REPUBLIC OF MALAWI

Department of Climate Change and Meteorological Services

10-day Weather and Agrometeorological Bulletin

Produced in support of national early warning systems

Period:11 – 20 February 2014 Cropping Season: 2013/14 Issue No.14

Release date: 24th February 2014

HIGHLIGHTS

- **Above average rainfall was experienced over most parts of Malawi …**
- **Maize crop doing well between vegetative and maturity stages…**
- **Wet weather to persist over Malawi during 21 to 28 February, 2014…**

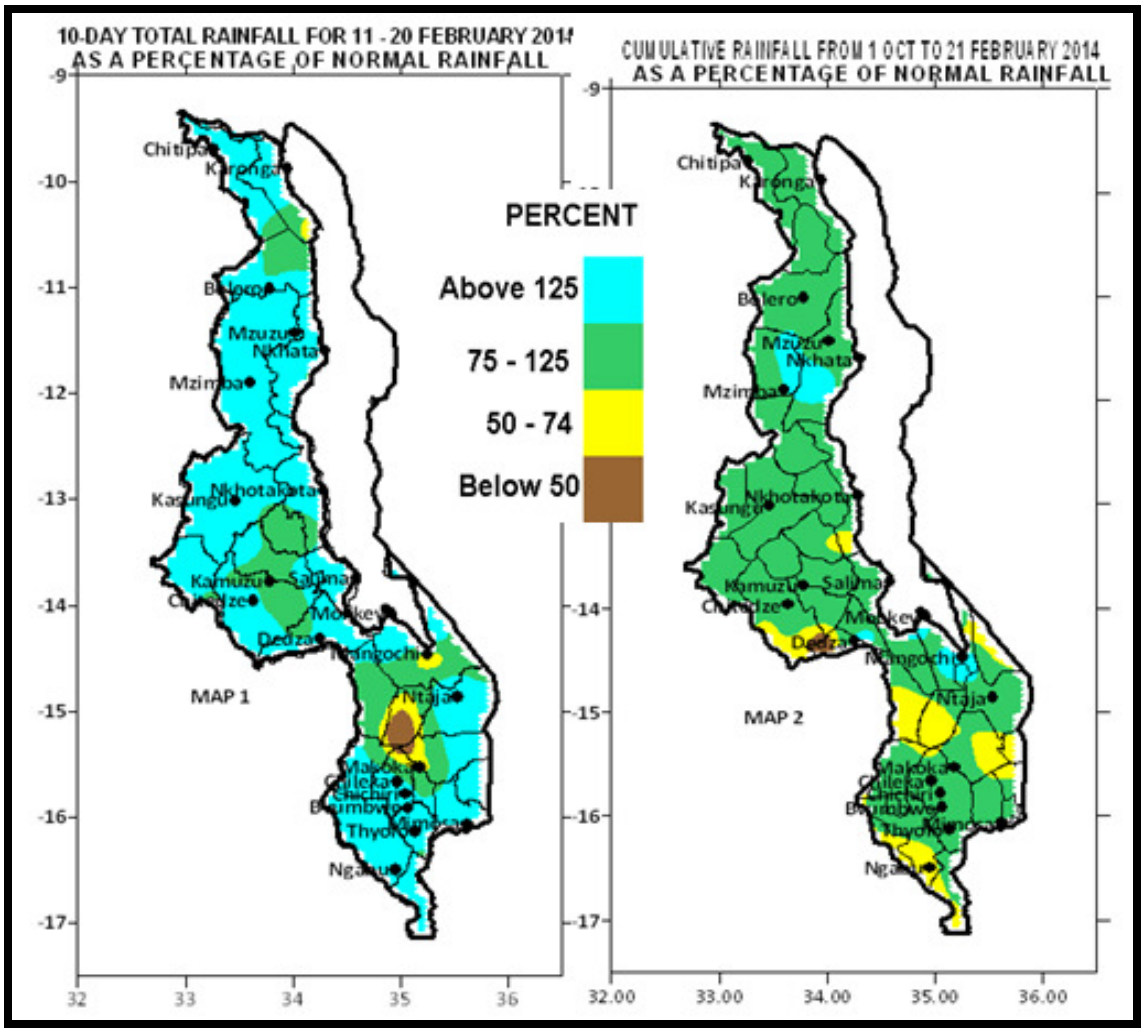


Figure 1: Rainfall Maps for Malawi for 11 to 20 February 2014

All inquiries should be addressed to: The Director of Climate Change and Meteorological Services, P.O. Box 1808, Blantyre, MALAWI
Tel: (265) 1 822 014/106 Fax: (265) 1 822 215 E-mail: metdept@metmalawi.com Homepage: www.metmalawi.com

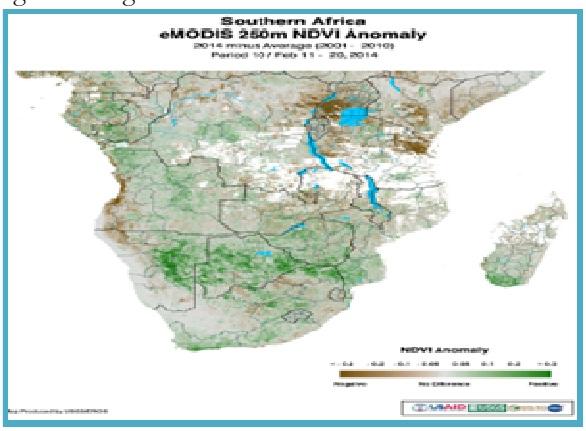
1.0 WEATHER SUMMARY AND IMPACTS

1.1 RAINFALL SITUATION

During the second ten days of February 2014 moist and unstable Congo air mass persisted over most parts of Malawi. As a result wet weather had covered most parts of Malawi and most areas had reported above average rainfall performance with many areas accumulating rainfall amounts of more than 100mm. Notable rainfall amounts of up to 130mm were deposited at some stations including Mimosa Met (155mm), Satemwa Tea Estate (131mm), Salima Met (196mm), Bwengu Agric (154mm), Chikangawa Forest (206mm), Euthini Agric (189mm), Mzuzu Met (170mm) and Zombwe Agric (141mm), More details are on Table 1. However there were a few areas particularly in the south that still recorded below average rainfall amounts (yellow and brown colours on Map 1).
Map 2 shows the situation of cumulative rainfall performance over the country from 1 October 2013 to 20 February 2014. The map shows that most parts of Malawi have received their long term average rainfall amounts (green colour on Map 2) and pockets of below average (yellow and brown colours on map 2) cumulative rainfall still existed particularly in southern Malawi. Other details are on Table 1.

1.2 VEGETATION CONDITION

Figure 2: Vegetation Condition over Southern Africa



The vegetation diference from long term average map for Southern Africa for the period 11 to 20 February 2014 showed further improvement in most areas. (Figure2). This has been attributed to good rainfall performance. This has positive implications for pasture conditions and development of crops.

1.3 AIR TEMPERATURE

Generally warm to hot tempratures continued were still experienced over Malawi during the second ten days of February 2014. Mean minimum temperatures for the same period where generally mild to warm.

1.4 WIND SPEEDS

At a height of two metres above the ground level the mean wind speeds for the period under review were generally light. Dry conditions coupled with high wind speeds result in high evaporation rates.

1.5 RELATIVE HUMIDITY

During the period under review, air over Malawi was generally very moist. Most stations had recorded mean daily relative humidity values of at least 70% High relative humidity values promote outbreaks of fungal diseases.

2. AGROMETEOROLOGICAL ASSESSMENT

During the period 11 to 20th February 2014 moderate to heavy rainfall fell over most parts of Malawi. Most areas had recorded rainfall amounts of above 100mm which was sufficient to satisfy daily crop water requirements.. The rains also continued to improve water resources and soil moisture reserves and pasture availability for communal grazing of livestock.. Despite the delayed start of the main rains particularly in southern Malawi, the maize crop was reported to be doing well especially where fertilizer and good crop husbandry practices have been applied. If rainfall continues performing well up to March then most farmers will have bumper harvests this season.
Preliminary results from the Agro meteorological maize yield forecasting model indicate that the 2013/14 national maize production is estimated at **3,993,980 Metric Tonnes** which is better than last season However, this is not the official maize production estimate for 2013/14 farming season. For official agricultural production estimates please contact Ministry of Agriculture and Food Security.

3. PROSPECTS FOR 2013/14 RAINFALL SEASON

The rainfall outlook for January to March 2014 suggests that ***Malawi is likely to experience normal to above normal total rainfall amounts. This forecast is relevant only to seasonal time-scales and relatively large areas. It does not fully account for local and day to day variations in distribution of rainfall.***

.

4. OUTLOOK FOR 21 TO 28 FEBRUARY 2014

Models for medium range weather forecast suggest that a deep low pressure area in Mozambique Channel will maintain Congo Air mass over Malawi. Therefore widespread locally heavy rains are expected to persist over most parts of Malawi up to 28th February 2014.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR 11 TO 20 FEBRUARY 2014

ION NAME	ACTUAL DEKADAL TOTAL RAINFALL mm	DEKADAL NORMAL (EXPECTED) RAINFALL mm	ACTUAL TOTAL AS PERCENTAGE OF NORMAL (EXPECTED) RAINFALL	TOTAL ACTUAL RAINFALL TO DATE mm	NORMAL (EXPECTED) RAINFALL TO DATE mm	ACTUAL TODATE AS PERCENTAGE OF NORMAL	RAINY DAYS ≥ 0.3 mm
HERN REGION							
a Township	21.7	46.6	**47**	361.8	631.8	**57**	3
ri Met.	73.4	52.3	**140**	736.8	920.0	**80**	7
awa Boma	120.1	41.5	**289**	521.6	570.6	**91**	7
a Airport	79.3	50.4	**157**	472.3	636.9	**74**	6
ale Agric	55.9	68.2	**82**	572.5	669.5	**86**	5
zulu Agric	70.3	66.2	**106**	620.8	710.5	**87**	7
a Met	29.1	63.1	**46**	630.8	703.2	**90**	4
chi Met.	41.0	65.0	**63**	819.0	483.4	**169**	5
nbanjati Agric	112.2	95.3	**118**	893.9	873.1	**102**	7
a Met.	154.7	71.9	**215**	802.9	939.7	**85**	9
y Bay Met.	95.3	46.7	**204**	607.9	445.8	**136**	6
pa Vet	116.0	68.0	**171**	533.5	793.9	**67**	7
si Agric	84.7	50.6	**167**	505.7	565.8	**89**	4
era Agric	59.6	61.7	**97**	379.1	717.0	**53**	6
e Boma	96.4	72.5	**133**	567.7	767.8	**74**	5
a Agric	5.3	57.4	**9**	377.4	605.8	**62**	1
wa	134.2	76.1	**176**	906.6	732.6	**124**	8
Boma	127.8	78.7	**162**	695.2	781.3	**89**	7
Met	90.7	73.8	**123**	926.5	785.7	**118**	7
a RTC	79.3	70.4	**113**	668.9	837.6	**80**	5
RAL REGION							
a Namitete	71.2	68.3	**104**	214.0	677.3	**32**	5
Met	98.7	74.7	**132**	833.5	657.2	**127**	7
Agric	71.2	56.4	**126**	528.6	609.0	**87**	6
gwa	115.1	60.1	**192**	533.4	722.0	**74**	5
Agric	74.6	63.6	**117**	633.2	668.8	**95**	3
gu Met	102.7	63.3	**162**	520.6	549.5	**95**	7
o Agric	71.1	65.7	**108**	182.5	581.5	**31**	6
Agric	106.8	75.9	**141**	486.2	594.9	**82**	4
a Met	104.7	55.1	**190**	558.8	623.2	**90**	4
la Agric	84.5	71.5	**118**	449.7	581.9	**77**	6
nje Agric	68.8	73.4	**94**	600.4	589.5	**102**	4
u - Nkhande	70.7	75.7	**93**	446.2	748.0	**60**	6
a Met	196.0	91.7	**214**	697.8	774.7	**90**	5
RTC	103.8	68.8	**151**	777.6	722.4	**108**	6
HERN REGION							
u Agric.	154.0	66.2	**233**	422.2	531.9	**79**	7
ngawa forest	205.5	75.6	**272**	1085.9	670.4	**162**	10
eche Agric	65.4	77.4	**84**	947.7	809.1	**117**	5
i Agric.	189.2	63.4	**298**	655.1	534.2	**123**	9
a Res. Stn	96.4	66.0	**146**	451.5	573.3	**79**	8
Met	170.1	65.3	260	639.7	593.2	**108**	10
kutu Agric	27.0	58.6	**46**	537.9	553.4	**97**	4
we Agric	140.5	62.6	**224**	601.7	484.8	**124**	6