

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

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AGROMETEOROLOGICAL BULLETIN

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DEKAD 23 PERIOD: $11^{TH} - 20^{TH}$ AUGUST 2023

1.0 HIGHLIGHTS

- During the period under review, only few parts of the country reported light to moderate rainfall. All stations except along the Coastal strip reported reduced rainfall compared to the previous dekad.
- Lamu station reported the highest amount of rainfall followed by Kaplong and Msabaha stations. (Figs; 3.1 & 3.2).
- Mean air temperature increased over several stations except at the Coast and few places within Rift valley. (Figs. 3.3 & 3.4).
- Total pan evaporation readings increased over most stations as cloud cover remained few-scattered over most stations.
- During the next ten (10) days, most parts of the Country are expected to remain dry with occasional light to moderate rains over a few places in western, Central and Coastal areas of the country.

2.0 WEATHER AND CROP REVIEW FOR THE PERIOD: 11TH – 20TH August 2023

2.1 SUMMARY

During the current period, only few parts of the country reported light to moderate rainfall. All stations except the ones along the Coastal strip reported reduced rainfall compared to the previous dekad. Lamu Meteorological station in the Coast reported the highest amount of rainfall (52.1 mm) and was followed followed by station in Rift valley.

In Western, Nyanza, and several parts of Rift Valley, maize is at full ripeness stage and farmers are already harvesting their crop with normal yield expected. In Central, Eastern, and Coastal regions maize is at the maturity stage and is also being harvested and normal yield is expected.

In Northwestern/Eastern and south rift valley, pasture and forage condition is slowly getting depleted due to overgrazing.

2.2 WESTERN AND NYANZA REGION

All stations from the region reported less rainfall as compared to their long-term decadal means. Light rainfall was reported by most stations within the region except Korieko and Kisumu stations which reported moderate rainfall.

Mean air temperatures increased in the region and ranged between 21.2 °C and 24.1 °C. Scattered cloud cover during the morning and afternoon hours was observed over most stations in the region during the dekad.

2.2.1 KAKAMEGA:

The station reported a cumulative rainfall amount of 6.1 mm against its Long-term dekadal mean of 58.9 mm. The station had a total of six (6) consecutive rainy days with some recording very heavy to extremely heavy rainfall. Scattered cloud cover during the morning and afternoon hours was reported at the station throughout the entire dekad. The average mean air temperature at the station increased from 22.0 to 22.7°C. Harvesting of maize is ongoing and normal yield is expected.

2.2.2 KISII:

The station reported a cumulative rainfall amount of 8.0 mm against its Long-term dekadal mean of 55.77 mm. The station reported two (2) consecutive rainy days and three (3) days recording more than 5.0 mm (moderate to heavy rainfall). The station maintained mean air temperature at 21.2 °C as in the previous dekad. Total pan evaporation was 36.5 mm. Scattered cloud cover during the morning and afternoon hours was observed at the station throughout the dekad. Harvesting of maize is ongoing and normal yield is expected.

2.3 RIFT VALLEY PROVINCE

The region reported reduced rainfall compared to the previous dekad. Light moderate rainfall was reported by few stations in the region during the dekad. Mean air

temperature decreased in the region and ranged between 17.0°C and 19.8°C. Cloud cover was mainly few during the morning and increasing to scattered during the afternoon throughout the dekad.

2.3.1 KITALE:

The station generally received light rainfall during the dekad. A cumulative rainfall amount of 18.7 mm was received against its long-term dekadal mean of 55.46 mm. The station reported four (4) consecutive rainy days three (3) of which received more than 5.0 mm of rainfall. Cloud cover was mainly few during the morning and increasing to scattered during the afternoon throughout the dekad. Mean air temperature decreased slightly from 19.8 °C to 19.5 °C. Maize is at maturity stage and in a moderate state. Farmers are harvesting beans and normal yield is expected for both crops.

2.3.2 KERICHO:

The station reported 2.4 mm of rainfall against its long-term dekadal mean of 58.48 mm. The station maintained mean air temperature at 18.1 °C as in the previous dekad. Cloud cover was few during the morning and increasing to scattered during the afternoon throughout the dekad. Harvesting of maize is ongoing and normal yield is expected..

2.3.3 KABARAK:

The station reported a cumulative amount of 2.3 mm of rain against its long-term dekadal mean of 40.4 mm. Mean air temperature increased from 19.8°C in the previous dekad to 20.0°C in the current dekad. Cloud cover was few during the morning and increasing to scattered during the afternoon throughout the dekad. Harvesting of maize is ongoing and normal yield is expected.

2.4 CENTRAL AND NAIROBI PROVINCES.

All stations from the Central region reported a decrease in the amount of rainfall reported as compared to the previous dekad. Mean air temperatures slightly went up and ranged between 14.4 °C and 21.1 °C. Broken cloud cover during the morning and reducing to scattered in the afternoon was observed in the region throughout the dekad.

2.4.1 NYERI:

The station reported light rainfall and received a cumulative amount of 4.2 mm against its long-term dekadal mean rainfall of 12.1 mm. Broken cloud cover during the morning and reducing to scattered in the afternoon was observed at the station throughout the dekad. Mean air temperature increased from 16.2°C to 18.6 °C in the current dekad. Maize is at the wax ripeness stage and in a fair state while beans are in the maturing stage. Some farmers have started harvesting beans and normal yield is expected for both crops.

2.4.2 THIKA:

The station reported nil rainfall against its long-term decadal mean of 3.0 mm. Total pan evaporation was 48.0 mm. Broken cloud cover was observed at the station during the morning and afternoon hours throughout the dekad. Maize has attained maturity and ready for harvesting. Normal yield is expected.

2.4.3 DAGORETTI

The station received a trace against its long-term decadal mean of 13.2 mm of rainfall. The mean air temperature increased from 17.4 °C to 19.2 °C in the current dekad. Broken cloud cover was observed at the station during the morning and afternoon hours. Maize is at the harvesting stage and a normal yield is expected.

2.4.4 KABETE:

The station received 0.1 mm against its long-term decadal mean of 9.8 mm of rainfall.

Themean air temperature at the station decreased from 18.7 to 18.3°C in the current dekad. Broken cloud cover during the morning and reducing to scattered in the afternoon was observed at the station throughout the dekad.

Coffee variety *Ruiru hybrid 11* is at 70% berry soft and the crop state is fair which corresponds to normal growth and 20% ripeness. 30% of the crop has been affected by leaf rust and Coffee Berry Disease (CBD) and pests. Maize is at the maturing stage and normal yield is expected.

2.4.5 NYAHURURU:

The station received a total cumulative amount of 20.9 mm against its long-term dekadal mean of 50.3 mm of rainfall. The station reported two (2) consecutive days of rain and two (2) rainy days recording more than 5.0 mm (moderate rainfall). Scattered cloud cover dominated the sky during the morning increasing to broken in the afternoon throughout the dekad. The average mean air temperature at the station decreased from 16.0 °C to 14.4 °C. Maize is at wax ripeness stage and in moderate condition.

2.5 EASTERN REGION:

All stations in the region received less rainfall as compared to the previous dekad. Broken cloud cover during the morning reducing to scattered in the afternoon was observed in the region throughout the dekad. Mean air temperatures decreased and ranged between 19.0 °C and 22.5 °C.

2.5.1 MERU:

The station received a cumulative rainfall of 3.2 mm against its a long-term dekadal mean rainfall of 3.9 mm. Mean air temperature increased from 17.7°C to 19.0 °C. Scattered cloud cover was observed at the station during the morning and in the afternoon hours throughout the dekad. Total pan evaporation was 48.6 mm. Maize is at maturity stage and

harvesting is ongoing with normal yield is expected.

2.5.2 EMBU:

The station received light rainfall of 2.6 mm against its long-term dekadal mean rainfall of 9.7 mm. The average mean air temperature increased from 17.8 °C to 119.7°C in the current dekad. Broken cloud cover was observed at the station during the morning reducing to scattered in the afternoon hours throughout the dekad. Total pan evaporation was 34.1 mm. Maize is at maturity stage and harvesting is ongoing with normal yield is expected.

2.5.3 KATUMANI:

The station reported rainfall of 0.2 mm againist its long-term dekadal mean of 1.0 mm of rainfall. Broken cloud cover was observed at the station during the morning reducing to scattered in the afternoon hours throughout the dekad. Total pan evaporation was 34.5 mm.

Maize is at maturity stage and harvesting is ongoing with below normal yield is expected due to insufficient rains during the season.

Mangoes (variety apple) are at 80% flowering flowering stage. Oranges (Washington Navel) are at 100% ripeness stage and in a fair state.

2.6 COASTAL REGION:

Several stations in the region reported light to moderate rainfall with Lamu station leading the region with 52.1 mm of rainfall. The mean air temperature generally decreased during the current dekad and ranged between 25.5 °C and 26.8°C.

2.6.1 MTWAPA:

The station received a total cumulative amount of 13.6 mm against its long-term dekadal mean of 5.8 mm of rainfall. The station reported four (4) consecutive wet days during the entire dekad. Mean air temperature decreased from 25.9°c to 25.5°c. Broken cloud cover was observed at the station during the morning reducing to scattered in the afternoon hours throughout the dekad. Maize has been harvested though below normal yield was obtained. Mangoes are at the maturity stage and in a fair state. Normal yield is expected for mangoes.

2.6.1 MSABAHA:

The station received a total cumulative amount of 34.5 mm against its long-term dekadal mean of 17.4 mm of rainfall. The station reported two (2) consecutive days of rain and two (2) rainy days recording more than 5.0 mm (moderate rainfall). Broken cloud cover was mainly observed during the morning and afternoon hours throughout the dekad. Maize is at the harvesting stage and in good state. Normal yield is expected.

2.7 NORTH EASTERN REGION:

Several stations in the region remained dry during the dekad. Few to scattered cloud cover was observed the region during the morning and in the afternoon hours throughout the dekad. Mean air temperature ranged between 27.7 °C and 30.5 °c.

Pasture and forage in the region is slowly getting depleted due to overgrazing and water levels in most water/earth pans in the region also decreasing and could dry up soon.

DEKAD 23-2023 RAINFALL AND TEMPERATURE MAPS/ CHARTS.

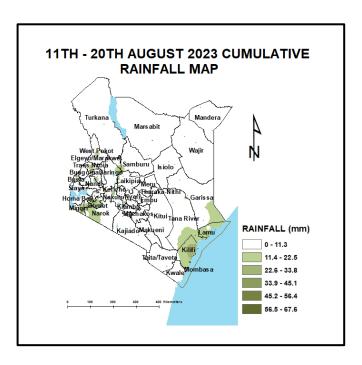


Fig: 3.1

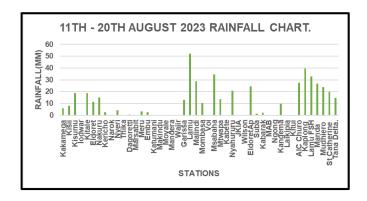


Fig: 3.2

| Station | Maximum | Maximum | Number | Cumulative |
|-----------|-------------|-------------|----------|------------|
| | consecutive | consecutive | of rainy | rainfall |
| | wet days | dry days | days | from start |
| | | | | of JJA |
| | | | | season |
| Kakamega | 1 | 6 | 1 | 467.48 |
| Kisii | 2 | 3 | 0 | 325.88 |
| Kitale | 2 | 4 | 1 | 384.44 |
| Kericho | 1 | 2 | 0 | 317.08 |
| Nyeri | 1 | 4 | 0 | 71.31 |
| Thika | 0 | 10 | 0 | 49.9 |
| Dagoretti | 0 | 5 | 0 | 50.77 |
| Meru | 1 | 4 | 0 | 65.42 |
| Embu | 2 | 3 | 0 | 92.16 |
| Katumani | 0 | 7 | 0 | 6.52 |
| Msabaha | 1 | 4 | 1 | 268.07 |
| Mtwapa | 2 | 4 | 1 | 299.51 |
| Kabete | 0 | 5 | 0 | 86.7 |
| Nyahururu | 2 | 6 | 2 | 220.11 |
| Kabarak | 1 | 6 | 0 | 173.04 |

Fig 3.3

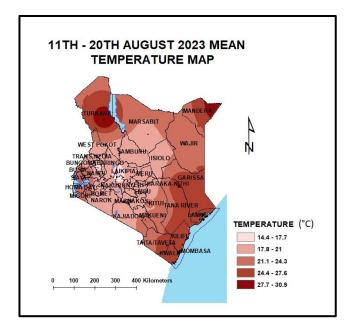


Fig: 3.4

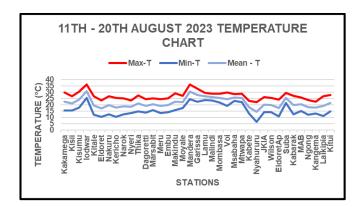


Fig: 3.5

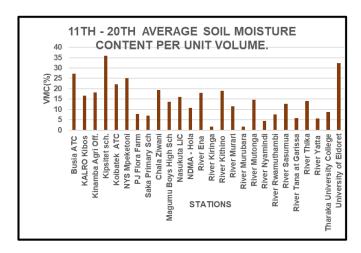


Fig: 3.6

4.0 EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT TEN (10) DAYS; 21ST – 31ST AUGUST 2023.

During the next ten (10) days, most parts of the Country are expected to remain dry with occasional light to moderate rains over a few places in western and high ground areas of the country.

Over Western and Nyanza regions, sunny interval with occasional light to moderate rain is likely to occur over a few places therefore, farmers who are still harvesting and carrying out post-harvest drying of cereals are advised to take advantage of sunny periods within the dekad in order to avoid postharvest losses.

In the Central region, Nairobi, and Eastern parts of the country, sunny interval with occasional light to moderate rain is likely to occur over a few places therefore, farmers who are still harvesting and carrying out post-harvest drying of cereals are advised to take advantage of sunny periods within the dekad in order to avoid postharvest losses.

North Western/Eastern is likely to have sunny intervals with cloudy nights during the next dekad. The expected weather conditions will be ideal for grazing, animal movement is expected to increase as they search for pasture hence increasing the possibility of conflicts.

South Eastern lowlands and Coastal regions are expected to experience occasional cloudiness with occasional showers over a few places during the next dekad.

For inquiries or any clarification, please use the contacts on the letterhead.

Mary Githinji

FOR: DIRECTOR OF METEOROLOGICAL SERVICES