Malawi 10-Day Rainfall & Agrometeorological Bulletin

Department of Climate Change and Meteorological Services

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HIGHLIGHTS

- **Parts of Malawi received Chizimalupsya, heavy in some areas…**
- **Major on-farm agricultural activity has been land preparation …**
- **Sporadic rainfall expected to persist during 21 – 31 October 2010 …**

1.1 RAINFALL SITUATION

Towards the end of the second ten days of October 2010 some parts of Malawi received part of the first rains that are locally known as *Chizimalupsya*. These rains were due to heating and incursions of moist and unstable air. Stations that reported significant cumulative rainfall amounts included Mpemba Vet in Blantyre 31.6mm, Thyolo Met 22.0mm, Mzuzu Airport 17.4mm and Chileka Airport 11.6mm. This type of weather is likely to continue until major rain bearing systems get established over the country.

1.2 MEAN AIR TEMPERATURE

Mean maximum air temperatures remained hot to locally very hot during the period under review. Ngabu in Shire Valley reported the highest mean maximum temperature of 38℃. Overall, mean maximum temperatures ranged from 29℃ at Mzuzu to 38℃ at Ngabu while mean minimum temperatures ranged from 12.6℃ at Mzuzu to around 23℃ at Ngabu.

1.4 MEAN WIND SPEEDS

Mean Wind speeds at a height of two metres above the ground level ranged from 1.3 to 3.9 metres per second or 4.5 – 14.0 Km/hr (see table).

1.5 MEAN RELATIVE HUMIDITY

During the second ten days of October 2010, air over Malawi was generally dry. Daily average relative humidity values ranged from 43% at Chitedze to 53% at Ngabu.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review some parts of Malawi received part of the first rains. These rains although sporadic in nature, encouraged farmers to speed up land preparation in readiness for the main rains. Other on-farm agricultural activities included distribution of Government of Malawi subsidised farm inputs as well as procurement of farm inputs.

3. PROSPECTS OF 2010/11 RAINFALL SEASON

The climate models suggests that during 2010/2011 rainfall season, a greater part of Malawi is likely to experience normal to above normal total rainfall amounts that will result in floods in some areas as *La Nina* conditions have become established over the eastern equatorial Pacific Ocean. In simple terms the seasonal rainfall will be adequate to support agricultural production in most parts of Malawi but high rainfall intensities will result in flooding especially in low lying areas.

The 2010/11 forecast can be downloaded at http://www.metmalawi.com/forecasts/SEASONAL_FORECAST_2010_2011_Press_release_final.pdf

4.0 OUTLOOK 21 – 31 OCTOBER 2010

Mainly hot weather with sporadic thunderstorms and rain showers will persist over Malawi during the last days of October 2010. Rainfall is expected to continue being sporadic until the main rain bearing systems become established over the country.

TABLE 1: SAMPLED AGROMETEOROLOGICAL PARAMETERS FOR 11 – 20 OCTOBER 2010

STATION	MAX TEMP (℃)	MIN TEMP (℃)	ABS MAX (℃)	ABS MIN (℃)	WIND SPEED m/s	RH %
BVUMBWE	29.8	18.1	34.4	14.4	2.3	51
CHILEKA	33.7	21.4	37.4	18.2	3.9	49
CHITEDZE	32.3	17.0	35.2	15.3	1.5	43
KARONGA	34.5	21.9	36.5	20.9	2.1	44
MIMOSA	34.3	17.3	37.7	11.9	1.3	48
MZUZU	29.0	12.6	30.8	10.0	2.1	50
NGABU	38.0	22.6	42.5	20.5	3.2	53
NKHOTAKOTA	33.0	21.9	35.3	19.4	N/A	47

Glossary of some terms on this table

- RH = Relative Humidity
- Mean Temperature of the day =(Max of the day + Min of the same day)/2
- ABS Max (Min) = Absolute Maximum (minimum) is the highest (lowest) of maximum (minimum) temperatures observed for a given number of days (calendar month) of a specified period of months (years).
- To convert Meters Per Second (mps) to Kilometers per hour (Km/hr) = mpsx3.6