



**Kenya Meteorological Department
P.O. Box 30259-00100**

THARAKA NITHI COUNTY

MARCH-MAY 2023 SEASONAL AGRO-WEATHER ADVISORIES

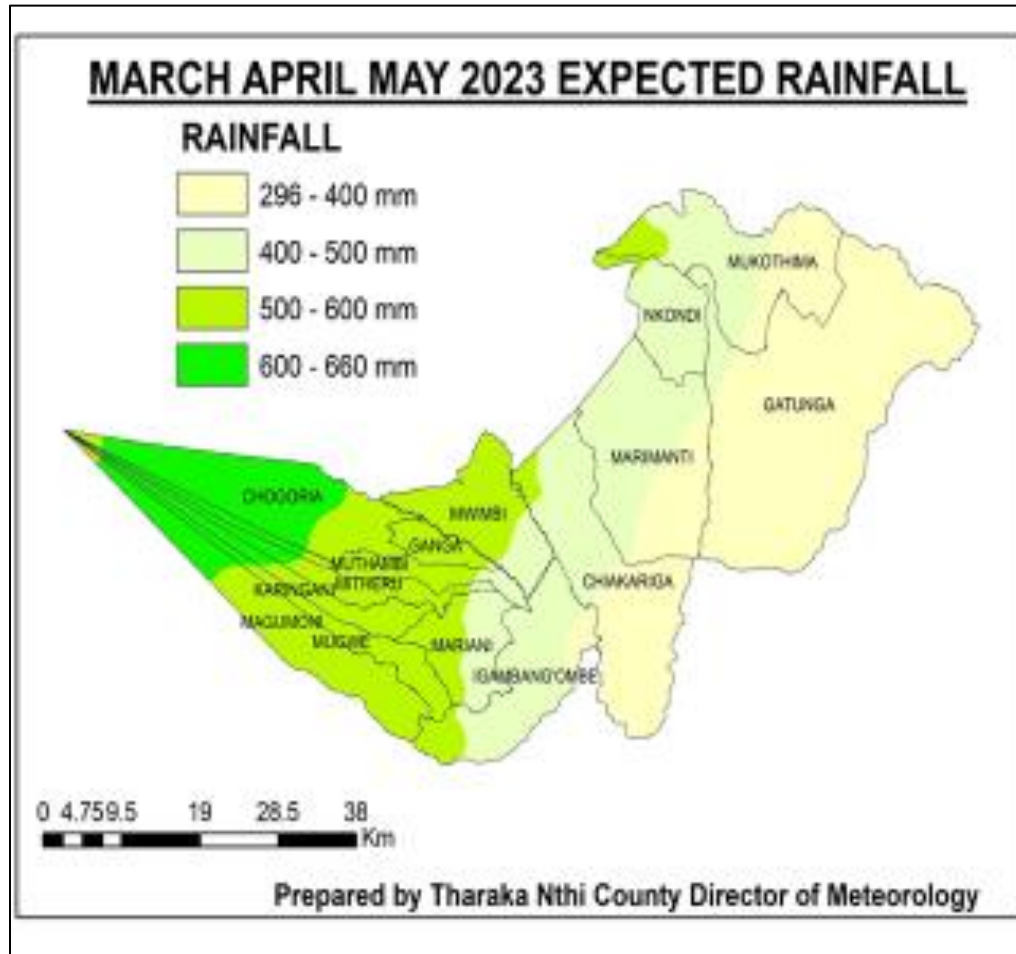
Advisories agreed at Participatory scenario planning Workshop held on 16 March 2023 and sponsored by the KCEP-CRAL programme

For More enquiries, Contact

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- 2) Ward, Subcounty or County Agricultural Extension Offices*

1 MAM 2023 Seasonal Forecast

1.1 PROBABLE TOTAL SEASONAL RAINFALL



1.2 HIGHLIGHTS

The MAM 2023 rainy season is expected to be below normal to near normal with onset (17th to 31st March). The rain is expected to be poorly distributed both in time and space (long dry days within season). The upper and middle zone of county are expected to receive near normal rainfall while the lower zones are expected to receive below normal rainfall. The cessation is expected to be between 22nd to 30th may 2023.

1.3 Summary of MAM 2023 Seasonal Forecast by Ward

SNO	Sub county	Ward/ climatic zone	Seasonal Amount in mm		Probable onset dates (Range 17 th to 31 st March	Probable Cessation dates (Range 24 th to 31 st May	Probable Length of Rain Period	Probable distribution
			Normal (Long term mean 1991- 2020)	Forecast for MAM 2023				
1 1	Chuka/Mara Chuka/Mara	Ganga	500-600	500-600	Between 17 th -31 st March	Between 24 th – 31 st M May	48-58 days	long dry spells within the rain season that could affect vulnerable crops
		Mwimbi	500-600	500-600				
		Low Mwimbi	400-500	400-500				
		Ganga	500-600	500-600				
		Low Ganga	400-500	400-500				
		Igambangombe	350-400	296-400				
		Igambangombe	400-500	400-500				
2	Tharaka North	Chiakariga	350-400	296-400				
		Chiakariga	400-500	400-500				
		Gatunga	350-400	296-400				
		Marimanti	400-500	400-500				
		Marimanti	350-400	296-400				
3	Tharaka South	Nkondi	400-500	401-500				
		Mukothima	350-400	296-400				
		Mukothima	400-500	400-500				

1.4 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:
 - At the moment we cannot reasonably predict the actual length of the dry spells and their impacts on various crops
 - We therefore advise farmers to choose crops that are least vulnerable to such long dry spells
 - Length of the rainy period (LRP):
 - The exact length of soil moisture is slightly higher than the LRP depending on crop type, 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.
- ii) Onset dates versus planting dates
 - For those wishing to dry plant, it is advisable to plant in the 1st week of the predicted onset dates
 - For those wishing to wet plant, it is advisable to wait for the weekly weather update which is more accurate
 - Dry or Wet Plant when the **weekly forecast** indicates at least **3 days** with rain of a total amount **greater than 20 mm**.

2 Agronomic Advisories

2.1 General Advisories:

- 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:
 - At the moment we cannot reasonably predict the actual length of the dry spells and their impacts on various crops
 - We therefore advise farmers to choose crops that are drought tolerant especially in the lower zone and early maturing variety in the upper zone.
- ii) Planting dates
 - Farmers in the upper zone (Maara & Chuka Sub-Counties) are advised to do dry planting, from **15th -18th March**.
 - Farmers in the lower zone (Tharaka North and South Sub-Counties) are advised to do wet planting and it is advisable to wait for the weekly weather update which is more accurate; Wet Plant when the **weekly forecast** indicates at least **3 days** with rain of a total amount **greater than 20 mm**.

2.2 General Responsibilities

- Farmers to implement the advisories
- Agricultural Officers to advise farmers
- Input suppliers to ensure inputs are available on time
- Community Extension Volunteers to advise farmers
- Kenya Met Department to provide weather updates (weekly, other)
- Agriculture, Livestock and Fisheries development
- Insurance companies

2.3 General Farm Activities

- Early land preparation: **before 17th March**
- Repair of soil and water conservation structures: Terraces, Pits, Basins
- Repair of water storage structures: Desilting of farm ponds, weirs, water tanks, water pans, Gutters
- Practices: Conservation Agriculture (CA): Ripping, Planting stations.
- Pre-germination (seed soaking); Seed preparation
- Scale up manure and fertilizer application (basal & top dressing)
- Timely weed control
- Timely and proper pests and disease control.
- Proper spacing of crops
- Plant ecologically suitable certified seeds as indicated above
- Pitting for fruits and forest Trees

2.4 SPECIFIC AGRO-WEATHER ADVISORIES FOR THE UPPER and MIDDLE ZONES

Crops to plant	Wards: Lower Ganga, Lower Mwimbi, Upper , upper Nkondi Upper Mukothima, Upper marimanti, Upper Chiakariga Probable MAM 2023 amount: 400-500 mm
1. Maize	DHO ₂₋₄ , Duma43, Sungura, Kishindo, Haraka, Duma series, Pioneer and DK series,
2. Beans	KatB1, GLP 92, KatX56, Kat B9, Locals, KatX69, Nyota,
3. Cow Peas	K80, M66, Locals Ken Kunde, Kunde mboga
4. Pigeon peas	Maintain the existing short rains crop; - ICEAP 00936, ICEAP 00554
5. Cassava	Maintenance of existing crop (KME 1, Mucericeri, KME 61,
6. Sweet Potatoes	Locals, KSP 20, Kemp 10, SPK 004
7. Sorghum	Gaddam, Serena, Seredo, Kari Mtama 1, Macia, Sila
8. Millets	Finger millet, Pearl Millet

2.5 Specific agro-weather Advisories for the Lower zones

Crops to plant	Marimanti, Gatunga, Chiakariga, Lower Nkodi, Lower Mukothima Probable MAM 2023 amount: 296-400mm
1. Cow Peas	K80, M66, Locals Ken Kunde, Kunde mboga, Kunde Tamu, Kunde Soko
2. Pigeon peas	Maintain the existing short rains crop; - ICEAP 00936, ICEAP 00554
3. Cassava	Maintenance of existing crop (KME 1, Mucericeri, KME 61, Red Stemmed Varieties, Locals)
4. Sorghum	Red sorghum, Serena, Seredo, Kari Mtama ,GADAM,
5. Millets	Finger millet, Pearl Millet
6. Green Grams	N26, KS20, Karemba, Dengu-bishara

2.6 General Analysis of Hazards/Risks and Opportunities (agriculture)

Hazards /risks	Opportunities	Proposed actions
<ul style="list-style-type: none"> ● Moderate floods (flash floods) ● Soil erosion ● Isolated incidences of water logging ● Outbreak of crop pests and diseases ● Leaching of nutrients ● False on-set of rains ● Poor germination and loss seeds ● Destruction of farm structures ● Low land productivity ● Low crop yields ● Loss of inputs and poor crop establishment ● Food insecurity and poor farm incomes 	<ul style="list-style-type: none"> ● Maximising yields and income through planting recommended varieties ● Increased area under crop and farm forest cover ● Water harvesting for crop production and household use ● Availing of certified farm inputs by agro-dealers ● Kitchen gardening ● Insuring of crops against 	<ul style="list-style-type: none"> ● Establish new and Repair existing soil and water conservation structures and farm facility structures ● Staggered planting ● Timely procurement of inputs ● Embrace Integrated Pest Management and Integrated Crop Management ● Procurement of crop insurance

3 Tharaka Nithi wards

