



STRATEGIC PLAN

2020-2023

July 2019

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I- CONTEXT AND VISION

ACMAD was established to act as a continental reference centre in meteorology and to promote its applications for development of Africa. Its role has become essential for implementation of Sustainable Development Goals (SDGs), the Paris Agreement and the Sendai Framework for Disaster Risk Reduction in Africa therefore **contributing to the African strategy on meteorology and the Agenda 2063 of the African Union on "the Africa we want"**. The need for enhanced and urgent climate action and governance on water, food and energy security has been recognized at the highest global, continental and regional political levels.

More than half of African National Meteorological and Hydrological Services (NMHSs) operate at or below the World Meteorological Organization (WMO) basic level. Therefore, Africa lacks adequate modern and functional meteorological observation infrastructure and capacity to collect, process, exchange data, interpret, tailor products, communicate and apply information, knowledge and understanding. The WMO Strategic Plan for 2020-2023 put special emphasis on reducing developing countries capacity gaps through improving access to regional and global monitoring and prediction systems enabling the use of products and services, developing competencies and partnerships for infrastructure, data, information and knowledge sharing.

The seven aspirations of Agenda 2063 can only be actualized if specialized Centres including ACMAD play their expected roles. Currently a couple of NMHSs are operationally providing advanced services. However, Dozens of African country NMHSs are unable to develop, update and/or implement policies, strategies on meteorology and therefore lack capacity to access funding for development of advanced services. In tens of countries where funding is available, provision of meteorological services remains far short of what is needed in critical and emerging development sectors.

International climate finance available for Africa is increasing, yet the continent has insufficient capacity to effectively access it. ACMAD has been sustained by a few member states contributions. In addition, since UNECA considered the mature state of ACMAD, there is a need to improve governance and management systems to adequately handle its continental mandate. The previous ACMAD strategy (2010-2015) made some significant contributions but there is need to develop a new strategy (2020-2023) to address the current realities.

Advances in science and technology with earth system approach to modeling, probabilistic approach to forecasting, high speed internet, high performance and cloud computing, quick communication through social media are opportunity for better services leading to effective planning for development. Big data, open-source systems, artificial intelligence to quickly extract useful information from large multimodel ensemble datasets are additional emerging technologies offering opportunities for better meteorological services. ACMAD needs improvements on management of available knowledge through intermediation, internalization, externalization, cognition and quality measurement transforming WMO Global Centres data and products to meet the needs of NMHSs and regional users across the continent.



VISION

To be a **world class continental operational centre of excellence** supporting all African countries to be **well resilient to extreme events with increased ability to adapt to climate change impacts**.

II- MISSION STATEMENT

ACMAD mission sharpened by the decision 2 (XXXI) of UNECA Conference of Ministers in 1996 is to act as the weather and climate watch institution and the Centre of excellence for meteorological applications and services for sustainable development for Africa. The Centre will provide evidence based participatory decision support systems for climate action and governance in Africa.

As the weather and climate watch institution for Africa, the centre shall:

- provide African countries with regular continental medium to long range meteorological and climate prediction;
- support regional early warnings on drought, tropical cyclones and other extreme weather and climate events;

As the African centre of excellence for meteorological applications for sustainable development, ACMAD shall:

- build capacity for cross-sectoral activities for meteorological applications for sustainable social and economic development at the national level;
- develop methodologies and techniques for application at national and sub-regional levels;
- strengthen Africa's participation in global weather and climate programmes;
- provide specialized training to relevant professionals and development practitioners in Africa;
- maintain research facilities, networking capacities and regional data bank and make them available for research programmes in the region;
- produce products that will satisfy requirements of Member States, complement those of national meteorological services and increase their effectiveness and impact.

III- GUIDING PRINCIPLES

The principles guiding the strategy include **relevance to development of Africa, stakeholders driven, advanced science and technology driven, good governance, partnership and cooperation** with special emphasis on implementation of WMO programmes in Africa, **subsidiarity and complementarity** with NMHSs, Regional Centers and other development actors.

IV- CORE VALUES

ACMAD is committed to accountability and stewardship, partnership, inclusiveness, diversity and knowledge management.

Accountability and stewardship

ACMAD is committed to provide care and responsibility for NMHSs and users as well as high accountability for service delivery.

Partnership

ACMAD believes in co-production and co-sharing of products and services with partners.

Inclusiveness and diversity

The face and aspiration of Africa and his diversity are at the core of governance and management of ACMAD. The rich Africa's heritage with women and youth are at the heart of all activities (e.g training, recruitment, workshops and conferences) of ACMAD.

Knowledge management

Informed and evidenced based decision-making processes are fundamental pillars of all the operations of ACMAD.

V- PRIORITIES

From the vision and mission above, the strategy articulates goals and strategic objectives addressing the weaknesses and tapping into opportunities presented in the Strengths, Weaknesses, Opportunities and Threats (SWOT)analysis below.

TABLE1 : SWOT ANALYSIS

STRENGTHS
- ACMAD is the mandated continental meteorological service providers and excellence centre for the applications of meteorology for development advising continental bodies on matters relating to meteorology and its use to improve quality of life;

- Evidence based weather, climate, water and related environmental information are essential for implementation of SDGs and AU agenda 2063;
- ACMAD operates the African RCC according to WMO international standards;
- Continental positioning for climate action and governance;
- 34 years of experience on weather, climate and related environmental services for planning and action;
- ACMAD provides special support to developing countries in Africa;
- knowledgeable highly qualified personnel from all 54 African countries;
- Networking through ACMAD with staff of NMHSs through on the job training and secondment;

WEAKNESSES

- High staff turnover;
- Ambiguous framework at ACMAD and involving UNECA to mainstream meteorology in continental and regional development programmes;
- Limitation in perceived roles at continental, regional and national levels;
- Low capacity of ACMAD to modernize quickly given the rapid advances in the science and technology;
- Limited collaboration with private sector and civil society for value addition;
- Weak mechanisms for collaboration between public and private and academic sectors across disciplines and technical domains involved in meteorology and sustainable socio-economic development;
- Lack of communication and outreach strategy;
- Suboptimal basic observing and data management infrastructure because up to 34 out of 54 African countries are LDC's with very limited capacity to deliver meteorological services;
- Low capacity at ACMAD to source for funds for infrastructure, technology and staff on the meteorological, hydrological and related environmental value chain;
- ACMAD little engagement with non-French speaking African countries;
- Lack of visibility at country level;

- Little integration of ACMAD work with other programmes (SWFDP and vigilance Météo France);
- Lack of continental strategic leadership;
- unsustainable collaborative linkages

OPPORTUNITIES

- Increasing and high relevance of ACMAD product and services for implementation of Sendai, SDGs, Paris agreement, Agenda 2063 and NEPAD;
- ACMAD have access to global data and products through international cooperation spearheaded by the World Meteorological Organization to help enhance continental, regional and national services;
- Growing awareness on impacts of climate change and demand for services from policy, decision makers and practitioners;
- Availability of development partners and funding agencies with resources to operate the Centre;
- Links with Severe Weather Forecasts Demonstration Projects and Regional Training Centres in Africa as well as NMHS and the media;
- Leverage on existing facilities (e.g High Performance Computing) and expertise within the continent;
- Existence of global institutions under WMO and other development players to support Africa on resilience and adaptation to climate change impacts;
- strong partnerships/ cooperation with UN agencies (e.g UNOCHA);
- New technology available and ACMAD well positioned to support service delivery at NMHSs using these technologies

THREATS

- Limited visibility and inadequate core financial support from member states;
- Emergence of alternative sources of information distributed through other media (i.e social media) without consideration of scientific and technological advances in their production;
- Little attention to continental, regional and national requirements in the ongoing processes of global competition on meteorological services;
- Commercial meteorological services competing with and by-passing government meteorological

services;

- Little awareness of member states on value of ACMAD products for the economy and society leading to underutilization of meteorological services for resilience to extreme and adaptation to climate change impacts;
- Lack of recognition of socio-economic value in the service delivery chain.

The strategy will focus on the following key priorities:

- strengthening resilience to disasters in Africa in the context of the Sendai Framework;
- supporting adaptation and mitigation to climate change in line with UNFCCC especially for water, food and energy security;
- enhancing applications and value of meteorological services for climate action and governance to address agenda 2063 (Table).

VI- OUTCOMES AND STRATEGIC OBJECTIVES

The following four outcomes have been identified:

- Scientific support provided to NMHSs for competitive service delivery
- Improved quality of services at regional and national levels
- Data exchange and Research on African weather and climate strengthened
- improved governance and management of ACMAD

Outcome 1: Scientific support provided to NMHSs for competitive service delivery

Investments in technology transfer and knowledge management between Global, regional and National Services, development of training materials, guides and tailored operational procedures, organization of workshops, forums, seminars and conferences are considered.

Objective 1.1 Identify and implement core infrastructure for improved service delivery

In the framework of enhancement of NMHSs capabilities to reducing devastating consequences of hazards, need for core infrastructure is timely given the fact that many African NMHSs operate at basic level and require capacity development. Establishment of favorable legal environment coupled with NMHSs strategic planning and capacity assessment are critical for enhanced services. WMO Global Centres, RTCs and RCCs or RSMCs offer effective partnerships for capacity building of NMHSs. In some instances, services available are not used because of inabilities in the user community to understand services provided. User's training, workshops or forums are essential and will be organized by ACMAD and partners.

Focus areas of intervention

- Development of legal and regulatory environment for NMHSs and Regional Centres for optimal operations
- Improvement of NMHSs in WMO classification
- NMHSs capacity assessment and strategic planning processes including updates

Objective 1.2 Support NMHSs and Users with technology, competencies and capabilities for competitive service delivery

Methods and tools are available in Global and Regional Centers but not sufficiently transferred to NMHS. Strategic skills to exploit and integrate available competencies to achieve optimal outcome is a problem in some NMHSs and Regional Centres which have human resources. Moreover, increased sophistication of user demands, advances in science and technology imply continuous skill and infrastructure enhancements.

Focus areas of intervention

- Development of curricula and training materials
- Capacity building for NMHSs and Regional Centres
- Twinning exercises with Global, Regional Centres and NMHSs
- Capacity building for Users

Outcome 2: Improved quality of services at regional and national levels

Objective 2.1 Support warnings and advisories for preparation and response to disasters and for regulatory requirements

Warning is becoming a necessity with increase in intensity, severity and frequency of extremes. Socio-economic and political cost of disasters are well recognized. Yet, Africa lacks a system for effective delivery and use of warnings. ACMAD is a WMO Regional Climate Centre with capabilities to provide services for Disaster Risk Reduction. This achievement will be sustained and demonstrations carried out to provide Specialized Meteorological products at continental level for Severe Weather supporting RSMCs, providing RSMC products in regions of Africa where RSMCs are not available and guiding NMHSs in Africa on advanced Severe Weather forecasting and Multi-hazards warnings. To facilitate data exchange, ACMAD will work with WMO and partners to become a Data Collection and Production Centre contributing to exchange data and deliver services in Africa using best practices and standard protocols.

Focus areas of intervention

- Development of more effective Regional and national Early Warning and advisory Systems for DRR and Humanitarian actors
- support NMHSs to contribute to Global Multi-hazards Alert System
- Enhancement of reporting protocols by NMHSs

Objective 2.2 Support services for mitigation and adaptation to climate change

The Global Framework for Climate Services to be implemented by ACMAD at continental level is an opportunity to consider to expand regional products portfolio and support NMHSs. Most African countries have limitations to provide climate information needed for adaptation planning and implementation, preparation of national communication and nationally determined contribution to the Paris agreement.

Focus areas of intervention

- Annual state of climate reporting and sustaining WMO RCC operations as part of GFCS/CSIS regional element
- Strengthening participation in GFCS and UNFCCC processes
- Strengthening NMHSs to better contribute to Climate change monitoring, attribution, mitigation and adaptation initiatives at country levels

Objective 2.3 support for new and emerging services

Apart from the Aviation and to a lesser extend the agriculture and water sectors, the value of meteorological services in many other sectors of the African economy is not well known by the users. Even in the Aviation, and agriculture or water sectors, new demands are emerging and challenging. Innovative methods will be considered by ACMAD to accelerate valuation of meteorological services leading to sustainable business models on provision of meteorological services. With urbanization and migration, megacities are emerging in Africa with more demand for clean air, access to energy and water challenged by heat waves, urban floods and other extremes. ACMAD will collaborate with partners to develop and deliver services to support sustainable cities and villages.

Focus areas of intervention

- Provision of services adapted to user needs for sustainability of cities and villages in Africa
- Application of modern technologies (i.e. web, high performance and cloud computing, social media, mobile communication systems) to generate and deliver better services through partnerships
- Upgrade services for water, food and energy security, transport, agriculture, health and disaster management

Outcome 3: Data exchange and Research on African weather and climate strengthened

The observing network in Africa is sub-optimal but technology advances provides new options to increase observations across the continent. ACMAD will support the rehabilitation of current in situ observing network, development of automatic in situ observing networks, rescue and digitization of old records of observations in Africa, the use of satellite and other space based observing systems,

experimentation of Aircraft observations with the AMDAR programme. Data management and processing to provide tailored products for Africa will be enhanced. Research to support climate policy discussions, assess predictability and improve predictions/warnings and develop forecast based financing over Africa.

Objective 3.1 Enable quality basic system infrastructure

Technological advances offer opportunities to improve observations and data exchanges in Africa, However, access to observations in Africa is limited due to telecommunication, internet bandwidth constraints and lack of staff operating observing stations and data rescue including digitization resources. ACMAD will develop capacity to become a WMO Data Collection and Production Centre connected to Global Data Centres and exchanging better products and data with NMHSs. ACMAD will also develop internet, advanced data processing, management systems and web capabilities for NMHSs.

Focus areas of intervention

- Implementation of improved observing networks
- Promotion and integration of additional and third-party observing systems
- Support data rescue, observation processing through seamless GDPFS and management
- Support presence of Regional Centres and NMHSs on WIS, web and other modern media

Objective 3.2 Enhance research for value addition

Contributions from Africa to IPCC and other support to climate negotiations are limited. Performance of operational forecasting and climate projection systems over Africa is not well assessed and documented leading to sub optimal use of available tools and products. Existing research findings useful for operations are not optimally included in updates of training materials, guides, manuals, operational procedures of NMHSs.

ACMAD will assess research findings, undertake predictability studies, transfer relevant research results into operational practices, identify and share with the scientific community the research needs or requirements of the operational community across Africa

Focus areas of intervention

- Promotion of culture for continuous professional development along the meteorological value chain through Meteorological societies
- Enhancement of predictability research in Africa
- Climate related socio-economic impacts research

Outcome 4: improved Governance and Management of ACMAD

ACMAD was created by UNECA and WMO and started operations in 1992. Since the rationalization of institutions by UNECA, identification of a new tutelage body for the Centre has been a challenge. Moreover, alignment of the management system of the centre to standards of international public sector organisations is to be addressed. Decision #3 of the AMCOMET Bureau during its session in September 2017 in Addis Ababa (Ethiopia) acknowledges with appreciation the willingness of UNECA to be part of ACMAD's future governance. ACMAD will pursue efforts with AMCOMET, AUC and UNECA to identify a tutelage mechanism and improve its management system. ACMAD will develop partnerships with development cooperation agencies at global and continental levels to facilitate resource mobilization mechanism.

Objective 4.1 Strengthen the governance and partnerships

UNECA organizes the Conferences of African finance, planning and Economic Development Ministers which is the structure which established ACMAD. The African Ministers in charge of Meteorology Conference has initiated discussions for a tutelage to ACMAD. Effective partnership and advocacy with relevant Ministerial level bodies will be explored to prepare a consensus leading to decisions at the relevant levels at AU and UNECA on the optimal governance structure to ensure that ACMAD more effectively provide continental meteorological services and spearhead applications for sustainable development in Africa. ACMAD will continue developing and expanding partnerships and alliances required. The requirements of investments along the meteorological value chain are huge. Public, Private sector and Civil society as well as academia provide a mix of stakeholders providing opportunities for partnerships to share the costs and give hope for sustainability.

Focus areas of intervention

- Establishment of regulatory requirements
- Performance of stakeholder analysis
- Establishment of inclusive and diversified collaboration mechanisms
- Implementation of decisions, resolutions and recommendations of ACMAD Board, AMCOMET, UNECA, WMO, AU and related organs and collaborating partners

Objective 4.2 Improve management of the organization

ACMAD has experienced high staff turnover, difficulties to attract and motivate skill labor and lack of regular revisions needed on its staff and financial regulations to respect international public sector

organizations standards. ACMAD will develop collaboration with UNECA and other partners to revise its staff and financial regulations taking into account the evolutions on inflation and other relevant socio-economic indicators. Technical assistance from WMO will continue to be essential for planning and implementation of scientific and technical programmes supporting quality management systems for NMHSs

Focus areas of intervention

- Standardization of resources (i.e staff, finance, infrastructure) management systems
- strengthening partnerships and communication
- Development of operational plan, budget and resource mobilization strategy
- Establishment of quality management system with ISO 9001-2015 standards
- Preparation and use of policy and procedure manuals
- Planning, monitoring, control and reporting on Resource's mobilization and utilization

VII- ALIGNMENT WITH AU AGENDA, AMCOMET AND WMO STRATEGIES

ACMAD's continental mission on weather and climate should support implementation of the African Union agenda 2063 through mainstreaming meteorological information and knowledge for effective realization of aspirations in the Agenda. As a centre of excellence in the applications of meteorology for sustainable development, ACMAD's functions include strengthening Africa's participation in global weather and climate programmes. To ensure effective application of meteorology for sustainable development including participation in global programmes, alignment of this strategy with the AMCOMET and WMO strategies is essential.

Table2: ACMAD's strategic objectives and relevance to AU agenda 2063

AU Agenda 2063 Aspirations	AU Agenda 2063/Goals	AU Agenda 2063/ Priority areas	Relevant ACMAD's Strategic Objectives
1) A Prosperous Africa, based on inclusive Growth and Sustainable Development	(1) A High Standard of Living, Quality of Life and Well Being for All Citizens (3) Healthy and well-nourished citizens (4) Transformed economies (5) Modern Agriculture for increased production	* Poverty, Inequality and Hunger *Social security and protection * Modern and Livable habitats and basic quality of life * Sustainable and inclusive growth *Economic diversification and resilience * Agricultural productivity and production	2.1 Support warnings and advisories for preparation and response to disasters 2.2 Services in support of mitigation and adaptation to climate change 2.3 Support for new and emerging services 3.2 Enhance research for value addition
	(2) Well Educated Citizens and Skills revolution underpinned by Science, Technology and Innovation	*Education and Science Technology Innovation skills driven revolution	1.1 Identify and implement core infrastructure for service delivery 1.2 Support NMHSs and Users with technology, competencies and capabilities for competitive service delivery 3.1 Enable quality basic system infrastructure 3.2 Enhance research for value addition

	(7) Environmentally sustainable climate and resilient economies and communities	*Sustainable natural resource management, biodiversity conservation, genetic resources and ecosystem/water security, climate resilience and natural disasters preparedness and prevention	2.1 Support warnings and advisories for preparation and response to disasters and for regulatory requirements 2.2 Services in support of mitigation and adaptation to climate change 2.3 Support for new and emerging services
2) An Integrated Continent Politically united and based on the ideals of Pan Africanism and the vision of African Renaissance	8) United Africa (Federal or Confederate)	Framework and Institutions for a United Africa	4.1 Strengthen the governance and partnerships 4.2 Improve management of ACMAD
3) An Africa of Good Governance, Democracy, Respect for Human Rights, Justice and the Rule of Law	(12) Capable institutions and transformative leadership in place	*Institutions and Leadership *Participatory Development and Local Governance	4.1 Strengthen the governance and partnerships 4.2 Improve management of the organization
4) A Peaceful and Secure Africa	(13) Peace Security and Stability is preserved	*Maintenance and Preservation of Peace and Security	2.3 Support for new and emerging services to address potential climate related insecurity
5) Africa with a Strong Cultural Identity Common Heritage, Values and Ethics	16) African Cultural Renaissance is preeminent	*Values and Ideals of Pan Africanism *Cultural Values and African Renaissance *Cultural Heritage, Creative Arts	4.1 Strengthen the governance and partnerships 4.2 Improve management of the organization

<p>6) An Africa Whose Development is people driven, relying on the potential offered by African People, especially its Women and Youth</p>	<p>(17) Full Gender Equality in All Spheres of Life (18) Engaged and Empowered Youth and Children</p>	<p>*Women and Girls Empowerment *Violence & Discrimination against Women and Girls *Youth, and caring for Children * Youth Empowerment and Children</p>	<p>4.1 Strengthen the governance and partnerships 4.2 Improve management of the organization 1.2 Support NMHSs and Users with technology, competencies and capabilities for competitive service delivery</p>
<p>7) An Africa as a Strong and Influential Global Player and Partner</p>	<p>(19) Africa as a major partner in global affairs and peaceful co-existence</p>	<p>*Africa's place in global affairs. * Partnership</p>	<p>4.1 Strengthen the governance and partnerships 2.1 Support warnings and advisories for preparation and response to disasters and for regulatory requirements 2.2 Services in support of mitigation and adaptation to climate change 2.3 Support for new and emerging services</p>

Table3: ACMAD's strategic objectives and relevance to WMO strategy

WMO Long Term Goals	WMO Strategic Objectives	Relevant ACMAD's Strategic Objectives
1) Better serve societal needs delivering authoritative, fit or purpose information and services	<p>(1) Strengthen Multi hazards Early Warning/alert systems and extend reach for to enable effective response</p> <p>(2) Broaden provision of policy and decision supporting climate services</p> <p>(3) Enhance value and innovate the provision of weather services</p>	<p>2.1 Support warnings and advisories for preparation and response to disasters</p> <p>2.2 Services in support of mitigation and adaptation to climate change</p> <p>2.3 Support for new and emerging services</p> <p>3.2 Enhance research for value addition</p>
2) Enhance Earth System observations and prediction	<p>1) Optimize acquisition of Earth system observations with WIGOS</p> <p>2) improve access to, exchange and management of observations and derived products with WIS</p> <p>3) Enable use of numerical analysis and Earth system prediction products at all space and time scales with Seamless GDPFS</p>	<p>1.2 Support NMHSs and Users with technology, competencies and capabilities for competitive service delivery</p> <p>3.1 Enable quality basic system infrastructure</p>
3) Advance targeted research to improve Earth system understanding and services delivery	<p>1) advance scientific knowledge of the Earth System</p> <p>2) Enhance science for services value chain</p> <p>3) advance policy relevant science</p>	<p>3.1 Enable quality basic system infrastructure</p> <p>3.2 Enhance research for value addition</p>
4) Close capacity gap to enhance service delivery	<p>1) Address the needs of developing countries</p> <p>2) Develop and sustain core competencies and expertise</p> <p>3) Scale up partnerships for investments, infrastructure and service delivery</p>	<p>1.1 Identify and implement core infrastructure for improved service delivery</p> <p>1.2 Support NMHSs and Users with technology, competencies and capabilities for competitive service delivery</p>

		<p>4.1 Strengthen the governance and partnerships</p> <p>4.2 Improve management of the organization</p>
<p>5) Strategic realignment of WMO structure and programmes for effective policy and decision making and implementation</p>	<p>1) Optimize WMO constituent bodies structure for effective decision making</p> <p>2) streamline WMO programmes</p> <p>3) Advance equal, effective and inclusive participation in governance, scientific cooperation and decision making</p>	<p>4.1 Strengthen the governance and partnerships</p> <p>4.2 Improve management of the organization</p>

Table4: ACMAD's strategic objectives and relevance to the AMCOMET strategy

AMCOMET Strategic Pillars	AMCOMET Strategic Areas of Action	Relevant ACMAD's Strategic Objectives
<p>1) Increase political support and Recognition of NMHSs and related WMO Regional Climate Centres</p>	<p>1) Formulate policies and legislation to ensure semi-autonomous and adequately financed NMHSs</p> <p>2) Develop NMHSs strategic plans and service charters in line with countries development agenda</p> <p>3) demonstrate relevance of NMHSs products to policy makers</p> <p>4) support cooperation with Regional Economic Communities and others for production and delivery of weather and climate services</p>	<p>1.1 Identify and implement core infrastructure for improved service delivery</p> <p>4.1 Strengthen the governance and partnerships</p> <p>4.2 Improve management of the organization</p> <p>3.2 Enhance research for value addition</p>
<p>2) Enhance production and delivery of weather and climate services for sustainable development</p>	<p>1) Invest in weather and climate monitoring infrastructure such as weather stations, radars, rain and water gauges</p> <p>2) Collectively engage equipment, accessories and consumable manufacturers to lower cost and improve station sustainability</p>	<p>1.2 Support NMHSs and Users with technology, competencies and capabilities for competitive service delivery</p> <p>2.1 Support warnings and advisories for preparation and response to disasters</p> <p>2.2 Services in support of</p>

	<ol style="list-style-type: none"> 3) Improve telecommunication through WIS 4) Enable capacity development for research, modeling and Prediction 5) improve Service delivery mechanisms including early warning systems, Climate Service Information System and User Interface Platform 6) ensure national and regional funding for NMHSs 7) ensure establishment of sub regional climate monitoring institution for central Africa 8) ensure effective communication of weather and climate information 9) Create national and regional fora 10) engage partners to design numerical weather prediction and satellite derived products 11) Ensure satellite products requirements are channeled through regional WIGOs and WMO space programme in addition to Communication Satellite (RASCOM) 12) Explore feasibility of launching and African Meteorology Space Programme 	<p>mitigation and adaptation to climate change</p> <p>2.3 Support for new and emerging services</p> <p>3.1 Enable quality basic system infrastructure</p>
<p>3) Improve access to Meteorological Services in particular for the Marine and Aviation sector</p>	<ol style="list-style-type: none"> 1) Develop quality management framework leading to ISO certification for sectors and whole NMHSs 2) Ensure that qualifications and competencies of personnel meet international standards 3) Ensure that equipments have calibration certificates with regularly verified readings for compliance 4) Facilitate buoys deployment where necessary and particularly in the Indian Ocean 	<p>1.2 Support NMHSs and Users with technology, competencies and capabilities for competitive service delivery</p> <p>3.1 Enable quality basic system infrastructure</p> <p>3.2 Enhance research for value addition</p> <p>4.2 Improve management of the organization</p>

	5) Facilitate the sustained provision of global and regional coverage of observational data, products and services for requirements of maritime user community for met-ocean information and services	
4) Support provision of weather and climate services for climate change mitigation and adaptation	<p>1) Ensure that at least 5% of NMHSs budget a dedicated to research and development</p> <p>2) Formulate legislation designating NMHSs as leading authority on climate change science-based projections.</p> <p>3) engage the development community</p> <p>4) liaise with policy bodies to craft new African agenda and positions on climate change</p> <p>5) ensure implementation of GFCS at regional level</p> <p>6) Ensure that AMCOMET actively participate in international negotiations such as UNFCCC, UNCBD, UNCCD COPs and IPCC</p>	<p>1.2 Support NMHSs and Users with technology, competencies and capabilities for competitive service delivery</p> <p>2.1 Support warnings and advisories for preparation and response to disasters</p> <p>2.2 Services in support of mitigation and adaptation to climate change</p> <p>4.1 Strengthen the governance and partnerships</p> <p>4.2 Improve management of the organization</p>
5) Strengthen Partnerships with Relevant institutions and Funding Mechanisms	<p>1) Cultivate long term partnerships with traditional funding mechanisms</p> <p>2) remain abreast of bilateral and multilateral funding mechanisms to support developing and least developed countries improvement of meteorological infrastructure and services</p> <p>3) mobilize private sector of agriculture, insurance, transport and tourism who are sustainable customer base for NMHSs</p> <p>3) strengthen partnerships with international scientific and technical partners for NMHSs and RCCs to access scientific and technical information</p>	<p>1.1 Identify and implement core infrastructure for improved service delivery</p> <p>4.1 Strengthen the governance and partnerships</p> <p>4.2 Improve management of the organization</p>

	<p>4) Collaborate with ClimDev Africa and the Monitoring of Environment and security in Africa (MESA) as well as relevant African institutions such as ACPC, ACMAD, RCCs, WMO Centre of excellence on training for complementarities and convergence</p>	
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VIII- TARGET GROUPS

The main target groups include NMHSs, national officials and regional Centres, RECs, AUC, UNECA, NEPAD, regional offices of UN and international organizations, civil society and charity organizations like farmers federations, public and private sector institutions and media.

ACMAD will work with NMHSs, Regional Centres and other national public officials to co-produce information and services, undertake training, transfer tools and methods in support of regulations, policies and actions.

ACMAD will provide weather, climate and related environmental services innovations in support of AUC, NEPAD and other UN bodies agenda in Africa.

ACMAD will engage the private sector (i.e infrastructure design, building and operations, insurance industries, manufacturing, processing and services industries,) in the continent to support entrepreneurship, economy growth and job creation at the interface of climate, environment and development with emphasis on water, food, energy and health security.

ACMAD will provide climate information to civil society (i.e PACJA) and charity organizations for climate governance and advocacy for improved quality of life. ACMAD will work closely with the media to co-generate and communicate information on weather, climate and environment.

IX- FINAL BENEFICIARIES

African population with special emphasis on those with weak resilience and adaptive capacity to high impact weather, climate and environmental events. ACMAD will support the African citizen with clear and comprehensive comparative analysis and regional scale products to meet households needs for food, water, energy, health and leisure.

X- IMPLEMENTATION OF THE STRATEGIC PLAN

The strategy will be implemented with main focus on advocacy and mobilization of countries, sub-regions, partners and resources during the first year, implementation of priorities from the first to the fourth year and assessment of progress towards meeting strategic outcomes during the fourth year.

A midterm evaluation after two years of implementation will be made to advice and guide the second half of the implementation period. Complementarity and subsidiarity will be essential after assessment of countries and sub-regional capacities. Dialogue days, platforms and forums will be organized with users to better define and co-generate services based on identified needs.

XI- RESOURCE AND PARTNERSHIPS MOBILIZATION

It will be centered but not limited to countries contributions and partners support (ClimDev special fund, global climate finance, EU/EDF, USAID and other cooperation for development agencies...), public private partnerships. Countries will be supported to adapt NMHSs strategies and programmes to countries development strategy papers, Nationally Determined Contributions (NDCs) to the Paris Agreement and regional/countries adaptation plans to mobilize public and private financing. Technical, scientific and financial cooperation with partners will be enhanced to exchange experiences and best practices on the priorities mentioned above.



XII- MONITORING THE STRATEGIC PLAN

Implementation of the strategic objectives will be monitored using indicators in the table below

Strategic objective	Objectively Verifiable indicators	Means of verification	Assumptions (Risks)
1.1 Identify and implement core infrastructure for service delivery	<p>NMHSs and Regional Centres supported to develop legal and regulatory environment for optimal operations</p> <p>countries with NMHSs supported to upgrade to higher categories in the WMO categorization scale.</p> <p>NMHSs capacity assessment reports and strategic plans available</p>	<p>1.1.1 Number of frameworks</p> <p>1.1.2 Number of NMHSs upgraded</p> <p>1.1.3 Number of countries supported</p>	<p>Supportive political environment</p> <p>Conducive governance of NMHSs</p> <p>Adequate capacity by NMHSs</p>



Strategic objective	Objectively Verifiable indicators	Means of verification	Assumptions (Risks)
1.2 Support NMHSs, Regional Centres and Users with technology, competencies and capabilities for competitive service delivery	<p>curricula and training materials development supported in countries and regions</p> <p>NMHSs and Regional Centres staff trained</p> <p>countries with NMHSs supported to be involved in twinning exercises involving Global Centres, ACMAD, RCCs, RSMCs</p> <p>User organizations trained</p>	<p>1.2.1 Number of countries with curricula and training materials</p> <p>1.2.2 Number NMHSs and Regional Centres with staff trained</p> <p>1.2.3 Number of NMHSs and Regional Centres with twinning exercises</p> <p>1.2.4 Number of User organization</p>	<p>Adequate capacity by NMHSs</p> <p>Adequate capacity by NMHSs</p> <p>Adequate capacity by NMHSs</p> <p>Adequate capacity by NMHSs</p>
2.1 Support warnings and advisories for preparation and	Countries/regions helped in	2..1.1 Number of countries/regions with	Cooperation from Disaster



Strategic objective	Objectively Verifiable indicators	Means of verification	Assumptions (Risks)
response to disasters and for regulatory requirements	<p>planning and implementation of Disaster management strategies and contingency plans</p> <p>NMHSs facilitated publishing warnings,</p> <p>NMHSs supported to provide advisories and reports including high impact weather and climate events and related socio-economic impacts</p> <p>countries with NMHSs providing services to humanitarian communities</p> <p>regional humanitarian and disaster management structures using Regional centres products and services</p>	<p>disaster strategies, contingency plans, warnings and advisories</p> <p>2..1.2 Number of countries</p> <p>2.13 Number of regional bodies</p> <p>2.1.4: Number of RSMCs for Severe weather</p>	<p>Risk Management sector</p> <p>Cooperation from Humanitarian sector</p> <p>Supportive regional humanitarian and DRM institutional frameworks</p>



Strategic objective	Objectively Verifiable indicators	Means of verification	Assumptions (Risks)
	RSMCs for severe in Africa		Supportive governance by NMHSs
2.2 Services in support of mitigation and adaptation to climate change	<p>Countries/Regions with regular annual state of climate reports published</p> <p>WMO designated RCCs in Africa sustained and more involved in UNFCCC processes</p> <p>NMHSs supported for active Climate Service Information</p>	<p>2.2.1 Number of countries/regions</p> <p>2.2.2 Number of RCCs</p> <p>2.2.3 Number of NMHSs providing climate</p>	<p>Supportive Governance of NMHSs</p> <p>Supportive Governance at regional level</p>



Strategic objective	Objectively Verifiable indicators	Means of verification	Assumptions (Risks)
	<p>System of the GFCS</p> <p>countries with NMHSs capacitated to participate to UNFCCC COPs and active in NAPs and NDCs development and implementation</p> <p>Regional projects providing climate services for adaptation and resilience identified</p>	<p>information services, attending CoPs and supporting NAPs and NDCs</p> <p>2.2.4 Number and value of projects</p>	<p>Supportive collaboration with Implementing entities</p>
2.3 Support for new and emerging services	NMHSs/RCCs supported to be active on social media with products and services	2.3.1 Number of MHNSs/RCCs active on social media	Conducive social media infrastructure
	NMHSs and regional centres supported to provide new services available	2.3.2 Number NMHSs/RCCs with new products and services	Innovative NMHSs and Regional Centres



Strategic objective	Objectively Verifiable indicators	Means of verification	Assumptions (Risks)
3.1 Enable quality basic system infrastructure	Countries NMHSs with observing stations rehabilitation plans identified	3.1.1 Number of NMHSs supported	Supportive governance environment
	NMHSs/RCCs with advanced observing and data collection systems	3.1.2 Number of NMHSs and regional centres supported with automatic stations, reception stations for polar orbiting satellites and Third generation of geostationary meteorological satellites	Supportive governance environment
	NMHSs supported for data collection and management	3.1.3 Number of NMHSs with operational data management systems and WIS capability	Supportive governance environment
	NMHSs supported for data rescue	3.1.4 Number of NMHSs supported for data rescue	Supportive governance environment
3.2 Enhance research for value addition	Operational research projects and consortium available research and development projects and consortia involving	3.2.1 Number and value of projects and consortia	Cooperation among consortium members
		3.2.2 Number NMHSs and Regional centres	



Strategic objective	Objectively Verifiable indicators	Means of verification	Assumptions (Risks)
	<p>ACMAD proposed</p> <p>NMHSs and Regional Centres verifying and assessing performance of global outputs and their products over their country or regions identified</p> <p>UNECA, AUC and other international bodies reports on the economic status of Africa including socio economic impacts of weather and climate events identified</p>	<p>undertaken predictability studies</p> <p>3.2.3 Number of NMHSs and Regional Centers supported to contribute to socio economic benefit assessment of meteorological services</p> <p>3.2.4 Number of reports</p>	<p>Supportive collaboration and partnerships</p>



Strategic objective	Objectively Verifiable indicators	Means of verification	Assumptions (Risks)
4.1 Strengthen the governance and partnerships	Compliance with the regulatory requirement demonstrated	4.1.1 All regulatory requirements by ACMAD Board, AMCOMET, SACOM UNECA and AU relevant organs recommendations, decisions or resolutions implemented	Capacity at ACMAD for implementation
	Designed Frameworks and implementation action points	4.1.2 number of frameworks	Supportive cooperation from AUC and UNECA
	NMHSs collaboration with private sector and academia established and/or implemented	4.1.3 number of arrangements for collaboration	Supportive cooperation environment



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Strategic objective	Objectively Verifiable indicators	Means of verification	Assumptions (Risks)
	MoUs or collaboration arrangements signed or implemented	4.1.4 Number of MoUs or collaboration arrangements	Supportive cooperation among stakeholders
	projects with partners and collaborators	4.1.5 Number and value of projects	
4.2. Improve management of the organization	Policy, regulations and procedure manuals updated and used	4.2.1 Policy and procedures available	Sufficient resources for implementation
	Plan for improved resources utilization	4.2.2 Annual plan	



Strategic objective	Objectively Verifiable indicators	Means of verification	Assumptions (Risks)
	Resource's utilization monitored and controlled	4.2.3 Performance contracts with staff 4.2. 4 Upgrades in financial and human resources management systems 4.2.5 Report on human resources strategy review 4.2.6 Report on operational status of infrastructure 4.2.7 Number and quality of Applications submitted and staff recruited 4.2.8 Number of Technical and financial Audits 4.2.9 Number of Continental policy impact audits	Supportive governance mechanism
	Resources (staff, funds, infrastructure) mobilized	4.2.10 Number of staff to be recruited 4.2.11 Amount of funds to be mobilized 4.2.12 Type and Value of infrastructure to be constructed	



XIII- REFERENCES

Inputs to this strategy were sourced from a variety of documents some of which are presented below.

- 1- African Ministerial Conference on Meteorology (AMCOMET) Strategy
- 2- World Meteorological Organization (WMO) strategic plan
- 3- African Union (AU) Agenda 2063
- 4- United Nations (UN) Sustainable Development Goals (SDGs)