

# REPUBLIC OF RWANDA MINISTRY OF ENVIRONMENT RWANDA METEOROLOGY AGENCY



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# Summary

In the second Dekad (11-20) of April 2020, most parts of the country received moderate to heavy rainfall which was above the range of Long Term Mean (LTM) over many stations in the country, except Rusizi and Nyamagabe stations that recorded below normal rainfall. During the 2<sup>nd</sup> dekad of April 2020, the highest rainfall amount was recorded at Gicumbi station in Gicumbi District (230.1mm) while the lowest rainfall was recorded at Rusizi station (40.6mm). Generally Northern and Eastern Province were comparatively wet than other parts of the country. The temperature was within the range of LTM. The maximum temperature ranged between 20.5°C in Gicumbi and 29.6°C in Bugarama. Minimum temperature ranged between 12.7°C at Busogo and 19.7 °C at Bugarama station.

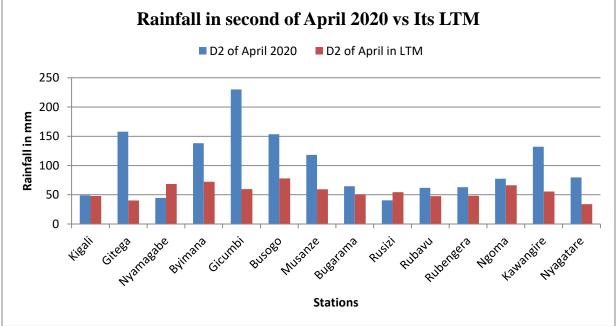


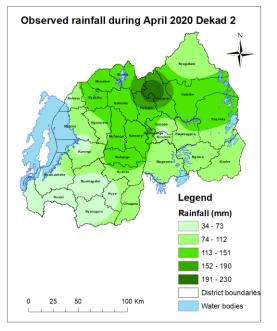
Figure 1: Rainfall performance as Compared to the LTM

#### **1.0 Rainfall Pattern**

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

#### **1.1 Rainfall Amount**

The total rainfall amount for the second dekad of April, 2020 is presented in map 1. On a daily basis observation, moderate to heavy rainfall were recorded in most parts of the country. The accumulation of rainfall in ten days ranged from 40.6mm received at Rusizi station which was the lowest and the highest was 230.1mm recieved at Byumba station in Gicumbi District. The Northern and EasternProvinces were wet compared to other parts of the country.

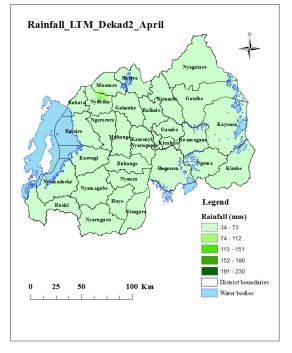


# Map 1: Rainfall amount during 2<sup>nd</sup> Dekad of April 2020

## **1.2 Rainfall climatology in the 2<sup>nd</sup> dekad of** April

The rainfall climatology for the 2<sup>nd</sup> dekad of April is shown in map 2, which indicates that rainfall ranged from 33.9mm to 78mm across the country.

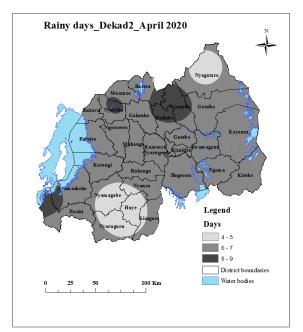
Comparing to the current dekad and the Long Term Mean (LTM) for the same period, the observed rainfall was above the LTM for April dekad two (D2) in the most part of the countryexcept the South western parts of the country at Rusizi and Nyamagabe stations respectively.



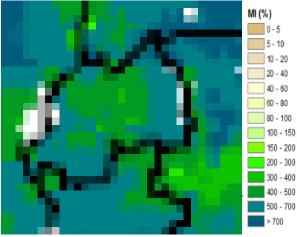
Map 2: Rainfall amount during 2<sup>nd</sup> Dekad(LTM)

#### **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 4 to 9 days were observed across the country. It can be seen that most parts of the country had 6 to 8 rainy days. A minimum of 4 days was observed at Nyamagabe and Nyagatare stations. The maximum of 9 days were observed at Gicumbi, Busongo and Rusizi stations.



*Map 3: Rainy days* 1.4 Soil moisture index



Map 4: Soil Moisture Index

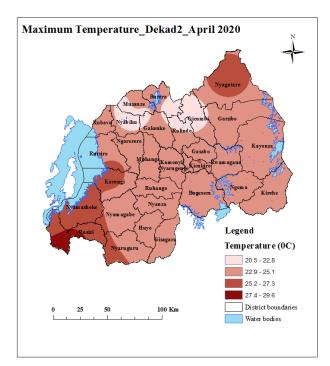
The distribution of available soil moisture across the country is shown in Map 4. Soil moisture increase over most parts of the country due to wet weather conditions experienced during second dekad of April 2020. The expectation is that soil moisture will continue to increase during third dekad of April 2020 due to the expected persistence of wet condition.

# 2.0 Temperature observation

The average maximum and Minimum temperature across the country during the  $2^{nd}$  dekad of April 2020 is highlighted below in this section.

## 2.1 Mean Maximum Temperature

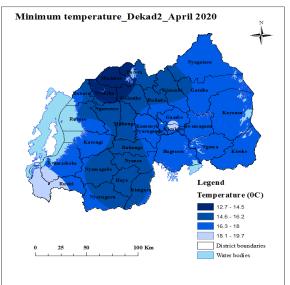
Map 5 shows the actual mean maximum temperature distribution across the country which indicates that the South western, Kigali City and Eastern Provinces were warmer compared to Northern province and Southern provinces. However, in most parts of the country the mean maximum temperature ranged between 20.5 and 26.1°C with exceptional of Bugarama that recorded 29.6°C.



Map 5: Mean Maximum Temperature for dekad 2 April 2020

#### 2.2 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 12.8 <sup>o</sup>C (Busogo) and 19.7<sup>o</sup>C (Bugarama).



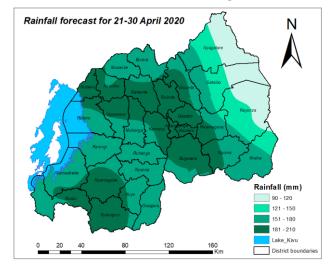
Map 6: Mean Minimum Temperature for dekad2 of April 2020

3.0 Weather Outlook and Agricultural advisory for the 3<sup>rd</sup> dekad (21-30) April, 2020.

# 3.1 Weather Outlook for the 3<sup>rd</sup> dekad of April 2020.

Comparing to the 2nd dekad of April 2020, an increase of rainfall amount during the 3<sup>rd</sup> dekad of April 2020 is expected. Moderate rainfall is expected in most parts of the country. Rainfall expected during dekad 3 (21<sup>st</sup> and 30<sup>th</sup>) of April 2020 ranged between 90 and 210 mm countrywide. Higher amount of rainfall between 180 and 210 mm is expected along the central corridal from southern to the northern and southwestern parts of the country while the lower amount

raning between 90 and 120 mm is expected in Eastern province (for more information on distribution, refer to the map below). The expected rainfall is above the Long Term Average of April dekad 3 rainfall countrywide. Expected rainfall will be associated with thunder in most parts of **Province**.Central Western. Northern parts(Kigali City) and Eastern Province, and strong wind in lower altitude of Eastern and South western parts of the country. Rainfall is resulting from strong convergence and increase of moisture over the region.



Map 7: Rainfall Forcast for third dekad of April 2020

### 3.2 Agricultural Activity/Advisories

The weather conditions are favourable for farming practices and other related activities. Due to the increase of wet weather condition. farmers are advised to clean water channel and are also 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.