

REPUBLIC OF RWANDA MINISTRY OF ENVIRONMENT RWANDA METEOROLOGY AGENCY



B P: 898, Kigali, Rwanda, Website: <u>www.meteorwanda.gov.rw</u> Toll free number : 6080

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Summary

In the first Dekad (01-10) of April 2020, most parts of the country received light to moderate rainfall which was below the range of Long Term Mean (LTM) over many stations of the country, except Ngoma, Nyamagabe, Bugarama, Gitega and Rubengera stations that recorded above normal rainfall. During dekad 1 April 2020, the highest rainfall amount was recorded at Kibungo-Kazo station in Ngoma District (90.5mm) while the lowest rainfall was received at Nyagatare station (2.2mm). Generally Western, Southern, some parts of the Northern and south Eastern were comparatively wet than other parts of the country. The temperature was within therange of LTM. The maximum temperature ranged between 22.0°C in Gicumbi and 31.6°C in Bugarama. Minimum temperature ranged between 11.7°C at Busogo and 19.1 °C at Bugarama station.



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 April 2020.

1.1 Rainfall Amount

The total rainfall amount for the first dekad of April, 2020 is presented in map 1. On a daily basis observation, light to moderate rainfall were recorded in most parts of the country. The accumulation of rainfall in ten days ranged from 90.5mm at Kibungo station in Ngoma District which was the highest and the lowest was 2.2mm received at Nyagatare station. The Western, Southern, Northern parts and Southwestern parts were wet compared to other parts of the country.



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

1.2 Rainfall climatology in the 1st dekad of April 2020

The rainfall climatology for the 1st dekad of April 2020 is shown in map 2, which indicates that rainfall ranged from 20.5mm to 56.7mm across the country.

Comparing to the current dekad and the Long Term Mean (LTM) for the same period,

the observed rainfall was below the LTM of April dekad one (D1) in the Northern part of the country. Above normal range rainfall was observed in Ngoma, Kirehe, Nyamagabe and southern parts of the Rusizi district. The remaining parts were in normal range with the long term mean rainfall.



Map 2: Rainfall amount during 1st Dekad(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 1 to 6 days were observed across the country. It can be seen that most parts of the country had 4 to 5 rainy days. A minimum of 1 day was observed at Nyagatare station. The maximum of 6 days were observed at Ngoma, Busogo, Musanze and Byimana stations.



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 shows a slight decrease in most parts of the country due to alternation of wet and dry weather conditions experienced during fist dekad of April 2020. The expectation is that soil moisture will increase during second dekad of April 2020 due to the expected increase of wet condition.

2.0 Temperature observation

The average maximum and Minimum temperature across the country during the 1st dekad of April 2020 is highlighted below in this section.

2.1 Maximum Temperature

Map 5 shows the actual mean maximum temperature distribution across the country which indicates that the Southwest, Kigali City and Eastern provinces were warmer compared to Northern province and Southern province. However, in most parts of the country the maximum temperature ranged between 22.0 and 27.4°C with exceptional of Nyagatare and Bugarama that recorded 28.5°C and 31.8°C respectively.



Map 5: Mean Maximum Temperature for dekad1 April 2020

2.2 Mean Minimum Temperature

The average minimum temperature across the country is shown in Map 6. The Northern 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 11.7 ^oC (Busogo) and 19.1^oC (Bugarama).



dekad1 of April 2020

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

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

Comparing to the 1st dekad of April 2020, an increase of rainfall amount during the 2nd dekad of April 2020 is expected. Moderate rainfall is expected in most parts of the country. Expected rainfall amount will be between 40 to 120 mm during the forecasting period.

High rainfall amount ranging between 100 and 120 mm is expected in northern parts of Western province, northern parts of Southern province and in a big part of Gakenke District while less rainfall ranging between 40 and 60 mm is expected in south Eastern parts of the country (refer to the map bellow). The normal range of 2nd dekad of April 2020 rainfall is between 50 and 100 mm which means the rainfall expected in dekad is near normal The rainfall expected is well range. distributed in most 7 days in 10 days of the dekad with slightly increase of rainfall between 16th and 18th April 2020.



Map 6: Mean Minimum Temperature for Map 7: Rainfall Forcast for second dekad of April 2020

3.2 Agricultural Activity/Advisories

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