



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

## **AGROMETEOROLOGICAL BULLETIN**

**DEKAD 32**  
**PERIOD: 11<sup>TH</sup>-20<sup>TH</sup> NOVEMBER**  
**2022**

### **1.0 HIGHLIGHTS**

- Most stations within the Country reported enhanced rainfall except in the Eastern region
- Scattered cloud cover was predominant during morning hours increasing to broken state during the afternoon hours.
- Mean air temperature continued to drop over several parts of the country during the dekad
- During the next ten days, (20<sup>th</sup> – 30<sup>th</sup> November 2022) several Counties in Western Kenya, South Rift valley, central and some parts of Eastern Kenya. are likely to receive moderate to heavy rainfall.

### **2.0 WEATHER AND CROP REVIEW FOR THE PERIOD: 10<sup>TH</sup> – 20<sup>TH</sup> NOVEMBER 2022**

During the 32<sup>nd</sup> dekad 2022, most stations within the Country reported enhanced rainfall except in the Eastern region. Thika Meteorological station in Central Kenya reported the highest amount of

rainfall (figure 3.2) followed by Dagoretti, Kabete and Kangema stations. Several Counties in Western, Nyanza and South Rift valley, recorded higher rainfall readings compared to the previous dekad. Cloud cover was mainly scattered during morning hours increasing to broken state during the afternoon hours. Mean air temperature continued to drop over several parts of the country especially in Central and Nairobi area. Farmers within the central Eastern region planted during the onset of the short rain season and the crops are currently at emergence stage. In Western, some parts of Nyanza and central rift valley, maize is at flowering stage and over south eastern and coastal regions, some farmers just planted while others are still waiting for sufficient rains to start planting.

### **2.1 WESTERN AND NYANZA REGION**

Several stations from the region recorded higher rainfall readings compared to the previous dekad. Nyanza lead in the region with the highest readings from Suba station followed by Kisumu and Kisii stations. Kisii reported five days of moderate rainfall (> 5.0 mm of rainfall) while Suba and Kisumu stations reported four rainy days each during the dekad.

Unlike Kisii, Kisumu station reported above normal rains (more rainfall than its long term mean) during the current dekad. Cloud cover in Nyanza and Western was mainly scattered during morning hours increasing to broken state during the afternoon hours.

Over Western and Nyanza region, mean air temperature ranged between 20.1°C - 23.3 °C and total pan evaporation at both Kisii and Suba stations was 33.5 mm during the same period.

Maize was at past flowering stage in Kisii and had started forming grains while beans were at maturity state. Both crops are in a fair state which corresponds to normal growth and normal yield expected for both crops.

In Kakamega, maize is at flowering stage and the crop is in a fair state which corresponds to normal growth. Normal yield is expected.

## **2.2 RIFT VALLEY REGION.**

Several stations from the region reported more rainfall than in the previous dekad. Kericho station reported more than its long term mean and received five rainy days during the dekad. Narok followed with four rainy days and the total amount of rainfall was more than its long term mean. In Transzoia county, Kitale received more rainfall than its long term mean and reported four days of moderate rainfall during the dekad.

Total pan evaporation at Kitale was 27.6 mm and 33.6 mm at Kericho station. Cloud cover was mainly scattered during morning hours and increased to broken state in the afternoon and evening hours. Mean air temperature in the region ranged between 18.0 °C within Kericho and 19.6 °C in Nakuru county

Maize is at tasseling stage in Kericho and beans at maturity stage. Both crops are in a fair state which corresponds to

normal growth and normal yield is expected for both crops.

At Kitale most farmers have completed harvesting maize and normal yield was obtained.

Over the pastoral areas in the south rift valley, the prevailing rainy conditions have greatly improved the pasture/forage status in the area and an improvement of the water resources in these areas. All communities living in these areas are therefore advised to vaccinate and deworm their livestock so that their animals are protected from parasitic infestation and diseases like rift valley fever, foot and mouth disease e.t.c.

## **2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION.**

Central region was leading in the Country and received more rainfall than the previous dekad. Several stations from the region received above normal rainfall and Thika meteorological station was leading with seven rainy days followed by Dagoretti, Kabete and Ngong with three and four days with moderate rainfall (> 5.0mm/day).

Cloud cover in the region was mainly scattered during morning hours and increased to broken state in the afternoon. Mean air temperature in the region ranged between 14.3 °C at Nyahururu and 20.7 °C at Thika Kiambu County.

Total pan evaporation in the region was 31.7 mm in Thika and 46.2 mm at Ngong area.

Maize in Nyahururu is at flowering stage but the crop state is poor because the phase coincided with a dry spell between 5<sup>th</sup> to 14<sup>th</sup> November 2022. Below normal normal yield is expected. In Nyeri, and Thika, Farmers completed planting and both crops are at emergence stage.

## 2.4 EASTERN REGION.

The entire Eastern region reported more rainfall than in the previous dekad. Embu station reported the highest amount of rainfall and had six days of moderate rainfall (> 5.0 mm/day) during the dekad. Meru and Mwea stations followed closely having reported five days with moderate rainfall each during the same period. Makindu and Kitui stations received three rainy days each during the dekad.

Cloud cover in the region was mostly scattered during morning hours and increasing to broken in the afternoon hours.

Mean air temperature in Meru and Embu counties ranged between 19.4°C and 19.7 °C. Over Kitui, Makueni and Marsabit counties, Mean air temperature ranged between 21.2 °C and 23.5 °C.

Total pan evaporation at Katumani was 63.9 mm, 38.2 mm at Embu and 40 mm at Marsabit and Moyale stations.

Farmers within the central parts of Eastern region (Meru and Embu) planted during the onset of the short rain season and currently both maize and beans crops are at emergence stage. Over the south eastern areas, some are still waiting for sufficient rains to start planting.

Mangoes (variety apple) were at 100% fruit setting stage. The crop condition was fair which corresponds to normal growth. Weeds are seen very seldom within the farm and insufficient rains seems to be adversely affecting the mangoes, which are at a sensitive phase.

Oranges (Washington Navel) were at 100% fruit setting and the crop condition was fair corresponding to

normal growth. Infestation by aphids and insufficient rainfall are affecting the phase. Weeds are seen very seldom within the farm

## 2.5 NORTH EASTERN REGION

The region received more rainfall than in the previous dekad. Garissa station was leading in the region after receiving very heavy rainfall on 19/11/2022. Only Garissa and Wajir stations reported rainy day (> 5.0 mm/day) during the entire ten day period.

Scattered to broken cloud cover was predominant in the region during both morning and afternoon hours. Mean air temperature in the region ranged between 29.2 °C and 29.9 °C and total pan evaporation 55.5 mm at Mandera station.

Pasture and forage regeneration is expected to continue improving in the region if the current rains continue.

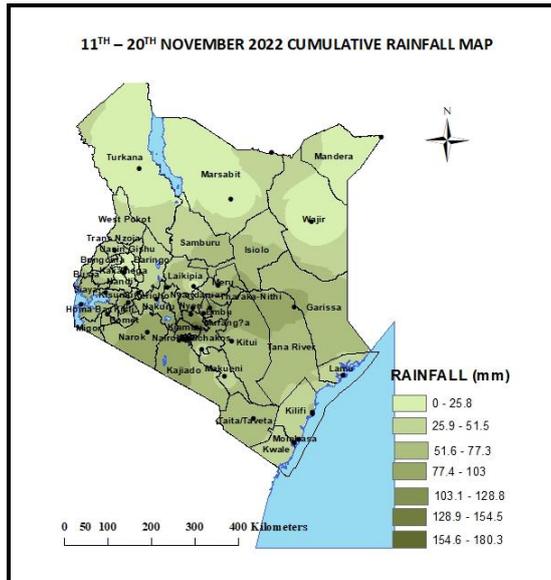
## 2.6 COASTAL REGION.

Several stations reported moderate rainfall as the rest reported light or dry conditions.

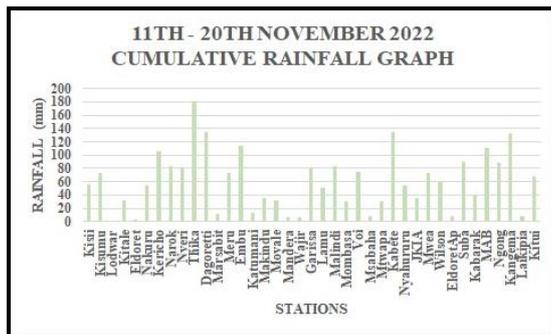
Scattered to broken cloud cover during both morning and afternoon hours was the most predominant situation during the past dekad. Mean air temperatures slightly increased over some stations but within Malindi and Lamu mean air temperature slightly dropped.

Malindi meteorological station reported total pan evaporation of 60.1 mm during the dekad.

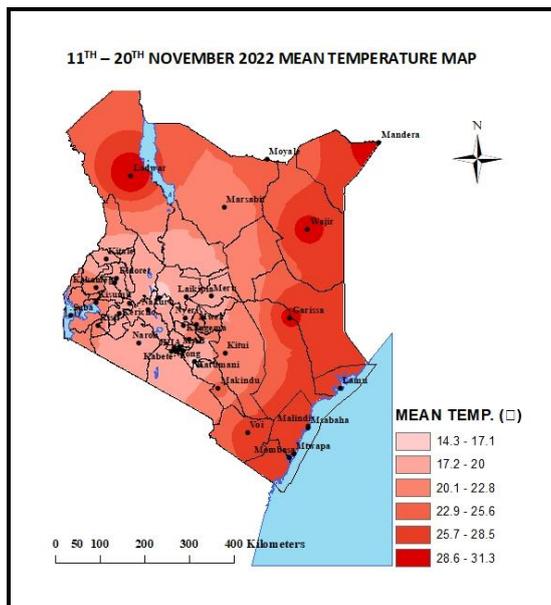
Some farmers in the region are yet to start planting because they haven't received sufficient rains.



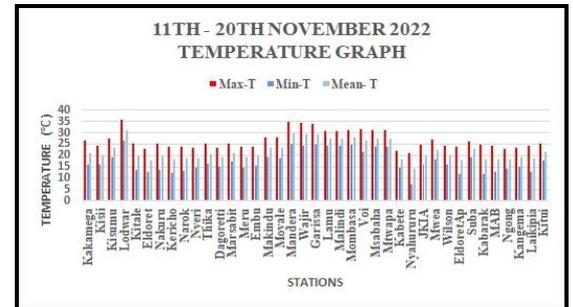
**Figure 3.1: Actual rainfall totals for dekad 32, 2022**



**Figure 3.2: Dekadal rainfall totals in (mm)**



**Figure 3.3: Mean temperature distribution for dekad 32, 2022**



**Figure 3.4 Dekadal temperatures in (°C).**

#### 4.0 EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21<sup>ST</sup> – 30<sup>TH</sup> NOVEMBER 2022.

During the next 10 days, Counties in western Kenya, Nyanza and Central Rift Valley are expected to experience moderate to heavy rainfall during the coming dekad.

The expected rain over these regions is likely to support maize which has already started forming grains in Kisii and Kericho to attain the next phase.

Central Highlands, Nairobi area and the surrounding are likely to experience moderate to heavy rainfall during the the next dekad (21<sup>st</sup> – 30<sup>th</sup> Nov. 2022).

Farmers within the region (Nyeri, Thika and Kabete) whose crops have attained third leaf stage could start weeding and top dress the crops. In Nyahururu the forecasted rain is expected to support maize attain wax ripeness stage.

Northern part of Eastern and the North Eastern regions are likely to experience moderate rainfall during the next dekad. The expected rains will support some food crops in the region and improve pasture and forage regeneration in the region. The current status of water resources in the region is also expected to

continue improving as most earth/water pans will be recharged by the rains.

South Eastern lowlands and the coastal regions are expected to receive light to moderate rainfall (greater than 5.0 mm) during the next dekad. The expected rains will support both maize and beans which are both at emergence stage.

The North western region is expected to receive light to moderate rainfall during the next dekad. The expected rains will support some food crops within the region and supply the necessary soil moisture for pasture and forage regeneration in the region. The current status of water resources in the region is also expected to continue improving as most earth/water pans will be recharged by the rains. Desilting of all earth/water pans in the area is highly recommended to maximize on the amount of water that is going to be harvested during the season.

During the coming dekad 21<sup>st</sup> – 30<sup>th</sup> November 2022, some on farm management decisions like weeding and top dressing of crops may be necessary in order to improve productivity especially in central eastern region.

---

For clarification, feedback or further guidance, please Contact:

**The Director,  
Kenya Meteorological Department,**