



# COMMERCIALISING WEATHER AND CLIMATE SERVICES:

## THE CASE OF UGANDA

BY

**MICHAEL S.Z. NKALUBO**

**Commissioner for Meteorology/PR of Uganda  
with WMO**

**Uganda National Meteorological Authority**

# Presentation Outline

- Background and mandate of UNMA
- Pre-requisite for fully functioning NMHSs
- Funding
- Commercialization efforts of Met. Services in Uganda
- Challenges
- Potential Clientele
- Conclusion
- Summary

# BACKGROUND

- Started as part of a small colonial service for East Africa way back in 1929, called the British East African Meteorological Service (BEAMS), to provide meteorological and climatological services to various sectors of the economy.
- The focus was mainly on Aviation and later for Agrometeorological research at Namulonge and other research centres.
- It became the Uganda Department of Meteorology by decree in 1977 from the previous East African Meteorological Department (EAMD) after the collapse of the East African Community (EAC).

# Divestiture of the Department

- The Department was seriously affected by political instability 1977 – 1986
- 1987 – 1993 the Department was not Government priority
- In 1995 DoM was earmarked for divestiture.
- The process was challenging but supported by:
  - EAC Ministerial council decision 1997 to agentise all MET Services in the region
  - The good will of Uganda Cabinet and Parliament
  - Commitment within the sector .

---

---

**S T A T U T O R Y   I N S T R U M E N T S**

**2014 No. 1.**

**The Uganda National Meteorological Authority Act  
(Commencement) Instrument, 2014.**

*(Under section 1 of the Uganda National Meteorological Authority Act, 2012,  
Act No. 4 of 2012)*

IN EXERCISE of the powers conferred on the Minister by section 1 of the Uganda National Meteorological Authority Act, 2012, this Instrument is made this 23rd day of January, 2014.

**1. Title.**

This Instrument may be cited as the Uganda National Meteorological Authority Act (Commencement) Instrument, 2014.

**2. Appointment of commencement date for Act No. 4 of 2012.**

The 24th day of January, 2014 is appointed as the date on which the Uganda National Meteorological Authority Act, 2012 shall come into force.

**BETTY BIGOMBE**  
*Minister of State for Water,  
Holding portfolio for the Minister of Water and Environment.*

# UNMA Mandate

- To monitor weather and climate as well as provide weather forecasts and advisories to Government and other stakeholders for use in sustainable development of the country

# JUSTIFICATION

- **The need to implement the EAC Ministerial Council directive to transform meteorological services in the EAC into Semi-autonomous government institutions.**
- **Persistent inadequate operational funding thus leading to limited ability to respond effectively to the challenge of climate change;**
- **Reduced weather monitoring capability due to progressive deterioration of the observation networks and its influence on sustainable development, climate change research and aviation safety;**
- **The need to respond to the growing demand of the private sector for weather and climate information.**
- **The need for a legal Instrument to designate UNMA as the official provider of meteorological information, advice and data to ensure quality and professional services.**
- **Prime goal: Provision of efficient meteorological services to safeguard life and property**

# Pre-requisites for the full functionality of NMHSs

- Good Observational Network (for Surface and Upper-Air Data Collection);
- Efficient Telecommunications System (for rapid exchange of data and products)
- Data Processing Facilities for product generation and data archival
- Trained Human Resource
- An Effective Dissemination system



# Critical Success Factors for an autonomous Agency

- **Excellence in Service Delivery of Core Service and additional commercial services;**
- **Successful aviation cost recovery;**
- **Effective partnerships;**
- **Growing commercial revenues;**
- **Culture of customer focus and innovation;**
- **International recognition;**

# Funding

- Meteorological services are funded by government of Uganda through MWE sector budget.
- The recurrent budget is supplemented by capital support through the “Meteorological Support to Plan for Modernization of Agriculture (PMA) Project.
- Other funds include bilateral support, especially through the WMO-Voluntary Corporation Programme (WMO-VCP), GEF-UNDP, USAID, GiZ, WFP among others.

# Commercialization efforts of Met. Services in Uganda

- Monthly cost-recovery from Civil Aviation Authority since 1998
- Revenue sharing from commercial advertisements on TV and radio public weather forecasts
- Revenue sharing with Mobile telecom companies from weather forecast requests for specific towns.
- Cost recovery for client specific meteorological data requests

# Challenges

- Cost recovery revenues are still collected through the consolidated fund – **limiting plough-back of these funds**
- Most users of weather and climate information are reluctant to pay the full cost. This information is viewed as public good.
- Sometimes specific requests may not be handled due to limited monitoring coverage.
- Misuse of meteorological information due to inadequate understanding and appreciation of the scientific nature of the data.
- Some potential users are not fully aware of the relevance of Meteorological Information to their operations

# Current and Potential Sectors/Institutions served by Meteorological services

- Agriculture & Animal Husbandry
- Transport
- Water resources management
- Trade
- Energy sector
- Health sector
- Tourism sector
- Construction Industry
- National Environment Management Authority

# Current and Potential Sectors/Institutions served by Meteorological services (Cont.)

- Civil Aviation (International Flights)
- Civil Aviation (Local Flights)
- Mercy flights & Rescue Missions
- Police Air Wing
- Police Force
- UPDAF Air Force
- Media
- Marine Industry

# Current and Potential Sectors/Institutions served by Meteorological services (Cont.)

- National Forestry Authority
- Uganda Bureau of Statistics
- Oil Exploration and Extraction
- Hydro power sector
- Commercial farmers
- Consultancy Firms
- Legal and Insurance
- Climate Proofing
- Academia & Research

# Current and Potential Sectors/Institutions served by Meteorological services (Cont.)

- Beverages
- Bank of Uganda and other Banks
- NGOs and CBOs
- Clean Development Mechanism
- Disaster Preparedness and Management
- Public Weather Services
- Finance and Planning
- Telecommunications
- Education



# Conclusions

- The human and economic losses, and environmental damage due to extreme climate events is enormous and is on the increase due to climate change.
- Planning without factoring weather and climate information is a futile exercise as Uganda has persistently witnessed.
- Weather and Climate information is a public good but attracts cost recovery only if it is used for commercial purposes.

# Conclusions Contd.

- Partnerships in data observations and collection, and acquisition of equipment can reduce the cost of providing meteorological services
- Effective disaster early warning systems and efficient disaster preparedness schemes are only possible with weather and climate information.

# Summary

- **Innovative manner- reduce redtape, allow NMS to respond to user needs (Service Delivery); modernize an NMS and increase financial resources for NMS**
- **Detailed planning- Transformation, Agentization and Commercialization;**
- **Critical: Support by Government/ Ministry**
- **Essential: Stakeholder engagements**
- **Lengthy legal process;**
- **Awareness of hidden costs, inventory of assets and adequate budgeting;**

## **The UNMA Mission**

To provide quality, customer-focused, cost-effective and timely weather and climate information to all users.

***END***

***Thank you for your attention***