



Highlights:

- **The cumulative rainfall** for the second dekad of November 2016 had a well distributed rainfall with a **depression in rainfall amount** at almost all parts of the country;
- **An increase of soil moisture content** was observed in all parts of the country at a very large extent.
- **For the 3rd and last dekad of November 2016;** we expect **continuation of rains;** depressing towards the end of November at many stations within the country

I. Introduction

Most parts of the country during the second dekad of November 2016 were generally wet throughout the whole dekad (The central part and north-eastern recorded high rainfall which resulted in high amount of soil moisture within those regions)

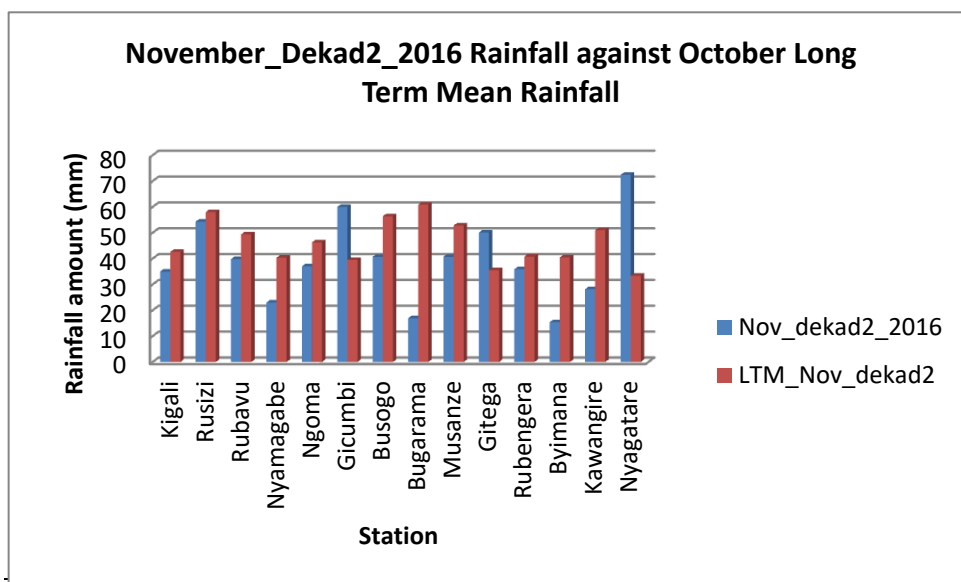
At most stations as compared to the Long-Term Mean; the country recorded below normal rainfall.

- a) The comparison between rainfall recorded in “November_dekad2_2016” and it’s long-term mean (LTM) value at each station, is shown below:

Cumulative rainfall (in mm) recorded at different stations

Station	Nov_d ekad2_2016	LTM_Nov_de kad2
Kigali	35	42.6
Rusizi (Kamembe)	54.3	58
Rubavu (Gisenyi)	39.8	49.4
Nyamagabe (Gikongoro)	23	40.4
Ngoma (Kibungo)	37	46.3
Gicumbi (Byumba)	60	39.5
Busogo	40.7	56.4
Bugarama	16.9	60.9
Musanze (Ruhengeri)	40.7	52.8
Gitega	50.1	35.5
Rubengera	35.9	40.8
Byimana	15.4	40.5
Kawangire	28.2	51
Nyagatare	72.4	33.4

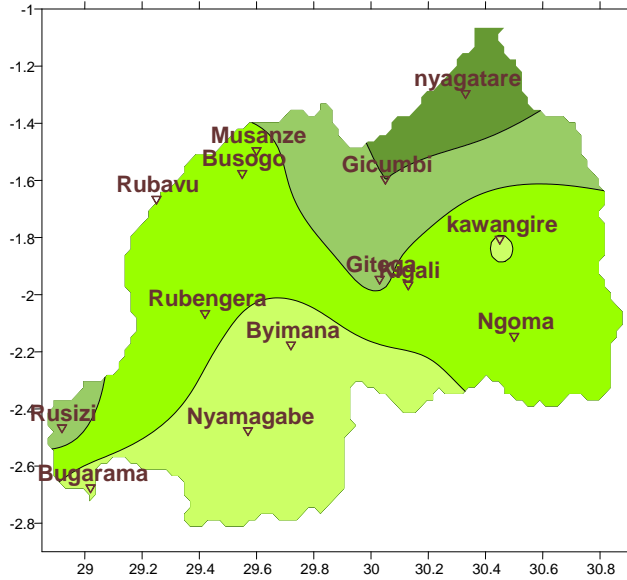
Table1



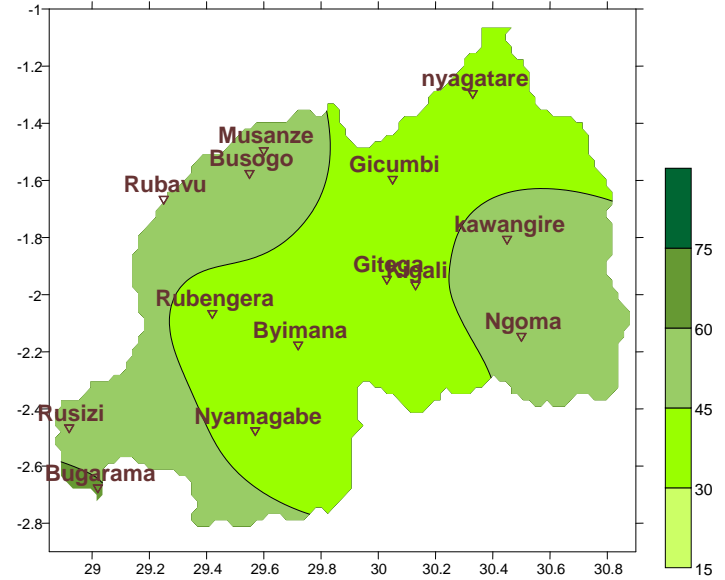
Plot1

b) **Rainfall analysis:** The next maps show the rainfall recorded during specific period monitored with the same dekad at long term average (mean)

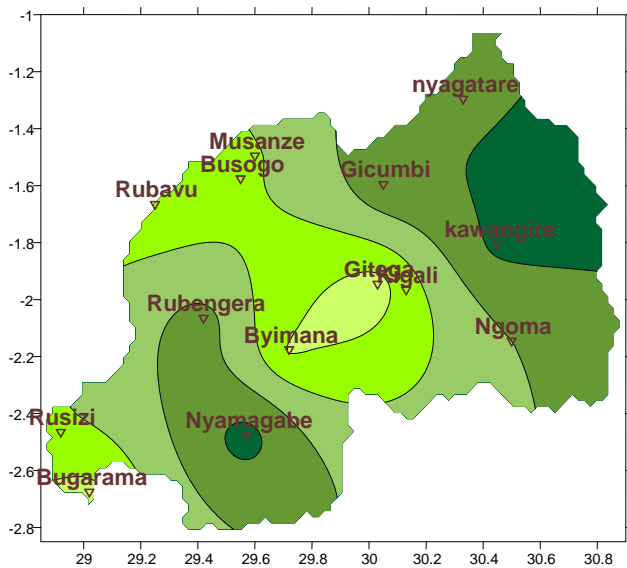
Map1: Total Rainfall (mm): Nov_dekad2_2016



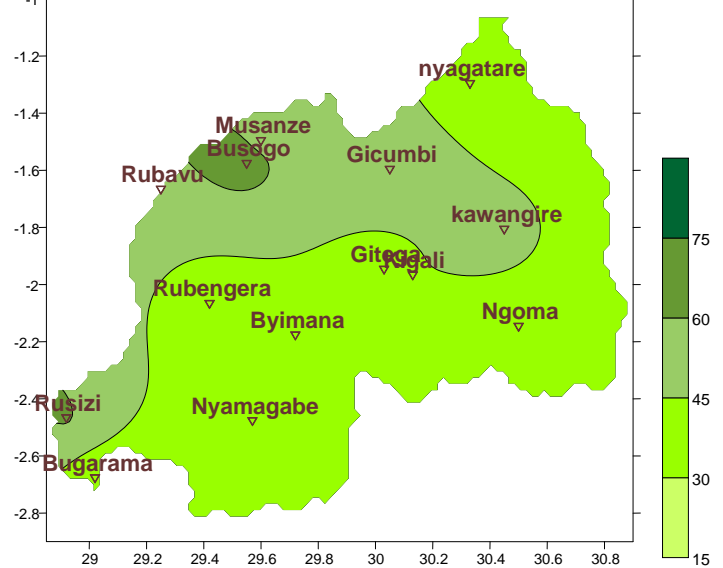
Map2: Long Term Average Rainfall (mm): Nov_dekad2



Map3: Total Rainfall (mm): Nov_dekad1_2016



Map4: Long Term Average Rainfall (mm): Nov_dekad1



II. Detailed observed rainfall during the 2nd dekad of November 2016

Cumulative rainfall for the first dekad of November 2016 was normal to above in many parts of the country except the central part extending northwestwards (see **Map3&4**). Cumulative rainfall for the second dekad of November 2016 was normal to below in many parts of the country (see **Map1&2**) except the most northeastern part which received the highest in the above range (see **Map1&2**):

a) Eastern Province

Almost all representing stations received rain that was normal to below in many parts of the country except the most northeastern part which received the highest in the above range (Nyagatare Station with 72.4mm; the double of the Mean climatological value; see **Table1**)

b) Northern Province

Rainfall pattern changed the orientation; we observed the eastern part to have had an enhanced rainfall and the western part with a depressed rainfall amount; but with almost the amount of rainfall at same range (see **Table1**)

c) Southern Province

All representing station received a below normal rainfall with Byimana Station as the smallest value recorded country wide (with 15.4mm of rainfall; see **Table1**)

d) Western Province

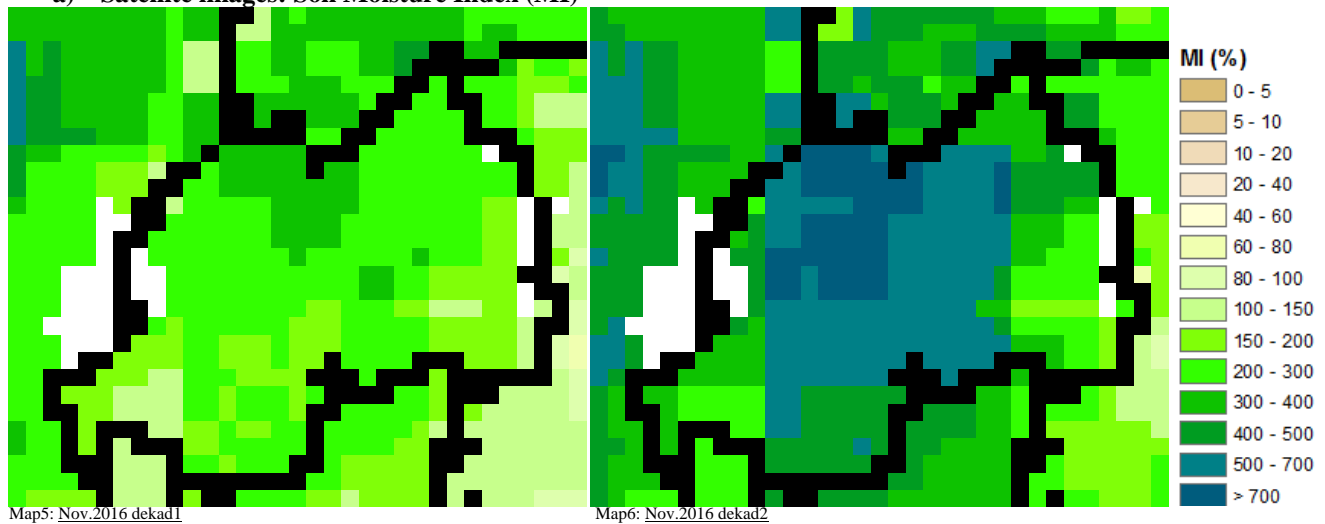
All stations received rain in the normal to below range compared to the mean value, but still, these amounts of rainfall was normally distributed and very close to climatology (see **Table1** and **Map1&2**)

e) **Kigali Region**

The central part with 2 representatives stations Kigali and Gitega; received overall rainfall which lies within the climatic range (see **Table1** and **Map1&2**)

III. Agricultural impact.

a) **Satellite images: Soil Moisture Index (MI)**



Within the 2nd dekad of November, there was continuation of rainfall that resulted in increase of the moisture content and vegetation cover over the whole Rwanda at a very large extent (see **Map5&6**)

The third dekad of November 2016; we expect continuation of rains across the country; Farmers are again advised to keep on harvesting rainwater to be used for irrigation while after this month of November; we expect sunny and hot weather in most parts of the country (the situation that usually lead to high rate of evaporation: Rain cessation)

b) **Rainfall forecast for the 3rd and last dekad of November 2016**

We expect continuation of rains; depressing towards the end of November at many stations within the country:

Kigali City; is expecting to experience alternatively wet and dry days which will be at normal range comparing to climatology.

Eastern Region; is expecting to experience depressed rainfall activities across the whole region.

Western Region; is expecting to experience rains at normal to above range throughout the period.

Northern region; is expecting moderate rains at normal to above range throughout the period.

Southern Region; is expecting to experience a depressed rainfall activities throughout the period with expectation of high amount towards the southwestern part but at a normal range comparing to climatology.

N.B: This forecast should be used in conjunction with the daily (24-hour), Three (3), Five (5) and Seven (7) days forecasts issued by the Rwanda Meteorology Agency (Meteo Rwanda)