



Highlights:

- **The cumulative rainfall** for dekad1_December_2017 showed a wide spread decrease over most parts of the country except Rusizi where recorded rainfall was above the Long Term Mean (LTM).
- The soil moisture index depleted across many parts of the country.
- The rainfall during dekad2 December _2017 is expected to **slightly increase over most parts of the country compared to the previous dekad.**

I. Introduction

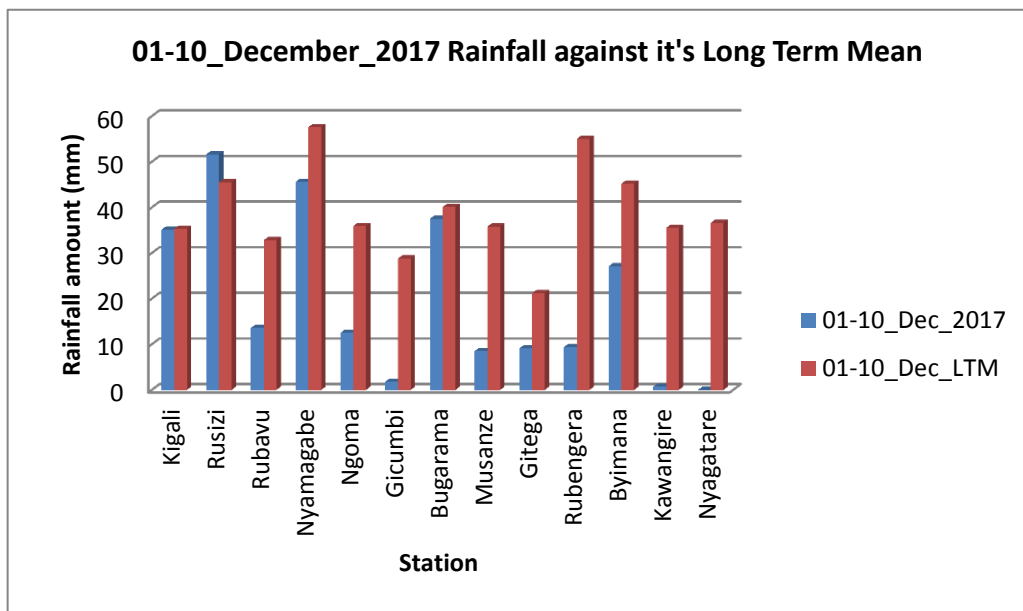
During dekad1_Sptember_2017, most parts of the country recorded rainfall which was less than the Long Term Mean (LTM) except Rusizi where records were slightly higher than the LTM; this is because of Inter Tropical Convergence Zone (ITCZ) which is source of rainfall moisture is shifting towards the south of the equatorial region.

a) The table and histogram below indicates the rainfall recorded during dekad1 December_2017 and the cumulative Long Term Mean for the same period.

Cumulative rainfall (in mm) recorded at different stations

Station	01-10_De c_2017	01-10_Dec _LTM
Kigali	35.1	35.3
Rusizi (Kamembe)	51.6	45.5
Rubavu (Gisenyi)	13.6	32.8
Nyamagabe (Gikongoro)	45.6	57.6
Ngoma (Kibungo)	12.5	35.9
Gicumbi (Byumba)	1.8	28.8
Bugarama	37.5	40.1
Musanze (Ruhengeri)	8.5	35.8
Gitega	9.1	21.2
Rubengera	9.4	55
Byimana	27.1	45.2
Kawangire	0.7	35.5
Nyagatare	0	36.6

Table1

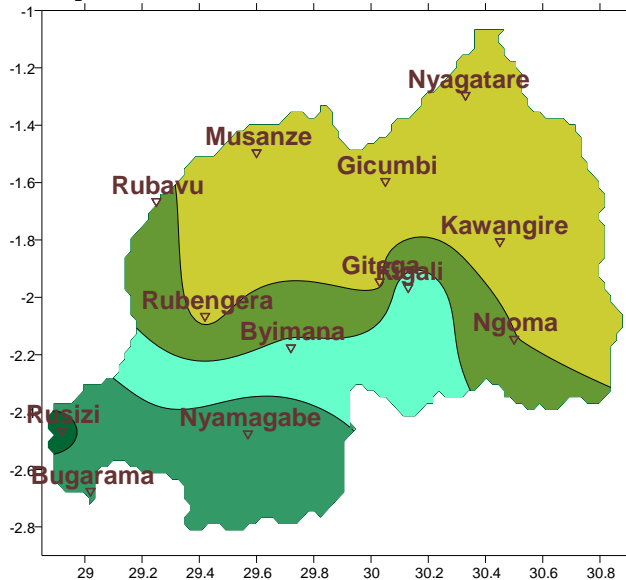


Plot1

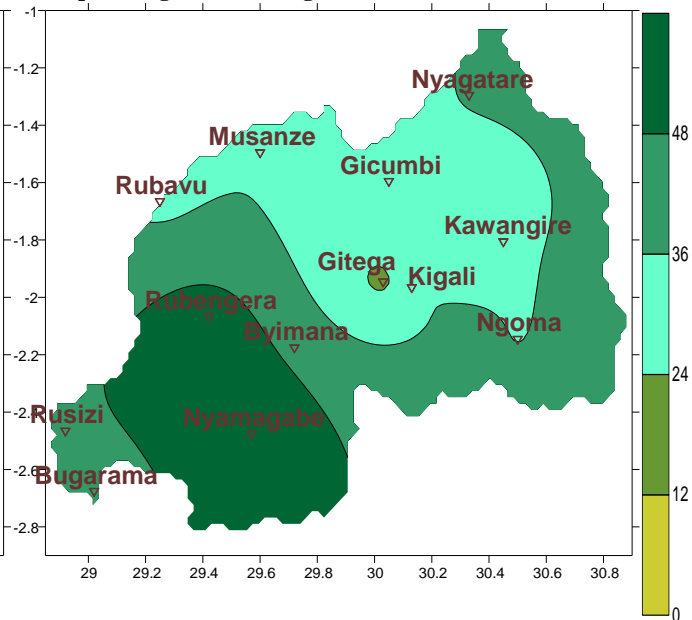
b) **Rainfall analysis:** The maps “**Map 1 and 2**” below show the cumulative rainfall recorded during dekad1 December_2017 and the cumulative rainfall for the same period. Generally the total rainfall distribution was less than the Long Term Mean (LTM).

The maps “**map 3 and 4**” show the cumulative rainfall recorded during dekad3_November_2017 and the cumulative rainfall for the same period. The rainfall for dekad3 of November 2017 was also less than the LTM.

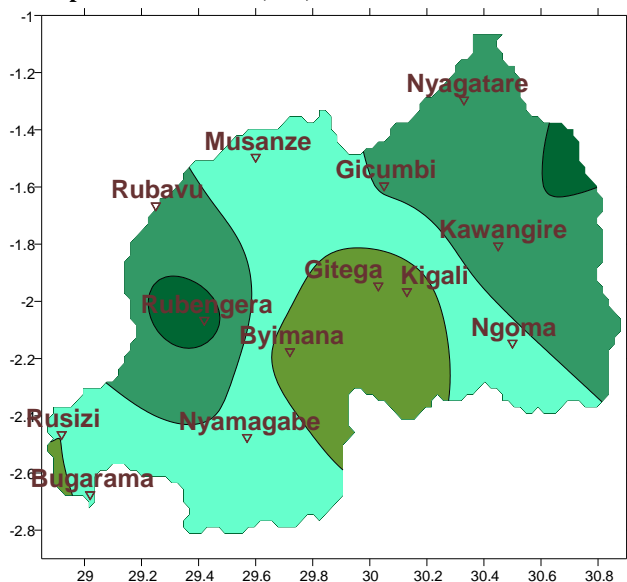
Map1: Total Rainfall (mm): dekad1_Dec_2017



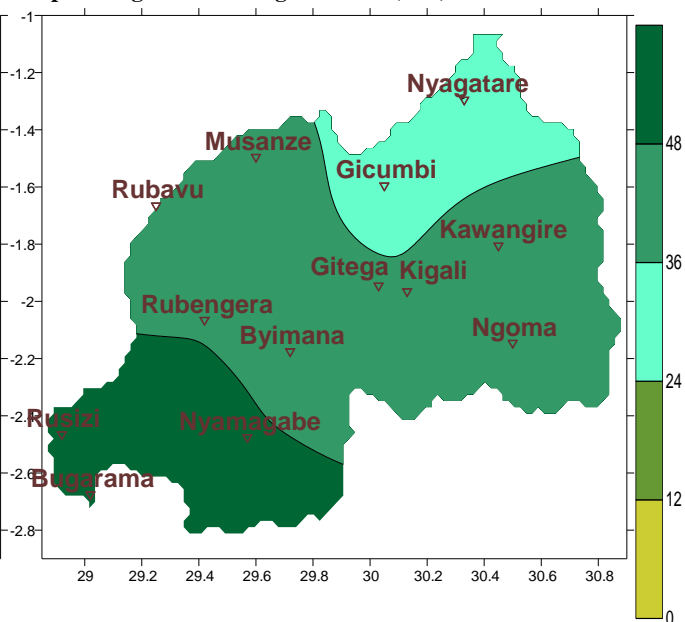
Map2: Long Term Average Rainfall (mm): dekad1_Dec_LTM



Map1: Total Rainfall (mm): dekad3_Nov_2017



Map2: Long Term Average Rainfall (mm): dekad3_Nov_LTM

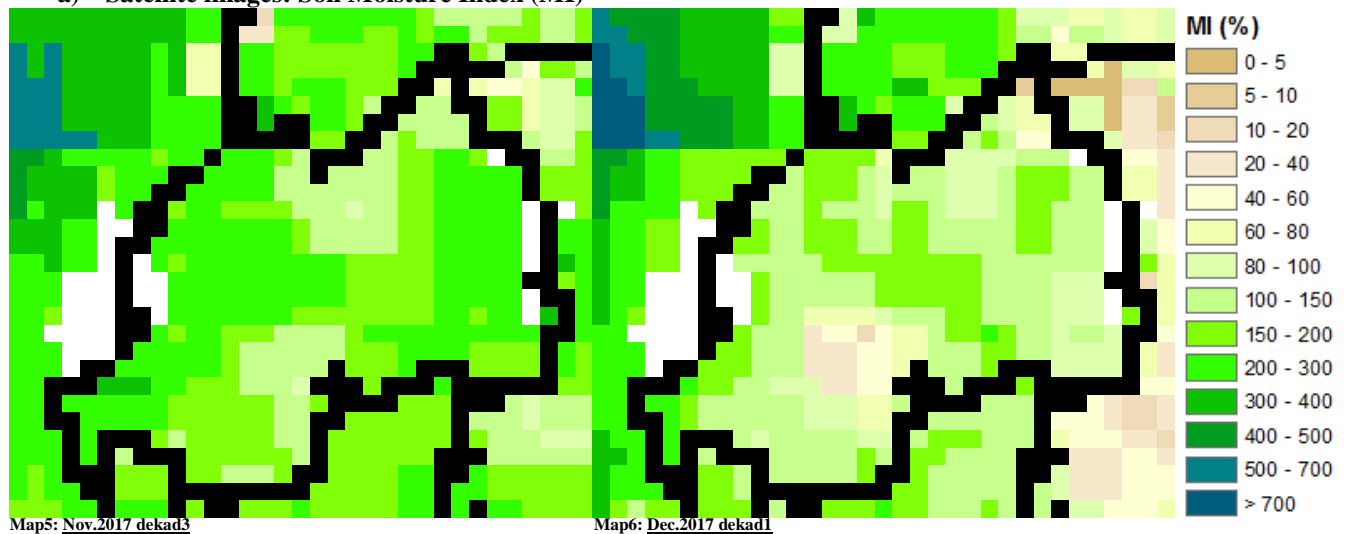


II. Detailed observed rainfall during the dekad1_December_2017

During dekad1_December_2017, the rainfall recorded was generally below the Long Term Mean and this was evident in the last two consecutive dekads across many parts of the country (see **Map1&2** and **Table1**) and dekad3_November_2017 (see **Map3&4**)

III. Agricultural impact.

a) Satellite images: Soil Moisture Index (MI)



During dekad3 of November_2017 to dekad1 of December_2017, the satellite derived moisture index show a decreased soil moisture due to the suppressed rainfall (see **Map 5&6**)

Rainfall forecast for dekad2 of December_2017

The rainfall during dekad2 December _2017 is expected to be slightly more over most parts of the country compared to previous dekad.

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)