

REPUBLIC OF RWANDA MINISTRY OF ENVIRONMENT RWANDA METEOROLOGY AGENCY



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Summary

The first Dekad (01-10) of May 2020, most parts of the country received light to heavy rainfall which was above the Long Term Mean (LTM) in some Parts of the country. During the 1st dekad of May 2020, the highest rainfall amount was recorded at Busogo station (151.3.mm) in Musanze District while the lowest rainfall was recorded at Gitega station (3.8mm) in Nyarugenge District. Generally Northern, Southern and Western province were comparatively wet than other parts of the country. The temperature was within the range of LTM. The maximum temperature ranged between 20.1°C in Gicumbi district and 30.3°C in Rusizi district at Bugarama station.

Minimum temperature ranged between 12.7°C at Musanze and 19.6°C in Rusizi district at Bugarama stations.



Figure 1: Rainfall performance as Compared to the LTM

1.0 Rainfall Pattern

This section provides the overview of observed rainfall amount, rainy-days and available soil moisture for the first dekad of May 2020.

1.1 Rainfall Amount

The total rainfall amount for the first dekad of May, 2020 is presented in map 1. On a daily basis observation, light to heavy rainfall were recorded in most parts of the country. The accumulation of rainfall in ten days ranged from 3.8mm at Gitega station in Nyarugenge District which is the lowest recorded and the highest was 151.3mm at Busogo station in Musanze District. The Northern, Southern and Western Provinces were wet compared to other parts of the country.



Map 1: Rainfall amount during 1st Dekad of May 2020

1.2 Rainfall climatology for the 1st dekad of May

The rainfall climatology for the 1st dekad of May is shown in map 2, which indicates that rainfall ranged from 23.2mm to 66.1mm across the country.

Comparing the 1st Dekad of May 2020 and the Long Term Mean (LTM) for the same period, it was observed that rainfall was above the LTM in some parts of the country especially in Northern and Southern provinces. The rest of the country recorded rainfall which was in the range of LTM.



Map 2: Rainfall amount during 1st Dekad of May(LTM)

1.3. Number of Rain Days

Map 3 shows the distribution of number of rain-days. A rainy day is defined as a day with rainfall of 0.85mm or more. A total of 2 to 8 days were observed across the country. It can be seen that most parts of the country had 4 to 6 rainy days. A minimum of 2 days were observed at Gitega, Ngoma and Kawangire stations. The maximum of 8 days were observed at Busogo and Musanze station in the Northern Province.



Map 3: Rainy days

1.4 Soil moisture index



Map 4: Soil Moisture Index

The distribution of available soil moisture across the country is shown in Map 4. Soil moisture increase over most parts of the country due to wet weather conditions experienced during first dekad of May 2020. The soil moisture will continue to increase during second dekad of May 2020 due to the expected persistent of wet weather conditions.

2.0 Temperature observation

The average maximum and Minimum temperature across the country during the 1^{st} dekad of May 2020 is highlighted in the section below.

2.1 Mean Maximum Temperature

Map 5 shows the actual mean maximum temperature distribution across the country which indicates that the South Western, Kigali City and Eastern Provinces were warmer compared to Northern and Southern Provinces. However, in most parts of the country the mean maximum temperature ranged between 20.1°C and 26.8°C with exceptional case of 30.3°C at Bugarama station.



Map 5: Mean Maximum Temperature for dekad 1 May 2020

2.2 Minimum Temperature

The average minimum temperature across the country is shown in Map 6. The Northern parts experienced colder temperature compared to other parts of the country, even though the minimum temperature increased a bit compared to the previous dekad. The minimum temperature ranged between 12.7 ^oC at Musanze and 19.6^oC at Bugarama.



Map 6: Mean Minimum Temperature for dekad1 of May 2020

3.0 Weather Outlook and Agricultural advisory for the 2nd dekad (11-20) May, 2020.

3.1 Weather Outlook for the 2nd dekad of May 2020.

Comparing to the 1st dekad of May 2020, a decrease of rainfall amount during the 2nd dekad of May 2020 is expected. Light to Moderate rainfall is expected in most parts of the country. Rainfall forecast from 11th 20th May 2020 will range between 20mm to 100mm countrywide. The Districts of Rubavu, Nyabihu, Rutsiro, Nyamagabe, Ngororero, parts bordering Nyungwe National Park of Nyamasheke, Rusizi and Nyaruguru are expected to experience rainfall ranging between 80mm and 100mm,

which is the highest of the forecasting period. Northern Province, Kigali City and the remaining Districts of Western and Southern Provinces are expected to receive rainfall ranging between 60mm and 80mm. The entire Eastern province and small portion of Southern province towards Eastern parts (Amayaga region) are expected to receive 40mm to 60mm, the eastern parts of Nyagatare, Gatsibo and Kayonza districts are expected to receive lower rainfall ranging between 20mm to 40mm. The most probable rain days are 11th to 16th in most parts of the country. The main drivers of the forecasted rainfall is the advecting deep convective activities over Lake Victoria. increased moisture content from westerly wind blowing from Congo coupled with local effects mainly over Lake Kivu and Nyungwe Forest.



Map 7: Rainfall Forcast for second dekad of May 2020

3.2 Agricultural Activity/Advisories

The weather conditions are still favourable for farming practices and other related activities. Farmers are advised to work closely with Agriculture Extension Officers for more information. For more meteorological information about weather forecast you can visit Meteo Rwanda's website: www.meteorwanda.gov.rw.