

## HIGHLIGHTS

- Wet northern most areas of the country...
- Maize at Maturity to drying stages over northern half, harvesting over southern...
- Normal to above normal amounts over the country during 01 -10 April 2024...

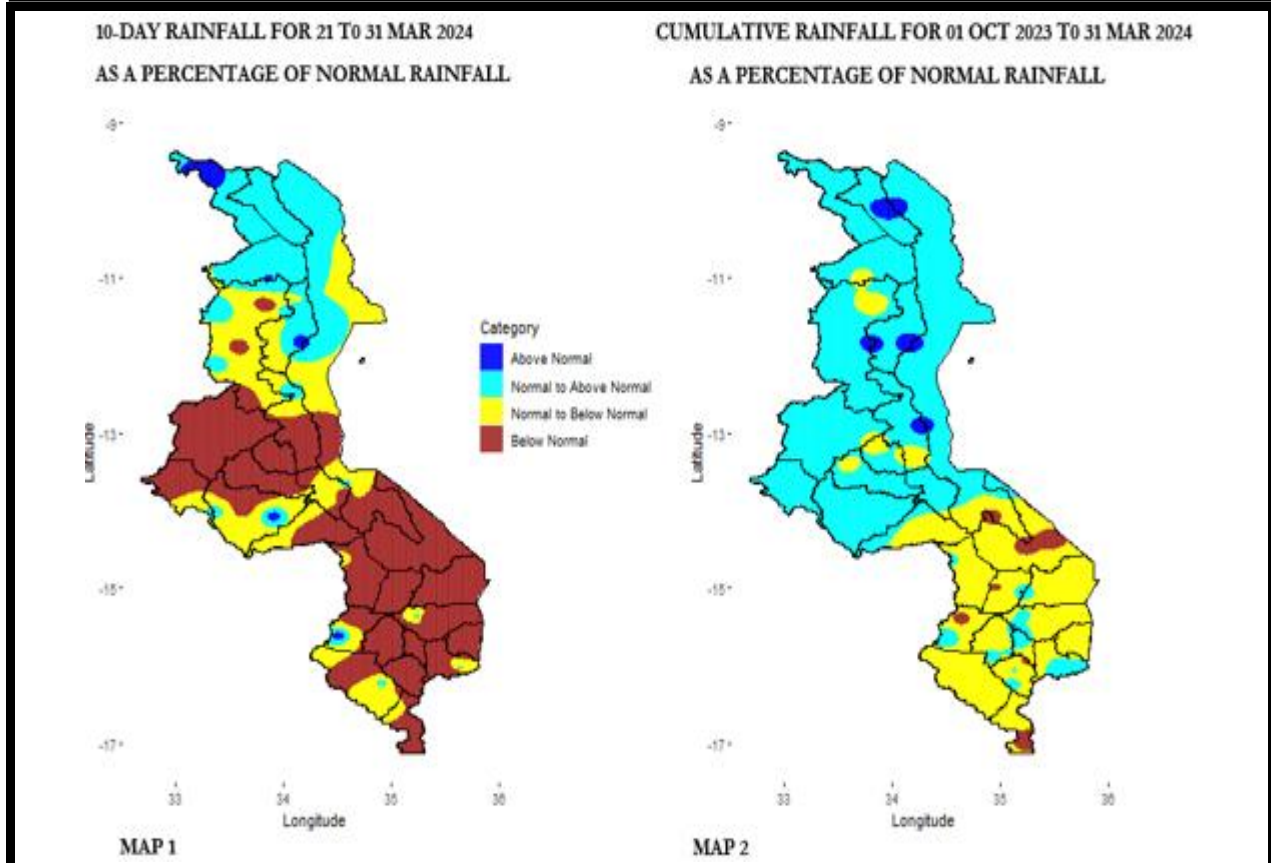


Figure 1: Observed dekadal and cumulative seasonal rainfall as percentage of normal for Malawi

## 1.0 WEATHER SUMMARY

During the period 21 to 31 March 2024, northern areas of the country remained within the vicinity of the Inter-Tropical Convergence Zone (ITCZ) hence experiencing moderate to scattered rainfall activities with dry conditions over central and southern areas.

## 1.1 RAINFALL SITUATION

During the last dekad of March 2024, the northern areas of the country experienced moderate to scattered rainfall activities which were locally heavy over parts of Nkhata Bay. The recorded rainfall amounts were within the normal to above normal over northern areas, while the majority of central and southern areas experienced outright below normal amounts of historical dekadal amounts. More in Map 1 from Figure 1.

Stations that recorded at least 100 mm of rainfall included Chintheche Agriculture in Nkhata Bay which recorded 446.8mm in 7 rainy days, Nathenje Agriculture in Lilongwe recorded 204.5mm in 5 rainy days, Nkhata Bay Meteorological station recorded 186.5mm in 10 rainy days, Dwangwa in Nkhotakota recorded 145.0mm in 7 rainy days, Lujeri Tea Estate in Mulanje recorded 142.8mm in 8 rainy days, Karonga Meteorological station recorded 134.2mm in 8 rainy days and Mzuzu Meteorological station in Mzimba recorded 113.8mm in 9 rainy days. More details refer to Figure 2 below.

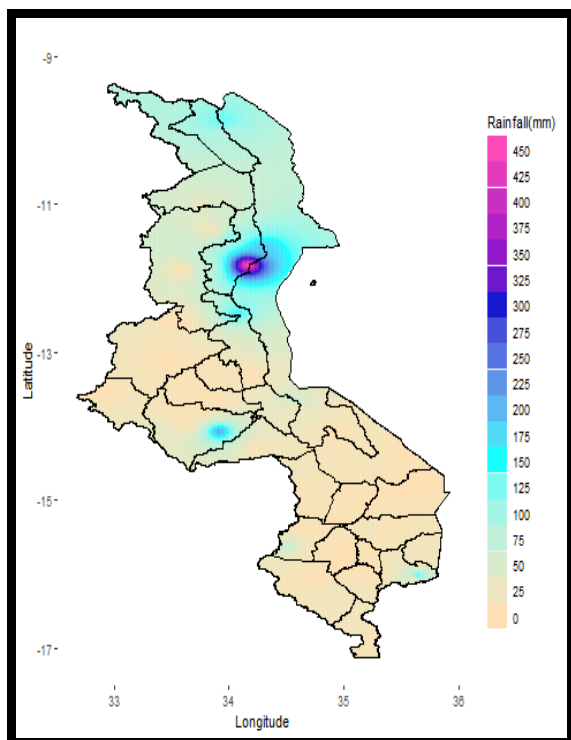


Figure 2: Observed dekadal rainfall for Malawi, 21-31 March 2024

The overall rainy days distribution from 21 to 31 March 2024 is shown in figure 3 below. The highest number of 10 rainy days was registered at Chikangawa Forest in Mzimba and Nkhata Bay Meteorological station. Lujeri Tea estate, Karonga Meteorological station and Mulanje all registered 8 rainy days. Majority of stations over central and southern areas had no rainy day during the period under review.

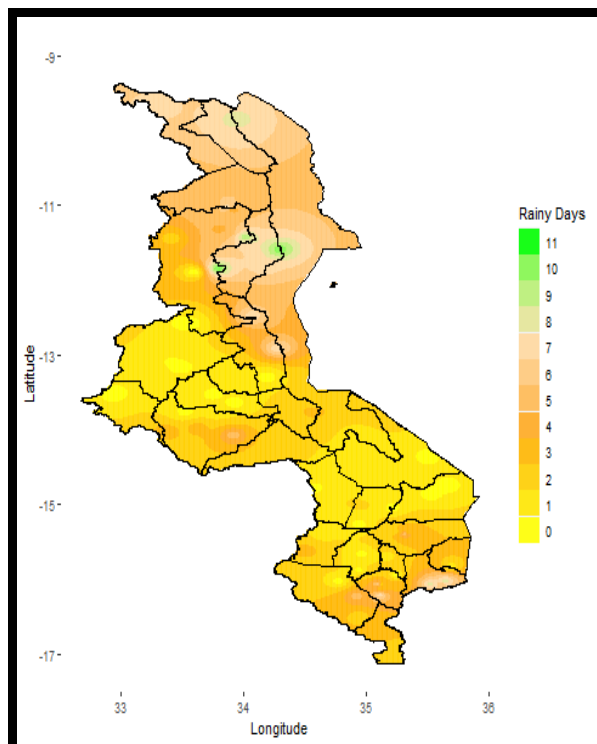


Figure 3: dekadal rainy days for Malawi, 21-31 March 2024

Cumulatively, since the start of monitoring of the rainfall season on 01 October 2023 to 31 March 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 had been experienced from the last dekad of January 2024 to last dekad of February 2024. Refer to Map 2 in Figure 1 above.

## 1.2 AIR TEMPERATURE

Malawi experienced warm to hot conditions during the period 21 to 31 March 2024. Mean daily maximum temperatures had ranged from 24.1°C at Mzuzu Meteorological station to 32.9°C at Ngabu Meteorological station in Chikwawa, while mean daily minimum temperatures had ranged from 15.7°C at Dedza Meteorological station to 24.0°C at Ngabu Meteorological station.

## 1.3 RELATIVE HUMIDITY

During the period under review, air over Malawi was generally humid. Daily average Relative Humidity values recorded from various meteorological stations had ranged from 65% at Mangochi Meteorological station to 80% at Mzuzu Meteorological station.

## 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 Nkhotakota Meteorological station to 75.5km per hour Ntaja and Monkey Bay Meteorological stations in Machinga and Mangochi respectively.

### 1.5 SUNSHINE HOURS/ SOLAR RADIATION

Generally medium to high hours of bright sunshine were observed over Malawi during the period 21 to 31 March 2024. Daily values of sunshine hours had ranged from 6.5 hours per day at Mzuzu Meteorological station to 9.7 hours per day at Ngabu Meteorological station and consequently the amount of Solar Radiation had ranged from 8.7 to 12.3 cal/cm<sup>2</sup>/day.

### 2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review northern areas of Malawi continued to experience good temporal and spatial distribution of rainfall while in majority of central and southern areas dry conditions prevailed.

Maize crop is generally at maturity to drying stages over majority of northern half of the country with drying maize crop over southern half. Farmers over southern areas are reportedly harvesting with some over central areas reportedly harvesting for those that planted early maturing varieties.

The dry conditions experienced over central areas was conducive for maturity and drying of the staple crop as captured in figure 4 below.

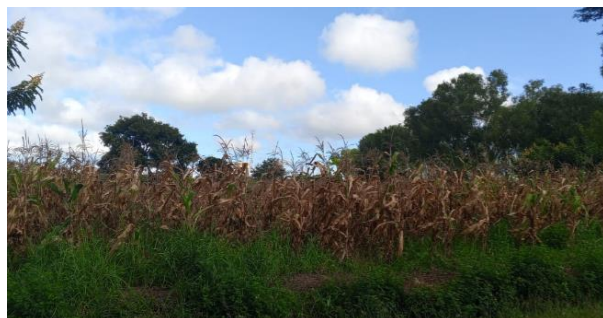


Figure 4: Drying maize, Dowa, Central Malawi

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

However, due to persistent hot and dry weather conditions experienced earlier in the season, particularly over southern half of the country, many crops, including the staple crop maize, showed various degrees of water stress conditions with some reaching permanent wilting point.

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, sorghum, cassava among others. More in figures 5 and 6 below.



Figure 5: Sorghum, one of the drought tolerant crops doing well, Rivirivi Extension Planning Area, Balaka



Figure 6: Promising sweet potato field, Chinsu village under Chingale Extension Planning Area, Zomba.

Overall, there are serious concerns of reduced crop production for subsistence and cash crops at both local and national levels due to the impacts of the prolonged dry conditions that were experienced over southern half of Malawi as well as reported cases of Fall Army Worm infestation countrywide and crop washaways due to floods over parts of Nkhosakota, Dowa and Karonga districts as assessment of impacts of these events is still ongoing.

### 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 to the end of 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 7 below. The map depicts mostly normal to below conditions over the country during the FMA sub-season.



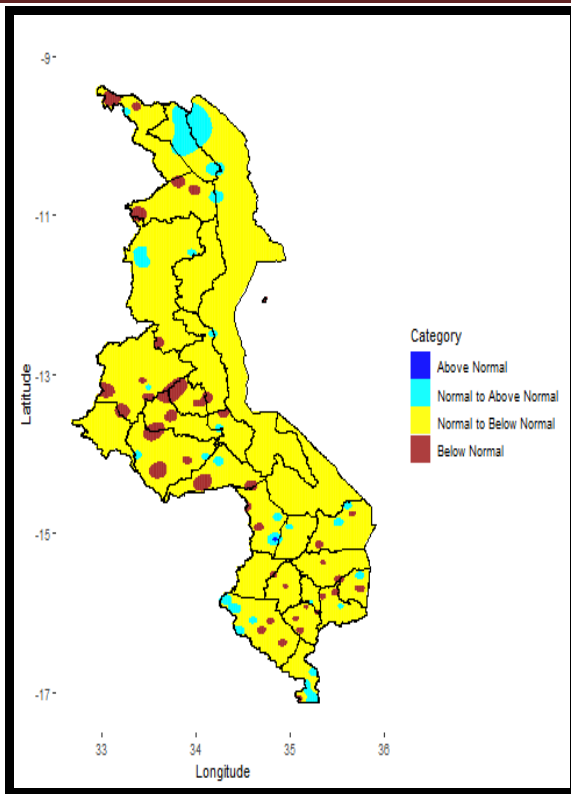


Figure 7: Sub-season February-March-April (FMA) rainfall forecast categories

For the month of April 2024, normal to below normal rainfall amounts are also anticipated over majority of central and southern areas of the country, with cases of normal to above normal rainfall amounts particularly over northern areas of the country. Refer to figure 8 below.

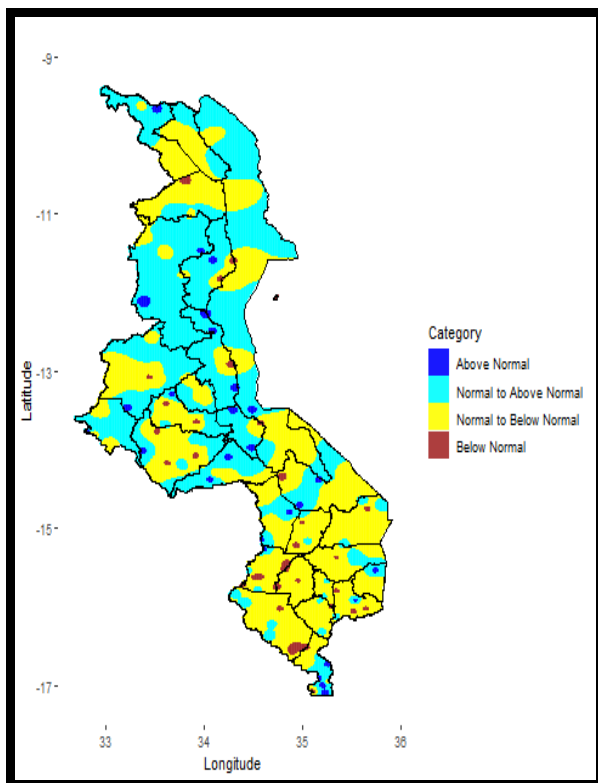


Figure 8: April 2024 rainfall forecast categories

**4. OUTLOOK FOR 21-31 MARCH 2024**

During the period 01 - 10 April 2024, generally easterly waves are expected to influence weather over greater part of Malawi as the northernmost areas remain within the vicinity of the Inter-Tropical Convergence Zone. Therefore, normal to above normal rainfall amounts are generally anticipated over central and southern of the country with normal to below normal over majority of northern areas. This is represented by the map in Figure 9.

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. Furthermore, those harvesting are advised to avoid post-harvest losses by among others avoid keeping their produce in moist areas

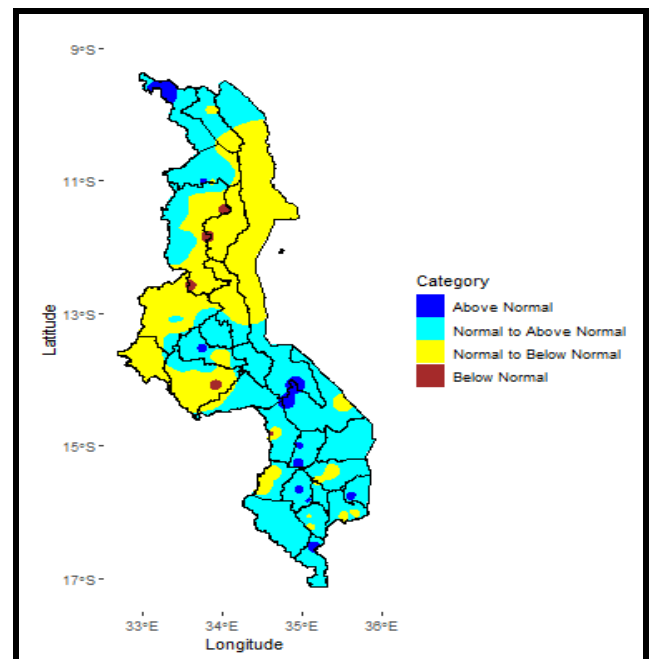


Figure 9: Dekadal rainfall outlook for Malawi for 01-10 April 2024 as percentage of normal rainfall