

AGROMETEOROLOGICAL BULLETIN



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

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DEKAD 17 PERIOD: 11TH – 20TH June 2023

1.0 HIGHLIGHTS

- During the next ten (10) days, rainfall is expected to fall over several regions within the country.
- During the current dekad several parts of the country received light to moderate rainfall. Most stations reported an increase in the total amount of rainfall received compared to the previous dekad.
- Eldoret airport station in Rift Valley region reported the highest amount of rainfall followed by Kisii (Figs; 3.1 & 3.2).
- Average mean air temperature has generally decreased all over the country because of the cold air mass from the south. The cooler regions in the Country had mean air temperatures ranging between 10.5°C – 15.6 °C while the warmer regions had mean air temperature reaching 31.0°C (Figs. 3.3 & 3.4).
- Total pan evaporation, increased over most stations with highest readings of 83.5 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 several regions within the country.

2.0 WEATHER AND CROP REVIEW FOR THE PERIOD: 11TH – 20TH 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 increased in amount compared to the previous dekad. Eldoret airport station in Uasin Gishu County reported the highest amount of rainfall of 88.1mm followed by Kisii at 81.6mm.

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

In Central, Nairobi, Eastern and the Coastal regions, beans are at maturity stage while maize is at wax ripeness 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 increased 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 decreased in the region and ranged between 20.0 °C and 23.7 °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 58.8mm against its Long term decadal mean of 57.33mm, the station had a total of four (4) consecutive rainy days with four (4) 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. Average mean air temperature at the station decreased from 22.52°C to 21.56°C. Maize is at wax ripeness 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 81.61 mm was received against its long-term decadal mean of 58.79 mm. The station reported four (4) consecutive rainy days with three (3) days recording more than 5.0 mm (moderate to heavy rainfall). Mean air temperature dropped from 21.1 °C in the previous dekad to 20.7 °C. Broken cloud cover persisted during both morning and afternoon hours throughout the dekad. Maize is at wax ripeness 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 18.5°C and 20.0 °C. Broken cloud cover was observed 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 47.2 mm was received against its long-term dekadal mean of 45.09 mm. The station reported four (4) consecutive rainy days with two (2) days receiving more than 5.0 mm of rainfall. Broken cloud cover was observed at 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 in good state while beans is at maturing stage. The rainfall is sufficient for crop's growth.

2.3.2 KERICHO:

A cumulative amount of 19.1 mm of rainfall was reported against its long-term dekadal mean of 50.85mm. The station had two (2) consecutive rainy days with one (1) day recording more than 5.0 mm of rainfall during the dekad. Average mean air temperature increased from 18.26 °C in the previous dekad to 18.76 °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 13.21 mm of rain against its long-term dekadal mean of 30.74 mm. Average mean air temperature increased from 18.93 °C in the previous dekad to 19.47 °C in the current dekad. Broken 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 decreased rainfall as compared to their long-term dekadal mean. Light to moderate rainfall was reported by all stations in the region. Average mean air temperatures generally decreased in the region and ranged between 17.8 °C and 20.3°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 0.62mm against its long-term dekadal mean rainfall of 14.23mm. The station had only one rainy day (more than 5.0 mm of 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 to 18.64 from 19.3°C in the previous dekad. Maize is between flowering of the tassel wax ripeness stage whereas beans are mostly in ripening stage. Both crops are doing well. Maize recovered from stalkborer attack.

2.4.2 THIKA:

Received a total cumulative amount of 35.3mm against its long-term dekadal mean rainfall of 5.40mm. Broken cloud cover dominated the sky during the morning and

afternoon hours throughout the dekad. Maize is at flowering of the tassel stage and beans at maturing stage. Beans in most areas have matured but not ready for harvesting.

2.4.3 DAGORETTI

Received a total cumulative amount of 29.1mm against its long-term dekadal mean rainfall of 12.99 mm. The station had a total of ten (10) rainy days 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 18.96 °C. Maize is at wax ripeness 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 14.2mm against its long-term decadal mean of 14.42 mm of rainfall. The station had one (1) consecutive rainy day with one (1) day recording more than 5.0 mm (moderate) rainfall. 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 flowering stage and beans at maturity stage. Plants are doing well and some of the farmers have started harvesting beans.

2.4.5 NYAHURURU:

The station received a total cumulative amount of 28.4mm against its long-term dekadal mean of 34.46 mm of rainfall. The station had two (2) rainy days with one (1) day recording more than 5.0 mm (moderate rainfall). Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. Average mean air temperature at the station was 15.6°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 rains with Embu reporting 4.22 mm of rainfall. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. Average mean air temperatures increased and ranged between 18.8 °C and 19.2°C.

2.5.1 MERU:

The station remained dry during the current dekad. It has a long-term dekadal mean of 4.23 mm of rainfall. Broken cloud cover was observed during the morning and afternoon hours throughout the dekad. Average mean air temperature at the station was 18.8°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 4.22 mm against its long-term dekadal mean of 8.35 mm of rainfall. The station had two (2) consecutive days with (light) 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 19.2 °C. Maize is at flowering of the tassel stage and beans are at harvesting stage.

2.5.3 KATUMANI:

The station received a total cumulative amount of 2.21mm against its long-term dekadal mean of 1.21mm of rainfall. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. Total pan evaporation was 31.7 mm.

Maize is at wax ripeness stage while beans at harvesting stage. Maize crop has generally been affected by too much sun.

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 rainfall with Mombasa station leading the region with 12.12 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 28.0°C.

2.6.1 MTWAPA:

The station received a total cumulative amount of 6.51 mm against its long-term dekadal mean of 38.11mm of rainfall. The station had two (2) consecutive rainy day with one (1) day recording more than 5.0 mm (light to moderate) rainfall Average mean air temperature was 26.0°C. Scattered 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. Rainfall has been insufficient in the dekad under review.

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 one (1) rainy day recording more than 5.0 mm (light to moderate) rainfall. Broken 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 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 20.9°C and 30.8°C.

Since most Water/Earth pans continue having sufficient water and Pasture/forage condition is okay, the forecasted weather conditions are not likely to affect negatively the livelihood of the communities living here.

3.0 DEKAD 17 2023 RAINFALL AND TEMPERATURE MAPS/CHARTS

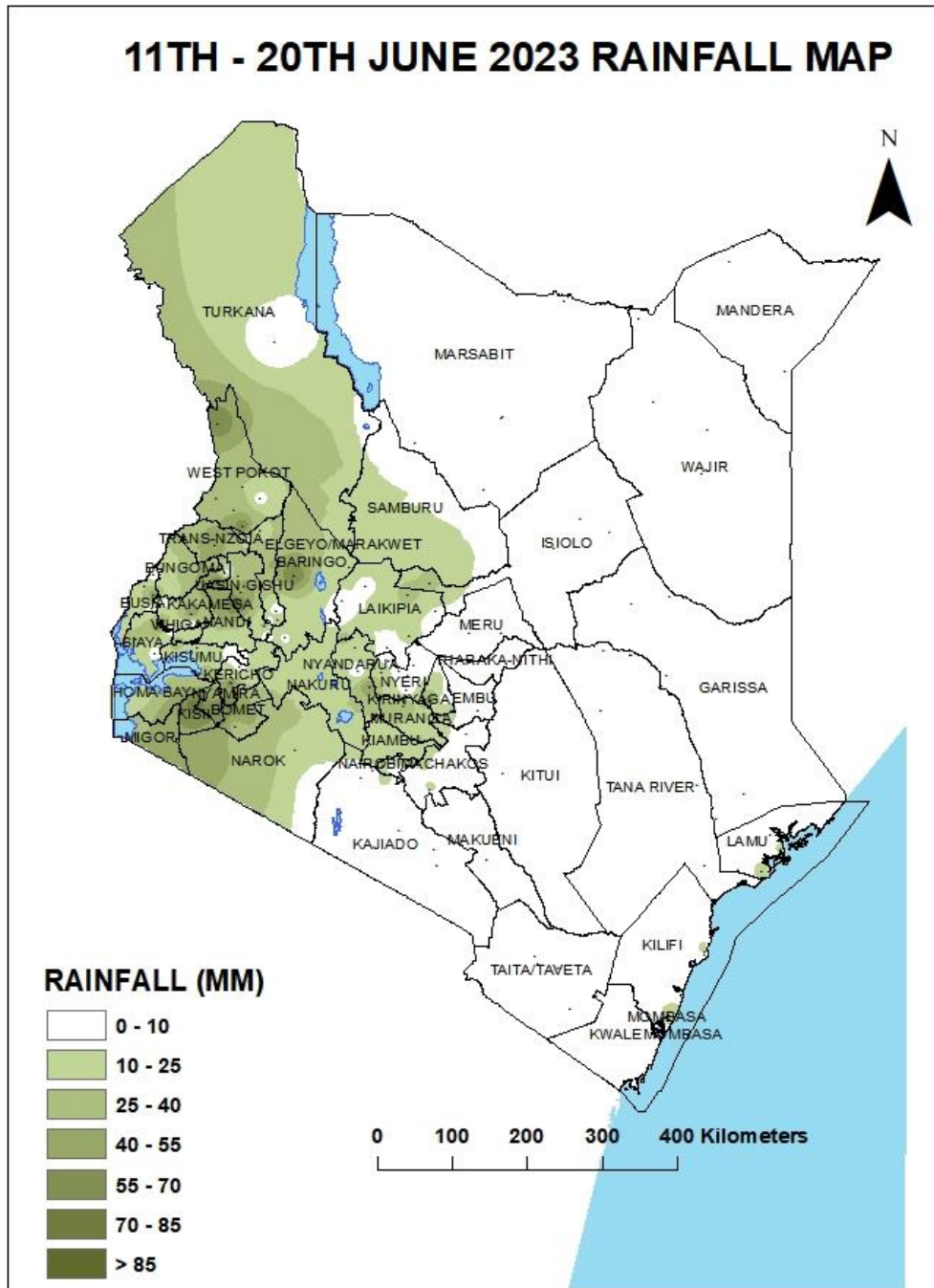


Fig: 3.1

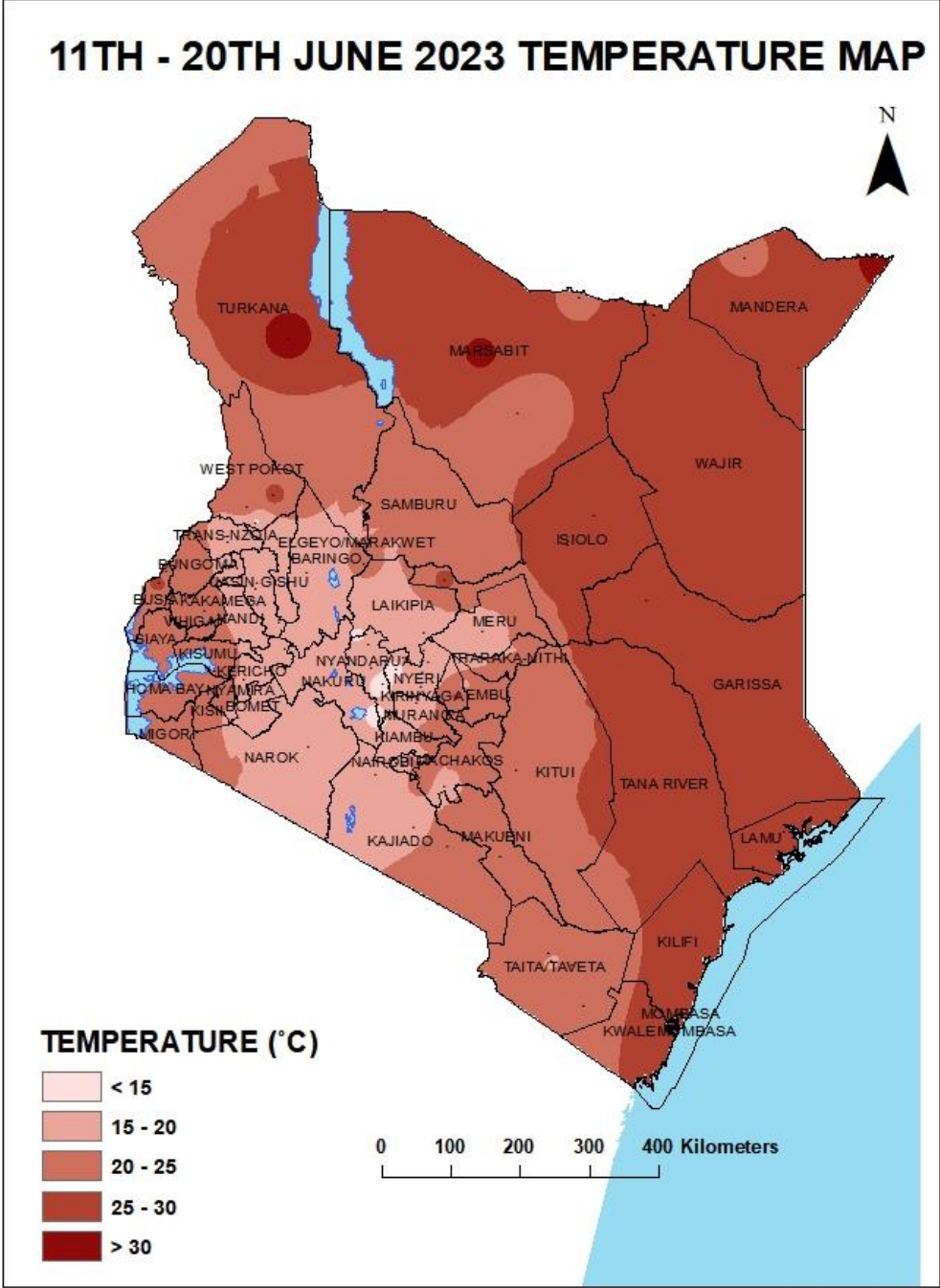


Fig: 3.2

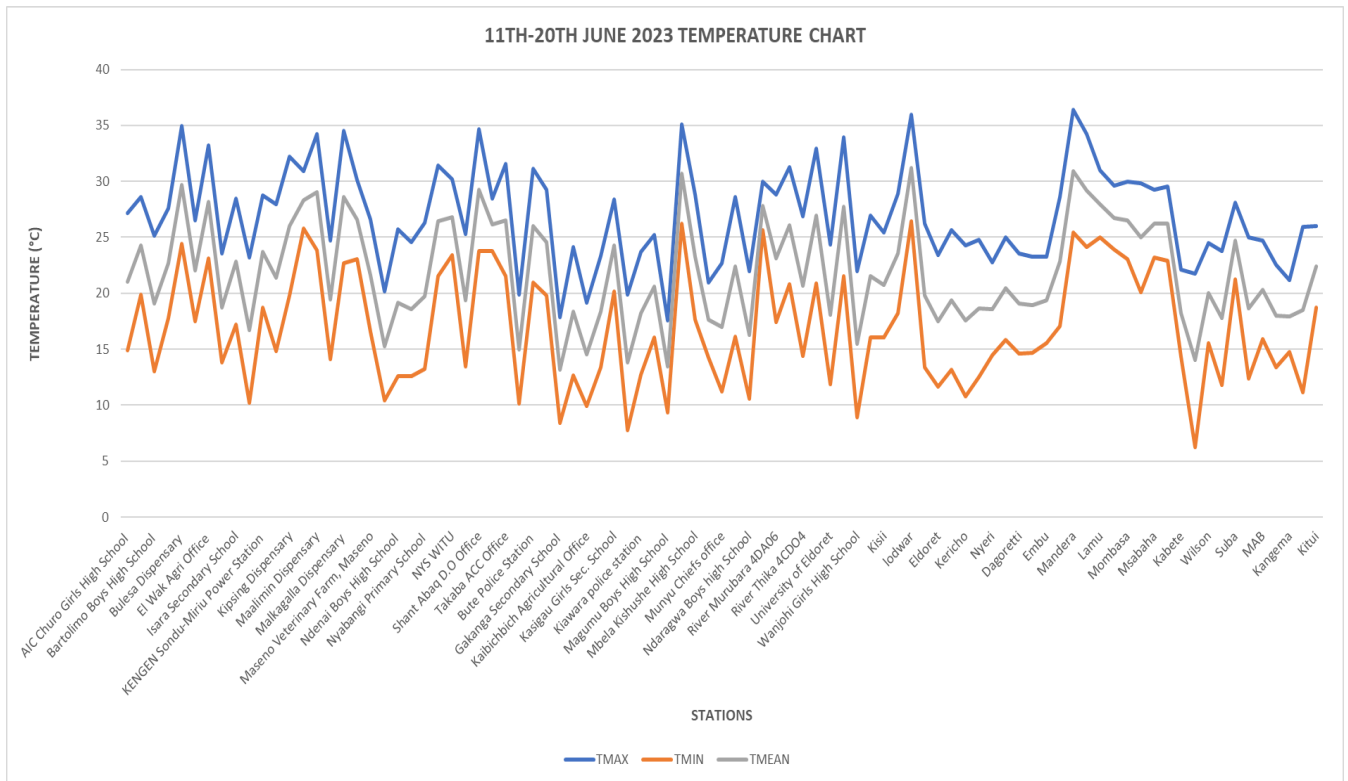


Fig: 3.3

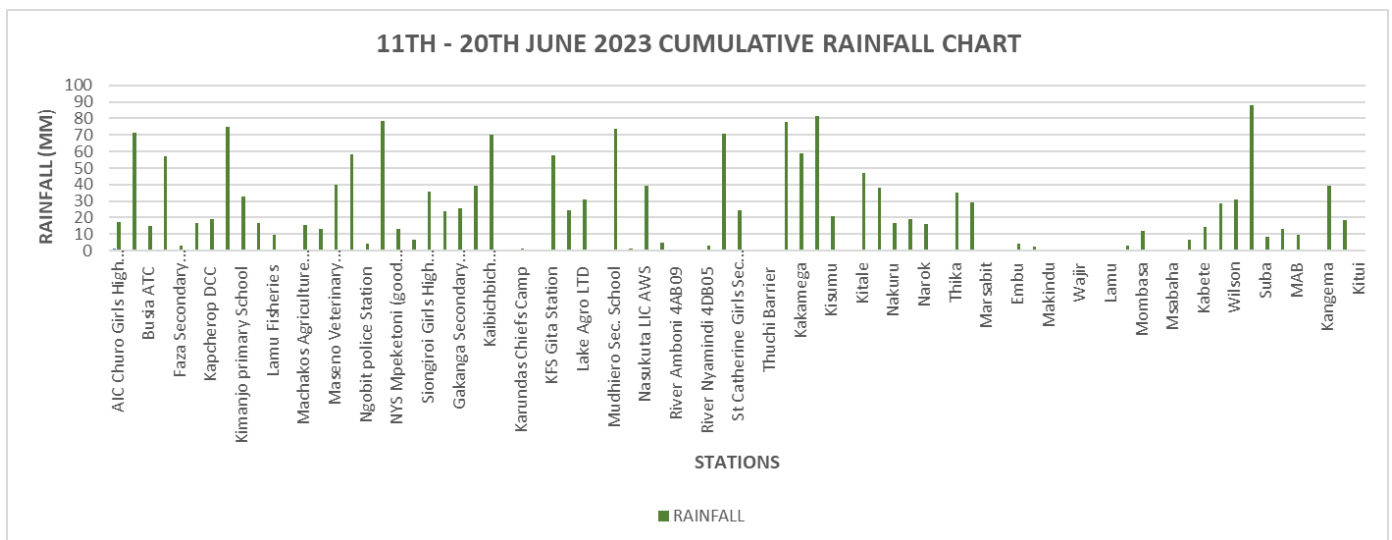


Fig: 3.4

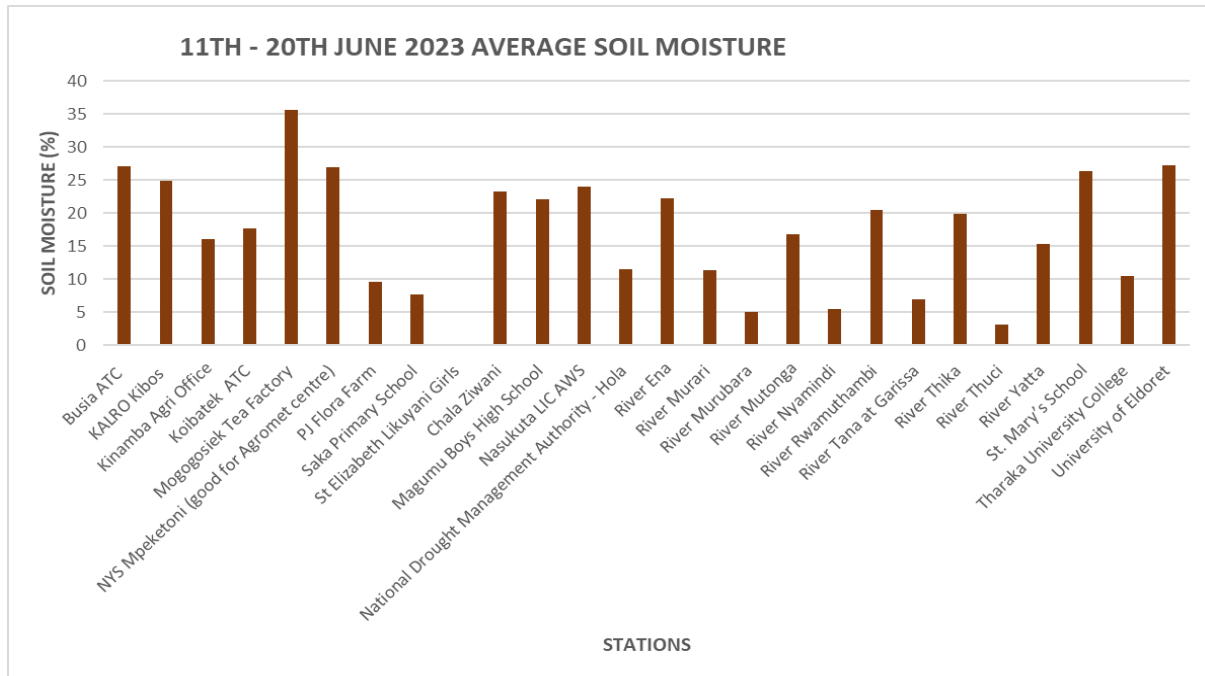


Fig: 3.5

Station	Maximum consecutive wet days (>1.0 mm)	Maximum consecutive dry days	Number of rainy days (> 5.0 mm)	Cumulative Rainfall from start of JJA 2023 RFseason
Kakamega	4	2	4	110.5
Kisii	4	1	3	115.8
Kitale	4	2	2	112.7
Kericho	2	1	1	52.0
Nyeri	0	4	0	35.3
Thika	1	6	1	35.6
Dagoretti	10	0	0	33.1
Meru	0	10	0	30.0
Embu	2	2	0	17.4
Katumani	1	5	0	6.3
Msabaha	1	7	1	46.0
Mtwapa	2	7	1	80.5
Kabete	1	6	1	53.6
Nyahururu	2	3	1	45.5
Kabarak	4	2	1	13.3

Fig: 3.6

4.0 EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT TEN (10) DAYS; 21ST – 30TH JUNE 2023.

During the next ten (10) days, rainfall is expected to fall over several regions within the country.

Over Western and Nyanza regions, light to moderate rains are likely to continue therefore farmers are expected to continue harvesting and post-harvest activities like winnowing, drying of beans 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 of the tassel and wax ripeness stage and beans at maturing stage, farmers should focus on maintaining their farms.

North Western/Eastern are likely to have sunny intervals with a chance of 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 and disease control embrace water harvesting practice.

South Eastern lowlands regions are expected to experience sunny intervals 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 with a chance of light showers during the next dekad period. Farmers should focus on maintaining their crop fields.

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



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FOR: DIRECTOR OF METEOROLOGICAL SERVICES.