

HIGHLIGHTS

- Wettest dekad of the season across the country, floods over central lakeshore district of Nkhotakota ...
- Maize at tasseling to cobbing stages, some maturing...
- Normal to above normal dekadal amounts anticipated countrywide...

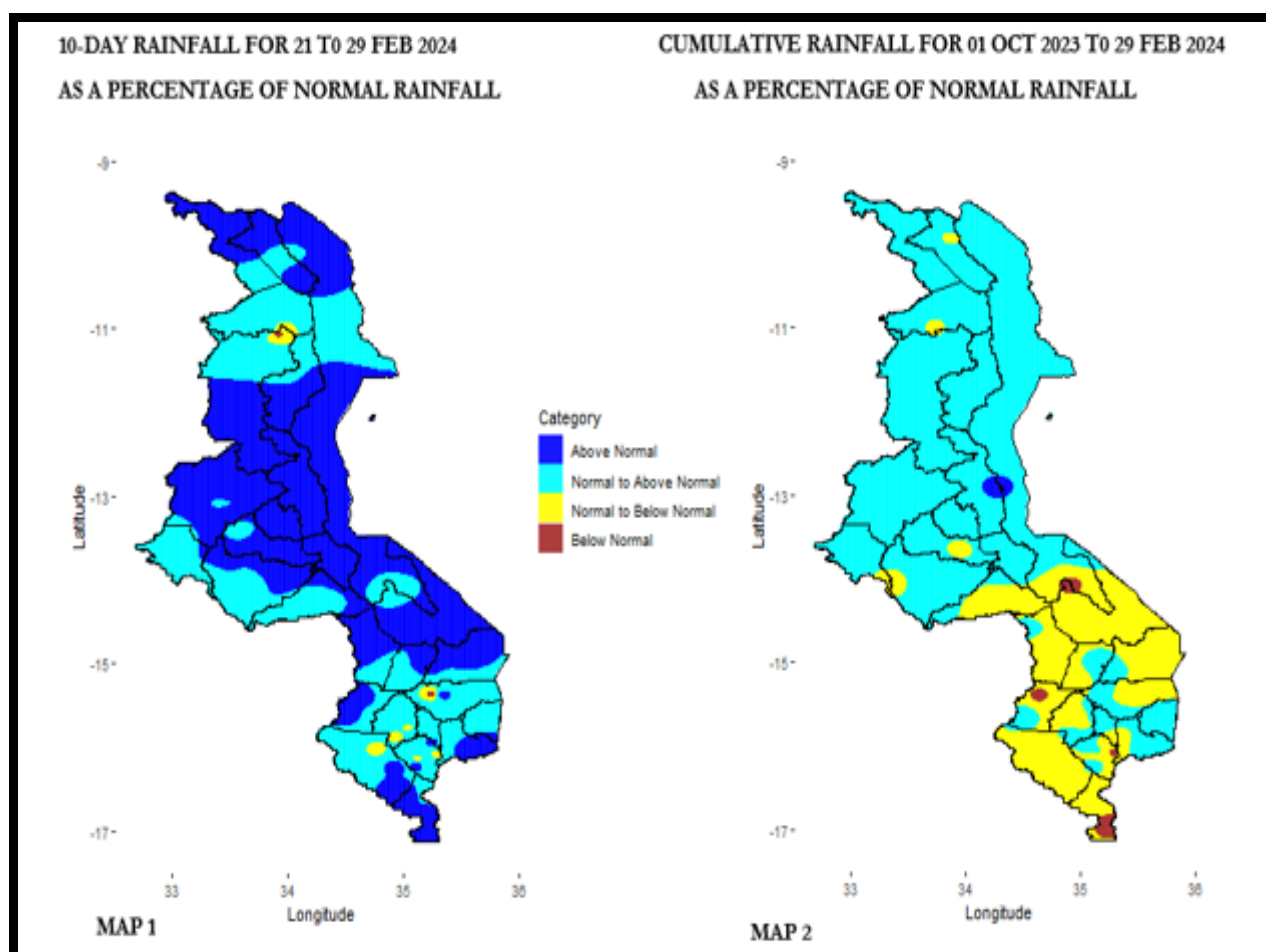


Figure 1: Observed dekadal and cumulative seasonal rainfall as percentage of normal for Malawi

1.0 WEATHER SUMMARY

During the period 21 to 29 February 2024, a deep Inter-Tropical Convergence Zone influenced weather of the country resulting in widespread rainfall activities over the country.

1.1 RAINFALL SITUATION

During the last dekad of February 2024, widespread rainfall activities were experienced over the country. The recorded rainfall amounts were within the normal to above normal of historical dekad amounts over majority of areas with above normal scenarios dominating central areas of the country. More in Map 1 from figure 1.

Spatial distribution of the actual recorded rainfall amounts shows that parts of central lakeshore districts of Nkhonkhotakota and Salima, and Mulanje district in Shire highlands received higher rainfall amounts. During the reporting period, stations that recorded at 200.0mm of rain included Dwangwa in Nkhonkhotakota which recorded 359.1mm in 6 rainy days, which is 500% of dekad normal amounts, Nkhonkhotakota Meteorological station recorded 341.2mm in 5 rainy days, which is nearly 400% of dekad normal amount, Lifuwu in Salima recorded 316.1mm in 6 rainy days, Lujeri Tea estate recorded 272.0mm in 6 rainy days, Emfeni Agriculture in Mzimba recorded 228.2mm in 5 rainy days. More details in figure 2 below.

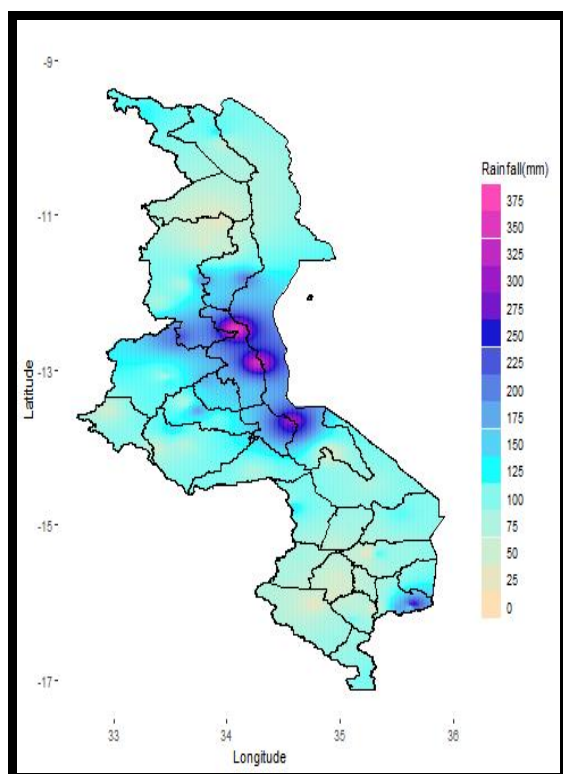


Figure 2: Observed dekad rainfall for Malawi, 21-29 February 2024

The overall rainy days distribution from 21 to 29 February 2024 is shown in figure 3 below. Highest number of 7 rainy days was registered at Karonga and Chitipa Meteorological stations in Karonga and Chitipa districts, respectively, other stations mostly

had rainy days ranging from 3 to 6 as the country experienced the wettest dekad this far.

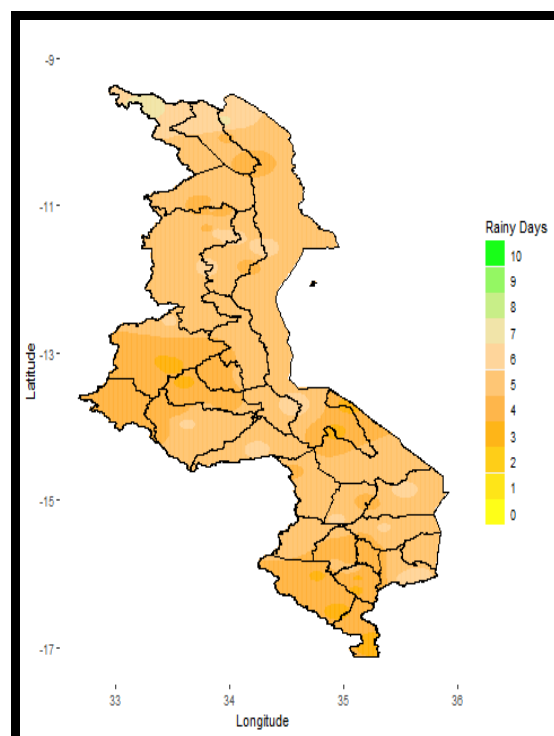


Figure 3: dekad rainy days for Malawi, 21-29 February 2024

Cumulatively, since the start of monitoring of the rainfall season on 01 October 2023 to 29 February 2024, generally normal to above normal rainfall amounts have been experienced over majority of northern and central areas of the country with normal to below normal scenarios over majority of southern areas, where prolonged dry spells have been experienced, despite the improved rainfall activities during the dekad under review compared to preceding dekads, as shown in Map 2 in figure 1 above.

1.2 AIR TEMPERATURE

Malawi experienced warm to hot conditions during the period 21 to 29 February 2024. Mean daily maximum temperatures had ranged from 25.3°C at Dedza Meteorological station to 35.2°C at Ngabu Meteorological station in Chikwawa, while mean daily minimum temperatures had ranged from 16.7°C at Dedza Meteorological station to 25.3°C at Ngabu Meteorological station.

1.3 RELATIVE HUMIDITY

During the period under review, air over Malawi was generally moist. Daily average Relative Humidity values recorded from various meteorological stations

had ranged from 64% at Ngabu Meteorological station to 82% at Bvumbwe and Mzuzu Meteorological stations in Thyolo and Mzimba districts respectively.

1.4 WIND SPEEDS

Most parts of Malawi experienced light to moderate wind speeds during the period under review. Daily average wind speeds measured at a height of two metres above the ground level across the country had ranged from 1.4 km per hour at Bolero to 11.2 km per hour at Chileka Meteorological station in Blantyre

1.5 SUNSHINE HOURS/ SOLAR RADIATION

Generally medium hours of bright sunshine were observed over Malawi during the period 21 to 29 February 2024. Daily values of sunshine hours had ranged from 6.3 hours per day at Mzimba Meteorological station to 9.3 hours per day at Ngabu Meteorological station and consequently the amount of Solar Radiation had ranged from 8.7 to 12.6 cal/cm²/day.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review, there was improved temporal and spatial distribution of rainfall particularly over central and southern areas of the country, with extreme wetness over central lakeshore areas resulting in massive floods over Nkhhotakota district.

Maize crop stand is encouraging over northern and some central areas particularly where fertilizer or manure was applied as well as good agricultural practices as stipulated by the Ministry of Agriculture, were adhered to.

Maize crop is generally at tasseling to cobbing stages over majority of northern half of the country with maturing maize crop over southern half for early planted crop that survived the prolonged dry spell experienced in the region. Some farmers over southern areas are reportedly harvesting for those that planted early maturity varieties and their crop survived the prolonged dry spells spanning almost a month in some areas.

Other crops as soya beans, tobacco, are also reportedly doing well with soya beans generally at flowering to podding stages over most of soya bean growing districts and majority of tobacco farmers are harvesting in readiness for the 2024/2025 Tobacco marketing season.



Figure 4: Encouraging maize crop stand, Santhe, Kasungu

However, due to persistent hot and dry weather conditions particularly over southern half of the country experienced for past month many crops including the staple crop maize which showed various degrees of water stress conditions, have failed to improve despite the rains experienced during the period under review. This is depicted in figure 5 below.



Figure 5: Water stressed maize crop, Blantyre Agricultural Division, southern Malawi

Furthermore, some farmers have taken heed of advice and have now planted crops that can mature within the remaining part of the season or utilize residual moisture during winter months with limited water such as sweet potatoes, sesame, cassava among others.

For livestock, majority of livestock in the country were under normal Temperature Humidity Index as the country experienced generally warm to hot and fairly humid conditions. The rains over the country ensured improved and continued pasture growth and water availability to various stock over northern and southern half of the country respectively.

Overall, there are serious concerns of reduced crop production for subsistence and cash crops at both local and national scales due to the impacts of the prolonged dry conditions that were experienced over southern Malawi as well as reported cases of Fall

Army Worm infestation countrywide and crop washaways due to floods over some areas like of Nkhotakota, Dowa and Karonga districts as assessment of impacts of these events is still ongoing.

For proper utilization of rain water, farmers should adhere to principles of good agricultural practices including moisture conservation, timely control of weeds, pests and diseases; and fertilizer/ manure application. Water harvesting technologies should also be practiced for future use during periods of suppressed rainfall.

3. PROSPECTS FOR 2023/2024 SEASON

The 2023-2024 rainfall season is being influenced by moderate to strong El Niño conditions that are prevalent over eastern-central equatorial Pacific Ocean. Global models project that these conditions are likely to persist throughout the season.

The rainfall forecast for sub-season-February-March-April (FMA) of the 2023/2024 season is that:

“normal to below-normal total rainfall amounts are anticipated over most areas of the country with a high chance of prolonged dry spells during the month of February.”

The spatial distribution of the FMA forecast is captured in figure 6 below. The map depicts mostly normal to below conditions over the country during the FMA sub-season.

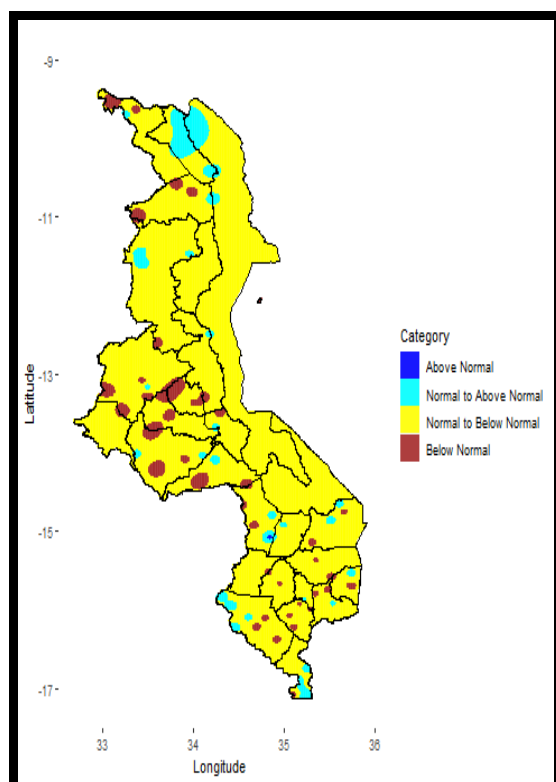


Figure 6: Sub-season February-March-April (FMA) rainfall forecast categories

normal rainfall amounts are also anticipated over majority of areas of the country, with very isolated cases of normal to above normal rainfall amounts across the country. Refer to figure 7 below.

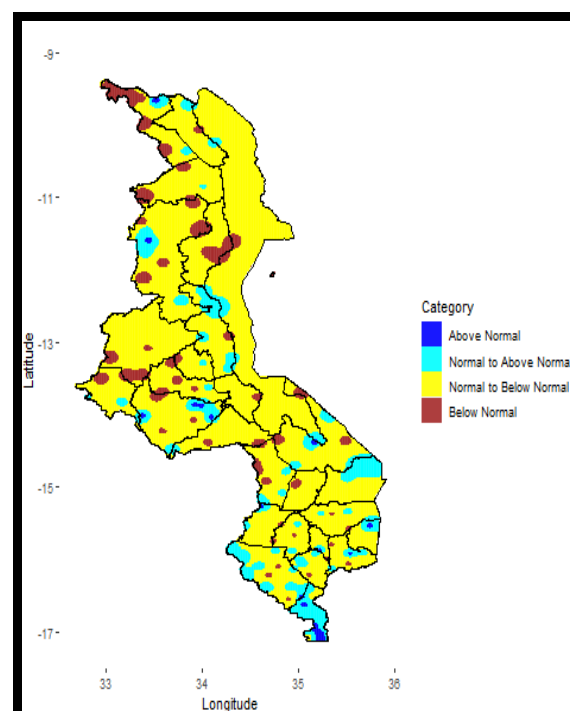


Figure 7: March 2024 rainfall forecast categories

For temperature, generally warmer than normal conditions are anticipated during the month of March 2024 over majority of central and southern areas of the country with normal conditions over majority of northern areas as shown in figure 8 below.

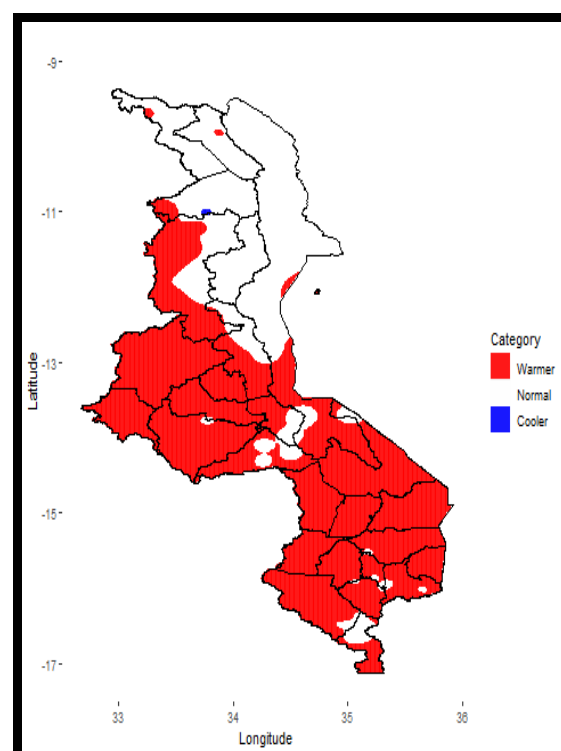


Figure 8: Temperature forecast categories for March 2024

4. OUTLOOK FOR 01-10 MARCH 2024

During the period 01-10 March 2024, a broad equatorial trough is expected to influence weather over Malawi. Therefore, generally above normal rainfall amounts are anticipated over northern areas of the country, particularly Chitipa, Karonga and Rumphi districts, with generally normal to above normal amounts elsewhere. This is represented by the map in Figure 9.

Farmers are advised to employ some water harvesting techniques wherever possible. For farmers whose crop reached permanent wilting point are advised to consider planting other crops that can survive in the prevailing weather conditions like sweet potatoes, as well as start making plans for winter cropping.

Livestock farmers, are encouraged to take proactive measures in ensuring their stock is guarded against worms, parasites as the seasonal conditions may provide suitable environment for breeding of the same. Furthermore, farmers are advised to provide proper housing for their stock as the anticipated rains might lead to flash flooding.

Fish farmers, are advised to guard against pond overflows particularly over northern areas as the anticipated amounts are above their dekadal historical amounts.

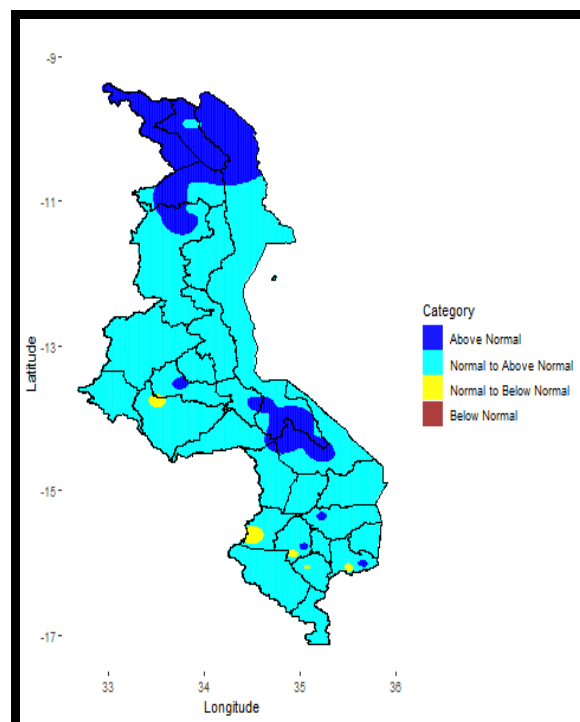


Figure 9: Dekadal rainfall outlook for Malawi for 01-10 March 2024 as percentage of normal rainfall