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AGROMETEOROLOGICAL BULLETIN

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DEKAD 22 PERIOD: 1ST – 10TH AUGUST 2023

1.0 HIGHLIGHTS

- During the current dekad several parts of the country reported light to moderate rainfall. Most stations in western, Nyanza and some parts of Rift-valley reported an increase in the total amount of rainfall received compared to the previous dekad.
- Kakamega Meteorological station in western reported the highest amount of rainfall followed by Miyale station in Migori County. (Figs; 3.1 & 3.2).
- Mean air temperature decreased over several stations with the cooler regions reporting mean air temperatures ranging between 16.0 °C – 19.2°C. (Figs. 3.3 & 3.4).
- Low total pan evaporation readings over most stations. The highest readings of 72.0 mm were reported at Laikipia station in Eastern Kenya.
- 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.

2.0 WEATHER AND CROP REVIEW FOR THE PERIOD: 1ST – 10TH August 2023

2.1 SUMMARY

During the period under review, several parts of the country reported light to moderate rainfall. Most stations in western, Nyanza and some parts of Rift Valley and Eastern region reported an increase in the total amount of rainfall received compared to the previous dekad. Kakamega station in Kenya reported the highest amount of rainfall totaling 146.01 mm followed by Miyale station in Migori and Kericho station in Rift Valley.

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

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

2.2 WESTERN AND NYANZA REGION

The stations from the region reported increased rainfall as compared to their long-term decadal means. Light to moderate rainfall was reported by several stations within the region except Kakamega and Miyale stations which reported heavy rainfall. Average mean air temperatures decreased in the region and ranged between 20.4 °C and 24.0 °C. Broken 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 146.0 mm against its Long-term decadal mean of 72.4 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 decreased from 22.5 to 22.0°C. Maize is at harvesting stage and normal yield is expected.

2.2.2 KISII:

The station reported a cumulative rainfall amount of 42.7 mm against its Long-term decadal mean of 47.7 mm. The station reported two (2) consecutive rainy days and three (3) days recording more than 5.0 mm (moderate to heavy rainfall). The mean air temperature decreased from 21.2 °C in the previous dekad to 20.4 °C. Scattered cloud cover persisted during the morning and afternoon hours throughout the dekad. Maize

is at the harvesting stage and a normal yield is expected.

2.3 RIFT VALLEY PROVINCE

Several stations from the region reported increased rainfall compared to the previous dekad. Moderate to heavy rainfall was reported by most stations in the region during the dekad. The average mean air temperature decreased in the region and ranged between 17.4°C and 19.8°C. Broken cloud cover during the morning and afternoon hours was observed throughout the region during the dekad.

2.3.1 KITALE:

The station generally received light to moderate rainfall during the dekad. A cumulative rainfall amount of 64.8 mm was received against its long-term decadal mean of 48.6 mm. The station reported four (4) consecutive rainy days three (3) of which received more than 5.0 mm of rainfall. Scattered cloud cover was observed at the station in the morning increasing to broken in the afternoon hours throughout the whole dekad. The average mean air temperature increased slightly to 19.8°C during the current dekad. Maize is at the maturity stage and in a good state. Farmers are harvesting beans and normal yield is expected for both crops.

2.3.2 KERICHO:

A cumulative amount of 76.0 mm of rainfall was reported against its long-term decadal mean of 48.6 mm. The station had five (5) consecutive rainy days and six (6) days which recorded more than 5.0 mm of rainfall. The average mean air temperature decreased from 18.8°C in the previous dekad to 18.1°C in the current dekad.

Scattered cloud cover was observed at the station in the morning increasing to broken in the afternoon hours throughout the whole

dekad. Maize is at the harvesting stage and a normal yield is expected.

2.3.3 KABARAK:

The station reported a cumulative amount of 58.0 mm of rain against its long-term dekadal mean of 45.9 mm. The station reported three (3) rainy days with moderate and heavy rainfall during the dekad. The average mean air temperature decreased from 19.8°C in the previous dekad to 18.0°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 maturing stage and normal yield is expected.

2.4 CENTRAL AND NAIROBI PROVINCES.

Several stations from the Central region reported a slight increase in the amount of rainfall reported as compared to the previous dekad. Mean air temperatures generally dropped in the region and ranged between 16.0°C and 18.7°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 9.6 mm against its long-term dekadal mean rainfall of 8.4 mm. The station reported light rainfall during the dekad. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. The average mean air temperature decreased from 17.4°C to 16.2°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 light rainfall during the dekad and received a total cumulative amount of 11.0 mm against its long-term dekadal mean of 6.3 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 though in some areas it is yet to attain full ripeness.

2.4.3 DAGORETTI

The station received a total cumulative amount of 9.7 mm against its long-term dekadal mean of 4.7 mm of rainfall. The average mean air temperature dropped from 18.2°C to 17.4°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 a total cumulative amount of 6.5 mm against its long-term dekadal mean of 4.7 mm of rainfall. The average mean air temperature at the station was 18.7°C. Broken cloud cover dominated the sky during the morning and afternoon hours 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 41.4 mm against its long-term dekadal mean of 63.57 mm of rainfall. The station reported three (3) consecutive days of rain and four (4) rainy days recording more

than 5.0 mm (moderate rainfall). Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. The average mean air temperature at the station decreased from 17.5 °C to 16.0 °C. Maize is at wax ripeness stage and in good condition.

2.5 EASTERN REGION:

All stations in the region except Embu received less rainfall compared to their long-term dekadal means. Broken cloud cover during the morning and afternoon hours was observed in the region throughout the dekad. Average mean air temperatures decreased and ranged between 17.6°C and 21.1 °C.

2.5.1 MERU:

The station received a total cumulative of 7.6 mm against its a long-term dekadal mean rainfall of 5.9 mm. The average mean air temperature dropped from 18.4°C to 17.7 °C. Broken cloud cover was observed at the station during the morning decreasing to scattered in the afternoon hours throughout the dekad. Maize is at harvesting stage and some farmers are already harvesting their crop and normal yield is expected.

2.5.2 EMBU:

The station received a total cumulative rainfall of 38.4 mm during the dekad against its long-term dekadal mean rainfall of 14.4 mm. The average mean air temperature decreased from 18.8°C to 17.8°C in the current dekad. Broken cloud cover was observed at the station during the morning and afternoon hours throughout the dekad. Maize is at maturity stage and beans at harvesting stage. Farmers have finished harvesting beans and normal yield is expected for both crops.

2.5.3 KATUMANI:

The station received a total cumulative rainfall of 0.2 mm against its long-term dekadal mean of 2.5 mm of rainfall. Broken cloud cover was observed during the morning and afternoon hours throughout the dekad.

Maize is at the full ripeness stage while beans have been harvested. Maize crop has generally been affected by too much sun and therefore, below normal yield is expected.

Mangoes (variety apple) are at 100% appearance of the new leaves though the mango trees have been infested with aphids.

Oranges (Washington Navel) are at 100% flowering 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 21.7 mm of rainfall. Scattered/Broken cloud cover was mainly observed in the region during the morning and afternoon hours. The mean air temperature generally decreased during the current dekad and ranged between 23.8 °C and 26.1°C.

2.6.1 MTWAPA:

The station received a total cumulative amount of 16.6 mm against its long-term dekadal mean of 25.5 mm of rainfall. The station reported four (4) consecutive wet days during the entire dekad. The average mean air temperature was 25.9°C. Broken cloud cover during the morning and afternoon hours. Maize is at the harvesting stage and normal yield is expected. 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 3.3 mm against its long-term dekadal mean of 29.1 mm of 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. Scattered/Broken cloud cover was mainly observed in the region during the morning and afternoon hours.

DEKAD 22-2023 RAINFALL AND TEMPERATURE MAPS/ CHARTS.

Mean air temperature ranged between 27.9 °C and 29.5 °C.

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

STATION	Maximum consecutive wet days	Maximum consecutive dry days	Number of rainy days	Cumulative Rainfall from start of JJA Season
Kakamega	6	1	4	461.38
Kisii	2	1	3	317.86
Kitalo	4	3	3	365.74
Kericho	5	0	6	314.65
Nyeri	1	2	0	67.1
Thika	1	2	1	49.92
Dagoretti	2	4	1	50.36
Meru	1	6	1	62.25
Embu	5	2	3	89.55
Katumani	0	7	0	6.53
Msabaha	1	3	0	233.56
Mtwapa	4	2	0	285.91
Kabete	1	5	0	86.63
Nyahururu	3	3	4	199.21
Kabarak	1	2	3	170.74

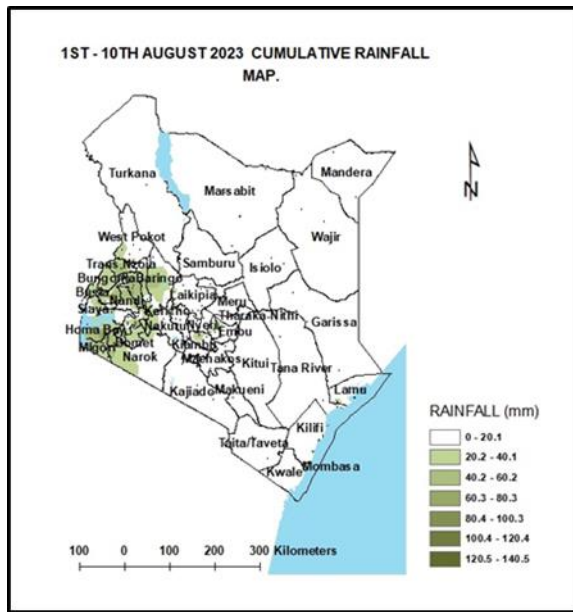


Fig: 3.1

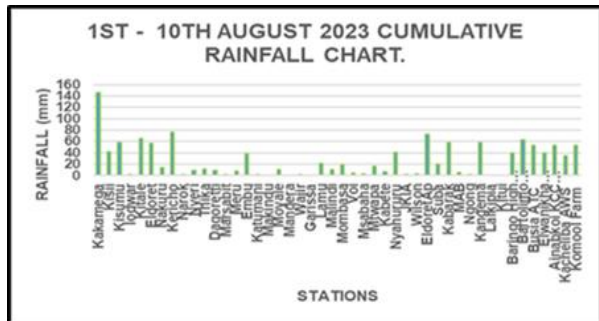


Fig: 3.2

Fig 3.3

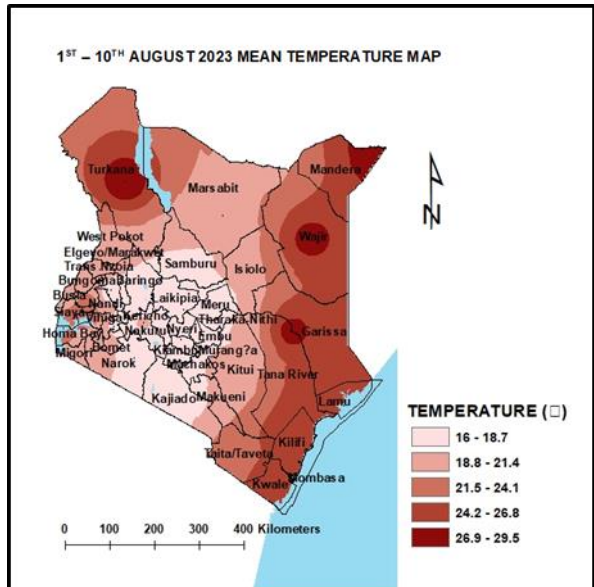


Fig: 3.4

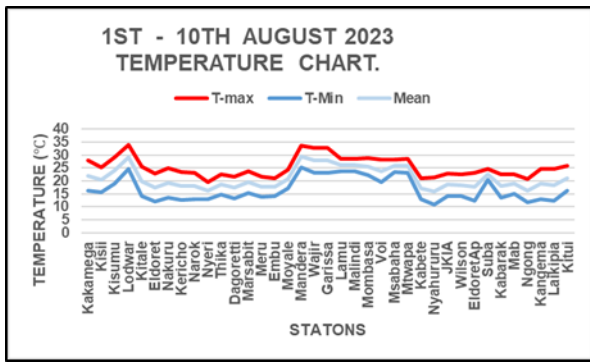


Fig: 3.5

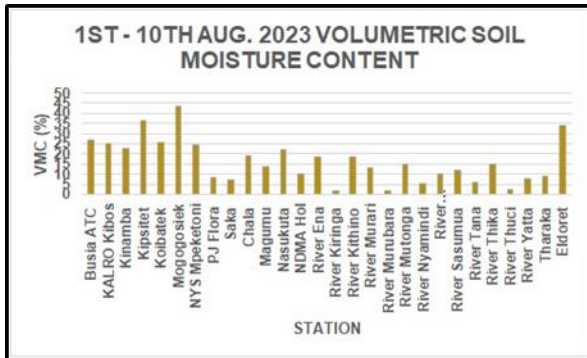


Fig: 3.6

4.0 EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT TEN (10) DAYS; 11TH – 20TH 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.

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FOR: DIRECTOR OF METEOROLOGICAL SERVICES