



MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND FORESTRY
STATE DEPARTMENT FOR ENVIRONMENT AND CLIMATE CHANGE
KENYA METEOROLOGICAL DEPARTMENT

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Weekly Weather Forecast for Makueni County

Validity: 9th December 2025 – 15th December 2025

Note:

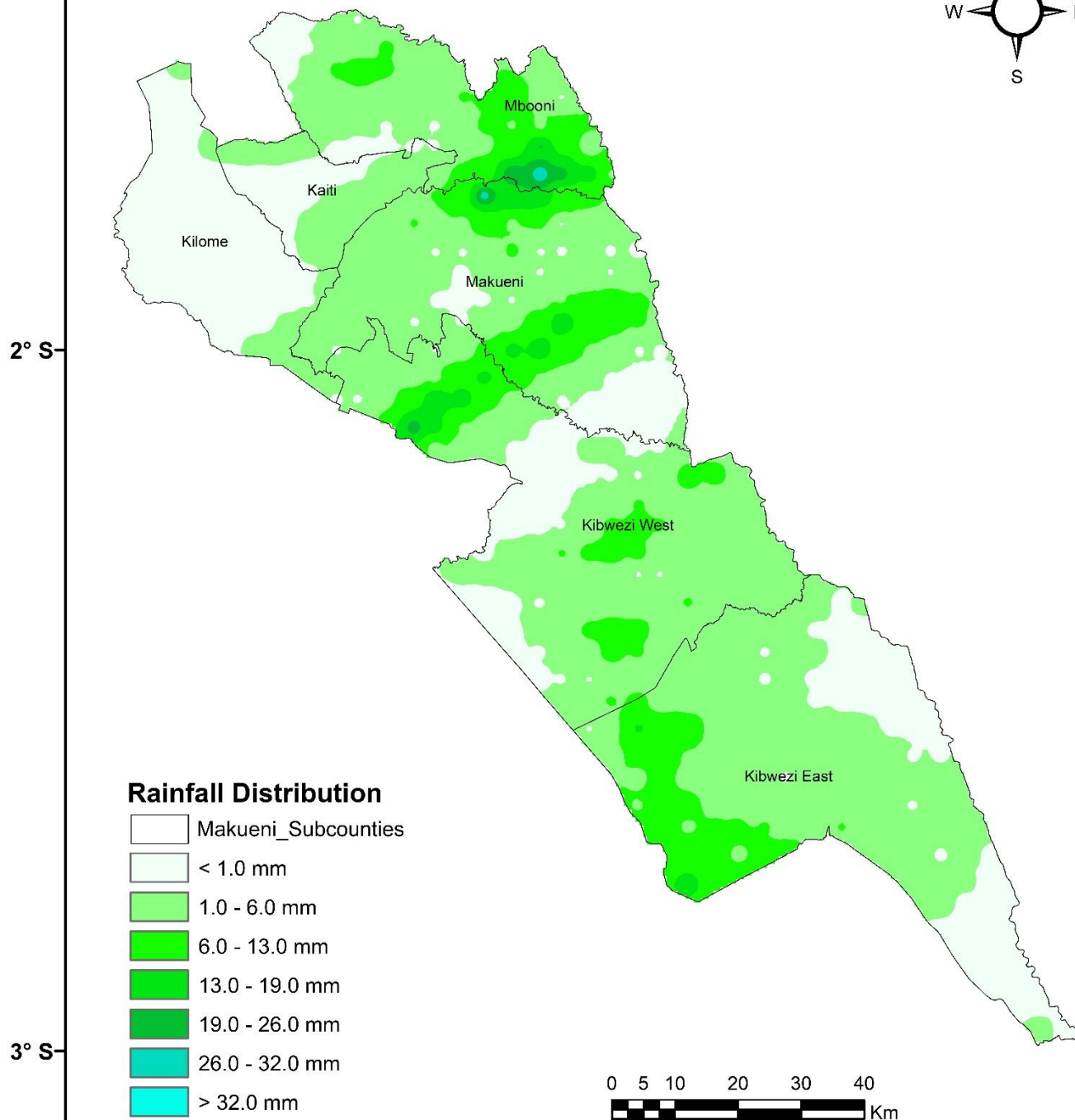
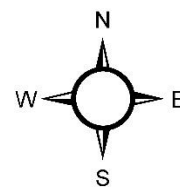
Dry day <1mm.	Light rains (1-5 mm).	Moderate rains (5-20 mm).	Heavy rains > 20 mm.
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Weather Highlights: Rainfall
Rainfall Map
Makueni

MAKUENI

WEEKLY CUMMULATIVE RAINFALL FORECAST

December 9, 2025 – December 15, 2025



Courtesy: CDMS-Makueni

Makueni Weekly Cumulative Rainfall Forecast Map

Content: Spatial distribution of cumulative rainfall amounts across subcounties, using a multi-category rainfall intensity legend.

The cumulative rainfall forecast for **December 9–15, 2025** shows a predominantly **light to moderate rainfall regime** across Makueni County, with localized patches of higher totals. A **north–south rainfall gradient** is evident:

- **Northern highland wards** (Mbooni, Tulimani, Kisau/Kilungu, parts of Kaiti) show **very light rainfall (<6 mm)**.
- **Central corridor** (Makueni, Kilome, Kibwezi West) receives **light to moderate rainfall (6–19 mm)**, with isolated pockets of 19–26 mm.
- **Southern/eastern lowlands** (Kibwezi East, Thange, Nguu/Masongaleni, Mtito Andei) show **the highest weekly totals (13–>26 mm)**, forming the county’s rainfall hotspot.

Rainfall categories expected:

- **Dry:** <1 mm
- **Light:** 1–6 mm
- **Moderate:** 6–20 mm
- **Heavy:** >20 mm

Areas with highest totals:

- **Kibwezi East** (especially eastern flank),
- **Thange,**
- **Nguu/Masongaleni,**
- **Parts of Kathonzweni–Kibwezi West boundary.**

Areas with lowest totals:

- **Upper Mbooni,**
- **Kaiti,**
- **Kasikeu–Kilome ridge.**

Subcounty and Ward-Level Forecast Summary

Subcounty	Ward	Forecast Rainfall (mm)	Rainfall Category	Remarks
Mbooni	Mbooni	1–6	Light	Mostly dry; limited water recharge
Mbooni	Tulimani	<1–6	Dry–Light	Scattered drizzle; minimal agricultural impact
Kilome	Kilome	1–6	Light	Light showers; pasture improvement minimal
Kilome	Kasikeu	<1–6	Dry–Light	Slight rainfall presence
Kaiti	Kaiti	<1–6	Dry–Light	Mostly dry conditions
Makueni	Wote	6–13	Moderate	Supports short-cycle crops; improved moisture
Makueni	Kathonzweni	6–19	Moderate	Beneficial for pasture and water pans
Makueni	Muvau/Kathonzweni	6–13	Moderate	Scattered moderate showers
Makueni	Kitise/Kithuki	13–26	Moderate–Heavy	Localized heavy rainfall possible

Subcounty	Ward	Forecast Rainfall (mm)	Rainfall Category	Remarks
Kibwezi West	Makindu	6–19	Moderate	Supports crop growth; mild ponding possible
Kibwezi West	Nguumo	13–26	Moderate–Heavy	Higher totals; monitor drainage areas
Kibwezi West	Kikumbulyu North	6–13	Moderate	Useful for rangeland regeneration
Kibwezi West	Kikumbulyu South	13–26	Moderate–Heavy	Enhanced recharge; watch for flooding spots
Kibwezi East	Thange	19–26+	Heavy	Highest rainfall zone; possible waterlogging
Kibwezi East	Mtito Andei	13–19	Moderate	Useful for grazing lands
Kibwezi East	Masongaleni	13–19	Moderate	Good for vegetation recovery
Kibwezi East	Ivingoni/Nzambani	13–26	Moderate–Heavy	Enhanced moisture availability

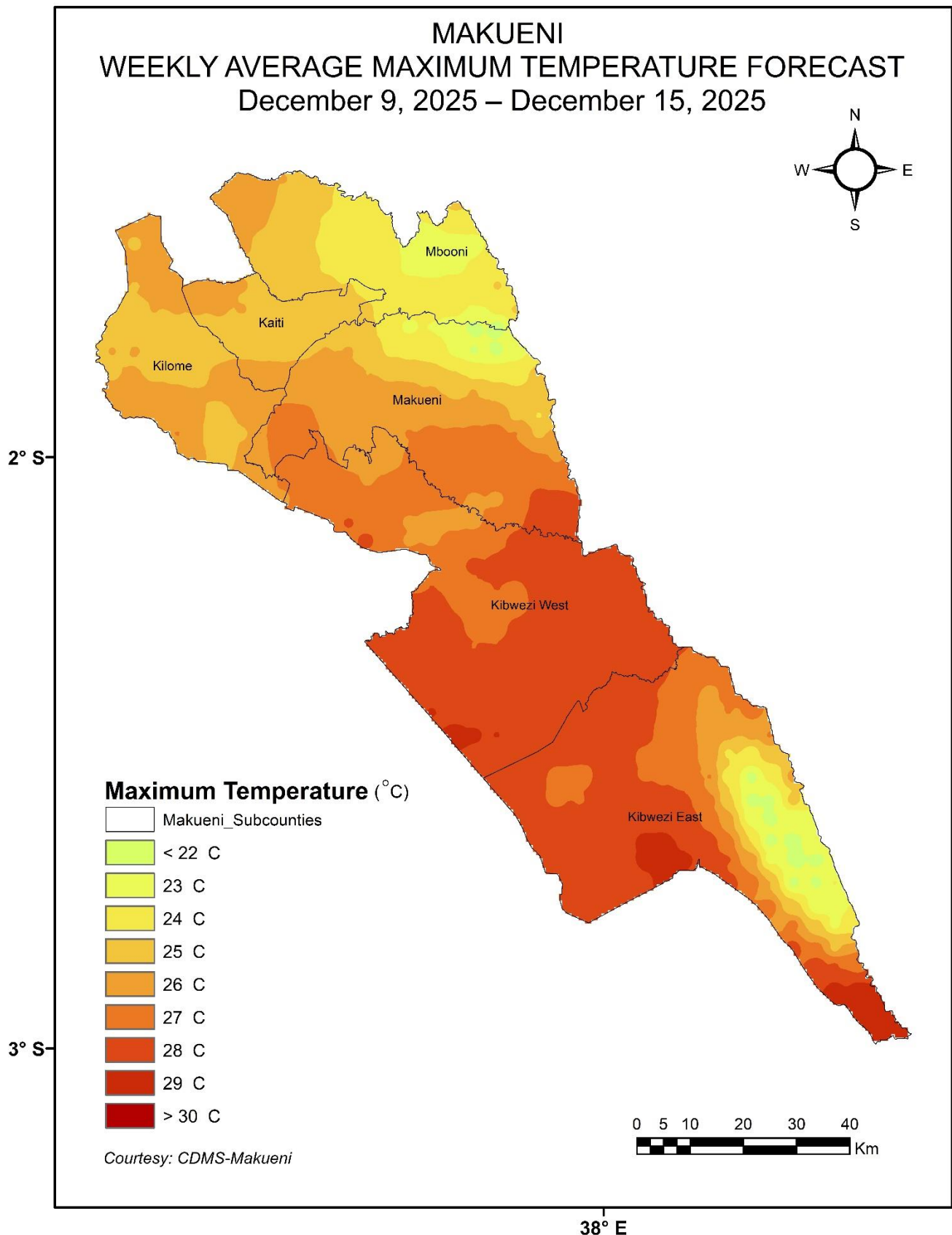
Summary by Rainfall Intensity

Rain Intensity	Rainfall Range (mm)	Wards Affected
Dry	<1.0 mm	Tulimani, parts of Kaiti, parts of Kilome
Light	1–6 mm	Mbooni, Kilome, Kaiti, upper Kilungu ridge
Moderate	6–20 mm	Wote, Makueni, Makindu, Kikumbulyu North, Masongaleni, Mtito Andei, parts of Kathonziweni
Heavy	>20 mm	Thange, Nguumo, Kikumbulyu South, Kitise/Kithuki (sections), Kibwezi East eastern belt, Ivingoni/Nzambani

- Southern and southeastern Makueni remain the rainfall hotspot**, recording 19–26+ mm. These zones should expect:
 - Episodes of heavy showers
 - Possible temporary waterlogging in low-lying areas
 - Good soil moisture for crops and pasture regeneration
- Central Makueni (Makindu, Wote, Kathonziweni, Kibwezi West)** will experience **moderate rainfall** conducive for:
 - Seedling establishment
 - Rangeland restoration
 - Water pan recharge at modest levels
- Northern highland wards (Mbooni, Kaiti, Kilome)** will remain **mainly dry to lightly wet**, with limited impact on agriculture.
 - Slow pasture recovery
 - Minimal runoff and recharge
- Agricultural implication:**
 - Moderate–heavy rainfall areas can support **ongoing planting and vegetation growth**.
 - Dry–light rainfall areas should rely on **conservation agriculture techniques**, mulching, and drought-tolerant crops.

Weather Highlights: Temperature

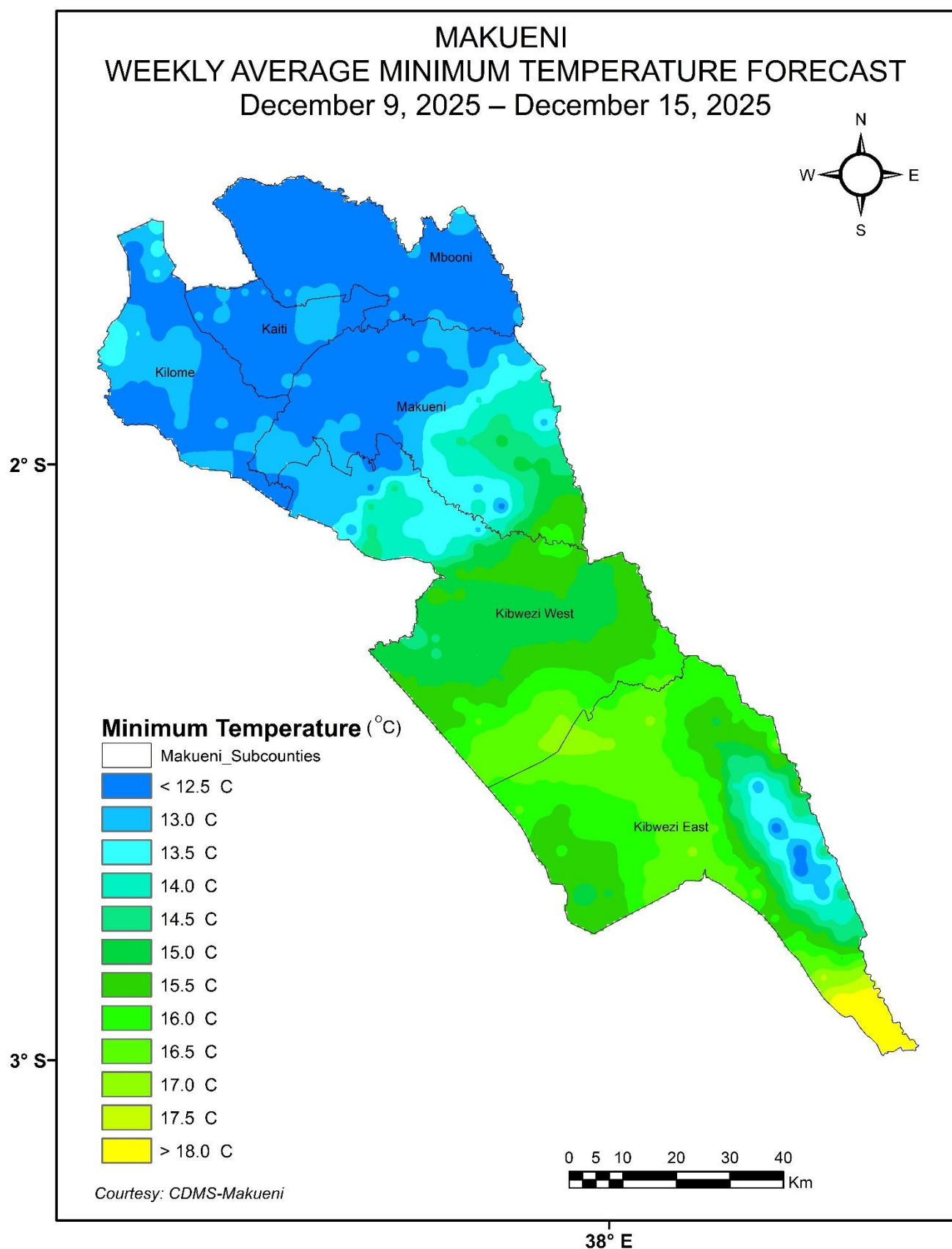
Maximum Temperature Map for the week



Makueni Weekly Average Maximum Temperature Forecast Map

Content: Spatial variation of forecasted weekly average maximum temperatures across subcounties.

Minimum Temperature Map for the week



Makueni Weekly Average Minimum Temperature Forecast Map

Content: Spatial variation of forecasted weekly average minimum temperatures across subcounties.

The temperature forecast for **December 9–15, 2025** shows a clear **elevation-driven gradient**, with **cooler highlands in the north and northwest** and **much warmer to hot lowlands in the south and southeast**. The patterns observed reflect typical Makueni climatology for early December.

Maximum Temperature Pattern

- **Coolest daytime temperatures (22–25°C)** appear over the **Mbooni highlands** and upper **Kaiti–Kilome** region.
- **Moderate to warm temperatures (26–29°C)** dominate **central Makueni**, including Wote, Kathonzweni, Makueni, and parts of Kibwezi West.
- **Hot conditions (30–33°C)** are evident in most of **Kibwezi East** and parts of **Kibwezi West**.
- **Very hot pockets ($\geq 34^\circ\text{C}$)** occur across the **eastern and southeastern lowlands**, especially **Masongaleni–Thange–Ivingoni–Nzambani corridor**.

Minimum Temperature Pattern

- **Coldest nights (12–14°C)** occur in **Mbooni, Kaiti, Kilome highlands**.
- **Cool to mild nights (14.5–16°C)** dominate central Makueni (Wote, Makueni, Kathonzweni).
- **Warmer nights (16.5–18°C)** occur across much of Kibwezi West and parts of Kibwezi East.
- **Warm night pockets ($\geq 18^\circ\text{C}$)** appear in the **southeastern lowlands**, especially **Thange, Nguu/Masongaleni, parts of Mtito Andei**.

Implications

- **Agriculture:**
 - Cooler highlands favor **vegetables, temperate fruits**, and slow evapotranspiration.
 - Hot lowlands face **high evapotranspiration**, requiring moisture conservation for maize, legumes, and horticulture.
 - Warmer nights accelerate **crop metabolism** but reduce nighttime recovery.
- **Water Demand:**
 - Highest in **Kibwezi East and West lowlands** due to persistent heat.
 - Lower in highlands.
- **Livestock:**
 - Heat stress risk elevated in **very hot wards**; shade and watering intervals needed.
- **Human Comfort:**
 - Hot south experiences **thermal discomfort**, while highlands experience **cool and comfortable conditions**.

Subcounty and Ward-Level Temperature Summary

Subcounty	Ward	Max Temp (°C)	Max Temp Category	Min Temp (°C)	Min Temp Category	Remarks
Mbooni	Mbooni	22–24	Cool	12–14	Cool–Cold	Cool days, cold nights; ideal for horticulture
	Tulimani	23–25	Cool	13–15	Cool	Mild days, cool nights; suitable for vegetables
Kilome	Kilome	24–26	Mild–Warm	13–15	Cool	Light heat; generally comfortable
	Kasikeu	24–26	Mild–Warm	13–15	Cool	Mild daytime heat
Kaiti	Kaiti	23–25	Cool–Mild	13–15	Cool	Cool and comfortable
Makueni	Wote	27–29	Warm	15–17	Mild	Warm days, mild nights; good for planting

Subcounty	Ward	Max Temp (°C)	Max Temp Category	Min Temp (°C)	Min Temp Category	Remarks
	Kathonzweni	27–29	Warm	15–17	Mild	Favorable for maize/legumes
	Muvau/Kathonzweni	26–28	Warm	15–17	Mild	Moderate heat; good crop conditions
	Kitise/Kithuki	28–30	Warm–Hot	16–18	Mild	Higher evapotranspiration expected
Kibwezi West	Makindu	28–31	Warm–Hot	16–18	Mild	Hot afternoons; livestock may need extra water
	Nguumo	30–33	Hot	17–18	Mild–Warm	Heat stress possible
	Kikumbulyu North	28–31	Warm–Hot	16–17.5	Mild	Moderate heat; manageable for livestock
	Kikumbulyu South	30–33	Hot	17–18	Mild–Warm	High evapotranspiration
Kibwezi East	Thange	30–33	Hot	18–19+	Warm	Hot days and warm nights; significant heat stress
	Mtito Andei	29–31	Warm–Hot	17–18	Mild–Warm	Warm nights; reduced cooling
	Masongaleni	30–33	Hot	17–18	Mild–Warm	Persistent heat; irrigation needed
	Ivingoni/Nzambani	31–34+	Hot–Very Hot	18–19+	Warm	Very hot; highest water demand

Maximum Temperature Summary by Category

Category	Range (°C)	Interpretation	Wards Affected
Cool	≤25	Mild daytime heat	Mbooni, Tulimani, Kaiti, upper Kilome, Kasikeu
Warm	26–29	Comfortable, moderate	Wote, Kathonzweni, Muvau/Kathonzweni, parts of Makindu
Hot	30–33	Intense heat	Nguumo, Kikumbulyu South, Kikumbulyu North, Thange, Masongaleni, Mtito Andei
Very Hot	≥34	Extreme heat	Eastern Ivingoni/Nzambani belt (pockets), SE lowlands

Minimum Temperature Summary by Category

Category	Range (°C)	Interpretation	Wards Affected
Cold	≤12	Chilly; dew/frost risk	Pockets in upper Mbooni
Cool	13–15	Mild nights	Tulimani, Kilome, Kasikeu, Kaiti
Mild	16–18	Moderate; favorable	Wote, Kathonzweni, Makueni, Makindu, parts of Kibwezi West
Warm	≥19	Warm nights	Thange, Masongaleni, parts of Nguu/Masongaleni, Ivingoni/Nzambani

1. **Hottest Daytime Areas:**
 - Ivingoni/Nzambani, Thange, Masongaleni, Kikumbulyu South.
 - Expect **high evapotranspiration**, requiring water conservation for crops and livestock.
 2. **Coolest Highland Zones:**
 - Mbooni, Tulimani, Kaiti, parts of Kilome.
 - These areas benefit from **low heat stress**, conducive to horticulture and dairy production.
 3. **Warm-to-Hot Transitional Belt:**
 - Wote, Kathonziweni, Makindu, Kikumbulyu North.
 - Moderate crop growth conditions with **manageable heat levels**.
 4. **Warmest Nights:**
 - Thange, Masongaleni, Ivingoni/Nzambani, parts of Nguumo.
 - Warm nights reduce cooling efficiency and may stress livestock.
 5. **Maximum–Minimum Contrast:**
 - Strongest in **Kibwezi lowlands**, creating **thermal stress cycles**.
 - Least contrast in highlands where nights remain cool.
 6. **Agricultural Relevance:**
 - Cooler uplands: Favor vegetables, fruits (avocado, passion), potatoes.
 - Hot lowlands: Benefit from heat-tolerant crops (green grams, cowpeas, sorghum).
 - Central zone: Balanced microclimate for maize, horticulture, and legumes.
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NB: This forecast should be used with the 24-hour, 5-day, 7-day, and monthly outlooks, special forecasts, alerts, and regular updates/advisories issued by this department.