

# Republic of Kenya Ministry of Environment, Climate Change and Forestry Kenya Meteorological Department Office of the County Director of Meteorological Services, Kilifi Mob. +254 (0) 746 423989

E-mail: <a href="mailto:cdmkilifi@meteo.go.ke">cdmkilifi@meteo.go.ke</a>; <a href="mailto:cdmkilifi@gmail.com">cdmkilifi@gmail.com</a>

## Weather Forecast for March-April-May (MAM) 2024 (Long Rains) Season

### 1 Highlights

The March-April-May rainfall season constitutes the main season along the coastal strip in which more than 300 mm of rainfall is normally received as opposed to the hinterland Figure 1.

In MAM 2024, Kilifi County is expected to receive rainfall that is likely to be Near-Average (NN) with a tendency to Above-Normal (Figure 2)

Occasional storms, and dry spells (long dry days within the season) are likely during the season.

Regions in the coastal strip are expected to have generally fair to good distribution of rainfall in both time and space. Poor distribution is expected towards the hinterland.

The temperature forecast indicates increased probability (70% chance) of warmer than normal temperatures in the whole of Kilifi County.

Onset is expected between  $25^{th}$  March  $-6^{th}$  April 2024, and the rains are expected to continue into June 2024 (cessation between  $10^{th} - 22^{nd}$  June 2024).

As is normal, the coastal strip is likely to receive the highest rainfall during MAM 2024 season which will reduce towards the hinterland.

### 2 Spatial Distribution of MAM 2024 Rainfall Forecast in Kilifi County

#### 2.1 Long term Average Rainfall

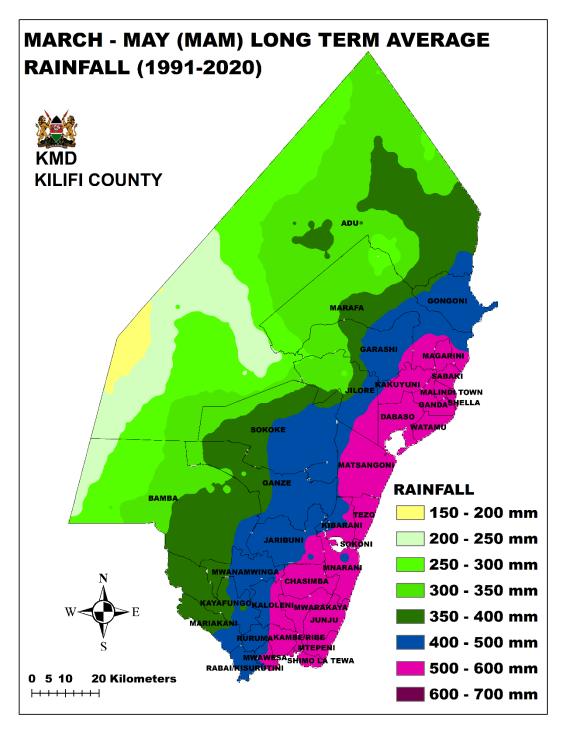


Figure 1. March-April-May (MAM) long term mean rainfall taken for the 1991-2020 climate normal.

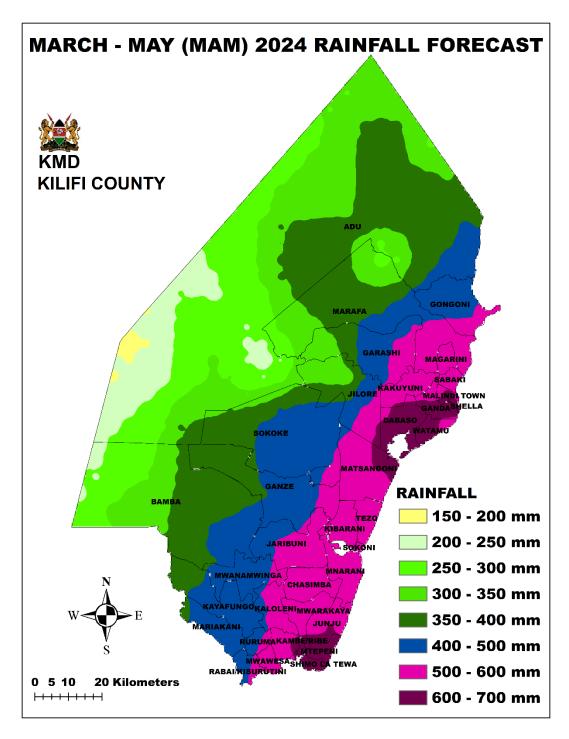


Figure 2. March-April-May (MAM) 2024 seasonal total rainfall forecast for Kilifi County

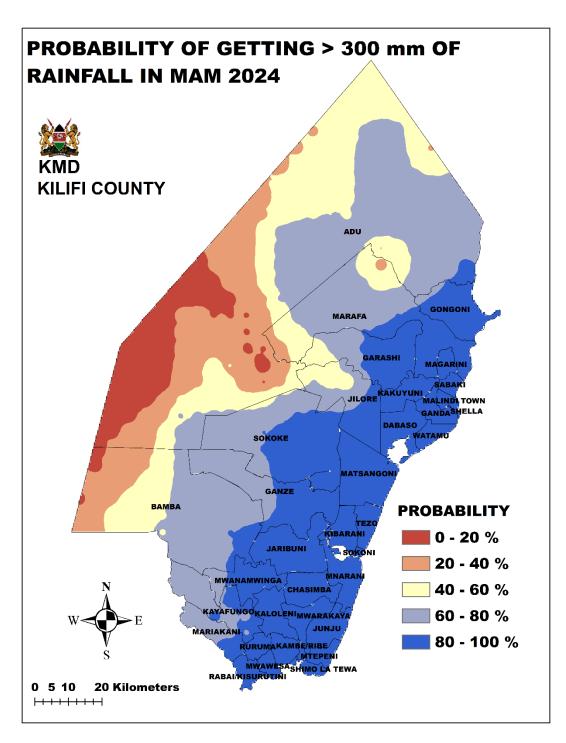


Figure 3. Probability of getting more than 300 mm of rainfall during MAM 2024 rainfall season in Kilifi.

# 2.0 Summary for MAM 2024 forecast by ward

Sub-County	Ward	Probable Amount range in mm	Probable onset dates	Probable Cessation dates	Length of rain period (LRP) in days	Probable distribution
Magaraini	Marafa (Dakacha) Marafa (Mambrui, Madina) Magarini Gongoni Adu (Makongeni) Adu (Kisiki) Adu (Matolani) Adu (Kamale, \Adu, Ramada, Merereni, Kadzandani) Garashi (Baricho, Gandini) Garashi (rest of Garashi)	280 – 320 mm 350 – 460 mm 400 – 500 mm 400 – 500 mm 200 – 300 mm 190 – 250 mm 280 – 350 mm 340 – 420 mm 300 – 390 mm	Between 25 <sup>th</sup> – 6 <sup>th</sup> April 2024	Between 10 <sup>th</sup> to 22 <sup>nd</sup> June 2024	70-90 days	long dry spells within the rain season that could affect vulnerable crops  Fair to good distribution along the coastal strip.  Poor distribution towards the hinterland.
Malindi	Sabaki Jilore (Mkondani, Makobeni, Lango baya) Jilore (Kakoneni, Jilore, Girimacha) Kakuyuni Ganda	500 – 570 mm 300 – 380 mm 350 – 500 mm 500 – 550 mm 500 - 580 mm				
Kilifi South  Kilifi North	Malindi Town Junju Mwarakaya Chasimba Mtepeni Shimo La Tewa Matsangoni Watamu Mnarani Tezo	500 – 600 mm 500 – 600 mm 500 – 600 mm 500 – 550 mm 500 – 600 mm 500 – 630 mm 450 – 600 mm 500 – 600 mm 500 – 570 mm 500 – 590 mm				

Sub-County	Ward	Probable Amount range in mm	Probable onset dates	Probable Cessation dates	Length of rain period (LRP) in days	Probable distribution
	Kibarani	500 – 590 mm				
	Sokoni	500 – 590 mm				
Kaloleni	Mariakani	390 – 440 mm				
	Kayafungo	380 – 450 mm				
	Kaloleni	450 – 590 mm				
	Mwanamwinga [Tsangatsini, Viragoni, Kibwabwani, Kitangwini (West)]	390 – 450 mm				
	Mwanamwinga (East)	450 – 530 mm				
Ganze	Sokoke (Digiria, Milore, Dugumunane, upper- Mwahera	340 – 400 mm				
	Sokoke (rest of Sokoke)	400 – 480 mm				
	Ganze (Mwambani, Mirihini)	350 – 390 mm				
	Ganze (rest of Ganze)	400 – 490 mm				
	Jaribuni	440 – 530 mm				
	Bamba (Western Gede)	230 – 300 mm				
	Bamba (Eastern Gede)	300 – 350 mm				
	Bamba (Rest of Bamba)	350 – 440 mm				
Rabai	Rabai	450 – 520 mm				
	Kambe/Ribe	530 – 620 mm				
	Ruruma	450 – 500 mm				
	Mwawesa	400 – 550 mm				

#### 2.4 General Recommendations

- i. Choosing the right crops to plant:
  - To minimize risks, choose the crops whose seasonal Crop Water requirement within the lower limit value of the predicted range
  - Risk of long dry Spells within the rainy period:
- ii. Length of the rainy period (LRP):
  - The exact length of soil moisture is slightly higher than the LRP depending on soil type and the amount of moisture at the time of cessation.
  - Choose the crop whose length of growing period to maturity is not too far from the LRP.
- iii. Onset dates versus planting dates:
  - For those wishing to dry plant, it is advisable to plant in the 1<sup>st</sup> week of the forecasted onset dates
  - For those wishing to wet plant, it is advisable to wait for the weekly weather update which is more accurate.

#### 3 NOTE:

There are other drivers of variability such as tropical cyclones and Madden Julian Oscillations (MJO) that are predictable only at shorter lead times. It is therefore advised to be checking for updates to the above forecasts.

This outlook should therefore be used together with the 24-hr, 5-day, 7-day, monthly, special forecasts issued by the Kenya Meteorological Department, as well as weekly and monthly County forecasts developed and availed by the County Meteorological Offices.

The County Updates are available at https://meteo.go.ke/node/4942.

Dr. Geoffrey Ogutu

County Director of Meteorological Services, Mombasa & Kilfi Counties