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## NATURAL

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## Highlights:

- The overall cumulative rainfall for dekad2_April_2017 was suppressed in most parts of the country.
- The soil moisture index is still significantly high although the northeast and central-west had a slight reduced in moisture.
- The rainfall during the third dekad of April_2017 is expected to increase compared to what was observed during the second dekad of April_2017.


## I. Introduction

The rainfall decrease was observed over most parts of the country especially during the last days of the second dekad of April_2017 however the amount recorded was below the Long Term Mean (LTM) across the country.
a) The table and histogram below indicates the rainfall recorded during dekad2_April_2017 and its LTM:

## Cumulative rainfall (in mm) recorded at different stations

| Station | $\begin{gathered} \text { Apr_1 } \\ 1- \\ 20 \_20 \\ 17 \end{gathered}$ | $\begin{gathered} \text { Apr_11 } \\ - \\ 20 \_\mathbf{L T} \\ \mathbf{M} \end{gathered}$ |
| :---: | :---: | :---: |
| Kigali | 40.3 | 47.9 |
| Rusizi <br> (Kamembe) | 15.7 | 54.6 |
| Rubavu <br> (Gisenyi) | 36.9 | 47.3 |
| Nyamagabe <br> (Gikongoro) | 39.4 | 68.8 |
| Ngoma <br> (Kibungo) | 28.8 | 68.9 |
| Gicumbi (Byumba) | 36.5 | 61.2 |
| Bugarama | 25.2 | 53.4 |
| Musanze (Ruhengeri) | 42.1 | 60.1 |
| Gitega | 53.6 | 51.1 |
| Rubengera | 13 | 50 |
| Byimana | 17.7 | 72.2 |
| Kawangire | 28.3 | 55.5 |
| Nyagatare | 16.5 | 50.4 |



PlotI
b) Rainfall analysis: The maps "Map 1 and 2" below show the cumulative rainfall recorded during dekad2_April_2017 and its Long Term Mean (LTM) of cumulative rainfall for the same period.
The maps "map 3 and 4" show the cumulative rainfall recorded during dekad1_April_2017 and its LTM of cumulative rainfall for the same period.


Map1: Total Rainfall (mm): dekad1_Apr_2017


Map2: Long Term Average Rainfall (mm): dekad2_Apr_LTM


Map2: Long Term Average Rainfall (mm): dekad1_Apr_LTM


## II. Detailed observed rainfall during the dekad2_April_2017

The cumulative rainfall for dekad2_April_2017 was suppressed over most parts of the country except at Gitega-Kigali and Rubavu stations where the reported values show that the range of rainfall was below the LTM (see Map1\&2). Cumulative rainfall for dekad1_April_2017 was also suppressed in most parts of the country especially the extreme eastern and western parts of the country.
a) Eastern Province

All representative stations show a decrease in amount of rainfall compared to the LTM (see Table1 and Map1\&2)
b) Northern Province

The records show that there was a high amount of rainfall (ranging between 30 and 50 mm ) however it was below the LTM (see Table1 and Map1\&2)
c) Southern Province

The representative stations in the province show a decrease in amount of rainfall far below the LTM (see Table1 and Map1\&2)
d) Western Province

The stations in the province recorded rainfall in the range of LTM however at Rubengera station records show a significant decrease of rainfall amount hence recording the lest value of 13 mm during second dekad of April_2017 (see Table1 and Map1\&2)
e) Kigali City

The decrease of rainfall was not much like other parts of the country the records were within the range of LTM, Gitega station recorded the highest amount during 2nd dekad of April_2017 (with 53.6 mm of rainfall; see Table1 and Map1\&2)

## III. Agricultural impact.

a) Satellite images: Soil Moisture Index (MI)


During dekad1 to dekad2_April_2017; the satellite derived moisture index showed gradual increase of moisture content in the most northwest and south but also a decrease in the most northeast and central west as result of the rainfall events that occurred within the last 20 days (see Map 5\&6)

The distribution of rains during dekad3_April_2017 is expected to continue and increase as opposed to the second dekad of April_2017

## Rainfall forecast for dekad3_April_2017

We expect wet conditions over most parts of the country especially central and south.
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)

