

# Malawi 10-day Weather and Agrometeorological Bulletin

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



Period: 01 – 10 November 2024 Season: 2024/2025

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#### **HIGHLIGHTS**

- Sporadic rainfall activities over some central and southern areas, hot and dry conditions elsewhere...
- Land preparation in progress over most parts of the country...
- Isolated rainfall activities anticipated during the second dekad of November 2024...

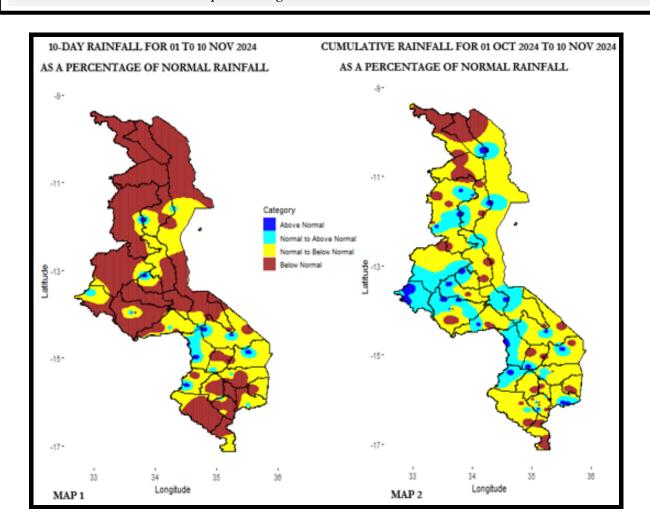


Figure 1: Observed dekadal and cumulative seasonal rainfall as percentage of normal for Malawi

### 1.0 WEATHER SUMMARY

During the period 01 to 10 November 2024, unstable airmass prevailed over the country resulting in isolated rainfall activities mainly over central areas and southern areas.

#### 1.1 RAINFALL SITUATION

During the first dekad of November 2024, generally hot and dry conditions prevailed over the country with sporadic rainfall activities over central and southern areas of the country which were heavy at times.

Stations that recorded at least 20mm of rainfall during the reporting period included Mlangeni in Ntcheu which recorded 57.7mm in 3 rainy days, Mwanza Boma recorded 48.1mm in 2 rainy days, Chikangawa in Mzimba recorded 44.4mm in 2 rainy days, Mangochi Meteorological station recorded 43.8mm in 2 rainy days, Lujeri Tea estate in Mulanje recorded 35.3mm in 3 rainy days and Chitedze Meteorological station in Lilongwe recorded 32.5mm in 1 rainy day.

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

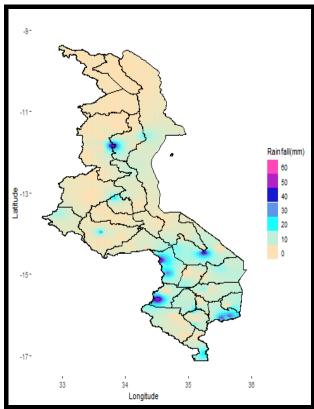


Figure 2: Observed dekadal rainfall for Malawi, 01-10 November 2024

The overall rainy days distribution from 01 to 10 November 2024 is shown in figure 3 below. Majority of northern areas did not record any rainfall. Most rainfall activities were experienced in central and southern areas with stations mainly recording 2 rainy days as captured in figure 3 below.

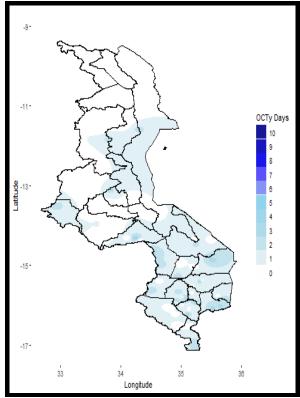


Figure 3: dekadal rainy days for Malawi, 01-10 November 2024

#### 1.2 AIR TEMPERATURE

Malawi experienced hot to locally very hot conditions during the period 01 to 10 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 42.7°C. On the other hand, daily average minimum temperatures had ranged from 16.9°C at Mzuzu 25.4°C at Monkey Bay Meteorological station to Meteorological station, in Mangochi, and Meteorological station.

# 1.3 RELATIVE HUMIDITY

During the period 01 to 10 November 2024, air over Malawi was generally dry. Daily average Relative Humidity values recorded from various weather stations had ranged from 48% at Chitipa Meteorological station to 67% at Mimosa Meteorological station in Mulanje.

#### 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 Nkhotakota Meteorological station to 14.7km per hour at Chitipa Meteorological station.

#### 1.5 SUNSHINE HOURS

Generally medium to long hours of bright sunshine were observed over Malawi during the period 01 to 10 November

2024. Daily average values had ranged from 7.4 hours at Byumbwe to 9.6 hours at Karonga Meteorological station and consequently the amount of Solar Radiation had ranged from 8.6 to 12.7 cal/cm<sup>2</sup>/day.

# 2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review, the main on-farm activity over Malawi has been land preparation in readiness for effective planting rains. Some risk tolerant farmers are reported to have planted particularly over southern Malawi.



Figure 4: farmers accessing farm inputs such as fertilizer, Nsanje, southern Malawi

Furthermore, farmers are also reportedly acquiring various farm inputs in major outlets across the country as captured in figure 4 above. 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

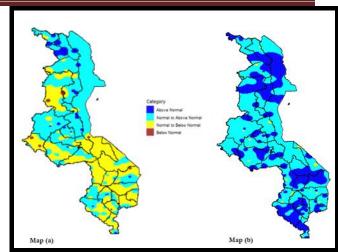
The 2024-2025 rainfall season is expected to be influenced by weak La Nina conditions that have been established over eastern-central equatorial Pacific Ocean. Global models project that these conditions are likely to persist for a considerable part of the season.

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.

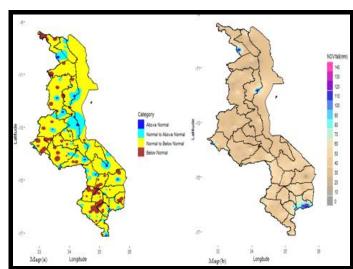


Figure 6: November 2024 rainfall forecast (a) categories and (b) values

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.

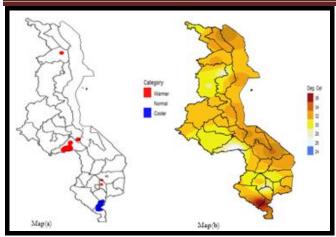


Figure 7: October 2024 temperature forecast

## 4. OUTLOOK FOR 11 - 20 NOVEMBER 2024

Rainfall activities are anticipated during the period 11-20 November 2024. Dekadal rainfall amounts are expected to be within the normal to below normal category of the historical dekadal amounts for southern areas of the country with isolated normal to above normal particularly over parts of Shire Valley. Below normal scenarios are anticipated over majority of central and northern areas of the country with hot to locally very hot temperatures. 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. 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.

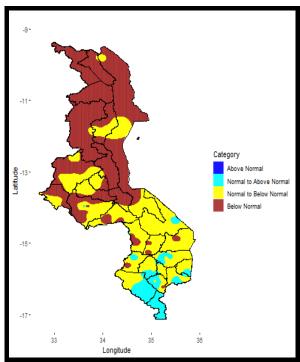


Figure 8: Dekadal rainfall outlook for Malawi for 11-20 November 2024