10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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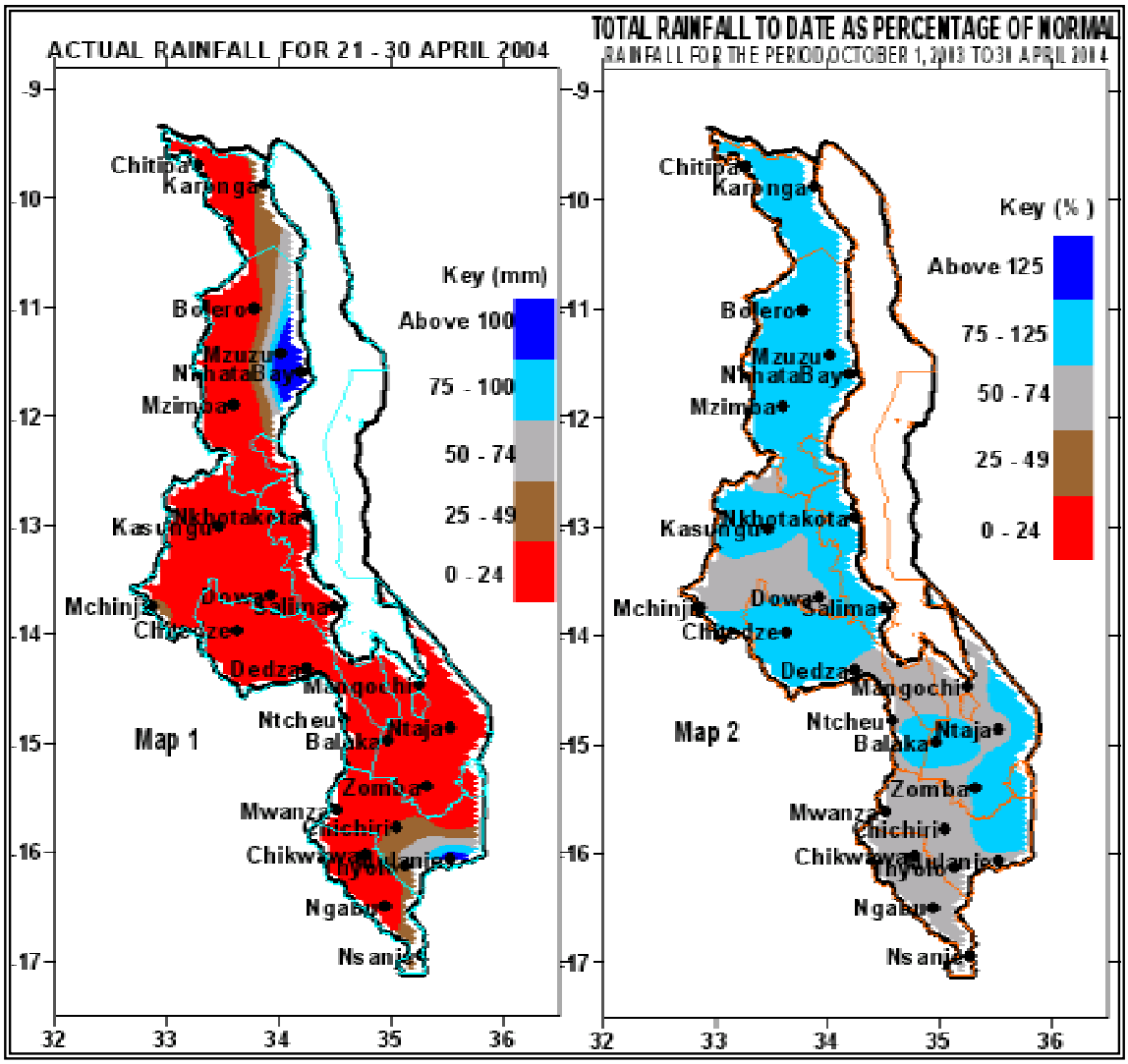
HIGHLIGHTS

- **Dry weather experienced in most parts of Malawi…**
- **Occasional rains expected over highlands and lakeshore areas…**
- **Centre and north experience normal cumulative rainfall, mixed in the south…**
- **Maize production for 2003/04 season is estimated at 1.77 million metric tonnes…**



All inquiries should be addressed to: The Director of Meteorological Services, P.O. Box 2, Chileka, MALAWI
Tel: (265) 1 692 312/333/320 Fax: (265) 1 692 329 E-mail: metdept@metmalawi.com Homepage: www.metmalawi.com

1. WEATHER SUMMARY

1.1 RAINFALL

During the last 10-days of April 2004 the main rain belt shifted to East Africa marking the end of the main rains in Malawi. Consequently most parts of Malawi experienced dry conditions except parts of Mulanje and Thyolo districts in the south and Mzuzu and Nkhata Bay in the north where moderate to heavy rainfall was experienced. Nkhata Bay Met with 283mm reported the highest. Other areas that recorded substantial amounts during the period included Kavuzi Rosefalls in Mzuzu 152mm, Mulanje Boma 131mm, Mzuzu Met 126mm and Lujeri Tea Estate 109mm. Otherwise most areas recorde 10-day rainfall amounts ranging from 0 to 24mm (Table 1 and Map 1).

As at 30th April 2004 cumulative rainfall performance showed that a normal rainfall season has been achieved over northern and central regions of Malawi where most areas had received between 75 and 125% of the expected cumulative rainfall amounts. However, in the southern region, cumulative rainfall performance had been mixed. Most areas had received below normal cumulative rainfall (below 75% of the expected rainfall) amounts except over some parts of Zomba, Balaka and eatern side of Machinga district where normal cumulative rainfall amounts (between 75 and 125% of the expected rainfall) had been experienced (Table1 and Map 2).

1.2 MEAN AIR TEMPERATURE

Warm to hot temperatures were maintained over Malawi. Mean daily maximum temperatures ranged from 23°C at Mzuzu and Bvumbwe to 30°C at Ngabu. Mean daily minimum temperatures ranged from 12°C to 21°C, with lowest values recorded at Kasungu. On 22nd April 2004 Ngabu (35°C) in Shire Valley registered the highest maximum (absolute) temperature while the lowest temperature (9°C) was reported at Kasungu on 26th April 2004.

1.3 AVERAGE DAILY WIND SPEEDS

There was a slight pick up in average daily wind speeds across the country. The highest average daily wind speed was recorded at at Chileka Airport (3.6m/s or 12.96Km/hr). Stronger wind speeds were also recorded along the shore of Lake Malawi.

1.4 MEAN RELATIVE HUMIDITY

With cool and moist air from the Indian Ocean prevailing over Malawi, mean daily relative humidity values slightly increased over most parts. Mean daily relative humidity values across the country ranged from 67% at Salima to 86% over Thyolo.

1.5 MEAN SUNSHINE HOURS

Partly cloudy skies prevailed over most parts of Malawi in the last days of April. Hence daily hours of bright sunshine reduced and most areas registered mean daily sunshine hours of less than 6 hours.

2. OVERVIEW OF 2003-04 SEASON

The 2003/04 rainy season in Malawi was characterised by late and erratic onset of rains with long breaks particularly during the first half (October to December). Most areas received planting rains during mid-December except lower Shire Valley and some isolated areas in the south where planting rains came mid January. Contrary to expectations, the main rains started in the north and centre while the south only received isolated light rains. From mid January 2004 good rains for agricultural production fell over most parts of Malawi. However, during the last days of February the rains became locally heavy and floods were experienced in some parts of Zomba, Phalombe and Nsanje districts. In March a prolonged dry spell caused severe moisture stress in lower Shire and isolated areas in the south. Worst affected was late planted maize that was at flowering stage. Some crops reached permanent wilting point, so could not recover although rains resumed at the very last days of March. Rainfall amounts diminished over Malawi from mid April, signalling the end of 2003/04 rainfall season in Malawi.

Maize is one of the main determinants of food security in Malawi. The second round crop production figures for 2003/04 released by the National Statistical Office (NSO) on 29th April 2004 put national maize production from Estate and Smallholder at 1,773,017 MT, down by 12.5 percent from last year's final round production of 1,983,440 MT. Harvesting of maize and other matured crops was in full swing over most parts of Malawi.

1. OUTLOOK FOR MAY 2004

A series of high pressure systems will periodically induce cool and fairly moist south easterly air into Malawi. Therefore, occasional light rains are expected particularly over highlands and along the Lakeshore areas during the month of May 2004.

THIS IS THE LAST 10-DAY BULLETIN FOR 2003/04 SEASON

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 3 OF APRIL 2004: PERIOD 21 - 30

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	TOTAL TO DATE	NORMAL TO DATE	**TOTAL TODATE AS %**	RAINY DAYS
SOUTHERN REGION	mm	mm	mm	mm	**NORMAL**	**≥ 0.3 mm**
Bvumbwe Met.	40.0	16.9	714.6	1060.4	67	6
Chancellor College	7.1	13.2	1105.4	1393.2	79	3
Chileka Airport	16.5	3.5	594.5	878.1	68	2
Lujeri Tea Estate	108.7	63.0	1287.7	1983.7	65	8
Mangochi Met.	18.4	8.9	489.5	826.2	59	7
Mimosa Met.	79.1	43.8	819.8	1445.7	57	7
Mulanje Boma	131.0	34.2	1202.5	1611.6	75	6
Mwanza Boma	6.7	13.3	576.2	987.6	58	1
Namiasi Agric	11.5	7.3	338.0	796.8	42	3
Naminjiwa Agric	0.0	5.8	905.3	931.7	97	0
Nchalo Sucoma	11.4	10.1	386.0	678.3	57	4
Ngabu Met.	9.3	11.1	521.4	766.4	68	4
Ntaja Met.	10.1	10.5	632.0	892.1	71	4
Satemwa Tea Est. No.1	58.7	22.3	827.9	1284.1	64	9
Toleza Farm	0.0	10.2	747.0	841.6	89	0
Thyolo Boma	47.6	24.7	631.7	1148.4	55	4
Thyolo Met	30.4	23.3	695.9	1143.2	61	7
CENTRAL REGION						
Chitedze Met.	4.1	8.4	768.9	905.4	85	1
Dwangwa Sugar Corp.	9.5	36.3	1281.5	1394.7	92	2
L.I.A. Met.	0.6	4.0	658.6	827.7	80	1
Kasungu Met	0.0	8.0	812.9	848.7	96	0
Mchinji Boma	32.0	15.0	799.8	1042.0	77	1
Nkhotakota Met	22.0	31.2	1299.0	1460.7	89	5
Ntchisi Boma	0.0	6.3	1064.3	868.5	123	0
Salima Met	6.7	11.1	1117.5	1258.3	89	1
NORTHERN REGION						
Bolero Met	5.3	4.7	670.5	728.2	92	4
Chikangawa forest	7.6	24.7	1188.3	1121.3	106	4
Chitipa Met	7.2	9.0	887.4	979.2	91	2
Karonga Met.	34.3	33.9	1215.0	1049.6	116	4
Kavuzi Rosefalls	152.3	70.4	1196.3	1544.5	77	6
Mzuzu Met.	125.6	59.2	1106.1	1184.1	93	8
NkhataBay Met.	283.2	146.3	1484.5	1637.1	91	7
Zombwe Agric	28.5	12.9	655.2	768.9	85	4

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 3 OF APRIL 2004

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED m/s	RH %
BVUMBWE	22.5	14.1	27.5	11.5	1.5	79
BOLERO	25.4	15.4	29.2	13.6	1.0	76
CHILEKA	25.2	15.1	29.7	15.6	3.6	78
NTAJA	24.0	18.2	31.7	15.6	1.8	72
CHITEDZE	25.1	15.2	28.4	12.0	1.2	72
CHITIPA	25.0	16.8	27.0	14.2	2.4	77
KASUNGU	26.7	12.1	29.1	8.7	1.7	68
KARONGA	28.9	21.1	31.0	18.0	1.8	78
L I A	25.4	15.4	28.0	13.0	2.0	79
MANGOCHI	29.2	19.9	33.3	16.5	1.9	71
MIMOSA	25.1	17.0	30.9	15.2	1.0	78
MONKEY BAY	28.8	20.4	32.3	17.2	2.1	69
MZIMBA	25.1	14.8	27.3	12.3	1.7	71
MZUZU	22.9	15.4	26.3	14.0	2.3	85
NGABU	30.1	21.0	35.0	17.5	1.3	74
NKHATA BAY	27.8	19.5	31.7	17.6	1.5	78
NKHOTAKOTA	27.6	20.2	29.9	17.5	2.8	75
SALIMA	28.3	20.7	31.2	18.2	3.3	67
THYOLO	24.0	17.7	28.2	15.4	1.0	86

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).