



World Meteorological Organization

Weather • Climate • Water

Global Situation of West Africa: Challenges & Opportunities

Outline of Presentation

- **Introduction to West Africa**
- **Ongoing Initiatives**
- **Highlight of Extreme Weather Events**
- **Challenges**
- **Opportunities**
- **Conclusion/Recommendations**



Introduction to West Africa

- **Development Status: 12 LDCs, 4 DCs; 2 SIDS; 3 LLDCs**
- **Countries emerging from political instability: (Cote d'Ivoire, Guinea Bissau, Liberia, Sierra Leone, etc..)**
- **Countries facing terrorism (Nigeria, Niger, Mali, Burkina Faso, Cote d'Ivoire)**
- **Countries emerging from Ebola epidemic (Guinea, Liberia, Sierra Leone)**
- **Regional organizations of interest: ACMAD (16), ECOWAS (15), CILSS (12), ASECNA (9), NBA (7), VBA (6), MRU (4), OMVG (4), OMVS (4), LCBC (2),**



Ongoing Initiatives

- AFRIMET support for MarineMet, MetAgri, EmerMet, Healthmet, Sand and Dust Forecasting to NMHSs in West Africa;
- ECOWAS Meteorology Programme and its Implementation and Resource Mobilization Plan in final stages, awaiting adoption by Ministers in August 2016;
- Training workshop on the preparation of National Strategic Plans (NSPs) for NMHSs in November 2015 in Cotonou, Benin and Nairobi, Kenya. The workshops highlighted the need for NSPs to align with the **United Nations Sustainable Development Goals (SDGs)**, **Sendai Framework for Disaster Risk Reduction**, **Istanbul Programme of Action for LDCs**, UNFCCC COP21 Paris Agreement, **WMO Strategic Plan 2016-2019**, **AMCOMET Integrated African Strategy for Meteorology**, **AU Agenda 2063**, Natl Devt Plans, etc.;



Ongoing Initiatives

- **Consultations with CILSS/AGRHYMET Centre to host the Regional Climate Centre for West Africa. Progress made on technical capabilities. Discussions taking place with CILSS on the future governance structure of RCC-to-be;**
- **Consultations on ways to strengthen ACMAD (governance structure; human, financial, material resources) to enable it function effectively as RCC-Africa;**
- **GEF LDCF funded projects to Strengthen Climate Early Warning Systems in Benin (US\$4.51M), Burkina Faso (US\$4.51M), Gambia (US\$8.91M), Liberia (US\$7.513M), Sierra Leone (US\$4.51M), etc;**



Ongoing Initiatives

- **Monitoring of the Environment for Security in Africa (MESA) project 2013-2017, with following themes:**
 - Coastal and Marine Resources Management, CILSS/ECOWAS Region,
 - Water Management for Cropland and Rangeland, CILSS/ECOWAS Region,
 - Climate Services, Africa-wide.;
- **Climate for Development in Africa (ClimDev-Africa) Programme, initiative of AUC, UNECA, AfDB & Partners to cater for Africa's response to climate change (www.climdev-Africa.org);**
- **E-SIAC course with Reading University supported by WMO;**
- **WMO supported data rescue activities in Burkina Faso, Mali, Niger, Guinea, Senegal, Ghana;**
- **Training Workshop on Severe Weather Forecasting in Dakar, Senegal**
- **Establishment of GFCS Regional Office in Dakar, Senegal.**

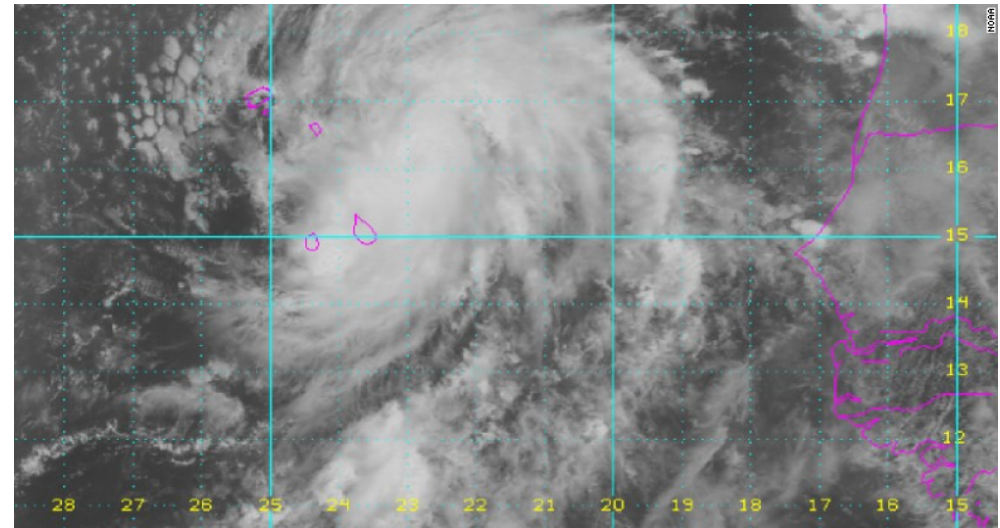


Highlight of Recent Extreme Weather Events

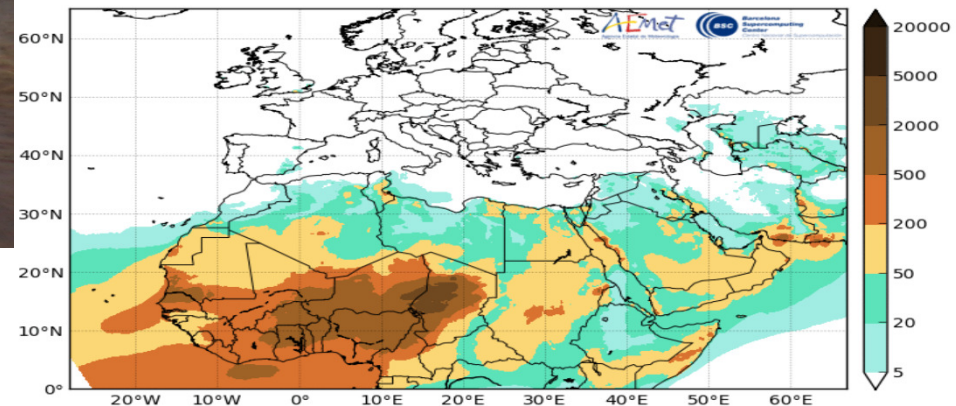
- Cabo Verde hurricane (category 2 - 135 km/h)
- Flooding in Niger, Mali, Sierra Leone, Liberia, Gambia, Nigeria,....



- Exceptionally dusty 2016 Harmattan season in West Africa



Hurricane Fred swirling off the coast of Senegal on 31/08/2015



Dust Concentration ($\mu\text{g}/\text{m}^3$) 8 to 14, February 2016

(Source WMO SDS-WAS: BSC-DREAM8b)

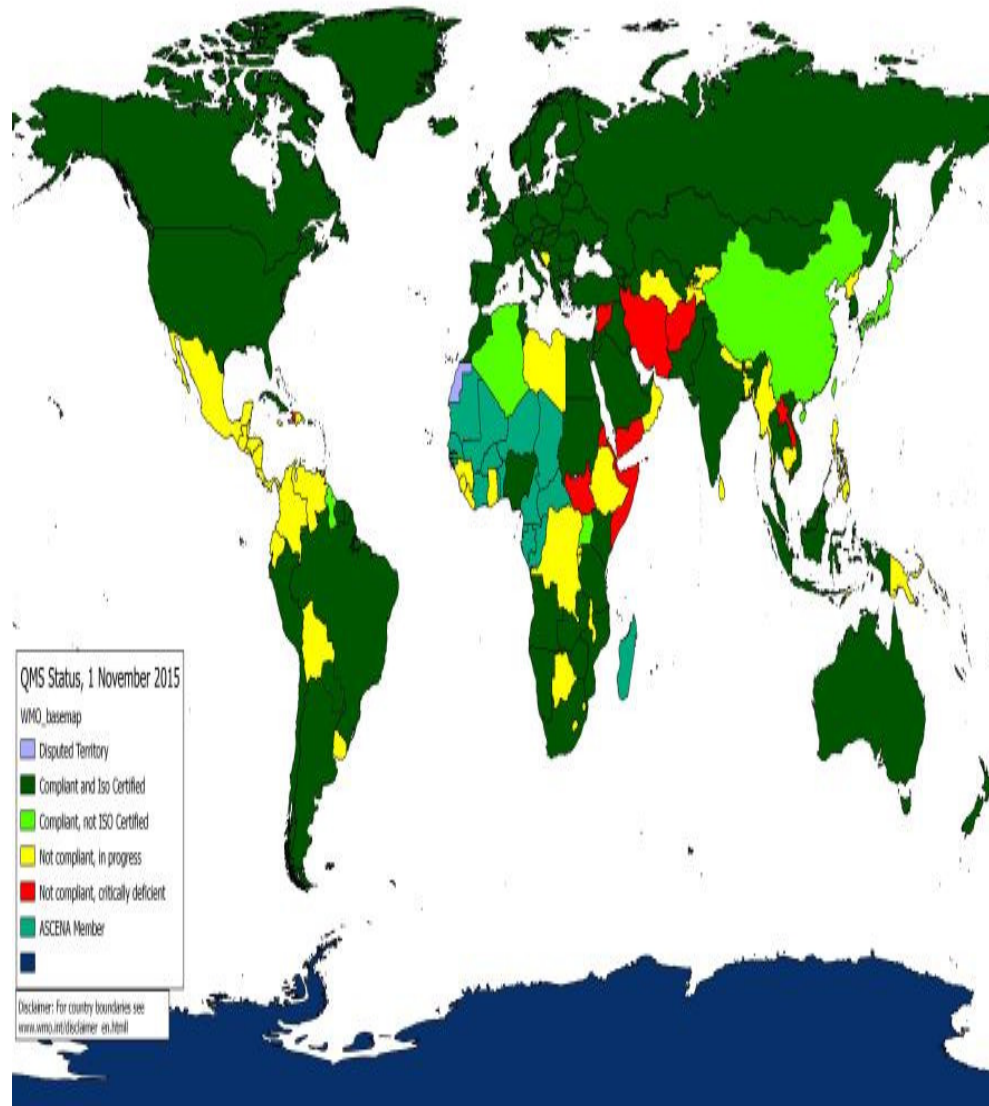


Challenges

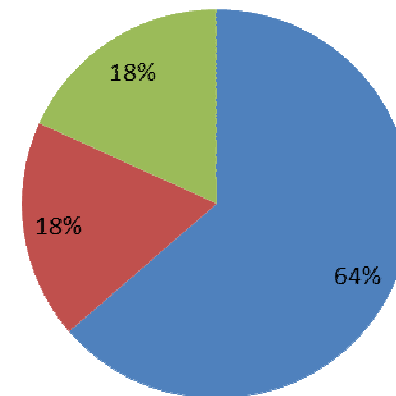
- **Absence of key requirements for modern meteorological operations: PUMA system not operational in Cabo Verde; absence of radar network in most countries; low density of network of observing stations; inadequate communication and preservation of observed data;**
- **Inadequate capacity for detection and forecasting of severe weather; Inadequate communication of forecast information to users;**
- **Delayed implementation of QMS in Ebola affected countries;**
- **Low skills & resources to benefit from emerging opportunities, e.g., aligning NMHSs SPs with global, regional and national development agenda;**
- **Inadequate partnerships with UNFCCC/GEF Focal Points at national level to access climate change funds;**



QMS Implementation



WIS Implementation RA I



- Not started
- Successful Implementation
- WIS Implementation Plan in place

Challenges.....

- **Low responses to questionnaires e.g., designation of Focal Points for WMO Programmes, AMCOMET issues, WIS, etc.;**
- **Low implementation of WMO flagship programmes GFCS, WIS, WIGOS, etc.;**
- **Search for relevance to national policies & stakeholders (e.g., actionable forecasts, mechanism for interaction with users, etc.)**
- **Low skills in Management (e-learning course on Management of NMHSs in English);**
- **Low payment of annual assessed contributions to WMO;**
- **Very low support for ACMAD (non-ratification of constitution & non-payment of contributions);**
- **Multiple “baskets” for national contributions to weather and climate services’ institutions/organizations (WMO, AMCOMET, ACMAD, etc.).**



Opportunities

- **Establishment of African Ministerial Conference on Meteorology (AMCOMET);**
- **New global development agenda (SDGs) with WMO commitment to assist NMHSs contribute to its attainment;**
- **High level ownership of regional meteorology programme by ECOWAS Commission and Ministers in ECOWAS Member States;**
- **Accreditation of WMO as Implementing Agency of Green Climate Fund;**
- **Growing Inter-regional collaboration (e.g., NiMet providing daily weather forecasts to Sierra Leone and Liberia);**
- **Inclusion of PRs in Presidential Advisory Committee on Climate Change in some countries;**
- **WMO compliant Regional Training Centres (AGRHYMET, EAMAC, NiMet);**



Opportunities.....

- Implementation of GFCS, WIGOS will strengthen partnership at national level, including for resource mobilization for more relevant weather and climate services;
- WMO-NCWA shared Concept Note titled “*Managing climate risks and resources for protection and development: Building Capacity for Multi-hazard Early Warning System and Risk Management*” with relevant PRs to use to tap funds from GEF;
- West Africa Science Service Centre on Climate Change and Adapted Land Use (www.wascal.org) funded by Federal Ministry of Education & Research-Germany, focus on strengthening research infrastructure & capacity related to climate change (active in 10 WA countries);
- Signing of MOU between World Bank Group and WMO on strengthening hydrometeorological services at regional and national level.



Conclusion/Recommendations

- Low status of economic development coupled with various shocks result in stiff competition for Government funds for NMHSs;
- Several ongoing initiatives and opportunities with direct benefits to NMHSs and good practices for others to emulate;
- AFRIMET supported interventions are success stories within the region and should serve to drum up more support for NMHSs;
- Need to implement WMO flagship programmes such as GFCS and WIGOS, to strengthen partnership with other sectors and thus promote relevance in the delivery of weather and climate services;
- Need to sustain regional institutions (WMO, AMCOMET, ACMAD, etc.);
- WMO field offices in Abuja and Nairobi are available to provide close support to NMHSs.





**World
Meteorological
Organization**

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Thank you for your attention

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