

REPUBLIC OF KENYA Ministry of Environment, Climate Change and Forestry State Department of Environment and Climate Change Kenya Meteorological Department County Director of Meteorological Services, Mombasa County P.O. Box 98512-80100. Mombasa, Kenya Email: cdmmombasa@meteo.go.ke

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# OCTOBER-NOVEMBER-DECEMBER (OND-2024) SEASONAL FORECAST FOR MOMBASA COUNTY

## **1. HIGHLIGHTS**

- ✓ The OND-2024 rainy season is expected to be Below Normal in the County of Mombasa and its neighborhoods.
- ✓ The onset dates are expected to fall within the 4<sup>th</sup> week of October and the 1<sup>st</sup> week of November.
- ✓ Rains are likely to continue in to the 2<sup>nd</sup> week of December 2024 (wet spell period of between 4 6 weeks)
- ✓ The rainfall distribution over Mombasa County will be marked by prolonged dry spells and occasional isolated storms,
- ✓ Temperatures are expected to be warmer than average across the county and the coastal waters.

The reasons for below - Normal rainfall during the OND 2024 season:

- This will be driven by weak La Niña conditions, characterized by cooler-than average Sea Surface Temperatures (SSTs) over the Central and Eastern Equatorial Pacific Ocean, which are likely to develop during the September to November period and persist into early 2025
- 2) The existence and persistence of a neutral Indian Ocean Dipole.

### SPATIAL MAP OF PROBABLE TOTAL OND 2024 SEASONAL RAINFALL COMPARED WITH LONG TERM OND MEAN

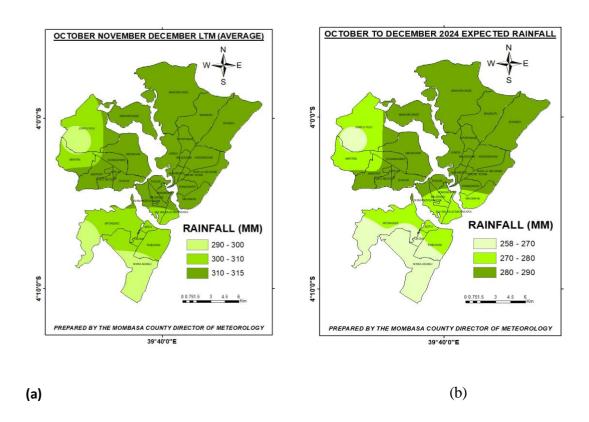
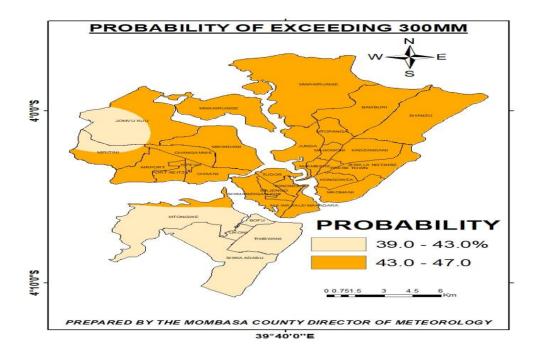


Figure 1. (a) Long Term Average rainfall and (b) OND-2024 rainfall forecast for Mombasa County

# FORECAST SUCCESS BROBILITY



# OND SEASON FORECAST BY SUB-COUNTY

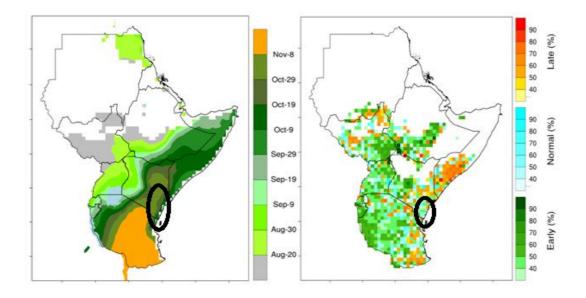
Sub-County	OND Long-Term Average Rainfall	OND-2024 Forecast Total Rainfall
Nyali	310 - 315 mm	270 - 290 mm
Mvita	300 - 315 mm	270 - 290 mm
Likoni	290 - 310 mm	258 - 280 mm
Kisauni	310 - 315 mm	280 - 290 mm
Jomvu	290 - 310 mm	258 - 280 mm
Changamwe	310 - 315 mm	280 - 290 mm

### ON SET, CESSATIONS AND DISTRIBUTION OF THE 2024 OND SEASON

ON SET DATES	CESSATION DATES	DISTRIBUTION
Last week of October to First week of November (29 <sup>th</sup> October – 9 <sup>th</sup> November 2024) Normal to delayed on set expected		The rainfall will be poorly distributed throughout the OND season.

### OND 2024 ON SET DATES

## PROBABILITY ON SET



# SUMMARY FOR DECISION MAKERS IN VARIOUS SECTORS IN MOMBASA COUNTY

#### 1. DISASTER RISK MANAGEMENT

The anticipated drying up of water sources due to below average forecasted rainfall could expose communities to safety risks. This situation may also lead to livestock disease outbreaks and loss, human disease outbreaks (waterborne and vector-borne), increased resource-based conflicts and cross-border movements, and infrastructure damage, including drainage clogging, roads, and bridges.

#### 2. AGRICULTURE AND FOOD SECURITY

There is a likelihood of inadequate soil moisture to support crop growth and development due to low rainfall and poor distributions. Also, the prevalence of pests and disease outbreaks is likely. This situation may lead to an increase in the number of food-insecure households and populations across the county. Additionally, there is a likelihood of increased conflict, involving human wildlife interactions and community disputes.

#### 3. WATER AND ENERGY

There is a potential reduction in water supply for human consumption, livestock, irrigation, and hydropower production, coupled with the risk of water contamination and conflicts over water use and access. Additionally, there is a risk of flooding due to occasional storms expected during the OND 2024 season in the county.

#### 4. HEALTH

Chances of increased incidence of vector-borne diseases such as dysenteries and watery diarrhea due to scarcity of clean water. Malnutrition as a result of the expected inadequate food supply to feed the community.

#### 5. FISHERIES

The anticipated warmer temperatures (sea surface temperatures) are likely to impact on fishing activities within the western Indian Ocean that boarder the County coastal waters. This can cause fish migrations to cooler deep waters, can also affect spawning and health of fish, affect the coral reefs and coastal habitat eventually impacting on the economic activity. Sustainable fishing practices and measures need to be employed during the season.

NB: The relevant sectors are advised to develop appropriate advisories to enable the community cope/adapt and where possible mitigation measures should be applied to the anticipated situations likely to be caused by the expected below average rainfall during the 2024 OND season

### 2. RECOMMENDATIONS

- a. The seasonal forecast should be considered together with the various time scale forecasts (24-hour, Monthly, Weekly forecasts, special forecasts) and regular advisories/updates issued by the Kenya Meteorological department and Mombasa County Meteorological Office
- b. The various sectors and agencies are advised to develop appropriate advisories and also put in place measures that would assist in adaptation and mitigation during the season.

thkamoleh

Joseph Amollo County Director of Meteorological Services, Mombasa County