

# **Weather Information and Climate Services in the SADC Region**

**By**

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# Introduction

## Need for Adaptation:

- Climate change threatens to derail gains;
- Call for scale-up and accelerate support for climate change adaptation;
- Climate change adaptation initiatives show good potential for economic viability;
- Long-term sustainability will depend on the prevailing levels of poverty, the wider context of policies and regulations; and
- New generations of climate change adaptation initiatives need to enhance adaptive capacity

# Introduction Continued

## Mitigation:

- Prevent further climate changes through implementation of mitigation measures;
- remove greater amounts of carbon dioxide from the atmosphere;
- adoption of more efficient uses of fossil fuels; and
- adaptation is the main priority when it comes to addressing resilience to impacts of climate change.

# Climate Services in SADC

- In the 1980s African countries especially E&S experienced severe desertification and drought;
- Major Conventions (UNFCCC(1992)) and (UNCCD (1996)) were adopted;
- These emphasized the role of climate on drought in the desertification process; and
- Placed greater emphasis on drought preparedness and mitigation Vs reactive measures.

# Climate Services in Africa-(CLIPS)

- Establishment and strengthening of EWSs, preparedness and management which took into consideration of seasonal to inter-annual climate predictions;
- In 1995 WMO established the Climate Information and Prediction Services (CLIPS) project which adopted new science and technology during the development of climate information;
- CLIPS was an interface between the development of climate information & products and their applications; and
- It built capacity of NMHSs through regional institutions

# Regional Climate Centres

## Drought Monitoring Centres (NRB & HRR)

- Studies had shown that **extremes** in climate variation **oftentimes** affected many countries; and
- **Regional rather than single-country** level yielded better returns; and
- In **1988 Drought Monitoring Centre (DMC)** was established for 22 countries in Eastern and Southern Africa; and
- Responsibilities included **addressing all climate-related risk challenges** in the region.

# Regional Centres

## **DMC Harare**

- 1990 DMC HRR became a full SADC Centre;
- 2007 it moved to Gaborone and in 2010 changed its name to SADC CSC.

## **Other relevant SADC institutions**



# Regional Climate Outlook Forums

- RCOFs - the process was initiated to **effectively produce and communicate seasonal to inter-annual products and information**; and
- Workshop held on **4<sup>th</sup>-6<sup>th</sup> October 1999** in Kadoma, Zimbabwe; and
- Addressed the **sustainability of the process for production and dissemination** of seasonal and inter-annual climate services.

# Regional Climate Outlook Forums

## Key recommendations from Kadoma Workshop

- Enhanced a **two-way communication between producers and users** of climate products;
- Carry more work at the **producer level to improve the quality** of the forecast;
- Training of producers, extension officers, media and farmer communities;
- Collaboration among **different stakeholders** to take charge of various elements of the programme; and
- Need to improve **timing of information, spatial and temporal accuracy** of the products

# Regional Climate Outlook Forums

## The RCOFs:

- RCOFs (**SARCOF**) are organized by SADC CSC **in collaboration** with NMHSs and others African and International Institutions and donors;
- **Donors are major** supporters of the RCOFs;
- Held at the beginning of **every major rainfall season**;
- Develop a single **best regional consensus** seasonal climate outlook product which **later downscaled at national level**;
- Apart from Scientists include **media experts, policy-makers, user sectors and public community**; and
- Introduced **NCOW process** for downscaling regional product.

# Regional Climate Outlook Forums

## The result of the process of RCOFs:

- **Triggered close collaborations amongst** NMHSs and users, donors, UN bodies, some vulnerable communities, and integration of Indigenous knowledge;
- Enabled some **governments to develop national projects** on how to live with **risks, impacts/vulnerability assessments, and factoring climate information in their** national plans;
- Facilitated the transfer of **emerging technologies to Africa** in the science of climate prediction and applications;
- **Enhanced interaction with the users** from various sectors thus improving the dissemination of climate information and prediction products ; and
- The media has played **a pivotal role in the dissemination** of climate services information and products.

# Global Framework for Climate Services

- GFCS was established during WCC-3 (Geneva, 2009), **UN-led initiative spearheaded by WMO**;
- Vision to **enable societies better manage risks and opportunities** arising from climate variability and change; and
- To be done through development and incorporation of **science-based climate information and prediction** into planning, policy and practices

# Global Framework for Climate Services (Cont.)

- Priority areas included **Agriculture and food security, Disaster risk reduction, Energy, Health, and Water;**
- GFCS vision supports the **Sendai Framework (SFDRR) and SDGs;**
- GFCS adheres to principles that provide the greatest benefit to **those who are most in need of climate services;** and
- Implemented through **regional/sub-regional centres, NMHSs and other** weather-, information-, and climate-related institutions.

# National Framework for Climate Services

## **NFCS underlines:**

- The necessity of increased **political support and institutional collaborations**;
- the urgent need for **enhanced weather and climate services** delivery to end users;
- improved **access to weather information and climate services** for the five priority sectors;
- need for **strengthening partnership**, increased support in the provision of weather and climate services; and strengthening research efforts; and
- Tanzania launched its **NFCS** in 2018

**There are projects such as GFCS I&II, WISER I&II and support from other funding agencies.**

# Challenges on Climate Services

**Challenges on capacity development :**

*Interventions are required to **address major challenges faced by NMHSs in fulfilling their mandate in five key pillars of Climate services;***

- Observations and monitoring;
- Research, Modeling and Prediction;
- Climate Service Information System;
- User Interface Platform; and
- Capacity Development.



# Opportunities on Climate Services

## Opportunities on Climate Services :

- Increased need for Governments, the public and other stakeholders of **accurate and dependable tailor** made weather and climate services;
- More support by **government and international development** partners;
- Availability of modern technologies;
- **Global recognition and investment** on climate change;
- Institutional **Research and development** collaborations;
- Private Sector **Partnerships** increased;
- Emerging sectors e.g. Oil and Gas in some countries; and
- Membership of NMHSs in **various regional and international** bodies and activities

# Challenges on implementing Adaption Initiatives

- **Overlapping and conflicting laws regulations and mandates**, resulting in inadequate understanding of the limits and responsibilities of individual agencies;
- Limited collaboration among ministries;
- **Weak coordination** between actors in the development space;
- **Weak capacities** to plan finance and implement adaptation initiatives;
- Weak culture of **information and knowledge sharing**;
- **Weak evidence-based** learning and take-up of learning into policy processes; and
- Weak **planning** for **results-based** management.

# Conclusion

## **Urgent actions needed to address the following:**

- The gap in **raising awareness** for broad ownership, support and communication to adapting to climate variability and change;
- The gap in **climate risk management** for strategic planning and disaster risk reduction;
- **Climate-based services support** to governments, the private sector and civil society are required; and
- **Improvement** of observations, data management and infrastructure to provide essential data to cover the first three gaps above.

# Principles behind achieving and sustaining adaptation benefits

- **Collaborative management approaches** that meaningfully put affected people at the centre of the innovation process and share decision-making over the adaptation process;
- **Sustainability-led programming** that addresses the barriers to replication and scaling up of promising adaptation interventions; and
- **Capacity development** for evidence-based policy design, programming, implementation and monitoring and evaluation

***ASANTE KWA KUNISIKILIZA***