



Agrometeorological Bulletin N° 31, Dekad1, November (01– 10) 2020 Issued on 12th November 2020

Summary

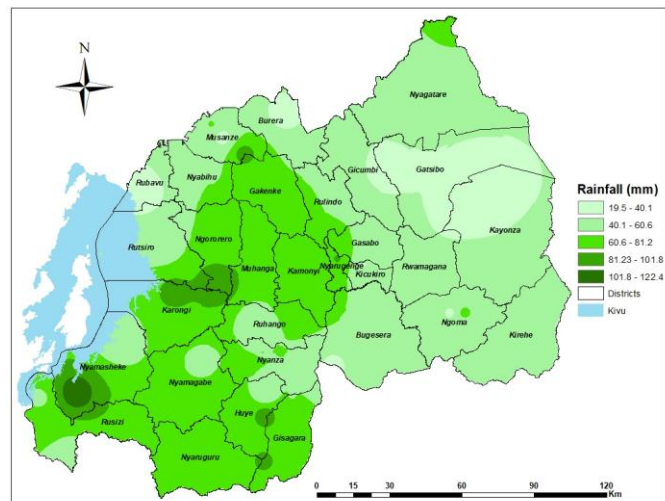
The first Dekad (01- 10) of November 2020; indicated that the Inter Tropical Convergence Zone (ITCZ) is still well located over the region and rainfall activities are well established across the country. Normal to above normal rainfall was recorded in all parts of the country. The highest rainfall amount was recorded in Western Province at Ntendezi station with 122.4mm in 8 rain-days, followed by Nyange station with 100.8mm in 7 rain-days and Save station in Southern Province with 93.3mm in 8 rain-days. The lowest rainfall less than 20mm was recorded at Mwiri station in the Eastern Province. The temperature was within the range of Long Term Mean. The maximum temperature ranged between 19.3°C at Kinigi and 29.9°C at Bugarama stations. Minimum temperature ranged between 11.1°C at Busogo and 19.3°C at Bugarama stations respectively. The soil moisture contents and soil temperatures were favourable for rainfed agriculture across the country.

1.0 Rainfall Pattern

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

1.1 Rainfall Amount

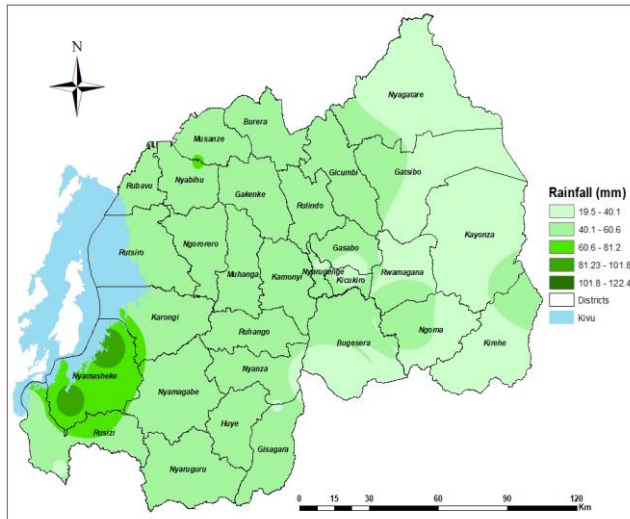
The actual total rainfall amount recorded in the first dekad of November, 2020 is presented in Map 1. On daily basis it was observed that this dekad received moderate rainfall in most parts of the country. Western, Southern Provinces and some parts of the Northern Province were comparatively wet. Stations across the country recorded good rainfall which was favourable for rainfed agriculture.



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

1.2 Rainfall climatology for the 1st dekad of November

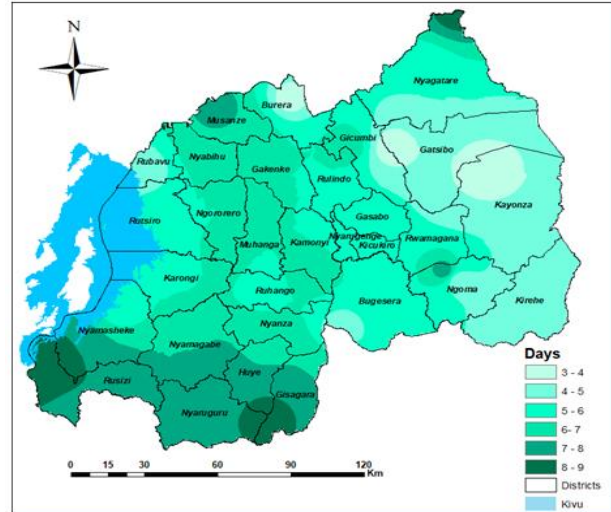
The rainfall climatology for the 1st dekad of November is shown in map 2, and it indicates that normally the rainfall ranges from 28.3 to 92.9mm across the country depending on the region. Comparing to the current dekad of November 2020 and the Long Term Mean (LTM) for the same period; it was observed that the current dekad was wet in most parts.



Map 2: Rainfall amount during 1st Dekad of November (LTM)

1.3. Number of Rain Days

The Map 3 shows the distribution of number of raindays across the country. A rainy day is defined as a day with at least 0.85mm of rainfall. As it is shown in map 3, most parts of the country had 4 to 9 rainy days except at Mwiri, Butaro and Nyagahanga stations that had 3 rain-days respectively. The rainfall distribution was adequate and suitable for rain-fed agriculture across the country. In the forecasting period (second dekad of November 2020) rainy days will be varying between 3 and 8 increasing from East toward the West parts of the country.



Map 3: Rainy days for dekad1 of November 2020

1.4 Soil moisture index

This section shows the available soil moisture across the country. The soil moisture showed an normal to surplus soil moisture over most parts of the country due to wet weather conditions experienced during the first dekad of November 2020. The soil moisture will continue to increase in the second dekad of November 2020 due to the expected wet weather conditions.

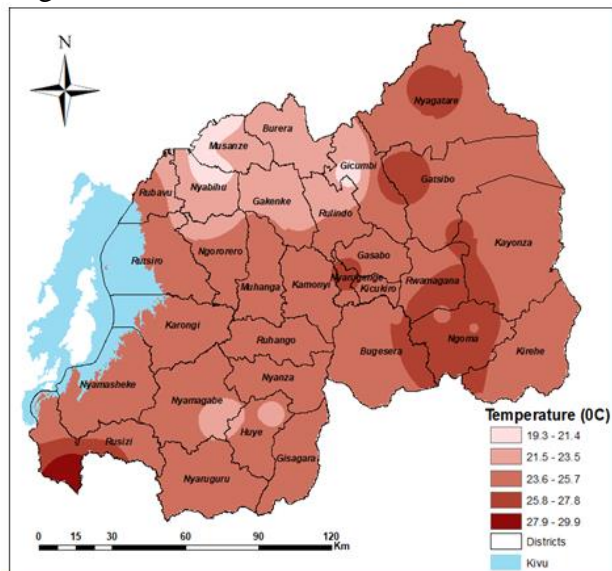
2.0 Temperature observation

The average maximum and Minimum temperature across the country during the first dekad of November 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 south western parts, Kigali City, northern and southern parts of the Eastern Province were warmer than the Northern, Southern and the Western Provinces. However, in most parts of the country the mean maximum temperature ranged between 19.3⁰C and 27.0⁰C with exceptional case of slightly high temperature of 27.5⁰C recorded

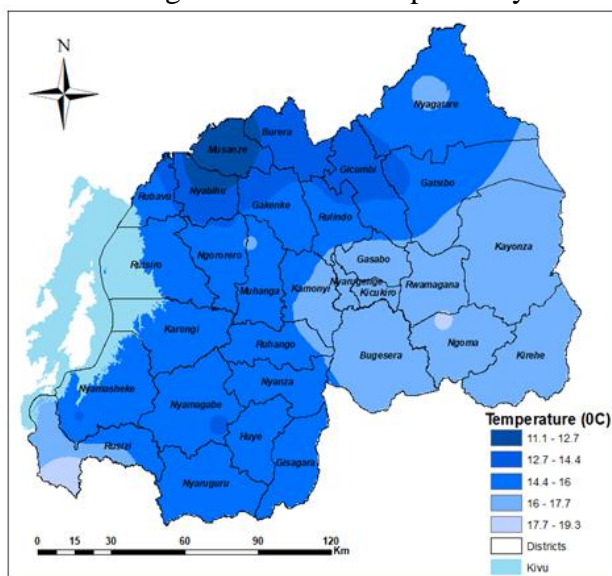
at Nyamata station and 29.9⁰C recorded at Bugarama station.



Map 4: Mean Maximum Temperature for dekad1 November 2020

2.2 Minimum Temperature

The average minimum temperature across the country is shown in Map 5. The Northern parts experienced colder temperature than the other parts of the country. The minimum temperature ranged between 11.1⁰C at Busogo Station and 19.3⁰C at Bugarama stations respectively.



Map 5: Mean Minimum Temperature for dekad1 November 2020

3.0 Weather Outlook and Agricultural advisories for the second dekad (11-20) November, 2020.

3.1 Weather Outlook for the second dekad of November 2020.

Rainfall expected will range between 20 and 150 mm across the country. The expected rain will result from Inter Tropical Convergence Zone (ITCZ) over the region which is migrating toward Southern Hemisphere. The enhanced Rainfall is expected from 15th to the end of forecasting period mainly in the Southern and Western Provinces.

The Eastern Province: Rainfall ranging between 20 and 80 mm is expected in Eastern Province. The eastern part of Nyagatare, Gatsibo, Kayonza and Kirehe are expected to receive rainfall ranging between 20 and 40 mm while the western part of Nyagatare, Gatsibo, Kayonza, northern part of Ngoma and eastern part of Rwamagana are expected to get rainfall between 60 and 80 mm. The remaining parts of the province are expected to receive rainfall ranging between 40 and 60 mm. The expected rainfall is slightly above normal range in many parts of the province.

Kigali City: Rainfall ranging between 40 and 60 mm is expected in Kigali City. South western part of Nyarugenge and central parts of Gasabo districts are expected to receive 60 to 80 mm. Rainfall expected in Kigali is within the range of long term mean for November dekad 2 (11th to 20th) rainfall.

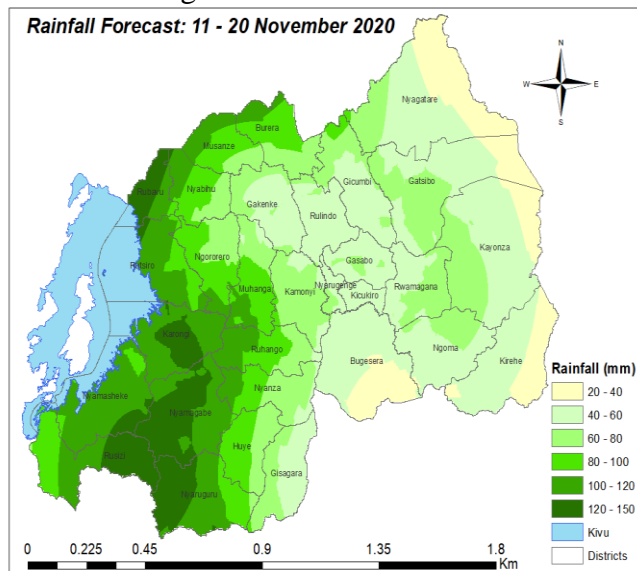
Southern Province: Rainfall ranging between 40 and 150 mm is expected in Southern Province increasing from eastern to western parts of the province. The eastern part of Gisagara is expected to receive rainfall ranging between 40 and 60 mm while the western part of Nyamagabe and Nyaruguru are expected to receive up to 150 mm, which is the highest amount of rainfall in this dekad. The expected rainfall will be above the range of long term average of November dekad 2.

Western Province: Rainfall ranging between 60 and 150 mm is expected in Western Province. Less rainfall in the province ranging between 60 and 80mm is expected in eastern Nyabihu and north east of Ngororero while high amount of rainfall in the province ranging between 120 and 150 mm is expected in east of Rusizi, Nyamasheke, western Rubavu and central part of Karongi District. Rainfall expected in Western Province is above long term mean range of November dekad 2 rainfall.

Northern Province: It is expected to receive rainfall ranging between 40 and 120 mm. Rulindo and southern parts of Gakenke and Gicumbi District are expected to receive rainfall ranging between 40 and 60mm while the volcano area is expected to have rainfall ranging between 100 and 120 mm. The expected rainfall is near long term mean range of November dekad 2 rainfall.

3.2 Agricultural Activity/Advisories

The stakeholders in Agriculture sector are advised to fast track fertilizers delivery to the farmers. The germination of the seeds are undergoing and weeding will be the main activity for the early planted crop. 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 second dekad of November 2020