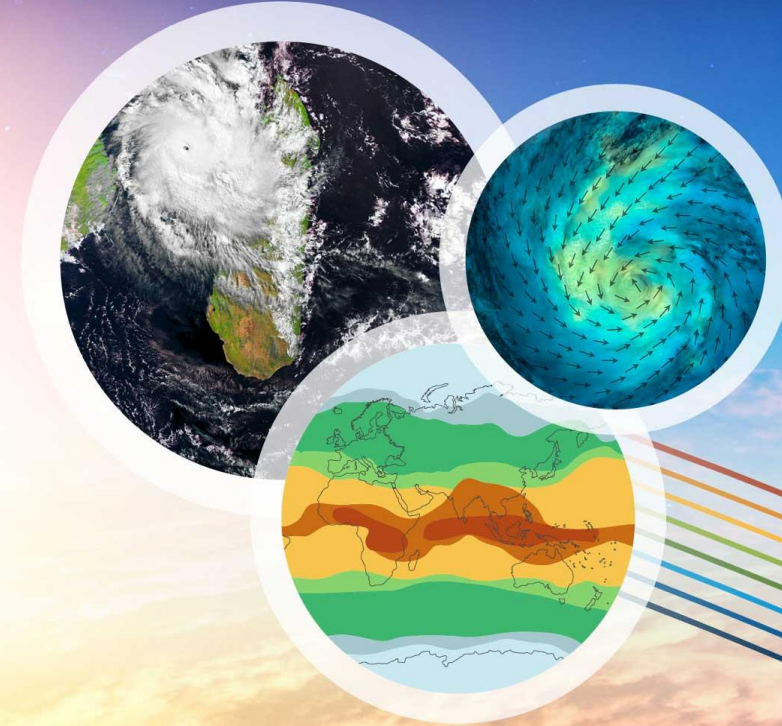
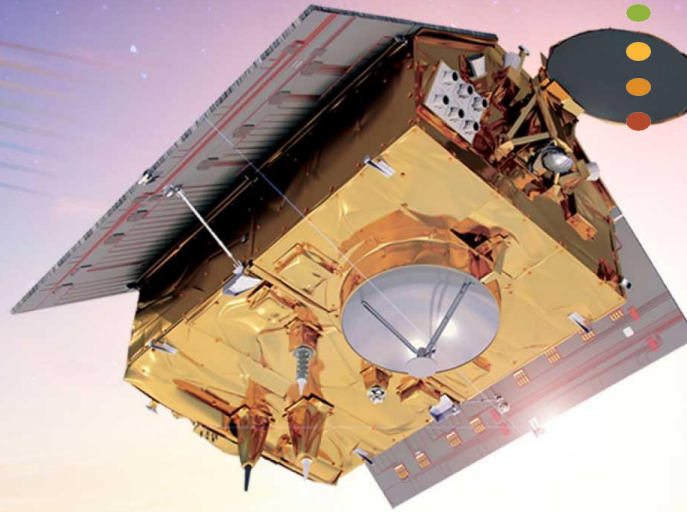


• **AFRICAN CENTRE OF
METEOROLOGICAL APPLICATIONS
FOR
DEVELOPMENT (ACMAD)**

• **TASK FORCE ON ANTICIPATORY
ACTION FOR FOOD SECURITY
MEETING**



DAKAR - SENEGAL
27 TO 28 NOVEMBER 2023



ClimSA
INTRA-ACP CLIMATE SERVICES AND RELATED APPLICATIONS PROGRAMME

An initiative of the Organisation of African, Caribbean and Pacific States funded by the European Union



ACMAD Continental Multi-Hazard Advisory Centre

Role & Functions for ANTICIPATORY ACTIONS



BY

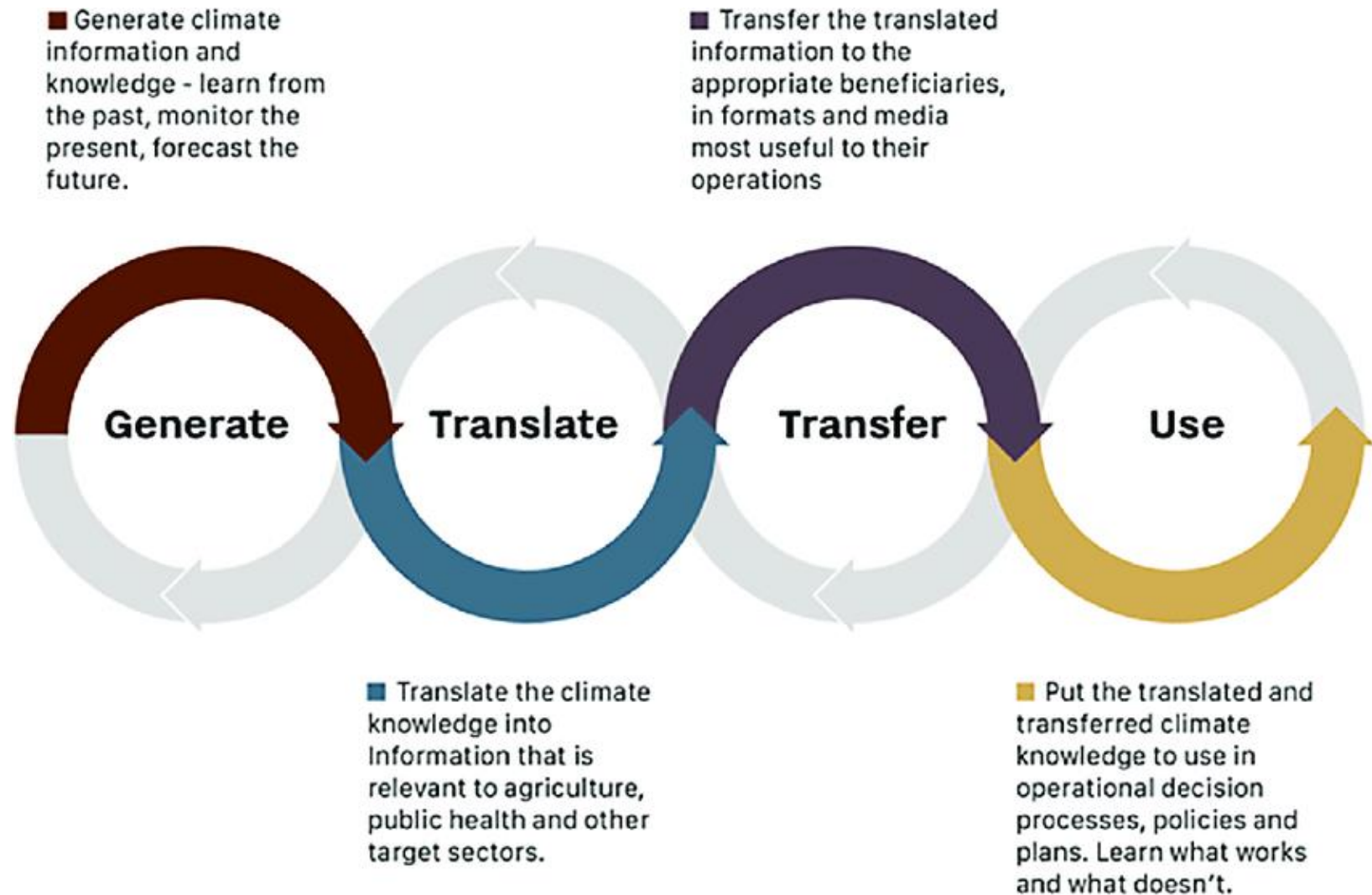
NSHIMIRIMANA Godefroid
Thematic Expert ClimSA/ACMAD

ACMAD PRESENTATION

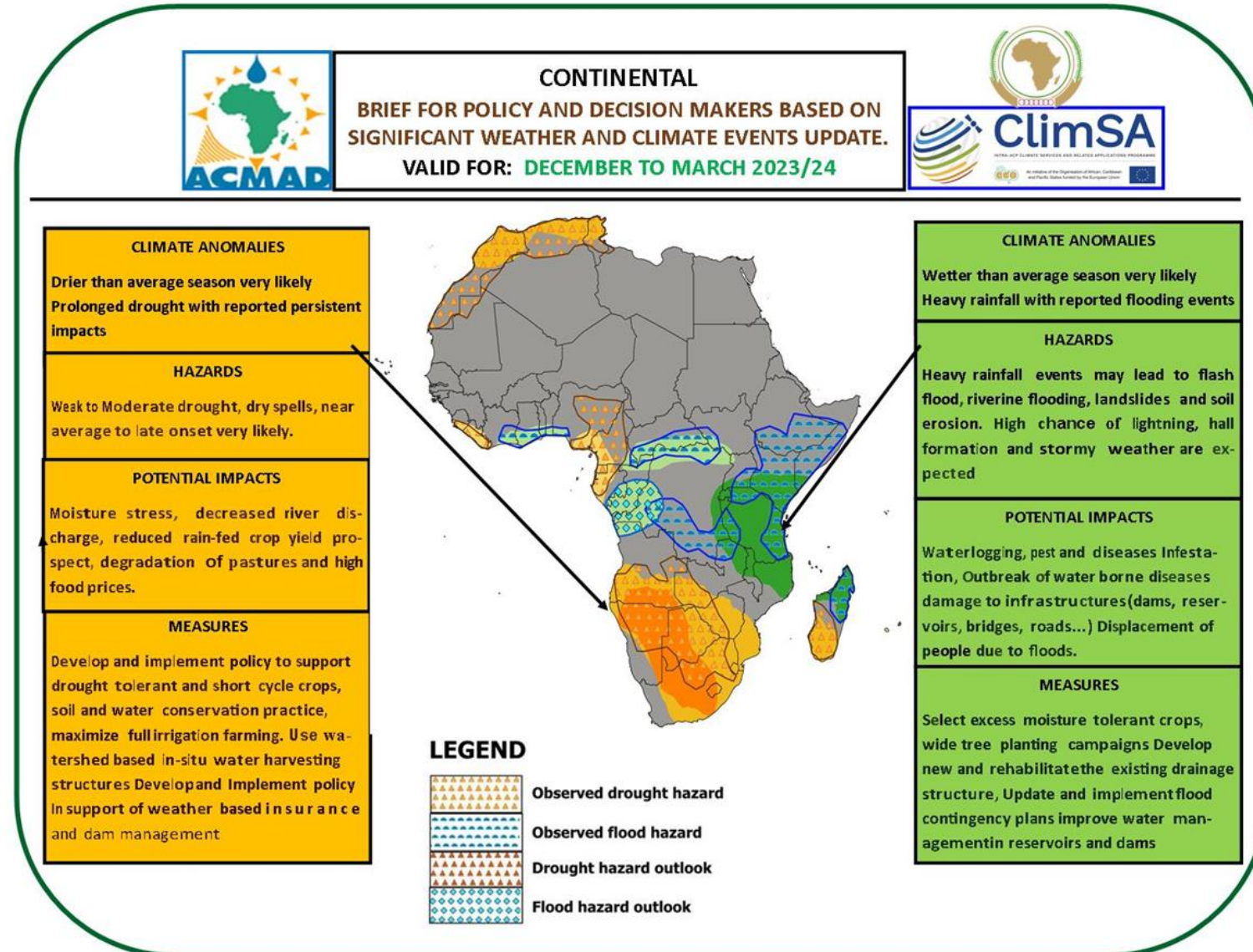
Created through resolution 540 of the UNECA Conference of Ministers in April 1985 following the droughts of the 70s and 80s, ACMAD is established in Niamey-Niger since October 1992 with mandate

- Continental Weather and Climate Watch Centre for Africa with Monitoring, *forecasting and early warning for droughts, floods, tropical cyclones and other extreme events as functions*
- Institution of excellence for the Applications of meteorology for sustainable development with capacity building, methods, tools and products development, contribution to global weather and climate programs, database, research and innovation as functions
- The Centre is also tasked to carry out capacity development for its Member State's National Meteorological and Hydrological Services (NMHSs) in weather prediction, climate monitoring, Information technology, research and transfer of technology.
- Since its creation, the African Centre of Meteorological Application for Development (ACMAD) has provided weather watch, prediction, and climate information at different time scales *to support humanitarian action and decision-making throughout Africa*
- *With the Support from UNDRR, ACMAD established the Continental Multi-Hazard Advisory Center and the contribute to AMHEWS by providing Meteorological forecast (Continental Watch)*
- *The centre is more than ever determined to leverage on the strengths of partnerships to serve member states supporting resilience to disasters and adaptation to climate change across Africa helping to realize the AU agenda 2063 " The Africa we want".*

Climate Services : The Value Chain

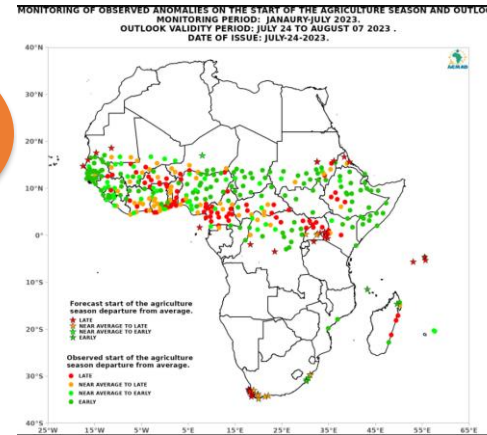
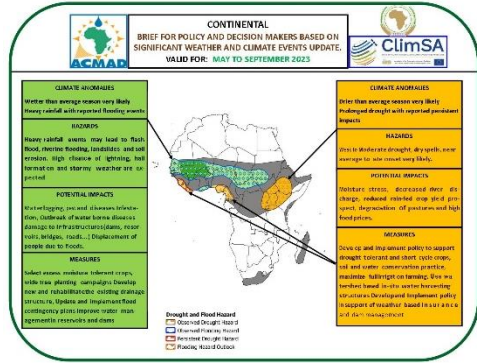
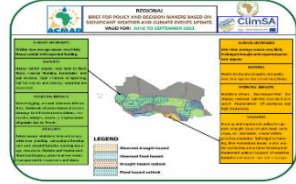
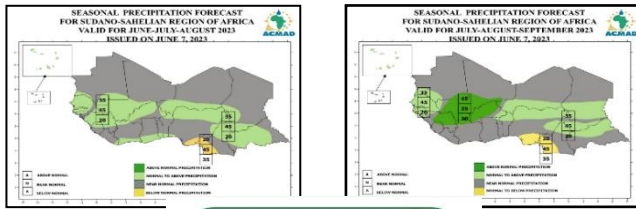


Contribution to the Food Security Value Chain – Prospects of expected rainfall



Provision of climate information for Anticipatory Action

Climate Services: ACMAD Priority Areas

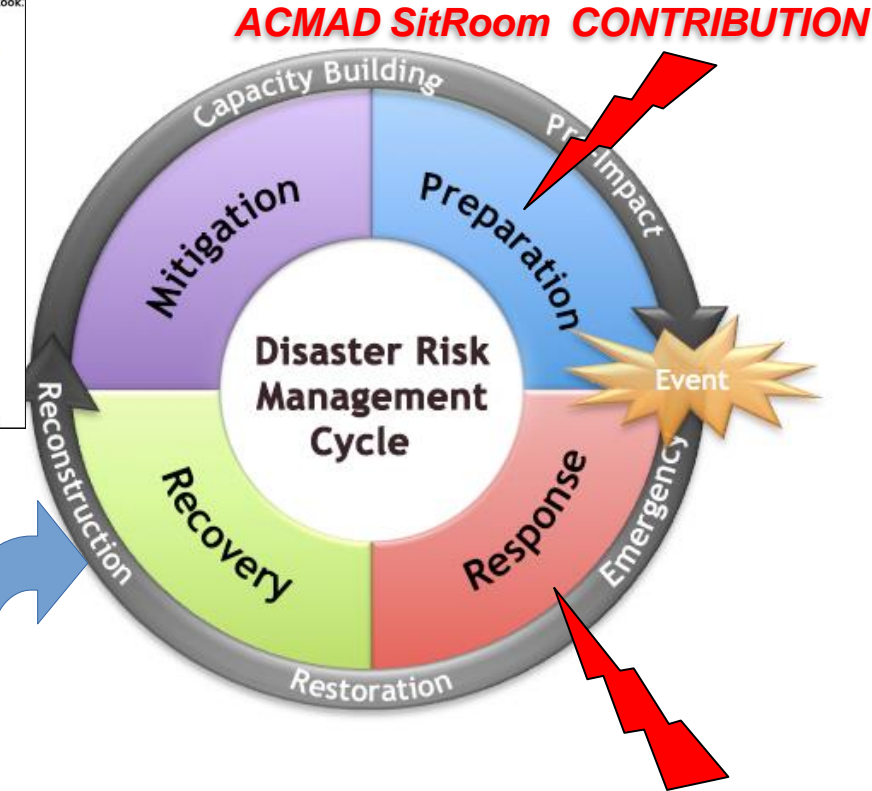


Agriculture

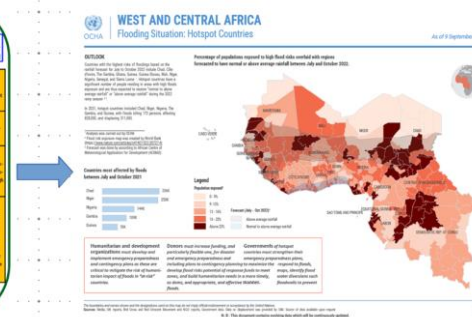
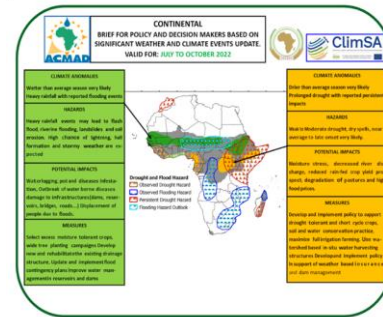
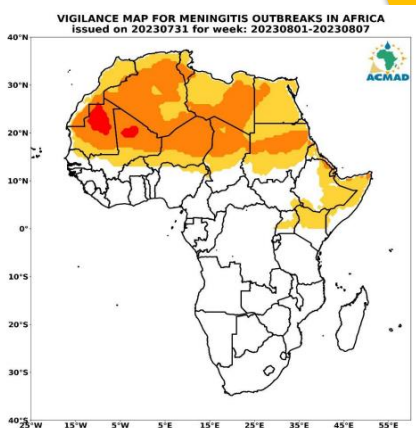
Climate Services

Disaster Risk Reduction

Health

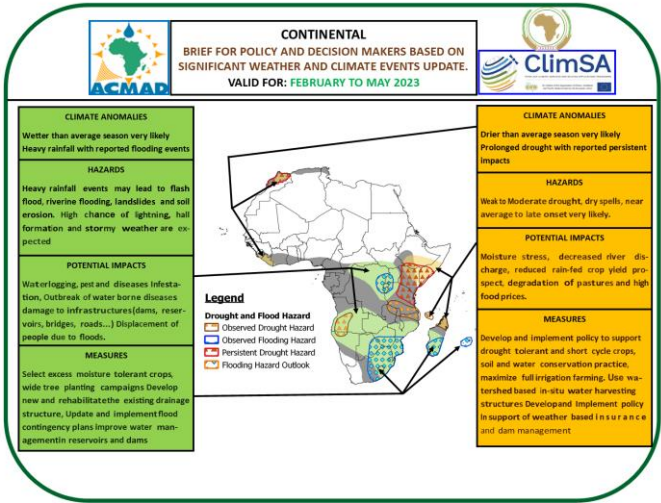


ACMAD SitRoom CONTRIBUTION



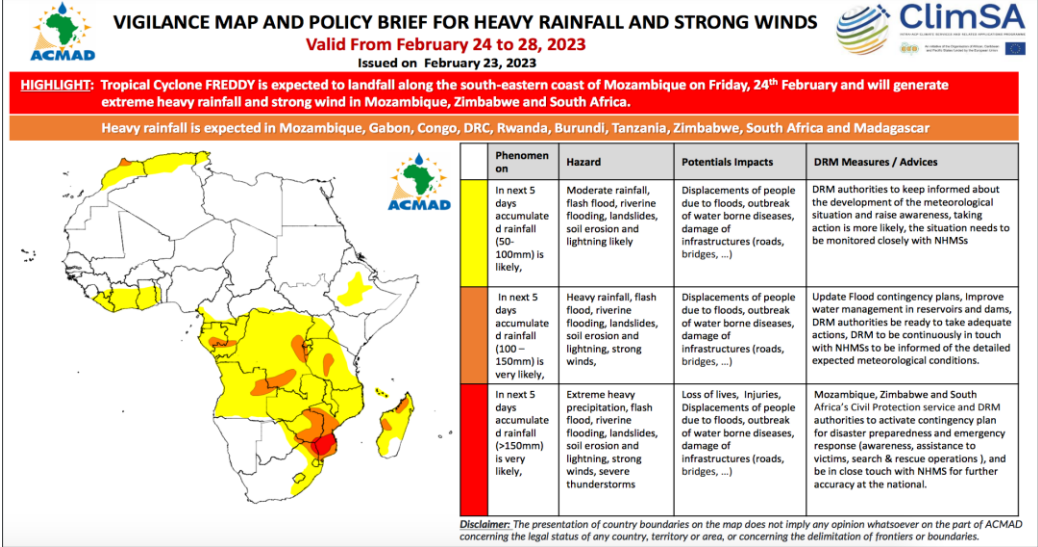
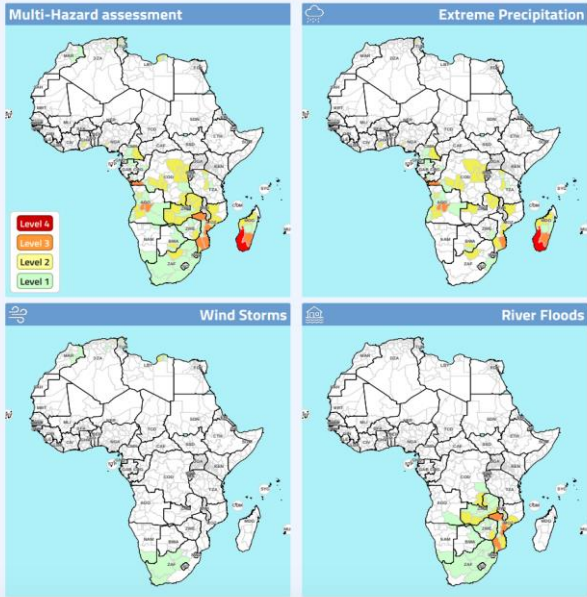
ACMAD provide DRM service tailored with significant weather and climate phenomena, related hazards, potentials impacts, responses measures

Continental Multi-Hazard Advisory for Anticipatory Actions

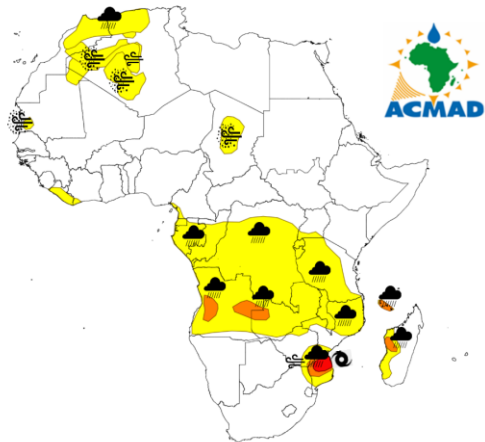


ACMAD PROVIDE MEOTOROLOGICAL FORECAST TWICE A WEEK IN SUPPORT TO AMHEWAS

2. DETAILED MULTI-HAZARD OUTLOOK FOR THE NEXT 5 DAYS From February 28, 2023 to March 4, 2023



Provision of :
Technical notes for heavy rainfall and strong winds and briefings twice a week
Provision of Meteorological Forecast in Continental Watch Bulletins, and reports for intermediaries in agriculture, DRR and health sectors
Statements, summaries, highlights for policy and decision makers



MULTI-HAZARD OUTLOOK Validity: 2023-02-24

issued on 2023-02-23

Rain	Wind	Dust	Meningitis
Very heavy >100mm	Very strong >80kmh ⁻¹	Very heavy >1000µg m ⁻³	Very likely
Heavy 50-100mm	Strong >65kmh ⁻¹	Heavy >600µg m ⁻³	Likely
Moderate 10 - 49mm	Moderate >50kmh ⁻¹	Moderate >400µg m ⁻³	Less likely
Light 1 - 10mm	Light <50kmh ⁻¹	Light <200µg m ⁻³	

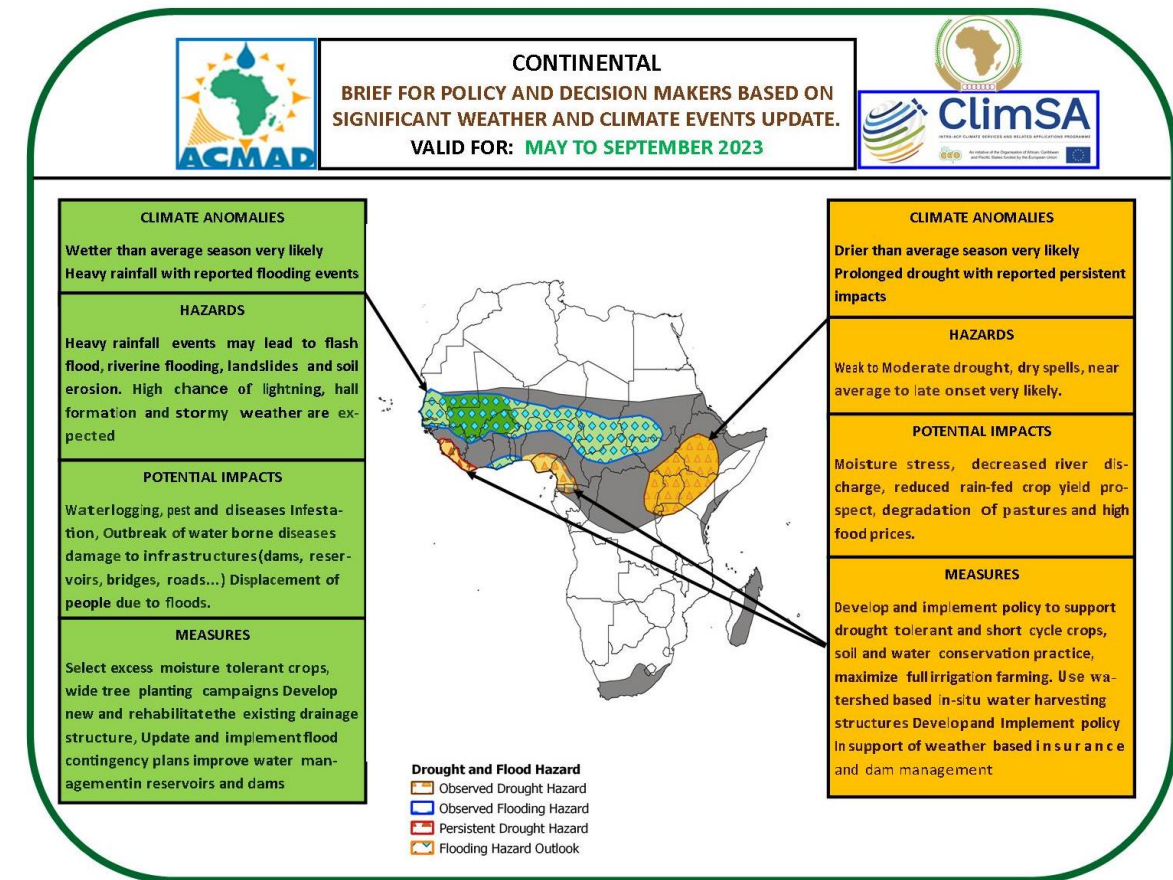
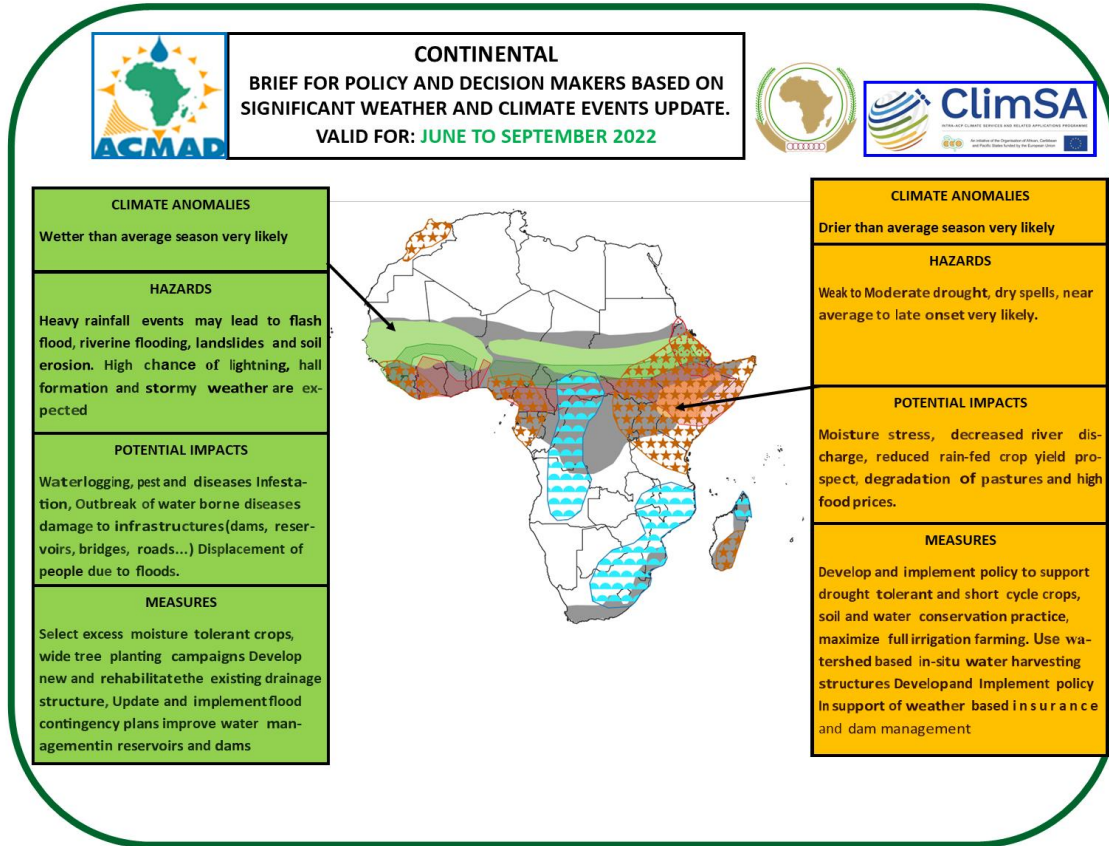
Low-Pressure tracks from: 06-March-2023, 00UTC to 11-March-2023, 00UTC

Models : ARPEGE, CMC, ECMWF, ICON, GFS and UKMO



Contribution to the Food Security Value Chain – Prospects of expected rainfall

Decision-making tool for managing water surpluses or deficits and identifying areas favorable or unfavorable to good harvests.



➤ *Excess rainfall forecast and observed in the Sahel in 2022. Record flooding in northern Nigeria due to the heavy recorded in the region.*

➤ *The ongoing drought in East Africa since March-May 2022 has been detected since February using seasonal forecasts*

Contribution to the Food Security Value Chain – Monitoring and forecasting of the start of the agricultural season

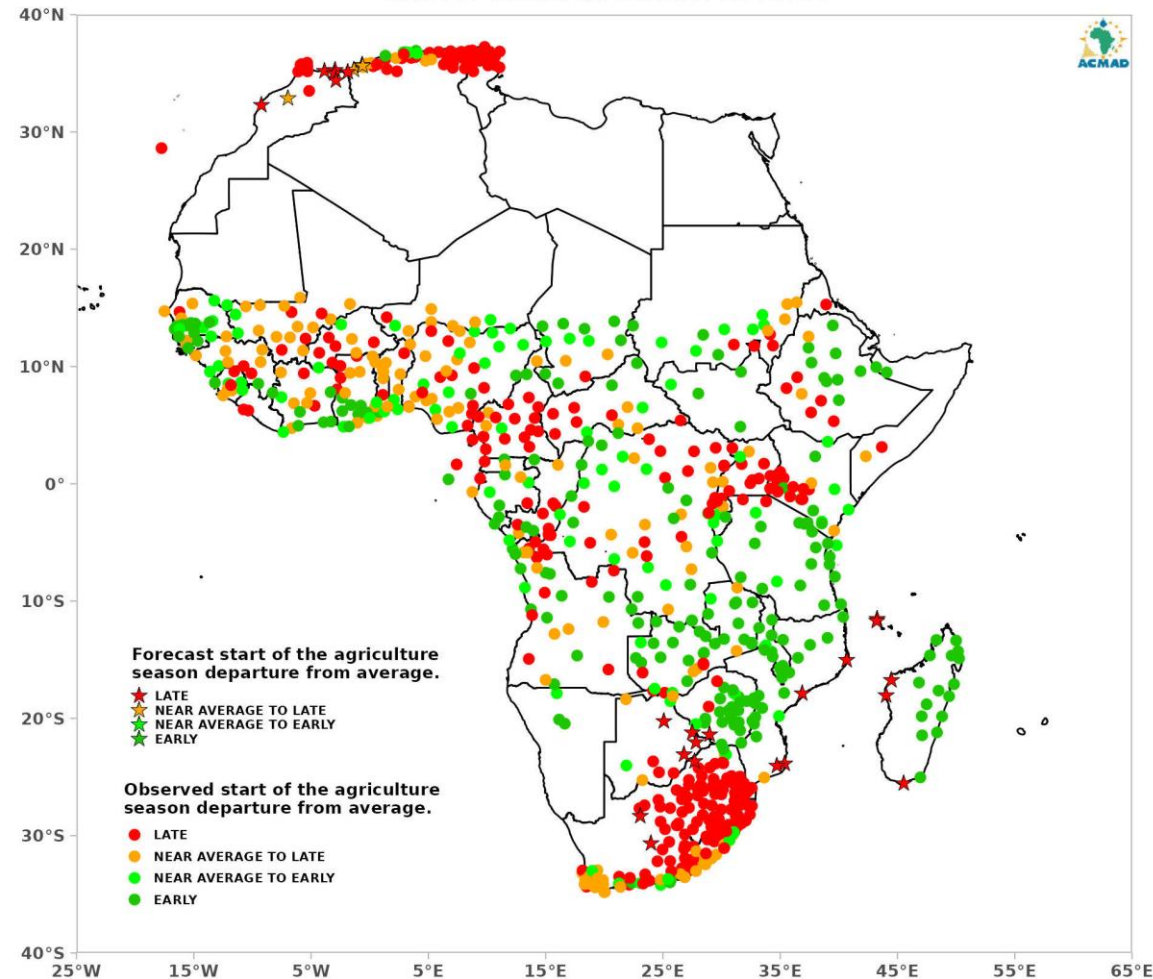
MONITORING OF OBSERVED ANOMALIES ON THE START OF THE AGRICULTURE SEASON AND OUTLOOK.

MONITORING PERIOD: JANUARY-NOVEMBER 2023.

OUTLOOK VALIDITY PERIOD: NOVEMBER 26 TO DECEMBER 10 2023 .

DATE OF ISSUE: NOVEMBER-26-2023.

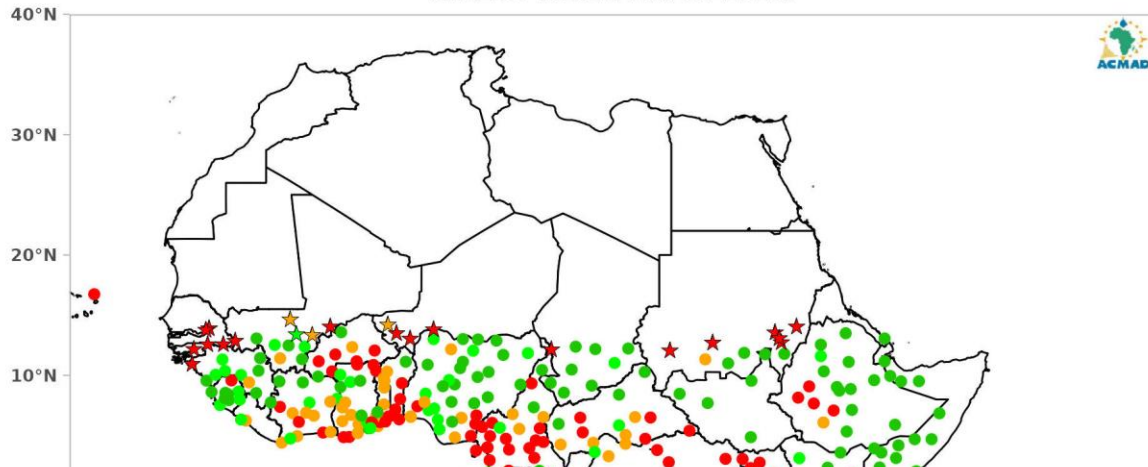
Prediction of the start of the agricultural season, dry and wet periods to support farmers in planning their activities



Contribution to the Food Security Value Chain – Monitoring and forecasting of the start of the agricultural season

MONITORING OF OBSERVED ANOMALIES ON THE START OF THE AGRICULTURE SEASON AND OUTLOOK.

MONITORING PERIOD: JANUARY-MAY 2023.
OUTLOOK VALIDITY PERIOD: MAY 30 TO JUNE 13 2023 .
DATE OF ISSUE: MAY-30-2023.

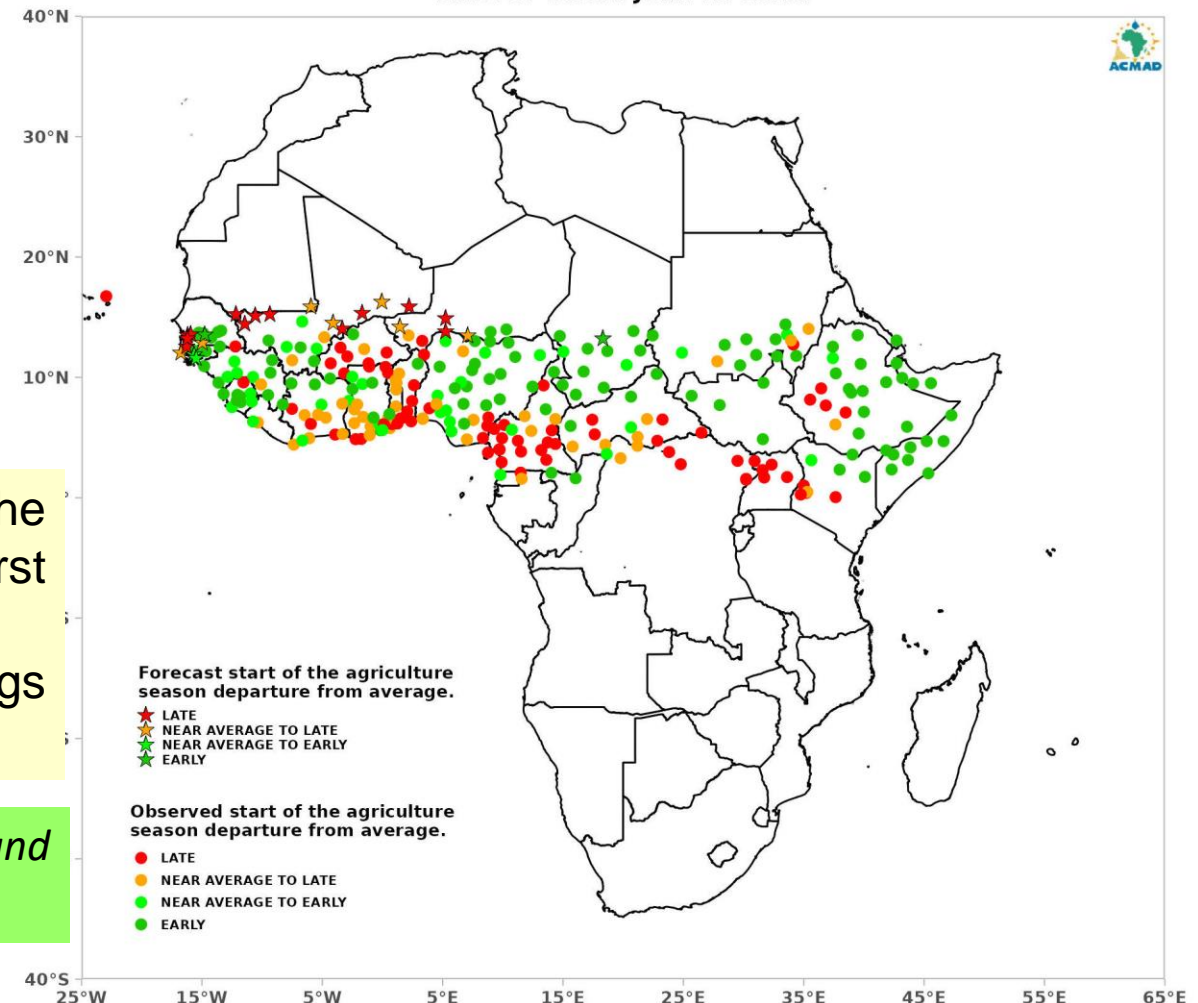


- ✓ Early start of the rains in parts of Niger. In Gaya, the average sowing dates revolve around mid-May: the first sowings have taken place.
- ✓ But, the occurrence of long dry sequences in seedlings leads to the loss of seed and the use of re-sowing.


Future development projects should integrate the production and dissemination of this information in real time to rural areas.

MONITORING OF OBSERVED ANOMALIES ON THE START OF THE AGRICULTURE SEASON AND OUTLOOK.


MONITORING PERIOD: JANUARY-JUNE 2023.
OUTLOOK VALIDITY PERIOD: JUNE 13 TO JUNE 27 2023 .
DATE OF ISSUE: JUNE-13-2023.



Contribution to the Food Security Value Chain – Climate tools to support long term planning






CLIMate Information platform for **AG**riculture
"Customised agro-climatic information at high resolution".



Supporting a climate resilient agricultural sector by:


- Explore climate projections and seasonal forecasts
- Identify threats and opportunities of a changing climate
- React with crop planning, climate adaptation strategies and international funding

Co-created with stakeholders




for meteorological services, policy makers, researchers, extension workers, NGOs, ...

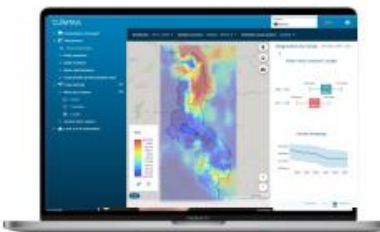
CLIMTAG™ for Africa










upscaling to 23 countries and counting...



klimpala.vito.be



climtag.vito.be



The CLimate InforMation porTal for AGriculture

- ❑ web portal that gives immediate access to a wealth of tailored *agro-climate information* at *high resolution*
- ❑ to accelerate a climate-resilient agricultural sector in Africa
- ❑ available for national Met Services, policy makers, reseachers, extension, NGOs

USE CASE – GROUND NUTS IN NIORO DU RIP – ‘BASSIN ARACHIDIER’ (SENEGAL)

- ✓ Optimal condition: at least 500 mm of rain and temp. ~ 28°C
- ✓ What to expected in the future (RCP 8.5, 2041-2070), in the context of climate change: - Less precipitation in northern parts (250 à 300 mm) - In eastern parts of bassin possible increases to 32°C
- Part of the groundnuts basin may become unsuitable for commercial groundnut production due to water stress (north) and higher temperature (east).

- ❖ The tools can be used on another areas, for other crops species.
- ❖ With ongoing and projected climate change identified area favorable for crop production
- ❖ However, good ground observation data are needed for the calibration and validation of the tools.

THANK
YOU



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