# **10-Day Rainfall & Agromet Bulletin**



**Department of Meteorological Services** 



Period: 11 - 20 March 2008

Season: 2006/2007 Release date: 27 March 2008 Issue No.17

# HIGHLIGHTS

- Rainfall improved over centre and north, declined over the south...
- Maize crop ranged from maturity to drying and harvesting stages...
- Generally dry conditions expected during 21 31 March, 2008...



### **1. WEATHER SUMMARY**

### **1.1 RAINFALL SITUATION**

During the second dekad of March 2008, the main rain belt shifted to central and northern Malawi. As a result moderate to heavy rainfall was experienced over the centre and north and generally light to moderate rainfall over the south particularly in Chikwawa, Neno, Balaka, Machinga and Mangochi. Areas that received rainfall amounts of more than 100mm included Mulanje Boma in the south, Malomo Agric and Mchinji Boma in the centre and Nkhata Bay in the north (Table 1). During the period under review drier than normal conditions were reported in some parts of the country. These areas included Chikwawa, Neno, Balaka, Machinga and Mangochi in the south, Ntcheu and Kasungu in the centre and Chitipa in the north (brown and yellow colours on Map 1). According to climatology, rains are expected to tail off starting from the south progressing northwards reaching the north by end of April and so far weather patterns indicate that the rainfall season is coming to an end.

Cumulative rainfall performance from October 2007 to 20 March, 2008 suggests the country has experienced generally normal to above-normal rainfall amounts (green and blue colours on Map 2).

#### **1.2 MEAN AIR TEMPERATURE**

During the period under review, Malawi experienced warm to hot temperatures during the day. Mean daily maximum temperatures ranged from 23°C at Dedza to 32°C at Ngabu. The highest absolute maximum temperaure was reported at Ngabu (35.3°C) while the lowest absolute minimum temperature was 12.9°C, reported at Dedza (Table 2).

## **1.3 MEAN DAILY WIND SPEEDS**

Mean daily wind speeds measured at a height of two meters above the ground were light. The highest speed was reported at Salima (2.4 m/s or 8.6 Km/hr) while the lowest wind speed was recorded at Chitedze (0.6 m/s or 2.2 Km/hr). See Table 2.

#### **1.4 MEAN RELATIVE HUMIDITY**

Relative humidity conditions were generally high in most areas. Mean daily values ranged from 63% at Dedza to 85% at Mzuzu.

#### 2. AGROMETEOROLOGICAL ASSESSMENT

During the second ten days of March 2008, there was a significant improvement in spatial and temporal distribution of rainfall over the centre and north and a decline in rainfall over some parts of the south particularly in Chikwawa, Neno, Balaka, Machinga and Mangochi. The rainfall received in the centre and north apart from supporting growth and development of tubers, enabled crops that were planted between late December and January to reach maturity stage. Drier than normal conditions that were experienced in some parts particularly in the south facilitated drying and harvesting of matured crops.

The general crop stand in the fields was reported in good condition. Maize crop which is the staple food crop for Malawi ranged from maturity in the centre and north to drying and harvesting stages in some parts of the south. Apart from floods and dry spells that lasted for more than a month in some parts of the south, no major incidences of pests and diseases have been reported.

Prospects of a good harvest this season have been compromised by late start of rains in some parts, heavy rains and floods in January and unusually dry conditions in February. The dry spell in February coincided with a more vulnerable stage of crop development and localized production deficits are expected. Hence overall crop production this season is likely to be less than last season.

#### 3. PROSPECTS OF 2007/08 SEASON

Most climate prediction models predict at least a moderate La Niña to persist up to April and rainfall over Malawi is likely to be confined to highlands and lakeshore areas as the main rainfall season comes to an end.

#### 4. OUTLOOK FOR 21 – 31 March 2008

Meanwhile, short to medium-term forecasts suggest that there is a great likelihood of thunder showers to be confined to northern Malawi and light rainfall in the south during the last ten days of March 2008.

10-Day Rainfall and	Agrometeorolog	DAL RAINFA		11 to 20	<u>) March 200</u>	<u>8</u>				
DEKAD 2 OF MARCH 2008: PERIOD 11 - 20										
STATION NAME	DEKADAL	DEKADAL	DEKADAL	TOTAL	NORMAL	TOTAL	RAINY			
	TOTAL	NORMAL	TOTAL	ТО	TO	TODATE	DAYS			
	RAINFALL		AS % OF	DATE	DATE	AS % OF				
SOUTHERN REGION	mm	mm	NORMAL	mm	mm	NORMAL	> 0.3			
Balaka Township	12.5	31.6	40	738.1	752.0	98	3			
Bvumbwe Met.	97.9	63.1	155	1033.6	937.2	110	8			
Chichiri Met.	34.6	65.0	53	971.1	952.1	102	5			
Chikwawa Boma	26.2	47.7	55	749.3	662.6	113	1			
Chikweo Agric.	31.1	45.6	68	1036.8	945.4	110	3			
Chileka Airport	76.7	56.5	136	906.2	793.2	114	5			
Chingale Agric	39.0	49.0	80	1070.1	850.8	126	3			
Chiradzulu Agric	63.8	52.0	123	821.3	929.4	88	3			
Chizunga Factory	60.0	84.5	71	1390.0	1131.8	123	4			
Kasinthula Res. Stn.	0.0	29.6	0	927.5	646.0	144	0			
Liwonde Township	28.5	45.6	63	838.9	754.8	111	4			
Makoka Met	9.5	52.0	18	1135.8	905.1	125	4			
Mangochi Met.	12.7	48.2	26	803.7	752.2	107	4			
Mimosa Met.	84.2	99.9	84	993.3	1210.9	82	4			
Monkey Bay Met.	20.1	18.6	108	1055.0	870.4	121	2			
Mulanje Boma	134.0	81.6	164	1906.1	1333.1	143	6			
Namiasi Agric	14.2	44.4	32	850.2	754.7	113	2			
Naminjiwa Agric	18.0	44.2	41	817.5	859.9	95	3			
Nchalo Sucoma	34.0	19.4	175	755.5	608.0	124	1			
Neno Agric	15.1	33.3	45	1277.7	1004.5	127	4			
Ngabu Met.	15.1	41.2	37	971.1	686.2	142	1			
Nsanje Boma	62.0	37.8	164	933.0	761.7	122	2			
Ntaja Met.	13.8	45.9	30	1053.7	786.8	134	4			
Thyolo Met	65.5	74.2	88	1197.4	990.0	121	5			
Zomba R.T.C	12.8	74.4	17	1290.4	1072.3	120	2			
CENTRAL REGION										
Bunda College	24.9	33.5	74	855.9	777.0	110	4			
Chileka Namitete	41.3	44.6	93	838.1	827.0	101	5			
Chitedze Met.	64.8	46.8	138	916.8	815.4	112	7			
Dedza Met	64.7	42.9	151	997.8	849.3	117	5			
Dowa Agric	16.4	50.9	32	976.8	791.8	123	3			
Kaluluma DTC	56.5	50.3	112	631.1	736.9	86	6			
K.I.A Met	44.8	44.6	100	796.0	772.0	103	4			
Kasiya Agric	46.7	39.7	118	767.5	871.0	88	6			
Kasungu Met	4.2	36.9	11	573.0	805.7	71	1			
Lisasadzi	25.6	33.7	76	569.9	752.8	76	5			
Malomo Agric	143.2	46.7	307	990.1	761.3	130	5			
Madisi Agric	6.0	37.2	16	644.5	764.2	84	2			
Mchinii Boma	125.9	56.7	222	1104.8	919.1	120	8			
Mkanda Met	46.8	40.3	116	931.9	815.2	114	2			
Mponela Agric	50.5	41.4	122	1007.8	750.7	134	4			
Mwimba Research	29.2	32.6	90	644 4	856.6	75	3			
Nathenie Agric	79.0	51 A	154	1026.3	795.0	129	4			
Nkhotakota Met	52 0	132 /	.39	1392.2	1150.0	121	5			
Ntcheu - Nkhanda	02.0 06.0	102.4	55	1002.2	060.0	126	2			
Ntchisi Roma	20.0 97.0	47.7	107	1006.9	777 A	130	2			
Solimo Mot	07.2	44.2	197	1000.8	1100.9	11/	3			
Sinvala Agrig	30.8 70 0	77.0	106	027.6	702 5	119	4			
Dodza PTC	78.0	40.2	160	937.0	793.3	07	5			
	03.1	49.2	109	073.4	900.7	97	5			
	50.0	00.4	140	001.0	005.0	100				
	53.3	38.1	140	681.8	665.8	102	5			
Bwengu Agric.	11.5	52.6	22	/15.7	/29.2	98	2			
Chitipa Met	37.8	72.8	52	744.1	872.2	85	5			
Emteni Agric	29.8	38.2	78	572.4	717.9	80	4			
Euthini Agric.	53.0	43.0	123	698.2	717.2	97	5			
Karonga Met.	78.9	91.2	87	896.6	753.8	119	5			
Mzimba Met	35.8	47.2	76	684.8	797.6	86	5			
Mzuzu Met.	73.7	62.6	118	1066.2	893.3	119	6			
NkhataBay Met.	103.3	49.9	207	917.2	1096.4	84	8			

STATION	MAX	MIN	ABS	ABS	WIND	RH
			MAX (°C)	MIN (°C)	SPEED m/s	0/
	27.0	16.4	29.4	15.0	1.0	70 80
BVUMBWE	24.4	17.1	26.7	13.0	1.0	84
CHICHIBI	25.0	17.1	27.5	14.3	0.8	
CHILEKA	27.1	19.7	29.3	17.8	2.6	80
CHITEDZE	26.6	17.6	29.2	16.1	0.6	78
CHITIPA	26.7	17.0	28.3	16.3	1.7	74
DEDZA	23.0	15.4	23.8	12.9	1.2	63
K.I.A.	25.7	16.8	27.4	15.0	1.1	84
KARONGA	29.4	21.3	30.4	19.2	0.8	78
KASUNGU	27.2	17.9	28.2	17.3	1.2	79
ΜΑΚΟΚΑ	26.0	17.5	29.7	15.0	1.3	81
MANGOCHI	30.4	21.5	33.4	19.6	1.4	75
MIMOSA	28.2	18.8	31.1	16.8	1.0	75
MONKEY BAY	29.7	22.1	30.9	20.4	1.7	75
MZIMBA	25.9	16.4	27.5	15.4	0.7	78
MZUZU	25.0	16.8	27.1	16.2	1.5	85
NGABU	32.4	22.0	35.3	19.6	1.0	78
ΝΚΗΑΤΑ ΒΑΥ	29.5	20.3	31.8	19.3	0.9	82
ΝΚΗΟΤΑΚΟΤΑ	28.2	21.5	29.6	20.9	1.0	79
NTAJA	28.2	20.4	30.4	17.0	0.9	77
SALIMA	29.3	22.2	30.7	20.9	2.4	74

# TABLE 2: AGROMETEOROLOGICAL PARAMETERSFOR DEKAD 2 OF MARCH 2008

#### 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