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Highlights:

- **The cumulative rainfall** for dekad1_January_2017 was suppressed in the east and increasingly westward.
- **Satellite derived soil moisture index shows a general decrease** during dekad1_January_2017
- The rainfall during dekad2_January_2017 is expected to **reduce in most places** of the country.

I. Introduction

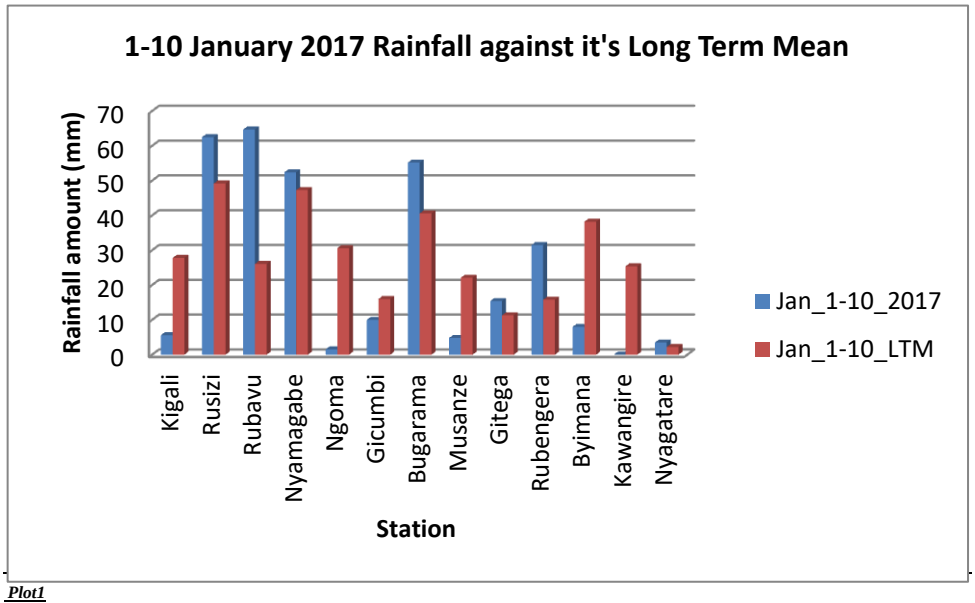
The whole western part especially the Western; during dekad1_January_2017 recorded rainfall which was above the long term mean (LTM); while the Eastern and Southern Provinces of the country recorded slightly below LTM.

a) The table and histogram below indicates the rainfall recorded during dekad1_January_2017:

Cumulative rainfall (in mm) recorded at different stations

Station	Jan_1-10_2017	Jan_1-10_LTM
Kigali	5.6	27.8
Rusizi (Kamembe)	62.5	49.2
Rubavu (Gisenyi)	64.7	26.1
Nyamagabe (Gikongoro)	52.4	47.3
Ngoma (Kibungo)	1.5	30.6
Gicumbi (Byumba)	10	16
Bugarama	55.2	40.6
Musanze (Ruhengeri)	4.8	22.1
Gitega	15.4	11.3
Rubengera	31.5	15.8
Byimana	8	38.2
Kawangire	0	25.4
Nyagatare	3.5	2.2

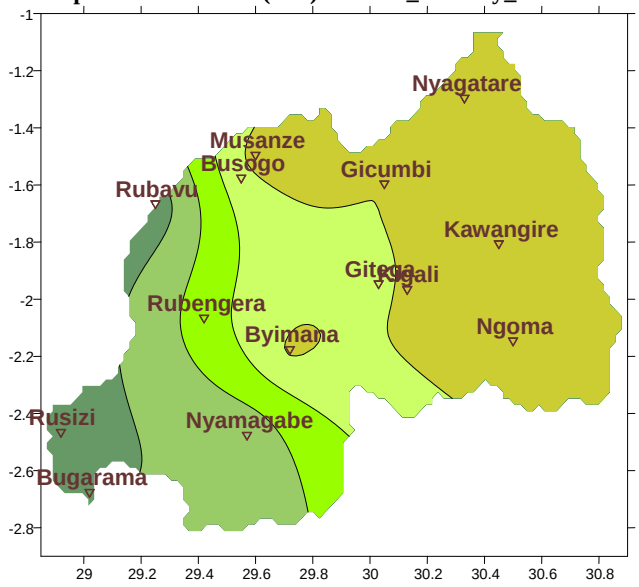
Table1



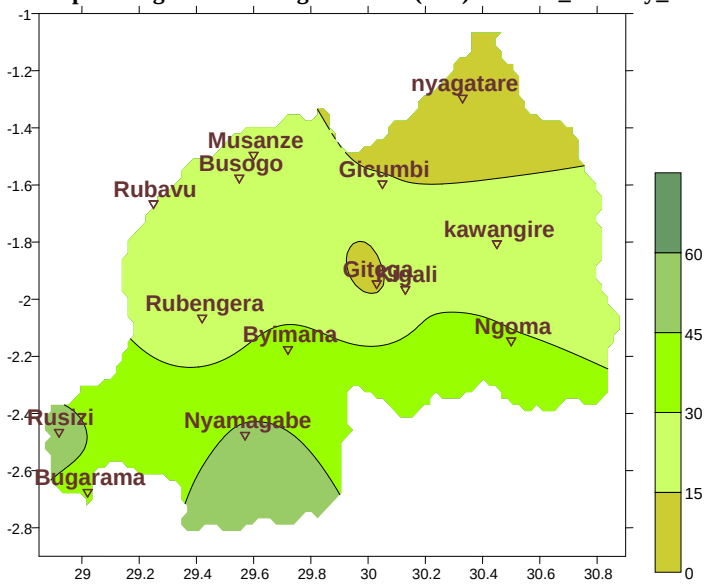
Plot1

b) **Rainfall analysis:** The maps "**Map 1 and 2**" below show the cumulative rainfall recorded during dekad1_January_2017 and its long term mean (LTM) of cumulative rainfall.
The maps "**map 3 and 4**" show the cumulative rainfall recorded during deka3_December_2016 and its LTM of cumulative rainfall.

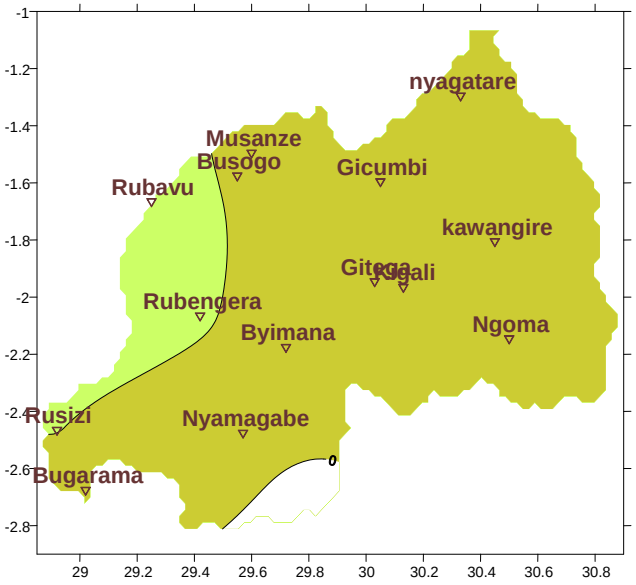
Map1: Total Rainfall (mm): dekad1_January_2017



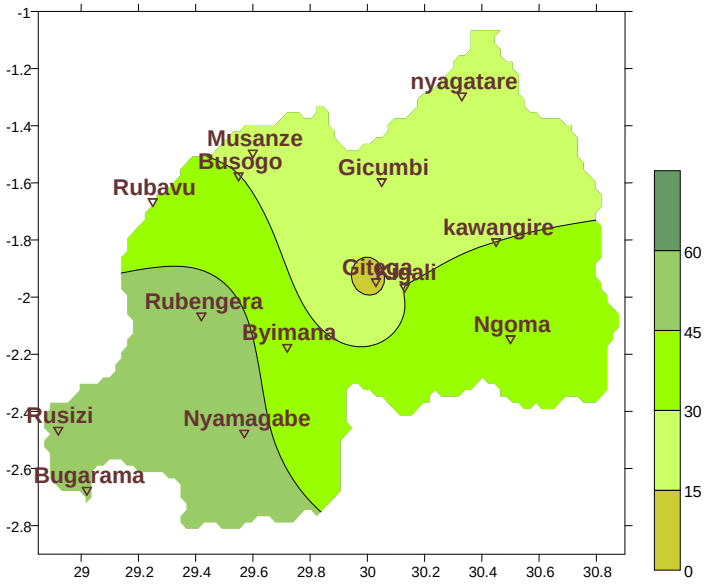
Map2: Long Term Average Rainfall (mm): dekad1_January_LTM



Map3: Total Rainfall (mm): dekad3_December_2016



Map4: Long Term Average Rainfall (mm): dekad3_December_LTM



II. Detailed observed rainfall during the dekad1_January_2017

Cumulative rainfall for dekad1_January_2017 was slightly enhanced in the west due to the advection that was steered from Congo forests (see **Map1&2**) while for dekad3_December_2016 cumulative rainfall was less wet because the system was not well pronounced (see **Map3&4**)

a) Eastern Province

All representing stations recorded high rainfall amount that is normal to above compared to the LTM (see **Table1** and **Map1&2**)

b) Northern Province

Most of the stations recorded rainfall which was slightly above the mean range increasingly westwards (see **Table1** and **Map1&2**)

c) Southern Province

Except the south-western part at Nyamagabe station which reported high rainfall amount; other stations in this Province recorded rainfall amount that is below the range of LTM (see **Table1** and **Map1&2**)

d) Western Province

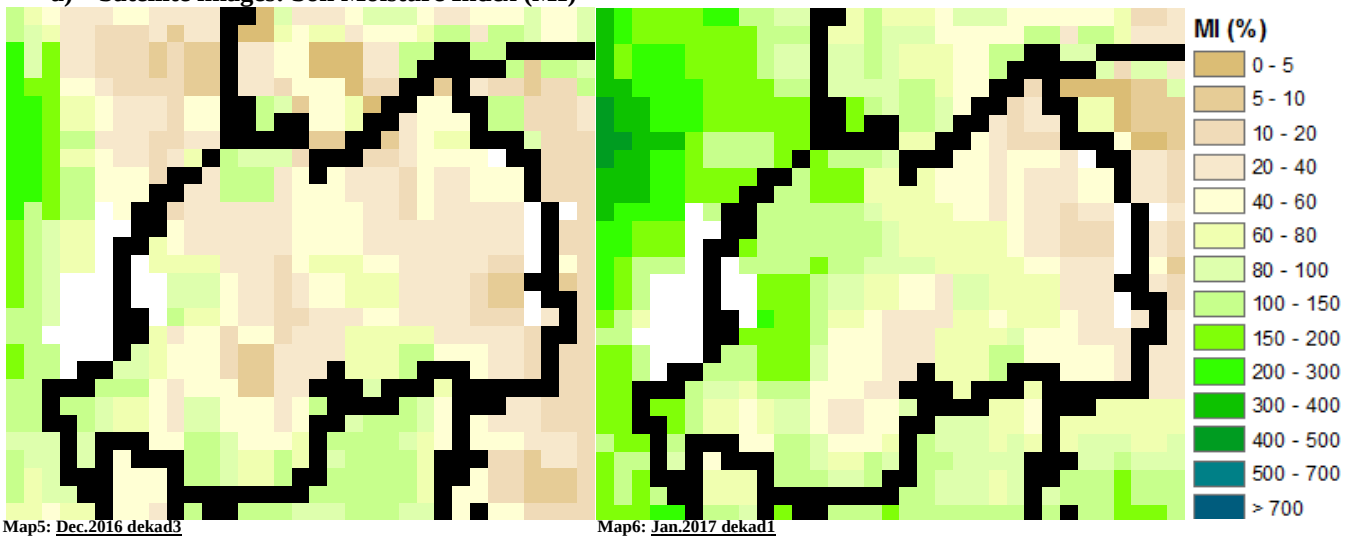
The stations in the Western Province recorded rainfall which was above the LTM range (see **Table1** and **Map1&2**)

e) Kigali City

The central part of the country which is represented by Kigali and Gitega stations recorded rainfall that is increasingly westwards with the low rainfall record at Kigali station with 5.6mm (see **Table1** and **Map1&2)**

III. Agricultural impact.

a) Satellite images: Soil Moisture Index (MI)



Map5: Dec.2016 dekad3 **Map6: Jan.2017 dekad1**

During dekad3_December_2016 to dekad1_January_2017; the satellite derived moisture index was reduced as a result of reduced widespread of rainfall across the country but increased in the western part because of rainfall events that occurred during the first dekad on January 2017 (see **Map 5&6**)

The distribution of rains during dekad2_January_2017 is expected to continue reducing comparing to what was observed in dekad1_January_2017 especially the east, north central and southern parts of the country.

Farmers are advised to put in place supplementary measures which will support their farming practices.

Rainfall forecast for dekad2_January_2017

We expect reduce rain distribution across many parts of the country during dekad2_January_2017

Kigali City; Will experience cloudy conditions.

Eastern Region; Will experience cloudy conditions.

Western Region; Will experience cloudy conditions to be likely over than rainy conditions over most parts of the region.

Northern region; Will experience cloudy conditions to and light rains in the most western part.

Southern Region; The region is expected to experience depressed rainfall activities.

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)