

Malawi 10-day Weather and Agrometeorological Bulletin

"In support of National Early Warning Systems and Food Security"



Period: 11 – 20 November 2024 Season: 2024/2025

leeua No OF

Release date: 25 November 2024

HIGHLIGHTS

- Increased rainfall activities over central and southern areas during 11 to 20 November 2024...
- Planting over south, land preparation in progress over central and northern areas...
- Increased rainfall activities anticipated during the last dekad of November 2024...

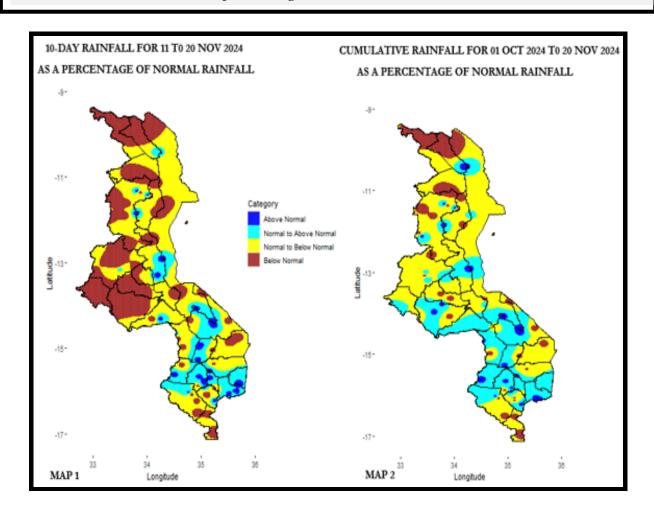


Figure 1: Observed dekadal and cumulative seasonal rainfall as percentage of normal for Malawi

1.0 WEATHER SUMMARY

During the period 11 to 20 November 2024, unstable airmass prevailed over the country resulting in rainfall activities mainly over southern and central areas .

1.1 RAINFALL SITUATION

During the second dekad of November 2024, there was improvement in spatial as well temporal distribution of rainfall activities starting from southern areas progressing northwards. The recorded rainfall amounts were generally within the normal to below normal of historical dekadal amounts over majority of areas of the country with normal to above normal dekadal amounts over parts of southern and Lakeshore areas as shown in Map 1 from figure 1. Cumulatively since onset of seasonal rainfall monitoring, majority of areas have had normal to below normal of historical rainfall amounts with some areas over southern half experincing normal to above normal scenario as shown in Map 2 in figure 1 above.

Stations that recorded at least 100mm of rainfall during the reporting period included Zoa Tea estate in Thyolo which recorded 153.0mm in 6 rainy days, Chichiri Meteorological station in Blantyre recorded 138.1mm in 6 rainy days, Chileka International Airport Meteorological station recorded 136.3mm in 6 rainy days, Monkey Bay Meteorological station in Mangochi recorded 128.2mm in 7 rainy days, Mwanza Boma recorded 122.2mm in 6 rainy days and Lujeri in Mulanje recorded 118.6mm in 7 rainy days.

Spatial distribution of the actual recorded rainfall amounts is shown in figure 2 below.

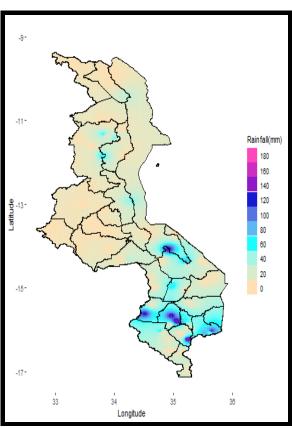


Figure 2: Observed dekadal rainfall for Malawi, 11-20 November 2024

The overall rainy days distribution from 11 to 20 November 2024 is shown in figure 3 below. Byumbwe Meteorological station in Thyolo recorded the highest number of 8 rainy days with majority of stations recording at least 3 rainy days across the country.

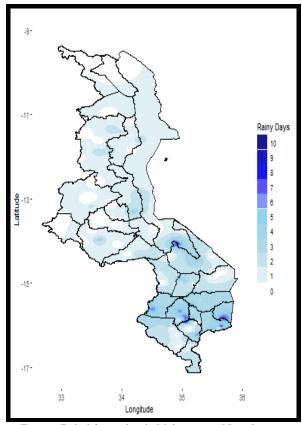


Figure 3: Dekadal rainy days for Malawi, 11-20 November 2024

1.2 AIR TEMPERATURE

Malawi experienced hot to locally very hot conditions during the period 11 to 20 November 2024. Daily average maximum temperatures had ranged from 26.4°C at Mzuzu Meteorological station in Mzimba to 38.5°C at Ngabu Meteorological station in Chikwawa. The highest daily maximum temperature recorded for the period under review was 42.8°C. On the other hand, daily average minimum temperatures had ranged from 16.9°C at Mzuzu Meteorological station to 25.4°C at Monkey Bay and Ngabu Meteorological stations.

1.3 RELATIVE HUMIDITY

During the period 11 to 20 November 2024, air over Malawi was relatively wet. Daily average Relative Humidity values recorded from various weather stations had ranged from 50% at Bolero Meteorological station in Rumphi to 73% at MimosaMeteorological station, in Mulanje, and Bvumbwe Meteorological station.

1.4 WIND SPEEDS

During the period under review, most parts of Malawi experienced light to moderate wind speeds. Daily average wind speeds measured at a height of two metres above the ground level across the country had ranged from 3.7km per hour at Bolero, Nkhata Bay and Nkhotakota Meteorological stations to 12.6km per hour at Salima Meteorological station.

1.5 SUNSHINE HOURS

Generally medium to long hours of bright sunshine were observed over Malawi during the period 11 to 20 November 2024. Daily average values had ranged from 6.4 hours at Brumbwe to 9.3 hours at Karonga Meteorological station and consequently the amount of Solar Radiation had ranged from 8.4 to 12.3 cal/cm²/day.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review, the main on-farm activities over Malawi have been planting particularly over southern areas and some selected central areas while land preparation in readiness for effective planting rains over majority of central and northern areas of the country. Some risk tolerant farmers reported to have planted particularly over southern Malawi have had their crops germinate as captured in figure 4 below.



Figure 4: Germinated maize field, Milonde Extension Planning Area, southern Malawi

Furthermore, farmers are also continue acquiring various farm inputs in major outlets across the country. Stocking of various farm inputs is underway across the country under the Malawi Government's Affordable Inputs Program (AIP) initiative.

3. PROSPECTS FOR 2024/2025 SEASON

The 2024-2025 rainfall season is expected to be influenced by weak La Nina conditions that have been established over eastern-central equatorial Pacific Ocean. Global models project that these conditions are likely to persist for a considerable part of the season.

The rainfall forecast for the 2024/2025 season is that:

"During October to December 2024, Rainfall amounts across most areas of the country are anticipated to be normal to below-normal, except for specific areas in central and northern Lakeshore districts, where they may experience normal to above-normal precipitation.

During January to March 2025, expect normal to above-normal total rainfall amounts over most areas with possibility of outright above normal rainfall in January 2025."

Illustration of the forecast is given in figure 5 below with map (a) and map (b) showing sub-seasons October November December (OND) and January February March (JFM), respectively.

Season: 2024/2025

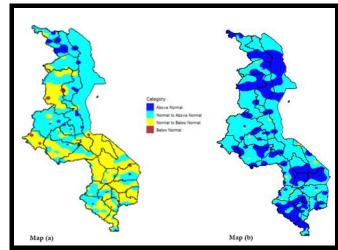


Figure 5: Forecast categories for OND and JFM

At national level, there are higher chances of normal to above normal cumulative seasonal rainfall amounts over most parts of the country.

For the month of November 2024, normal to below normal rainfall amounts are anticipated over majority of areas of the country. Refer figure 6 below map (a). The actaul anticipated rainfall amounts are generally less than 100mm as shown in figure b map (b) below.

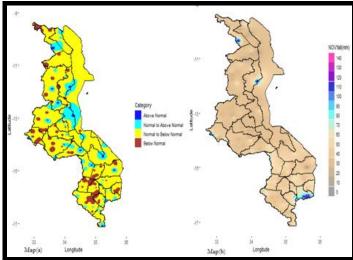


Figure 6: November 2024 rainfall forecast (a) categories and (b) values

In terms of temperature, generally normal conditions are anticipated during this month of November over most areas of the country as shown in map (a) in figure 7 below. This generally entails temperatures of around 36 Degree Celsius for lower Shire River Valley areas while temperatures of 30 to 32 Degree Celsius elsewhere as captured in map (b) in figure 7 below.

Figure 7: October 2024 temperature forecast

4. OUTLOOK FOR 21 - 30 NOVEMBER 2024

Rainfall activities are anticipated during the period 21-30 November 2024. Dekadal rainfall amounts are expected to be within the normal to below normal category of the historical dekadal amounts for majority of central areas of the country with normal to above normal particularly over southern and northern area. This is represented by the map in Figure 8.

These conditions provide opportunity for farmers to continue with their land preparation initiatives as well as buying farm inputs particularly over central areas while for the south it provides opportunity for planting for those not yet planted. Farmers are advised to buy inputs from authorized agro dealers across the country.

Furthermore, livestock farmers are advised to provide water to their stock at regular times to avoid stress to their stock.

Season: 2024/2025

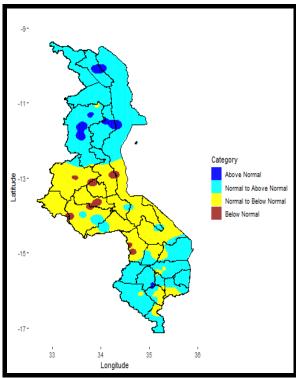


Figure 8: Dekadal rainfall outlook for Malawi for 21-30 November 2024