



# Mapping and Assessment of the flow of Climate Information



United Nations  
Economic Commission for Africa

ACP<sup>C</sup>  
African Climate Policy Centre



UKaid  
from the British people

WISER  
Weather and Climate Information Services for Africa

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# Introduction



➔ The African Climate Policy Centre, under the Pan African component of the WISER Programme, undertook research with focus on SADC region on the needs, flow, utility and packaging of climate information in order for the Centre to strengthen strategic communication and provide more tailored products and services to decision makers, as well as improve the efficiency of delivery to the last mile.

# Objectives

## The Research Brief:

- Conduct stakeholder interviews and focus group discussions
- Map and identify key spaces and platforms for climate information in Africa
- Assess the communication barriers to the uptake of climate information between providers and end users
- Identify tools and approaches for engagement and participation
- Document good practices and challenges to climate information sharing, and uptake
- Map climate information providers
- Assess the uptake of climate information within key national sectors
- Make recommendations for improving uptake of Climate Information

# Methodology

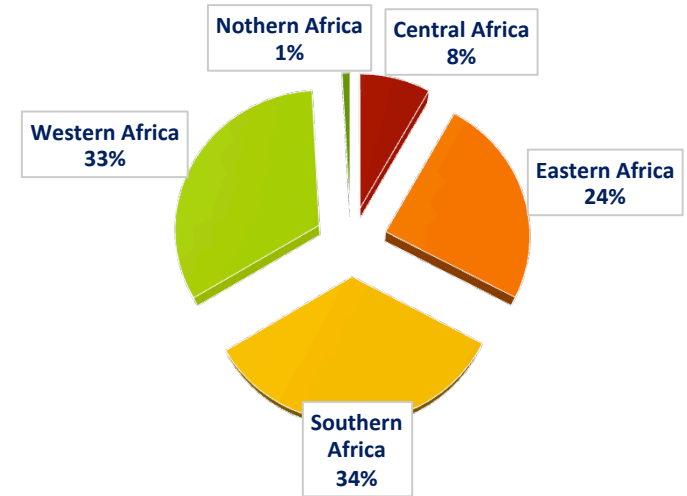
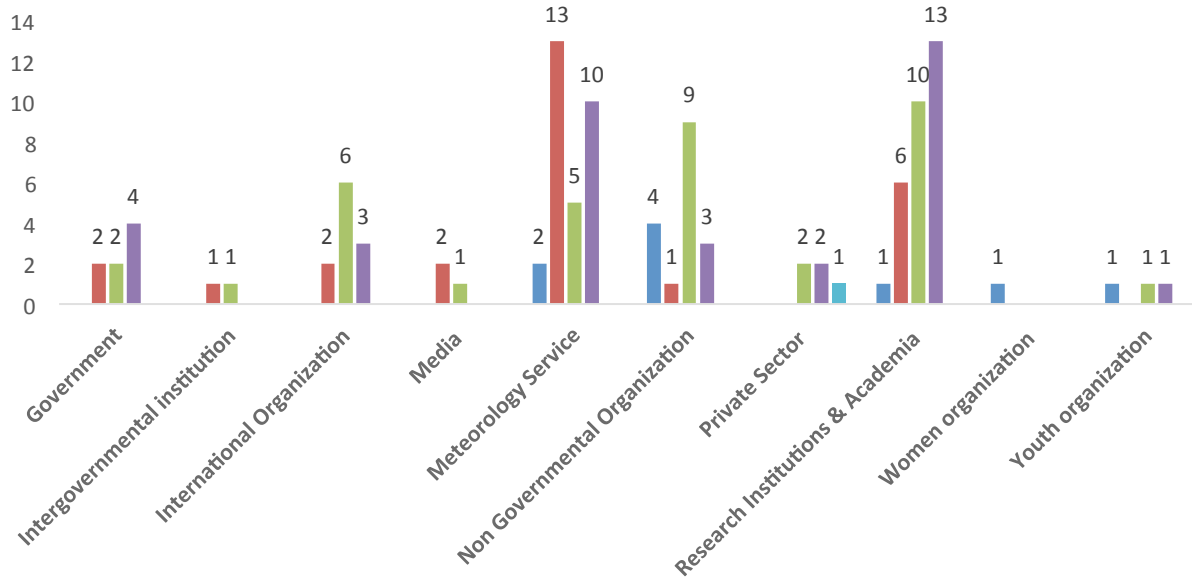
- **Social Research Techniques:**
  - Data collection (quantitative and qualitative data):
    - Online Surveys on climate information perceptions: knowledge, attitudes and practices
    - Field meetings with key stakeholders
    - Focus Group with key institutions
  - Data Analysis
    - Statistical treatment
    - Key Findings
    - Challenges and successes
    - Recommendations
  - Reporting
    - Wrap-up meeting: feedback collection
    - KM and Communication Workshop
    - Final report published

# Scope

➤ Continental scope

➤ Surveys

Regional Constituency Distribution

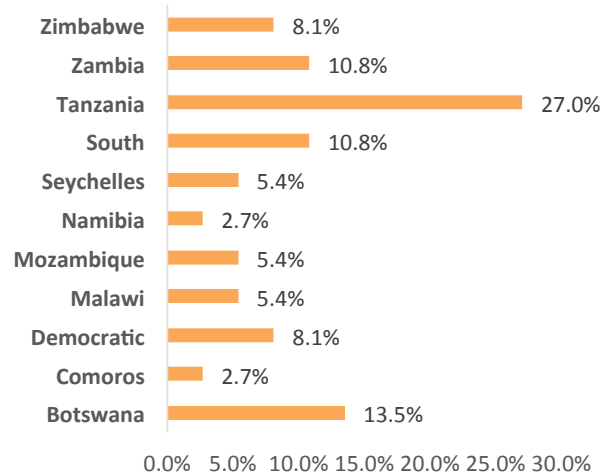


# Scope

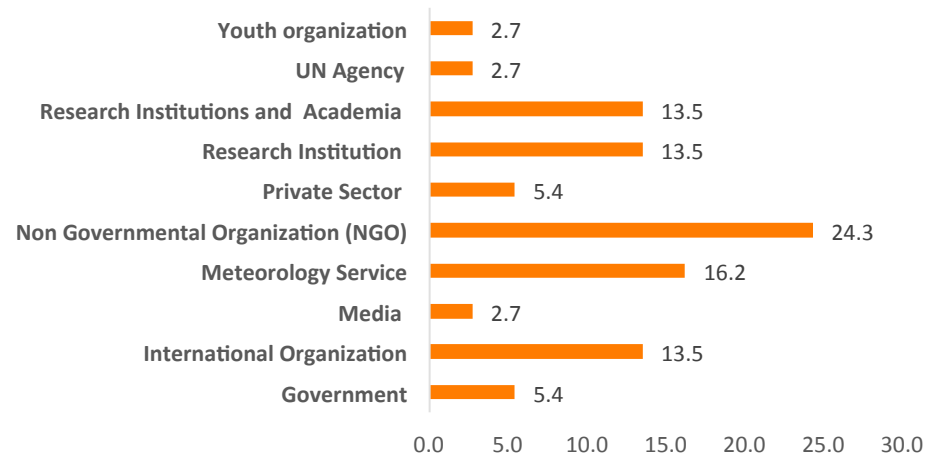
## ➤ SADC Regional approach :

- Field Meetings and Focus Groups, with particular focus on Botswana, Mozambique, South Africa and Tanzania
- Surveys

Country Proportions



Constituency Distribution



# Mapping of stakeholders in SADC Region

- Key stakeholders
  - Meteorology Services
    - SADC-Climate Services Centres
    - Mozambican National Meteorology Institute
    - South African Weather Services
    - Tanzanian Meteorological Agency
    - Department of Meteorological Services of Botswana
  - Governments (Ministries of Environment, Finance, Water Resources, Agriculture, DRR...)
  - Universities and Research Institutions
  - NGOs and CSOs,
  - Media practitioners
  - Country UN offices.



# Mapping of stakeholders in SADC Region

## ➤ Strengthens analysis

- a) Identified institutions engaged in climate research
- b) Identified institutions with archives on climate change data, useful for climate research and related activities
- c) Identified focal points (and focal institutions) for international bodies involved in climate-related activities
- d) Identified experts on climate science, policy, adaptation and services
- e) Identified institutions doing research, policy adaptation, capacity-building development programmes

# Mapping of stakeholders in SADC Region

- Southern Africa has a robust climate change prediction capability in tracking long-term issues related to impacts of climate change
- Institutions in Southern Africa are focus largely on research in climate modelling, services, and adaptation
- **Weaknesses analysis**
  - Weak capacity of the research institutions on how the climate information they generate filters down to grassroot communities
  - Some Meteorology services may not always be in a position to prepare timely information whenever an event is forecasted.
  - They need strengthening monitoring and tracking capacity for cyclones, storms and heavy rains. Some reforms have been introduced to tackle this and create regional Meteorological centres.
  - Sustaining and providing equipment to local Disaster Risk Management Committees

# Mapping of stakeholders in SADC Region

SADC Drought Monitoring Centre which was established in 1999 was transformed into **SADC Climate Services Centre (SADC - CSC)**, moving its headquarters from Zimbabwe to Botswana.

- Although this process has somehow weakened the institution, efforts have been now put in place to support its revival.
- It still remains as a relevant player in the region with some influence into the national meteorology services.
- It organises seasonal regional climate outlook fora (SARCOF) and support the domestication nationally through NCOFs.
- The SADC - CSC services have been broadened. It is now more embedded in SADC political processes.
- It provides training in climate prediction for personnel in the NMHSs. Training also covers the end users in the various weather sensitive economic sectors such as agriculture, health, energy, water resources management and transport in the region in application of the climate products and services.
- Main partners: ECA/ACPC, United Nations Development Programme (UNDP), World Meteorological Organisation (WMO), World Bank, US National Oceanic and Atmosphere Administration- Office of Global Programmes (NOAA-OGP) and United States Agency for International Development (USAID), Belgium.

# Assessment of the flows of Climate Information

## ➤ **Needs Assessment for Uptake of Climate Information:**

- a) A multi-institutional approach for the provision of climate services
- b) Governments should invest in the Climate Change Knowledge Centres;
- c) An Inter-institutional Working Group for Climate information at national and local levels for each country to facilitate information sharing and consensus and to advise and provide collective information to policy makers
- d) Building a network for information sharing among stakeholders
- e) Co-production is crucial for uptake of climate information.
- f) Monitoring and evaluation of climate information, based in tailored indicators is important
- g) There is need to invest in community and rural radio, and mainstream media for effective grassroots dissemination to the last mile
- h) Introduce the concept of probabilistic forecasts to policymakers

# Assessment of the flows of Climate Information

## ➤ **Flow, Utility, Packaging of Climate Information**

1. In each country of the region, the main source of climate information is the meteorological department but other countries, such as South Africa and Tanzania, have various sources of climate information
2. Climate information is mainly disseminated through media and direct messaging in public gatherings, In some of the countries these messages are transmitted by religious and community leaders.
3. The steps to downscaling information for the source to the user is still a challenge in the region, as well as the language
  - Mozambique has risk management committees which disseminate climate information. The person who conveys the message to the communities is important.
  - The governors of the Mozambique provinces of Inhambane and Gaza provinces, are also used to convey climate information directly in gatherings , reaching larger audiences with a good deal of credibility
  - There is need for Meteorology technicians to repackage climate information in a end-user friendly way, at regional, national and sub-national level.
  - Tanzania Metrological Agency has an early warning project supported by UNDP for data collection dissemination of information this has increased the scale of data, as well as working with the communities to help build their capacities to improve their livelihoods, adapting to climate change.
  - In Tanzania UNDP is promoting an integrated climate information database all weather and disaster management related information establishing a 24/7 Emergence Centre to compile and process the data.

# Assessment of the flows of Climate Information

- Good practices on flows of information
  - The South Africa Department of Environmental Affairs, Climate Change Section is developing a monitoring and evaluation system, to assess the information flow and impact, linked to the NFCS. This includes a web-based sharing mechanism. Observation and impact related information, and financial responses.
  - Mozambique has a good community-based early warning system in the Beira Province, which has been replicated over the country and in Southern Africa. Climate data is co-produced with indigenous knowledge. Indigenous knowledge is complemented with scientific weather data to issue early warnings; communities already have traditional knowledge, which is useful for prediction
  - District Disaster Risk Management Committees are useful in disseminating climate information to reach remote areas.
  - In general disaster fatalities in Mozambique are decreasing, due to the coordination mechanism to provide timely information.

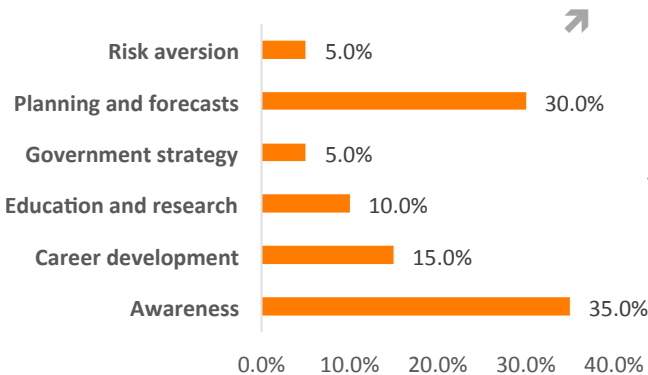


# Outcomes analysis and policy entry points

## ➤ Policy use of Climate Information

- Climate information is used as a way of mitigating risk associated to climate variability. Using this information the government is able to strategize and implement policies related to prevent extreme situations that may be due to unforeseen changes in climate under normal circumstances.

### Climate Information Relevance

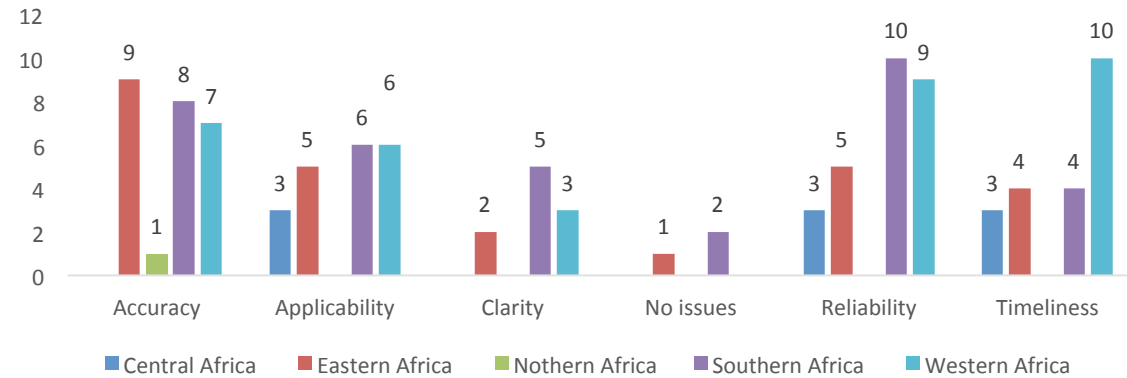


- The climate information was found relevant as a tool to help in decision making, especially when planning and projecting for future resources. In fact it was reported the use of climate information to provide improved forecasting of water resources for management and operation of infrastructure, and planning for water resources development.

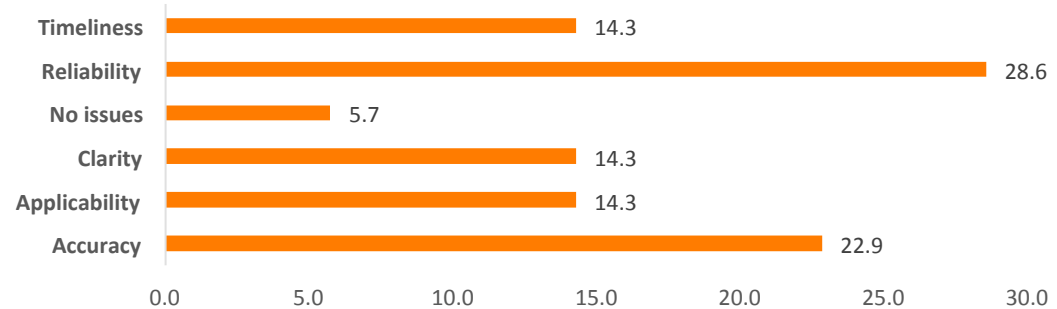


# Outcomes analysis and policy entry points

## Climate Information Challenges



## Climate Information Challenges in Southern Africa

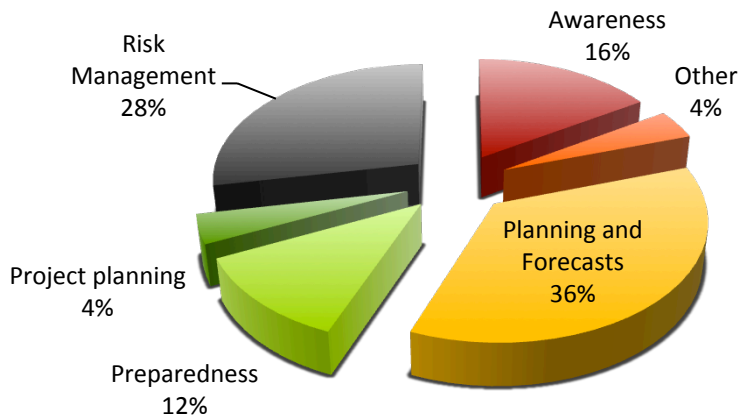




# Outcomes analysis and policy entry points

➤ Points that can increase (leverage) the uptake of information in policymaking:

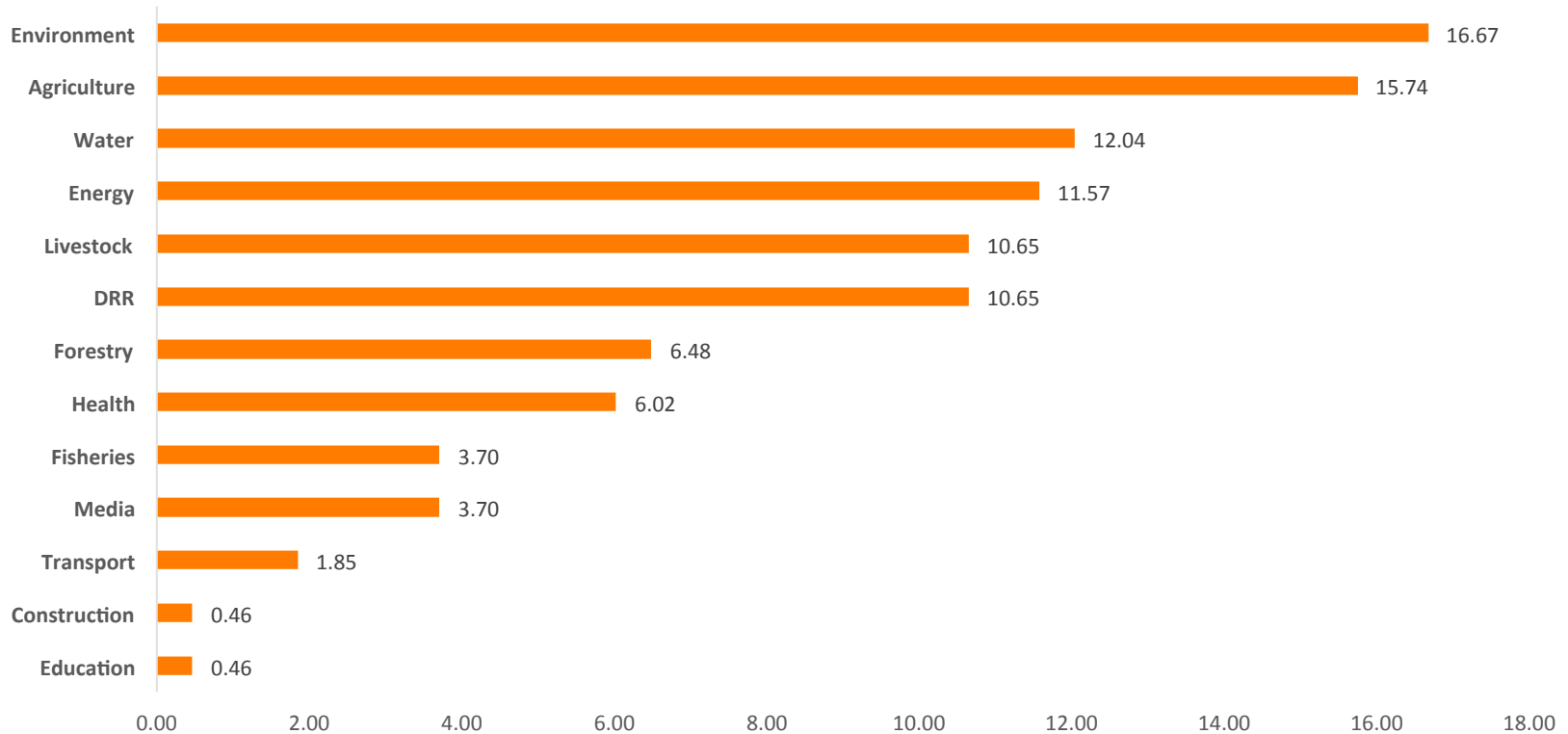
## Socio-Economic Benefits



- Introduce a programme to explain probabilistic forecasting and the importance of and use of climate information
- Develop capacities on Climate Information interpretation through trainings fit-for-purpose for policymakers
- Socioeconomic benefits of Climate Information

# Outcomes analysis and policy entry points

Climate Information use by Policy Sector

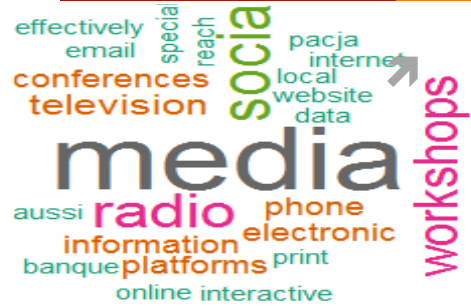


# Outcomes analysis and policy entry points

## ➤ Success stories on climate information incorporation into policy-making

1. Tanzania has been successful to mainstream climate change in the development planning process and national policies at ministerial and local level
  - Climate change has also been mainstreamed in the UNDAF process.
  - The country has a Climate Change Strategy for Tanzania and Zanzibar and a budgeting process to manage risk which is a GFCS outcome.
2. South Africa now has a climate data policy
3. Mozambique has good policy documents. The Government is making efforts to integrate climate information into different policy areas and mainstreaming adaptation, following a regulation on climate information sharing
4. Repeated incidences of disasters has put pressure on the government to push new policies which integrate climate information for DRR.
5. Climate information has forced bilateral Commissions to plan together in different countries. i.e. Namibia, Botswana, South Africa.
6. In Botswana, a Climate Change Policy has been developed and endorsed by the cabinet and waiting for approval in Parliament
7. The different provinces in South Africa use climate information to make decisions (local and provincial policy-making) and the private sector responses to climate opportunities are addressing some of the information challenges in the country.
8. In Mozambique, the Ministry of Economy and Finance has promoted an insurance scheme, based on climate information, and now is upscaling it.

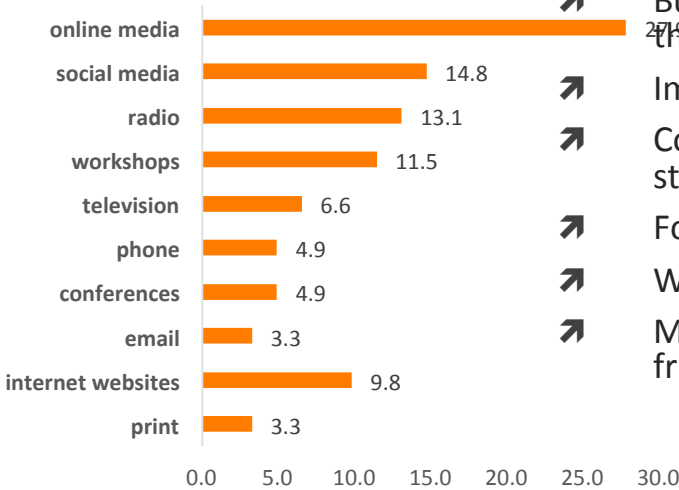
# Key Recommendations and conclusions



## Recommendations on Climate Information sharing

- Governments to invest in the Climate Change Knowledge Centers; it will be a useful tool to upscale uptake of climate information, exchange and disseminate of knowledge. This will improve general public awareness and the countries' resilience to climate-induced disasters.
- An Inter-institutional Working Group for Climate information is recommended in each country to facilitate information sharing and consensus and to advise and provide collective information to policy makers.
- Building a communication network for stakeholders both at the national and the district level is important.
- Improve on Communication avenues that downscale climate information.
- Co-production with traditional/indigenous knowledge systems should be strengthened to prevent failure in implementation.
- Foster impact based forecasting and response strategy to foster preparedness.
- When information is fit for purpose the uptake is enhanced
- Meteorology technicians should repackaging climate information in a end-user friendly way, at regional, national and sub-national level

Most Effective Channel



# Key Recommendations and conclusions

## ➤ Recommendations on Flows of Climate Information

1. A Climate Information Programme for policy makers could be established to facilitate policy makers to understand the importance of the Climate Services.
1. Training activities to understand probabilistic forecasts, the importance and use of climate information may strengthen capacities of policy makers and decision makers. This will enable policy makers to implement climate information in policies.
2. A regional approach to Climate Information would have a positive impact to strengthen regional ownership and transfer of skills to the national level, so that they interface better with communities.
3. Quality Assurance and control is important for Met services to meet WMO ISO standards.
4. Monitoring and evaluation of climate information, is crucial to identify gaps and how to improve information dissemination.
5. Politicians and local governors can be used as a vehicle to raise awareness and disseminate climate information to reach a wider audience when they convey their political agenda.
6. Meteorology departments in the region should be strengthened at district level in order to match specific requirements and predictions for districts, downscaling from national to sub-national level.
7. Invest in community radio and media for effective grassroots dissemination to the last mile.

# Key Recommendations and conclusions

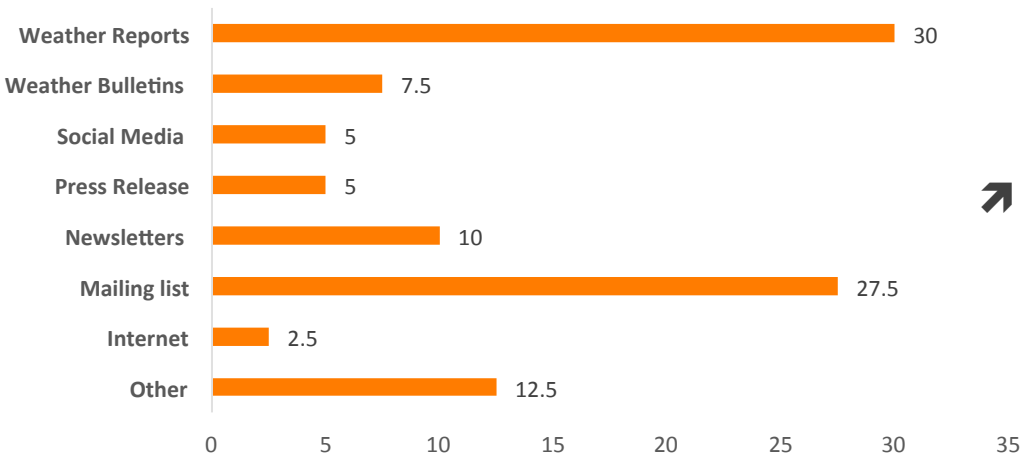
## ➤ Recommendations on KM and Media role on CIS

➤ Reinforce the Communication and Knowledge Management component of the projects in order to effectively convey messages and reach to the last mile.

➤ Consolidate the media as key stakeholder to enhance the awareness and dissemination; this may include specific programmes for media practitioners in the climate activities and events.

➤ Train journalists and media practitioners in each country to understand climate information and disseminate and downscale information.

Most Trusted Information Channel





# Key Recommendations and conclusions

## ➤ **Conclusions**

- The important role of the **National Climate Outlook Forums (NACOF)** has been highlighted by stakeholders in the four countries visited,
- Global Framework Climate Services (GFCS) guidelines have a positive impact in the region:
  - Clustering stakeholders into Climate National Networks
  - Promoting DRR national offices at highest level (President or Vice-president's Office) and DRR committees at local level
  - Facilitating a National Framework Climate Services (NFCS)
- The value of Indigenous Knowledge for consensus forecasting and the domestication of the climate information into the local languages is crucially acknowledged: co-production relevance

## ➤ **Way Forward**

- Other Regions Mapping and Assessment: North Africa, West Africa, Central Africa, East Africa, SIDS
- Focus on the uptake and use of Climate Information at municipal and community level
- Communication Partnerships to be established and strengthened with national, regional, global and regional mechanisms and projects
- Presentation of Findings at International Conferences, such as CCDA and COP 23
- Publication of analytic Report and thematic papers

# Q & A - Debate



➤ Thank You for your attention!

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