

REPUBLIC OF KENYA MINISTRY OF ENVIRONMENT AND FORESTRY KENYA METEOROLOGICAL DEPARTMENT

TAITA TAVETA COUNTY SEASONAL WEATHER FORECAST FOR OCTOBER-NOVEMBER-DECEMBER (O.N.D), 2025

Date of Issue: 21st September, 2025

Forecast Period: 1st October to 31st December, 2025

RAINFALL OUTLOOK FOR THE OCTOBER-NOVEMBER-DECEMBER (OND) 2025 SHORT-RAINS SEASON; AND REVIEW OF THE JUNE-JULY-AUGUST (JJA) 2025 RAINFALL SEASON

1. HIGHLIGHTS:

1.1.Rainfall Outlook for the October-November-December (OND) 2025 "Short Rains" Season:

The Climate Outlook for the October-November-December 2025 "Short Rains" season indicates that most parts of the Southeastern lowlands of Kenya are expected to receive below average rainfall. Taita Taveta County is found within the Southeastern lowlands.

The main driver of this outlook is the difference in sea surface temperatures between the eastern and western equatorial Indian Ocean, commonly referred to as the Indian Ocean Dipole (IOD), which is currently developing into a negative phase and is expected to persist from September to November 2025 before returning to neutral in December. A negative IOD typically brings drier than normal conditions over East Africa, potentially suppressing rainfall during the short rains.

According to the most recent update issued on 2nd September 2025 by the World Meteorological Organization (WMO), there is about a 55% chance of La Niña developing during September–November 2025, rising to 60% in October–December 2025. The Kenya Meteorological Department (KMD) will continue to closely monitor ENSO conditions.

The distribution of rainfall is expected to be poor, with prolonged dry spells and isolated storms in some areas. Temperatures are forecasted to be warmer than average over most parts of the county.

1.2. Review of the Rainfall and Temperature in June-July-August (JJA) 2025

Most parts of Taita Taveta remained predominantly dry during the June-July-August (JJA) season, with few parts receiving light rain showers especially the high grounds and south eastern parts of the county. Temperatures were generally warmer than average countywide, with notably elevated nighttime conditions. However, high-altitude areas experienced pronounced cold spells during July and a significant cold event in mid-August, when daytime temperatures dropped sharply across much of the county.

1.3 Scientific Terminology

Table 1: Category and intensity of precipitation, and probability of rainfall distribution over places

Category	Rainfall Amount	<u>§</u>	Spatial Rainfall Distribution		
Light	Less than 5.0mm	<u>Term</u>	Meaning		
Moderate	5 mm to 20 mm	Most Places	Between 66% and 100%		
Heavy	20 mm to 50 mm	Several Places	Between 33% and 66%		
Very Heavy	Over 50mm	Few Places	Between 0 and 33%		

2. RAINFALL OUTLOOK FOR OCTOBER-NOVEMBER-DECEMBER (OND) 2025 "SHORT-RAINS" SEASON

- The "Short Rains" October-November-December (OND) season constitutes an important rainfall season in Kenya, particularly in the Central and Eastern regions of the country.
- Taita Taveta county is located in the south of the Eastern region, and its climatology is shown in figure 1.
- Figure 2 indicates the OND 2025 rainfall forecast and is closely followed by an analysis comparing the climatology and expected lowest and highest cumulative amounts of rainfall (figures 3 and 4) of the season for the county.
- The probability of the rainfall amounts exceeding certain thresholds is indicated on figures 5a and 5b.

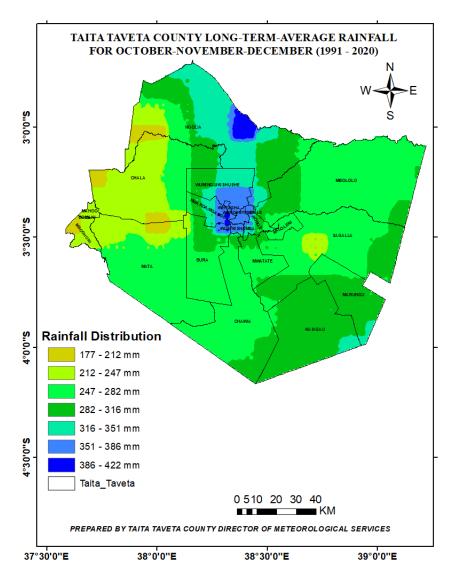


Figure 1: Taita Taveta Climatology for OND (1991-2020)

This map illustrates how much rain different parts of Taita Taveta County usually receive during the short rainy season (October to December).

The wetter areas, shown in blue, are mainly around the central hills, while the middle zones, shown in green, get moderate rainfall.

The driest parts, in yellow, are found on the western and some eastern lowlands.

In simple terms, the hills get the most rain, the plains get the least, and the rest of the county falls somewhere in between.

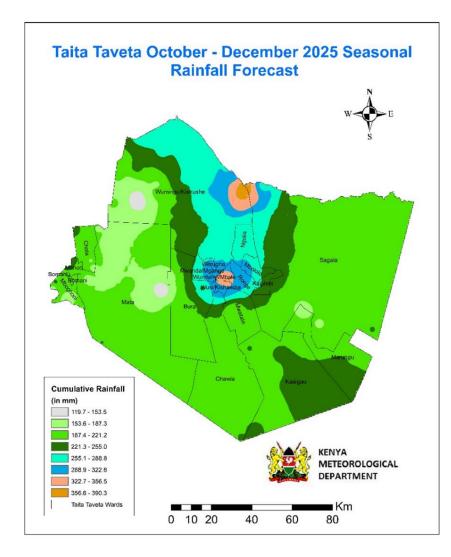


Figure 2: OND 2025 Seasonal Rainfall Forecast for Taita Taveta County

A LOOK AT THE MAP:

Forecast Summary:

• Even though Taita Taveta lies in the Southeastern Lowlands (expected to have depressed rains overall), the forecast map shows strong spatial variability. The hills will be wetter than average, while the lowlands will align with the national depressed rainfall outlook.

Implications

Agriculture:

- Lowlands (Kasigau, Mata, Taveta) may struggle with moisture stress implying that short-maturing drought-tolerant crops are advisable.
- Highlands (Wundanyi, Mwatate, Wusi) could still support traditional crops and some cash crops due to the higher rainfall expected.

Water resources:

- Hills will recharge rivers, springs, and catchments, benefiting downstream users.
- Semi-arid lowlands may face water scarcity unless they benefit from possible runoffs.

Disaster risk:

- Localized flooding or landslides may occur in the wetter hill zones.
- Drought impacts likely in the broader lowland areas.

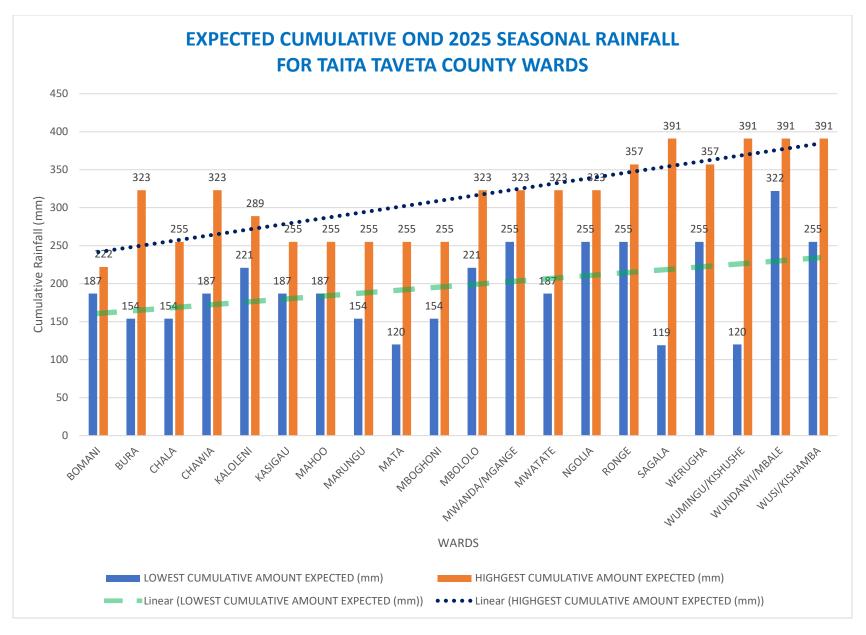


Figure 3: Comparison between expected lowest and highest cumulative rainfall amounts per Ward

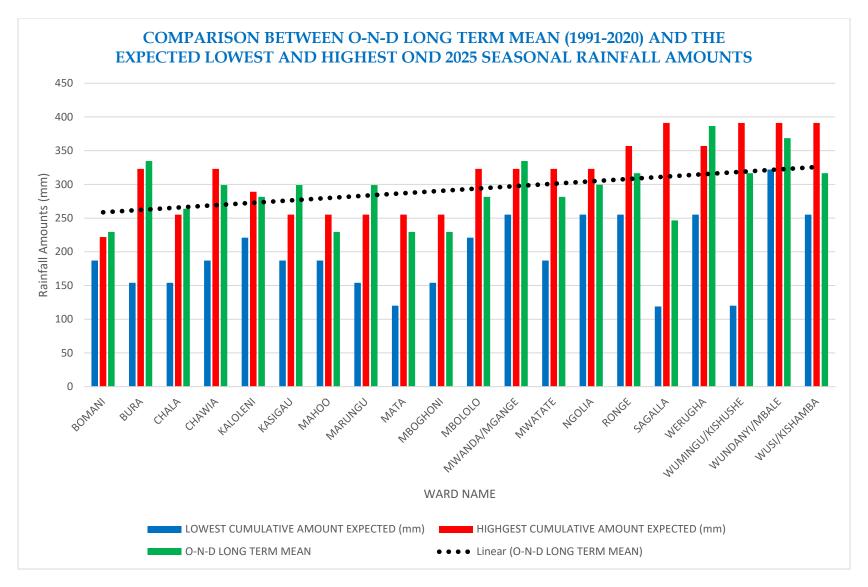


Figure 4: Comparison of Seasonal totals with the Long-Term Average for Taita Taveta County Wards

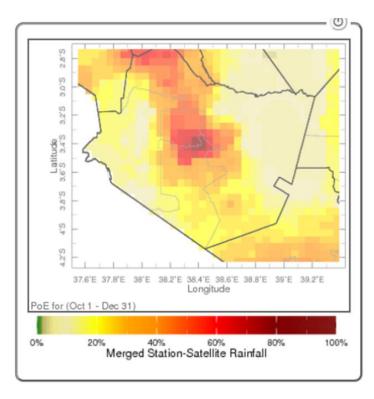


Figure 5a: Color code for the probability of Rainfall amounts exceeding 300mm

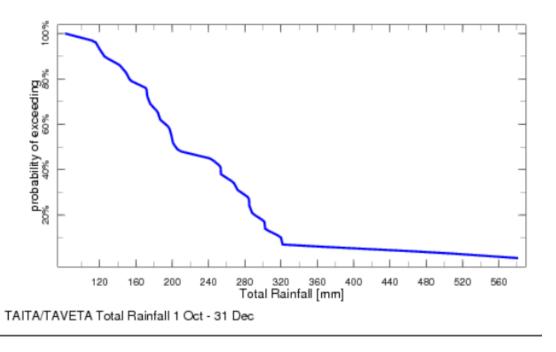


Figure 5b: Probability of exceeding certain amounts of rainfall during the OND season for Taita Taveta County

The Climate Outlook for the October–December 2025 "Short Rains" season indicates that most of the Southeastern lowlands are expected to receive below average rainfall. In figure 2, notice the part of Kenya where Taita Taveta County is located, where the forecast indicates that areas indicated in orange colour are expected to experience below-average (depressed) rainfall.

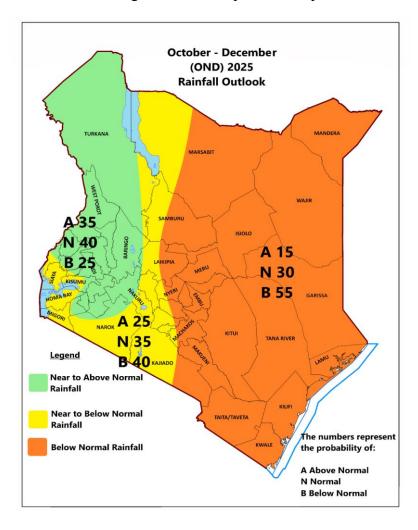


Figure 6: OND 2025 Rainfall Outlook for Kenya

The letters A, B & C on the map, indicate the probability of the anomaly occurring where the color code has been used to represent it. A represents above normal anomaly, N represents near normal, and B represents below normal anomaly.

So, for Taita Taveta County, the outlook indicates that during the October-December (OND) season:

- (i) there is a 55% chance of rainfall being below normal;
- (ii) there is a 30% chance of rainfall being near normal; and
- (iii) there is a 15% chance of the rainfall being above normal.

This implies that the higher likelihood is for the county to receive near normal to below normal rainfall. Mark you, there is a 30% chance of near normal, and a 15% chance of above normal rainfall.

The specific outlook for October-November-December (OND) 2025 for the county is as follows:

Table 2: Taita Taveta October-December 2025 Rainfall Forecast for each Sub-County (from figure 2)

Taita Taveta OND 2025 Rainfall Forecast (by Sub-County)						
Sub-County	Wards	Forecast Rainfall	OND Outlook			
Taveta	Taveta, Mahoo, Mboghoni	187 – 255 mm	Near-average to slightly above-average rainfall. Good for crops & pasture recovery.			
Wundanyi	Wundanyi/Mbale, Werugha, Mwanda/Mgange, Wumingu/Kishushe	255 – 390 mm (localized heavy zones)	Above-average rainfall with localized very heavy rainfall. High risk of floods & landslides in hilly areas.			
Voi	Kasigau, Sagalla	153 – 221 mm	Near-average rainfall. Moderate drought recovery expected.			
	Kaloleni, Ngolia	221 – 288 mm	Near- to above-average rainfall. Supportive for agriculture & water recharge.			
Mwatate	Mwatate, Bura, Chawia, Rong'e	187 – 288 mm	Near- to above-average rainfall. Favorable for agriculture and pasture.			

3. EXPECTED DISTRIBUTION OF THE OND RAINFALL, ONSET AND CESSATION DATES

3.1 Distribution

The OND 2025 rainfall is expected to be poorly distributed, both in time and space over several parts of the county. This season will be marked by prolonged dry spells and occasional isolated storms, even in regions where depressed rainfall (below average) is forecasted.

3.2 Onset and Cessation

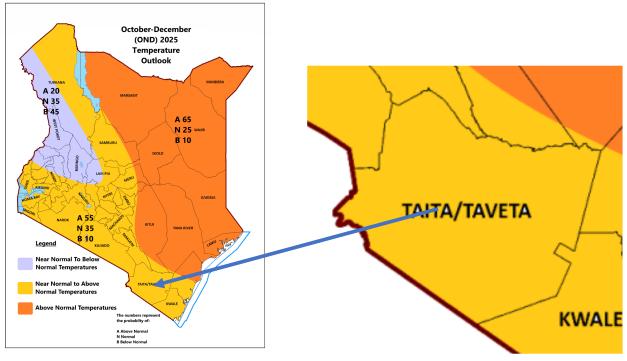
The expected onset and cessation dates, and rainfall distribution for most of the County are as indicated in table 1.

Table 1: Onset, Cessation dates and Rainfall Distribution for Taita Taveta County:

County	Onset	Cessation	Distribution
Taita Taveta	3rd to 4th week of November, 2025.		
Several parts to	3 rd to 4 th week of November, with occasional	3rd to 4th week of December.	Poor
the east of the	rainfall in October, 2025.	31d to 4th week of December.	POOI
county			

4. OND 2025 TEMPERATURE OUTLOOK

The temperature outlook shows that most parts of the country are expected to be warmer than average except a few areas over the western sector where temperature is expected to be near to cooler than average. The Central and eastern parts of Kenya are expected to have higher probabilities for warmer than average temperature as illustrated in figure 6.



- The eastern parts of Kenya where Taita Taveta is situated are expected to have higher probabilities for warmer than average temperature as illustrated in figure 6.
- The yellowish color over the whole of the county indicates a probability of near normal to above normal temperature.

Figure 6: Probabilities of expected temperature

5. POTENTIAL IMPACTS OF THE OND 2025 RAINS

The October–December 2025 (OND) seasonal rainfall forecast indicates near-average to above-average rainfall across Taita Taveta County, in line with the national outlook. Rainfall will vary by sub-county, with the highest amounts expected over the highlands of Wundanyi and relatively lower totals in parts of Voi (Kasigau and Sagalla).

Sectoral Implications

Agriculture & Food Security

Farmers in Taveta and Mwatate should take advantage of the expected near-average rains for planting drought-tolerant crops and short-cycle varieties. In Wundanyi highlands, where heavy rainfall is expected, soil conservation and terracing are encouraged to minimize erosion and landslide risks.

Livestock & Pasture

Improved pasture and water availability expected across most rangelands (Kasigau, Sagalla, Bura, Chawia). Livestock keepers should plan for pasture conservation (hay/silage) in case of localized flooding or waterlogging.

Water Resources

Recharge of rivers, springs, and dams likely, especially in Ngolia, Bura, and Taveta plains. Communities are encouraged to harvest and store rainwater to enhance resilience against future dry spells.

Disaster Risk Management

Wundanyi (Werugha, Mgange, Wundanyi/Mbale) faces a risk of landslides and flash floods; early preparedness and community sensitization are critical. Urban centers (Voi, Taveta, Mwatate towns) may experience flash floods in parts where drainage is poor; stakeholders should unclog drainage systems early.

Health

Increased cases of waterborne diseases (cholera, diarrhea) and vector-borne diseases (malaria, dengue) are likely. Strengthening of public health surveillance and awareness is advised.

6. NOTE:

- 6.1 Participatory Scenario Planning (PSP) is very much encouraged, now and in future, for Taita Taveta County.
- 6.2 Communities are encouraged to use this OND 2025 Outlook together with the weekly, monthly and special updates provided by the County Director of Meteorological Services, Taita Taveta County.

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