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



**Department of Meteorological Services** 

| sue No.19 |
|-----------|
|           |

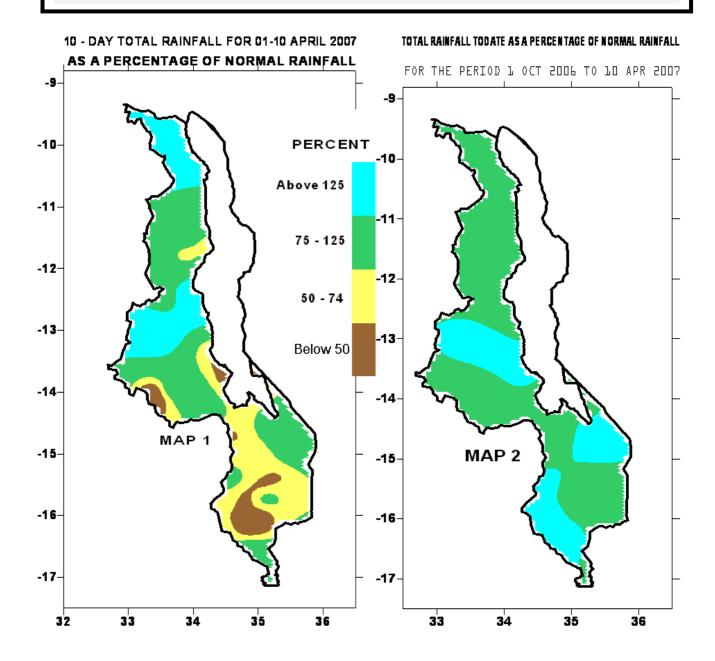
15

Period: 01 – 10 April 2007

Season: 2006/2007 Release date: 13 April 2007

# HIGHLIGHTS

- A general decline in rainfall activities experienced...
- Maize crop between maturity and drying stages and harvesting continues...
- Isolated rainfall activities expected during the period 11 20 April, 2007...



# **1. WEATHER SUMMARY**

All inquiries should be addressed to: The Director of Meteorological Services, P.O. Box 1808, Blantyre, MALAWI Tel: (265) 1 822 014 Fax: (265) 1 822 215 E-mail: <u>metdept@metmalawi.com</u> Homepage: www.metmalawi.com

# 10-Day Rainfall and Agrometeorological Bulletin 1.1 RAINFALL SITUATION

During the first dekad of April 2007, a reduction in rainfall was experienced mainly over the southern parts of Malawi while over the northern half generally wet conditions were experienced. Total dekadal rainfall amounts received during the period were below normal (brown colour on Map 1) in most parts of the southern half and normal to above normal in most parts of the northern half (Green and light blue colours on Map 1). The northern half was under the influence of the rain belt that was active over southern Tanzania during the period under review. Only Ngabu in the south and Mzimba in the north received ten day rainfall amounts above 150%. According to climatology, rains are expected to start tailing off by end of March starting from the south progressing northwards and reaching the north between end of April and early May.

Cumulative rainfall performance from October 2006 to end March, 2007 suggests that the country has enjoyed good rainfall season (green and blue colours on Map 2).

**1.2 MEAN AIR TEMPERATURE** 

Between 1 and 10 April 2007, Malawi experienced warm to hot temperature conditions during the day. Reported mean daily maximum temperatures ranged between around 24°C and 33°C at Dedza and Ngabu, respectively. The highest absolute maximum temperaure was reported at Bvumbwe (36.0°C) while the lowest absolute minimum temperature was 13.2°C, reported at Kamuzu International Airport (KIA) (Table 2).

**1.3 MEAN DAILY WIND SPEEDS** 

Light mean daily wind speeds, measured at a height of two meters above the ground, were reported during the period under review. The highest speed was reported at Chitipa (4.1 m/s or 14.8 Km/hr) while the lowest wind speed was recorded at Chitedze (0.7 m/s or 2.5 Km/hr). See Table 2.

### 01 to 10 April 2007

# **1.4 MEAN RELATIVE HUMIDITY**

Mean Relative Humidity values reported during these ten days were generally lower in most areas than the previous dekad. The mean daily values ranged from 55% at Chitipa and Mzimba to 82% at Chichiri. See Table 2.

#### 2. AGROMETEOROLOGICAL ASSESSMENT

During the period under review, it was generally dry over most areas mainly the southern half of the country. The main agricultural activity during this period, particularly over the south and some parts of the centre, continued to be harvesting of matured crops. However, in some areas of the south the activity was hampered by rains that resulted from the Chiperoni weather conditions that affected these areas. As for the northern areas, the wet weather supported maturity of the maize crop and the cultivation of rice in areas where it is grown.

The general crop stand in the fields was reported in good condition. Maize crop which is the staple food crop for Malawi was reported at maturity and drying stages and harvesting is in progress in some parts of the south. Generally no major incidences of pests, diseases and extended dry spells have been experienced this season. There are high prospects of another good harvest this season. This could be mainly attributed to the Government of Malawi fertiliser and input programme and good rainfall performance. The first round crop production estimates from Ministry of Agriculture and Food Security suggested a national maize production forecast of around three million metric tonnes.

# 3. OUTLOOK FOR 11 – 20 April 2007

During the second dekad of April 2007, Malawi will generally be under the influence of relatively moist easterly air mass Therefore isolated rainfall activities are expected across the country.

| STATION NAME        | DEKADAL DEKADAL DEKADAL TO |        | TOTAL   | NORMAL | TOTAL  | RAINY   |      |
|---------------------|----------------------------|--------|---------|--------|--------|---------|------|
|                     | TOTAL                      | NORMAL | TOTAL   | TO     | TO     | TODATE  | DAYS |
|                     | RAINFALL                   |        | AS % OF | DATE   | DATE   | AS % OF |      |
| SOUTHERN REGION     | mm                         | mm     | NORMAL  | mm     | mm     | NORMAL  |      |
| Bvumbwe Met.        | 20.6                       | 30     | 69      | 1090.9 | 1017.4 | 107     | 5    |
| Chancellor College  | 9.9                        | 38     | 26      | 1217.9 | 1353.8 | 90      | 1    |
| Chichiri Met.       | 11.3                       | 29     | 39      | 1140.3 | 1032.6 | 110     | 1    |
| Chileka Airport     | 13                         | 23.6   | 55      | 938.3  | 857.7  | 109     | 2    |
| Chiradzulu Agric    | 3.5                        | 34     | 10      | 873.1  | 1011.5 | 86      | 2    |
| Lujeri Tea Estate   | 67.6                       | 106.5  | 63      | 1726.8 | 1850.5 | 93      | 4    |
| Makoka Met          | 15.5                       | 27.7   | 56      | 961    | 971.5  | 99      | 1    |
| Mangochi Met.       | 0                          | 18.4   | 0       | 1098   | 808.1  | 136     | 0    |
| Namiasi Agric       | 0                          | 2.9    | 0       | 963.9  | 786.2  | 123     | 0    |
| Namwera Agric       | 0                          | 34.4   | 0       | 661.5  | 1032.1 | 64      | 0    |
| Nchalo Sucoma       | 12                         | 19.8   | 61      | 1070.1 | 650.2  | 165     | 1    |
| Neno Agric          | 11.8                       | 31.3   | 38      | 1467.2 | 1085.6 | 135     | 4    |
| Ngabu Met.          | 29.8                       | 16.2   | 184     | 972.8  | 737.9  | 132     | 4    |
| Nsanje Boma         | 0                          | 16.6   | 0       | 975.2  | 803.2  | 121     | 0    |
| Ntaja Met.          | 0                          | 26.5   | 0       | 1264.5 | 865.6  | 146     | 0    |
| Satemwa Tea Estate  | 15.4                       | 53     | 29      | 1438.7 | 1218.3 | 118     | 5    |
| Zomba Land Hus.     | 12.3                       | 39.7   | 31      | 1513.7 | 1168.5 | 130     | 1    |
| CENTRAL REGION      |                            |        |         |        |        |         |      |
| Bunda College       | 0                          | 34.9   | 0       | 924.5  | 840.1  | 110     | 0    |
| Chitedze Met.       | 18.3                       | 23.8   | 77      | 969.3  | 882.1  | 110     | 1    |
| Dedza Met           | 2.6                        | 21.6   | 12      | 872.8  | 907.9  | 96      | 1    |
| Dwangwa Sugar Corp. | 7.6                        | 108    | 7       | 1317.9 | 1283.8 | 103     | 1    |
| K.I.A Met           | 0                          | 16.7   | 0       | 719    | 820.2  | 88      | 0    |
| Kasungu Met         | 0                          | 9.3    | 0       | 1146.1 | 839.9  | 136     | 0    |
| Mchinji Boma        | 0                          | 32.6   | 0       | 1153.2 | 1004.5 | 115     | 0    |
| Mlangeni Njolomole  | 19.2                       | 27.4   | 70      | 838    | 970.9  | 86      | 1    |
| Nathenje Agric      | 2.6                        | 29.8   | 9       | 978.8  | 866.3  | 113     | 1    |
| Nkhotakota Met      | 2.9                        | 78.6   | 4       | 1182.9 | 1368.2 | 86      | 2    |
| Ntcheu - Nkhande    | 5.3                        | 20     | 27      | 1105.5 | 1031.2 | 107     | 1    |
| Ntchisi Boma        | 13.4                       | 24.1   | 56      | 1739.7 | 845.2  | 206     | 2    |
| Salima Met          | 0                          | 42.7   | 0       | 1348.8 | 1208.6 | 112     | 0    |
| Dedza RTC           | 0                          | 22.5   | 0       | 1096.3 | 967.5  | 113     | 0    |
| NORTHERN REGION     |                            | 40.0   |         | = 10.0 |        | 10.5    |      |
| Bolero Met          | 2.4                        | 18.6   | 13      | 748.2  | 711    | 105     | 2    |
| Bwengu Agric.       | 10.3                       | 24.2   | 43      | 816    | 794.2  | 103     | 2    |
| Chitipa Met         | 0                          | 30.8   | 0       | 1005.2 | 953.5  | 105     | 0    |
| Karonga Met.        | 12.6                       | 76.1   | 17      | 775.6  | 946.5  | 82      | 5    |
| Mzimba Met          | 42.9                       | 19.6   | 219     | 894.9  | 860.1  | 104     | 5    |
| Mzuzu Met.          | 6.6                        | 87     | 8       | 1037.3 | 1057.9 | 98      | 1    |
| NkhataBay Met.      | 60.7                       | 85.8   | 71      | 1108.5 | 1399.7 | 79      | 6    |

#### TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR DEKAD 1 OF APRIL 2007: PERIOD 01 - 10

| STATION    | MAX<br>TEMP | MIN<br>TEMP | ABS<br>MAX | ABS<br>MIN | WIND<br>SPEED | RH  |
|------------|-------------|-------------|------------|------------|---------------|-----|
|            | (°C)        | (°C)        | (°C)       | (°C)       | m/s           | %   |
| BOLERO     | 29.7        | 15.9        | 31.2       | 14.0       | N/A           | 68  |
| BVUMBWE    | 24.2        | 16.0        | 36.0       | 16.9       | 1.6           | 81  |
| CHICHIRI   | 25.3        | 17.4        | 27.1       | 16.4       | 0.9           | 82  |
| CHILEKA    | 27.1        | 19.2        | 28.8       | 17.9       | 2.6           | N/A |
| CHITEDZE   | 27.4        | 16.6        | 29.7       | 15.0       | 0.7           | 73  |
| CHITIPA    | 27.9        | 17.4        | 30.1       | 16.8       | 4.1           | 55  |
| DEDZA      | 23.5        | 15.5        | 26.7       | 13.6       | 1.1           | N/A |
| KASUNGU    | 21.2        | 17.5        | 30.9       | 15.3       | 1.6           | 65  |
| KARONGA    | 31.4        | 22.2        | 32.5       | 20.5       | 1.7           | 69  |
| KIA        | 26.7        | 15.6        | 29.0       | 13.2       | 1.5           | 70  |
| MAKOKA     | 26.6        | 17.3        | 27.6       | 15.7       | 1.2           | 79  |
| MANGOCHI   | 30.5        | 21.6        | 31.5       | 21.0       | 1.7           | 78  |
| MZIMBA     | 27.7        | 16.9        | 29.5       | 16.2       | 1.0           | 55  |
| MZUZU      | 25.5        | 16.4        | 27.2       | 14.5       | 1.6           | 79  |
| NGABU      | 32.9        | 21.8        | 34.0       | 21.4       | 1.3           | 67  |
| NKHATA BAY | 30.7        | 19.9        | 32.6       | 18.8       | 0.9           | 78  |
| NKHOTAKOTA | 29.2        | 22.0        | 30.3       | 21.8       | 2.4           | 73  |
| NTAJA      | 28.6        | 20.1        | 29.9       | 17.6       | 1.2           | 77  |
| SALIMA     | 29.7        | 22.7        | 30.9       | 21.0       | 2.9           | 70  |

#### **TABLE 2: AGROMETEOROLOGICAL PARAMETERS** FOR DEKAD 1 OF APRIL 2007

#### 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 ٠
- 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 •