



MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND FORESTRY

STATE DEPARTMENT FOR ENVIRONMENT AND CLIMATE CHANGE

KENYA METEOROLOGICAL DEPARTMENT

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THE OUTLOOK FOR SEPTEMBER 2025 AND THE REVIEW OF AUGUST 2025

1 HIGHLIGHTS

1.1 The Outlook for September 2025

Several parts of the country are likely to experience generally sunny and dry weather conditions during the month of September. However, the Lake Victoria Basin, the Highlands West of the Rift Valley, the Central and South Rift Valley, some parts of the Northwest close to the border with Uganda and South Sudan and a few areas over the Highlands East of the Rift Valley are expected to experience rainfall (with some breaks) that is likely to be near to above the September Long Term Mean (LTM). Counties in the Highlands East of the Rift Valley and Nairobi are likely to experience mainly sunny and dry weather conditions though a few areas may experience occasional showers in the afternoon during the month as well as occasional cool and cloudy conditions with light rains in the morning, especially at the beginning of the month. Sunny and dry conditions are likely to prevail over the Northeastern, Southeastern and Coastal strip. However, a few areas over the coast may experience occasional light morning showers.

1.2 The Review for August 2025

Mainly dry weather conditions prevailed in the Northeastern and Southeastern lowlands while significant rainfall was received over the Western and Central Highlands including Nairobi County, the Lake Victoria region, Central and South Rift Valley, the Northwestern and the Coastal regions. The rainfall was above average over the Northwestern, Nairobi, South Rift Valley, most of the Central highlands and a few areas over the Western highlands and Lake Victoria region. Near to below average rainfall was recorded over the Coastal region, most parts of the Western highlands and a few areas over Central Kenya.

Maximum temperatures were cooler than average over several parts except over most stations in the Coast and Southeastern lowlands as well as in Mandera, Kakamega and Thika where temperatures were warmer than average. Minimum temperatures were warmer than average over the whole country while mean temperatures were also warmer than average except in Lodwar, Marsabit, Kisii and Kisumu where the temperatures were cooler than average.

2. The Forecast for September 2025

The rainfall forecast for September 2025 is based on the observed patterns of the Global Sea Surface Temperatures (SSTs) especially over the Indian and Pacific Oceans. The rainfall climatology for September is shown in **Figure 1a**.

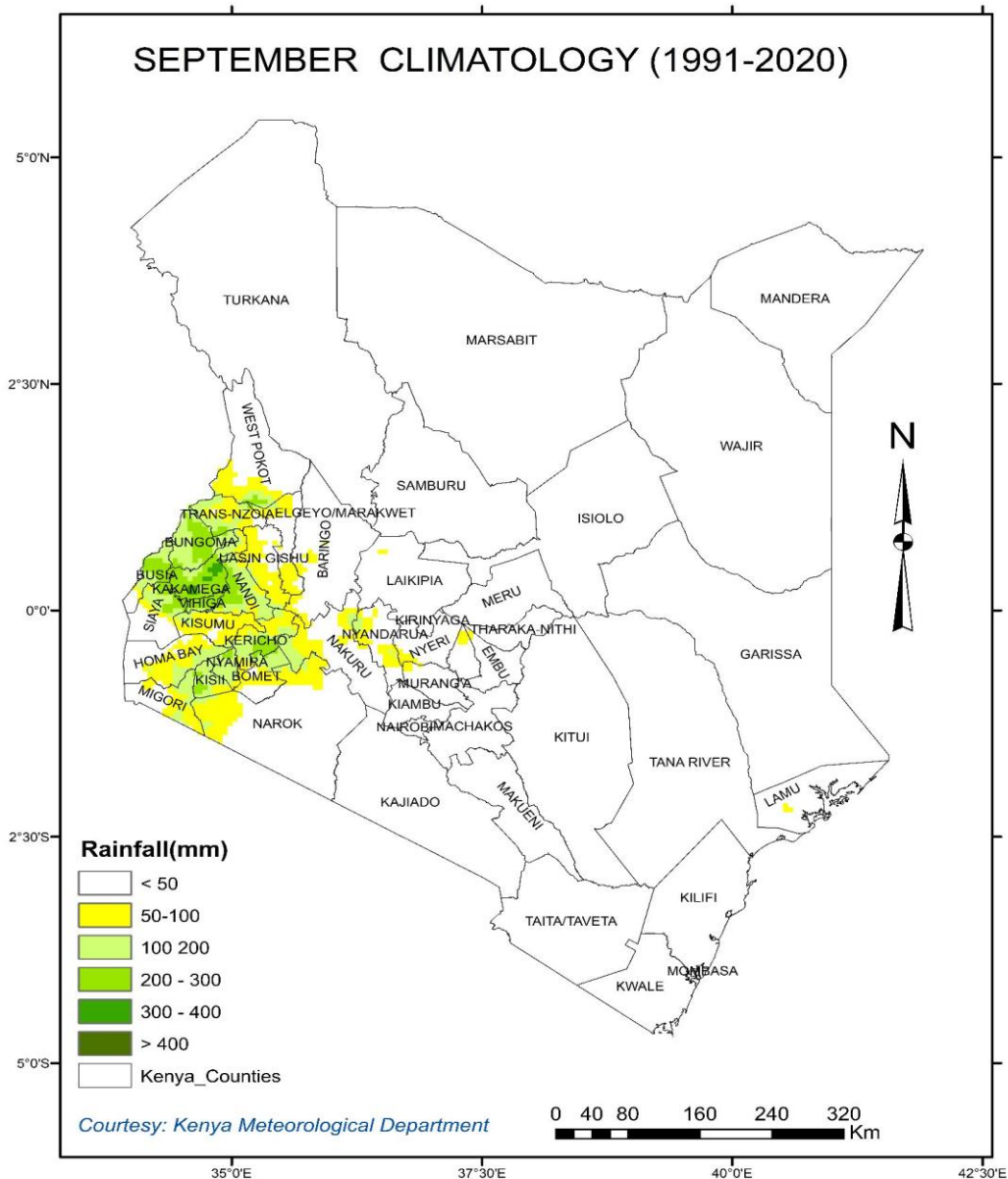


Figure 1a: September Rainfall Climatology

2.1. Rainfall Forecast for September 2025

Several parts of the country are likely to experience generally sunny and dry conditions during the month of September. However, the Lake Victoria Basin, the Highlands West of the Rift Valley, the Central and South Rift Valley, and a few areas over the Highlands East of the Rift Valley are expected to experience rainfall but with some breaks; the total amounts are likely to be near to above the September Long-Term Mean (LTM). Sunny and dry conditions are

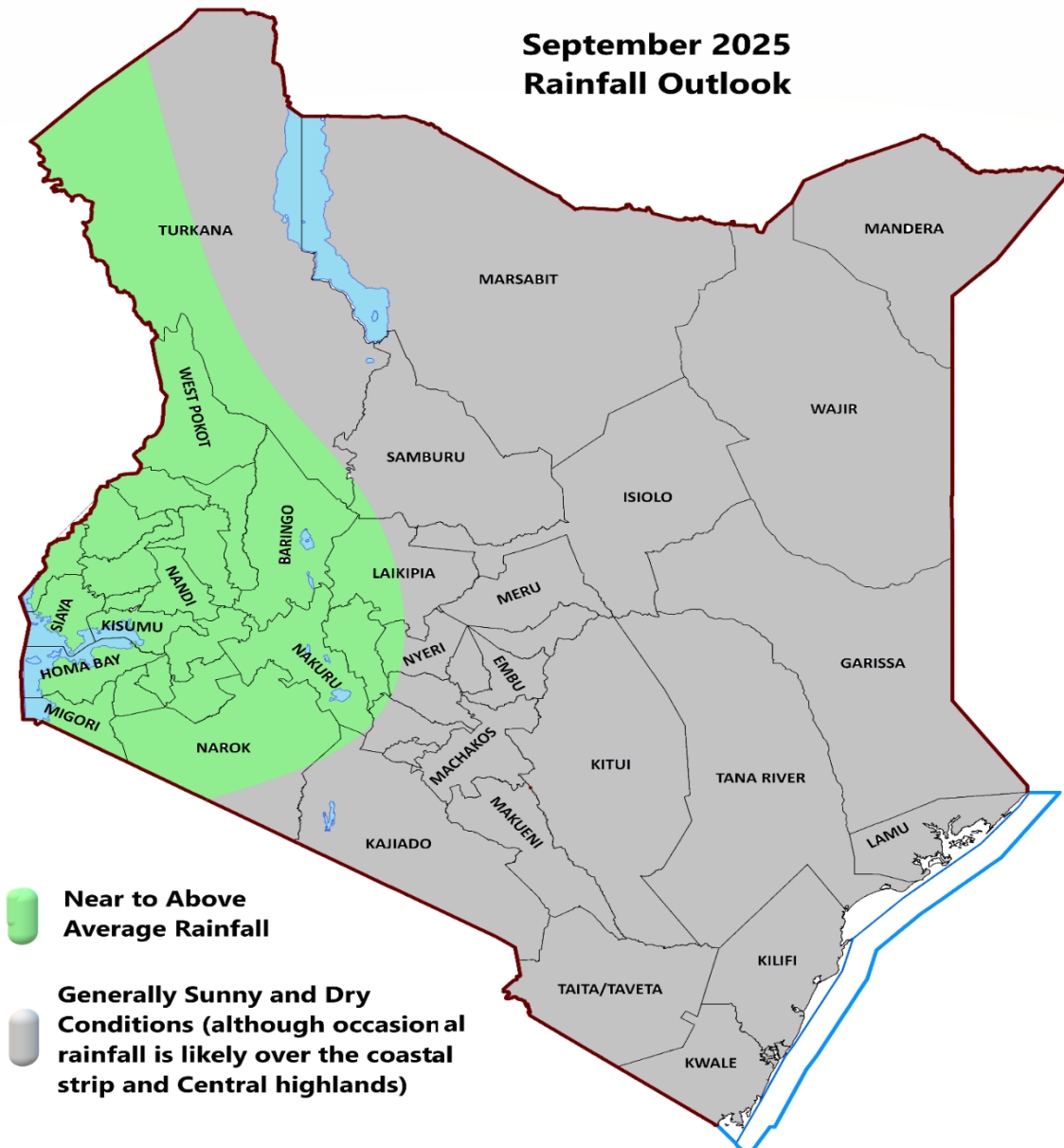


Figure 1b: September 2025 Rainfall Outlook

expected over the Northwest, though a few areas along the South Sudan and Uganda border may experience occasional rainfall that is also likely to be near to above the September LTM. Counties in the Highlands East of the Rift Valley and Nairobi are likely to experience mainly dry weather conditions though a few areas may experience occasional showers in the afternoon during the month as well as occasional cool and cloudy conditions with light rains in the morning especially at the beginning of the month. Sunny and dry conditions are likely to prevail over the Northeastern, Southeastern, and Coastal regions. However, a few areas

along the coast may experience occasional rainfall in the morning. **Figure 1b** illustrates the September rainfall outlook.

2.2 Specific Outlook for Particular Areas

2.2.1 The Highlands West of the Rift Valley (Trans Nzoia, Nandi, Kericho, Bomet, Uasin Gishu, Elgeyo-Marakwet, West Pokot, Kakamega, Vihiga, Bungoma, Kisii and Nyamira counties); the **Lake Victoria Basin** (Kisumu, Homa Bay, Migori, Siaya, Busia counties); the **Central Rift Valley** (Nakuru, Baringo counties and Western part of Laikipia); the **Southern Rift Valley** (Narok county) and **parts of the Highlands East of the Rift Valley** (parts of Nyandarua county) are likely to experience rainfall with some breaks during the month. The expected total rainfall over these areas is likely to be near to above the long-term average for September.

2.2.2 Northwestern Kenya (Turkana and Samburu counties) is likely to experience mainly sunny and dry weather conditions throughout the month. However, a few areas, especially those near the border with Uganda and South Sudan, may receive occasional rainfall. The total rainfall in these areas is expected to be near to above the long-term average for September.

2.2.3 The Highlands East of the Rift Valley (Nyeri, Murang'a, Kiambu, Kirinyaga, Embu, Meru, Tharaka-Nithi counties, Eastern Laikipia and parts of Nyandarua) as well as Nairobi County, are likely to experience mainly sunny and dry weather conditions for most of the month. However, occasional afternoon and night showers may occur in some areas. In addition, cool and cloudy conditions with light morning rains are likely, particularly at the beginning of the month. The total rainfall for September is expected to be near to above the long-term average.

2.2.4 The Coast (Lamu, Kilifi, Mombasa and Kwale counties and Coastal Tana River) are likely to experience generally dry weather conditions, though a few areas may experience occasional light morning showers. The expected total rainfall amount is likely to be below the long-term average for September.

2.2.5 The Southeastern Lowlands (Machakos, Makueni, Kitui, Kajiado, Taita Taveta and most of Tana River counties) are likely to experience generally sunny and dry weather conditions throughout the month.

2.2.6 Northeastern Kenya (Marsabit, Isiolo, Wajir, Mandera, and Garissa counties) are likely to experience generally sunny and dry weather conditions throughout the month.

2.3 POTENTIAL IMPACTS

The following are the likely impacts during the month of September:

2.3.1 Agriculture and Food Security

The near to above-average rainfall expected over the Highlands West of the Rift Valley, the Lake Basin, and parts of the Rift Valley is likely to be favorable for agricultural activities. This rainfall will support crop growth, improve pasture conditions, and enhance overall agricultural production.

2.3.2 Water Resources Management and Energy

The near to above average rainfall expected over the western sector of the country is likely to maintain water levels in the Sondu and Turkwell hydro power generating dams, thus ensuring stable power generation. Water availability for both domestic and livestock use is also expected to be stable over these regions. However, water availability may be limited over the northeastern and parts of the southeastern lowlands. Residents in these areas are advised to use the available water sparingly.

2.3.3 Health

There may be an increase in respiratory diseases over the northeastern parts of the country during the month as a result of the strong winds and dry weather conditions that may lead to dust storms.

3.0 OUTLOOK FOR SEPTEMBER TO NOVEMBER

The outlook for the next three months indicates that the Highlands West of the Rift Valley, the Lake Victoria Basin, Central and South Rift Valley are likely to experience rainfall but with some breaks. This rainfall is expected to be near to above the September to November LTM. The Northwestern region is expected to remain predominantly dry in September and October with rainfall anticipated in November. However, a few areas especially those bordering South Sudan and Northern Uganda may experience occasional rainfall throughout the season. This rainfall is expected to be near to above the September to November LTM.

The Highlands East of the Rift Valley, including Nairobi County, is likely to remain generally dry in September and experience rainfall from the second half of October. However, a few areas may experience occasional afternoon/night showers in September as well as occasional cool and cloudy conditions in the morning especially at the beginning of the month. The total rainfall amounts are expected to be near to below the September to November LTM

The Southeastern lowlands are expected to remain generally sunny and dry in September and October and receive rainfall from November. The rainfall is expected to be below the September to November LTM except a few areas in Machakos and Kajiado that may receive near to below the September to November LTM

The Northeastern region is expected to remain generally sunny and dry in September and October and receive occasional rainfall in November that is expected to be below the September to November LTM.

The Coastal region is expected to remain generally sunny and dry with occasional light morning showers in September and October which is expected to spread to several places in November. This rainfall is expected to be below the September to November LTM.

Temperatures are expected to be warmer than average over most parts of the country except over a few areas in the Northwest and Highlands West of the Rift Valley where temperatures are expected to be near the September to November LTM.

4.0 REVIEW OF THE WEATHER DURING AUGUST 2025

4.1 Rainfall Review in August 2025

Dry weather conditions prevailed over several parts of the country except over the Highlands West of the Rift Valley, the Central Rift Valley, the Northwest and a few areas over the Coast, the Lake Victoria Basin, South Rift Valley and the Highlands East of the Rift Valley, including Nairobi county where rainfall was experienced. The rainfall amounts recorded over Northwestern, Central Kenya including Nairobi county, Lake Victoria region and South Rift Valley was above average except in Nyahururu where near average rainfall was recorded. The Highlands West of the Rift Valley, Central Rift Valley and the Coastal region recorded near to below average rainfall. The rest of the country remained generally dry although isolated areas over Northeast and Southeastern lowlands received a day or two of light rainfall. A few areas over the Lake Victoria Basin, Highlands West of the Rift Valley and the Central Rift Valley experienced occasional heavy rainfall above 50 mm in twenty-four hours.

Occasional cool and cloudy conditions with light rains were experienced over the Central highlands including Nairobi, some parts of Southeastern lowlands and the Highlands West of the Rift Valley.

An analysis of rainfall up to 28th August shows that the highest monthly rainfall total (242.3 mm) was received at Kapsabet prison rainfall station in Nandi county followed by Eldoret Airport Meteorological station with 186.5mm. Other stations that recorded significant amounts of rainfall include Mukakula farm rainfall station (185.1mm), Miwani Boys rainfall station (166.6mm), St. Catherine Girls rainfall station (165.2mm), Kibabii University rainfall station (156.6mm), Kericho Meteorological station (153.9mm), Butere rainfall station (148.9mm), Sipili agricultural rainfall station (148.0mm), Kisumu Meteorological station (144.2mm) and Kibisi Secondary rainfall station (141.7mm). The rest of the stations recorded less than 140 mm of rainfall with most of the stations over the Southeastern and Northeastern regions recording no rainfall at all throughout the month. See **Figures 2a** and **Figure 2b**.

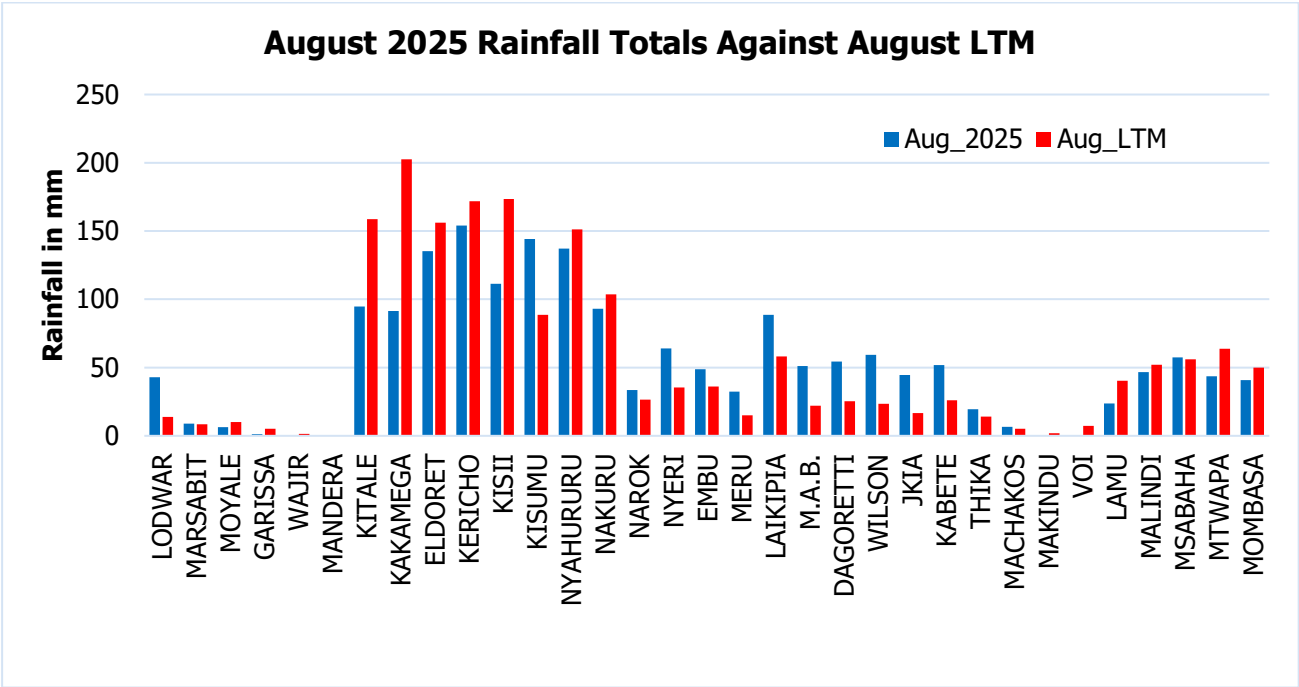


Figure 2a: August 2025 Rainfall Totals Against August LTM

August 2025 Rainfall Totals

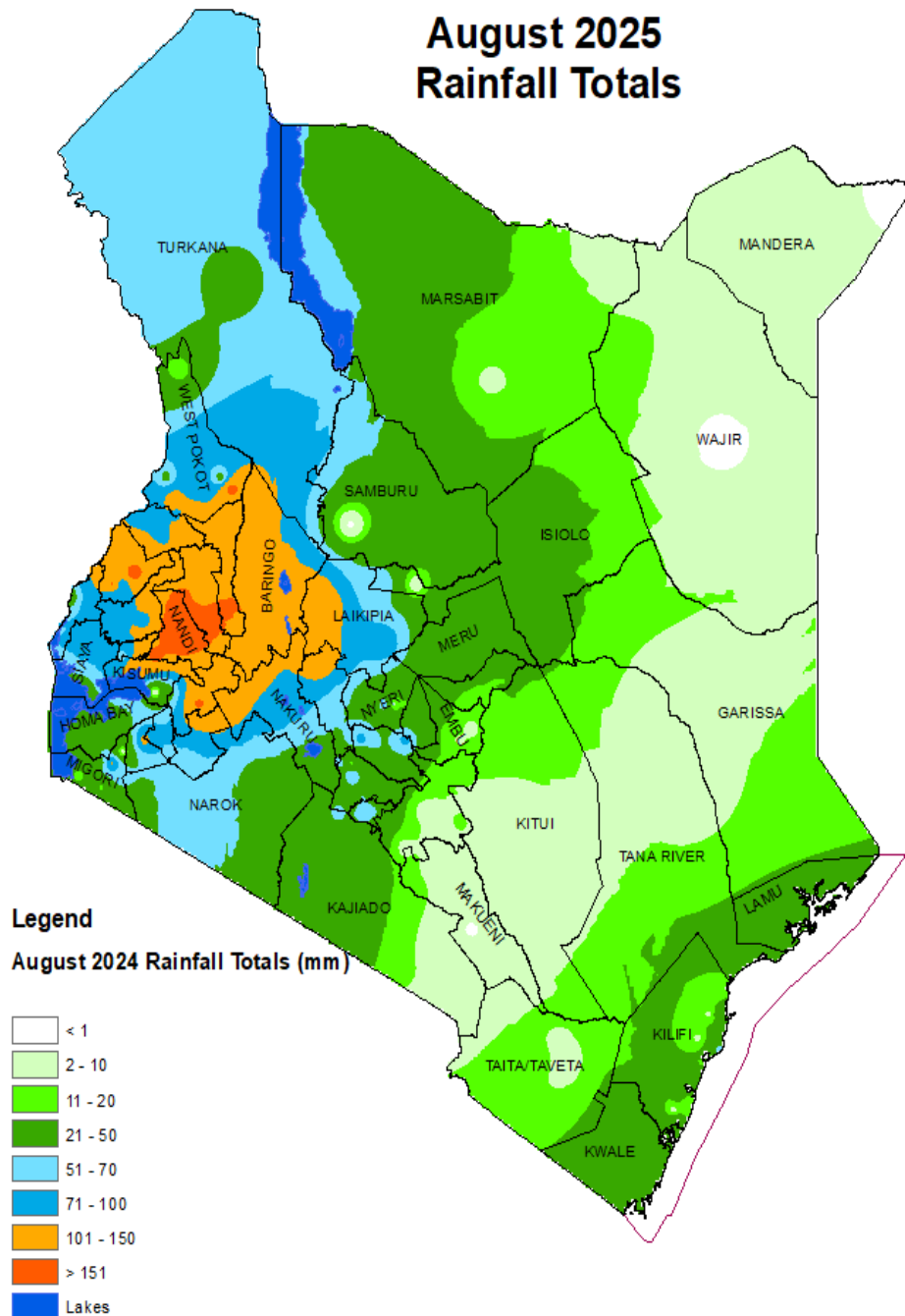


Figure 2b: August 2025 Rainfall Totals

The month was characterized by heavy rainfall (above 50mm in 24 hours) as shown in **Table 1**

4.2 Temperature Review in August 2025

The month of August marks the gradual end of the cold season. An analysis of temperature up to 28th August indicates that several parts of the country recorded maximum temperatures that were cooler than the August LTM. Mandera, Kakamega, Thika, Makindu, Voi, Lamu, Malindi, Mtwapa and Mombasa are the only stations that recorded warmer than average temperatures while Nyahururu and Msabaha recorded near average temperatures. Extremely cold day time temperatures were experienced over Central Kenya including Nairobi county and parts of the South Rift Valley and the Southeastern lowlands on 18th August. For instance, Kangema experienced 15.0⁰c, Dagoretti 15.2⁰c, Nyeri 15.5⁰c, Embu 15.8⁰c, Wilson 16.2⁰c, JKIA 16.4⁰c, Machakos 17.0⁰c, Narok 17.1⁰c and Thika 17.3⁰c. These low temperatures resulted from rainfall that was experienced the whole day as a result of a band of convective clouds that was moving across the Indian Ocean known as the Madden Julianne Oscillation (MJO) coupled with high pressures over the Southern hemisphere that were pumping in cold air from the South. Other days that were extremely cold are shown in **table 1**. The lowest monthly average daytime temperature (20.0⁰C) was recorded at Kangema station

Minimum temperatures were warmer than average across the entire country. However, a few stations over the Highlands West and East of the Rift Valley, Central and South Rift Valley and Southeastern lowlands occasionally recorded night time (minimum) temperatures below 10⁰C. For instance, Narok recorded 8.1⁰C on 1st, 8.4⁰C on 4th and 29th, 8.3⁰C on 14th and 8.5⁰C on 15th. Laikipia Air Base recorded 8.4⁰C on the 28th, Eldoret and Kericho recorded 8.9⁰C and 9.3⁰C respectively on the 1st. Machakos recorded 9.3⁰C and 9.4⁰C on 6th August and 13th August respectively while Nyahururu recorded less than 10⁰C for most of the month . The lowest monthly night time temperature (8.3⁰C) was recorded at Nyahururu station.

Mean temperatures were warmer than average over most stations, except in Lodwar, Marsabit, Kisii and Kisumu where the temperature was cooler than the August LTM.

Note: Anomalies refer to deviations from the mean or average temperatures. Positive anomalies imply that temperatures were warmer than average while negative anomalies imply that temperatures were cooler than average. See **Figures 3a, 3b and 3c**.

Table 1: Days with cold Temperatures in August

S/No	Station	Temperature in ⁰ c	Date
1	Kangema	16.2	9-8-2025
		16.4	12-8-2025
		16.8	19-8-2025
		16.8	22-8-2025

S/No	Station	Temperature in °c	Date
2	Nyeri	15.0	19-8-2025
3	Embu	16.8	19-8-2025
4	Meru	15.9	19-8-2025
		17.0	20-8-2025
		16.6	21-8-2025
5	Dagoretti	18.0	19-8-2025

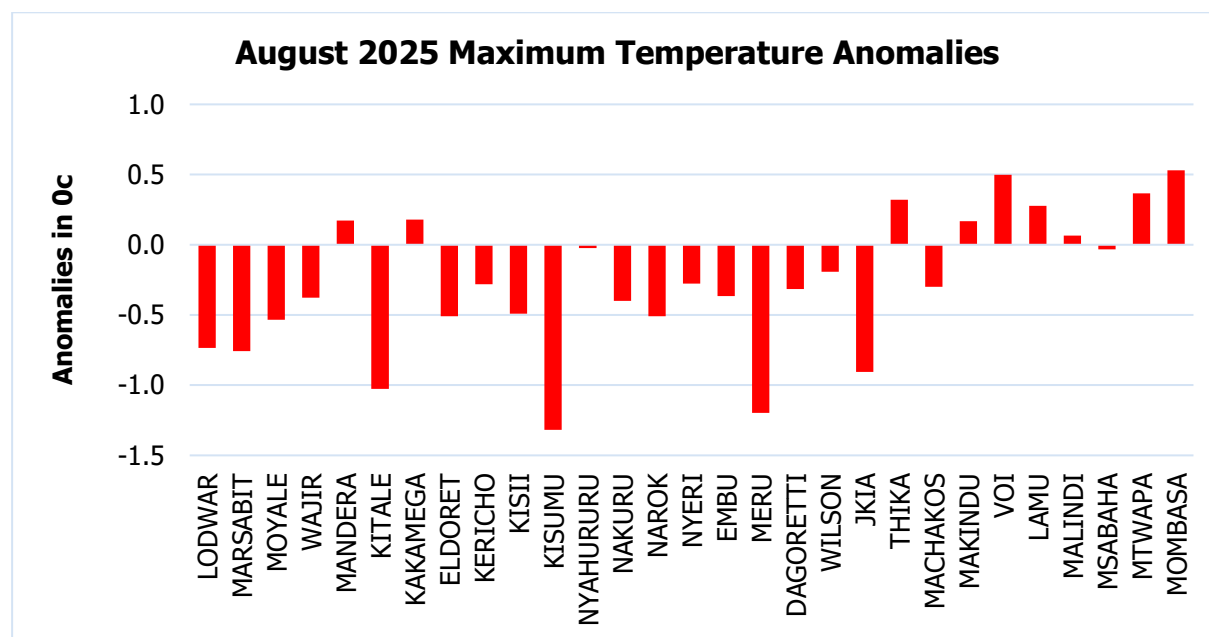


Figure 3a: August 2025 Maximum Temperatures Anomalies

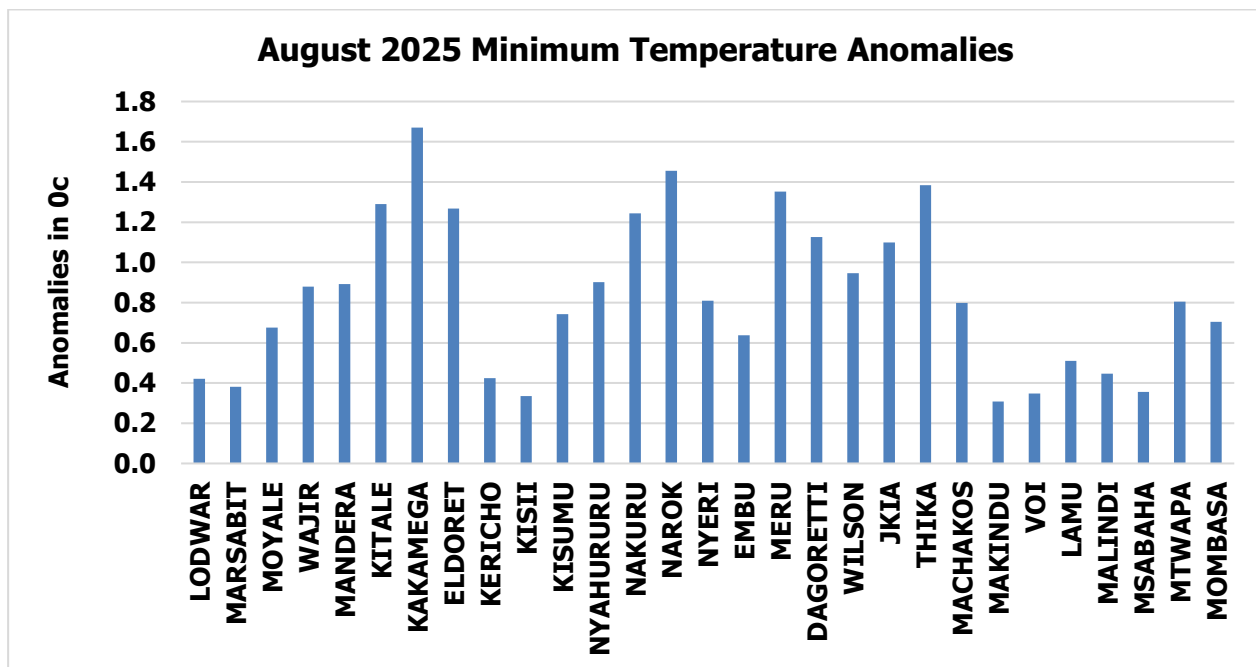


Figure 3b: August 2025 Minimum Temperatures Anomalies

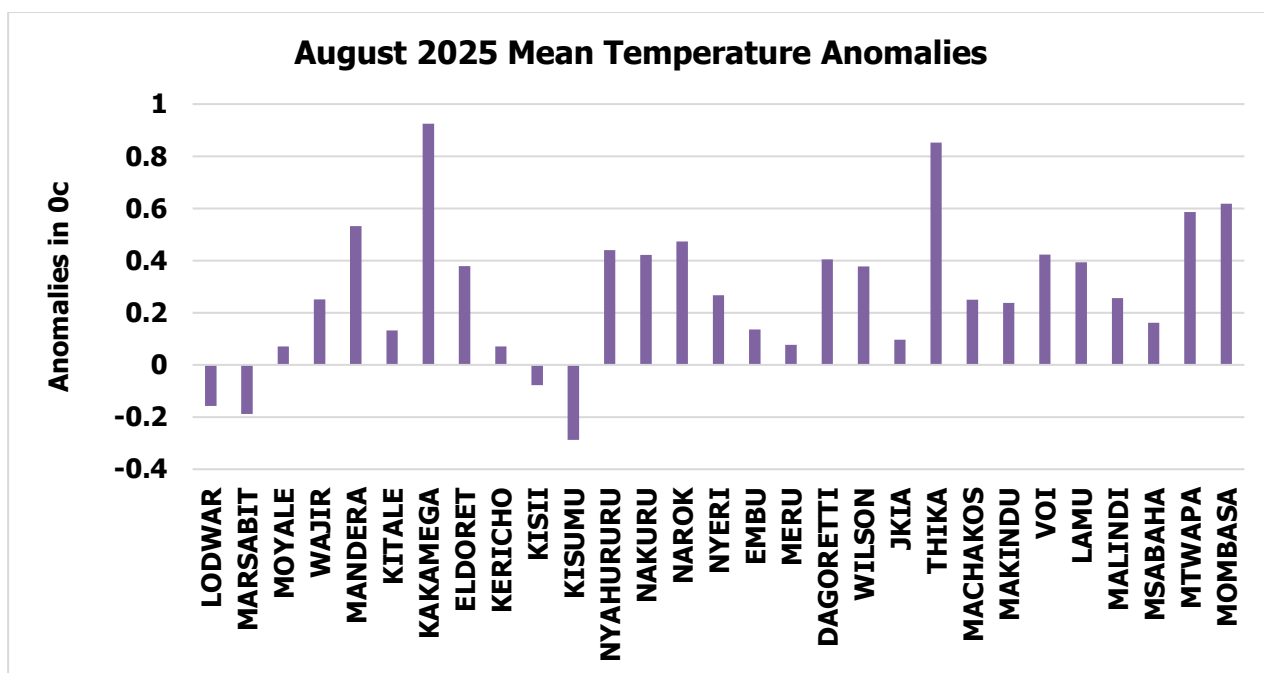


Figure 3c: August 2025 Mean Temperatures Anomalies

4.3 Experienced Impacts

4.3.1 Agriculture and Food Security

200 shoats were swept by flash floods in Resom village, Samburu east after heavy rains pounded the area on 16th August.

Crops were destroyed in Kisumu West following heavy rainfall that was accompanied by large hailstones were experienced in the area on 26th August

4.3.2 Disaster

Several houses were flooded in Nasorot, Tiaty east Baringo County after heavy rainfall was experienced in the area on 18th August.

Several houses, business premises and property were destroyed in Kisumu West following heavy rainfall that was accompanied by large hailstones on 26th August.

4.3.3 Transport and Public Safety

Transport was temporarily disrupted along the Marigat Loruk road in Baringo on 21st August following heavy rainfall experienced during the month that led to rising water levels in Lake Baringo.

Transport was temporarily disrupted in Kisumu West after trees were uprooted by heavy rainfall that was accompanied by strong winds blocking access roads to the area on 26th August.

4.3.4 Environment

The landslides/mudslides experienced in Baringo County destroyed trees and other vegetation, leading to land degradation.

NB: This outlook should be used together with the 24-hour, 5-day, 7-day, special forecasts and regular updates issued by this Department as well as Weekly County forecasts developed and availed by County Meteorological Offices.



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