

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

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AGROMETEOROLOGICAL BULLETIN

DEKAD 29 PERIOD: $11^{TH} - 20^{TH}$ OCTOBER 2023. 1.0 HIGHLIGHTS

- During the period under review, **most parts** of the country reported an increased amount of rainfall as compared to the previous dekad except for a few stations over coastal and South Eastern lowlands.
- Kakamega Meteorological Station in the Western region reported the highest amount of rainfall followed by Nyaroya Station in Migori and Kitui Meteorological Station (Figs; 3.1 & 3.2).
- Mean air temperature and pan evaporation readings increased slightly over most parts of the country as compared to the previous dekad. (Figs. 3.3 & 3.4).
- During the next ten (10) days, most parts of the Country are likely to receive moderate to heavy rains over a few places in the Western, Central, Rift Valley, South Eastern lowlands, North Eastern, and Coastal areas of the country.

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

2.1 SUMMARY

In Western, Nyanza, and several parts of Rift Valley, several stations reported enhanced rainfall, which surpassed their long-term dekadal means.

In central Nairobi and the Eastern region, enhanced rainfall fell as the southern lowlands and coastal region reported less rainfall as compared to the previous dekad.

In Northwestern and Eastern regions, moderate rainfall was reported at Wajir and Mandera and light rainfall at Garissa and Lodwar stations.

Most farmers in the country have already planted their crops and pasture/forage condition is slowly improving due to the occasional light to moderate rains.

2.2 WESTERN AND NYANZA REGION

Most stations reported enhanced rainfall, which surpassed their long-term dekadal means. Moderate to very heavy rainfall fell by all stations in the region during the dekad. Mean air temperature dropped in the region and ranged between 21.3°C and 24.4°C. Scattered to Broken cloud cover dominated the region during both morning and afternoon hours.

2.2.1 KAKAMEGA:

The station reported a cumulative rainfall amount of 157.6 mm, which is above its long-term mean. Broken cloud cover persisted at the station throughout the entire dekad. Mean air temperature at the station decreased by 0.9 °C.

Maize is at its nineth leaf and in a good state, while beans are flowering and doing well due to prevailing weather conditions.

2.2.2 KISII:

The station reported a cumulative rainfall amount of 51.8 mm, which is below the long-term dekadal mean. Mean air temperature at the station was 21.3 °C Scattered cloud cover during the morning increasing to break during the afternoon hours prevailed over the station during the dekad.

Maize is at its ninth leaf and in a good state, while beans are flowering and doing well due to prevailing weather conditions.

2.3 RIFT VALLEY REGION

2.3.1 KITALE:

Received 70.1 mm of rainfall, which is above the long-term dekadal mean. Mean air temperature decreased slightly from 20.6 °C to 20.1 °C during the dekad. Scattered cloud cover persisted over the station throughout the dekad

Most farmers are still harvesting their maize despite the ongoing heavy rains.

2.3.2 KERICHO:

The station reported 142.2 mm of rainfall which is a above its long-term decadal mean. Mean air temperature at the station dropped from 18.7 °C to 18.5 °C. Broken cloud cover persisted at the station during both morning and afternoon hours throughout the dekad.

Maize is at its ninth leaf and in a good state, while beans are flowering and doing well due to prevailing weather conditions.

2.3.3 KABARAK:

The station reported a cumulative amount of 80.1 mm which is a above its long-term decadal mean. Mean air temperature decreased from 19.2°C to 19.1°C. Scattered cloud cover at the station persisted throughout the dekad.

Farmers have already planted their crops and are at the emergence stage.

2.4 CENTRAL AND NAIROBI REGION.

Most stations from the Central region reported an increase in rainfall compared to the previous dekad (Fig 3.2). Mean air temperatures slightly increased and ranged between 20.6 °C and 23.3 °C. Scattered to broken cloud cover fell throughout the region during the dekad.

2.4.1 NYERI:

The station reported a cumulative rainfall amount of 50.0 mm which is above the long-term dekadal mean. Broken cloud cover in the morning and afternoon was observed at the station throughout the dekad. Mean air temperature decreased from 20.6 °C to 21.2 °C.

Farmers have completed planting and the crop is at the emergence stage.

2.4.2 THIKA:

The station reported 52.4mm rainfall which is above normal during the period. Total pan evaporation was 52.9 mm. Broken cloud cover in the morning and afternoon was observed at the station throughout the dekad

Planting of crops is underway in most farms.

2.4.3 DAGORETTI

The station received a cumulative rainfall amount of 49.5mm. The mean air temperature increased from 20.2 °C to 21.3°C in the dekad. Scattered cloud cover was observed at the station throughout the dekad.

Land preparation is over and some farmers have done dry planting awaiting the onset of the rains.

2.4.5 NYAHURURU:

The station received a total rainfall amount of 17.1mm, which is below the long-term decadal mean. The average mean air temperature at the station increased from 15.5 °C to 16.1 °C. Broken cloud cover was observed at the station during both morning and afternoon hours throughout the dekad.

Farmers have completed planting and the crop is at emergence stage.

2.5 EASTERN REGION:

Most stations in the region received more rainfall as compared to the previous dekad. Mean air temperature increased slightly and ranged between 21.8°C and 25.6°C. Scattered/broken cloud cover was observed over most stations in the region during the dekad.

2.5.1 MERU:

The station received a cumulative rainfall of 144.6 mm. Mean air temperature slightly increased from 21.4 °C to 21.8 °C. Scattered cloud cover was observed at the station during both morning and afternoon hours throughout the dekad.

Farmers have completed planting and the crop is at the emergence stage.

2.5.2 EMBU:

The station received a cumulative rainfall amount of 42.1mm. The average mean air temperature increased from 21.8 °C to 22.0°C in the dekad. Broken cloud cover was observed at the station throughout the dekad.

Maize and beans are at an emergence stage.

2.5.3 KATUMANI:

The station reported 1.3 mm of rainfall during the dekad. Scattered cloud cover at the station during both morning and afternoon hours.

Maize and beans are at an emergence stage. Mangoes are at fruit setting stage while oranges have attained the full ripeness stage but have been infested by aphids.

2.6 COASTAL REGION:

Most stations in the region except Mombasa station reported a decreased amount of rainfall as compared to the previous dekad. The mean air temperature generally increased during the dekad and ranged between 27.5°C and 28.3°C.

2.6.1 MTWAPA:

The station received a total rainfall amount of 27.7 mm against its long term dekadal mean of 54.6 mm. Mean air temperature increased from 26.6°c to 27.5°c. Scattered cloud cover was observed at the station during the dekad.

Farmers are preparing for the second season planting and mangoes are at dormant stage.

2.6.2 MSABAHA:

The station received a total rainfall amount of 14.7 mm against its long-term dekadal mean of 44.5 mm. The mean air temperature increased from 26.9 °C to 27.5 °C. Broken cloud cover was observed during the dekad.

Farmers are preparing for the second season planting and mangoes are at the dormant stage.

2.7 NORTH EASTERN REGION:

Most stations in the region received an increased amount of rainfall as compared to the previous dekad. Mean air temperature ranged between 30.5 0 C and 30.8 0 C

Scattered to broken cloud cover was observed in the region throughout the dekad. Water levels in most water/earth pans/seasonal rivers in the region are filling up and pasture and forage in the region are fast improving due to the prevailing OND rains.

DEKAD 29 2023 RAINFALL AND TEMPERATURE MAPS/ CHARTS

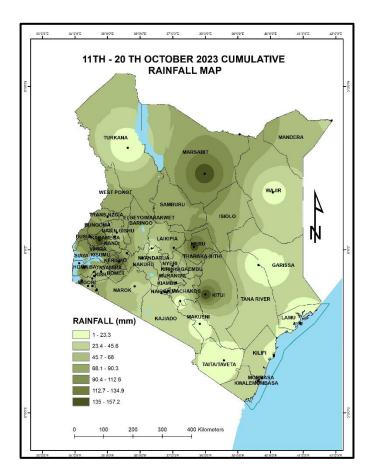


Fig: 3.1

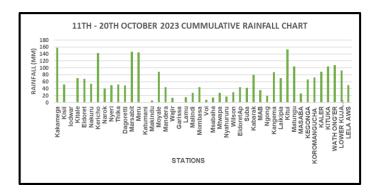


Fig: 3.2

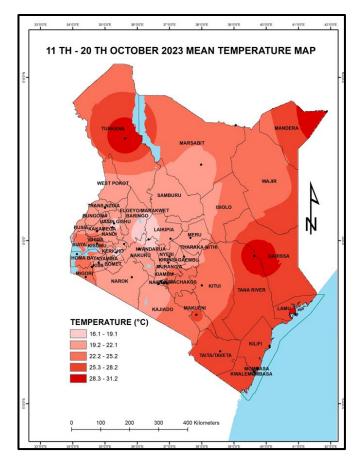


Fig 3.3

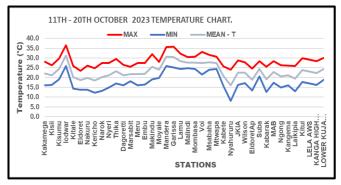


Fig: 3.4

Station	Maximum consecutive wet days	Maximum consecutive dry days	Number of rainy days	Cumulative rainfall
Kakamega	10	0	5	191.11
Kisii	4	1	4	73.03
Kitale	2	0	4	102.62
Kericho	6	0	8	156.82
Nyeri	4	0	2	59.65
Thika	2	4	3	56
Dagoretti	4	2	2	55.32
Meru	5	4	4	162.7
Embu	6	3	3	126.61
Katumani	0	4	0	1.82
Msabaha	1	5	1	60.52
Mtwapa	3	3	2	66.4
Kabete	4	3	2	20.61
Nyahururu	2	3	0	17.71
Kabarak	4	1	3	100.22

Fig 3.5

4.0 EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT TEN (10) DAYS; 21^{ST} - 30^{TH} OCTOBER, 2023.

During the next ten (10) days, several parts of the Country are expected to receive occasional moderate to heavy rains over several places in the Highland East of the Rift Valley and North Eastern parts of the country.

Over **Western and Nyanza regions**, mornings are likely to be generally sunny, however occasional rains may occur over few places. Afternoon and night showers are likely to occur over few places.

In the Central region, Nairobi, and Eastern parts of the country, morning rains as well as afternoon and night showers are expected over few places. Therefore, farmers are advised to take advantage of these rains to plant.

North Western is likely to receive morning rains as well as afternoon and night showers and thunderstorms over few places. The expected weather conditions will be ideal for pasture and forage regeneration.

South Eastern lowlands and Coastal regions are expected to receive occasional morning, afternoon and night showers over a few places during the next dekad. Therefore, farmers are advised to take advantage of these rains an plant.

4.1 AGRO - ADVISORY:

- ❖ Farmers in the Western, Nyanza North Rift and central Rift Valley are advised to continue on planting various types of crops like Root crops, Cereals, Bananas, Sugar cane etc. in order to make the best of the high rainfall expected in October-November -December short rainfall season.
- ❖ It is advised that farmers to keep their animals particularly poultry birds and young calves warm to mitigate the effects of cold weather during the short rain season.
- Pastoralists in North Western Kenya, North eastern and South Rift valley and parts of south eastern Lowland are advised to caution their animals from flood prone areas at the course of their herding activities.
- ❖ Farmers are advised to work closely with Agricultural Extension officers and other stakeholders to have a better understanding of weather patterns and how they affect agricultural activities like weeding, fertilizer application, chemical spraying etc.
- ❖ Areas with drainage challenges like fairly flat lands e.g., Mwea irrigation scheme and along River Nzoia basin; farmers are advised to construct furrows and channels to remove stagnant waters to increase the air spaces in the soil thus improving aeration for great root development, more intense bacterial activity and promotion of oxidation processes.

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

Mary Githinji

FOR: DIRECTOR OF METEOROLOGICAL SERVICES