



EAC AEO REGIME

WORKSHOP ON WMO HIGHWAY PROJECT
1st March 2018, Nairobi

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East Africa Community Secretariat

• E A C R E G I O N

Comprises 6 Partners States: Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda



- EAC is an inter-Governmental organization
- Treaty for establishment of EAC signed 1999
- Set out bold vision for eventual unification
- **Vision**
 - ✓ to have a prosperous, competitive, secure and politically united East Africa
- **Mission**
 - ✓ to widen and deepen economic, political, social and cultural integration in order to improve the quality of life of the people of East Africa through increased competitiveness, value added production, trade and investment



THE ORGANS OF THE COMMUNITY

- Summit of Heads of State
- The Council of Ministers/Sectoral Councils
- Coordination Committee
- Sectoral Committees
- The Secretariat
- The East African Court of Justice
- The East African Legislative Assembly



INSTITUTIONS OF THE COMMUNITY

- The Inter-University Council of East Africa
- The East African Development Bank
- The Lake Victoria Fisheries organization
- [The Lake Victoria Basin Commission](#)
- East Africa Kiswahili Commission
- East Africa Science and Technology Commission
- East Africa Health Research Commission
- East Africa Civil Aviation Safety and Security Oversight Agency (CASSOA)

METEOROLOGY SECTOR AT EAC

- Meteorology sector in EAC is established under Article 100 of the Treaty
- It is overseen by a Committee known as the Committee of the Heads of Meteorological Services
- Committee reports to the Sectoral Council of Ministers responsible for Transport, Communications and Meteorology(TCM)
- There are Meteorological Task Forces and working groups that are established by the Directors of Meteorological Services
- Meteorological Activities are Coordinated by a Meteorologist at EAC Secretariat
- Implementation of projects and programmes are guided by the Five Year Meteorological Development Plan and Investment Strategy(2013- 2018)

EAC LEGAL FRAMEWORK FOR METEOROLOGY

- EAC Treaty: Article 100
- EAC Meteorological Data Policy
- EAC Protocol on Cooperation of Meteorological Services



EAC METEOROLOGICAL DATA POLICY

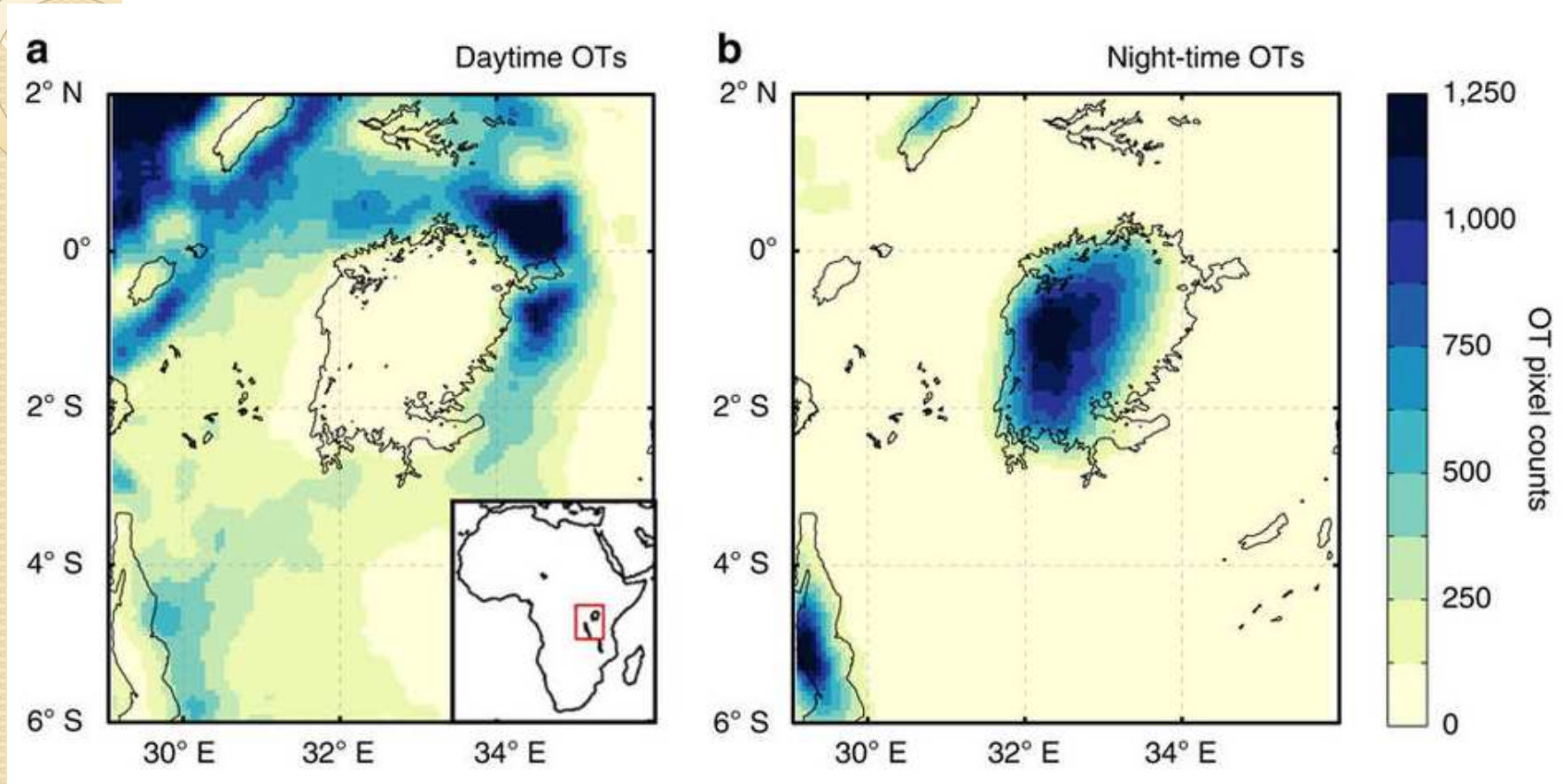
- Signed by the Ministers Responsible for Meteorology in 2013
- The main objective is to harmonize and to put in place measures to ensure availability of high quality meteorological and hydrological data required for a wide range of applications for protection of life and property and enhancing socio-economic development.



Provisions in the EAC Met Data Policy (Observations)

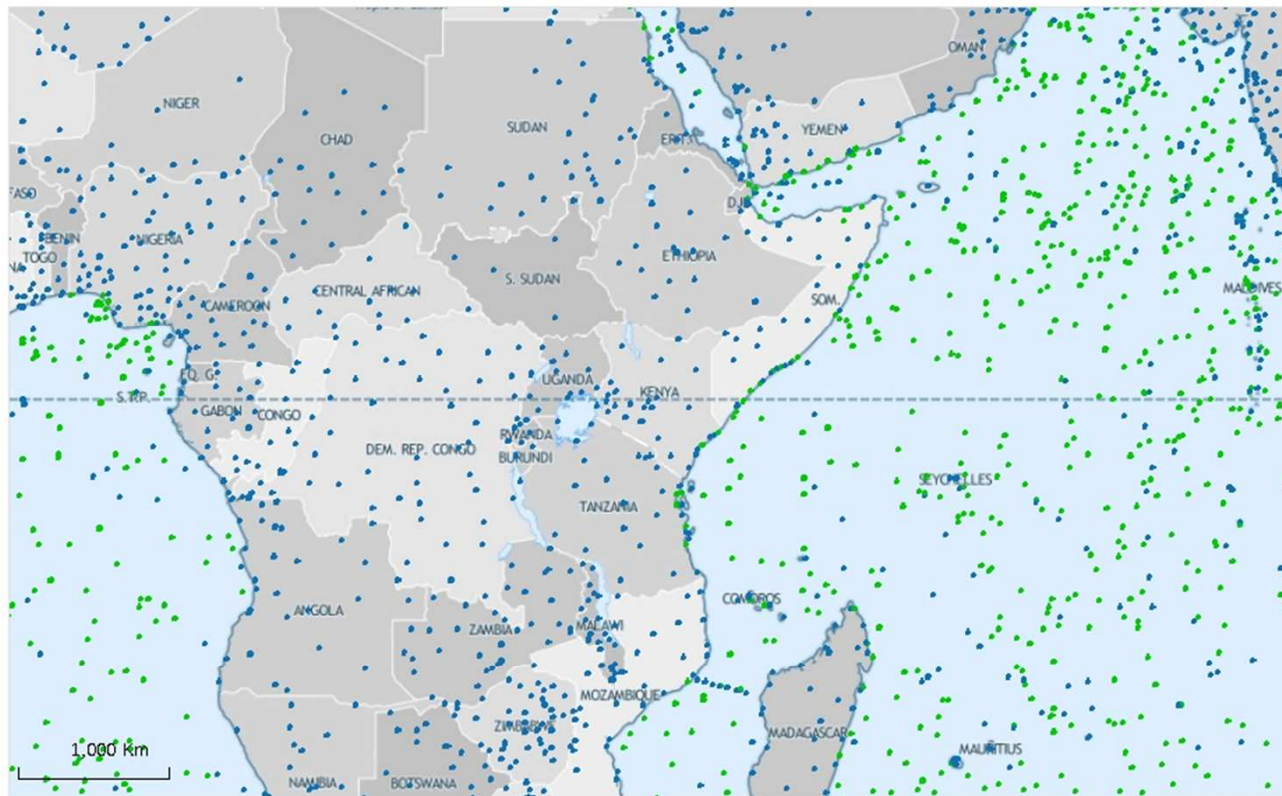
- Establish optimum number of observing stations in accordance with WMO recommendations;
- Promote adherence to WMO recommended procedures in setting up and management of weather observing platforms;
- Conform to the established standards for siting and setting up of Automatic Weather Stations including Airport Weather Observing Systems (AWOS), Seismic, Buoys and Tidal gauges;
- Other organizations and voluntary observers shall consult NMHSs when siting and setting up of weather observing stations for guidance;
- Support continuous training and motivation of observers and instrument technicians in order for them to acknowledge value attached to the data they observe;
- Seek for budgetary provisions to support establishment, maintenance, regular inspection and management of weather observing stations;
- Support calibration of meteorological instruments and equipments;
- **Mutual procurement in bulk of meteorological instruments through EAC Secretariat on behalf of Partner States for standardization purposes and to enjoy the economies of scale;**
- Recruit voluntary observers;
- Support implementation of the WMO Integrated Global Observing Systems (WIGOS), which is a coordinated, comprehensive and sustainable system, to address observation requirements of all WMO programs and Partners including those of Global Earth Observation System of systems (GEOSS) .

Lake Victoria Thunderstorms



Satellite-based overshooting tops (OT) detections during 2005–2013 over the Lake Victoria region (Thiery et al, Nature Communication 2016)

Station Network Coverage



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Home Affairs FDHA
Federal Office of Meteorology and Climatology MeteoSwiss

air
land or ocean surface
sub-surface
lake or river





WMO contribution to HighWay

- **Severe Weather Forecast Demonstration Project**, providing a cascade of weather and warning information from Global to Regional to National
- **WMO Integrated Global Observing System**, ensuring the development of an efficient regional observational network and its global availability
- **Public Weather Service**, supporting the development of last mile communication
- **Regional Office**, liaison with regional office and political layer

Meteorological Services are becoming Critical (Uganda)

Meteorological and Weather Authority becoming critical

Karoli Ssemogerere > Talking Point

The new National Meteorological and Weather Authority (NMWA) is quickly becoming an important agency in adapting to climate change, fighting hunger and securing the future of farming and livestock rearing communities.

After a particularly dry spell in which temperatures hit record highs, and plant and animal life began to wilt and waste re-echoing the linguistic accuracy of *Mukulansanja* (February), the rains opened up soon after February 15, the official start of the 2018 rainy season.

Rains are expected in most parts of the country before they quit the country in June 2018. That is just about 90 days of coverage in most of the country before another long spell kicks in; the Baganda of central region described the perilous summer heat as *Ssebo Aseka* (June) (Grandpa is laughing, meaning he has died of heatstroke), *Kasambula* (July) (the cereal grain stalks have dried) and *Muwakanya* (August) (*Muwakanya* - to describe doubt if it will rain again). It's possible that *Mutunda* (September) referred to the time folks went to trade in the market.

What NMWA has accomplished in a short period is distinguishing between daily, monthly and quarterly patterns. The daily weather statistics are useful for everyday life and planning, but quarterly patterns are crucial for investment, allocation of labour and cash-flows. When should farmers access an activity? It should be at the end of the year (September) when they are in the market not in February when they should be racing to

“The big challenge. Shorter rains are posing challenges in the rural areas. For subsistence farmers, very few families can grow enough food to last the whole year as the shorter rains at the end of the year can barely produce one crop.”

fight the toxic weeds and preparing to seed the ground with annual or perennial crops. The proverbial weather has created a subject citizens can talk about without causing the government any headache. I can count many friends of mine in the farming world with whom we don't see eye to eye on many issues except the weather.

In a particularly hot stretch, one of my friends was worried about the deteriorating look of his banana plantation in Wakiso. A veteran features writer Kalungi Kabuye posted on social media his weather clock reporting 35C at Mulago roundabout, temperatures more commonly associated with Gulu where the mercury hit nearly 40C.

NMWA's March-April-May (MAM) report has been eagerly awaited, and this time, the weather team nailed it. The rain shadow picked up slowly in Kigezi where it began raining earlier. By the time early release editions distributed by the Office of the Prime Minister became public this week, rains were raging in most parts of the country.

Shorter rains are posing challenges in the rural areas. For subsistence farmers, very few families can grow enough food to last the whole year as the shorter rains at the end of the year can barely produce one crop.

Most of the hard-to-reach areas need basic storage facilities (*ebyagi*) to store grains in the wet months when rural roads become impassable. UNRA and the district local governments are not up to the task of keeping all weather roads passable. The intensity of the rains coupled with deforestation hurts areas with clay loams the most where roads simply disappear. Some of the more elaborate barns are in Lango where the barn is raised off the ground.

The wet seasons carries challenges for cash crops like coffee and cotton. It is a time of great promise on many *shambas*. Both of these crops require rain to mature.

Cotton lint gets destroyed by rain. Coffee berries need a combination of rain and sunshine to mature quickly and ripen. So a lot of off-season stock starts making its way to the markets in April, when drying and the road network is a major challenge.

For now, print a copy, display a copy at the Gombolola, read and understand the weather report.

Mr Ssemogerere is an Attorney-at-Law

Headline News (Kenya)





Need for Development Partners to Support NMHSs

- Benefits of using Meteorological Data for design of infrastructure (roads, Airports, Railway among others)
- Weather information to support Health sector
- Weather information to support Food production



EAC Expectations

- Capacity building on Numerical weather Prediction (NWP)
- Installation of cluster computing platform for the NWP Forecasting model (EACS has the expertise and installed some NWP Computing equipment in Partner States)
- Enhanced collaboration and inter-institutional information exchange including application-focused modelling and interdisciplinary research;
- WMO through the HIGHWAY project to support the SWFDP by providing video conference software (CISCO Jabber)
- Data sharing framework for the utilization of new AMDAR data to be acquired through Kenya Airways.



EAC Secretariat to facilitate

Harmonization of

- 1) lake zones
- 2) colour-coded alerts
- 3) thresholds

Thank you

