

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

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AGROMETEOROLOGICAL BULLETIN

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DEKAD 30 PERIOD: $1^{ST} - 10^{TH}$ NOVEMBER, 2023.

1.0 HIGHLIGHTS

• During the period under review, **most parts** of the country reported increased amount of rainfall as compared to the previous dekad except for a few stations.

• Kitui station in South Eastern Lowland region reported the highest amount of rainfall of 297.3mm followed by Meru Meteorological Stations with 273.9mm (Figs; 3.1 & 3.3).

• Mean air temperature decreased slightly in most parts of the country as compared to the previous dekad. (Figs. 3.2 & 3.4).

• Total pan evaporation readings slightly decreased in most stations as compared to the previous dekad.

• During the next ten (10) days, most parts of the Country are expected to receive occasional moderate to heavy rains over most places in Western, Central, Rift Valley, South Eastern lowlands, North Eastern and Coastal areas of the country.

2.0 WEATHER AND CROP REVIEW FOR THE PERIOD: 1ST – 10TH NOVEMBER, 2023.

Date: 14/11/2023

2.1 SUMMARY

In Western, Nyanza, and several parts of Rift Valley, most farmers have their crops at emergence and maturity stages; all are in good state.

In Central, Eastern, and Coastal regions crops are at emergence and post emergence stages.

In Northwestern and Eastern regions pasture and forage condition is slowly getting regenerated due to the occasional moderate to heavy rains.

2.2 WESTERN AND NYANZA REGION

Most stations from the region reported enhanced rainfall with Kakamega reporting a decrease in rainfall amounts from 135.9mm to 117.9mm. Kisii reported the highest rainfall amount of 136.1mm.

Most stations recorded a decrease in Mean air temperature.

Scattered to broken cloud cover was observed over most stations in the region during the dekad.

2.2.1 KAKAMEGA:

The station reported a cumulative rainfall amount of 117.9 mm which is above its long-term mean of 53.5mm.

The average mean air temperature at the station decreased from 21.9°C to 21.75°C. Scattered to broken cloud cover was reported throughout the entire dekad.

Maize crops are at tasseling stage and in good condition.

Beans are at maturity stage and some farmers have started to harvest.

2.2.2 KISII:

The station reported a cumulative rainfall amount of 97.8 mm, a positive deviation from the long-term mean. The average mean air temperature at the station slightly decreased by 1.3° C from the previous dekad. Scattered cloud cover during the morning increasing to broken during the afternoon hours prevailed over the station during the dekad.

Maize and beans are at post emergence stage and are corresponding to the normal growth.

RIFT VALLEY REGION

2.3.1 KITALE:

The station received substantial amount of rainfall during the dekad of 24.11mm, a negative deviation from the normal. Mean air temperature decreased slightly from 20.2 $^{\circ}$ C to 19.9 $^{\circ}$ C. Scattered to broken cloud cover was observed throughout the dekad

2.3.2 KERICHO:

The station reported 149.8mm of rainfall which is a above its long-term mean. The station reported a decrease in mean air temperature from 18.2 °C to 18°C.

Some farmers have planted maize whereas others have not. Maize is at emergence stage and are in good condition.

Beans are being affected by the current heavy rainfall received.

Beans are in flowering stage and in fair state; growing better than normal.

2.4 CENTRAL AND NAIROBI REGION.

Most stations from the Central region reported a increased in rainfall compared to the previous dekad (Fig 3.2). Mean air temperatures slightly decreased and ranged between 19.8°C and 20.2°C. Broken cloud cover was observed in the region throughout the dekad.

2.4.1 NYERI:

The station reported a cumulative rainfall amount of 183.9mm which is a positive deviation from the long-term mean of 71.3mm. Broken cloud cover was observed at the station throughout the dekad. Mean air temperature decreased from 21.0° C to 19.8° C in the dekad.

Both maize and beans crops are in post emergence stage and in fair state due to the prevailing short rains season.

2.4.2 THIKA:

The station reported 89.6mm rainfall which is a positive deviation from its normal mean of 68.9mm. Total pan evaporation was 29.1mm. Broken cloud cover was observed at the station throughout the dekad.

Both maize and beans crops are in post emergence stage and in fair state due to the prevailing short rains season.

2.4.3 DAGORETTI

The station received a cumulative rainfall amount of 210.4mm which is a above normal from its long-term mean of 53.9mm. The mean air temperature decreased from 20.8° C to 19.1° C in the dekad. Broken cloud cover was observed at the station throughout the dekad.

Maize and beans are at post emergence stage and are corresponding to the normal crop growth.

2.4.4 KABETE:

The station received a cumulative rainfall amount of 220.8mm which is above normal from its long-term mean of 66.0mm. The mean air temperature at the station decreased from 24.8°C to 19.2°C. Broken cloud cover was observed at the station throughout the dekad.

2.4.5 NYAHURURU:

The station received a total rainfall amount of 88.1 mm, a positive deviation from its long-term mean of 29.2mm. The average mean air temperature at the station increased from 15.6°C to 15.7°C. Broken cloud cover was observed throughout the dekad.

Maize crop has reached full ripeness but not yet completely dry for harvesting.

2.5 EASTERN REGION:

Most stations in the region received more rainfall as compared to the previous dekad (refer to the graphs and the maps). Mean air temperature decreased slightly and ranged between 19.7°C and 22.7°C. Broken cloud cover was observed in the region throughout the dekad.

2.5.1 MERU:

The station received a cumulative rainfall of 273.9 mm which is a positive deviation from its long term mean of 143.5mm. Mean air temperature slightly decreased from 20.7°C to 19.7°C. Broken cloud cover was observed at the station throughout the dekad.

2.5.2 EMBU:

The station received a cumulative rainfall amount of 157.2mm a positive deviation from its long-term mean 117.1mm. The average mean air temperature decreased from 21.7° C to 20.2° C. Broken cloud cover was observed at the station throughout the dekad.

Farmers have started weeding their farms.

Maize and beans crops are at emergence stage and are in fair condition, and corresponding to normal growth.

2.5.3 KATUMANI:

The station reported 226.7mm of rainfall during the dekad, a positive deviation from its long-term mean of 57.1mm. Broken cloud cover was observed at the station throughout the dekad.

Maize and beans are at post emergence stage and are corresponding to the normal crop growth.

2.6 COASTAL REGION:

All stations in the region reported an increase in rainfall amounts as compared to the previous dekad. The mean air temperature generally decreased during the dekad and ranged between 26.1° C and 27.1° C.

2.6.1 MTWAPA:

The station received a total rainfall amount of 182.7mm against its long term dekadal mean of 63.4mm. Mean air temperature decreased from 28.0° C to 26.7° C. Broken cloud cover was observed at the station throughout the dekad.

Planting underway and with torrential rainfall downpour the crops will pick up well.

Maize crop is at emergence stage and are corresponding to the normal growth.

Maize are being affected by hail, wind, storm, insects and excessive weed growth.

Mangoes are at dormant stage.

2.6.2 MSABAHA:

The station received a total rainfall amount of 220.2mm against its long-term dekadal mean of 47.3mm. The mean air temperature decreased from 28.2°C to 27.3°C. Broken cloud cover was observed throughout the dekad.

Maize crop is at post emergence stage and are corresponding to the normal crop growth.

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 22.8° C and 28.2° 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 growing due to the prevailing OND rains.

DEKAD 31 2023 RAINFALL AND TEMPERATURE MAPS/ CHARTS















Fig 3.4

Station	Cummulative rainfall	Maximum consecutive wet days	Maximum consecutive dry days	Number of rainy days
Kakamega	900.85	7	2	5
Kisii	927.83	6	2	7
Kitale	392.71	3	2	1
Kericho	733.11	6	2	6
Nyeri	518.18	4	2	5
Thika	524.02	4	2	7
Dagoretti	725.29	4	2	7
Meru	746.25	10	2	8
Embu	642.61	8	2	7
Katumani	465.93	10	2	9
Msabaha	657.26	3	2	3
Mtwapa	727.72	4	2	3
Kabete	756.03	4	2	8
Nyahururu	363.42	8	2	3
Kabarak	491.17	7	2	6

Fig 3.5

4.0 EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT TEN (10) DAYS; 11^{TH –} 20TH NOVEMBER, 2023.

During the next ten (10) days, several parts of the Country are expected to receive 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, Morning rains as well as afternoon and night showers are expected over few places occasionally spreading to several places In the **Central region, Nairobi, and Eastern parts** of the country, morning rains as well as afternoon and night showers are expected over several places.

North Western is likely to receive morning rains as well as afternoon and night showers over few places.

South Eastern lowlands and Coastal regions are expected to receive occasional morning, afternoon and night showers over a several places during the next ten days.

4.1 AGRO – ADVISORY:

- Farmers in all regions of the country especially Western, Nyanza North Rift and central Rift Valley are advised to take advantage of the prevailing rain by planting various types of crops like Root crops, Cereals, Bananas, Sugar cane, horticultural crops etc. in order to enhance their crop production and ease food insecurity.
- Farmers should take precaution on high risk of seasonal flu due cold and humid weather. Therefore, they are highly advised to keep their animals particularly poultry birds and young

calves warm to mitigate the effects of cold weather during the prevailing rains.

- Pastoralists in North Western Kenya, North eastern and South Rift valley and parts of south eastern Lowland are advised to be cautious of their animals from flood prone areas. They are also advised to plant pastures like boma Rhodes grass, sorghum etc. for future use.
- 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.
- The national Government and the county government should facilitate in construction of water storage facilities like dams, weirs, gabions for long term water conservation

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FOR: DIRECTOR OF METEOROLOGICAL SERVICES

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