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MINISTRY OF ENVIRONMENT
RWANDA METEOROLOGY AGENCY



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Summary

In the second Dekad (11-20) of December 2019, most parts of the country received light rainfall which was below the Long Term Mean(LTM) in most parts leaving Kigali–Aero, Rubavu, Nyamagabe, Ngoma and Musanze with above the LTM. In this dekad, high rainfall amount was recorded at Ngoma station(142.6mm), Kigali received 71.2mm. While less rainfall was received at Gicumbi (1.1mm). Generally Southwest, Northwest and Southeast regions were wet compared to the other regions of the country. The temperature was in normal range. The maximum temperature ranged between 29.9°C in Bugarama and 21.8°C in Gicumbi. Minimum temperature ranged between 11.9°C at Musanze and 18.1°C at Bugarama stations.

1.0 Rainfall Pattern

This section provides the observed rainfall amount, rainy-days and available soil moisture for the second dekad of December, 2019.

1.1 Rainfall Amount

The total rainfall amount for the second dekad of December, 2019 is presented in figure 1. On a daily basis observation, light to moderate rains were recorded in most parts of Rwanda. The accumulation of rainfall in ten days ranged from 142.6mm to 1.1mm. The highest rainfall total was recorded at Ngoma (142.6mm), Kigali-Aeroport (71.2mm), Rubavu, Nyamagabe, Rusizi, Bugarama, Rubengera received rainfall ranging between 50 and 30mm, Busogo (21.9mm), Byimana (23.4mm), Kawangire (11.2mm);

Gicumbi, Gitega and Nyagatare received rainfall amount less than 5mm. The Southern and Western region were wet compared to other parts of the country.

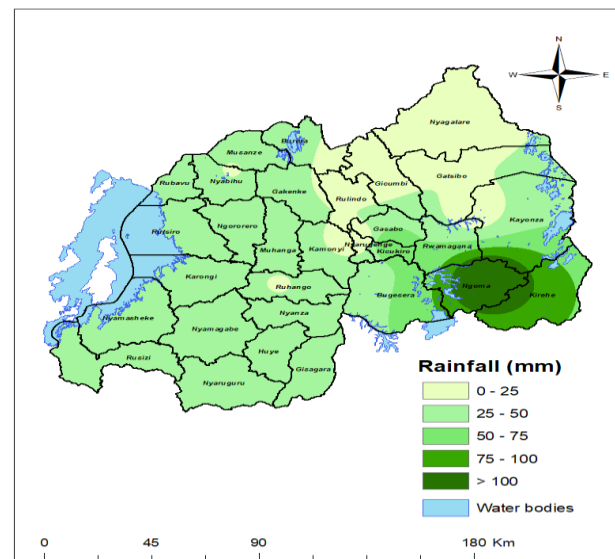


Figure 1: Rainfall amount

1.2 Rainfall climatology in the 2nd dekad

The rainfall climatology for the 2nd dekad of December is shown in figure 2 below, which indicates that rainfall usually range from 58.5mm to 21.2mm across the country. Comparing the current dekad and the Long Term Mean(LTM) for the same period, it was observed that rainfall in the 2nd dekad of December 2019 was below the LTM in most parts of the country leaving Kigali-Aeroport, Rubavu, Nyamagabe, Ngoma and Musanze station with the above normal to the Long Term Mean (LTM).

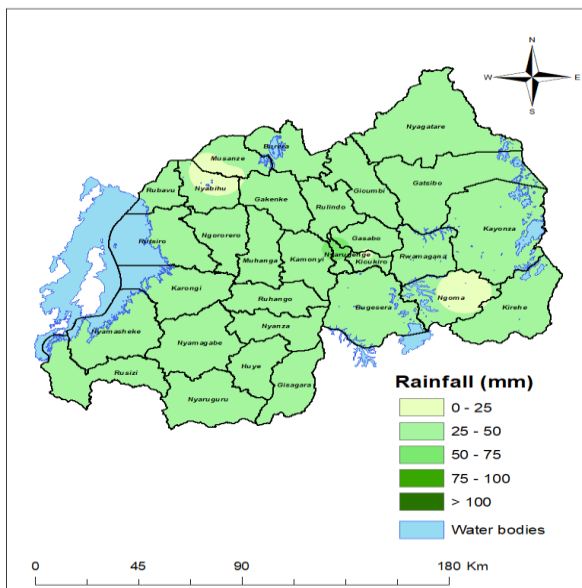


Figure 2: Rainfall distribution in long term

1.3. Number of Rain Days

Figure 3 shows the distribution of number of rain-days for the 2nd dekad of December 2019. A total of 1 to 6 days were observed across the country. It can be seen that most parts of the country had days ranged between 3 and 6 days of rainfall. A minimum of 1 day was observed at Nyagatare and Gicumbi. The maximum of 5 to 6 days were received at Kigali-Aeroport, Rusizi, Rubavu, Nyamagabe, Ngoma, Busogo and Rubengera.

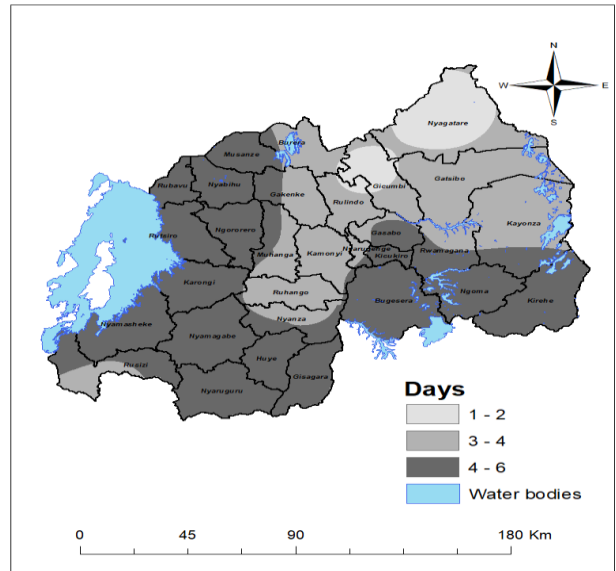


Figure 3: Rainy days

1.4 Soil moisture index



Figure 4: Soil Moisture Index

The distribution of available soil moisture across the country is shown in figure 4 above. Soil moisture decreased in most parts of the country due to dry days experienced during this dekad. The expectation is that rain conditions are likely to increase in the coming dekad hence leading to increase of soil moisture across the country.

2.0 Temperature observation

The average of maximum and Minimum temperature across the country during the 2nd dekad is highlighted below in this section.

2.1 Maximum Temperature

Figure 5 below shows the actual mean maximum temperature distribution across the country which indicates that the West, Kigali City and East provinces were warmer compared to Northern province and Southern province. However, in most parts of the country the maximum temperature ranged between 21.8 and 26.5°C with exception of Bugarama that recorded 29.9°C.

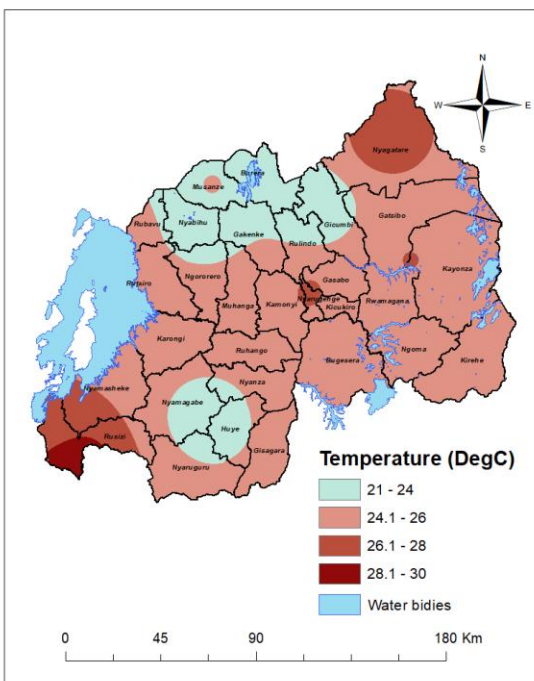


Figure 5: Mean Maximum Temperature

2.2 Minimum Temperature

The average minimum temperature across the country is shown in figure 6 below. The Northern region experienced temperature

which were in the range of LTM with a tendency to be above. The minimum temperature ranged from 11.9 (Musanze) to 18.1°C (Bugarama).

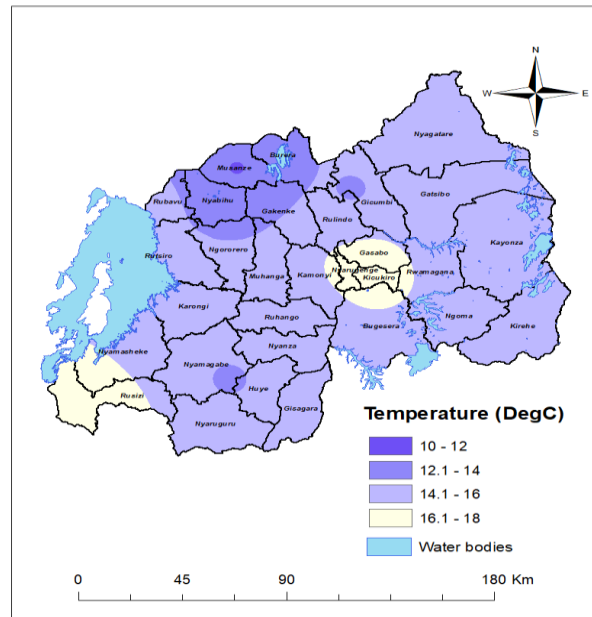


Figure 6: Mean Minimum Temperature

3.0 Weather Outlook and Agricultural for the 3rd dekad (21-31) December, 2019.

3.1 Weather Outlook for the 3rd dekad of December.

Compare to the second dekad of December 2019; the third dekad will receive enhanced rainfall activities due to the convergence of winds that led to the increase of moisture over Rwanda. Towards the end of December 2019; Southern, Western, Northern provinces are expected to receive high amount of rainfall compare to Eastern and Kigali city.

3.2 Agricultural Activity/Advisories

The wet conditions are expected to continue in 3rd dekad of December 2019 from 21st to 31st, farmers are advised to work closely with Agriculture officers within their location.

For more meteorological information you can visit MeteoRwanda website:

www.meteorwanda.gov.rw.

