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UGANDA NATIONAL METEOROLOGICAL AUTHORITY

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THE OUTLOOK FOR DECEMBER 2020 AND REVIEW OF THE RAINFALL PERFORMANCE FOR NOVEMBER 2020

1.0 Summary

The rainfall outlook for December 2020 indicates a reduction in the rainfall activity across most parts of the country, apart from some parts of the Southern Sector which are expected to be wetter than the Northern sector which is expected to experience dry conditions.

The month of November was generally characterised by enhanced rainfall conditions over most parts of the country.

2.0 Rainfall Outlook for December 2020

Most parts of the country are expected to experience a reduction in the wet conditions. However, the Southern sector is expected to continue receiving occasional isolated showers as compared to northern sector where dry conditions are expected to prevail. Enhanced rainfall is expected in the mountain regions of Uganda most especially around Mountain Rwenzori, Elgon and Kigezi highlands. Refer to Fig-1 below:

Rainfall Forecast (mm): December 2020

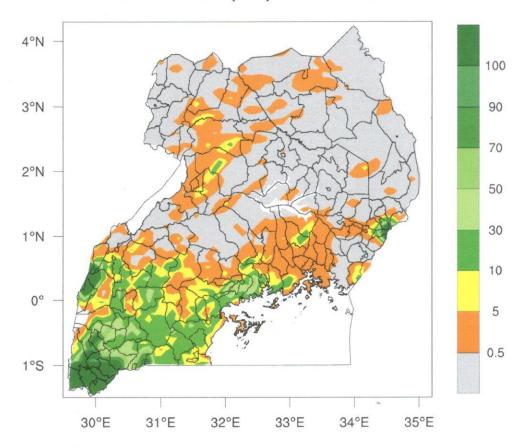


Figure 1: Rainfall Outlook for December 2020

3.0 Temperature forecast for December 2020

Maximum Temperature:

The maximum temperatures in the Northern region are expected to be higher than the rest of the country, with some parts of Acholi and West Nile sub regions experiencing the highest temperatures from 26 to 30 degrees centigrade (°C), while in the Southern Sector of the country the temperatures are expected to be lower ranging from 18 to 26 degrees Centigrade (°C). The Mountain areas of Rwenzori, Elgon and Kigezi highlands are expected to experience lowest temperatures. Refer to figure 2 below:

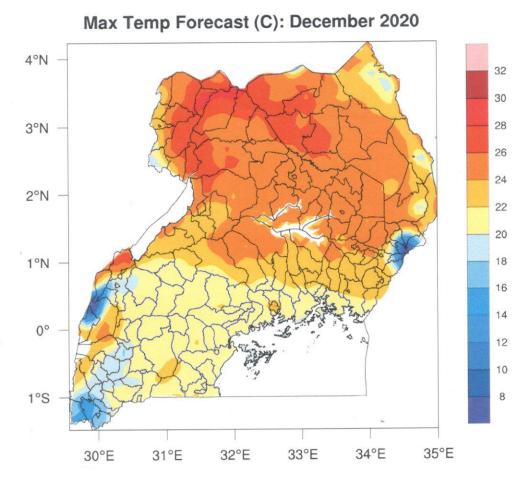


Figure 2: Expected spatial maximum temperature distribution across the country during December, 2020.

Minimum Temperature:

During the month of December, the lowest minimum temperatures of about 8 to 10 degrees centigrade are expected to prevail over the south western tip of the country, the mountain areas of Rwenzori, Elgon and some parts of central region Minimum temperatures of about 16 to 18°C are expected in parts of Eastern, Western, and Northern regions. Refer to figure 3 below for further information

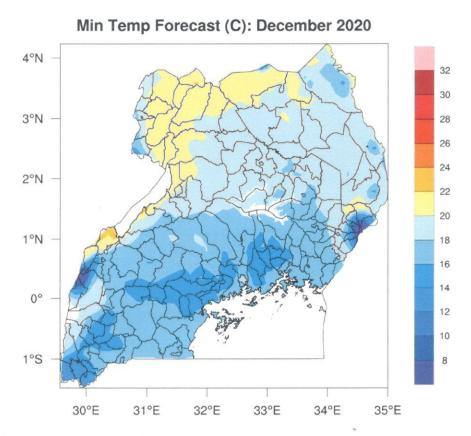


Figure 3: Expected spatial minimum temperature distribution across the country during December 2020.

Mean Temperature:

The entire Northern region is expected to have mean temperature of 22°C and above over most parts. While some parts of the Western, South Western, Central regions plus the mountain areas of Rwenzori and Elgon are expected to experience lower mean daily temperatures as lower than 18°C in some of these areas as shown in figure 4 below:

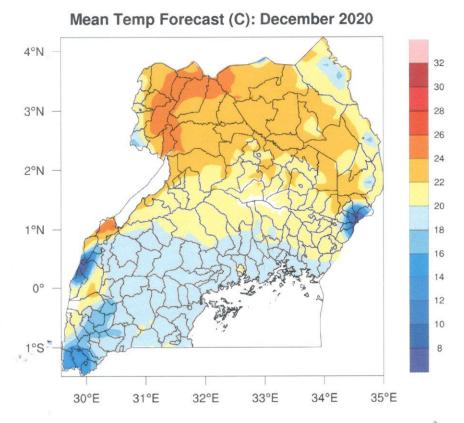


Figure 4: Expected spatial mean temperature distribution across the country during the month of December 2020.

4.0 Potential impacts expected during December, 2020

The predicted weather conditions over most parts of the country are expected to result into the following impacts;

- Due to reduction in the rainfall which is expected some water sources are like to dry up.
- In Agricultural sector, farmers are expected to continue weeding their crops.
- In pastoral areas especially in cattle corridor, the reduced rainfall will lead to further deterioration in foliage and pasture for livestock.
- Farmers in areas predicted to experience suppressed rainfall should continue harvesting their crops.
- Most parts of the country are expected to experience an increase in the temperature both day and night.

5.0 Review of rainfall performance in November, 2020

The rainfall performance in the month of November 2020 indicates that much wetter activity was experienced in the districts within the Lake Victoria Basin. Further analysis shows that most weather stations across the country recorded above average rainfall from their Long Term Mean (LTM).

From the data records, Kamenyamigo weather observatory in Masaka District recorded the highest rainfall amount of 429.1mm. This was followed by Mbulamuti station in Kamuli District and Entebbe Water Resource institute station with rainfall amounts of 331.7mm and 323.5mm respectively. The lowest amount of 16.7mm was recorded at Rugarama station in Ntungamo district.

In terms of distribution, Namulonge station in Wakiso District recorded the highest number of rainy days with 21 days. This was followed by Kamenyamigo in Masaka, Kampala and Kituza CRU station in Mukono with 19 days of rainfall activity each. The lowest number of rainy days were observed in Kotido and Nabiswera station in Nakasongola district with only 4 days each.

The highest rainfall intensity in the country (highest rainfall amount recorded in a day) was observed at Entebbe Water Resources Institute with a total of 112.1mm on 24th November 2020. This was followed by Mbulamuti station with a total of 88.2mm on the same date. For more details, refer to fig 1, 2 and 3 below;

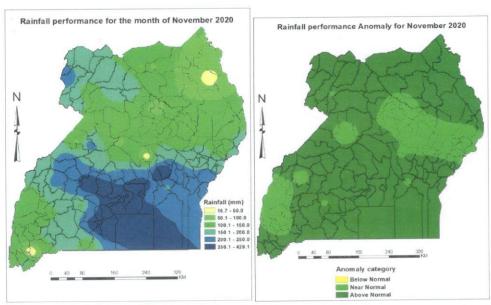
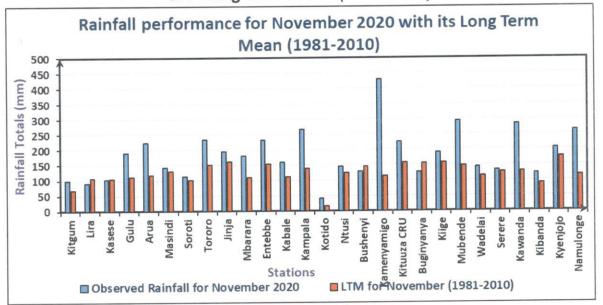


Fig 1 and 2 show Rainfall performance amounts and rainfall performance anomaly for November 2020.

Graph 1: Comparative graph of observed rainfall for November 2020 with the Long term mean (1981-2010)



The month of November 2020 shows that most stations across the country recorded more rainfall as compared to their long term mean, With Kamenyamigo, Mubende, Kawanda and Namulonge receiving excessively more rainfall than their LTM. In general, most stations recorded average rainfall.

6.0 Experienced Impacts during November 2020

The rainfall performance during this impacted positively on various sectors of the economy

- Water levels in most rivers and lakes increased significantly due to enhanced rainfall experienced in most parts of the country and this resulted into widespread flooding in many parts of the country.
- > In Agricultural sector, most farming communities benefited from the prolonged rains which favoured crop growth.
- In the pastoral areas the prolonged rains resulted into good pasture growth for the livestock;
- > As a result of prolonged rains in November, farmers across the country continued with the weeding of their crops.

Dr. Festus Luboyera

EXECUTIVE DIRECTOR