



Agrometeorological Bulletin N° 36, Dekad3, December (21– 31) 2020 Issued on 2nd January 2021

Summary

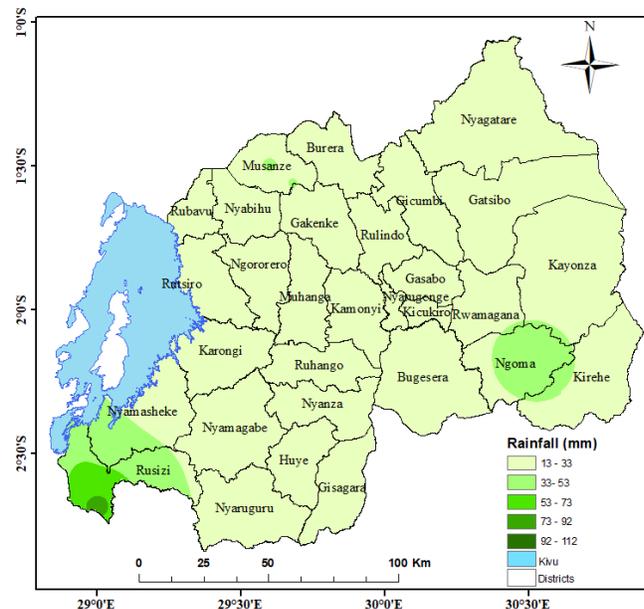
The third Dekad of December 2020 from 21st to 31st; indicated that the Inter Tropical Convergence Zone (ITCZ) is still well located over the region eventhough the rainfall is decreasing in most parts of the country. Normal to below normal rainfall was recorded in most parts although few parts of the country recorded above normal rainfall. The highest rainfall amount was recorded in Rusizi district at Bugarama and Mbirizi station with 76.4mm in 3 rain-days and 55.5mm in 4 rain-days respectively; and Kibungo station (Ngoma district) in Eastern Province with 44.8mm in 4 rain-days. The lowest rainfall less than 10mm was recorded in Eastern Province at Mwiri station in Kayonza district which recorded 5.4 mm in one rainy-day. The temperature was within the range of Long Term Mean. The maximum temperature ranged between 21.4°C to 30.2°C at Byumba and Bugarama stations respectively. Minimum temperature ranged between 10.7°C and 18.7°C at Busogo and Bugarama stations respectively.

1.0 Rainfall Pattern

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

1.1 Rainfall Amount

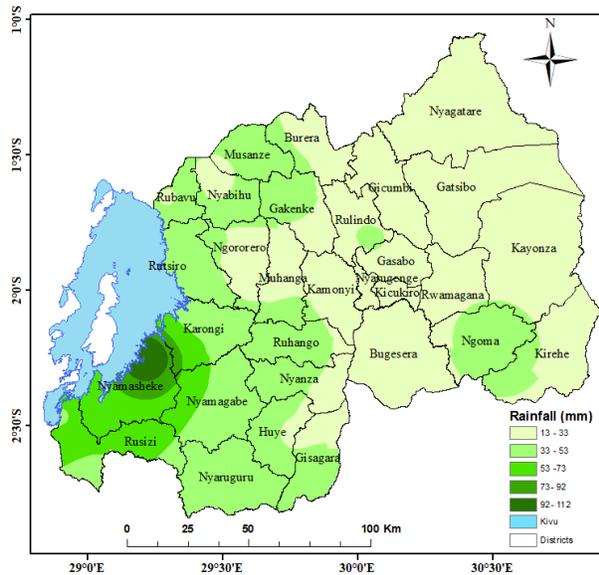
The actual total rainfall amount recorded in the third dekad of December, 2020 is presented in Map 1. On daily basis it was observed that thirddekad received light to moderate rainfall in most parts of the country. Stations across the country recorded below rainfall which have impacted some crops which were still in need of rainfall.



Map 1: Rainfall amount during 3rd Dekad of December 2020

1.2 Rainfall climatology for the 3rd dekad of December

The rainfall climatology for the 3rd dekad of December is shown in map 2, and it indicates that normally the rainfall ranges from 13.8 to 111.8 mm 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 rainfall was very light in most parts of the country during the third dekad of December 2020.

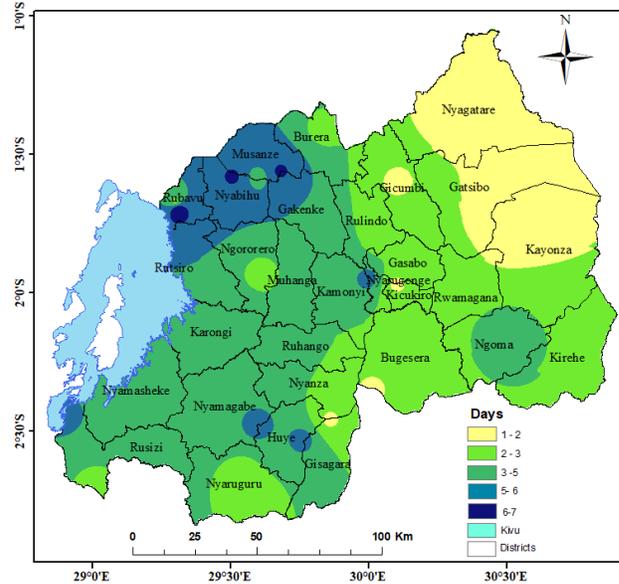


Map 2: Rainfall amount during 3rd Dekad of December (LTM)

1.3. 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 most parts of the country had 2 to 7 of rainy days except Nyagatare and Mwiri stations which had one rainy day.



Map 3: Rainy days for dekad3 of December 2020

1.4 Soil moisture index

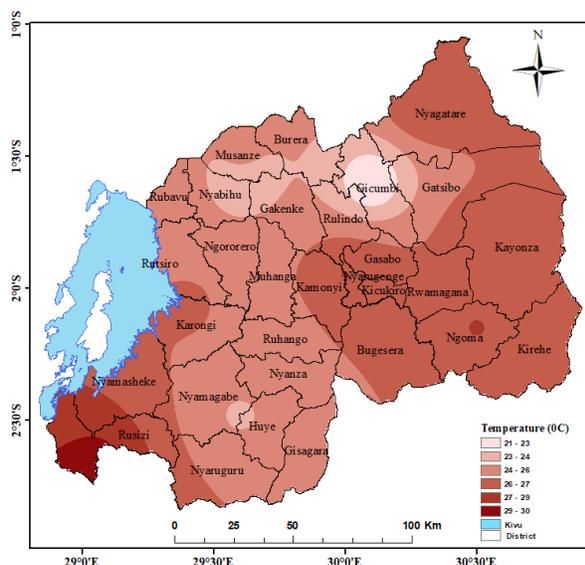
This section shows the available soil moisture content across the country. The soil moisture was decreased over most parts of the country. The soil moisture will retain in the first dekad of January 2021 due to the expected rainfall amount.

2.0 Temperature observation

The average maximum and Minimum temperature across the country during the third dekad of December 2020 is highlighted in the section below.

2.1 Mean Maximum Temperature

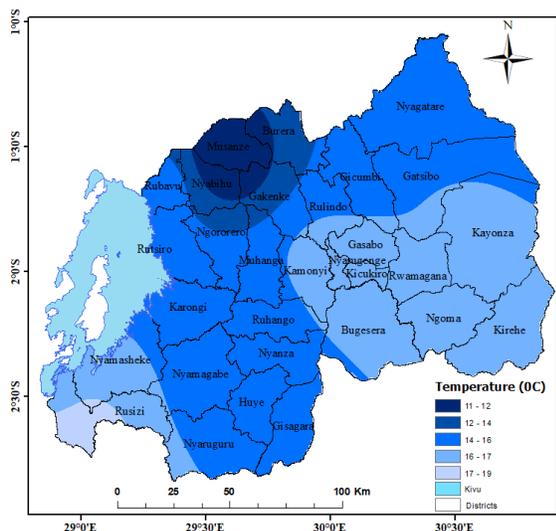
Map 4 shows the actual mean maximum temperature distribution across the country which indicates that the southwestern parts, Kigali City, northern and southern parts of the Eastern Province were warmer than the Northern, Southern and the Western Provinces. The mean maximum temperature ranged between 21.4⁰C and 27.3⁰C with exceptional case of slightly high temperature of 30.2⁰C recorded at Bugarama station.



Map 4: Mean Maximum Temperature for dekad3 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 the other parts of the country. The minimum temperature ranged between 10.7°C and 18.7°C at Busogo and Bugarama stations respectively.



Map 5: Mean Minimum Temperature for dekad3 December 2020

3.0 Weather Outlook and Agricultural advisories for the first dekad (1-10) January, 2021.

3.1 Weather Outlook for the first dekad of January 2021.

Rainfall ranging between 20 and 120 millimeters is expected country wide in the first dekad of January 2021 (between 1st and 10th January 2021). Southern and Western Provinces are expected to receive enhanced rainfall compare to the Long Term Mean of that area. The rest of the country will receive rainfall in the range of Long Term Mean. Rainfall is mainly expected from 1st to 3rd January 2021. The distribution of the rainfall across the country is highlighted below:

Eastern Province: Rainfall ranging between 20 and 80 mm is expected. Most parts of Nyagatare, central parts of Gatsibo and northern parts of Kayonza districts are expected to receive rainfall ranging between 20 and 40 mm. Eastern Kirehe, the remaining parts of Gatsibo and Nyagatare districts, most of Bugesera district and northeastern of Rwamagana are expected to receive rainfall amount ranging between 40 and 60 mm while rainfall amount ranging between 60 and 80mm is expected in the remaining parts of Kirehe, Ngoma, Rwamagana and southeastern of Bugesera districts.

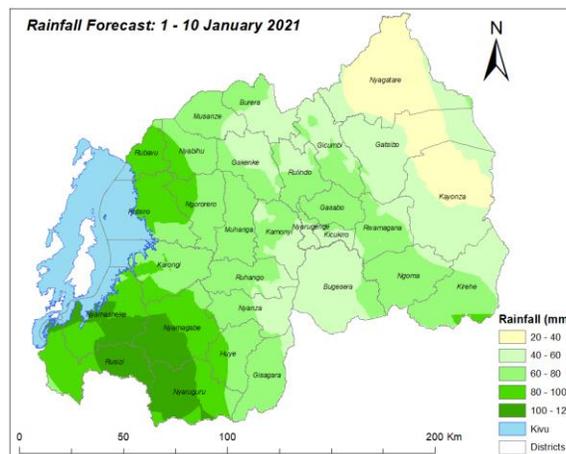
Kigali City: Rainfall amount ranging between 40 and 80 mm is expected. Gasabo, northern parts of Nyarugenge and Kicukiro Districts are expected to receive rainfall ranging between 40 and 80 mm. Remaining parts of Nyarugenge and Kicukiro are expected to receive rainfall ranging between 40 and 60 mm.

Southern Province: Rainfall ranging between 40 and 120 mm is expected. The Eastern of Nyanza and Ruhango districts and southern of Kamonyi are expected to receive between 40 and 60 mm. Rainfall ranging between 60 and 80 mm

is expected in Muhanga and Gisagara districts, most parts of Huye and remaining parts of Ruhango, Kamonyi and Nyanza districts. Parts of eastern Nyamagabe and Nyaruguru districts, and western Huye are expected to receive 80 and 100 mm while western parts of Nyaruguru and Nyamagabe districts bordering Nyungwe National Park are expected to receive rainfall ranging between 100 and 120mm.

Western Province: Rainfall ranging between 60 and 120 mm is expected. Parts of eastern Nyabihu and Ngororero districts, southern Rutsiro and most part of Karongi are expected to receive rainfall ranging between 60 and 80 mm. Rubavu, western Nyabihu, Ngororero districts, most parts of Rutsiro, small part of southern Karongi, southern and northern parts of Nyamasheke and western Rusizi are expected to receive rainfall ranging between 80 and 100. Eastern Rusizi and central parts of Nyamasheke are expected to receive rainfall ranging between 100 and 120 mm.

Northern Province: Rainfall ranging between 40 and 80 mm is expected in Northern Province. Most parts of Musanze, northern Burera, western and southern parts of Gakenke districts and southern parts of Rulindo and Gicumbi districts are expected to receive rainfall ranging between 60 and 80 mm. However, small part of southern Musanze, southern parts of Burera and northern parts of Gakenke, Rulindo and Gicumbi are expected to receive rainfall ranging between 40 and 60 mm.



Map 6: Rainfall Forecast for the first dekad of January 2021

3.2 Agricultural Activity/Advisories

Generally, seasonal crops are on the stage of maturity to harvesting, in most parts of the country. The focus in these coming days should be on postharvest 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.