Malawi 10-Day Rainfall & Agrometeorological Bulletin

Department of Climate Change and Meteorological Services

HIGHLIGHTS

- **Hot and mostly dry weather continued over Malawi…**
- **Land preparation was major on-farm agricultural activity …**
- **Hot to very hot and mostly dry weather expected to persist …**

1.1 RAINFALL SITUATION

Mainly dry weather prevailed over Malawi except at a few places in some districts in the south where sporadic rainfall was reported in the first ten days of October 2009. Such places included Mpemba Agriculture (19.6mm), Bvumbwe Met (12.7mm), Mulanje Boma (6,2mm) and Ntaja Met (2.7mm),

Mainly dry weather is likely to persist over Malawi in the month of October until major rain bearing systems get established over the country, normally between November and December.

1.2 MEAN AIR TEMPERATURE

Mean maximum air temperatures were generally in the hot category except in lower Shire Valley where very hot conditions existed and Ngabu reported an average maximum temperatures of 37°C. Overall, average maximum temperatures ranged from 25°C at Dedza to 37°C at Ngabu while average minimum temperatures ranged from 16°C at Dedza to 24°C at Ngabu. For more details see Table 1 below.

1.4 MEAN WIND SPEEDS

Mean wind speeds at a height of two metres above the ground level ranged from 0.7 and 3.8 metres per second or 2.5 – 13.7 Km/hr (see table). The highest wind speeds were reported at Ngabu (3.8 m/s).

1.5 MEAN RELATIVE HUMIDITY

During the first ten days of October 2009, air over Malawi was fairly dry. Daily average relative humidity values ranged from 42% at Mangochi to 63% at Mimosa and Bvumbwe. Details are on the Table 1 on page 2.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review the main on-farm agricultural activity in Malawi has been land preparation in readiness for the coming main rains.

3. PROSPECTS OF 2009/10 RAINFALL SEASON

Climate models indicate that during October to December 2009, the northern half of Malawi is most likely to receive normal to above normal rainfall while the Southern half is most likely to receive above normal to normal rainfall.

During the period January to March 2010, the northern half of Malawi is most likely to receive above normal to normal rainfall while the Southern half is most likely to receive normal to above normal rainfall.

In summary, the models suggest that during 2009/2010 rainfall season, a greater part of Malawi will most likely **experience normal total rainfall amounts. However, just like in any El Niño season, extreme weather events such as floods and prolonged dry spells may occur in some places**

The potential Agriculture impact of above-normal to normal rains expected during the first half of the season is that this will provide reasonably good chances of good agricultural success, although provision should be made for possibility of flooding, particularly in the low-lying areas

4. OUTLOOK 11 – 20 OCTOBER 2009

Hot and mostly dry weather is likely to continue over Malawi during 11 - 20 October 2009

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TABLE 1: AGROMETEOROLOGICAL PARAMETERS FOR 1 – 10 OCTOBER 2009

STATION	MAX TEMP (℃)	MIN TEMP (℃)	ABS MAX (℃)	ABS MIN (℃)	WIND SPEED m/s	RH %
BVUMBWE	27.1	17.0	31.2	13.4	2.6	63
CHICHIRI	28.6	18.3	32.5	14.5	1.1	54
CHILEKA	31.2	20.5	35.2	16.1	3.4	56
NTAJA	32.3	20.5	35.4	18.0	2.2	55
CHITEDZE	30.2	17.0	32.5	14.4	1.3	50
CHITIPA	30.8	18.5	32.3	16.9	2.5	49
DEDZA	25.2	16.2	28.0	11.7	1.6	N/A
KASUNGU	31.0	18.9	33.0	15.2	3.4	47
KARONGA	32.8	22.2	36.5	31.0	1.6	54
K I A	29.1	16.8	31.2	13.8	2.2	48
MAKOKA	29.5	17.6	32.6	13.9	1.5	60
MANGOCHI	N/A	22.7	N/A	10.4	2.0	42
MIMOSA	31.8	18.7	36.6	15.5	1.3	63
MONKEY BAY	33.3	22.1	35.1	18.3	2.1	51
MZIMBA	30.2	17.8	31.8	15.4	1.7	45
MZUZU	28.4	14.2	30.6	12.1	1.8	55
NGABU	37.0	24.3	40.8	21.1	3.8	55
NKHATA BAY	33.5	17.3	36.3	15.8	0.7	56
NKHOTAKOTA	32.2	22.3	33.5	20.0	N/A	79
SALIMA	31.8	22.2	34.4	21.2	2.4	54

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