



Agrometeorological Bulletin N° 07, Dekad1, March (1– 10) 2021 Issued on 12th March 2021

Summary

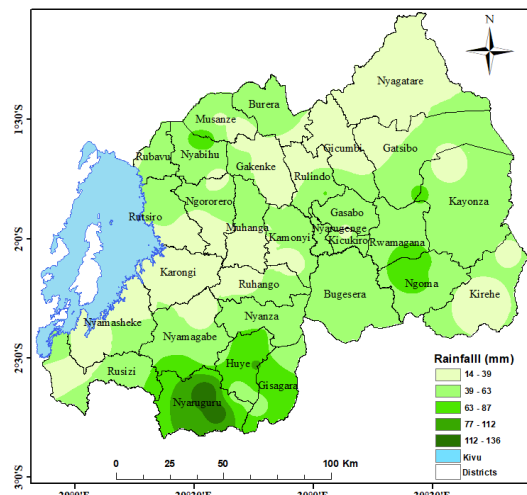
The first dekad of March 2021 from 01st to 10th, showed that the country characterized by wet weather conditions in many parts of Southern and some parts of Eastern Province while in the remaining parts of the country the rainfall is within the normal ranges especially in Northeast and Western Provinces compared to the 1st dekad of climatology of March. The highest rainfall amount was recorded in Southern Province at Kibeho station with 136.6mm in 5 rain-days, followed by Cyahinda station with 126mm in 5 rain-days and Save Station with 91.6mm in 5 rain-days. The lowest rainfall less than 20mm was recorded at Rubengera and Nyange stations of Western Province. The same amount was also recorded at Rushashi stations located in Northern Province. The temperature was generally within the range of Long Term Mean (LTM). The main agricultural activity during the first dekad was harvesting of maize in Eastern Province and farming preparation in most parts of the country.

1.0 Rainfall Pattern

This section provides the overview of recorded rainfall amount, rainfall anomalies, comparison of observed rainfall with LTM, rainy-days and available soil moisture.

1.1 Rainfall Amount

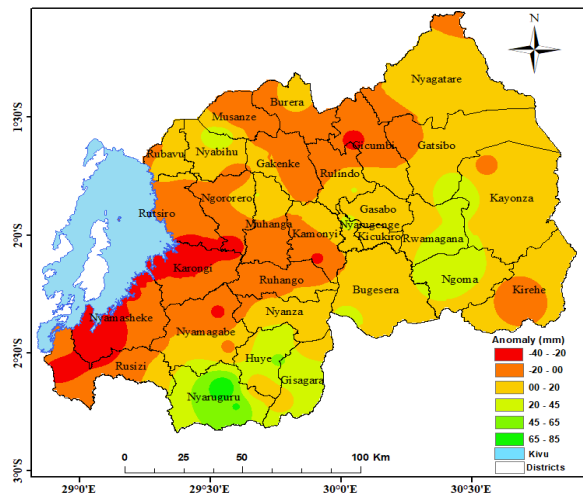
The actual total rainfall amount recorded in the first dekad of March, 2021 is displayed in Map 1, it was observed that during this dekad many parts of Southern region recorded above normal rainfall. The highest rainfall amount was recorded in Southern Province at Kibeho station with 136.6mm in 5 rain-days, followed by Cyahinda station with 126mm in 5 rain-days and Save Station with 91.6mm in 5 rain-days.



Map 1: Rainfall amount during 1st Dekad of March 2021

1.2 Rainfall Anomaly (Deficit and Surplus)

The rainfall anomaly is represented by map 2. It shows that many parts of Southern Province and few places of Eastern Province received enhanced rainfall while some parts of Western Province experienced deficit rainfall. The remaining parts over the country were in range with the normal rainfall.



Map 2: Rainfall anomaly during 1st Dekad of March 2021

1.3. Comparison of March 1st dekad recorded rainfall with its Long Term Mean for the dekad1 of March.

The comparison of recorded rainfall amount and long term mean records for the 1st dekad across the country are shown in figure 1 and 2. During this dekad above normal rainfall conditions were experienced specifically in Southern Provinces, and in southeast parts of Eastern Province at Ngoma district.

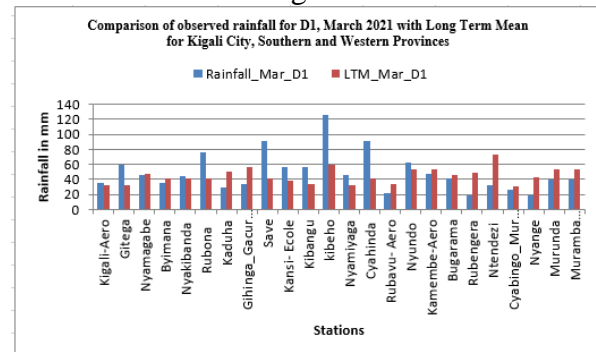


Figure1: Comparison of observed rainfall with long term mean for the dekad 3 in Kigali

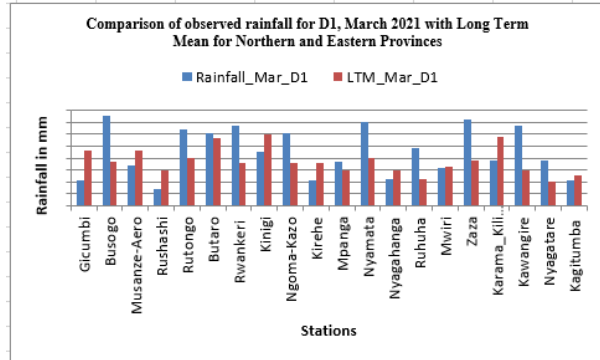
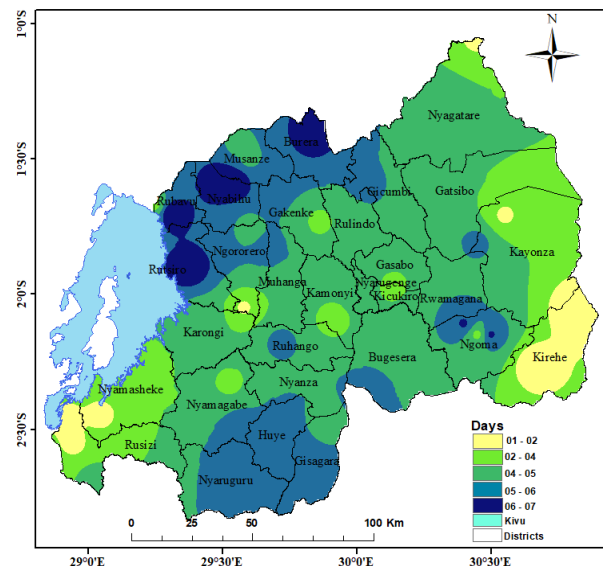


Figure 2: Comparison of Observed rainfall with long term mean for the dekad 3 in Northern and Eastern Provinces.

1.4 Number of Rain Days

The Map 3 shows the distribution of number of rain days across the country. A rainy day is defined as a day with at least 0.85mm of rainfall.

The distribution shows that rainy days ranged between 1 and 7 rainy days over many stations in the country. The distribution of rain days affected post-harvesting activities in many parts of the country especially in the Eastern province. Rainy days are expected to vary between two (2) and five (5) days in the second dekad of March 2021.



Map 3: Rainy days for dekad 1 of March 2021

City, Southern and Western Provinces.

1.5 Soil moisture condition

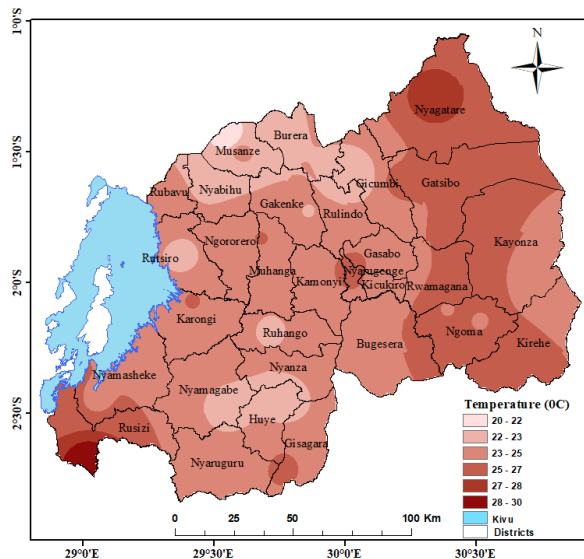
This section shows the available soil moisture content across the country. The soil moisture was increased over most parts of the country due to wet weather conditions experienced. The soil moisture content will continue to increase in the second dekad of March 2021 due to expected rainfall in the next dekad.

2.0 Temperature observation

The average maximum and Minimum temperature across the country is highlighted in the section below.

2.1 Mean Maximum Temperature

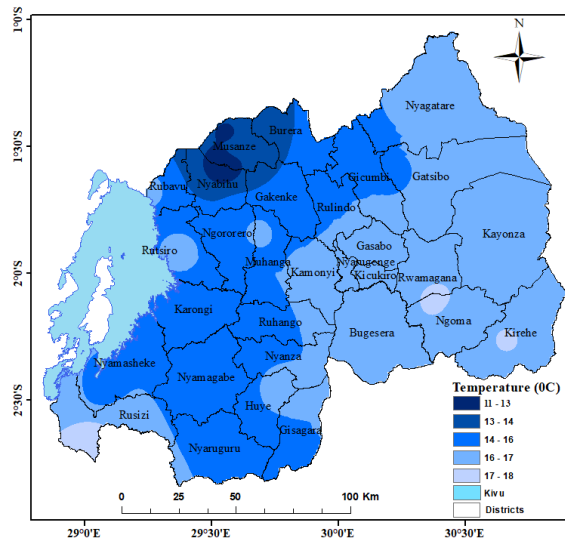
Map 4 represents the mean maximum temperature distribution across the country during 1st dekad of March. It indicates that the Eastern Province Kigali City and at some parts of Southwestern were warmer than the rest of the country. The mean maximum temperature ranged between 21.9^oC and 29.8^oC was recorded at Gicumbi and Bugarama stations respectively.



Map 4: Mean Maximum Temperature for dekad 1 March 2021

2.2 Minimum Temperature

The average minimum temperature across the country is shown in Map 5. The Northern, Southern and most parts of Western Provinces experienced colder temperature than the other parts of the country. The minimum temperature ranged between 11.2^oC and 18.5^oC at Busogo and Bugarama stations respectively.



Map 5: Mean Minimum Temperature for dekad 1 March 2021

3.0 Weather Outlook and Agricultural advisories for the second dekad (10-20) March, 2021.

3.1 Weather Outlook for the second dekad of March 2021.

Rainfall expected between 11th and 20th March 2021 will range between 20 and 80 mm across the country which is in the range of Long Term Mean countrywide. The wide spread rainfall is forecasted between 15th and 20th March 2021 over most parts of the country and rainy days will vary between two (2) and five (5) days. A slightly enhanced rainfall is forecasted in Nyungwe National Park and neighbouring parts of Nyamasheke, Rusizi, Nyamagabe and Nyaruguru districts as well as some southern parts of Rubavu and northern Rutsiro districts.

Thunderstorms and moderate to strong winds are expected especially between 15th and 17th March 2021. The distribution of the rainfall across the country is highlighted below:

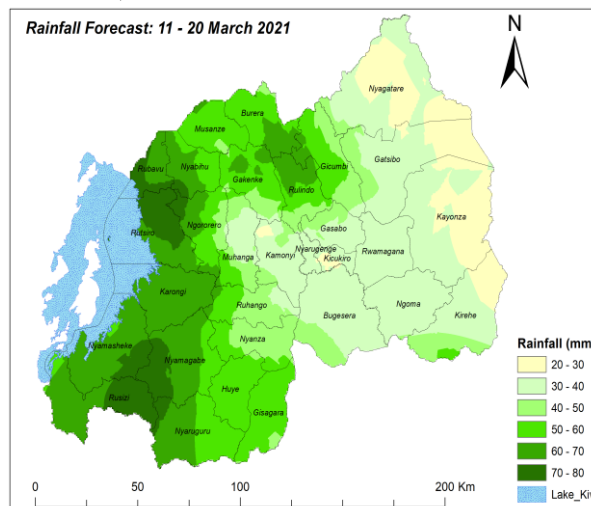
Eastern Province: Rainfall ranging between 20 and 30 mm is expected in southeast and central parts of Nyagatare, eastern parts of Kayonza and Gatsibo and northeastern parts of Kirehe. Rainfall ranging between 40 and 50 mm is expected in small parts of western Gatsibo and Nyagatare, southern Kirehe and south western of Bugesera. Remaining parts of the Province are expected to receive rainfall ranging between 30 and 40 mm.

City of Kigali: Rainfall ranging between 40 and 50 mm is expected in northern parts of Gasabo while the rest of Kigali city is expected to receive rainfall ranging between 30 and 40 mm. a small part in south western Kicukiro is expected to get rainfall ranging between 20 and 30mm.

Southern Province: Rainfall ranging between 30 and 40 mm is expected in Kamonyi district, eastern and central parts of Muhanga and a small part of north eastern Ruhango. Rainfall ranging between 40 and 60 mm is expected in Huye, Gisagara, Nyanza and remaining parts of Muhanga, Ruhango, eastern parts of Nyaruguru and Nyamagabe districts. Remaining parts of Nyamagabe and Nyaruguru districts are expected to receive rainfall ranging between 60 and 80 mm.

Western Province: Rainfall ranging between 50 and 60 mm is expected in eastern parts of Nyabihu and Ngororero. Rainfall ranging between 60 and 70 mm is expected in Karongi, northern parts of Rubavu, southern parts of Rutsiro, west and central parts of Rusizi and Nyamasheke as well as remaining parts of Nyabihu and Ngororero districts. Rainfall ranging between 70 and 80 mm is expected in the remaining parts of Rutsiro, Rubavu, Nyamasheke and Rusizi districts.

Northern Province: Rainfall ranging between 40 to 50 mm is expected in eastern and southern parts Gicumbi and a small part of southern Rulindo and Gicumbi districts. Rainfall ranging between 60 and 70 mm is expected in northern parts of Rulindo, southern parts of Burera, small parts of western Gicumbi and some pockets of Gakenke district. Rainfall ranging between 50 and 60 mm is expected in Musanze district and the remaining parts of Gicumbi, Rulindo and Gakenke districts.



Map 6: Rainfall Forecast for the second dekad of March 2021

3.2 Agricultural Activity/Advisories

Generally, in most parts of the country, seasonal crops are on post-harvesting period and harvesting of maize in the Eastern Province. The focus in these coming days should be on the farming preparation and planting activities as we move towards start of the March-May rainy Season which corresponds to 2021B agricultural Season. Farmers are advised to work closely with Agriculture Extension Officers for detailed information which will support their agriculture activities. For more meteorological information you can visit Meteo Rwanda's website: www.meteorwanda.gov.rw or call the toll free number 6080.