



Agrometeorological Bulletin N° 35, Dekad2, December (11– 20) 2020 Issued on 22nd December 2020

Summary

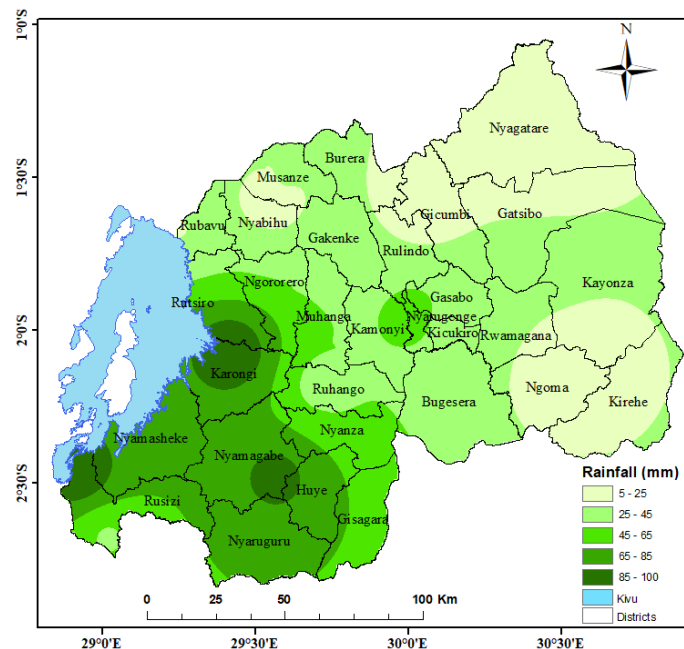
The second Dekad of December 2020 from (11 -20); indicated that the Inter Tropical Convergence Zone (ITCZ) is still well located over the region even though the rainfall showed a decrease in most parts of the country. Normal to below normal rainfall was recorded in most parts although few parts of the country recorded above normal rainfall. The highest rainfall amount was recorded in Karongi district at Rubengera station with 99mm in 5 rain-days, followed by Rusizi District at Kamembe Airport station with 93.7mm in 5 rain-days; both stations are located in Western province, and Nyamagabe station in Southern Province with 85.8mm in 5 rain-days. The lowest rainfall less than 10mm was recorded in Eastern Province, at Nyagatare station which recorded 4.9 mm. The temperature was within the range of Long Term Mean. The maximum temperature ranged between 20.5°C at Busogo and 29.3°C at Bugarama stations. Minimum temperature ranged between 10.9°C at Busogo and 19.0°C at Bugarama stations respectively.

1.0 Rainfall Pattern

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

1.1 Rainfall Amount

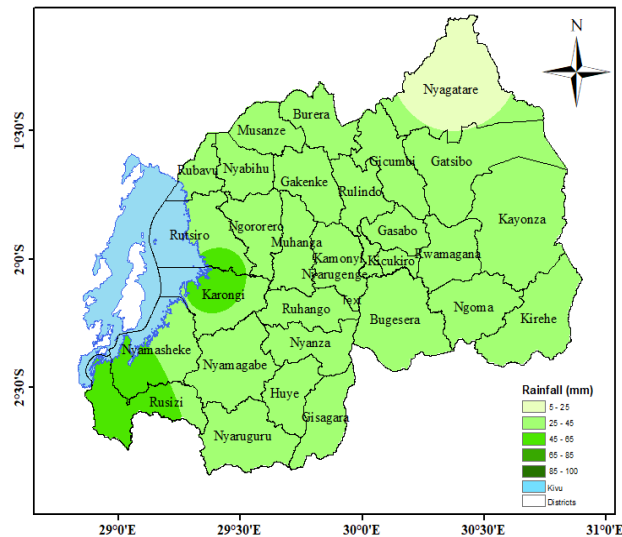
The actual total rainfall amount recorded in the second dekad of December 2020, is presented in Map 1. On daily basis it was observed that second dekad received light to moderate rainfall in most parts of the country. Western and Southern Provinces were comparatively wet. Stations across the country recorded below rainfall which was good for rainfed agriculture and favorable for harvesting period which is approaching.



Map 1: Rainfall amount during 2nd Dekad of December 2020

1.2 Rainfall climatology for the 2nd dekad of December

The rainfall climatology for the 2nd dekad of December is shown in map 2, and it indicates that normally the rainfall amount ranges from 16.1 to 47.5mm across the country depending on the region. Comparing to the current dekad of December 2020 and the Long Term Mean (LTM) for the same period; it was observed that the Eastern, Northern Provinces and Northern parts of the Western Province were dry in the second dekad of December 2020.

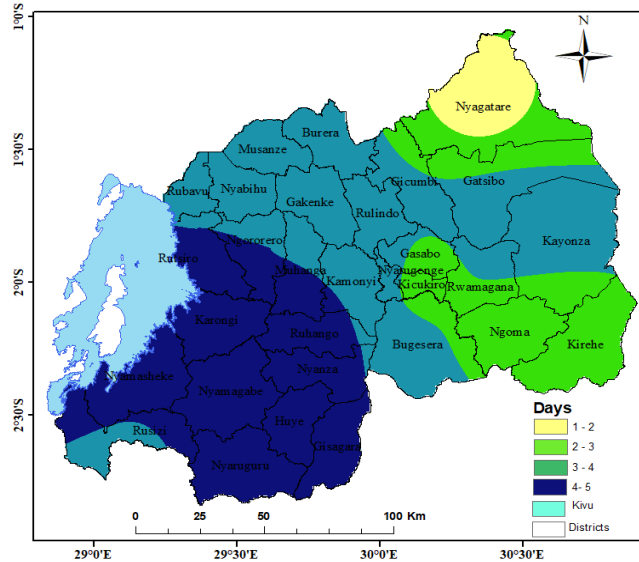


Map 2: Rainfall amount during 2nd Dekad of December (LTM)

1.3. Number of Rain Days

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

The distribution shows that most parts of the country have from 2 to 5 rainy days except Nyagatare station that had one rainy days during this dekad.



Map 3: Rainy days for dekad2 of December 2020

1.4 Soil moisture index

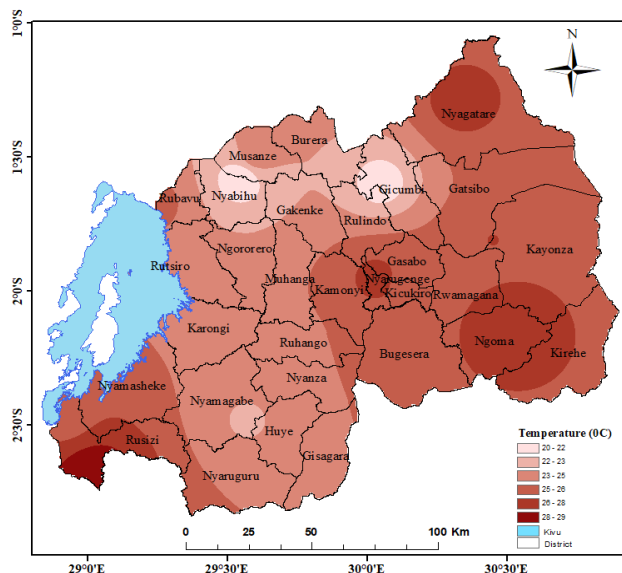
This section shows the available soil moisture content across the country. Soil moisture was in normal conditions over most parts of the country. However, soil moisture will decrease in the third dekad of December 2020 due to the expected decrease of rainfall amount leading to the rainy season which is approaching the cessation .

2.0 Temperature observation

The average Maximum and Minimum Temperature across the country during the second dekad of December 2020 is highlighted in the section below.

2.1 Mean Maximum Temperature

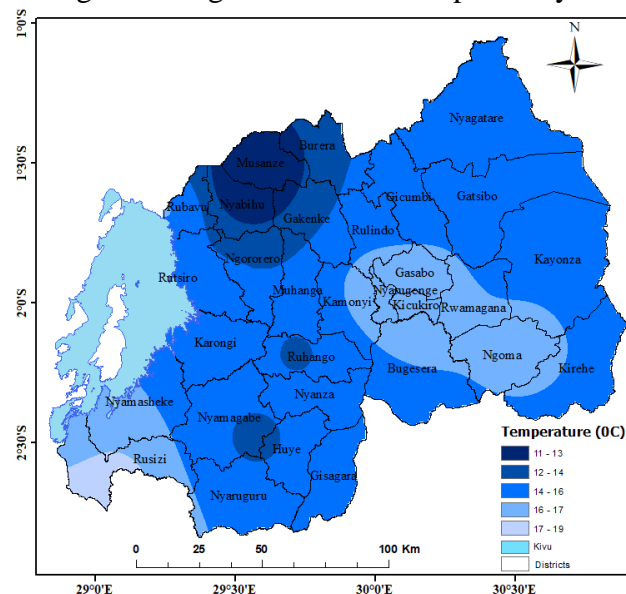
Map 4 shows the actual Mean Maximum Temperature distribution across the country which indicates that the southwestern parts, Kigali City, northern and southern parts of the Eastern Province were warmer than the Northern, Southern and the Western Provinces. The mean maximum temperature ranged between 20.5⁰C and 27.3⁰C with exceptional case of slightly high temperature of 29.3⁰C was recorded at Bugarama station.



Map 4: Mean Maximum Temperature for dekad2 December 2020

2.2 Minimum Temperature

The average minimum temperature across the country is shown in Map 5. The Northern part experienced colder temperature than other parts of the country. The minimum temperature between 10.9⁰C and 19.0⁰C was recorded at Busogo and Bugarama stations respectively.



Map 5: Mean Minimum Temperature for dekad2 December 2020

3.0 Weather Outlook and Agricultural advisories for the third dekad (21-31) December, 2020.

3.1 Weather Outlook for the third dekad of December 2020.

Rainfall amount ranging between 0 and 69 mm across the country is expected between 21st and 31st of December 2020 . A decrease in rainfall amount indicates the cessation of seasonal rainfall in most parts of Eastern and Southern Provinces. The distribution of the rainfall amount across the country is highlighted below:

Eastern Province: Rainfall ranging between 0 and 45 mm is expected in Eastern Province. Most parts of Kayonza District, southeastern parts of Gatsibo, central Nyagatare and extreme northeastern parts of Kirehe are expected to receive less rainfall ranging between 0 and 15 mm. Most parts of Bugesera, Ngoma, Rwamagana, Gatsibo and Nyagatare districts are expected to receive rainfall ranging between 15 and 30 mm while southern parts of Kirehe, Ngoma and Bugesera districts are expected to receive rainfall ranging between 30 and 45 mm.

Kigali City: It is expected that rainfall ranging between 15 and 45 mm will be received in Kigali City. Kicukiro, Nyarugenge and southern parts of Gasabo districts are expected to receive rainfall between 15 and 30 mm while northern parts of Gasabo and small part of northern Nyarugenge are expected to receive rainfall ranging between 30 and 45 mm.

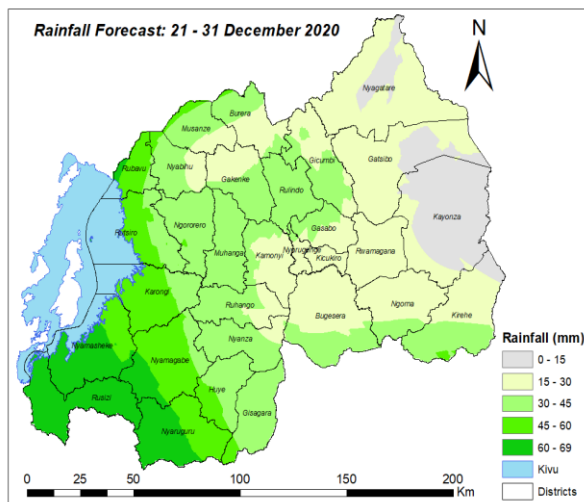
Southern Province: It is expected that rainfall amount ranging between 15 and 69 mm will be received in Southern Province. Most part of Kamonyi, eastern Nyanza and Ruhango districts are expected to receive rainfall ranging between 15 and 30 mm. Most parts of Nyanza, Ruhango, Muhanga, Gisagara, Huye and eastern parts of Nyamagabe districts are expected to receive rainfall ranging between 30 and 45 mm. Most part of Nyamagabe and eastern parts of Nyaruguru are expected to receive rainfall ranging between 45 and 60 mm. Western parts of Nyaruguru and Nyamagabe bordering Nyungwe National Park are expected to receive rainfall ranging between 60 and 69 mm.

Western Province: It is expected that rainfall amount ranging between 15 and 69 mm will be received in Western Province. Eastern Nyabihu is expected to receive rainfall ranging between 15 and 30 mm while the eastern parts of Rutsiro and Karongi districts, the remaining part of Nyabihu and Ngororero districts are expected to receive rainfall ranging between 30 and 45 mm. Western Rutsiro, Karongi, eastern Nyamasheke and most parts of Rubavu are expected to receive rainfall ranging between 45 and 60 mm while Rusizi and most parts of Nyamasheke are expected to receive rainfall ranging between 60 and 69 mm.

Northern Province : It is expected that rainfall amount ranging between 15 and 60 mm will be received in Northern Province. Rainfall ranging between 45 and 60 mm is expected in volcanic areas of Musanze. Most parts of Musanze, Gakenke, Rulindo, northern Burera and southern Gicumbi districts are expected to receive rainfall ranging between 30 and 45 mm while northern Gicumbi, Gakenke, southern Burera and Musanze are expected to receive rainfall ranging between 15 and 30 mm.

3.2 Agricultural Activity/Advisories

Generally, for this Agricultural season various crops are on the stage of maturity to harvesting in most parts of the country. The focus in these coming days should be on post-harvest activities. Farmers are advised to work closely with Agriculture Extension Officers for more 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.



Map 6: Rainfall Forecast for the third dekad of December 2020