

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

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### AGROMETEOROLOGICAL BULLETIN

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DEKAD 34 PERIOD: 1ST - 10TH DECEMBER 2024.

#### 1.0 HIGHLIGHTS

- During the period under review the country experienced reduced rainfall amounts except the coastal region which reported enhanced rainfall.
- Malindi station in the Coast region recorded the highest amount of rainfall of 121.2 mm followed by Msabaha with 119.2 mm. (see Figures 3.1 and 3.3).
- The mean air temperature dropped over most parts of the country as a result of reduced cloud cover especially at night (see Figures 3.2 and 3.4).
- Total pan evaporation readings increased over most parts the country compared to the previous dekad.
- During the next ten days Rainfall is expected to reduce over most parts the country with several regions expected to remain dry.

## 2.0 WEATHER AND CROP REVIEW FOR THE PERIOD 1ST – 10TH DECEMBER 2024.

#### 2.1 WESTERN AND NYANZA REGION

Most stations in the region reported reduced rainfall compared to the previous dekad. Kisumu station recorded the highest amount of 30.6 mm followed by Kakamega and Matungu stations with 29.5 mm and 14.6 mm respectively. Significant reduction from long term mean was registered throughout the entire region. Mean air temperature increased significantly in the region ranging between 20.5°C in Kisii to 23.4 °C in Kisumu. scattered cloud cover dominated the region throughout the dekad.

#### 2.11 KAKAMEGA:

The station reported a rainfall amount of 29.5 mm which was above its long-term mean of 33.8 mm.

The average mean air temperature at the station slightly increased from 21.4°C to 21.6°C, the station reported scattered cloud cover during the dekad.

Maize crop is at flowering stage, beans have attained maturity.

#### 2.12 KISII:

The station recorded 21.5 mm of rainfall, which was above its long term of 59.1 mm during the dekad. Mean air temperature slightly increased from 19.8°C to 20.5°C during the same period.

The station reported scattered cloud cover throughout the dekad.

Maize crops has reached flowering stage and are in good state while beans have attained maturity stage.

#### 2.2.0 RIFT VALLEY REGION

Most stations within the region reported depressed rainfall during dekad. Kericho station recorded 3.5 mm

Mean air temperature in the region ranged between 16.5 °C in Eldoret and 18.9 °C in Nakuru.

Scattered cloud cover dominated over most parts of the region during the dekad.

#### 2.2.1 KITALE:

The station recorded no rainfall during the dekad. The mean air temperature decreased from 21.0 °C to 18.7 °C.

The station reported scattered clouds cover during the dekad.

Farmers have harvested their crops.

#### 2.2.2 KERICHO:

The station reported rainfall amount of 3.5 mm as compared to its long-term mean of 52.0 mm. Mean air temperature decreased from 18.2 °C to 18.0 °C

The station reported scattered clouds cover all through during the dekad.

Both maize and beans crops are at flowering stage and corresponding to the normal growth. Normal yield is expected.

#### 2.3.0 CENTRAL AND NAIROBI REGION.

Most stations in the region reported decrease rainfall compared to the previous dekad. Dagoretti and Kabete stations recorded the highest with 46.1 mm (Fig 3.3). Mean air temperature decreased in the region and ranged between 15.1°C and 21.5°C. Most stations from

the region reported scattered cloud cover throughout the dekad.

#### 2.3.1 NYERI:

The station reported rainfall amount of 4.8 mm which was below the long term dekadal mean of 29.0 mm. Mean air temperature slightly decreased from 19.8°C to 18.8°C during the dekad.

Cloud cover was scattered throughout the dekad.

Maize at emergence stage and in fair state while beans are at the flowering stage.

#### 2.3.2 THIKA:

The station received a rainfall amount of 12.3 mm which is below its long-term dekadal mean of 54.7 mm. Mean air temperature decreased from 21.7°C to 21.5°C during the dekad.

The station reported scattered cloud cover during the dekad.

Maize are at emergence stage while beans are at their flowering stage and both corresponding to normal growth.

#### 2.3.3 DAGORETTI

The station reported cumulative rainfall amount of 46.1 mm which is above its long-term dekadal mean of 41.3 mm. The mean air temperature remained the same with 20.1°C. The station reported scattered cloud cover throughout the dekad.

Maize crop is at emergence stage and beans has attained the flowering stage and in fair state.

#### 2.3.4 KABETE:

The station reported cumulative rainfall amount of 45.2 mm during the dekad. The mean air temperature at the station increased from 19.0°C to 19.2°C. The station reported broken scattered cloud cover throughout the dekad.

Maize and Beans are at emergence and corresponding to the normal growth due to sufficient precipitation.

#### 2.3.5 NYAHURURU:

The station received depressed rainfall amount of 0.9 mm which was below its long-term mean of 24.3 mm. The mean air temperature at the station slightly increased from 16.3°C to 15.1°C. The station reported scattered clouds cover throughout the dekad.

Maize has attained full ripeness and ready for harvest. Above normal yield is expected.

#### 2.4.0 EASTERN REGION:

Several stations in the region reported decreased rainfall compared to the previous dekad. Kitui station recorded the highest amount of 18.6 mm followed by Makindu and Katumani stations with 6.7mm and 6.5 mm respectively during the dekad. (see Fig 3.3). Mean air temperature ranged between 19.5°C and 24.6°C. Scattered cloud cover dominated the region throughout the dekad.

#### 2.4.1 MERU:

The station recorded cumulative rainfall amount of 2.1 mm which was below the long-term dekadal mean of 71.1 mm. Mean air temperature decreased from 19.7°C to 19.5°C.

Scattered clouds cover was recorded throughout the period under review.

Both maize and beans crops are at post emergence stage and corresponding to the normal crop growth.

#### 2.4.2 EMBU:

The station received no rainfall over the dekad. The mean air temperature observed under the same period slightly decreased from 20.9 °C to 20.20.1 °C.

The station reported scattered cloud cover throughout the dekad.

Maize crop was at emergence stage and beans flowering stage all in fair state.

#### **2.4.3 KATUMANI:**

The station recorded rainfall amount of 6.5 mm during the dekad.

The mean air temperature increased from 20.1°C to 20.2°C.

Scattered clouds cover was reported throughout the dekad.

Maize crops are at emergence stage and beans in the flowering stage all in a good state.

#### 2.5.0 COASTAL REGION

Most stations in the region reported increased rains in respect to the previous dekad with Malindi station and Msabaha recording 121.2 mm and 119.2 mm respectively. The mean air temperature ranged between 26.5°C and 28.3°C. Scattered clouds cover conditions were observed during the dekad.

#### 2.5.1 MTWAPA:

The station recorded a rainfall amount of 9.0 mm which was below its long term dekadal mean of 28.4 mm. Mean air temperature remained constant of 28.0°C. scattered cloud cover was reported all through during the dekad.

Maize is at emergence and in a poor state

#### **2.5.2 MSABAHA:**

The station reported a rainfall amount of 119.2 mm during the dekad. The mean air temperature slightly decreased from 28.8°C to 28.3°C. Scattered cloud cover was reported during the dekad.

No activities happening on the farms as the lands are lying fallow.

#### 2.6.0 NORTH EASTERN REGION:

The region remained dry during the dekad. Mean air temperature reduced in the region and ranged between 24.4°C and 29.8°C. Scattered cloud cover dominated over several parts of the region during

## DEKAD 34 2024 RAINFALL AND TEMPERATURE MAPS/CHARTS & TABLES

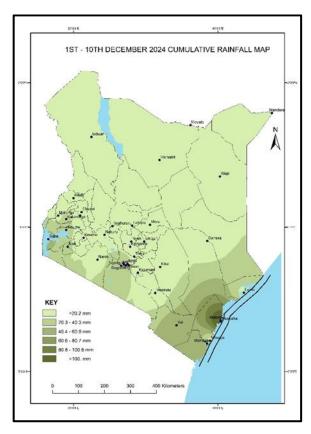


Fig: 3.1

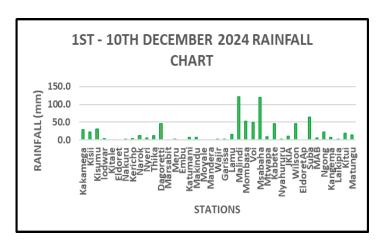


Fig: 3.2

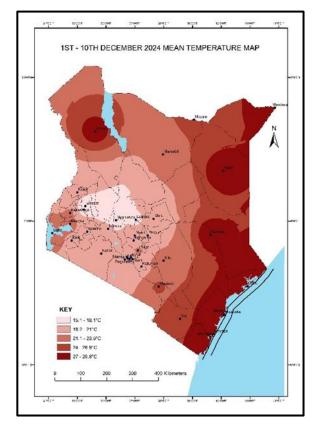


Fig: 3.3

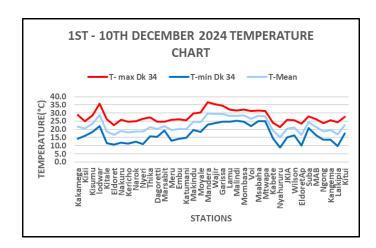


Fig: 3.4

Station	Maximu m consecut ive wet days during the dekad	Maximum consecutiv e dry days during the dekad	Days with moderat e or heavy RF during the dekad	Total rainfall from the start of OND 2024 season
Kakamega	2	5	2	559.5
Kisii	2	1	2	449.4
Kitale	0	10	0	298.2
Kericho	1	4	0	504.1
Nyeri	2	8	0	161.4
Thika	1	9	1	314.7
Dagoretti	2	7	2	402.2
Meru	1	8	0	377.3
Embu	0	10	0	315.7
Katumani	1	8	1	138.6
Msabaha	3	1	3	287.2
Mtwapa	2	4	1	195.1
Kabete	2	7	2	550.5
Nyahururu	0	7	0	217.0

Fig: 3.5

# 4.0 EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT TEN (10) DAYS; 11 – 20TH DECEMBER 2024.

In the Highlands West of Rift valley, Lake Victoria Basin and the Rift valley and Nyanza regions, Morning rains are expected over few places. Afternoon and night showers are expected over few places during the first half the forecast period. Over the last half of the forecast Period sunny interval is expected

In the **Central region and Nairobi County**, Morning session cloud cover breaking into sunny interval and sunny interval over the afternoon session expected.

The crops and pastures in the region are expected to benefit from sunny session for the vegetative growth.

In **North Western** Sunny interval throughout the forecast period.

In **North Eastern**, Sunny interval throughout the forecast period.

Pastures and forage are expected to rejuvenate due to the past moisture.

In **south-eastern lowlands**, Chance of morning rainfall during the first days of the forecast period breaking to the sunny interval throughout the forecast period.

Crops and pasture condition is expected to rejuvenate owing to the humble moisture in the soil.

In the **Coastal region**, Morning, afternoon and night showers are expected over few places occasionally spreading to several places.

Crops and pastures conditions in the region is expected to improve positively due to the expected showers over the region.

#### 4.1 AGRO-ADVISORY:

Farmers are advised to make the best of the amount of moisture in the soil by planting different crop varieties like sweet potatoes, cassava etc. to enhance the food security in the land.

Farmers are advised to grow short maturing and drought resistant crops due to the expected depressed rains over Eastern Kenya.

Pastoralists are advised on conservation of the current forage crop.

Appropriate grazing during the current season to maintain plant vigor-this will ensure survival during the depressed rain season and recovery after drought.

Enhance offtake to facilitate conservative stocking rate during the OND.

Offtake before the droughts starts to receive better prices.

Farmers should ensure proper storage of cereals in dry and cool places to avoid food contamination.

Farmers are advised to establish robust collaborations with Meteorological staff and other technical personnel at the grassroots to enhance their understanding of weather patterns and their implications on agricultural activities.

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For inquiries or any clarification, please use the email below

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