



REPUBLIC OF KENYA
MINISTRY OF ENVIRONMENT, CLIMATE CHANGE & FORESTRY
KENYA METEOROLOGICAL DEPARTMENT
Dagoretti Corner, Ngong Road, P. O. Box 30259-00100, GPO, Nairobi, Kenya
Telephone: +254 (0) 20 38567880-7, +254 724 255 153-4
E-mail: director@meteo.go.ke, info@meteo.go.ke Website: <http://www.meteo.go.ke>

AGROMETEOROLOGICAL BULLETIN

Ref: MET/7 /28 / 2

Issue No: 18/2023

Date: 4/07/2023

DEKAD 18 PERIOD: 21ST – 30TH 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 the Rift Valley region reported the highest amount of rainfall followed by Kericho (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 15.5°C – 20.5 °C while the warmer regions had mean air temperature reaching 34.7°C (Figs. 3.3 & 3.4).
- Total pan evaporation, increased over most stations with the highest readings of 73.5 mm being recorded at Garissa station in North Eastern Kenya.

2.0 WEATHER AND CROP REVIEW FOR THE PERIOD: 21ST – 30TH 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, 124.4 mm followed by Kericho with 88.3 mm.

Over Western, Nyanza, and some parts of Rift Valley, farmers have completed harvesting beans and maize is at the wax ripeness stage.

In Central, Nairobi, Eastern, and Coastal regions, beans are at the maturity stage while maize is at the wax ripeness stage.

In the pastoral regions of Northwestern/Eastern and south rift valley, 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 20.5 °C and 21.9 °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 85.2mm against its Long term decadal mean of 71.34mm, the station had a total of ten (10) 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. The average mean air temperature at the station increased slightly from 21.56 to 21.89°C. Maize is at the wax ripeness stage while beans have been harvested.

2.2.2 KISII:

The station received light to moderate rainfall during the dekad. A cumulative rainfall amount of 62.92 mm was received against its long-term decadal mean of 50.65 mm. The station reported three (3) consecutive rainy days with five (5) days recording more than 5.0 mm (moderate to heavy rainfall). The mean air temperature dropped from 20.7°C in the previous dekad to 20.5°C. Broken cloud cover persisted during both morning and afternoon hours throughout the dekad. Maize is at the wax ripeness stage while beans have been harvested.

2.3 RIFT VALLEY PROVINCE

Several stations from the region reported increased rainfall compared to the previous dekad. Light to moderate rainfall was reported by all stations in the region during the dekad. Most stations from the region maintained same mean air temperatures just as in the previous dekad and ranged between 18.5°C and 20.0 °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 23.4mm was received against its long-term dekad mean of 42.11 mm. The station reported two (2) 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. The average mean air temperature remained constant at 20.0°C. Maize is at the flowering stage and in a good state while beans are at the maturing stage. The rainfall is sufficient for crop growth.

2.3.2 KERICHO:

A cumulative amount of 88.3 mm of rainfall was reported against its long-term dekad mean of 52.8 mm. The station had three (3) consecutive rainy days with four (4) days recording more than 5.0 mm of rainfall during the dekad. The average mean air temperature decreased from 18.76 °C in the previous dekad to 18.04°C in the current dekad. Broken cloud cover persisted over the station in the morning and in the afternoon hours. Maize is at the maturing stage and some farmers are planning for June – August 2023 season's planting.

2.3.3 KABARAK:

The station reported a cumulative amount of 40.41 mm of rain against its long-term dekad mean of 26.31mm. The average mean air temperature increased from 19.47°C in the previous dekad to 19.42 °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 the flowering of the tassel stage and beans are at the 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 decadal mean. Light to moderate rainfall was reported by all stations in the region. Average mean air temperatures decreased in the region and ranged between 15.52°C and 19.88°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 3.33mm against its long-term dekad mean rainfall of 8.58mm. 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 17.34 from 18.64°C in the previous dekad. Maize is between the flowering of the tassel wax ripeness stage whereas beans are mostly in the maturing stage. Both crops are fairly doing well due to sufficient rainfall.

2.4.2 THIKA:

Received a total cumulative amount of 0.31mm against its long-term dekad mean rainfall of 2.71mm. Broken cloud cover was observed at the station during the morning and afternoon hours throughout the dekad. Maize is at the flowering of the tassel stage

and beans at the maturing stage. Beans in some areas have matured and ready for harvesting.

2.4.3 DAGORETTI

Received a total cumulative amount of 4.5 mm against its long-term dekadal mean rainfall of 9.86 mm. The station reported a single (1) rainy day (more than 5.0 mm of rainfall) during the dekad. Broken cloud cover was observed during the morning and afternoon hours throughout the dekad. The average mean air temperature decreased from 18.96 °c to 18.11°C in the current dekad. Maize is at the wax ripeness stage and generally doing well while beans have been harvested. Fall worms attack on the maize has subsided and the maize is in a fair state.

2.4.4 KABETE:

The station received a total cumulative amount of 5.2 mm against its long-term decadal mean of 6.44 mm of rainfall. The station reported a single rainy day - 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 the flowering stage and beans are at the maturity stage. Both crops are doing well and some farmers have already started harvesting beans.

2.4.5 NYAHURURU:

The station received a total cumulative amount of 58.4mm against its long-term dekadal mean of 39.20 mm of rainfall. The station had five (5) rainy days with five (5) 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 was 15.5°C. Maize is approaching tasseling stage and doing well due to sufficient rainfall.

2.5 EASTERN REGION:

Several stations in the region reported light rains with Embu reporting 12.22 mm of rainfall. 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 18.12 °C and 18.46°C.

2.5.1 MERU:

The station remained dry during the current dekad. Broken cloud cover was observed during the morning and afternoon hours throughout the dekad. The average mean air temperature at the station was 18.46°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 12.22 mm against its long-term dekadal mean of 7.74 mm of rainfall. The station had two (2) consecutive days with (light) rainfall with one (1) day recording more than 5.0 mm (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 at the station was 18.12 °C. Maize is at flowering of the tassel stage and beans are at the harvesting stage.

2.5.3 KATUMANI:

The station remained dry during the current dekad. It has a long-term dekadal mean of 1.22mm of rainfall. Broken cloud cover dominated the sky during the morning and afternoon hours throughout the dekad. Total pan evaporation was 29.0mm.

Maize is at the full ripeness stage while beans have been harvested. Maize crop has generally been affected by too much sun.

Mangoes (variety apple) are at the appearance of the new leaves stage and 100% development phase. The first weeding is being done.

Oranges (Washington Navel) are at the flowering stage and 100% development phase. Harvesting has started.

.

2.6 COASTAL REGION:

Several stations in the region reported light rainfall with Mombasa station leading the region with 41.2 mm of rainfall. Scattered/Broken cloud cover was mainly observed in the region during the morning and afternoon hours. Mean air temperature generally decreased during the current dekad and ranged between 24.6 °C and 27.6°C.

2.6.1 MTWAPA:

The station received a total cumulative amount of 34.6 mm against its long-term dekadal mean of 39.32mm of rainfall. The station had three (3) consecutive rainy days with three (3) days recording more than 5.0 mm (light to moderate) rainfall. The average mean air temperature was 25.6°C. Broken cloud cover dominated the sky during the morning and afternoon hours. Maize is at the flowering of the tassel stage and in a normal state. Mangoes are at the fruit-setting stage and in a moderate state. Normal yield is expected for mangoes. Rainfall was insufficient during the dekad under review and could affect grain filling phase in maize.

2.6.1 MSABAHA:

The station received a total cumulative amount of 41.2mm against its long-term dekadal mean of 48.11mm of rainfall. The station had three (3) consecutive rainy days with two (2) days 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 the flowering of the tassel stage normal yield is expected. There has been sufficient rainfall in the current dekad.

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 decreased and ranged between 28.35°C and 29.32°C.

Most Water/Earth pans in the region continue holding water and Pasture/forage condition remains satisfactory, livestock is doing well.

3.0 DEKAD 18 2023 RAINFALL AND TEMPERATURE MAPS/CHARTS

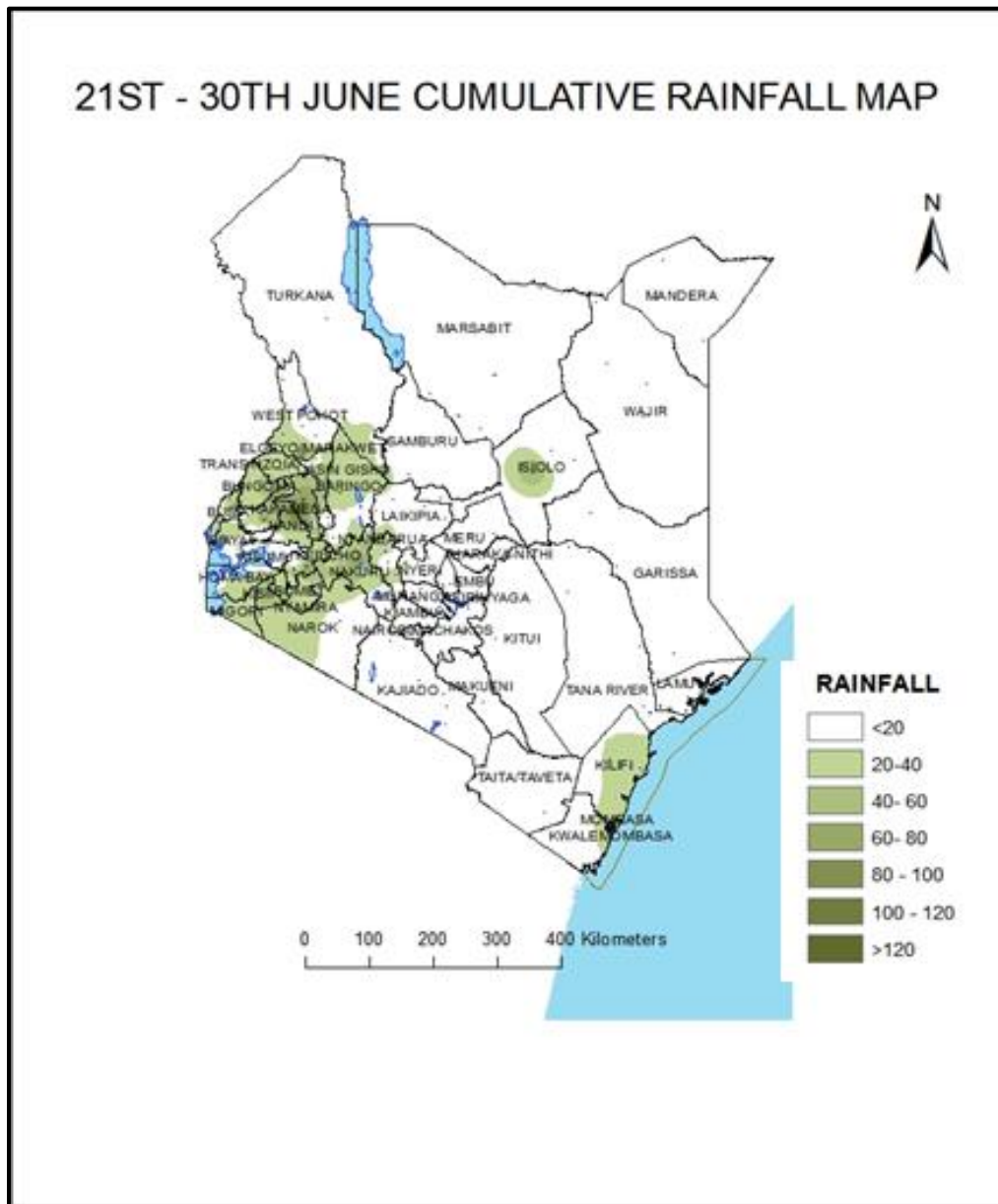


Fig: 3.1

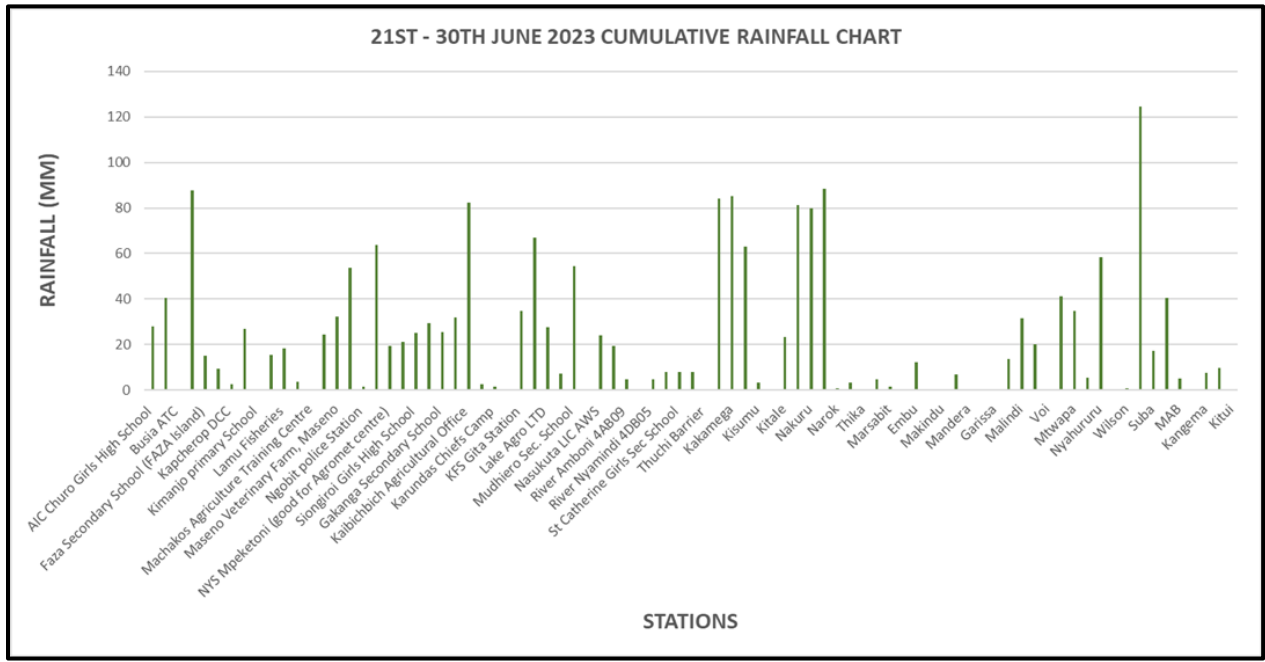


Fig: 3.3

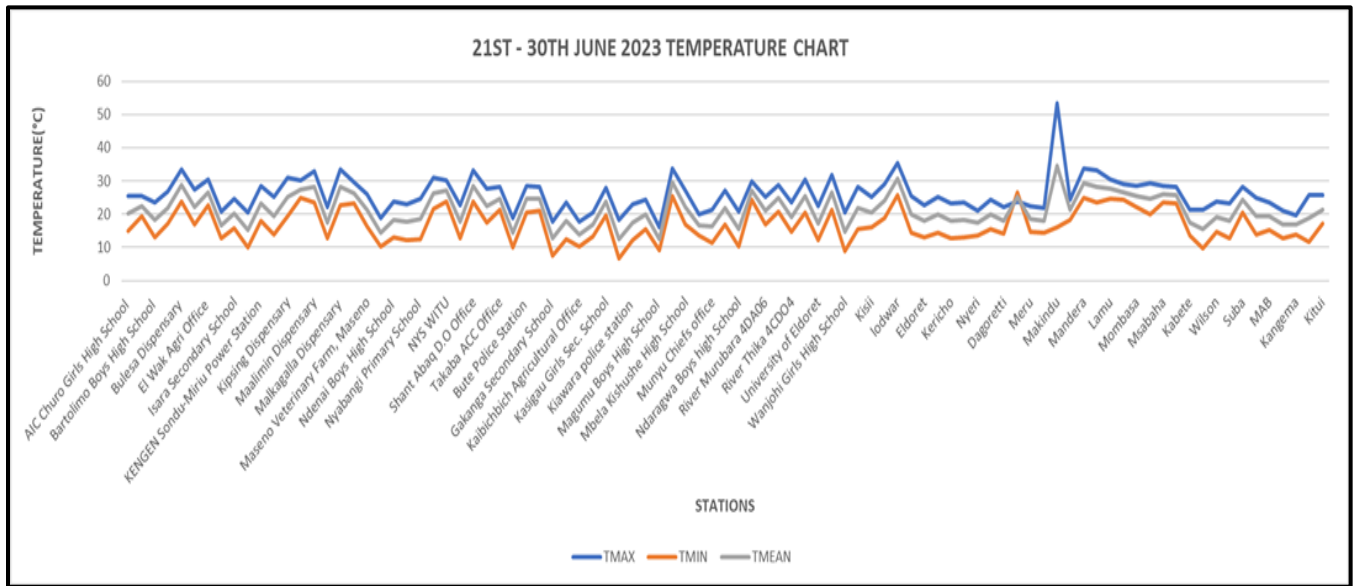


Fig: 3.4

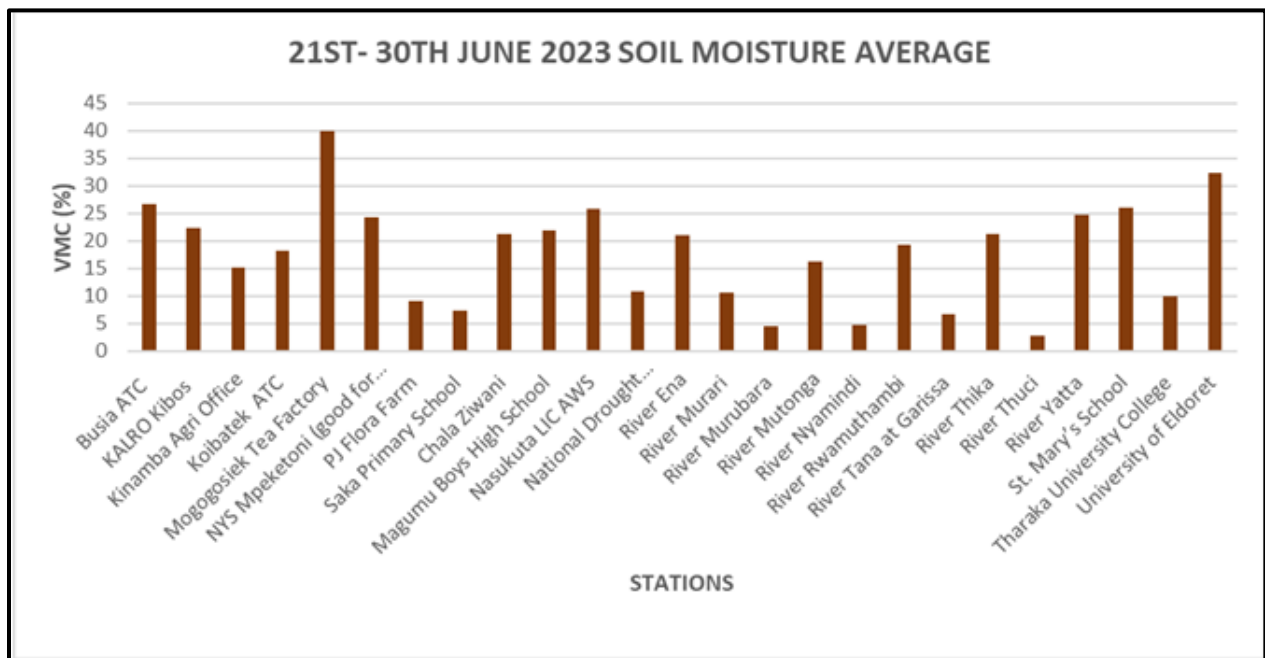


Fig: 3.5

Station	Maximum consecutive wet days (>1.0 mm)	Maximum consecutive dry days	Number of rainy days (> 5.0 mm)	Cumulative Rainfall from the start of JJA 2023
Kakamega	10	2	4	195.7
Kisii	3	2	5	178.7
Kitale	2	2	2	136.1
Kericho	3	1	4	140.3
Nyeri	1	1	0	38.6
Thika	0	4	0	35.9
Dagoretti	1	6	0	38.2
Meru	0	8	0	30.1
Embu	2	1	1	29.6
Katumani	0	10	0	6.3
Msabaha	3	2	2	87.2
Mtwapa	3	2	3	115.1
Kabete	1	9	1	58.8
Nyahururu	5	1	5	103.9
Kabarak	4	1	2	53.7

Fig: 3.6

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

DAYS; 1ST – 10TH JULY 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 is likely to continue therefore farmers who are still harvesting and carrying out activities like winnowing, threshing, and drying of beans 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, light rains are expected during the next dekad and are likely to supply the necessary soil moisture required by maize which is at the flowering of the tassel and wax ripeness stage. Since beans are at the maturing stage, farmers should focus on harvesting to avoid losses resulting from the light rains.

North Western/Eastern is likely to have sunny intervals with cloudy nights and 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 and embrace water harvesting practices.

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

The Coastal regions are likely to be sunny with occasional light showers during the next dekad period. Farmers are advised to focus on maintaining their crop fields.

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



Mary Githinji

FOR: DIRECTOR OF METEOROLOGICAL SERVICES.