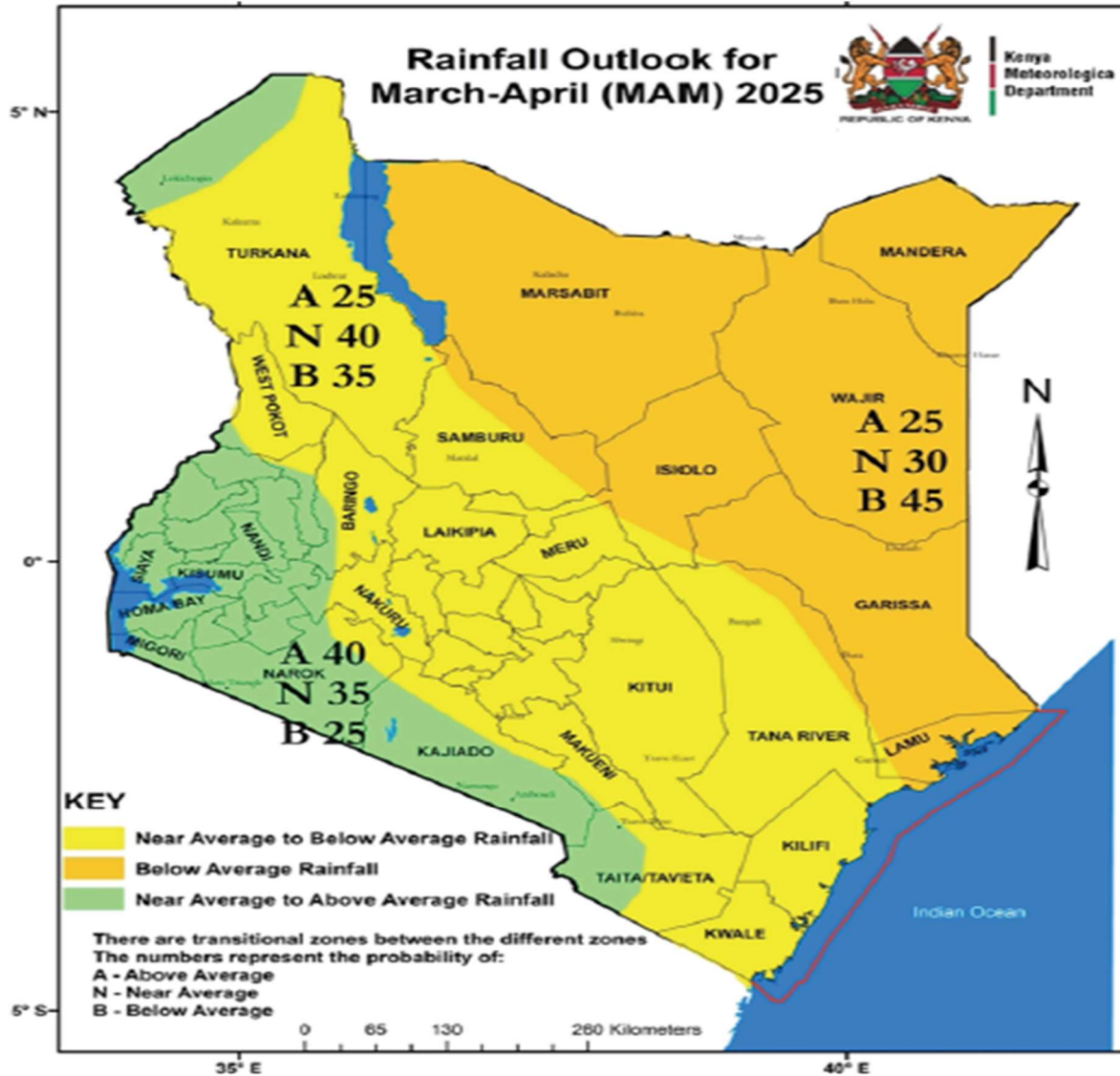


MAM 2025 SEASONAL FORECAST FOR MAKUENI COUNTY

MAM 2025 NATIONAL FORECAST



IMPORTANCE OF CLIMATE INFORMATION

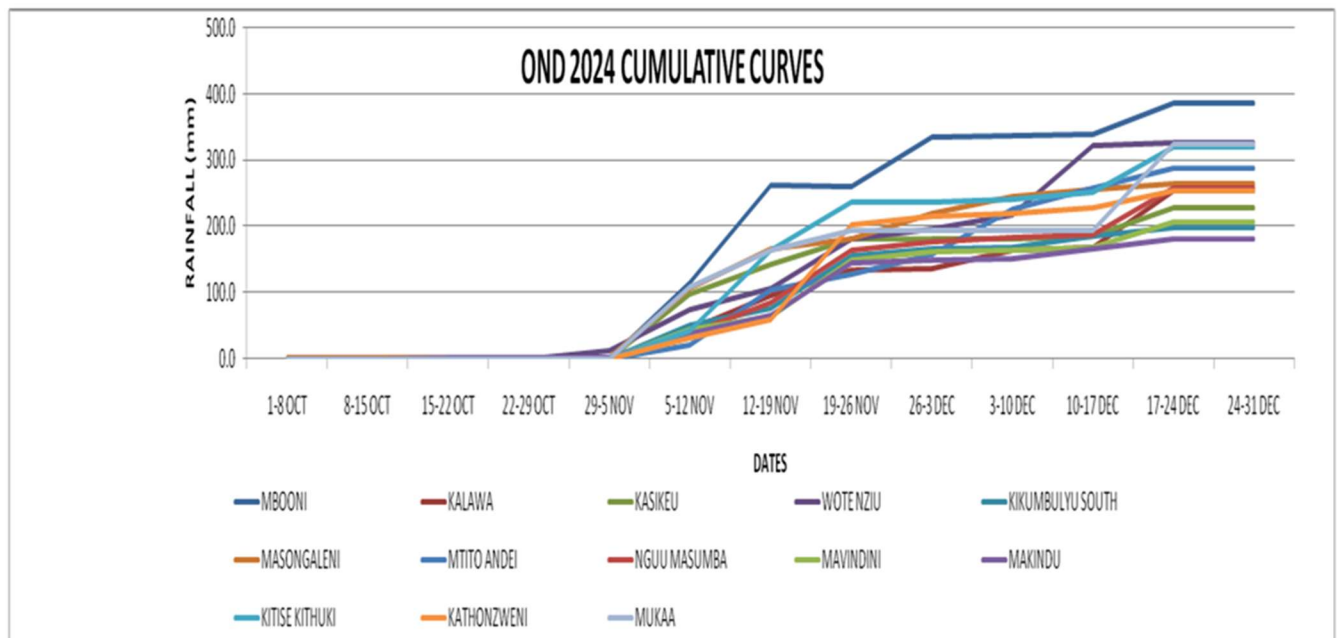
- Climate information is very vital for supporting adaptation, mitigation and resilience building efforts to climate change impacts (Adaptation & Mitigation pathways to climate change).
- Daily (24 hour) forecasts are crucial in informing daily operational activity planning.
- Weekly (7 day) forecasts guide planning of weekly activities.

- Monthly outlooks (30 day) forecasts are quite crucial in guiding planning of monthly programmes and activities.
- Seasonal (90 day) forecasts are critical in guiding decision-making processes for various sectors with the aim of minimizing any predicted climatic risks in various localities.

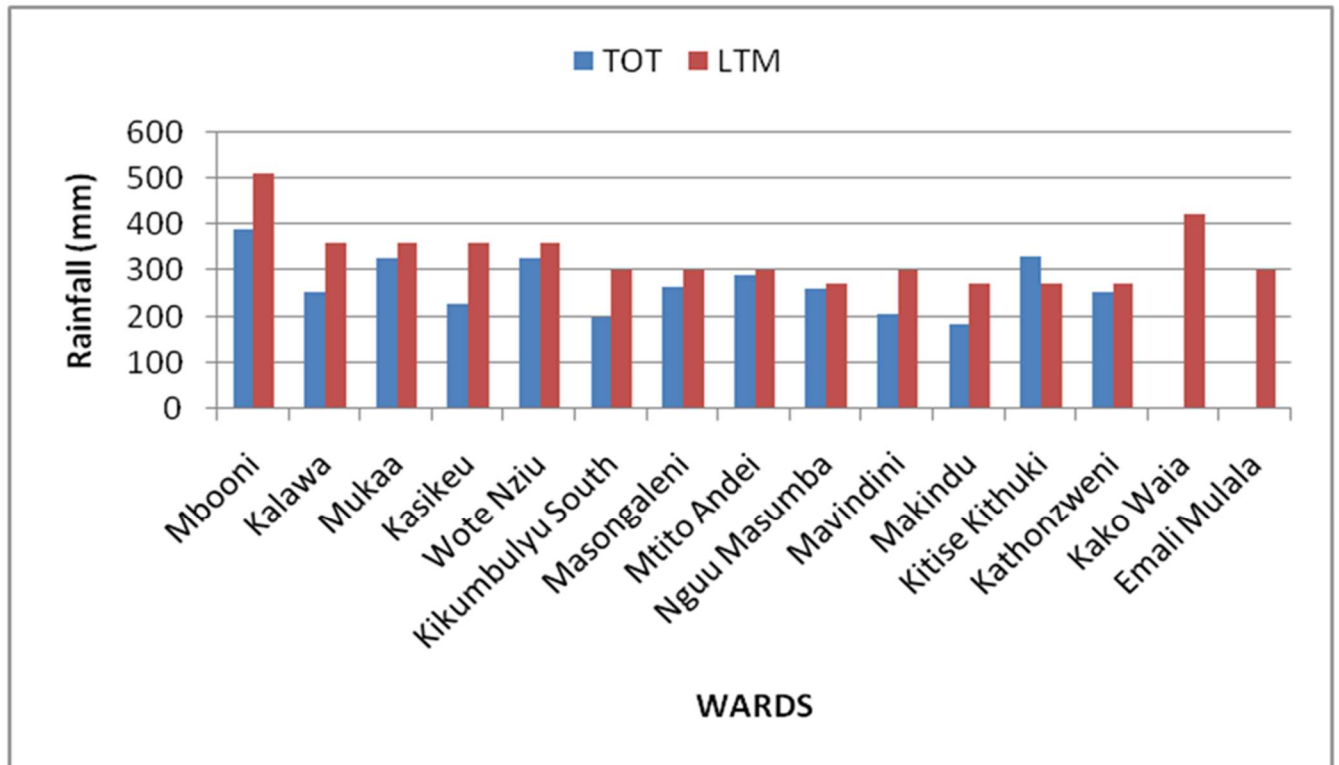
REVIEW OF THE OND 2024 SHORT RAINS SEASON.

- The OND 2024 Seasonal rains onset was late during the 1st dekad of November in almost all the wards within Makueni County.
- The onset(start) was between 6th to 8th November 2024.
- Cessation(stop) was the 17th to 20th December ,2024.
- The distribution of the seasonal rains was poor in the entire county both in time and space (poor temporal and spatial distribution).
- The season was generally characterized by long dry spells which had some negative implications on the planted crops.
- A tropical cyclone christened “Chido” developed in Indian Ocean and brought in some moisture influx in our county particularly on 18/12/2024 in most wards within Makueni County after it made a land fall in Mozambique coast.

October – November – December 2024 CUMULATIVE CURVES.



OND 2024 RAINFALL PERFORMANCE VS LONG TERM AVERAGES.

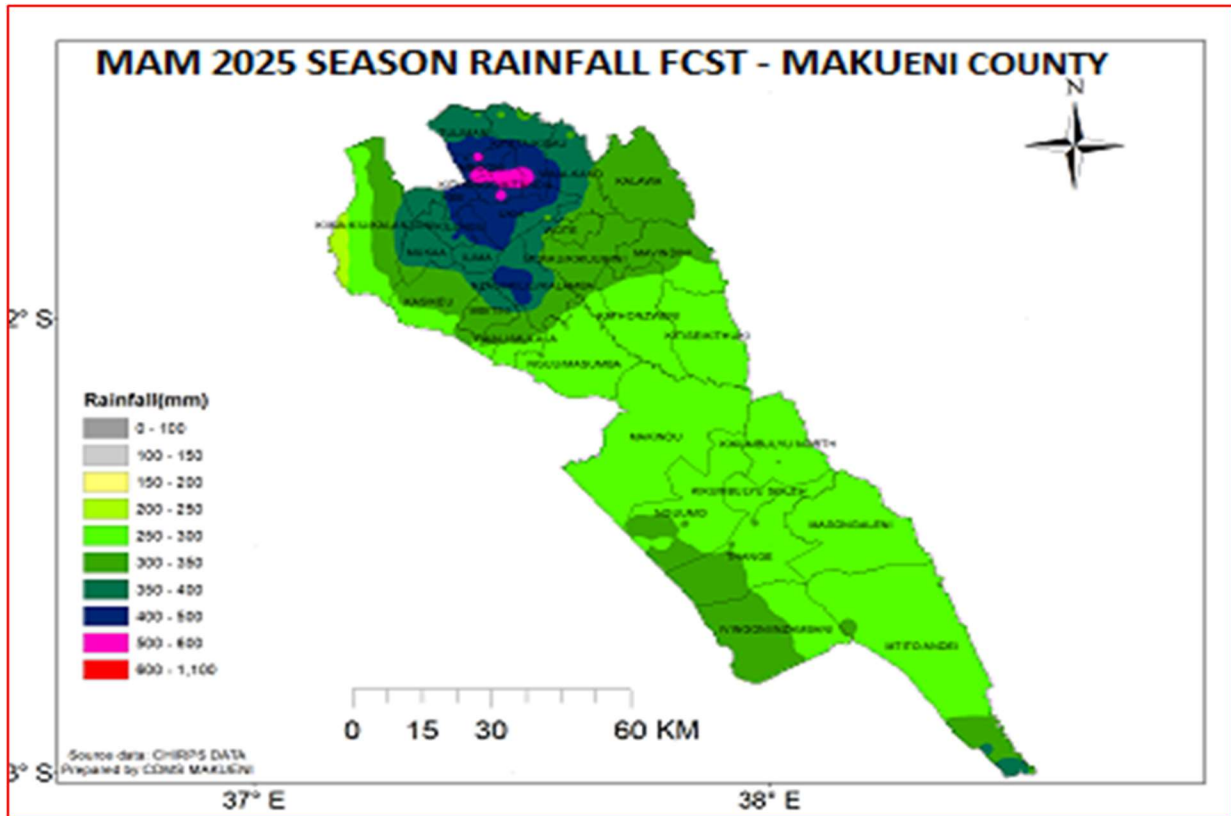


EXPECTED MARCH -APRIL - MAY 2025 LONG RAINS SEASONAL FORECAST – HIGHLIGHTS.

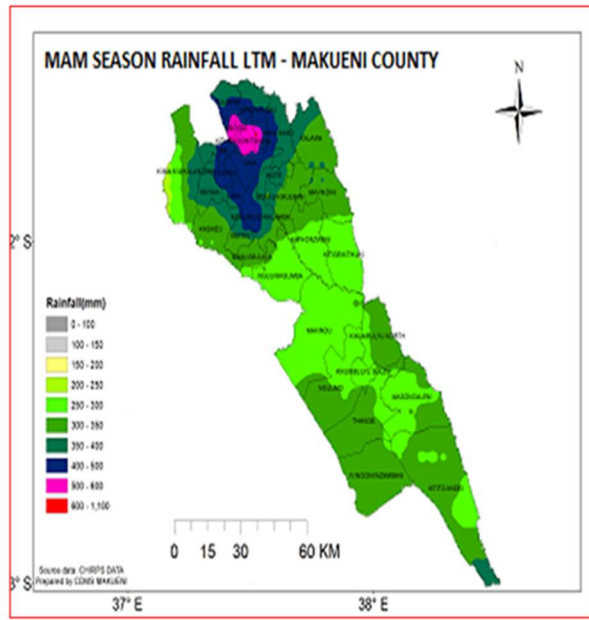
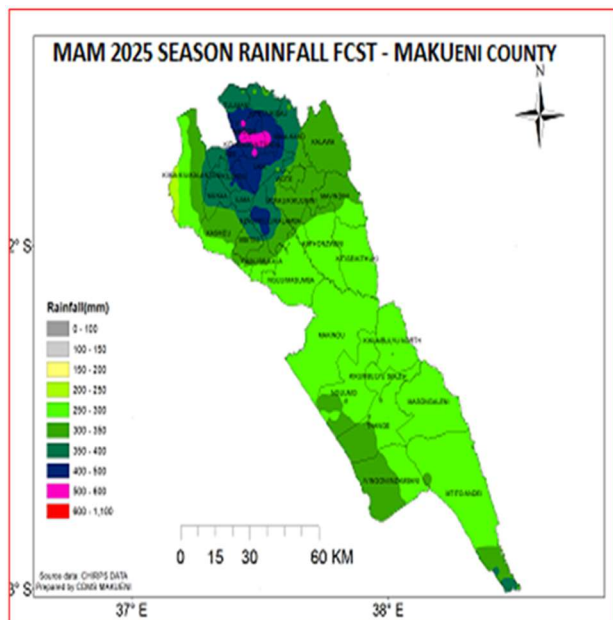
- The expected rainfall amounts is likely to be Near Normal to Below long-term average for the season.
- Onset is expected between 24th March to 6th April 2025.
- Distribution is predicted to be poor to fair both in time and space.
- Occasional storms are likely to occur during the season.
- Occasional dry spells are predicted to occur within the season.
- Peak rainfall expected in the month of April 2025.
- Cessation expected between 19th to 31st May 2025.

NB: It is important to note that currently ENSO-Neutral conditions are present in the central and eastern tropical Pacific Ocean and a neutral “Indian Ocean Dipole (IOD)” is currently present in the Indian Ocean.

EXPECTED MARCH – APRIL – MAY 2025 LONG RAINS SEASONAL FORECAST



EXPECTED MARCH – APRIL – MAY 2025 LONG RAINS SEASONAL FORECAST VS LONG TERM AVERAGE RAINFALL



POTENTIAL IMPACTS OF THE MAM 2025 LONG RAINS SEASON.

- In view of the forecast Near Normal (N) to Below Normal (B) seasonal rainfall in Makueni County, for the upcoming rainfall season, many sectors will be impacted in different ways.
- This forecast is in itself an early warning to minimize climate risks through early actions.
- With adequate preparations, the county can avoid some of the likely negative impacts, while taking full advantage of the positive ones.
- In order to prepare our community members to be weather-ready, climate-smart and water-wise in the face of a changing climate, more efforts should be put in place by our governments and all stakeholders in Makueni County to sensitize community members on the same.

ONSET AND CESSATION DATES FOR MAM 2025 SEASONAL RAINS.

	UPPER ZONE (WARDS: Mbooni, Kithungo/Kitundu, Kilungu, Ilima, Kee, Ukia	MIDDLE ZONE (Wards: Tulimani, Kako/Waia, Mbitini, Kisau/Kiteta, Kasikeu. Kiima kiu/Kalanzoni, Nzaui/Kilili/ Kalamba, Emali/Mulala, Wote,/Nziu, Muvau/Kikumini, Mukaa	LOWER ZONE (Wards: Makindu, Nguu/Masumba, Kalawa, Kikumbulyu South, Kikumbulyu North, Nguumo, Thange, Nzambani/Ivingoni, Mavindini, Kathonzweni, Kitise/Kithuki, Masongaleni, Mtito Andei
AMOUNT RANGE	350-600 mm	200-500 mm	250-350 mm
ONSET DATES	24 th March to 6 th April 2025.	24 th March to 6 th April 2025.	24 th March to 6 th April 2025.
CESSATION DATES	19 th to 31 st May 2025.	19 th to 31 st May 2025	19 th to 31 st May 2025
RAINFALL DISTRIBUTION	Seasonal rainfall distribution is expected to be poor to fair both in time and space.	Seasonal rainfall distribution is expected to be poor to fair both in time and space.	Seasonal rainfall distribution is expected to be poor to fair both in time and space.
RAINFALL DURATION*	45 – 70 days	45 – 70 days	45 – 70 days

SECTORAL ADVISORIES.

AGRICULTURE, LIVESTOCK, IRRIGATION AND FOOD SECURITY SECTORS

- The near normal to below normal rainfall amounts and the length of the forecast seasonal period (LRP) coupled with poor distribution both in time and space is likely to negatively affect agricultural production and productivity especially in the middle and lower zones of Makueni County.

- Farmers are encouraged to adopt climate smart technologies, innovations and GAPs in order to counter the anticipated climatic risks.
- Extension officers are advised to assist farmers in choosing the appropriate crop varieties in tandem with the forecast scenario while at the same time encouraging farmers to adopt conservation agriculture and on-farm rainwater harvesting among others.
- The expected near average to depressed seasonal rainfall is expected to worsen food and nutrition security in the county.
- Food prices are expected to rise further and accessibility to food is also expected to be poor.
- Relevant authorities and humanitarian institutions are advised to closely monitor the situation and provide food and food supplements to the most vulnerable community members to avert loss of lives.
- The projected near average to depressed rainfall coupled with warmer than normal temperatures, may have a negative impact on pasture regeneration.

DISASTER MANAGEMENT SECTOR.

- The current drought being experienced in some wards of the county is expected to intensify.
- Relevant authorities are advised to sensitize and disseminate early warning information for anticipatory action to be undertaken as well as step-up measures already being implemented to avert loss of lives, livestock and livelihoods.
- Competition for diminishing water, pasture and browse is expected to increase the ongoing resource-based conflicts among different community members as well as inter-county conflicts.
- Governments and local leaders are advised to enhance conflict resolution mechanisms among the communities and to promote equitable distribution of resources.

WATER, ENERGY AND SANITATION SECTOR.

- The near normal to depressed seasonal rainfall may lead to below-normal stream flows, low recharge of aquifers as well as reduced water levels in rivers and reservoirs.
- This will result in the disruption of water supplies for both domestic and livestock use.
- Efficient water mgt. and tracking should therefore be enhanced to ensure that the water needs of human and animal populations in the affected areas are met.

- Relevant authorities and the public are encouraged to practice roof water and surface runoff harvesting in order to supplement their water needs.
- Long dry spells may lead to dusty conditions which may deposit dust on solar panels and reduce their performance.
- Continuous monitoring and cleaning of solar panels should be enhanced.
- Relevant authorities are advised to put in place measures to optimally utilize heavy rainfall storms that have been forecast within the season to address water scarcity challenges in the county.

HEALTH SECTOR.

- Malnutrition-related diseases are expected to rise in the county especially among (vulnerable groups) - the elderly, pregnant and lactating mothers, PWDs and the under 5s.
- Rapid vulnerability assessment is recommended to identify the most vulnerable population and provide them with relief food and food supplements.

NB: Kiima Kiu/Kalanzoni ward and other vulnerable wards within the county are still struggling with depleted food reserves from the “Short Rains” - “OND” 2024” where some respective wards had very poor rainfall performance. Response activities should be encouraged to cushion these vulnerable populations from the adverse impacts of this ongoing drought situation.

ENVIRONMENT AND FORESTRY SECTOR.

- The destruction of forest biodiversity is expected to increase due to forest wildfires, logging, increased charcoal burning and encroachment of forest areas for pasture.
- To mitigate these threats, relevant authorities and community members are encouraged to increase surveillance for forest fires and illegal activities in the forested areas.
- Tree growing is recommended in all wards immediately the long rains start to restore our environments and improve overall forest cover in our localities.

MACROECONOMY SECTOR.

- Reduced food production in wards likely to receive depressed poorly distributed seasonal rainfall may lead to higher food prices and lower household incomes.

- Strain on pasture and water resources, potentially causing livestock fatalities and conflicts over scarce resources.
- Increased human-wildlife conflicts in areas that will have limited water and pasture availability.
- Slowdown in business activity, particularly in crop and livestock value chains, with spillover effects on agro-processing and transport sectors.
- Exacerbation of food and nutrition security and economic challenges in vulnerable areas of the county already affected by cumulative impacts of the previous poor rainfall season.

MEDIA & RELIGIOUS ORGANIZATIONS.

◇ The media and religious organizations hold critical roles in safeguarding public preparedness during the March-April-May (MAM) 2025 Long Rains Season.

◇ Media organizations and religious organizations are urged to proactively track and promptly disseminate forecasts and cautionary details as they emerge, ensuring timely access to vital information for the populace.

This ensures that the content is both scientifically accurate and actionable for end users.

◇ Additionally adopting plain language in communication is strongly advocated to bridge the gap between technical forecasts and public understanding, enabling communities to grasp the risks and respond effectively.

◇ By prioritizing clarity, accuracy and accessibility, the media and religious fraternity helps households and communities to stay safe, make informed choices and support one another through the challenges of the “MAM” 2025 Season.

Prepared by the County Director of Meteorological Services (CDMS) – Makeni County.