

COUNTY DOWNSCALED FORECAST FOR OND2021



REPUBLIC OF KENYA
MINISTRY OF ENVIRONMENT AND FORESTRY
KENYA METEOROLOGICAL DEPARTMENT
MACHAKOS COUNTY

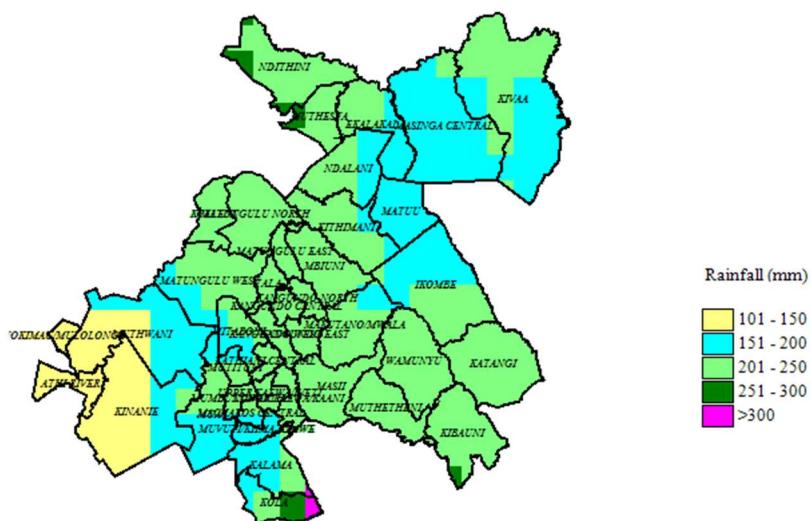
SEASONAL FORECAST FOR OCTOBER NOVEMBER AND DECEMBER 2021

DATE OF ISSUE 9TH SEPTEMBER, 2021

Map of Machakos, forecast for OND 2021

Figure 1. Forecast volume of rainfall in mm in Machakos County during the October, November and December rainy season.

OCTOBER-NOVEMBER-DECEMBER 2021 FORECAST FOR MACHAKOS



SUMMARY OF RAINFALL OUTLOOK

Rainfall in Machakos County during October, November to December, 2021 is likely to be below normal (depressed). The volume of rainfall is expected to be below the average for the past 30 years long term mean (LTM)

For further information, please contact county director of Meteorology- Kyalo Dominic

Mobile: 0721 384 681

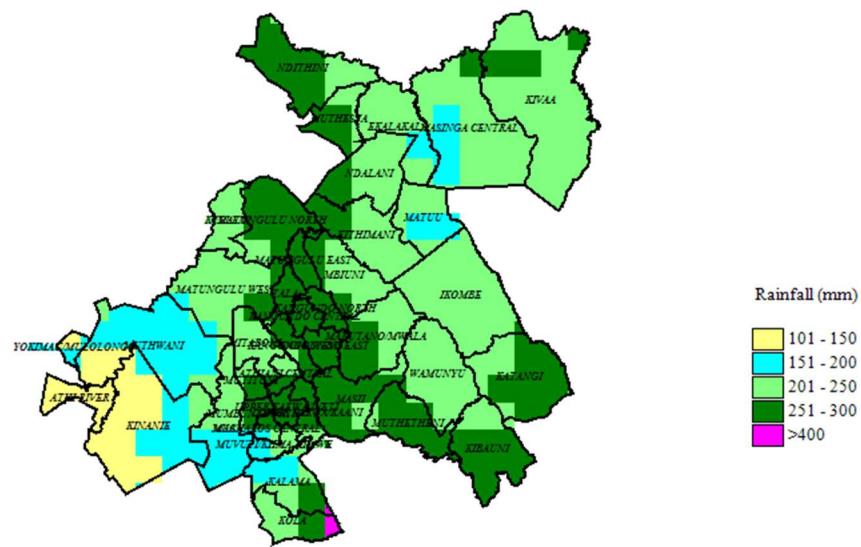
Email: dominicrobert7@gmail.com

The map above fig I show the volume of rainfall in mm that is forecast to fall in each part of Machakos County during the coming season.

Mavoko sub county will be the driest receiving rainfall between 100mm to 200mm.

Matungulu and Machakos town sub counties will be receiving between 150mm to 250mm. Since the seasonal rains may last for only four (4) weeks sustaining a crop may be a challenge. The other sub-counties of Kathiani, Kangundo, Mwala, Yatta and Masinga will be receiving between 200mm to 300mm which will be poorly distributed.

OCTOBER-NOVEMBER-DECEMBER 2021 AVERAGE RAINFALL FOR THE LAST THIRTY YEARS IN MACHAKOS



The map above (fig2) shows normal rainfall in mm each ward of county during the same three-month period normal rainfall considered to be the average volume of rainfall that fell during the same three-month period over the 30-year period from 1981-2010.

to find out whether rainfall in a particular location is likely to be higher or lower than normal or simply in line with the historical average compare the volume of rain in mm forecast for this location in fig 1 with the normal volume of rainfall in mm for the same location in fig 2.

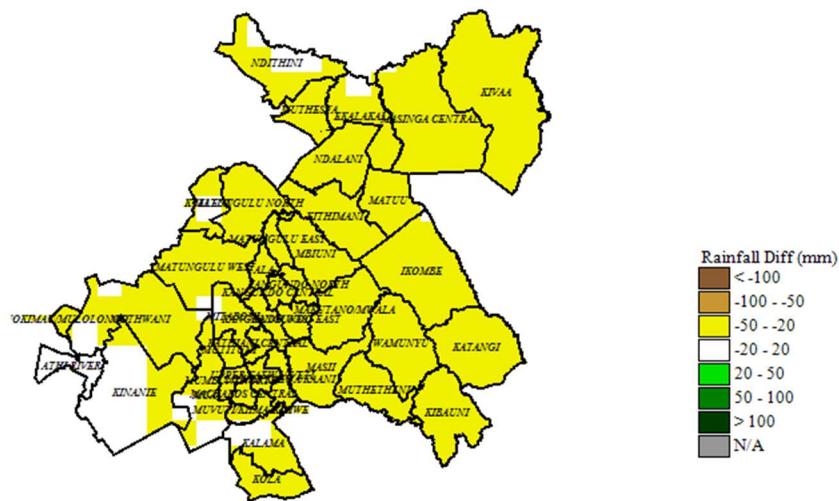
Normal rainfall does not mean good or bad rainfall it is simply an average amount that smooth's out the variations recorded between one year and another.

This map shows the average rainfall experienced during the same three-month period over 30 years between 1981 and 2010. figure 2 normal rainfalls in mm in Machakos County during October, November and December rainy season.

Machakos County Rainfall Difference

Fig 3. The figure showing the range of rainfall difference in **mm** between the forecast and the LTM_s long term means (1981 – 2010). Mostly green meaning we expect more rain.

DIFFERENCE BETWEEN AVERAGE RAINFALL AND OND 2021 FORECAST FOR MACHAKOS



- Start of rainy season (onset) in all the county will be between the **2nd week of November to 3rd week of November**.
- End of rainy season (cessation) in all the county will be between the **2nd week to 3rd week of December**.

Distribution of rainfall over time

The **October November and December 2021** rainfall is expected to be **poorly distributed** both in time and space.

POTENTIAL IMPACTS OF THE OND 2021 RAINS

In view of the forecasted rainfall, many sectors are likely to be impacted in various ways-

- **Agriculture, livestock development and food security sectors.**

Depressed rainfall expected over all the county is not favorable for agricultural activities. So proper advice from the technical personnel from the Ministry of agriculture will be necessary and of great importance.

- **Environment and natural resources**

This sector needs to be improved by increasing the forest cover to 10% by the year 2022

N.B: This forecast should be used in conjunction with the five –day ,weekly forecasts including updates, advisories and alerts by the department.