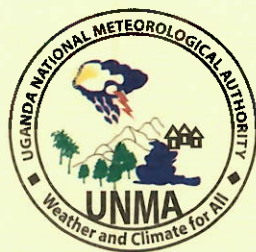


Head Office:
Plot 21/28,
Port Bell Road - Luzira.
Email: info@unma.go.ug
Email: exdir@unma.go.ug



Tel: +256 414 251 798
Fax: +256 414 251 797
P.O.Box 7025,
Kampala- Uganda.
Website: www.unma.go.ug

UGANDA NATIONAL METEOROLOGICAL AUTHORITY

Ref: FCF/102/02

5th February, 2024

CLIMATE OUTLOOK FOR FEBRUARY, 2024 AND RAINFALL PERFORMANCE FOR JANUARY, 2024 OVER UGANDA

1.0 SUMMARY

- The February rainfall outlook indicates that most parts of the country are likely to remain generally dry and sunny with hazy conditions. However, occasional rainfall is expected in areas of South-Western and around Lake Victoria basin.
- Temperatures are expected to be warmer than average over most parts of the country
- During the month of January, 2024, substantial rainfall was experienced in Kigezi, Lake Victoria basin and Eastern parts of the country

2.0 INTRODUCTION

The month of February is generally characterised by dry and sunny weather conditions over most parts of the country. It is also associated with high day temperatures and higher than average temperatures are usually recorded during the month of February.

3.0 RAINFALL OUTLOOK FOR FEBRUARY 2024

The rainfall outlook for the month of February 2024 indicates a likelihood of dry, sunny and hazy conditions to persist over most parts of the country. However, areas around the South-Western sub region are likely to experience wetter conditions while isolated parts around Central, Lake Victoria basin stretching to Eastern region are expected to experience occasional rainfall.

Refer to Figure 1 below.

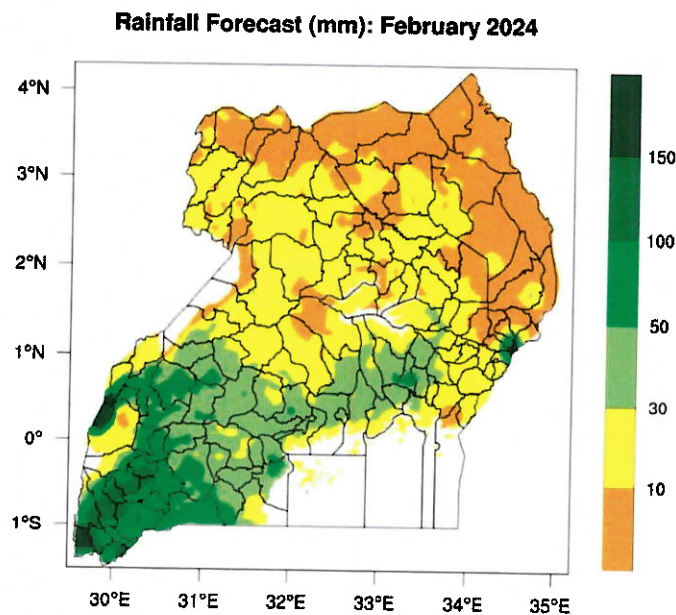


Figure 1: Expected Spatial rainfall distribution during February, 2024.

4.0 CLIMATE DRIVERS FOR FEBRUARY 2024

The systems likely to influence the February rainfall distribution include: -

- The current strong El Niño conditions that have persisted. Equatorial Sea Surface Temperatures (SSTs) are above average across the Central and Eastern Pacific Ocean. The tropical Pacific atmospheric anomalies are consistent with El Niño with a transition to ENSO-neutral favored during the next couple of months.
- The Indian Ocean Dipole (IOD) has fallen below the threshold and is returning to neutral state during the month of February.
- The influence of high-pressure systems
- The local and regional physical features, including water bodies, vegetation and highlands, and their generated circulation systems.

5.0 TEMPERATURE FORECASTS FOR FEBRUARY 2024

Overall, the temperature forecast indicates that warm temperatures are likely to be experienced during the forecast period.

5.1 Maximum Temperature:

The highest maximum temperatures are likely to range from 30 °C to 32 °C and above over most parts of the Northern, Eastern and around Kyoga basin, while the rest of the country are likely to experience temperatures in the range of 24 °C to 28 °C. The highland areas of Rwenzori, Elgon and Kigezi are likely to experience cooler temperatures in the range of 8 °C to 22 °C.

Refer to figure 2 below.

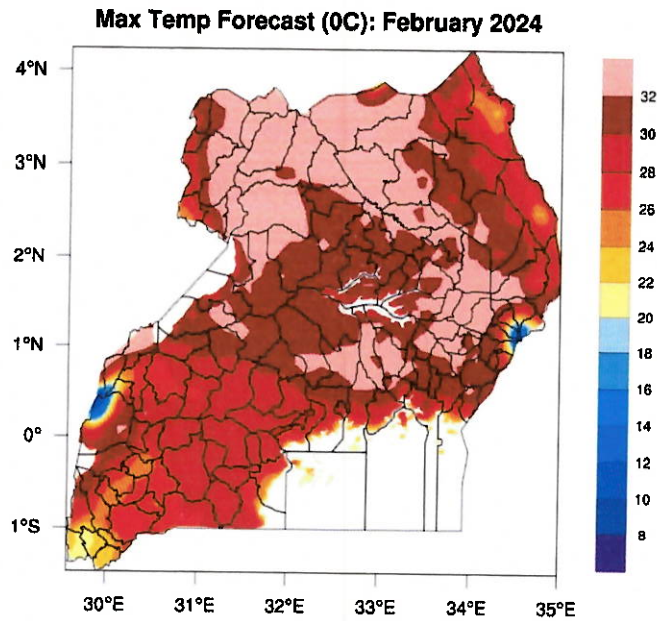


Figure 2: Expected Spatial Maximum temperature distribution over Uganda during February, 2024

5.2 Minimum Temperature

The minimum temperatures for this month are expected to range between 20°C to 26°C over northern half of the country. The rest of the country is likely to experience minimum temperatures below 20 °C.

Refer to figure 3 below.

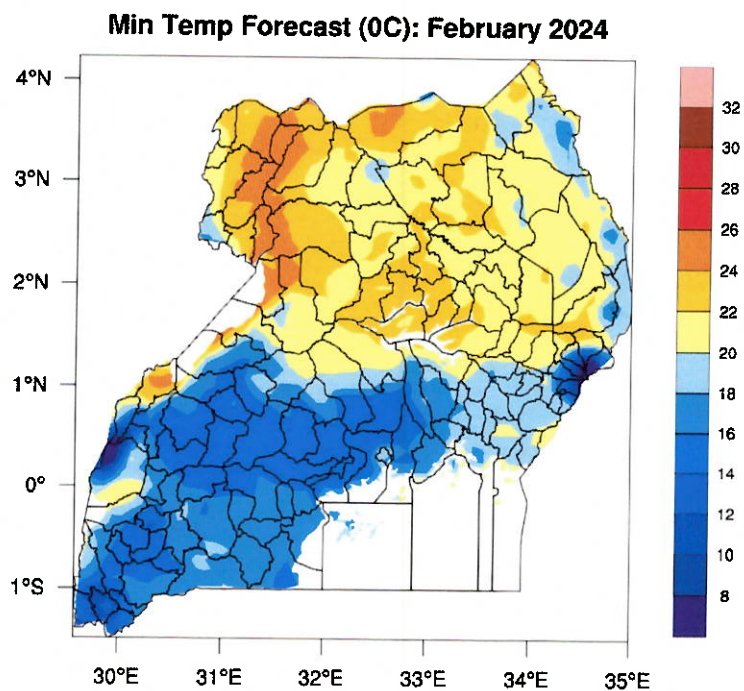


Figure 3: Expected spatial minimum temperature over Uganda during February, 2024.

5.3 Mean Temperature

The expected mean temperature ranging from 24 °C to 28 °C is expected over northern half of the country while the temperature in the range of 20 °C to 24 °C is expected over southern half of the country for the month of February, 2024. However, the western rift valley parts are expected to experience higher temperatures in the range of 28 °C to 30 °C.

Refer to figure 4 below.

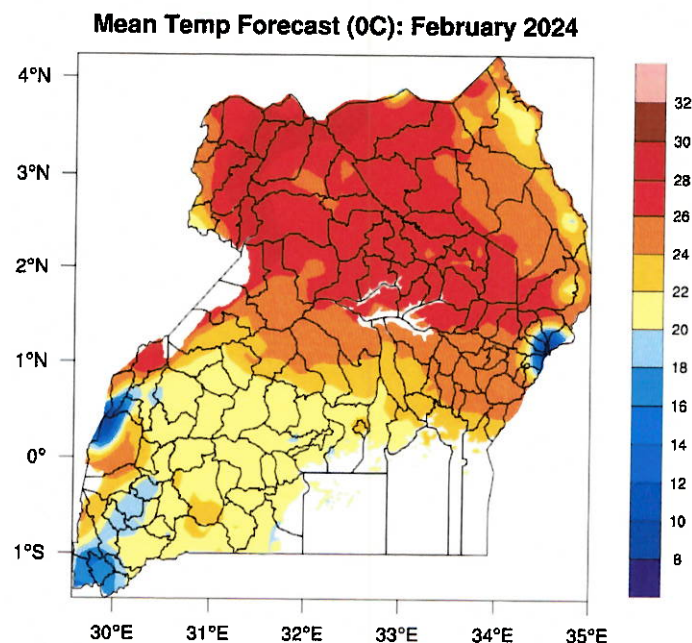


Figure 4: Expected mean daily temperatures over Uganda during the month of February, 2024.

6.0 POTENTIAL IMPACTS EXPECTED DURING FEBRUARY, 2024

- Foggy and hazy conditions are expected to continue during the forecast period.
- There is a likelihood of increased incidences of respiratory and eye diseases as a result of dusty and windy conditions.
- Reduction in animal pastures is expected in areas predicted to experience dry conditions
- The expected dry conditions may impact negatively on the water resources leading to a reduction in water levels
- Human-wildlife conflicts may escalate during the month as problem animals migrate in search of water and pasture
- A likely Upsurge of malaria incidences due to favorable weather conditions for mosquito breeding

- Adequate soil moisture has a result of the expected moderate rains in the Kigezi region

7.0 ADVISORIES

- Community health education, awareness campaigns and inspections are encouraged
- Increase surveillance of disease incidences such as malaria and report to responsible authorities for immediate and further interventions
- Health units are encouraged to stock medicines for anticipated disease incidents
- Communities are advised to practice good sanitation and personal hygiene to prevent disease outbreaks
- Communities are encouraged to sleep under treated mosquito nets
- Motorists are advised to drive with caution whenever foggy and hazy conditions prevail
- Monitor and report any emergence of crop pests and diseases as well as animal parasites to responsible authorities
- Communities are encouraged to avoid bush burning to preserve ecosystems
- Communities are advised to practice rotational grazing of livestock
- Farming communities should carry out land preparation in anticipation of the first seasonal rains
- General public is encouraged to manage water resources to minimize water shortages
- Farming communities are advised to practice good post-harvest handling practices to avoid compromising the quality when drying crops. The dry spell can be used for proper drying of produce like cereals
- Planting of quick maturing crops like vegetables in areas likely to receive light to moderate rains
- Farmers are encouraged to avoid wasteful consumption of food and immediate sale of harvests in order to achieve food security
- Urban authorities are advised to desilt in order to open up drainage systems

8.0 REVIEW OF RAINFALL PERFORMANCE FOR JANUARY, 2024

The analysis of observed rainfall for the month of January, 2024 revealed that the spill over of September to December (SOND) seasonal rainfall continued in most parts of the country during the month of January which is always associated with dry conditions. The areas that received substantial rainfall included Kigezi highlands, Lake Victoria basin and Eastern parts of the country.

The highest amount of rainfall during the month was recorded at Kabale station with a total of 249.4mm. This was followed by Manafwa Washing Bay station in Manafwa district, Karengere station in Rubanda district and Entebbe Water Resource Department in Wakiso district with amounts of 222.1mm, 194.4mm and 155mm, respectively. The lowest rainfall was experienced at Ruhengyere station in Kiruhura district, Nyabyeya forest station in Masindi district and Butiaba station in Bulisa district all with 0.0mm.

In terms of temporal rainfall distribution (number of days with rainfall activity), Entebbe Water Resource Department station in Wakiso district and Karengere station in Rubanda district experienced the highest number of rain day activity with an observation of 19 days each in the month. This was followed by Budduda station, Rubanda station, Ikulwe station in Mayuge district, Manafwa Washing Bay station in Manafwa district and Kabale station all with 14 days of rainfall during the month of January 2024.

The highest maximum fall (highest amount recorded in a single day) was observed at Manafwa Washing Bay station in Manafwa district with amount of 50.5 mm on 9th January 2024, Atira station in Serere district with recorded 45.7mm on 11th January 2024 and Buginyanya station in Bulambuli district with rainfall amount of 44.7 on 26th January, 2024.

Refer to Figure 5 and 6 below for further details.

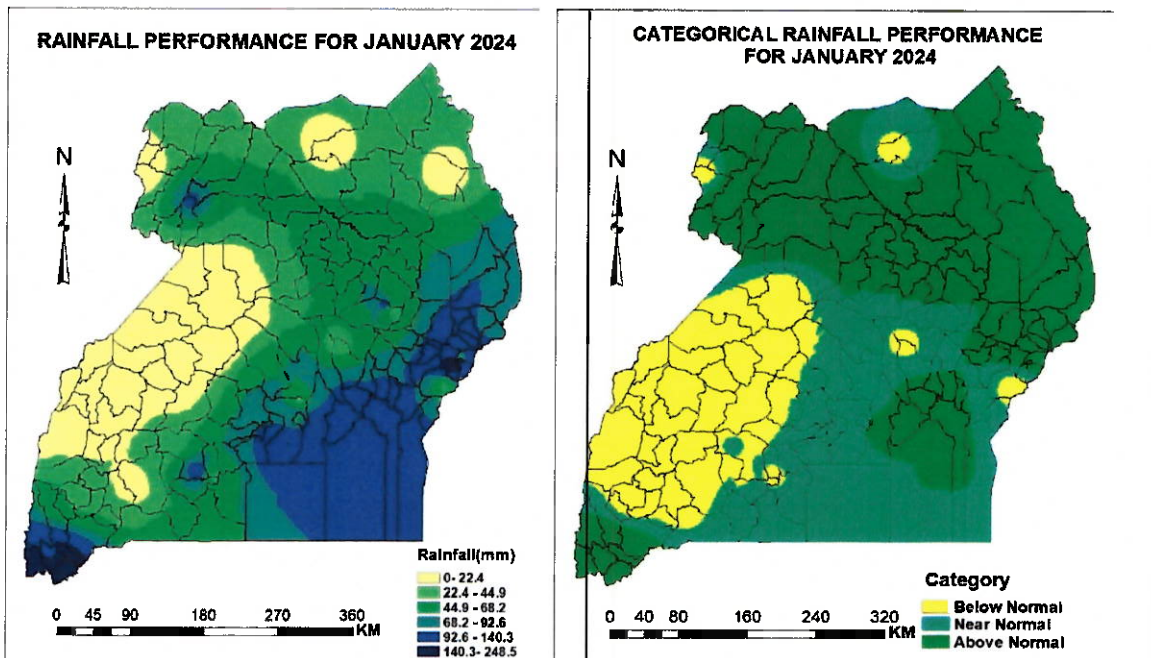


Figure 5: Spatial maps showing actual and Categorical Rainfall performance in January, 2024

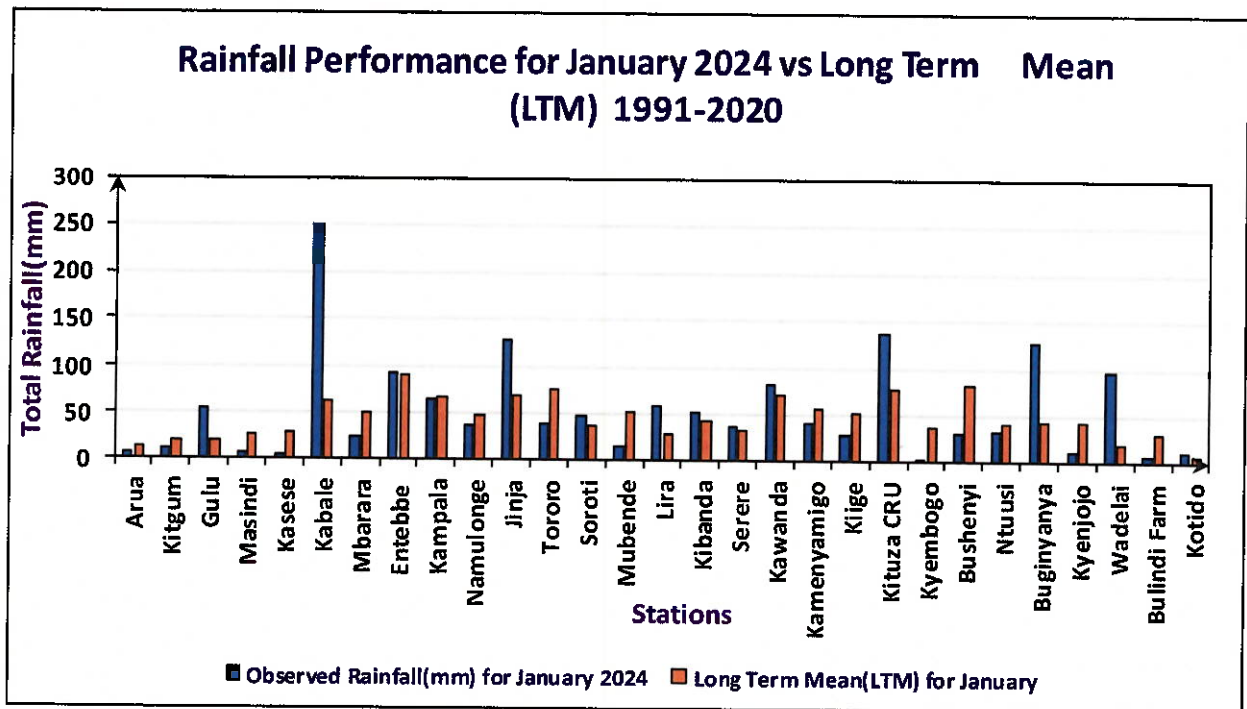


Figure 6: Graph showing Observed Rainfall performance Vs Long Term Mean (LTM) in January, 2024

Please note that Uganda National Meteorological Authority (UNMA) will continue to monitor evolution of the relevant weather systems and issue appropriate weather alerts, updates and advisories to the users. This outlook should be used together with the 24-hour, 10-day, 7-day, and 5-day city forecasts, routinely issued by UNMA for proper planning and decision making.

Bob Alex Ogwang, PhD
AG. EXECUTIVE DIRECTOR