Malawi 10-Day Rainfall & Agromet Bulletin

Department of Meteorological Services

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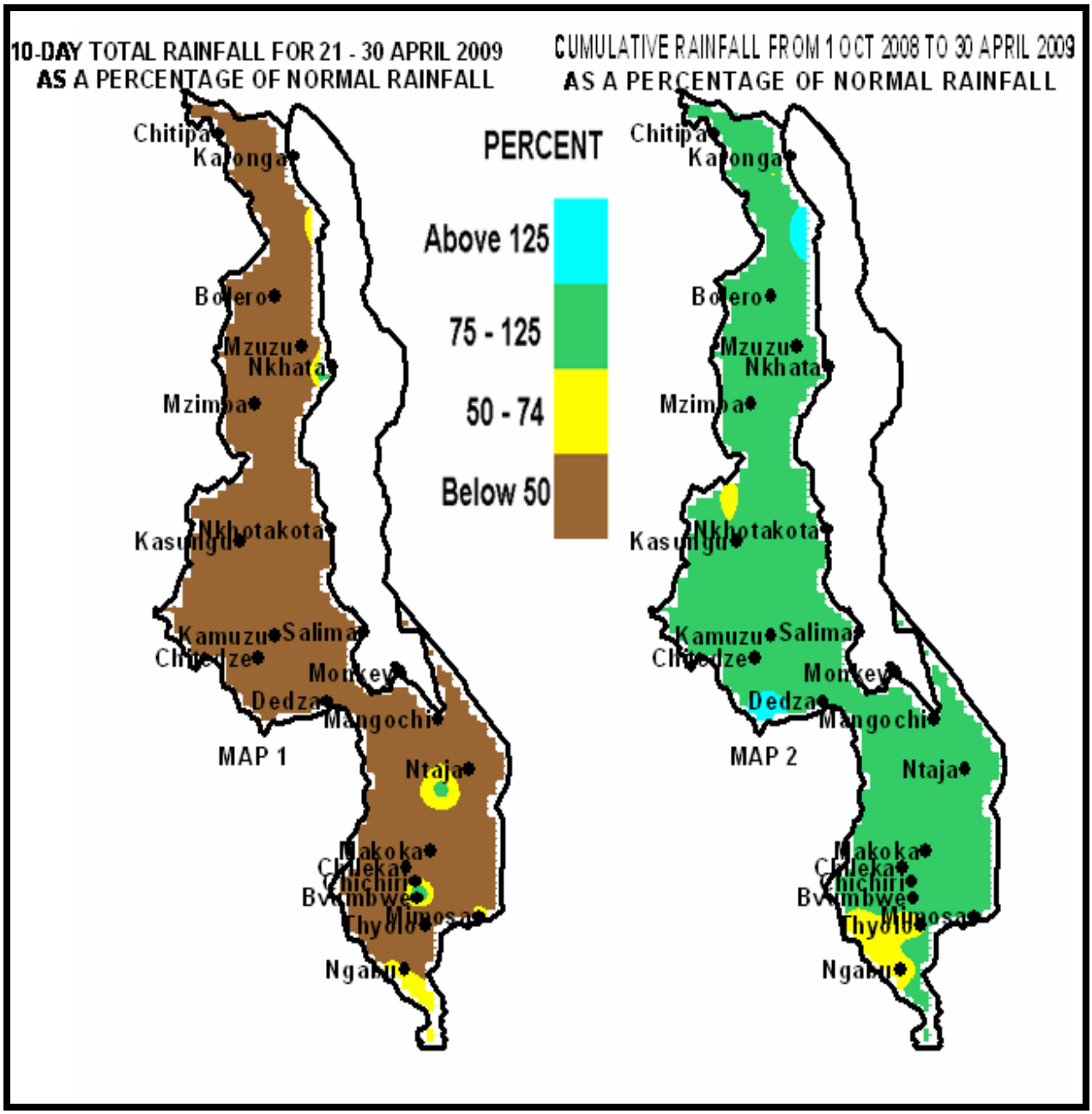
HIGHLIGHTS

- **Dry conditions prevailed in the last ten days of April…**
- **Normal seasonal rainfall amounts experienced in 2008/9…**
- **Occasional light rainfall expected in May and June 2009……**



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1. WEATHER SUMMARY

1.1 RAINFALL SITUATION

During the last ten days of April 2009, as expected the main rain belt was over East Africa. As a result dry weather conditions prevailed over most parts of Malawi except at very few places mainly over highlands and along the lakeshore. Details are on Table 1. Most areas registered nil rainfall for the entire period..

Cumulative rainfall performance from October 2008 up to 30 April, 2009 indicated that the 2008/09 rainfall season in Malawi has been generally good (**green colour on Map 2**) although localised rainfall deficits and surpluses have also been experienced. Notable areas with rainfall deficits (**yellow colour on map 2**) included Chikwawa district in Shire Valley Agricultural Development Division. The rainfall deficits in Chikwawa have been due to late onset of the main rains and occurrence of prolonged dry conditions from end of January to early March 2009.

1.2 MEAN AIR TEMPERATURE

During the last ten days of April 2009, Malawi experienced warm to hot temperatures during the day and cool to mild temperatures during the night and early morning. Reported mean daily maximum temperatures ranged from 23°C over highlands such as at Dedza to 32°C over low altitude areas such as Ngabu in Chikwawa. The highest absolute maximum temperaure was registered at Ngabu (37°C) while the lowest absolute minimum temperature was 9°C, reported at Dedza. Details are in Table 2.

1.3 MEAN DAILY WIND SPEEDS

Mean daily wind speed at a height of two meters above the ground, were generally light during the period under review. The highest wind speed was reported at Chitipa (3.3 m/s or 11.9 Km/hr) while the lowest wind speed was recorded at Nkhata Bay (0.9 m/s or 3.2 Km/hr). Details are in Table 2.

1.4 MEAN RELATIVE HUMIDITY

Mean Relative Humidity values continued to decline over most areas as dry weather crept in. The mean daily values ranged from 66% at Karonga to 84% at Mzuzu More details are in Table 2.

2. AGROMETEOROLOGICAL ASSESSMENT

Dry conditions that prevailed over the country facilitated harvesting and drying of matured crops. In the south and some parts of the centre most farmers had completed harvesting most crops while in the north most crops were at drying and harvesting stages.

The performance of rainfall in both time and space this season has been the best in recent growing seasons. This resulted in good crop stand in most fields and good crop yields. For the first time Malawi is expected to produce a record 3.7 million metric tonnes of Maize this season according to second round official reports from Ministry of Agriculture and Food Security. Up to second round crop production estimates figures remain subjective. Objective figures are normally released during the third round in June after weighing of crop yields has been done. The second round results from the Agrometeorological Maize Yield assessment model from Department of Meteorological services estimate a national Maize production of not less than **3,207,806 Metric Tonnes** this season.

The general crop production increases have been attributed to several factors including good rainfall performance and timely implementation of Government of Malawi fertiliser and input subsidy programme.

3. FORECAST FOR MAY & JUNE 2009

A series of high pressure systems are expected to periodically induce cool and moist air from the Indian Ocean into Malawi during winter season. Therefore, during the months of May and June 2009 occasional light rains are expected particularly over highlands and along the Lakeshore.

THIS IS THE LAST BULLETIN FOR 2008-09 RAINFALL SEASON

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 3 OF APRIL 2009: PERIOD 21 - 30

STATION NAME	DEKADAL TOTAL RAINFALL	DEKADAL NORMAL	DEKADAL TOTAL AS %	TOTAL TO DATE	NORMAL TO DATE	TOTAL TODATE AS %	RAINY DAYS
SOUTHERN REGION	**mm**	**mm**	**NORMAL**	**mm**	**mm**	**NORMAL**	**³ 0.3 mm**
Bvumbwe Met.	30.5	30.0	**102**	1225.4	1017.4	**120**	3
Chancellor College	4.1	38.0	**11**	1000.4	1353.8	**74**	1
Chichiri Met.	17.7	29.0	**61**	1066.6	1032.6	**103**	2
Chileka Airport	1.0	23.6	**4**	818.3	857.7	**95**	1
Chingale Agric	0.0	26.1	**0**	766.1	917.9	**83**	0
Liwonde Township	20.0	17.2	**116**	813.3	809.2	**101**	1
Lujeri Tea Estate	91.3	106.5	**86**	1863.2	1850.5	**101**	2
Makoka Met	3.1	27.7	**11**	1041.7	971.5	**107**	1
Mangochi Met.	10.4	18.4	**57**	806.9	808.1	**100**	1
Monkey Bay Met.	0.0	5.8	**0**	1029.8	904.2	**114**	0
Mpemba Vet	0.0	35.6	**0**	1257.5	1109.4	**113**	0
Mulanje Boma	49.5	75.9	**65**	1152.7	1514.4	**76**	3
Namiasi Agric	0.0	2.9	**0**	740.5	786.2	**94**	0
Naminjiwa Agric	6.3	20.9	**30**	1115.9	914.4	**122**	1
Nchalo Sucoma	7.0	19.8	**35**	496.1	650.2	**76**	2
Neno Agric	17.0	31.3	**54**	1198.4	1085.6	**110**	1
Ngabu Met.	9.7	16.2	**60**	515.5	737.9	**70**	2
Nsanje Boma	10.6	16.6	**64**	716.2	803.2	**89**	2
Thyolo Met	5.8	43.2	**13**	1076.8	1089.2	**99**	1
CENTRAL REGION							
Chileka Namitete	0.0	27.9	**0**	647.2	889.5	**73**	0
Chitedze Met.	0.2	23.8	**1**	806.8	882.1	**91**	0
Dedza Met	2.7	21.6	**13**	966.7	907.9	**106**	1
Dwangwa Sugar .	0.0	108.0	**0**	1290.1	1283.8	**100**	0
Kaluluma DTC	0.0	24.6	**0**	562.0	789.3	**71**	0
K.I.A Met	1.8	16.7	**11**	788.0	820.2	**96**	1
Kasungu Met	0.0	9.3	**0**	620.6	839.9	**74**	0
Malomo Agric	0.0	16.3	**0**	872.2	808.4	**108**	0
Mchinji Boma	0.0	32.6	**0**	1183.4	1004.5	**118**	0
Mkanda Met	0.0	21.5	**0**	1081.8	891.7	**121**	0
Mponela Agric	0.0	11.7	**0**	818.9	795.5	**103**	0
Mtakataka Airwing	0.0	20.8	**0**	1267.9	825.3	**154**	0
Nathenje Agric	5.0	29.8	**17**	933.5	866.3	**108**	1
Ntcheu - Nkhande	0.0	20.0	**0**	1143.5	1031.2	**111**	0
Ntchisi Boma	0.0	24.1	**0**	955.6	845.2	**113**	0
Salima Met	0.0	42.7	**0**	1167.1	1208.6	**97**	0
Dedza RTC	0.0	22.5	**0**	994.8	967.5	**103**	0
NORTHERN REGION							
Bolero Met	7.5	18.6	**40**	666.9	711.0	**94**	2
Chitipa Met	0.0	30.8	**0**	718.7	953.5	**75**	0
Chintheche Agric	40.0	143.3	**28**	1027.8	1588.2	**65**	2
Karonga Met.	0.1	76.1	**0**	916.5	946.5	**97**	0
Mzimba Met	6.0	19.6	**31**	755.0	860.1	**88**	2
Mzuzu Met.	70.5	87.0	**81**	817.4	1057.9	**77**	5
NkhataBay Met.	158.1	146.3	**108**	1385.8	1637.1	**85**	3
Vinthukutu Agric	98.9	114.2	**87**	1822.2	1076.3	**169**	4

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR DEKAD 3 OF ARIL 2009

STATION	MAX TEMP (℃)	MIN TEMP (℃)	ABS MAX (℃)	ABS MIN (℃)	WIND SPEED m/s	RH %
BOLERO	27.1	14.2	29.5	10.9	N/A	74
BVUMBWE	23.0	15.1	26.8	12.0	2.1	80
CHILEKA	26.8	17.6	30.2	14.1	3.1	70
CHITEDZE	26.9	14.0	28.4	10.9	0.9	70
CHITIPA	26.4	17.1	27.8	14.9	3.3	70
DEDZA	22.9	12.8	24.6	8.9	1.1	N/A
K.I.A.	25.6	13.2	27.5	9.9	1.6	69
KARONGA	30.0	21.6	32.5	20.1	2.0	66
KASUNGU	27.9	15.0	30.5	12.2	1.5	67
MAKOKA	25.7	15.7	28.5	12.0	1.3	78
MANGOCHI	N/A	18.3	N/A	15.0	1.5	72
MONKEY BAY	29.4	18.8	31.5	16.4	1.7	67
MZIMBA	26.2	15.3	28.5	12.2	1.2	67
MZUZU	23.1	15.6	26.1	12.7	2.1	84
NGABU	32.1	19.8	36.7	17.1	1.3	71
NKHATA BAY	28.3	18.8	30.5	15.8	0.9	80
SALIMA	28.2	19.5	30.6	17.0	2.2	67

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