Weather Information and Climate Services in the SADC Region
By

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Outline

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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
Mitigation:

• Prevent further climate changes \textit{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 4th-6th 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.
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 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
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