REPUBLIC OF MALAWI

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HIGHLIGHTS

- **Dry conditions and below average rainfall performance experienced…**
- **Crop failure reported in Karonga district as dry spell hit many areas…**
- **Rainfall performance to improve slightly during 11 to 20th March 2014…**

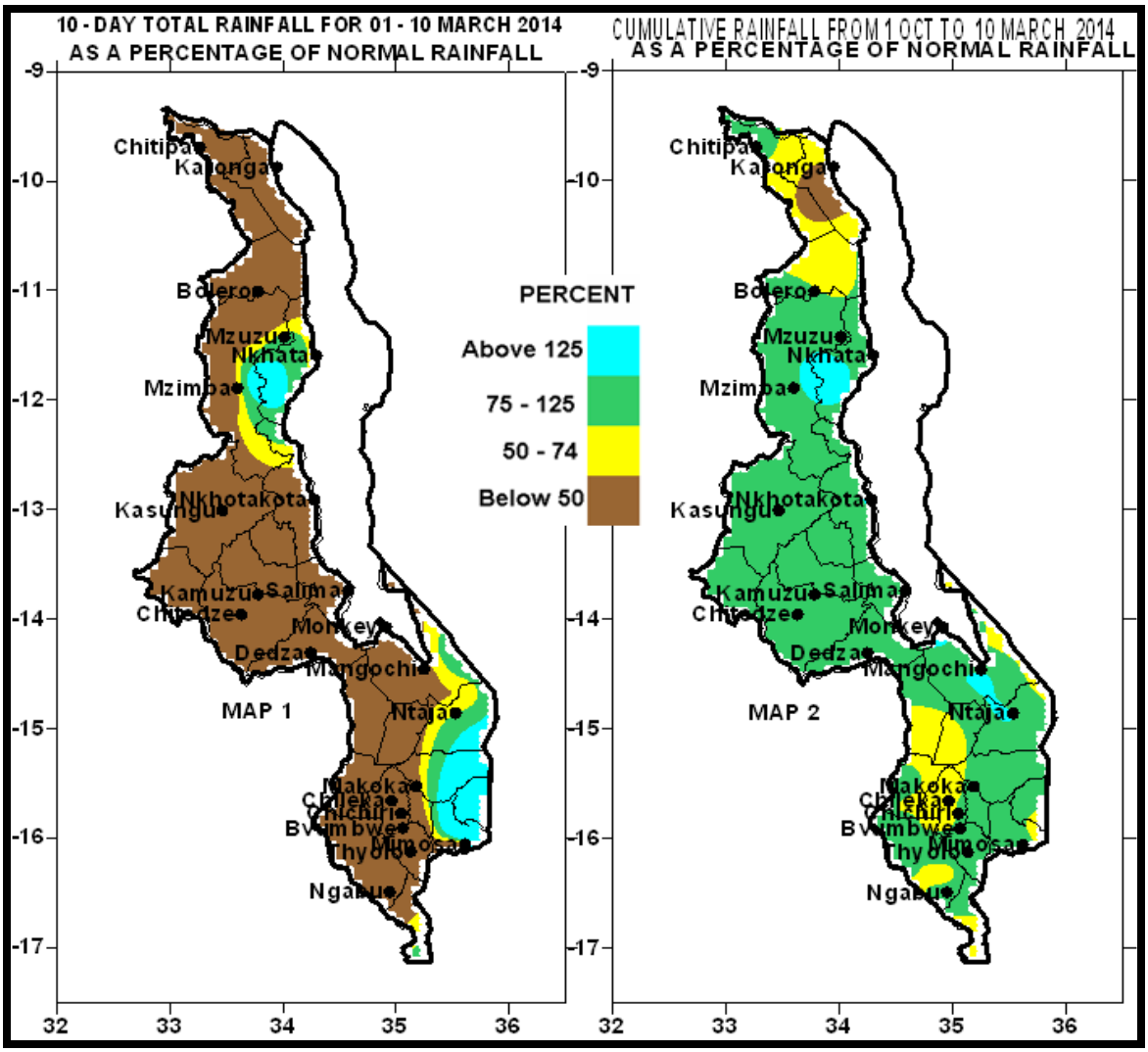

Figure 1: Rainfall Maps for Malawi for 01 to 10 March 2014

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1.0 WEATHER SUMMARY AND IMPACTS

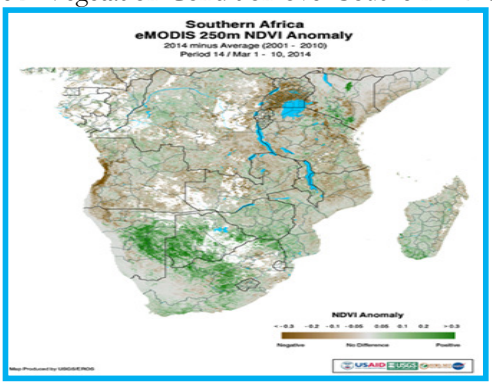
1.1 RAINFALL SITUATION

During the first ten day of March 2014 the main rain bearing systems had relaxed over Malawi causing mostly dry conditions and below average rainfall performance. During the entire period under discussion, stations that had accumulated rainfall amounts of at least 100mm were very few and confined to some parts of northern Malawi and included Chikangawa Forest (166mm) and Chintheche Agric (109mm). Otherwise most areas had recorded cumulative rainfall amounts of less than 50mm with an average of three rainy days. More details are on Table 1.

Map 2 shows cumulative rainfall performance over the country from 1 October 2013 to 10th March 2014. The map shows that most parts of Malawi have received their long term average cumulative rainfall amounts (green colour on Map 2) except for a few places particularly over the north and some parts of the south where cumulative rainfall performance is still below average (yellow and brown colours on map 2). 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 01 to 10 March 2014 showed stressed vegetation and negative anomalies over some parts of the region particularly in the north and over East African region. This has been due to below average rainfall performance (Figure2).

1.3 AIR TEMPERATURE

The period under review was charactarised by hot and sunny days. As a result warm to hot tempratures were maintatined over Malawi. Mean daily maximum temperatures had ranged from around 23°C at Dedza to 35C at Ngabu. Mean daily minimum temperatures for the same period had ranged from 15.4°C at Bvumbwe to 23.8°C at Ngabu in Chikhwawa. The highest absolute maximum temperature for the period was 35.5°C observed at Ngabu. . For more details see Table 2.

1.4 WIND SPEEDS

Mean wind speeds at a height of two metres above ground level were still light and variable. The mean daily wind speeds had ranged from 0.5 to 4.3 metres per second. The lowest mean wind speed was reported at Kasungu .while the highest mean wind speed was recorded at Chitipa. For more details refer to Table 2.

1.5 RELATIVE HUMIDITY

During the period under review, moist air had persisted over Malawi. Most stations had recorded mean daily relative humidity values of at least 75% except at Chichiri and Nkhotakota. The highest mean daily relative humidity was reported at Salima and Chitedze (89%). More details are on the Table 2. High relative humidity values promote outbreaks of fungal diseases.

2. AGROMETEOROLOGICAL ASSESSMENT

Following good rainfall performance during the months of January and February, most parts of Malawi had experienced a dry spell during the first ten days of March 2014. As a result crops started wilting and premature drying. However, in Karonga and other areas that have been experiencing below average rainfall performance since January 2014, the dry spell caused wilting and premature drying and some crops like maize had reached permanent wilting point and will not recover even if rains resumed. Otherwise in other parts of the country particularly in central Malawi, the maize crop survived on residual soil moisture and had been reported in good condition especially where good crop husbandry practices and fertilizer and manure have been applied. If rainfall continues performing well up to end of March then most farmers will have good harvests this season.

Preliminary indications from the Agro meteorological maize yield forecasting model show if good rains continue up to end of March then Malawi at least **3.9 million Metric Tonnes** of maize during the 2013/14 farming season which is enough for national consumption but food maize shortages will still exist as some farmers particularly in Karonga district will not harvest anything. Please note that this is not the official estimate. For official statistics on agricultural production 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.***

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4. OUTLOOK FOR 11 TO 20 MARCH 2014

Models for medium range weather forecast show the rain belt will be moving from south to north and become slightly active over Malawi particularly over central and northern Malawi. Therefore expect an improvement in rainfall performance particularly over central and northern Malawi during the period 11 to 20th March 2014.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR 01 TO 10 MARCH 2014

STATION 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
SOUTHERN REGION							
Balaka Township	1.5	57.5	3	428.3	736.5	58	1
Bvumbwe Met.	13.6	70.3	19	847.1	904	94	2
Chichiri Met.	12.9	24.6	52	780.9	997.1	78	2
Chikwawa Boma	13.1	43.8	30	534.7	647.2	83	2
Chikweo Agric.	30.3	71.6	42	670.4	878	76	2
Chileka Airport	10.1	51.8	19	549.5	736.6	75	2
Chingale Agric	35.6	57.6	62	709.1	781.1	91	3
Chiradzulu Agric	5.5	73.1	8	664.8	836.9	79	1
Lujeri Tea Estate	93.2	14.8	630	946.5	1466.3	65	6
Mpilipili (Makanjila)	15.2	61.5	25	435.3	770.9	56	3
Makoka Met	23.5	65.1	36	654.3	825.1	79	3
Mangochi Met.	12.4	55.1	23	862.7	586	147	1
Masambanjati Agric	22.0	100.3	22	915.9	1049	87	2
Mimosa Met.	19.5	95.1	21	900.5	1097.7	82	7
Monkey Bay Met.	2.4	42.4	6	721.6	521.9	138	2
Mpemba Vet	8.1	77.9	10	629.5	926.5	68	1
Mulanje Boma	85.5	119.1	72	1308.8	1328.9	98	4
Mwanza Boma	0.0	65.8	0	609.9	846.3	72	0
Namiasi Agric	17.2	44.0	39	522.9	659.8	79	1
Namwera Agric	79.2	71.1	111	595.5	851.2	70	1
Nchalo Sucoma	4.5	41.0	11	408.6	559.5	73	2
Ngabu Met.	8.5	41.8	20	490.5	632.4	78	2
Ntaja Met.	50.9	58.0	88	1025.4	734	140	3
Phalula Agric	0.0	57.2	0	377.4	720.6	52	0
Satemwa	7.7	73.0	11	1140.9	854.1	134	2
Thuchila Agric	7.9	68.6	12	387.5	737	53	1
Thyolo Boma	7.9	84.4	9	703.1	918.3	77	1
Zomba RTC	18.6	76.0	24	872.7	979.7	89	4
CENTRAL REGION							
Chitedze Met.	1.6	67.5	2	629.3	737	85	2
Dedza Met	9.5	68.6	14	880.2	799.9	110	4
Dowa Agric	29.2	74.8	39	627.9	748.7	84	5
Dwangwa	74.5	108.4	69	788.5	900.5	88	3
Dzonzi Forest	16.0	82.9	19	502.5	836.3	60	1
K.I.A Met	2.7	69.1	4	672.3	721.7	93	2
Kasiya Agric	6.0	83.5	7	639.2	834.1	77	1
Kasungu Met	2.7	64.3	4	710.3	673.4	105	3
Lifuwu	2.2	98.7	2	240.0	978.5	25	1
Malomo Agric	18.7	84.3	22	201.2	714.6	28	4
Mkanda Met	41.9	60.2	70	697.0	742.4	94	6
Mlangeni Njolomole	41.9	78.3	54	706.4	816.9	86	6
Nathenje Agric	13.0	62.7	21	613.4	718.7	85	2
Nkhotakota Met	7.3	118.2	6	1295.7	988.4	131	4
Ntcheu - Nkhande	33.4	79.3	42	583.1	896.6	65	4
Ntchisi Boma	18.7	86.3	22	315.2	991.7	32	4
Salima Met	2.3	98.7	2	803.9	966.2	83	1
Dedza RTC	19.0	86.8	22	796.6	851.5	94	3
NORTHERN REGION							
Bolero Met	0.8	47.9	2	414.9	538.4	77	2
Bwengu Agric.	4.4	38.1	12	426.6	615.4	69	2
Chikangawa forest	166.0	76.1	218	1251.9	810.4	154	8
Chitipa Met	33.6	64.3	52	647.6	761.6	85	2
Chintheche Agric	109.2	136.1	80	1218.0	1011.4	120	3
Emfeni Agric	22.6	66	34	257.7	679.7	38	3
Euthini Agric.	0.0	52.0	0	655.1	639.7	102	0
Karonga Met.	4.9	73.4	7	294.0	614.8	48	3
Mbawa Res. Stn	5.3	68.8	8	572.2	688.9	83	2
Mzimba Met	19.6	71.7	27	802.5	748.9	107	4
Mzuzu Met.	74.6	81.0	92	759.4	717.1	106	3
NkhataBay Met.	56.3	97.5	58	911.0	819.2	111	5
Rumphi Boma	1.0	61.4	2	238.0	600.7	40	1
Vinthukutu Agric	7.6	76.7	10	545.5	679	80	3
Zombwe Agric	7.4	56.5	13	669.3	588.7	114	2

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR 01 TO 10 MARCH 2014

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED (m/s)	RH (%)	EVAP (mm)
KARONGA ADD							
Chitipa	27.6	18.3	28.5	16.7	4.3	75	N/A
Karonga	31.8	21.0	33.6	21.0	1.8	65	N/A
Bolero	28.7	18.0	29.7	16.4	N/A	65	N/A
Mzuzu	25.9	17.8	27.4	16.3	1.3	75	N/A
Mzimba	27.5	17.7	29.2	17.0	0.9	72	N/A
Nkhata Bay	31.5	21.0	32.7	20.0	0.6	78	N/A
Kasungu	28.5	N/A	29.5	N/A	0.5	74	N/A
LILONGWE ADD							
KIA	26.2	17.6	27.0	16.1	1.5	80	5.4
Chitedze	27.0	18.2	27.9	17.4	0.9	77	N/A
Dedza	23.4	16.0	24.3	15.1	2.4	83	N/A
SALIMA ADD							
Salima	31.1	22.4	31.7	20.6	1.0	69	N/A
Nkhotakota	29.8	22.2	30.9	21.7	1.7	68	N/A
MACHINGA ADD							
Makoka	27.7	18.6	28.5	18.0	1.1	71	N/A
Ntaja	30.0	21.0	30.7	20.0	1.2	72	N/A
Mangochi	32.1	21.9	33.5	21.0	1.0	69	N/A
Monkey Bay	31.1	22.4	32.2	20.6	1.2	68	N/A
BLANTYRE ADD							
Chileka	29.7	20.9	31.0	19.5	2.8	70	N/A
Chichiri	28.2	19.2	29.4	17.8	1.0	65	N/A
Bvumbwe	27.0	15.4	27.8	14.8	1.5	77	N/A
Mimosa	31.8	19.2	32.4	18.3	1.0	77	4.7
SHIRE VALLEY ADD							
Ngabu	34.9	23.8	35.5	23.1	1.3	70	N/A

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