10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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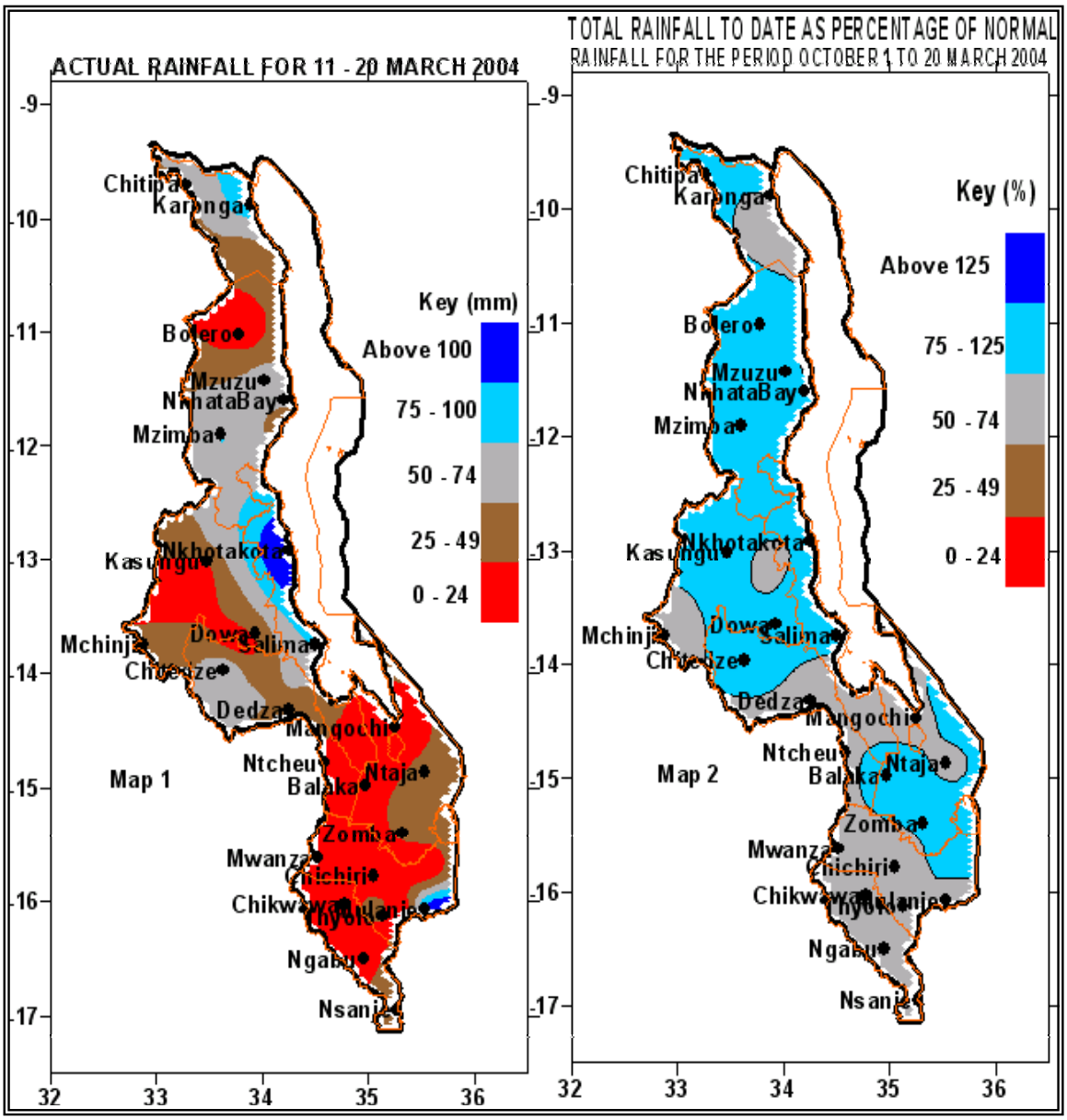
HIGHLIGHTS

- **Rainfall diminishes over most areas of Malawi…**
- **Late planted maize severely affected at flowering stage…**
- **Cumulative rainfall suggests near normal rainfall season…**
- **Dry weather to persist in most areas of Malawi…**



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1. WEATHER SUMMARY

1.1 RAINFALL

During the period 11 to 20 March 2004, most parts of Malawi became relatively dry. Very few areas received above normal rainfall during the period. These areas included Karonga, Mzuzu and Mzimba in the north, Nkhotakota, Salima, Chitedze and Dedza in the centre and Lujeri Tea Estate and Mulanje Boma in the south. Otherwise, most areas received either light amounts of rainfall or no rainfall during the period. Notable total rainfall amounts above 100mm were registered at Nkhotakota, Mulanje and Karonga.

Cumulative rainfall totals to date indicate that most areas in the north and centre have received between 75 and 125% of normal amounts with just pockets of below 75% of normal amounts by 20 March 2004. In the south, however, rainfall deficits persist as most areas have so far received between 50 and 74% of normal rainfall amounts.

1.2 MEAN AIR TEMPERATURE

During the period under discussion warm to hot temperatures were maintained over Malawi. Mean daily maximum temperatures ranged from 23°C at Chitipa in the north to 32°C at Ngabu in Chikwawa district in the south. The highest temperature during the period was 35°C, registered at Ngabu on 20th March while the lowest temperature (14°C) was reported at Dedza on 12th March 2004.

1.3 AVERAGE DAILY WIND SPEEDS

Wind speeds at a height of 2 meters above the ground remained light and variable. However, Nkhotakota in the centre, Chileka in the south and Chitipa recorded wind speeds in excess of 2m/s. The highest wind speed was 2.6m/s, recorded at Chileka Airport.

1.4 MEAN RELATIVE HUMIDITY

Mean daily relative humidity values at most areas took a downward trend. This was in line with relatively dry weather that prevailed over most areas. Areas that recorded relative humidity values in excess of 80% included only highlands and Lakeshore areas.

1.5 MEAN SUNSHINE HOURS

Most parts of Malawi experienced an increase in mean daily sunshine hours during the period 11 to 20 March 2004. Most areas registered mean daily sunshine hours of more than 7 hours.

2. AGROMETEOROLOGICAL ASSESSMENTS

In the second 10-days of March 2004, most areas in Malawi experienced a dry spell. This dry spell will have a severe negative impact on the final yields of late planted maize that was at the crucial flowering stage particularly in Shire Valley and some isolated areas in southern Malawi. If the current dry spell continues, production of the maize that was planted between mid January and early February 2004 will be a total failure. On the other hand, the dry spell facilitated drying of matured crops in some parts of the country.

According to preliminary crop production estimates released early March 2004 by National Statistics Office (NSO), summer smallholder maize production for 2003/04 season is estimated at 1.5 million metric tonnes which is 24% below last season total maize production. However, it should be noted that this preliminary maize production estimate has not included winter and estate production.

2. FORECAST FOR 21 – 31 MARCH 2004

The current atmospheric pattern indicates that the main rainfall season in Malawi is probably coming to an end. However, air over Malawi is still fairly moist. Therefore, isolated light to moderate rainfall is expected over Malawi during the remaining days of March 2004.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 2 OF MARCH 2004: PERIOD 11 - 20

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	TOTAL TO DATE	NORMAL TO DATE	TOTAL TODATE AS % NORMAL	RAINY DAYS
SOUTHERN REGION	mm	mm	mm	mm		≥ 0.3 mm
Blantyre Town Hall	0.0	61.4	515.0	964.5	53	0
Chancellor College	45.2	105.1	951.5	1232.9	77	3
Chichiri Met.	14.1	65.0	682.6	952.1	72	3
Chikwawa Boma	5.8	47.7	491.1	662.6	74	1
Chileka Airport	3.0	56.5	506.7	793.2	64	1
Kasinthula Res. Stn.	2.8	29.6	481.7	646.0	75	1
Lujeri Tea Estate	135.2	146.5	982.6	1612.8	61	5
Makoka Met	9.7	52.0	611.0	905.1	68	2
Mangochi Met.	3.3	48.2	444.9	752.2	59	2
Monkey Bay Met.	27.6	18.6	493.9	870.4	57	3
Mulanje Boma	102.5	81.6	790.5	1333.1	59	3
Mwanza Boma	6.2	54.5	456.6	886.8	51	2
Namiasi Agric	0.0	44.4	-	754.7	-	0
Naminjiwa Agric	0.0	44.2	754.5	859.9	88	0
Nchalo Sucoma	10.5	19.4	347.9	608.0	57	4
Ngabu Met.	11.1	41.2	419.6	686.2	61	2
Ntaja Met.	34.0	45.9	550.3	786.8	70	3
Satemwa Tea Est. No.1	46.6	83.4	647.3	1101.4	59	5
Thyolo Met	9.5	74.2	508.4	990.0	51	3
Zomba R.T.C	25.1	74.4	900.2	1072.3	84	5
CENTRAL REGION						
Chitedze Met.	73.1	46.8	685.1	815.4	84	4
Dedza Met	48.0	42.9	509.7	849.3	60	6
Dwangwa Sugar Corp.	82.1	86.7	864.3	1015.4	85	7
L.I.A. Met.	2.6	44.6	623.5	772.0	81	3
Kasungu Met	36.6	36.9	759.9	805.7	94	4
Mchinji Boma	30.0	56.7	656.5	919.1	71	2
Mwimba Research	12.6	32.6	822.6	856.6	96	1
Nkhotakota Met	155.3	132.4	931.9	1150.0	81	8
Salima Met	81.4	77.8	900.8	1100.8	82	5
NORTHERN REGION						
Bolero Met	9.3	38.1	602.8	665.8	91	3
Chitipa Met	48.5	72.8	813.1	872.2	93	5
Chintheche Agric	36.9	102.5	1196.5	1243.8	96	4
Karonga Met.	108.7	91.2	689.1	753.8	91	8
Kavuzi Rosefalls	75.1	90.4	635.2	1083.2	59	5
Lupembe	57.0	71.4	462.5	685.7	67	7
Mzimba Met	79.1	47.2	824.8	797.6	103	5
Mzuzu Met.	68.0	62.6	734.7	893.3	82	5
NkhataBay Met.	46.8	49.9	736.9	1096.4	67	7
Rumphi Boma	12.0	34.5	508.1	618.2	82	2

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 2 OF MARCH 2004

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BOLERO	27.1	17.7	28.8	15.9	0.5	76
CHICHIRI	26.0	17.1	28.0	15.1	0.6	94
CHILEKA	28.1	19.6	30.2	18.5	2.6	74
NTAJA	29.2	20.6	31.4	19.5	1.4	73
CHITEDZE	26.8	17.6	28.2	15.9	0.6	79
CHITIPA	23.3	16.2	27.2	15.0	2.0	76
DEDZA	23.6	15.4	24.7	14.3	1.1	83
KASUNGU	27.5	17.7	29.1	16.6	1.1	79
KARONGA	29.9	22.2	32.5	21.5	1.4	84
L I A	26.6	17.0	27.8	16.0	1.5	79
MAKOKA	26.9	17.3	28.7	16.6	1.1	76
MANGOCHI	31.8	21.8	33.7	20.9	1.6	71
MONKEY BAY	30.1	21.9	32.3	20.2	1.3	72
MZIMBA	26.3	16.3	28.1	15.3	0.8	80
MZUZU	25.4	16.7	27.6	14.4	1.5	84
NGABU	32.2	22.7	35.0	21.0	1.3	73
NKHATA BAY	29.5	20.8	31.9	19.5	1.5	81
NKHOTAKOTA	28.8	21.6	31.0	19.5	2.4	78
SALIMA	29.8	21.5	31.5	19.0	1.8	76
THYOLO	27.0	18.3	28.6	17.0	0.8	80

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).