



HIGHLIGHTS

- Locally heavy rains experienced during the period 01- 10 March 2023...
- Maize maturing to drying over southern, cobbing over central and northern areas...
- Wet conditions to persist over Malawi during 11 – 20 March 2023...

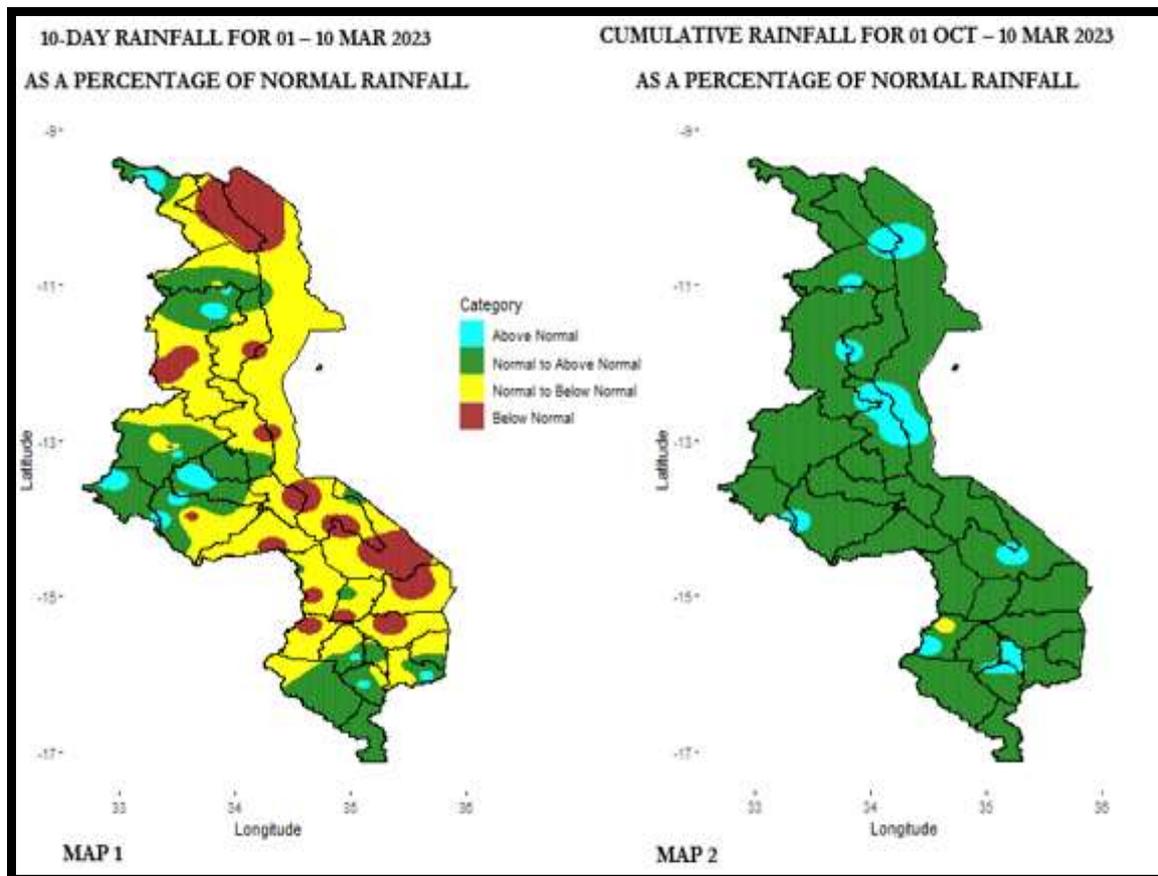


Figure 1: Observed dekadal and cumulative seasonal rainfall as percentage of normal for Malawi

1.0 WEATHER SUMMARY

During the period 01 to 10 March 2023, a diffused Inter-Tropical Convergence Zone (ITCZ) coupled with sporadic influx of Congo airmass influenced weather over Malawi resulting in scattered rainfall activities which were heavy at times, with generally warm to hot temperature conditions experienced across the country.

1.1 RAINFALL SITUATION

During the period under review, scattered rainfall activities were experienced over the country as shown in Map 1 above. The recorded dekadal rainfall amounts were normal to below normal of historical dekadal rainfall amounts for majority of southern areas and some central and northern areas of the country. Northernmost district of Chitipa, parts of Mzimba, Rumphi, Mchinji, Lilongwe, Dowa, Chikwawa and Nsanje had normal to above normal dekadal rainfall amounts as compared to historical dekadal amounts.

Stations that recorded at least 100.0mm of rainfall during this period included Mkanda in Mchinji which recorded 151.3mm in 5 rainy days, Madisi Agriculture in Dowa recorded 139.9mm in 5 rainy days, Zombwe Agriculture in Mzimba recorded 131.9mm in 6 rainy days, Kasiya Agriculture in Lilongwe recorded 122.4mm in 5 rainy days, Bolero Meteorological station in Rumphi recorded 112.3mm in 7 rainy days and Chitipa Meteorological station recorded 102.1mm in 7 rainy days as well.

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

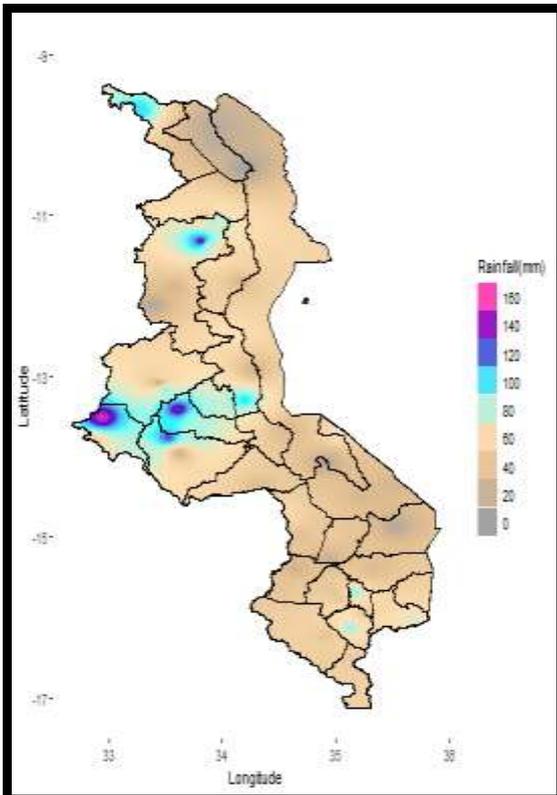


Figure 2: Observed dekadal rainfall for Malawi, 01-10 March 2023

The overall rainy days distribution from 01 to 10 March 2023 is shown in figure 3 below. Majority of areas across the country had less than 3 rainy days as the overall distribution is shown in figure 3 below.

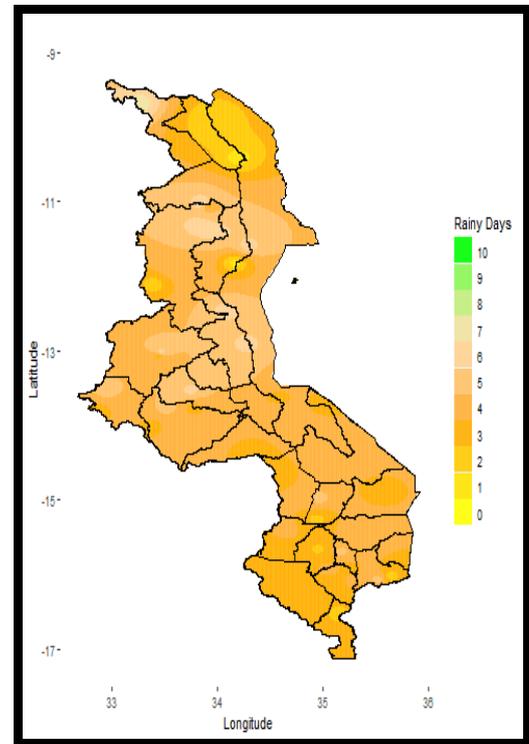


Figure 3: dekadal rainy days for Malawi

Since the start of October 2022 to 10 March 2023, normal to above normal cumulative rainfall amounts have been experienced over majority of areas of the country with cases of normal to below normal rainfall amounts over Neno as shown in Map 2 in figure 1 above.

1.2 AIR TEMPERATURE

Malawi experienced warm to hot conditions during the period 01 to 10 March 2023. Mean daily maximum temperatures ranged from 25.8°C at Dedza Meteorological station to 34.7°C at Ngabu Meteorological station in Chikwawa. Mean daily minimum temperatures had ranged from 15.9°C at Dedza Meteorological station to 24.1°C at Ngabu Meteorological station.

1.3 RELATIVE HUMIDITY

During the period 01 to 10 March 2023, air over Malawi was generally moist. Mean daily average Relative Humidity values recorded from various weather stations had ranged from 66% at Kasungu Meteorological station to 82% at Bvumbwe Meteorological station in Thyolo.

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 0.8 km per hour at Bolero Meteorological station in Rumphi to 11.6 km per hour at Chileka International Airport in Blantyre.

1.5 SUNSHINE HOURS

Generally medium to long hours of bright sunshine were observed over Malawi during the first dekad of March 2023. Mean daily values had ranged from 6.8 hours per day at

Bvumbwe Meteorological station to 8.6 hours per day at Salima Meteorological station and consequently the amount of Solar Radiation had ranged from 9.6 to 12.3 cal/cm²/day.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review, there was good temporal and spatial distribution of rainfall over some areas in all the three regions of the country.

The rainfall experienced during the dekad under review particularly over some central and northern areas supported maturity of maize, growth and development of rice. Moreover, the rains ensured continued availability of water for livestock as well as growth and development of pastures.

Maize crop stand is very encouraging in all the three regions particularly where fertilizer or manure was applied as well as good agricultural practices as stipulated by the Ministry of Agriculture, were adhered to. The crop is reportedly at generally cobbing stage over majority of central and northern areas while maturity to drying over southern areas.

Furthermore, majority of cash crops such as soya beans, tobacco, are also reportedly doing well with soya beans generally at maturity stage over most of soya bean growing districts as captured in figure 4 below. Tobacco farmers are harvesting in readiness for the 2023/2024 Tobacco marketing season.

However, over the course of the rainfall season, there have been reports of flooding leading to crop wash aways as well as sporadic cases of Fall Army Worm, snail infestation and dry spells particularly over northern districts of Karonga and Chitipa.

Furthermore, dry conditions experienced Karonga have resulted in moisture stress for crops such as Maize as depicted in figure 5 below. This has the potential of negatively affecting the good crop stand thereby affecting production at local scale. Nevertheless, maize fields where climate smart agriculture technologies, such as *mtayakhasu*, *ulimi wa mphimbila* are in use have showed limited maize crop stress.



Figure 4: Maturing soya bean, Dona, Central Malawi



Figure 5: Stressed maize, Mpata Extension Planning Area, northern Karonga

3. PROSPECTS FOR 2022/2023 RAINFALL SEASON

The 2022/2023 rainfall is being influenced by La Nina 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 the second part of the 2022/2023 season is that:

“During January to March 2023, most areas in the south, center and the north are expected to receive normal to above-normal cumulative rainfall amounts.”

At national level, there are higher prospects of normal to above normal cumulative rainfall amounts over most parts during sub-season January, February and March (JFM) of the 2022/2023 season.

During the month of March 2023, normal to above normal rainfall amounts are anticipated for majority of areas over Malawi with projections of mainly above normal rainfall amounts over southern areas and Karonga while pockets of normal to below normal rainfall amounts are projected for some areas of the country, particularly central region. Refer to figure 6 below.

4. OUTLOOK FOR 11-20 MARCH 2023

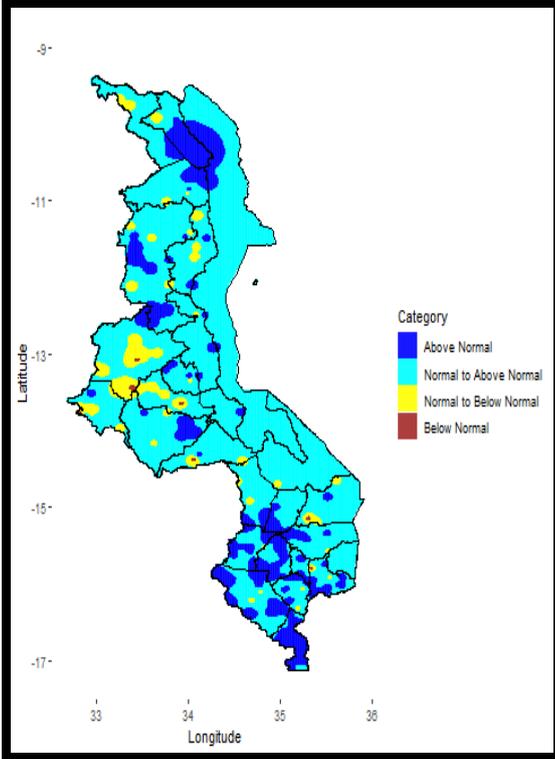


Figure 6: March 2023 rainfall forecast categories

In terms of temperature, generally normal conditions are anticipated to prevail during the month of March over majority of areas of the country with pockets of warmer than usual temperature conditions over some areas in the central and southern regions of the country (represented by red colour). More details as shown in figure 7 below.

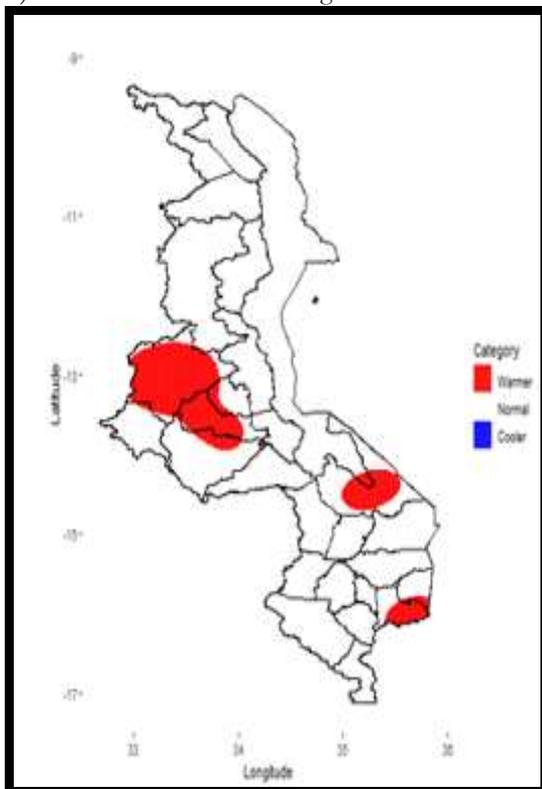


Figure 7: March 2023 temperature forecast categories

Wet conditions are anticipated over Malawi during the second dekad of March 2023. The anticipated dekad rainfall amounts are expected to be within the above normal categories of the historical dekad amount for southern and lakeshore areas with normal to above ranges elsewhere. (Represented by green and cyan colours in Figure 8).

Farmers are advised to continuously follow weather forecasts and advisories during the growing season for proper planning and utilization of the weather and climate information and services in their various agricultural activities.

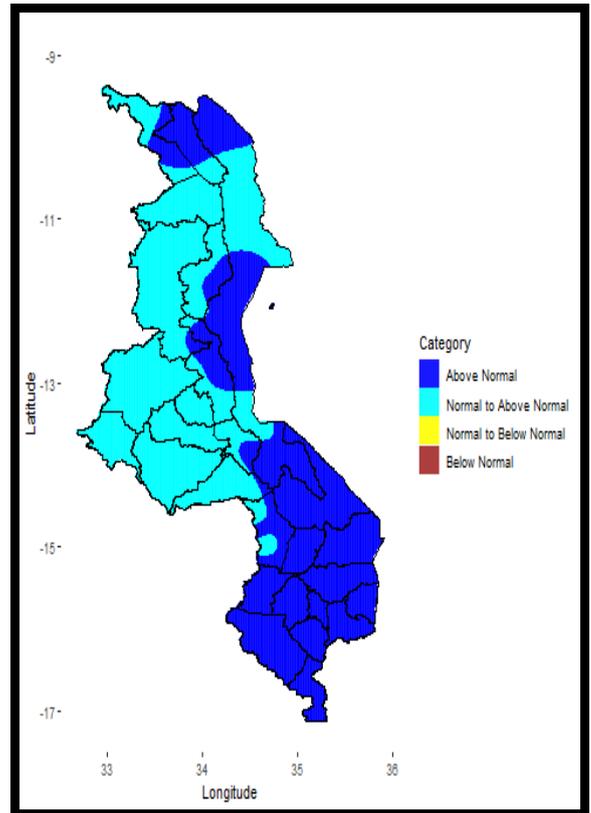


Figure 8: Dekadal rainfall outlook for Malawi for 11-20 March 2023 as percentage of normal rainfall