# AFRICAN CENTER OF METEOROLOGICAL APPLICATIONS FOR DEVELOPMENT



MAKING WEATHER, WATER AND ENVIRONMENT RESOURCES FOR SUSTAINABLE DEVELOPMENT

# THREE-YEAR STRATEGIC PLAN (2025-2027)











**Dr. Ousmane Ndiaye**Director General

ACMAD is established in Niamey-Niger since October 1992 with mandate to act as a Continental Weather and Climate Watch Centre and an Institution of excellence for the Applications of meteorology for sustainable development. ACMAD hosts the African Continental Multi-Hazard Advisory Centre, which provides advisory services to the African Union Commission (AUC) and Regional Economic Communities (RECs) as part of the Multi-Hazard Early Warning and Early Action System for Disaster Risk Reduction in Africa.

Since May 2015, ACMAD has been recognized as a WMO Regional Climate Centre, offering climate monitoring, long-range forecasting, training, and data services to stakeholders at continental, regional, and national levels to enhance adaptation and resilience to climate chock across the continent.

ACMAD's Strategic Plan 2025-2027 is our renewed commitment to a resilient, sustainable and prosperous Africa. Leveraging our strong partnerships, expertise and clear vision, we are ready to transform climate challenges into opportunities for sustainable development across the continent using innovation.

# THE ACMAD 3-YEAR PLAN 2025-2027

# VISION

To be a world-class continental operational Centre of excellence contributing to a prosperous Africa with well-resilient population to extreme events and empowered to reduce weather and climate related hazards

Disasters have significantly increased across the African continent over the past four decades. Between 1970 and 2019, more than 1,000 disasters and 1 million deaths were recorded, primarily caused by natural hazards (Africa Biennial Report on DRR, AU publication, 2019).

Despite the shift from reactive to proactive disaster risk management, the frequency, intensity, and impacts of disasters continue to grow. Early warning and early action are essential to significantly reducing losses and damages.

In line with its mandate, ACMAD will work closely with partners to deliver high-quality climate information services, develop applications, and provide support to member states.

# MISSION

To act as an African weather and climate watch centre and a centre of excellence for the Applications of meteorology for sustainable development

- As an Africa weather and climate ACMAD watch Institution, committed to provide African countries with regular continental medium short, to long-range meteorological and climate regional prediction and support early warnings on extreme weather and climate events (drought, tropical cyclones, heavy rainfall, heat waves, ...)
- As an Africa's Centre of Excellence Meteorological Applications, ACMAD is committed to build the capacity of African experts, develop new methodologies, support global programs, provide training, maintain research facilities, and deliver tailored products to national meteorological enhance services and promote sustainable development.

Goal 2

# **GOALS**

Goal 1

Reduce capacity gaps in meteorology and its applications in Africa.

Significant gaps exist in the forecasting and warning capabilities of the NMHSs in Africa's most vulnerable countries. ACMAD collaborates with partners to conduct capacity needs assessments for service generation, delivery, and applications. To address these gaps, ACMAD implements capacity-building programs aimed at improving access to and the use of methods, tools, and global prediction products within NMHSs.

Provide quality services at national and regional levels for early warning, climate change adaptation and sustainable development

ACMAD is advancing technological capabilities to enhance data access through space-based and other platforms. Key developments include the MeteoSat Third Generation satellite, PUMA stations, and RARS for satellite data. ACMAD will continue to leverage digital transformation through, Impact based forecasting, early warning system for heat waves, Al driven model for weather and climate forecasting, the WIS Data Collection Centre Production Centre, and the formulation and implementation of the African Meteorological Satellite Applications Facility.

Goal 3

Facilitate better access to data, research and innovation on African weather and climate

ACMAD provides services based on actionable indicators, weather and climate impact-based forecasts with thresholds. historical data analysis, assessments and contribute to AMHEWAS situation report and continental watches. Additionally, ACMAD has developed new platforms, including UCLIP for enhancing resilience in urban areas, CLIMTAG for climate services supporting resilient agriculture, and a Drought Monitoring System to generate climate services for drought management, Onset monitoring system, all aimed at delivering improved and tailored services for Africa members states.

Goal 4

Modernize Governance and Management of ACMAD

Modernizing institutional management is crucial for implementing ACMAD's vision. As part of these efforts, ACMAD will continue engaging with UNECA to review and approve the relationship agreement with the AUC, ensuring its submission to AUC organs for adoption. Efforts will focus on reaffirming ACMAD's role as the AUC's technical arm on climate matters and reactivating UNECA's statutory role in board renewal and work plan adoption. Additionally, partner and donor meetings will be prioritized to strengthen resource mobilization.

# OBJECTIVES: IMPLEMENTING THE STRATEGIC PLAN

ACMAD has identified four high-level goals for the next three years (2025–2027) to achieve its vision. These goals focus on its core functions, contributing to early warning for anticipatory action within the framework of the Early Warning for All initiative, supporting climate change adaptation and mitigation in line with the Paris Agreement, and enhancing the applications and value of meteorological services to address the aspirations of Agenda 2063 and the Sustainable Development Goals.

## Goal 1

Reduce capacity gaps in meteorology and its applications in Africa

- Goal 1.1: Fill competency gaps to provide tailored services for early warning, climate action and sustainable development.
- Goal 1.2: Support National Meteorological and Hydrological Services, Regional Centres and Beneficiaries with leadership, management, technology and new services capabilities.





On the left, On-the-Job Trainees receiving their certificates with ACMAD experts; and on the right, Experts at PRESAC 19 pre-forum training on climate forecasting tools.

### Goal 2

Provide quality services at national and regional levels for early warning, climate change adaptation and sustainable development

- Goal 2.1: Support advisories and watches to strengthen warnings at the national level for preparation and disaster responses.
- Goal 2.2: Improve climate services to reduce weather and climate impacts and support sustainable development.
- Goal 2.3: Support for tailored and innovative services.



# Goal 3 Facilitate better access to data, research and innovation on African weather and climate

- Goal 3.1: Facilitate better data exchange.
- Goal 3.2: Enhance research and innovation for development.



Regional Advanced Retransmission System (RARS) for low earth orbiting satellite data Network over Africa

# Goal 4 Modernize Governance and Management of ACMAD

- Goal 4.1: Strengthen the governance and partnerships.
- Goal 4.2: Improve management of the organization.





On the left, the ACMAD DG and the PAFO President after the signing of the MoU between the two institutions. On the right, the WMO SG with the ACMAD DG at WMO headquarters.





# Transparency and Accountability



ACMAD is committed to building trust between stakeholders by enforcing transparency and accountability for service delivery.

# Partnership and Cooperation



ACMAD believes in cooperation and partnership to ensure continental complementarity, subsidiarity and delivery.

# Inclusiveness, Diversity and Gender



We value the diversity of African cultures, knowledge, and experiences, ensuring that our services are accessible to all. The African rich heritage with women and youth is at the heart of all activities in recruitment, capacity building, opportunities, ....

# **Knowledge Management**



We are committed to using the best available scientific data, methods and best practices to improve our services and to inform our decisions.

# FLAGSHIP INITIATIVES

In the short term, ACMAD aims to be a lead centre in three priority initiatives:

- 1. Artificial Intelligence (AI) in Weather forecasting for Africa: Use AI forecast in Africa to leapfrog in climate modelling.
- 2. Heat Wave Early Warning System (HWEWS) for Africa: Implement an early warning system to protect African vulnerable population from the harmful effects of heat waves.
- 3. Impact-Based Forecasting (IBF): Develop forecasting models that integrate the potential impacts of weather and climate events on different hazards.

# **PARTNERS**

At ACMAD we trust that collaboration is key to achieve early warning for all and build resilience across our continent. We express our deepest thanks to all our partners for continue support and collaboration.







































































































# **PROGRAMS**













# Follow us













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