

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

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# WEEKLY BIOMETEOROLOGICAL BULLETIN (7<sup>TH</sup> NOVEMBER –13<sup>TH</sup> NOVEMBER, 2023)

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#### 1.0 PREAMBLE

Biometeorology is an interdisciplinary science of interactions between atmospheric processes and living organisms - plants, animals and human-beings. The Biometeorological Services Division collects, analyzes and interprets Meteorological and Health data in liaison with partners in the Health Sector for advisory development.

The weather information provided is aimed at guiding residents to identify and recognize the likelihood of occurrence of weather related health diseases according to the issued advisories and take necessary action.

# Summary

Heavy rainfall can cause flooding and water contamination, leading to the water-borne diseases such as cholera and typhoid fever. Mosquitoes and other insects that carry diseases such as dengue fever, malaria and Zika virus thrive in warm and humid conditions, which can be created by heavy rainfall. Rain can lead to increase in respiratory illnesses and pneumonia due to dampness and mold growth.

# **REVIEW FOR LAST WEEK (30<sup>TH</sup> OCTOBER – 5<sup>TH</sup> NOVEMBER, 2023)**

#### 1.1 High Rainfall

This section lists stations recorded more than 50mm total rainfall in the last 7 days. This is shown in Table 1 below.

Table 1:

Station	Total weekly Rainfall
Meru Met	222.7mm
Kangema Met	196.7mm
Kitui Met	195.3mm
Msabaha Met	193.4mm
Mtwapa Met	187.3mm
Wajir Met	179.1mm
Malindi Met	167.7mm
Nyeri Met	164.2mm
Mombasa Met	160.7mm

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Embu Met	156.5mm
Mandera Met	137.5mm
Kabete Met	131.1mm
Lamu Met	124.0mm
Wajir Met	119.4mm
Kericho Met	112.1mm
Suba Met	105.7mm
Machakos Met	102.7mm
MoiAirbase Met	102.0mm
Wilson Airport	95.8mm
Thika Met	93.7mm
Kisumu Met	91.6mm
Eldoret Airport	88.4mm
Moyale Met	85.8mm
Nakuru Met	73.2mm
Ngong Met	64.6mm
JKIA	57.6mm
Nyahururu Met	51.7mm
2 High Temperatures	

#### **1.2 High Temperatures**

This section lists stations that recorded average temperatures exceeding  $35^{\circ}$ C in the last 7 days. All stations recorded average temperatures **not** exceeding  $35^{\circ}$ C

#### **1.3 Low Temperatures**

This section lists stations that recorded average temperatures below 10°C in the last 7 days. This is shown in Table 2 below.

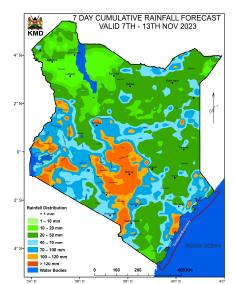
#### Table 2:

Station	Average weekly minimum temperature
Nyahururu Met	9.4°C

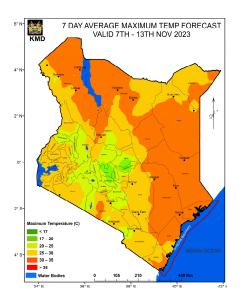
# 1.4 High Winds

This section list stations that recorded winds with speeds of more than 25 knots (12.9 metres per sec) in the last 7 days. This was recorded in Marsabit met station.

# 2.0 FORECAST FOR 7<sup>TH</sup> NOVEMBER- 13<sup>TH</sup> NOVEMBER, 2023 a) Rainfall



Rainfall exceeding 50mm is expected over parts of Meru, Tharaka Nithi, Makueni, Muranga, Kericho, Nyamira, Kisii, Trans Nzoia, Kilifi, Migori, Vihiga, Kisumu, Kakamega and Busia counties during the forecast period (Tuesday 7<sup>th</sup> November, 2023 to Monday 13<sup>th</sup> November, 2023).



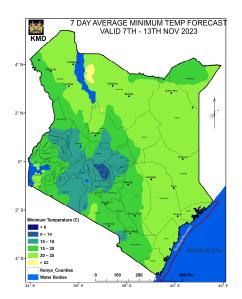
# b) High Temperature

Maximum Temperatures not exceeding 35°C is expected over parts of the Country during the forecast period (Tuesday 7<sup>th</sup> November 2023 to Monday 13<sup>th</sup> November, 2023).

# c) Low Temperature

Minimum temperature of less than 10°C is expected over parts of Nyandarua (Nyahururu) and Nakuru Counties during the forecast period (Tuesday 7<sup>th</sup> November, 2023 to Monday 13<sup>th</sup> November, 2023).

# c) Winds



Winds of more than 25 knots (12.9m/s) are expected over parts of Eldoret and Marsabit Counties, during the forecast period (Tuesday 7<sup>th</sup> November, 2023 to Monday 13<sup>th</sup> November, 2023). Less risk of dust related diseases since we are in the rainy season in most parts of the Country.

#### 3.0 Advisories

i) Areas expected to receive more than 50 mm of weekly total rainfall have a high likelihood of occurrence of waterborne diseases (e.g. diarrhea) and Vector borne diseases (e.g. Malaria), especially in areas with poor drainage. Residents are advised to be on the lookout for such diseases and take necessary action.

**ii) Residents living in areas expected to experience temperatures of more than** 35°C have a high risk of being infected with skin diseases e.g. skin rash.

iii) Areas expected to experience less than 10°C have a high likelihood of occurrence of cold weather diseases. e.g. Asthma, pneumonia, common cold and flu. Residents are advised to be on the lookout for such diseases and take necessary action.

iv) Winds of more than 25 knots (12.9m/s). These winds are strong enough and able to blow dust especially over bare grounds. The blown dust may increase the risk of respiratory infections e.g. Cold and flu diseases. These diseases are quite common during the dry weather conditions. Residents are advised to be on the lookout for such diseases and take necessary protective measures.

# N. B: This forecast is to be used together with the daily (24-hour) forecast issued by this Department.

# Dr Gikungu DIRECTOR OF KENYA METEOROLOGICAL DEPARTMENT