

REPUBLIC OF KENYA MINISTRY OF ENVIRONMENT, CLIMATE CHANGE & FORESTRY KENYA METEOROLOGICAL DEPARTMENT

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AGROMETEOROLOGICAL BULLETIN

Ref: MET/7 /28 / 2 Issue No: 16/2023 Date: 14/06/2023

DEKAD 16 PERIOD: 1ST - 10TH June 2023

1.0 HIGHLIGHTS

- During the current dekad several parts of the country received light to moderate rainfall. Most stations reported a decrease in the total amount of rainfall received compared to the previous dekad.
- Koromangucha Weather station in Migori County reported the highest amount of rainfall followed by Mtwapa (Figs; 3.1 & 3.2).
- Average mean air temperature has generally increased all over the country. The cooler regions in the Country had mean air temperatures ranging between 14.6°C 19.8 °C while the warmer regions had mean air temperature reaching 31.4°C (Figs. 3.3 & 3.4).
- Total pan evaporation, increased over most stations with highest readings of 82.5 mm being recorded at Mandera station in North Eastern Kenya.
- During the next ten (10) days, light to moderate rains are expected to fall over a few regions within the country.

2.0 WEATHER AND CROP REVIEW FOR THE PERIOD: 1ST - 10TH JUNE 2023

2.1 SUMMARY

During the period under review, several parts of the country reported light to moderate rains just as in the previous dekad. The rainfall amount reported over most stations generally decreased in amount compared to the previous dekad. Koromangucha Weather station in Migori County reported the highest amount of rainfall of 110.4mm followed by Mtwapa at 66.3mm.

Over Western, Nyanza and some parts of Rift Valley, beans are being harvested while maize is at flowering of the tassel stage.

In Central, Nairobi, Eastern and the Coastal regions, beans are at maturity stage while maize is at flowering of the tassel stage.

In the pastoral regions of Northwestern/Eastern and over the game reserves, pasture and forage condition remains satisfactory and most Water/Earth pans still have sufficient water for both domestic and wildlife.

2.2 WESTERN AND NYANZA REGION

The stations from the region reported reduced rainfall as compared to their long-term decadal means. Light to moderate rainfall was reported by all stations in the region during the dekad. Average mean air temperatures increased in the region and ranged between 19.9 °C and 22.5 °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 51.7mm against its Long term dekadal mean of 63.37mm, the station had a total of two (2) consecutive rainy days with one (1) day recording more than 5.0 mm (moderate rainfall). Scattered cloud cover dominated the station in the morning and afternoon hours throughout the whole dekad. Average mean air temperature at the station increased from 22.48°C to 22.52°C. Maize is at flowering of the tassel stage and beans are at harvesting 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 34.2 mm was received against its long-term dekadal mean of 65.07 mm. The station reported three (3) consecutive rainy days with two (2) days recording more than 5.0 mm (moderate to heavy rainfall). Mean air temperature dropped from 21.8 °C in the previous dekad to 21.1 °C. Scattered cloud cover persisted during both morning and afternoon hours throughout the dekad. Maize is at flowering of the tassel stage and beans are at harvesting stage. Normal yield is expected for both crops.

2.3 RIFT VALLEY PROVINCE

Several stations from the region reported reduced rainfall compared to the previous dekad. Light to moderate to rainfall was reported by all stations in the region during the dekad. Average mean air temperatures generally increased in the region and ranged between 17.6°C and 20.0 °C. Scattered cloud cover dominated the sky during the morning and afternoon hours.

2.3.1 KITALE:

The station generally received light to moderate rainfall during the dekad. A cumulative rainfall amount of 65.5 mm was received against its long-term dekadal mean of 39.0mm. The station reported two (2) consecutive rainy days with two (2) days receiving more than

5.0 mm of rainfall. Scattered cloud cover dominated the station in the morning and afternoon hours throughout the whole dekad. Average mean air temperature remained constant at 20.0°C. Maize is at flowering stage and beans maturing stage. Poor distribution of March – May 2023 seasonal rainfall adversely affected beans especially during the grain filling stage.

2.3.2 KERICHO:

A cumulative amount of 32.91 mm of rainfall was reported against its long-term dekadal mean of 70.81mm. The station had two (2) consecutive rainy days with four (4) days recording more than 5.0 mm of rainfall during the dekad. Average mean air temperature dropped from 18.26 °C in the previous dekad to 17.64 °C in the current dekad. Broken cloud cover persisted over the station in the morning and in the afternoon hours. Maize is at flowering of the tassel 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 0.12 mm of rain against its long-term dekadal mean of 33.64 mm. Average mean air temperature increased from to 18.93 °C in the previous dekad to 19.24 °C in the current dekad. Scattered cloud cover persisted over the station in the morning and in the afternoon hours throughout the entire dekad. Maize is at flowering of the tassel stage and beans are at harvesting stage. Normal yield is expected for both crops.

2.4 CENTRAL AND NAIROBI PROVINCES.

Several stations from the Central region reported increased rainfall as compared to their long-term decadal 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 18.6 °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 34.71mm against its long-term dekadal mean rainfall of 12.46 mm. The station had five (5) consecutive rainy days with three (3) day recording more than 5.0 mm (light to moderate) rainfall during the dekad. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. The average mean air temperature remained constant at 19.3°C as in the previous dekad. Maize is flowering stage whereas beans are at filling of pods stage. Both crops are in fare state. Since farmers have been spraying their farms the attack is not adverse but still they should focus on maintaining their crop fields.

2.4.2 THIKA:

Received a total cumulative amount of 0.31mm against its long-term dekadal mean rainfall of 18.01mm. Broken cloud cover dominated the sky during the morning and

afternoon hours throughout the dekad. Maize is at flowering of tassel stage and beans at maturing stage.

2.4.3 DAGORETTI

Received a total cumulative amount of 4.62 mm against its long-term dekadal mean rainfall of 23.07mm. The station had a total of one (1) rainy day with no (0) day recording more than 5.0 mm (light to moderate). Broken cloud cover was observed during the morning and afternoon hours throughout the dekad. The average mean air temperature was 19.83 °C and total pan evaporation was 37.6 mm. Maize is at flowering of the tassel stage and beans at maturity stage and generally doing well. Minimal fall worms attack on the maize was reported but the damage is not significant.

2.4.4 KABETE:

The station received a total cumulative amount of 25.21mm against its long-term decadal mean of 25 mm of rainfall. The station had one (1) consecutive rainy day with three (3) days recording more than 5.0 mm (light to moderate) rainfall. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad.

Coffee variety *Ruiru hybrid 11* is at 90% berry soft and the crop state is fair which corresponds to normal growth. 30% of the crop has been affected by leaf rust and Coffee Berry Disease (CBD). Weeding is in state three.

2.4.5 NYAHURURU:

The station received a total cumulative amount of 14.5mm against its long-term dekadal mean of 37.37 mm of rainfall. The station had one (1) rainy day with one (1) day recording more than 5.0 mm (light to moderate). Scattered cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. Average mean air temperature at the station was 14.7°C. Maize is past ninth leaf stage and beans have attained the flowering stage. Both crops are doing well due to adequate rainfall.

2.5 EASTERN REGION:

Several stations in the region reported light to moderate rainfall with Meru leading the region with 30.0 mm of rainfall. Scattered/Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. Average mean air temperatures increased and ranged between 19.8 °C and 23.6 °C.

2.5.1 MERU:

The station received a total cumulative amount of 30.0 mm against its long-term dekadal mean of 5.93 mm of rainfall. The station reported two (2) days with one (1) day reporting more than 5.0 mm (light to moderate) rainfall during the dekad. Scattered cloud cover was observed during the morning and afternoon hours throughout the dekad. Average mean air temperature at the station was 19.8°C. Maize is at flowering of the tassel 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 13.21 mm against its long-term dekadal mean of 11.72 mm of rainfall. The station had two (2) consecutive rainy days with one (1) day recording more than 5.0 mm (light to moderate) rainfall during the dekad. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. Average mean air temperature at the station was 20.5 °C. Maize is at flowering of the tassel stage and beans are at maturing stage. Both crops are doing well.

2.5.3 KATUMANI:

The station received a total cumulative amount of 4.1 mm against its long-term dekadal mean of 5.21 mm of rainfall. Scattered cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. Total pan evaporation was 37.6 mm.

Maize is at flowering of the tassel stage while beans at ripeness stage some farmers have started harvesting beans.

Mangoes (variety apple) are at appearance of new leaves stage and attacked to a 40% extent with aphids.

Oranges (Washington Navel) are at flowering stage.

2.6 COASTAL REGION:

Several stations in the region reported light to moderate rainfall with Mtwapa leading the region with 66.3 mm of rainfall. Scattered/Broken cloud cover was mainly observed in the region during the morning and afternoon hours. Mean air temperature ranged between 25.0 °C and 28.1 °C.

2.6.1 MTWAPA:

The station received a total cumulative amount of 66.3 mm against its long-term dekadal mean of 43.27mm of rainfall. The station had two (2) consecutive rainy day with four (4) day recording more than 5.0 mm (light to moderate) rainfall Average mean air temperature was 26.0°C. Broken cloud cover dominated the sky during the morning and afternoon hours. Maize is at flowering of the tassel stage and normal yield is expected. Mangoes are at fruit setting stage and in moderate state. Normal yield is expected for mangoes.

2.6.1 MSABAHA:

The station received a total cumulative amount of 39.51 mm against its long-term dekadal mean of 44.16 mm of rainfall. The station had two (2) consecutive rainy days with five (5) days recording more than 5.0 mm (light to moderate) rainfall. Scattered cloud cover was mainly observed during the morning and afternoon hours throughout the dekad. Maize is at flowering of the tassel stage normal yield is expected.

2.7 NORTH EASTERN REGION:

Several stations in the region reported remained dry during the dekad. Scattered/Broken cloud cover was generally observed over the region during the morning and afternoon hours. Mean air temperature ranged between 29.5°C and 31.2°C.

Since light showers are expected in the region, Pasture and forage condition is expected to remain satisfactory and most Water/Earth pans to continue having sufficient water for both domestic and wildlife.

3.0 DEKAD 16 2023 RAINFALL AND TEMPERATURE MAPS/CHARTS

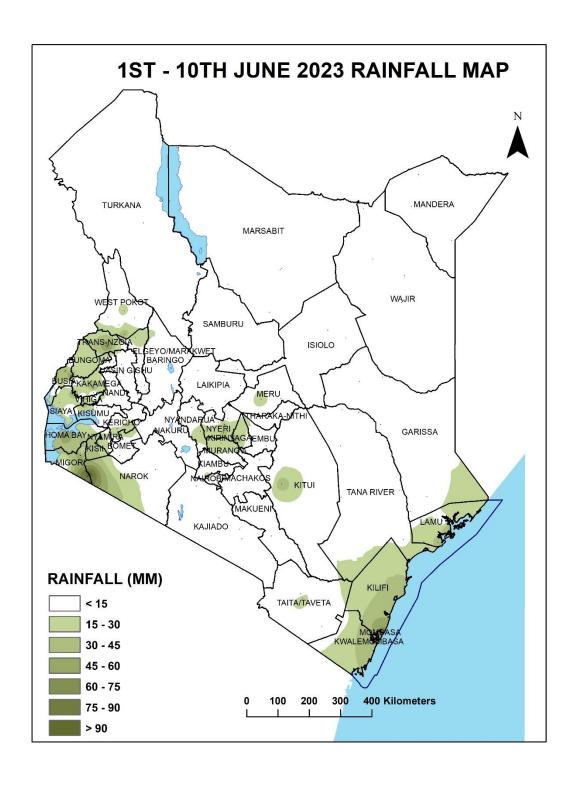


Fig: 3.1

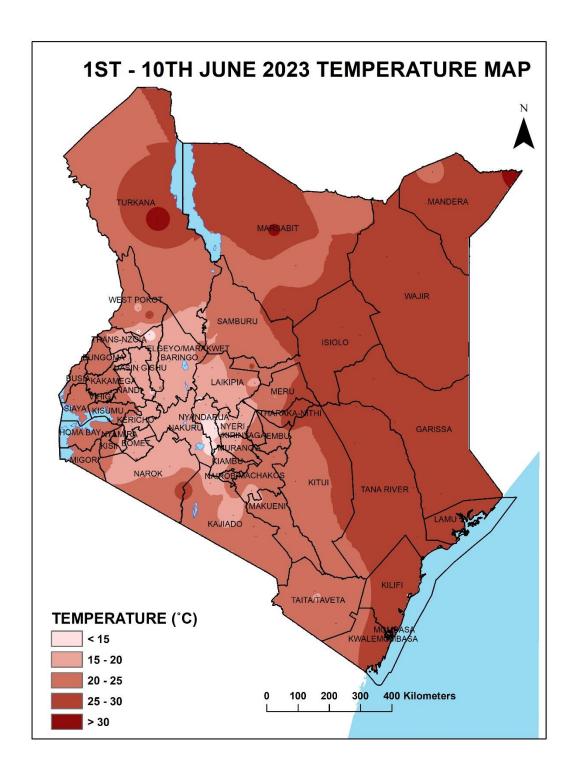


Fig: 3.2

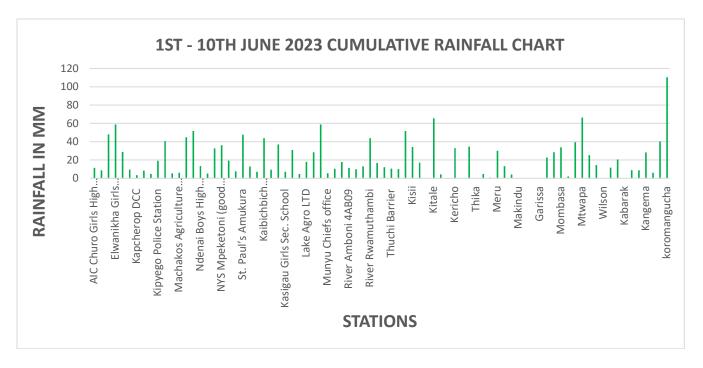


Fig: 3.3

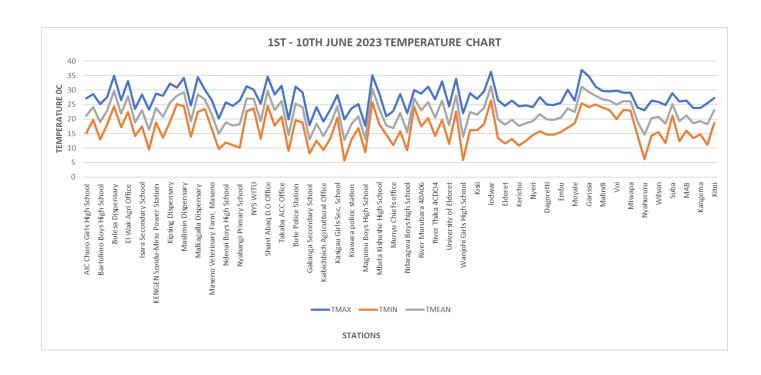


Fig: 3.4

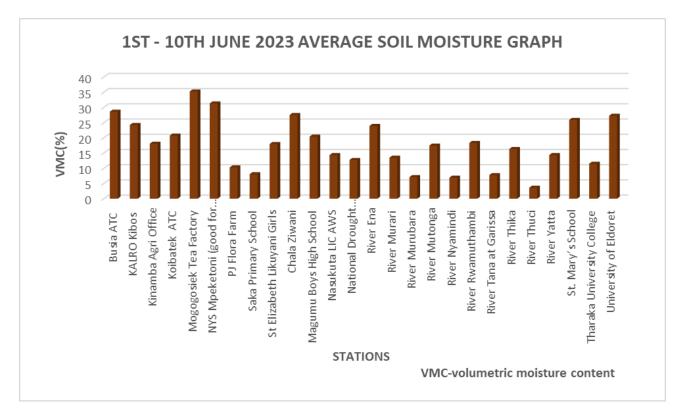


Fig: 3.5

Station	Maximum	Maximum	Number of rainy	Cumulative
	consecutive wet	consecutive dry	days (> 5.0 mm)	Rainfall from
	days (>1.0 mm)	days		start of JJA 2023
				RFseason
Kakamega	2	2	1	51.7
Kisii	3	6	2	34.2
Kitale	2	2	2	65.5
Kericho	2	2	4	32.91
Nyeri	5	2	3	34.71
Thika	0	8	0	0.31
Dagoretti	1	3	0	4.62
Meru	2	5	1	30
Embu	2	2	1	13.21
Katumani	1	8	0	4.1
Msabaha	2	1	5	39.51
Mtwapa	2	2	4	66.3
Kabete	1	2	3	25.21
Nyahururu	1	4	1	14.5
Kabarak	0	5	0	0.12

Fig: 3.6

4.0 EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT TEN (10)

DAYS; 11TH - 20TH JUNE 2023.

During the next ten (10) days, light to moderate rains are expected to fall over a few regions within the country.

Over Western and Nyanza regions, light rains are likely to continue therefore farmers are expected to harvest beans and do post-harvest activities like winnowing, drying in order to avoid losses brought about by rotting of the produce.

In Central region, Nairobi and Eastern parts of the country, light rains are expected. Maize is at flowering stage and beans at podding and filling stage, farmers should focus on maintaining their farms. Since farmers have been spraying their farms the attack is not adverse.

North Western/Eastern are likely to have sunny intervals with light showers during the next dekad. The expected weather conditions will be ideal for grazing animals and pastoralists are advised to deworm and spray their livestock for pest control.

South Eastern lowlands regions are expected to experience sunny intervals with light showers during the next dekad. Farmers should focus on harvesting their beans and do post-harvesting activities on beans, peas etc.

The Coastal regions are likely to be sunny. However, occasional light showers may occur during the next dekad period.

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

Mary Githinji

FOR: DIRECTOR OF METEOROLOGICAL SERVICES.