

STATE DEPARTMENT FOR ENVIRONMENT AND CLIMATE CHANGE

KENYA METEOROLOGICAL DEPARTMENT

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## CLIMATE OUTLOOK FOR JUNE 2025 CLIMATE REVIEW OF MAY 2025

## 1. HIGHLIGHTS

# 1.1 The Forecast for June 2025

The June 2025 outlook predicts generally dry and sunny conditions for several parts of the country. The Highlands west of the Rift Valley, the Lake Victoria Basin, the Central Rift Valley and parts of the Southern Rift Valley, parts of the Highlands East of the Rift Valley (Nyandarua) and parts of Northwestern Kenya are likely to experience above-normal cumulative rainfall. This rainfall may occasionally extend eastwards into other parts of the Highlands east of the Rift Valley and Nairobi County. The Coastal zone is likely to receive near normal rainfall totals. Occasional cool and cloudy conditions with light rains are expected in the Central Highlands, Nairobi area, parts of western Kenya, the Central Rift Valley, and the Southeastern Lowlands as the cool season gradually sets in.

Temperatures are anticipated to be higher than average across several parts of the country. However, despite the warmer than average temperatures expected, the Central highlands, Nairobi area and parts of Kajiado County may experience low daytime temperatures below 18°C.

## 1.2 Climate Review for May 2025

May 2025 marked the end of the Long Rains across most of Kenya, except in the Coastal region, parts of Western Kenya, and a few areas in the Highland East of the Rift Valley. Near to above average rainfall was recorded over several parts of the country except the central highlands and a few areas over Northeast and Southeastern lowlands where below average rainfall was recorded. The month was characterized by a few days with heavy rainfall over western Kenya, Lake Victoria Basin, the Coastal region and a few areas over central Kenya and Isiolo County.

Temperatures were higher than average over most parts of the country except over a few areas over Northeast, Lake Victoria Basin, Western Kenya and South Rift Valley where temperatures were lower than average.

Strong southerly to south-easterly winds with speeds exceeding 25 knots (12.86 m/s) were experienced occasionally over the Coast and Kenya's territorial waters, the South-eastern lowlands, North-eastern and North-western Kenya during the month. The winds were much stronger (up to 30 knots) on 24<sup>th</sup> and 25<sup>th</sup> May.



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# 2. The Forecast for June 2025

The forecast indicates that several parts of the country will be generally dry and sunny during the month of June 2025. However, above-average rainfall is expected over the Highlands West of the Rift Valley, Lake Victoria Basin, the Central Rift Valley and parts of the Southern Rift Valley, parts of the Highlands East of the Rift Valley (Nyandarua and Western Laikipia) and parts of Northwestern Kenya. The Coastal strip is likely to experience near average rainfall as indicated in **Figure 1a**.

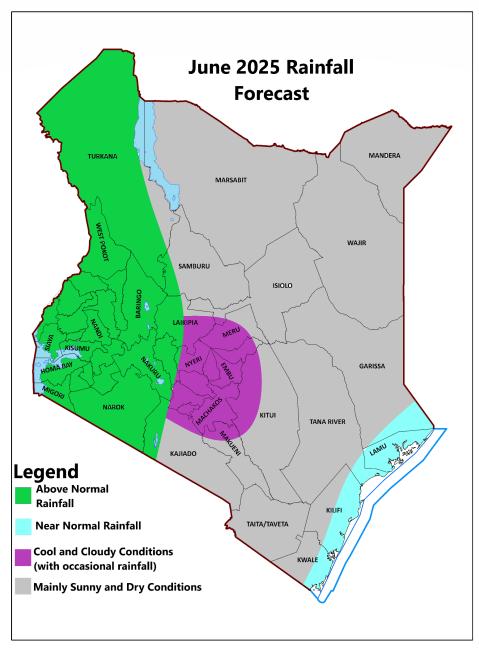


Figure 1a: June 2025 Rainfall Forecast



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Occasional cool and cloudy conditions with light rains will be observed in the Central Highlands, including the Nairobi area, and some parts of western Kenya, the Central Rift Valley, and the Southeastern Lowlands as the cold season gradually sets in. Additionally, occasional afternoon showers emanating from western Kenya may also be experienced over the Central Highlands, including Nairobi County.

Figure 1b illustrates the rainfall climatology of June.

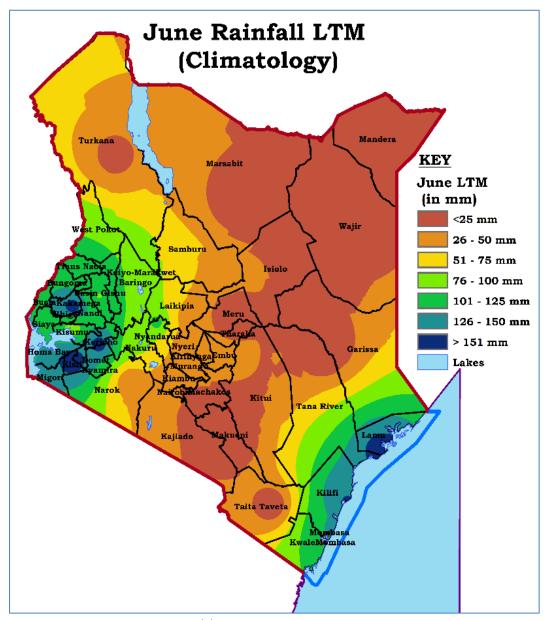


Figure 1b: The rainfall climatology of June.



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# 2.1 Specific Outlook for Individual Areas

2.1.1 Highlands West of the Rift Valley, the Lake Victoria Basin, Central Rift Valley and parts of the Southern Rift Valley (West Pokot, Trans Nzoia, Uasin Gishu, Elgeyo Marakwet, Bungoma, Kakamega, Vihiga, Nandi, Kisii, Nyamira, Kericho, Bomet, Busia, Siaya, Kisumu, Homabay, Migori, Nakuru and Baringo counties, the Western part of Laikipia County and parts of Narok county and parts of the Highland East of the Rift Valley (Nyandarua County):

Rainfall is expected during the month with occasional breaks. The total rainfall amount is expected to be above the long-term average amounts for June.

## 2.1.2 Northwestern Region (Turkana and Samburu counties):

Occasional rainfall is expected during the month, with the total likely to be above the long-term average amounts for June. In addition, strong southerly to south-easterly winds, with speeds exceeding 25 knots (12.86 m/s), are expected to occur occasionally.

- 2.1.3 The Highlands East of the Rift Valley (including Nairobi area): (Nyeri, Kirinyaga, Murang'a, Kiambu, Meru, Embu, Tharaka Nithi, Nairobi counties and parts of Eastern Laikipia) are expected to experience occasional cool and cloudy (overcast) conditions, with intermittent light morning rains or drizzles. The cumulative rainfall in this region is likely to exceed the long-term average for June. A few days are anticipated to be cold and chilly, with daytime (maximum) temperatures dropping below 18°C in various parts due to the overcast skies. Occasional afternoon and evening showers are also likely.
- **2.1.4** Northeastern Kenya (Mandera, Marsabit, Wajir, Garissa and Isiolo counties) are likely to remain generally sunny and dry. However, a few high ground areas in Marsabit county are likely to experience occasional morning cloudy and foggy conditions. In addition, strong southerly to southeasterly winds, with speeds exceeding 25 knots (12.86 m/s), are expected to occur intermittently.
- 2.1.5 South-eastern Lowlands (Kitui, Makueni, Machakos, Taita Taveta, Kajiado counties and most parts of Tana River County) are expected to be generally sunny and dry throughout the month. However, a few areas bordering the Central Highlands and Nairobi—specifically parts of Machakos, Kajiado, and Kitui counties—as well as the Chyulu and Taita hills in Makueni and Taita Taveta counties, are likely to experience occasional cool and cloudy conditions accompanied by light rains. In addition, strong southerly to south-easterly winds, with speeds exceeding 25 knots (12.86 m/s), are expected to occur intermittently.
- 2.1.6 The Coastal strip (Mombasa, Kilifi, Lamu, Kwale and the Coastal parts of Tana River County): Occasional rainfall is expected during the month, with the total likely to be near the long-



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term average amounts for June. In addition, strong southerly to south-easterly winds, with speeds exceeding 25 knots (12.86 m/s), are expected to occur intermittently.

## 3. POTENTIAL IMPACTS OF THE JUNE FORECAST

The following are the likely impacts during the month of June.

#### 3.1 Disaster Risk Management

There is a possibility of flooding in low-lying areas, flood plains, and along rivers, especially over the Lake Victoria Basin where above-average rainfall is expected. Relevant authorities are therefore advised to implement measures to mitigate possible negative impacts that may arise. The public is advised to refrain from driving or walking through flooded rivers or moving waters.

Cases of lightning strikes are likely over the Lake Victoria Basin and Highlands West of the Rift Valley. The public is advised to avoid seeking shelter near metallic structures or under trees to prevent loss of life.

Strong southerly to south-easterly winds with speeds exceeding 25 knots (12.86 m/s) are likely to be experienced occasionally over the Coast and Kenya's territorial waters, the South-eastern lowlands, North-eastern and North-western Kenya during the month of June. These winds may lead to rough sea conditions, posing risks to small vessels and marine activities, as well as increased dust levels and reduced visibility, particularly in arid and semi-arid areas. Additionally, the strong winds could cause damage to weak structures, power lines, and trees, and may disrupt outdoor activities and aviation operations. Residents and relevant stakeholders are advised to exercise caution and follow official weather updates.

#### 3.1.1 Agriculture and Food Security Sector

The expected rainfall is anticipated to be conducive for agricultural production, particularly in the high-potential counties in the Lake Victoria Basin Region, Highlands West of the Rift Valley, as well as Central and Southern Rift Valley.

## 3.1.2 Health Sector

Cases of respiratory diseases such as asthma attacks, pneumonia, flu, and the common cold are expected to increase over Nairobi County, the Highlands East of the Rift Valley, parts of the Central Rift Valley, and Highlands West of the Rift Valley as the cold season gradually sets in. The public in these areas are advised to keep warm and avoid using charcoal *jikos* in poorly ventilated houses, as these jikos produce carbon monoxide gas, which can be lethal if inhaled.

#### 3.1.3 Transport and Public Safety

Fog formation in areas expected to experience cold and cloudy conditions may pose significant risks to motorists due to reduced visibility. Drivers are advised to exercise caution, particularly along the Nairobi–Naivasha Highway, with heightened vigilance recommended on the Kikuyu–Kinungi stretch. Light rains and drizzles may render roads slippery, increasing the likelihood of traffic accidents. All road users are urged to take necessary precautions to enhance safety during such conditions.



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In addition, strong southerly to south-easterly winds, occasionally exceeding 25 knots (12.86 m/s), may pose hazards to both inland and marine transport. These winds could lead to rough sea conditions, particularly along the Coast and in Kenya's territorial waters, potentially affecting small vessels and marine activities. Operators of small boats and marine transport services are advised to stay updated with marine forecasts and exercise heightened caution.

Fog and strong winds may also intermittently disrupt flight operations at key airports, including Wilson and Jomo Kenyatta International Airports. All transport stakeholders are encouraged to monitor weather advisories and adjust operations accordingly to ensure public safety.

# 3.1.4 Water Resources Management and the Energy Sectors

The water catchment areas over the Highlands West of the Rift Valley are expected to experience rainfall during the month. Consequently, there is a possibility that the maximum water level in the hydroelectric power generation dams may be exceeded. Therefore, it is imperative to conduct careful reservoir management and continuously monitor water levels in these areas to avoid any negative impacts that may arise if the dams overflow.

#### 3.1.5 Environment and Forestry

The anticipated rainfall over the Highlands West of the Rift Valley, Lake Victoria Basin, Central Kenya, and parts of the Southern Rift Valley is expected to sustain favorable soil moisture conditions, thereby supporting tree growth and forest regeneration. These conditions present an ideal opportunity for stakeholders—including government agencies, community groups, and private entities—to actively engage in tree planting and broader environmental conservation initiatives.

In this context, Kenya has embarked on an ambitious national campaign to plant 15 billion trees by 2032. This initiative aims to increase the country's tree cover to 30% and restore approximately 5.1 million hectares of degraded land. It reflects Kenya's strong commitment to addressing climate change, enhancing biodiversity, and promoting long-term environmental sustainability. Stakeholders are encouraged to align their activities with this national agenda and capitalize on the favorable climatic conditions to accelerate progress toward these environmental goals.

#### 4. REVIEW OF THE WEATHER AND CLIMATE IN MAY 2025

## 4.1 Rainfall Review

The month of May marked the cessation of the Long Rains over most parts of the country, except the Coastal region, the Western Kenya, and isolated areas in the Highland East of the Rift Valley. In May 2025, rainfall occurred over several parts of the country. Kenya experienced significant regional variations in rainfall performance, with western, parts of Nairobi, Southeastern lowlands and the northern regions recording above-normal precipitation (≥125% of long-term averages). Kakamega registered the highest rainfall at 185.8% of normal, followed by Laikipia (170.5%) and Wajir (169.3%), while other western stations



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including Eldoret (144.4%), and Kisumu (144.3%) and Kabete in Kiambu also showed substantial increases. The northern stations of Mandera (138.9%) and Lodwar (131.0%) similarly exceeded their typical rainfall amounts, demonstrating unusually wet conditions across these typically drier regions.

Most of the country received near-normal rainfall (75-125% of average), with Nakuru (123.6%) and Machakos (123.4%) slightly above the midpoint of this range. Coastal areas maintained moderate levels, with Malindi at 115.2% and Mombasa at 85.8%, while central highland stations like Nyahururu (107.9%) remained close to historical averages. The Nairobi region showed consistent patterns, with Dagoretti Corner (114.6%), Wilson Airport (103.8%), and M.A.B. (96.8%) all within normal ranges, along with other stations such as Msabaha (109.9%), Kitale (104.4%), and Lamu (90.6%).

Several eastern and central regions experienced below-normal rainfall (<75% of average), with extreme deficits in Voi (6.4%) and Garissa (0%). Other shortfalls occurred in Nyeri (69.1%), Thika (68.3%), Moyale (65.9%), Embu (61.5%), and Meru (59.1%), indicating potentially challenging conditions for these areas.

The highest rainfall was recorded at Kakamega with 469.4 mm, making it the wettest synoptic station in the country. Other stations with very high rainfall included Koromangucha in Migori county (395.2 mm), Malindi (369.6 mm), Msabaha (352.8 mm), and Lela also in Migori (351.1 mm). These stations are mainly located in the western and coastal regions of Kenya, areas known for their relatively wetter climate, especially during the long rainy season. Several other stations such as Kisii (343.5 mm), Mtwapa (334.5 mm), and Migori (313 mm) also recorded rainfall exceeding 300 mm, indicating widespread heavy rainfall in these parts.

On the other end of the spectrum, some stations recorded very little to almost no rainfall. Notably, Voi reported the lowest rainfall with only 1.5 mm for the entire month, followed by Masongaleni in Makueni (2.1 mm), Kitui (3 mm), and Kikumbulyu South also in Makueni (5.4 mm). These locations are mostly found in arid and semi-arid zones in the eastern and southeastern parts of Kenya, where dry conditions prevailed through May. Other stations with minimal rainfall below 10 mm included Nema-Isiolo (9.1 mm), Kasunguni (10 mm), and Makolongo (10.5 mm).

The month was characterized by heavy rainfall of more than 50mm in twenty-four hours over several areas in western Kenya, Lake Victoria Basin, the Coastal region and a few areas over Central Kenya and Isiolo county.

Figure 2a shows the rainfall recorded from 1st to 26th May 2025 (blue bars) compared to the May long-term means (LTMs) (red bars). Figure 2b depicts the May 2025 rainfall performance as a percentage of the May LTMs, while Figure 2c illustrates the spatial distribution of the May 2025 rainfall totals.



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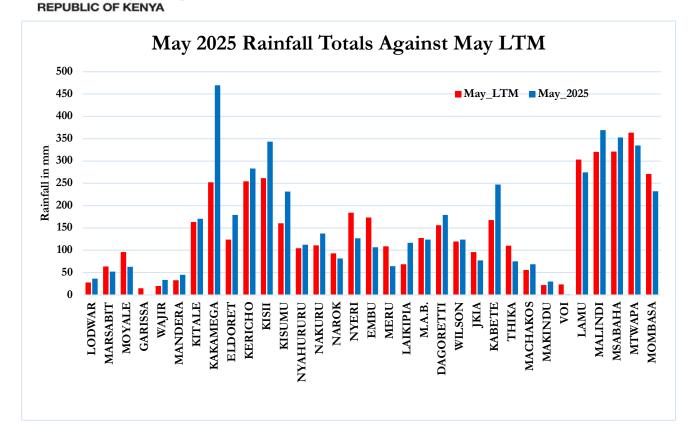


Figure 2a: May 2025 Total Rainfall Against May LTM

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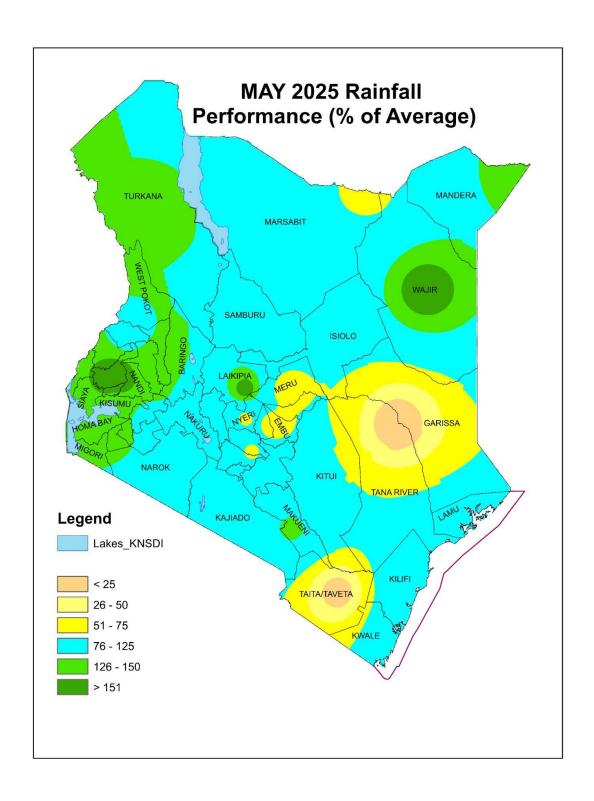


Figure 2b: May 2025 rainfall as a percentage of the May LTM



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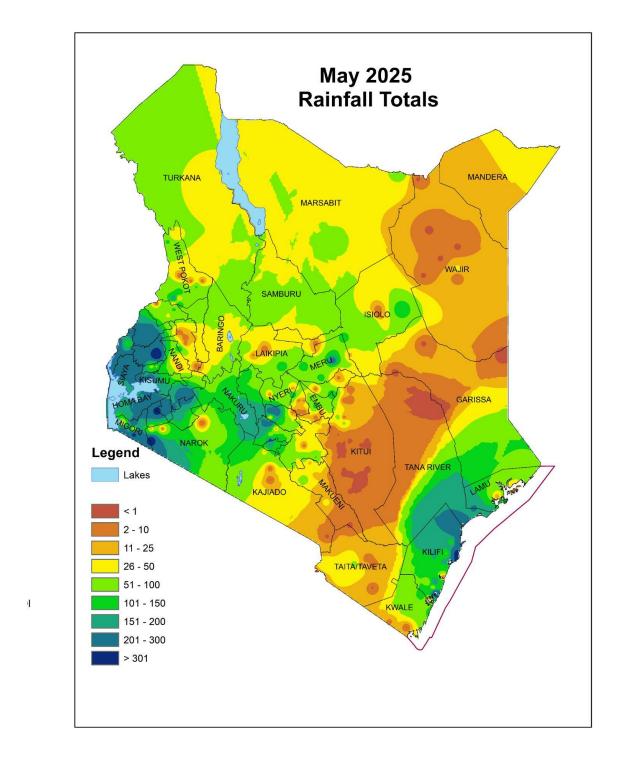


Figure 2c: May 2025 rainfall totals



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## 4.2 Temperature Review

Maximum temperatures were higher than average over several parts of the country except in Lodwar, Marsabit, Eldoret, Kericho, Kisumu and Nakuru where lower than average figures were observed; and in Voi where the temperature was near the May LTM (Figure 3a). Minimum temperatures were higher than average over the whole country except Mandera which had lower than average temperatures (Figure 3b).

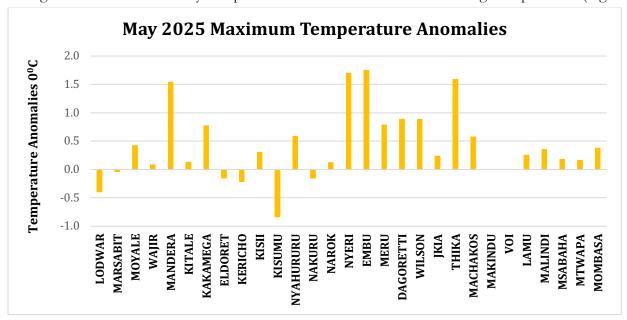


Figure 3a: May 2025 Maximum Temperature Anomalies

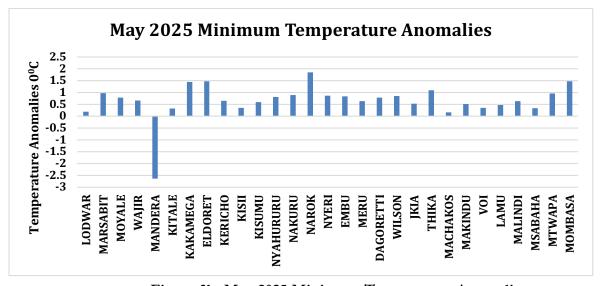


Figure 3b: May 2025 Minimum Temperature Anomalies



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## 4.3 Strong Winds and Large Waves

Strong southerly to south-easterly winds, with speeds exceeding 25 knots (12.86 m/s), were occasionally experienced during the month across several parts of the country. These included the Coast, Kenya's territorial waters, the South-eastern lowlands, and the North-eastern and North-western regions. The winds were particularly intense on the 24th and 25th of May, with gusts reaching up to 30 knots, especially along the coastal strip and in open, exposed areas. These strong winds posed potential risks to marine activities, light infrastructure, and transportation, particularly for small vessels operating in coastal waters.

In response to the heightened risk, county governments in Kwale, Mombasa, Kilifi, and Lamu took proactive measures to safeguard public safety. They issued directives suspending all beach activities, including fishing, swimming, and non-essential transport, effective from May 24, 2024, at 5:00 PM, in anticipation of adverse weather conditions. The Kenya Meteorological Department had issued a special advisory highlighting the likelihood of strong winds, rough sea conditions, and reduced visibility, particularly in coastal and low-lying areas. The Department also cautioned about the potential for structural damage, including the uprooting of trees and the blowing off of roofs, as well as the risk of capsizing for small boats due to high waves and strong winds.

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

Dr. David Gikungu

DIRECTOR OF METEOROLOGICAL SERVICES