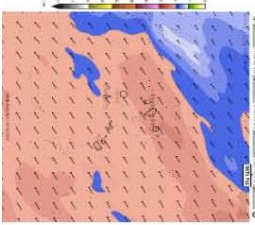
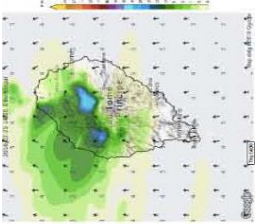
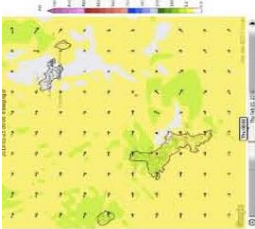
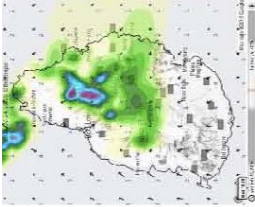
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*ACPC-UNECA*

*17 September 2021*



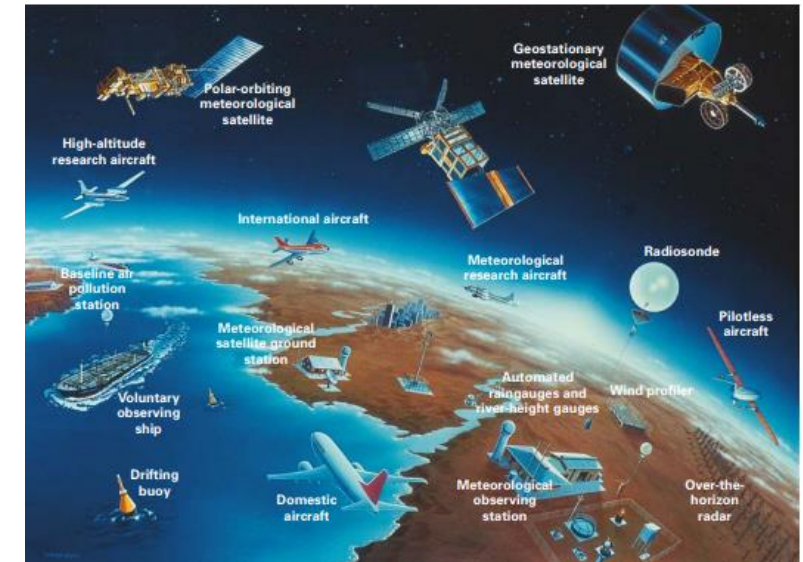
*Part I*  
*Investing in Climate  
Information Services (CIS)*





## Climate information services

- are tools and processes that enable decision-makers and user communities to assess, and prevent or prepare for, potential impactful weather or climate events.
- produced at national, regional and international levels.



Observing system

Climate  
Data



Climate  
Information



Climate  
information  
Services



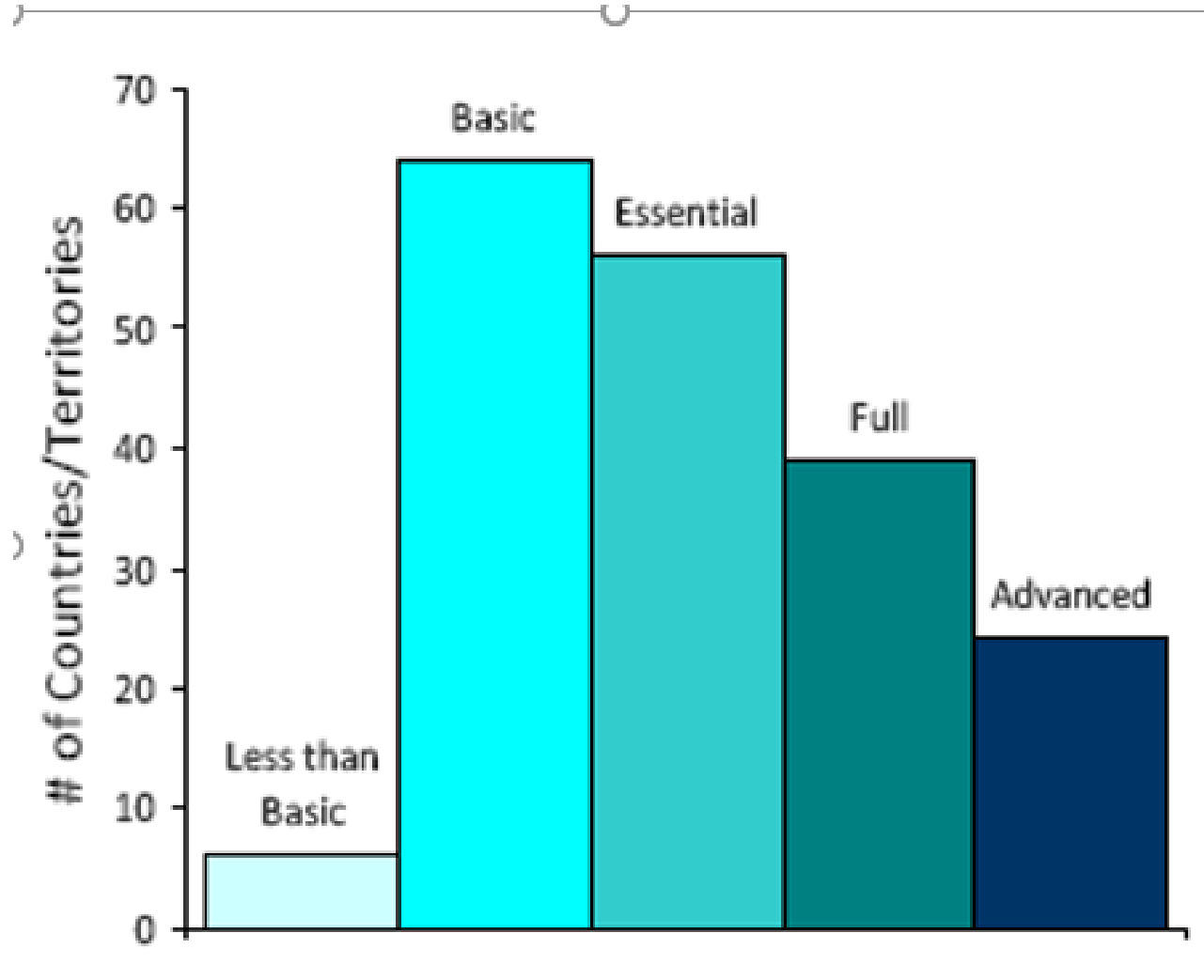
## Major actors involved in CIS in Africa

- **The NMHSs** are mandated to provide climate data, seasonal forecasts and weather forecasts among others.
- **The Regional Climate Centers (RCC)** mostly manage regional climate database and other functions depending on the needs of the region.
- **Academic and research institutions** usually transform climate data into useful information for planning and decision-making.
- **The Media** constitute the main institution for CIS dissemination. Print, electronic (Radio, TV) and social media are used for CIS in Africa.





## Climate information Products



- **Climate information is collected, assessed and assembled into products that are disseminated to users and services.**
- **can be basic, intermediate and advanced based on complexity of the information but play similar role in decision making**



## State of climate services in Africa

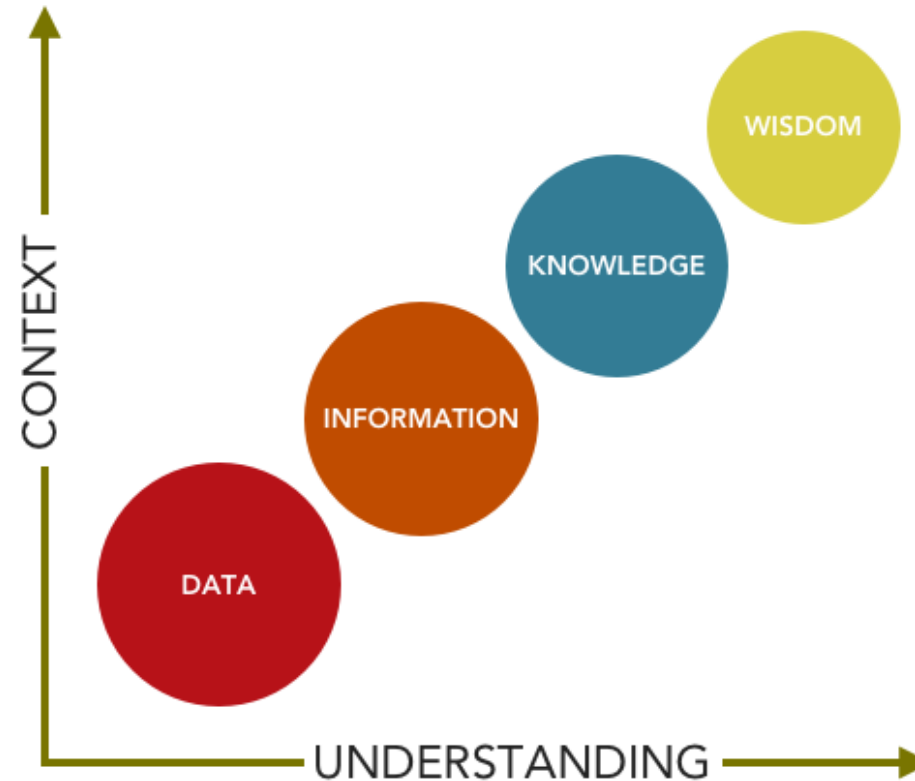
*(compared to global average)*

- Basic systems (observing network, forecasting, data and data sharing)**
- + Governance**
- User interface**
- ++ Capacity development**
- + Provision and application of CIS**
- Monitoring and evaluation**





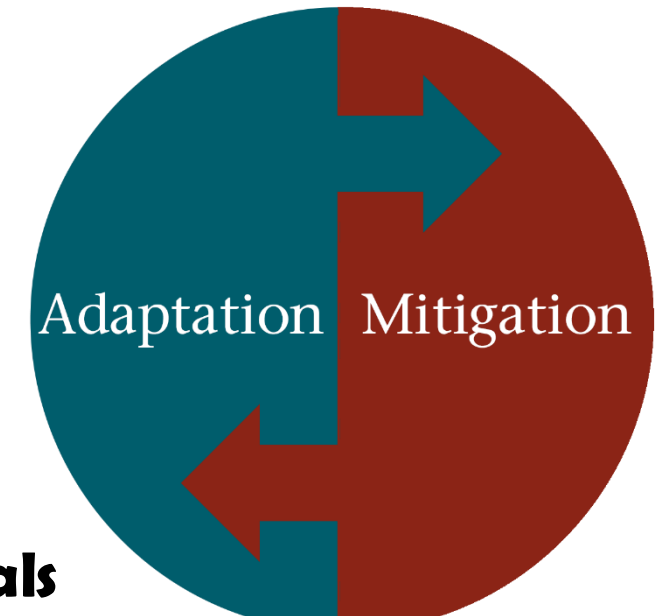
**investing in Hydro-  
Meteorological  
infrastructure and  
institution to build  
resilience in economy,  
ecosystem and society  
as the cost-benefit ratio  
ranges from 1:2 to 1:10**





## Investing in (CIS) could help Africa in:

- ✓ **facilitating climate-smart decision**
- ✓ **guiding adaptation and mitigation planning**
- ✓ **supporting scenario planning**
- ✓ **identifying hotspot or areas with high potentials of future vulnerability**
- ✓ **guiding long-lived, large scale investment**
- ✓ **informing interventions in NDC,...**







*Opportunities for better CIS  
generation, uptake and Use in  
development planning in Africa*



## Existing Enabling Environment

- **Policy/Data sharing protocols** which enable NMHSs to share data among students, universities, research institutions and inter-Governmental Agencies.
- **Institutional capacity** (e.g. Data Archives and Data Sources) that give enabling environment for Private Sector CIS to operate.
- **high demand for CIS** which creates a market for CIS in Africa (e.g. aviation industry, farmers, disaster relief agencies, water management, event organisers, etc.)
- **Lack of legal and regulatory restrictions** on the operations of the Private Sector.



## *Part II*

# *Climate Research in support of Development Planning*



## Africa is:

- **a home to 1.1% of the world's scientific researchers** (*The World Bank, 2010*).
- **contributed to <1% of the world's research output** (*Scopus database*).
- **spent only 0.4-0.72% of global expenditure in research and development (R&D)** (*The World Bank, 2010*).
- **accounted for only 0.1% of global patents.**



**This figure is very low for climate research**



## Climate Research for Development (CR4D)

- **Strengthens the links between climate science research and climate information needs in support development planning in Africa**
- **an outcome of the African Climate Conference 2013 (ACC-2013), which was held in Arusha, Tanzania**



*Arusha, Tanzania*



## CR4D...

- **Officially launched in 2015 during the third AMCOMET meeting in Cape Verde**
- **later endorsed by participants of CCDA-III in Addis Ababa, Ethiopia.**
- **an African-led initiative supported by partnership between ACPC-UNECA, AMCOMET, WMO, WCRP and GFCS**





*Major Achievements of Climate  
Research for Development in  
Africa (CR4D) initiative*





## CR4D Key Achievements

### 1. Functional structure established and operationalized

- **CR4D governance bodies**
  - **Oversight Board (OB)**
  - **Scientific Advisory Committee (SAC)**
  - **Institutional Collaboration Platform (ICP);**
- **Independent Research Review Panel**





## CR4D Key Achievements...

### 2. Research study and Capacity

- **a comprehensive study on institutions, initiatives and experts in Africa in the past 10 years conducted;**
- **sub-seasonal to seasonal (S2S) pilot projects conducted in West and Central Africa;**
- **21 cross-cutting climate research projects conducted by the CR4D postdoc research fellows;**



## CR4D Key Achievements...

### 3. long-term interventions

- **development of the 5-years CR4D strategy plan (2019-2023);**  
*4 structural goals*  
*3 knowledge frontiers*  
*11 research thematic areas*
- **the CR4D research grant management mechanism framework established, etc.**





## CR4D Research Grant

- **aims at establishing an African-led, small but potentially scalable research grant management facility in African institution.**
  - **A comprehensive project document on WISER funded CR4D research definition, oversight and uptake developed,**
  - **2,847,000€ from DFID secured,**
  - **Partnered with the African Academy of Science (AAS) to manage the grant**





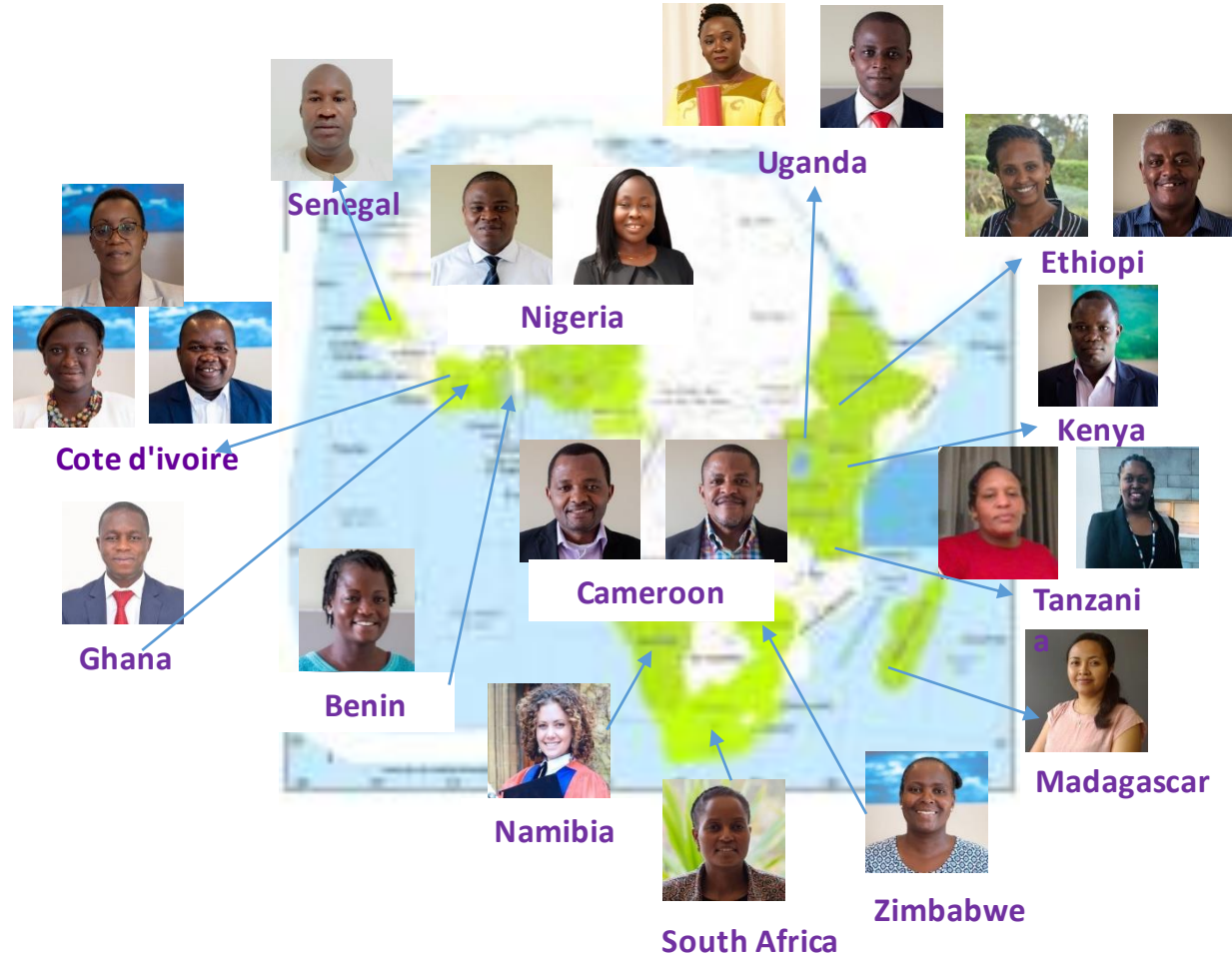
## **The first cohort of the research grant...**

- **amount of fund per research grant is in the range of 100k to 130k USD,**
- **project span time will be one year,**
- **180 proposals received from 24 African countries and reviewed by 5 independent reviewers,**
- **30 applicants invited face-to-face interview (Gender, geographic distribution, thematic areas, originality, capacity building...),**
- **21 research projects from eleven countries selected.**

***The WISER-funded CR4D research grant was officially launched on 3rd of June 2019 in Nairobi, Kenya.***



## The first cohort of the research grantees from 14 African countries



**Southern = 4**  
**Central= 2**  
**Eastern = 7**  
**Western = 8**



## CR4D Research Projects by KF



*Foundational Climate Science = 4 projects*



*Impact, Information and translation = 14 projects*

- *Climate change on agriculture (4)*
- *Climate change on gender (2)*
- *Climate change on forestry/ecosystem (2)*
- *Climate change on health (2)*
- *climate change on informal settlement/infrastructure/resilience/flooding (4)*



*Policy, development and decision communities = 3 projects*





## Data on Female applicants

- **Total applicants = 180**

*38 Female vs 142 Male = 21.1%*

- **Selected for face-to-face interview = 30**

*13 Female vs 17 Male = 43.3%*

- **Selected for grant = 21**

*12 Female vs 9 Male = 57.1%*

- **Success rate**

$$\frac{\text{Granted Female}}{\text{Total applied Female}} = 31.6\% \text{ vs } 6.4\% \text{ for male}$$





## Major outputs of the CR4D research after 18 months of implementation:



- **87 publications in form of journal articles, blogs, policy briefs, book chapters, and others**



- **235 media mentions from January 2019 to August 2021**



- **about 50% of the fellows reported promotions and career growth in one form or another while 67% were engaged in other research activities**



- **fellows supervised and mentored about 69 master students, 25 PhD candidates, and 3 Postdoc fellows**



## Conclusion

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### **Investment in weather and climate services in Africa should...**

- Go for digital**
- Engaged private sector**
- Take climate research at its center**
- Be reliable, affordable and accessible**
- Meet standards set by international agencies;**
- Move away from being donor-driven programmes**

**We ensure better uptake and use of CIS in Africa and build resilient economy, society and ecosystem**



**Obrigada!**  
**Thank you!**  
**Merci!**



## What is next for CR4D?

- **Endorsement of the 5-year Implementation Plan where more than 50 major projects identified under 11 research thematic area**
- **Mobilization of funds using its partner institutions by organizing donor round meeting**
- **Forming research working groups devoted to each sub-regions and continuing to build capacity of institutions,**
- **Contributes to strengthen the links between climate science research and climate information needs in support development planning in Africa**