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## **ADVISORIES FOR THE MARCH-APRIL-MAY (MAM) 2024 RAINY SEASON**

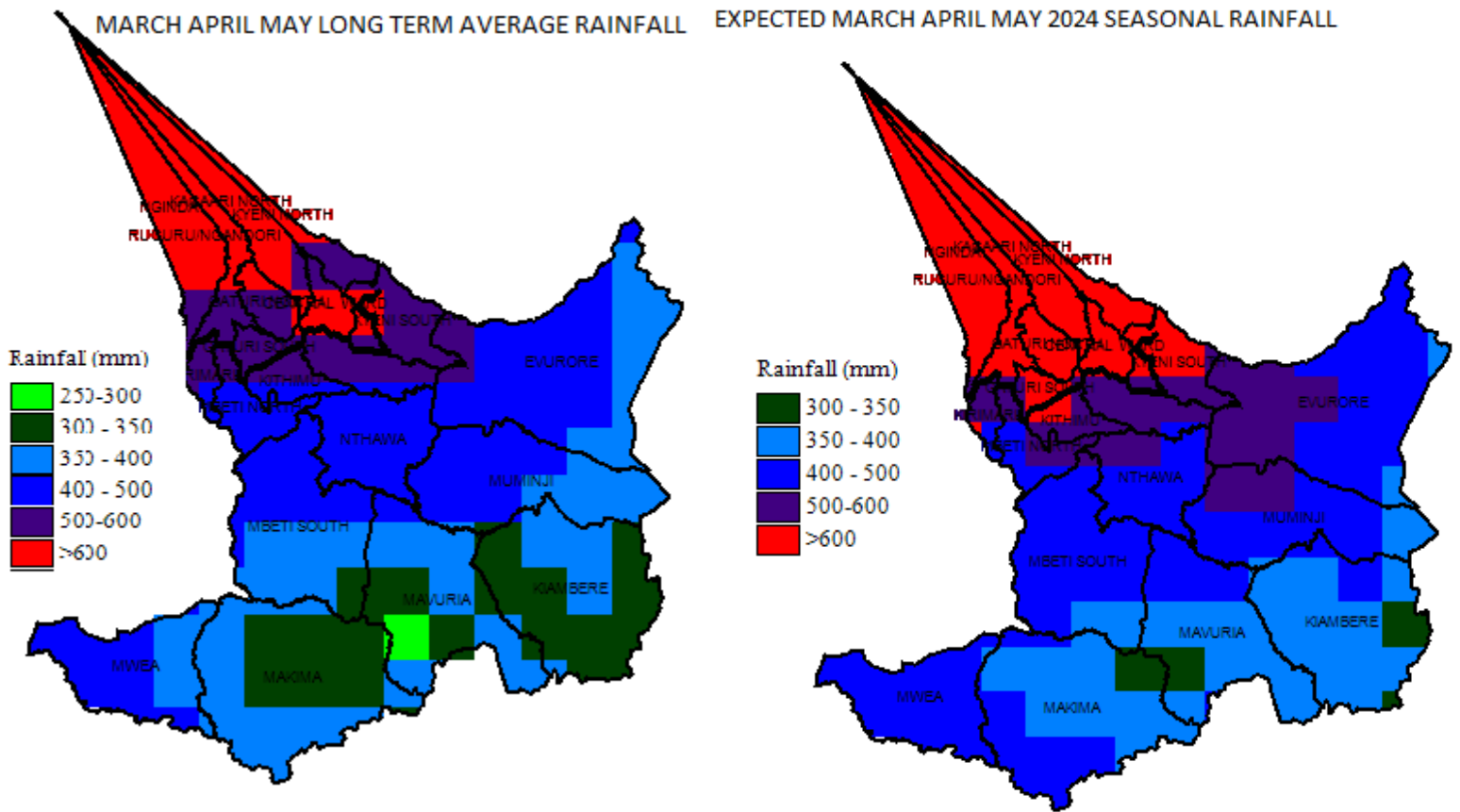
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## 1 HIGHLIGHTS

- *The March to May period is the major rainfall season over Embu County*
- *Normal to above-normal rainfall is expected in the upper altitude zones (on the slopes of Mt. Kenya) while Near Normal rainfall is likely over most parts of the middle and lower altitude zones of Embu County.*
- *The seasonal rainfall onset is expected between 15<sup>th</sup> and 28<sup>th</sup> March 2024 and Cessation between 22<sup>nd</sup> May and 7<sup>th</sup> June 2024.*
- *Generally, distribution of the rainfall is expected to be fair to good both in time and space in Embu County.*
- *The peak rainfall is expected in the Month of April 2024.*
- *The temperature forecast indicates that warmer than average temperatures are expected over the whole County.*

## 2 SPATIAL MAP OF PROBABLE TOTAL SEASONAL RAINFALL,



Prepared by Embu County Meteorological Director

### 3 MAM 2024 Seasonal Forecast Table by Wards (see exact zones in a Ward from above maps)

Subcounty	Ward/climatic zone	Normal MAM (LTM) amounts mm	Forecast for MAM 2024	Probable onset dates	Probable cessation dates
Runyenjes	Kyeni North	> 600	>600	Between 15 <sup>th</sup> and 28 <sup>th</sup> March 2024.	Between 22 <sup>nd</sup> May and 7 <sup>th</sup> June 2024.
	Kyeni North	500 – 600	>600		
	Kagaari North	>600	>600		
	Kagaari North	500 – 600	>600		
	Gaturi North	>600	>600		
	Gaturi North	500 – 600	>600		
	Runyenjes Central	>600	>600		
	Runyenjes Central	500 – 600	>600		
	Kagaari South	400 – 500	400 – 500		
	Kagaari South	500 - 600	500 – 600		
	Kagaari South	>600	>600		
	Kyeni South	500 - 600	500 – 600		
	Kyeni South	>600	>600		
Mbeere North	Muminji	350 – 400	350 - 400	Between 15 <sup>th</sup> and 28 <sup>th</sup> March 2024 But check weather updates from KMD website <a href="https://meteo.go.ke/node/4942">https://meteo.go.ke/node/4942</a>	Between 22 <sup>nd</sup> May and 7 <sup>th</sup> June 2024.
	Muminji	400 - 500	400 – 500		
	Muminji	400 - 500	500 - 600		
	Evurore	350 - 400	350 – 400		
	Evurore	400 – 500	400 -500		
	Evurore	400 - 500	500 - 600		
	Nthawa	400 - 500	400 - 500		
	Nthawa	400 - 500	500 - 600		
Mbeere South	Mwea	350 - 400	400 - 500	Between 15 <sup>th</sup> and 28 <sup>th</sup> March 2024 But check weather updates from KMD website <a href="https://meteo.go.ke/node/4942">https://meteo.go.ke/node/4942</a>	Between 22 <sup>nd</sup> May and 7 <sup>th</sup> June 2024.
	Mwea	400 - 500	400 - 500		
	Makima	250 – 300	300 - 350		
	Makima	300 – 350	350 - 400		
	Makima	350 - 400	400 - 500		
	Mbeti South	300 – 350	350 – 400		
	Mbeti South	350 – 400	400 – 500		
	Mbeti South	400 – 500	400 - 500		
	Mavuria	250 – 300	250 – 300		
	Mavuria	300 – 350	300 – 350		
	Mavuria	350 – 400	400 – 500		
	Kiambere	300 – 350	300 – 350		
	Kiambere	350 – 400	350 – 400		
Kiambere	350 - 400	400 - 500			

## 4 Recommendations

### a) Choosing the right crops to plant

- To minimize risks, choose the crops whose seasonal crop water requirements is within the lower limit value of the predicted range.

### b) Onset dates

- The onset dates predicted in this seasonal forecast should be used in conjunction with weekly Weather forecasts/updates which are more accurate.
- Wet Plant when the **weekly forecast** indicates at least **3 days** with rain of a total amount **greater than 20 mm**.
- For those wishing to dry plant, it is advisable to plant in the 1<sup>st</sup> week of the predicted onset dates

## 5 Agronomic Advisories

### 5.1 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

### 5.2 General Farm Activities

- Early land preparation: before 15 march
- Repair of soil and water conservation structures: Terraces, fanya juu, benches water pans Zai pits, etc
- 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

### 5.3 Specific agronomic Advisories for the Upper zones

Crops to plant	Wards (Runyenjes Central, kagaari north, Kyeni North, Nginda, Gaturi north and Ruguru Ngandori)
1. Maize	Hybrid – 5 series, Pannar 15, Pioneer 30G19,513,614,deckalb,duma43
2. Beans	Kat (B1, B9, B69 & B56), Nyota and Angaza ,redharycot,
3. Fodder	Napier grass (Bana & Kakamega I, II & III varieties) under Tumbukiza method, Bracharia, Rhodes grass, Calliandra, Desmodium and Mulberry,lucern
4. Tea	Proper management
5. Coffee	Proper management, working with disease resistant

### 5.4 Specific agro-weather Advisories for the Middle zones

Crops to plant	Wards: (Kagaari South, Gaturi south, Kyeni South Kirimari , Mbeti North and Kithimu)
1. Maize	Duma 41, Duma 43, DH04, KDV4 and KDV6, Pioneer 2848, Simba 61, WS403, Pannar 3M-05 & 4M-19),deckalb, makueni ,sungura
2. Beans	Mwende, mwitemania, gachango, KATB1, KTB9, KATX69, KATX56, Nyota,redharycot ,mama safi,ka-meru
3. Sunflower	Encouraged to plant for oil and animal feeds
4. Cassava	Ndolo, Mucericeri and Tajirika,
5. Sweet Potatoes	KSP 004, KEMB 10 and Bungoma
6. Fruits	Encouraged to plant and do proper maintenance
7. Fodder	Napier grass (Kakamega I, II & III varieties) under Tumbukiza method, Bracharia (basilisk and MG4), Rhodes grass, Desmodium, Tithonia, Sweet potato vines (Musinya, X-Mukurweini), Fodder trees(Calliandra, Leucaena & Mulberry. Farmers advised to conserve excess fodder

### 5.5 Specific agro-weather Advisories for the Lower Zone

Crops to plant	Wards( Mbeti South, Evurore, Muminji, Nthawa, Mavuria, Makima , Mwea and Kiambere)
1. Maize	Sungura,,deckalb,duma43 DeKalb ,Duma 43 DH02Sungura F1Haraka101DK777
2. Beans	Kat (KATB 1 & KATB 56), Nyota and Angaza ,redharycot, GLP, Raila Wairimu
3. Sorghum	Gadam,, millet
4. Millet	PM 1, 2 & 3
5. Cow peas	M66 & KVU 27-1
6. sunflower	Encouraged to plant for oil and animal feeds
7. Green grams	N26, KS 20, karembo.Biashara,Ndengu tosha
8. Vegetables	Cow peas leaves
9. Cassava	Ndolo, Mucericeri and Tajirika
10. Sweet Potatoes	Locals, KSP 20 & 20, Kemp 10, SPK 004 local kingee.
11. Fodder crop/trees	Sudan grass, fodder sorghum, Leucaena & Mulberry
12. Fruits trees	Mango, pawpaw and orange trees to be well managed

## 5.6 General Analysis of Hazards/Risks and Opportunities (agriculture)

Hazards /risks	Opportunities	Proposed actions	Actors/Responsible
<ul style="list-style-type: none"> <li>• Moderate floods (flash floods)</li> <li>• Soil erosion</li> <li>• Water logging in areas like Makima and Mwea</li> <li>• Outbreak of crop pests and diseases</li> <li>• Leaching of nutrients</li> <li>• False on-set of rains</li> <li>• Poor germination and loss of seeds</li> <li>• Destruction of farm structures</li> <li>• Low land productivity</li> <li>• Low crop yield</li> <li>• Loss of inputs and poor crop establishment</li> <li>• Food insecurity and poor farm incomes</li> <li>• Gulley formation</li> </ul>	<ul style="list-style-type: none"> <li>• Maximizing yields and income through planting recommended varieties</li> <li>• Increased area under crop and farm forest cover</li> <li>• Water harvesting for crop production and household use</li> <li>• Availability of subsidized farm input</li> <li>• Availing of certified farm inputs by agro-dealers</li> <li>• Kitchen gardening</li> <li>• Crop insurance against crop loss</li> <li>• Value addition</li> <li>• Aggregation of cereals</li> </ul>	<ul style="list-style-type: none"> <li>Establish new and Repair existing soil and water conservation structures and farm facility structures</li> <li>Early land preparation and planting</li> <li>Staggered planting</li> <li>Timely procurement of inputs</li> <li>Embrace Integrated Pest Management and Integrated Crop Management</li> <li>Use of organic manure</li> <li>Procurement of crop insurance</li> </ul>	<ul style="list-style-type: none"> <li>WAO</li> <li>WLO</li> <li>Village based advisors</li> <li>Private extension service providers</li> <li>VBA's</li> </ul>

## 5.7 Specific advisories for Livestock farmers

Hazard/Risks	Opportunities	Recommended Actions	RESPONSIBLE
<ul style="list-style-type: none"> <li>Livestock diseases, Parasites infestation, Poor pasture and fodder establishment</li> <li>Inadequate pasture and fodder</li> <li>Reduced milk production</li> <li>Low birth rates</li> <li>Poor body condition</li> <li>Low prices of animals</li> <li>Reduced water availability</li> <li>Reduced household income</li> </ul>	<ul style="list-style-type: none"> <li>Feed Conservation</li> <li>Breed improvement-for adaptable breeds (Magic 50)</li> <li>Value addition</li> <li>Water harvesting and storage</li> <li>Increase of small stock number</li> <li>Breed improvement-for adaptable breeds</li> <li>Value addition</li> <li>Water harvesting and storage</li> <li>Increase of small stock number</li> <li>Feed Conservation</li> <li>Feed formulation</li> </ul>	<ul style="list-style-type: none"> <li><b>Pastures/fodder to be established</b></li> <li>Bracharia species</li> <li>Sorghum Fodder</li> <li>Sudan grass</li> <li>Napier grass</li> <li>Baby corn</li> <li>Desmodium</li> <li>Calliadra</li> <li>Boma rhodes</li> <li>Sweet potatoes- vines</li> </ul>	<ul style="list-style-type: none"> <li>Farmers</li> <li>WLPO</li> <li>Community Extension</li> <li>Volunteers,</li> <li>Inputs suppliers</li> <li>Service providers</li> </ul>

## 5.8 Advisories for Other Livelihood Sectors

SECTOR	Impact	Hazards/ Risk	Opportunity	Intervention/Actions	Responsible
Water resources	Water harvesting	Inadequate water infrastructures - Flash flood	Water harvesting & conservation	Water trucking, adopt Water harvesting structures e.g. dams, ponds, water tanks trenches	Dept of water and development partners
Disaster management	Few disasters likely to happen	Foods and whirl winds	Leverage on salvaged produce	Emergency /contingency plans	National Drought Management Authority, NGOs, Governments, Faith Based Organization
Wildlife /forestry	Increased Human /wildlife conflict, Incidences of wild fire breakout.	Loss of livelihood  Loss of wildlife	Conservation and strict protection of the current biodiversity	Human /wildlife conflict minimization through budgetary allocation for compensation, electric fencing, surveillance and enforcement, Afforestation programs	KWS National & County Government Farmers
Trade, industry and finance	commodity price increase Reduced per capita incomes	Famine/ drought/starvation	Prudent utilization of current food reserves, Importation of essential food commodities	Subsidized trader Reduced credit interests	Dept of Trade, Business Community, National & County Government
Energy	Energy infrastructure network collapse	Electrocution, Temporary blackouts	Maintenance of KPLC infrastructures, Investment on alternative energy sources	Allocate emergency funds, subsidy on fuel especially for domestic use	Kenya Power & Lighting Company
	Power outages	Short-circuiting	Energy saving	Alternative supply e.g. solar, generators	Kenya Power & Lighting Company
	Increased cost of Energy	Reduced electric energy generation	Intensified use of solar energy	Power rationing, Subsidies on solar power equipment	
Transport /communication	Poor transport & communication networks	Flash floods	Road for water harvesting	Diversion channels Emergency funds /personnel, re clogging of culverts	Department of Transport, NTSA, National Government, County Government



<b>SECTOR</b>	<b>Impact</b>	<b>Hazards/ Risk</b>	<b>Opportunity</b>	<b>Intervention/Actions</b>	<b>Responsible</b>
Health	Increased Food security	decreased Malnutrition, decreased food deficient related ailments	Leverage on Nutrition, Increase food supplements for young children and the elderly	Emergency /mobile clinic, Increase Health personnel, Enhanced public health activities, Prepositioning of drugs in health facilities	Ministry Of Health, Private Hospitals, Stakeholders
Education	Enough foods	Poor school infrastructure due to parent's low incomes	Initiation of School feeding Program	Early warning and preparedness	Department of Education, NGOs, Faith Based Organizations, Parents

## **5.9 How to get Weather Updates**

You can get weekly weather updates from the Counties folder in the KMD Website <https://meteo.go.ke/node/4942> and via SMS messages every Monday evening or early Tuesday morning. For More information, Contact, the Nearest Agric Office: Ward, Sub County & County-Embu. And County Meteorological Office, Embu mobile +254705252469

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## 6 Annex 1: Embu County Wards Map

