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# AGROMETEOROLOGICAL BULLETIN

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DEKAD 14 PERIOD: 11<sup>TH</sup> - 20<sup>TH</sup> May 2023

## 1.0 HIGHLIGHTS

- During the current dekad several parts of the country continued to report light to moderate rainfall. The total amount reported over most stations was generally less than the previous dekad.
- Lela station in Migori County reported the highest rainfall followed by Malindi station in Kilifi (Figs; 3.1 & 3.2).
- Average mean air temperature increased over most parts of the country during the current dekad.
- Total pan evaporation increased over most stations with the highest readings of 76.5 mm being recorded at Mandera and Garissa stations in Northeastern Kenya.
- During the next 10 days (11<sup>th</sup> – 20<sup>th</sup> May 2023 several parts of the country are expected to continue receiving light to moderate rainfall).

## 2.0 WEATHER AND CROP REVIEW FOR THE PERIOD: 11<sup>TH</sup> – 20<sup>TH</sup> MAY 2023

### 2.1 SUMMARY

During the period under review, several parts of the country reported light to moderate rainfall unlike the previous dekad where moderate to heavy rainfall was reported. Lela station in Migori reported the highest rainfall readings in the Country (98.2 mm) followed closely by Malindi station which reported (88 mm).

Over Western, Nyanza, and some parts of Rift Valley, maize has attained tasselling stage, and beans are at the flowering stage. Both crops are in a moderate state corresponding

to normal growth and therefore, normal yield is expected for both crops. In Central, Nairobi, Eastern, and Coastal regions, maize is past the ninth leaf stage and beans are at the flowering stage. In the pastoral regions in North Eastern, Northwestern, and over the game reserves, pasture and forage conditions improved with the current rains and most Water/Earth pans recharged hence improving the status of water resources in these regions.

## **2.2 WESTERN AND NYANZA REGION**

Most stations from the region reported light to moderate rainfall, which was below normal. Average mean air temperatures rose in the region and ranged between 21.82 °C and 22.88 °C. Scattered cloud cover dominated the sky during the morning and afternoon hours.

### **2.2.1 KAKAMEGA:**

The station reported a cumulative rainfall amount of 39 mm against its Long term dekadal mean of 78.68 mm, the station had a total of three (3) consecutive rainy days with three (3) days recording more than 5.0 mm (moderate rainfall). Scattered cloud cover dominated the station in the morning and afternoon hours throughout the whole dekad. The average mean air temperature at the station increased from 21.9 °C to 22.88 °C. Maize is at flowering stage and beans are at maturing stage. Normal yield is expected for both crops.

### **2.2.2 KISII:**

The station received light to moderate rainfall during the dekad. A cumulative rainfall amount of 36.51 mm was received against its long-term dekadal mean of 79.01 mm. The station had a total of four (4) consecutive rainy days with all four (4) days recording more than 5.0 mm (light to moderate rainfall). Mean air temperature increased from 19.9°C in the previous dekad to 21.82 °C. Scattered cloud cover persisted during both morning and afternoon hours throughout the dekad. Maize is at flowering stage and beans are at maturing stage. Normal yield is expected for both crops.

## **2.3 RIFT VALLEY PROVINCE**

All stations from the region reported below-normal rainfall except Kitale. Light to moderate rainfall was reported by all stations in the region during the dekad. Average mean air temperatures generally increased in the region and ranged between 18.85 °C and 20.6 °C. Scattered cloud cover dominated the sky during the morning and afternoon hours throughout the dekad.

### **2.3.1 KITALE:**

The station generally received light to moderate rainfall during the dekad. A cumulative rainfall amount of 67.21 mm was received against its long-term dekadal mean of 48.52 mm. The station reported five (5) consecutive rainy days with four (4) days receiving more than 5.0 mm of rainfall (moderate to heavy rainfall). Scattered cloud cover dominated the station in the morning and afternoon hours throughout the whole dekad. Average mean air temperature rose from 19.9°C to 20.6°C. Total pan evaporation was 37.6 mm. Maize

is at emergence and beans at flowering stage, both crops are in good state. Rainfall is sufficient for the growth of both crops and weeding is in progress.

### **2.3.2 KERICHO:**

A cumulative amount of 76.4 mm of rainfall was reported against its long-term dekadal mean of 81.69 mm. The station had five (5) consecutive rainy days with four (4) days recording more than 5.0 mm (moderate to heavy) rainfall during the dekad. Average mean air temperature increased from 18.2 °C in the previous dekad to 18.85°C in the current dekad. Broken cloud cover persisted over the station in the morning and in the afternoon hours. Maize is at flowering stage and beans are at maturing stage. Normal yield is expected for both crops.

### **2.3.3 KABARAK:**

The station reported a cumulative amount of 37.04 mm of rain against its long-term dekadal mean of 55.16 mm. The station had two (2) consecutive rainy days with all the two (2) days recording more than 5.0 mm (moderate to heavy) rainfall during the dekad. Average mean air temperature rose from 19.3 °C in the previous dekad to 19.5 °C in the current dekad. Scattered cloud cover persisted over the station in the morning and in the afternoon hours throughout the entire dekad. Most farmers in the area have completed planting and both maize and beans and the two crops are at emergence stage.

## **2.4 CENTRAL AND NAIROBI PROVINCES.**

Several stations from the Central region reported reduced rainfall which was lower than their long-term dekadal mean. Light to moderate rainfall was reported by all stations in the region. Average mean air temperatures generally increased in the region and ranged between 15.4 °C and 21.7 °C. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad

### **2.4.1 NYERI:**

Received a total cumulative amount of 13.9 mm against its long-term dekadal mean rainfall of 50.7 mm. The station had a total of one (1) consecutive rainy day with one (1) day recording more than 5.0 mm (moderate to heavy) rainfall during the dekad. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. The average mean air temperature was 20.04 °C which was a decrease from 20.39 °C in the previous dekad. Maize is past ninth leaf stage and beans have attained the flowering stage. Both crops are in a moderate state and therefore normal yield is expected.

### **2.4.2 THIKA:**

Received a total cumulative amount of 0 mm against its long-term dekadal mean rainfall of 38.9 mm. The station had a total of zero (0) rainy days with zero (0) days recording more than 5.0 mm. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. Maize is past ninth leaf stage and beans have attained the flowering stage. Both crops are in a moderate state and therefore normal yield is expected.

### **2.4.3 DAGORETTI**

Received a total cumulative amount of 6.52 mm against its long-term dekadal mean rainfall of 57.8 mm. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. The average mean air temperature was 19.76 °C and total pan evaporation was 33.4 mm. Maize is past ninth leaf stage and is infested with fall worms. Beans have formed pods and some are infested with aphids while peas are at the flowering stage. Farmers are encouraged to begin second wedding.

### **2.4.4 KABETE:**

The station received a total cumulative amount of 7.2mm against its long-term dekadal mean of 55.52 mm of rainfall. The station reported one (1) rainy day recording more than 5.0 mm of rainfall. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad.

Maize is past ninth leaf stage and beans have attained the flowering stage. Both crops are in a moderate state and therefore normal yield is expected.

Coffee variety *Ruiru hybrid 11* is at 100% berry soft and the crop state is fair which corresponds to normal growth. The extent of spread of weeds are not much in the farm though 40% of the crop has been affected by leaf rust.

Banana variety *Giant Cavendish* is at 90% suckers and 10% ripeness stage and there is a considerable amount of weeds but they do not affect the plant. However, 40% of the crop has been affected by Panama banana disease.

### **2.4.5 NYAHURURU:**

The station received a total cumulative amount of 31.3 mm against its long-term dekadal mean of 39.62 mm of rainfall. The station had a total of five (5) rainy days with two (2) days recording more than 5.0 mm. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. Average mean air temperature at the station was 15.35 °C. Maize is past ninth leaf stage and beans have attained the flowering stage. Both crops are in a moderate state and therefore normal yield is expected.

## **2.5 EASTERN REGION:**

Several stations in the region reported light rainfall with Embu leading the region with 7.5 mm of rainfall. Scattered cloud cover which increased to broken in the afternoon was generally observed in the region during the entire period under review. Average mean air temperatures ranged between 13.0°C and 24.4 °C.

### **2.5.1 MERU:**

The station received a total cumulative amount of 0.01 mm against its long-term dekadal mean of 22.16 mm of rainfall. Scattered cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. Average mean air temperature at the station was 20.20 °C. Maize is at flowering stage and beans are at maturing stage. Normal yield is expected for both crops.

### **2.5.2 EMBU:**

The station received a total cumulative amount of 7.5 mm against its long-term dekadal mean of 61.43 mm of rainfall. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. The average mean air temperature at the station was 20.7 °C. Maize is at flowering stage and beans are at maturing stage. Normal yield is expected for both crops.

### **2.5.3 KATUMANI:**

The station received a total cumulative amount of 0 mm against its long-term dekadal mean of 14.72 mm of rainfall. Broken cloud cover during the morning and afternoon hours dominated the sky throughout the dekad. Total pan evaporation was 33.0 mm.

Maize is at tasseling stage and beans at flowering stage.

Mangoes (variety apple) are at 80% developing stage with new leaves and first weeding in progress.

Oranges (Washington Navel) were at 100% flowering stage.

## **2.6 COASTAL REGION:**

Several stations in the region reported light to moderate rainfall with Malindi leading the region with 88.0 mm of rainfall. Scattered cloud cover dominated the region throughout the dekad. Mean air temperature ranged between 26.7 °C and 28.1 °C.

### **2.6.1 MTWAPA:**

The station received a total cumulative amount of 54.6 mm against its long-term decadal mean of 108.3 mm of rainfall. Average mean air temperature was 27.9 °C. Broken cloud cover dominated the sky throughout the dekad. Maize is at the ninth leaf stage and in good state. Mangoes are at fruit setting stage and in moderate state.

### **2.6.1 MSABAHA:**

The station received a total cumulative amount of 61.11 mm against its long-term dekadal mean of 101.14 mm of rainfall. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. Maize is at the ninth leaf stage for those farms that were planted late and tasseling stage for those who planted early.

## **2.7 NORTH EASTERN REGION:**

Several stations in the region reported light rainfall with Moyale leading the region with 0.45 mm of rainfall. Scattered/Broken cloud cover was generally observed over the region during the morning and afternoon hours.

Mean air temperature ranged between 17.85 °C and 31.04 °C.

Pasture and forage condition is good and Water/Earth pans in the region are still filled up with water.

### 3.0 DEKAD 14 2023 RAINFALL, TEMPERATURE AND SOIL MAPS/CHARTS

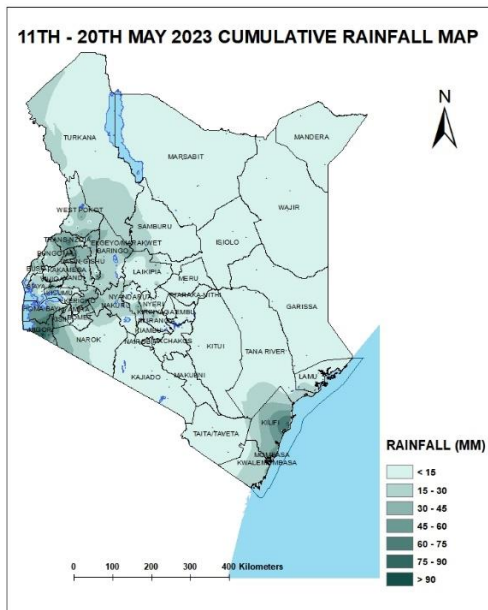


Fig: 3.1

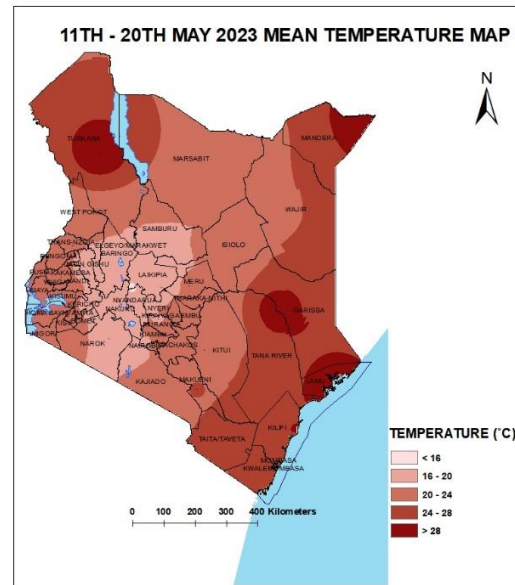


Fig: 3.2

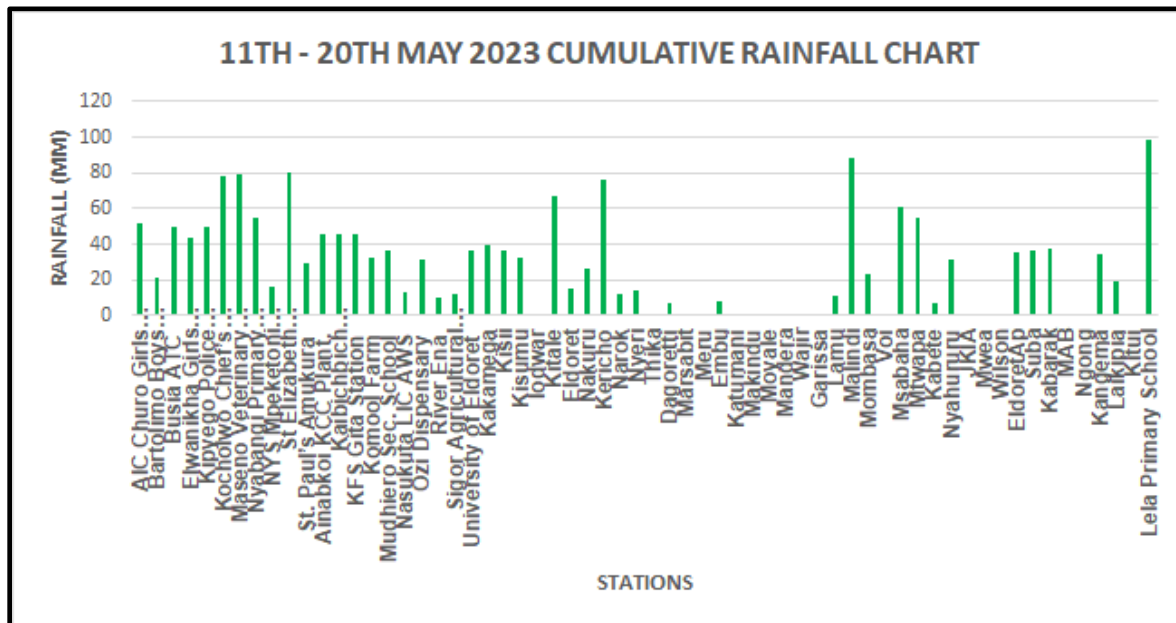


Fig: 3.3

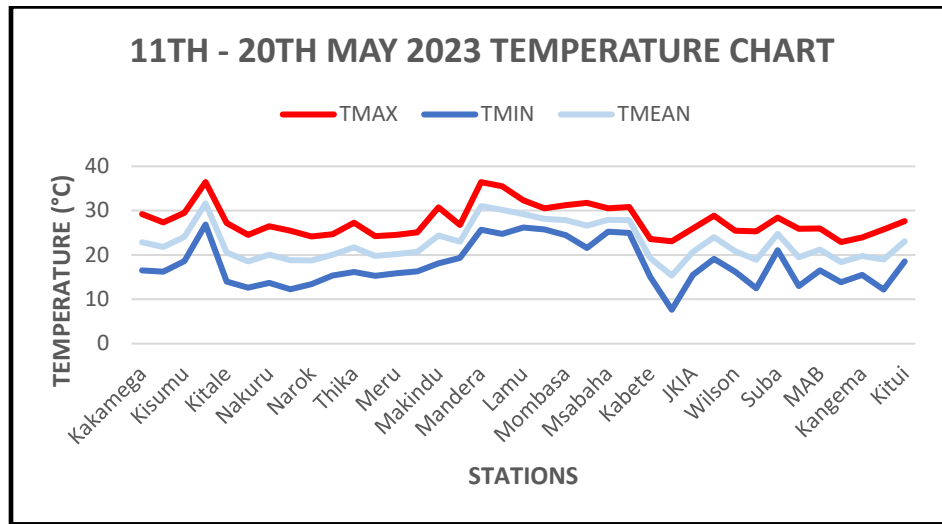


Fig: 3.4

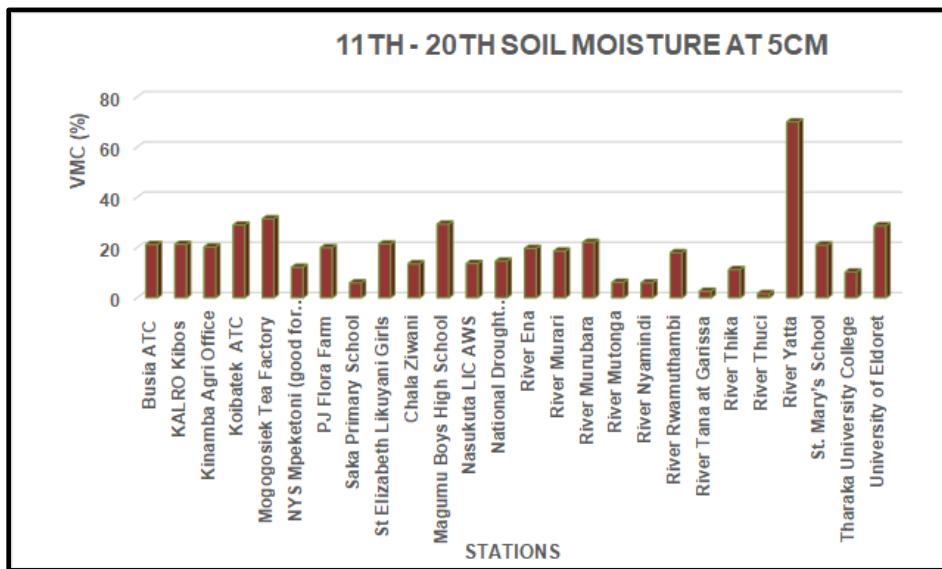


Fig: 3.5

Station	Cumulative Rainfall from start of MAM 2023 rainfall (mm) season	Maximum consecutive wet days	Maximum consecutive dry days	Number of rainy days
Kakamega	782.95	3	2	3
Kisii	791.73	4	2	4
Kitale	366.3	5	3	4
Kericho	583.31	5	1	4
Nyeri	334.27	1	3	1
Thika	434.42	0	10	0
Dagoretti	514.88	1	2	0
Meru	472.35	0	6	0
Embu	485.41	2	3	0

Station	Cumulative Rainfall from start of MAM 2023 rainfall (mm) season	Maximum consecutive wet days	Maximum consecutive dry days	Number of rainy days
Katamani	239.23	0	10	0
Msabaha	437.05	4	3	3
Mtwapa	545.02	2	2	2
Kabete	535.22	1	3	1
Nyahururu	275.32	5	3	2
Kabarak	399.87	2	1	2

Fig: 3.5

#### **4.0 EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT TEN (10) DAYS; 21<sup>ST</sup> – 30<sup>TH</sup> MAY 2023.**

During the next ten (10) days, light rains are expected over most parts of the country including south eastern lowlands and the Coastal region.

Over Western and Nyanza regions, most farmers who planted early are expected to start harvesting beans.

In Central Nairobi and Eastern parts of the country, light rainfall is expected and since crops are currently at past the ninth leaf stage and beans forming pods, the expected weather conditions will help beans to form grains.

Northwestern, Northeastern and South Rift regions are expected to have sunny intervals during the next dekad, the expected weather conditions will be ideal for grazing of domestic animals spraying and deworming for pest control is recommended for the pastoral communities in these regions.

South Eastern lowlands and the coastal regions are also expected to receive light rainfall during the coming dekad. The expected weather conditions are likely to support both crops and pasture and continue to improve water resources in these areas.

For inquiry or any clarification, please use the contacts on the letter head.

Mary Githinji

**FOR: DIRECTOR OF METEOROLOGICAL SERVICES.**