REPUBLIC OF MALAWI

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HIGHLIGHTS

- **Good rainfall persisted over most parts except northern tip…**
- **Maize crop was mostly between vegetative and tasseling stages…**
- **Good rains to be confined over southern half during 01 to 10 February, 2014…**

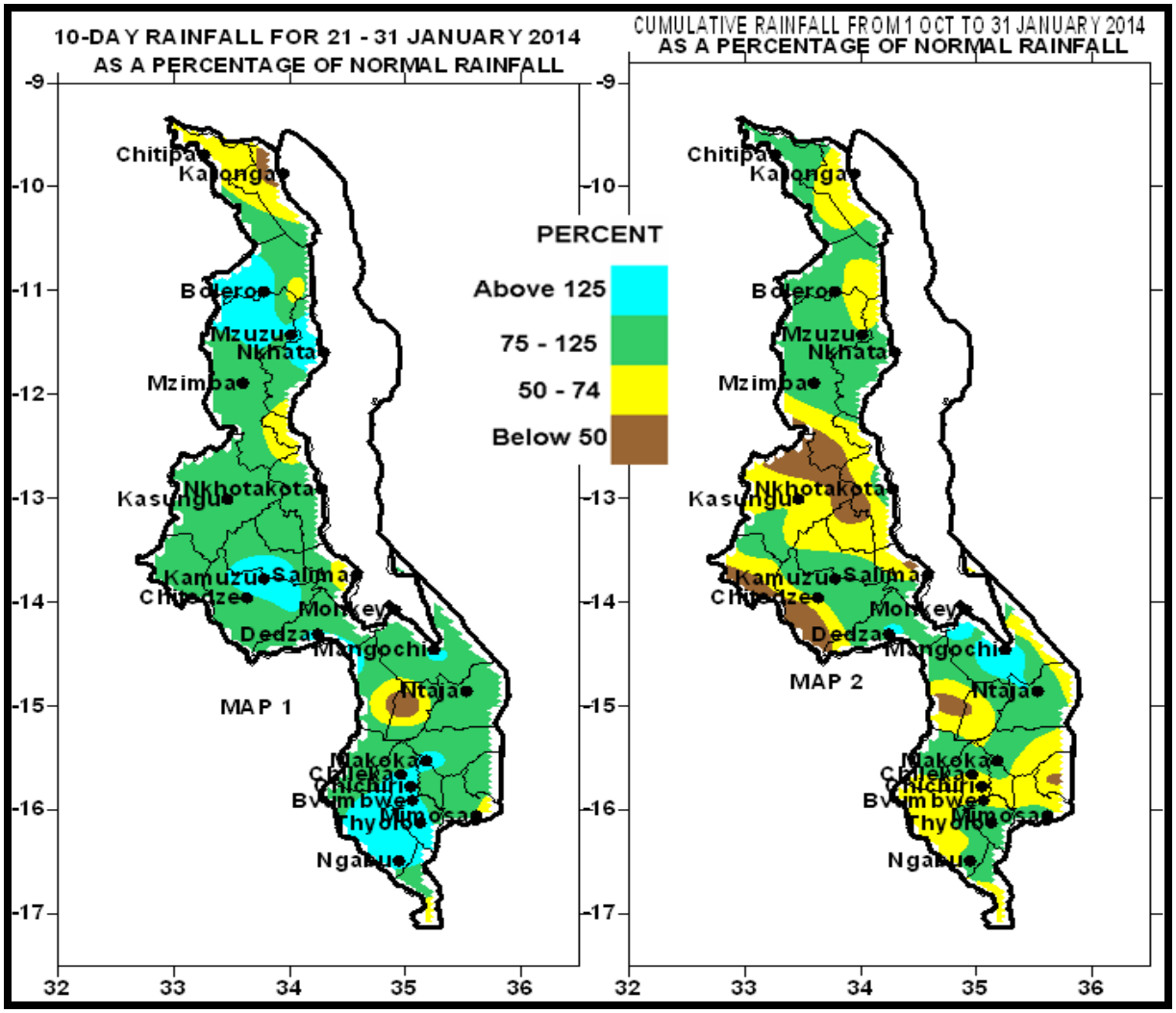

Figure 1: Rainfall Maps for Malawi for 21 to31 January 2014

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1.0 WEATHER SUMMARY AND IMPACTS

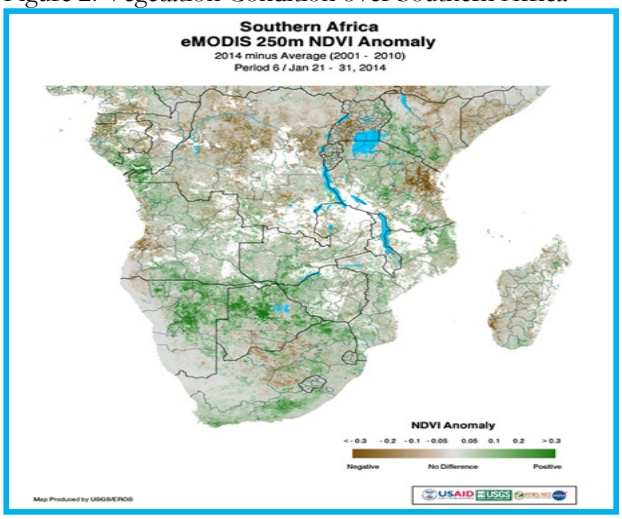
1.1 RAINFALL SITUATION

During the last ten days of January 2014, scattered to widespread moderate to heavy rains were received over Malawi. These rains were due to enhanced Congo Air mass induced by a deep low pressure system that had developed in the Mozambique Channel. Average to above average cumulative rainfall performance was experiences over most areas in Malawi (Green and light blue colours in Map 1) except over Chitipa and Karonga districts. Very high rainfall amounts of up to 150mm were cumulated at some stations such as Makoka Met (156mm), Masambanjati Agric (175mm), Satemwa (158mm) and Nkhata Bay Met (188mm) More details are on Table 1. Areas that had recorded below average rainfall amounts were confined to a few places mainly over the extreme north and around Balaka (yellow and brown Colours on Map 1).

Map 2 shows the situation of cumulative rainfall performance over the country from 1 October 2013 to 31 January 2014. From the map, Malawi has experienced average (green colour on Map 2) to below average (yellow and brown colours on map 2) cumulative rainfall performance. Other details are on Table 1.

1.2 VEGETATION CONDITION

Figure 2: Vegetation Condition over Southern Africa



Improvement in vegetation conditions continued to be observed in many parts of the region during the last ten days of January 2014. This was due to the significant improvement in rainfallperformance experienced in most parts of the region. Vegetation conditions compared with average (Figure 2) shows that most areas had above average vegetation conditions (green colours) including areas where vegetation stress had been observed in November 2013. This has positive implications for pasture conditions and development of crops.

1.3 AIR TEMPERATURE

Generally warm to hot tempratures had persisted over the country during the last ten days of January 2014. Mean maximum temperatures had ranged from around 22.6°C at Dedza to 33.9°C at Ngabu. Mean minimum temperatures for the same period had ranged from 15.7°C at Bvumbwe to 24.5°C at Ngabu in Chikwawa. The highest absolute maximum temperature for the period was about 36.0°C, observed at Ngabu in Shire Valley. . For more details see Table 2.

1.4 WIND SPEEDS

At a height of two metres above the ground level the mean wind speeds for the period under review had ranged from 0.4 to 2.0 metres per second. The lowest mean wind speed was reported at Chitedze Met while the highest mean wind speed was recorded at Chileka Airport. For more details refer to Table 2. High wind speeds coupled with dry conditions result in high evaporation rates.

1.5 RELATIVE HUMIDITY

During the period under review, air over Malawi was generally very moist. Most stations had reported mean daily relative humidity values of at least 75% except Ngabu Met which had a mean daily value of 74%. The highest mean daily relative humidity was reported at Chitedze Met (86%). More details are on the Table 2. High relative humidity values promote outbreaks of fungal diseases.

2. AGROMETEOROLOGICAL ASSESSMENT

During the third ten days of January 2014, there was a great improvement in rainfall intensity and distribution across the country. These rains were favourable for crop and pasture development as well as regeneration of the natural vegetation. The rains were also good for replenishing ground water levels. Despite the late onset of rains in some parts of the country particularly in southern Malawi, generally crops were reported to be doing well and are not expected to be affected by the delayed onset, particularly the short season varieties. Maize crops were reported to be in good condition, ranging from vegetative to tasselling and cob formation stages. On farm activities included weeding and application of basal and top dressing fertilizers.

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. However, this forecast covers the rainfall season from January to March 2014 and 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 but only rainfall totals, summed over the three-month period from January to March 2014.***

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4. OUTLOOK FOR 01 TO 10 FEBRUARY 2014

Models for medium range weather forecast suggest that Congo Air mass over southern half of the country while a ridge of high pressure will reduce rainfall over northern half of Malawi. Therefore more rains are expected over the south and some parts of central Malawi and reduced rainfall over the northern areas during the first ten days of February 2014.

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR 21 TO 31 JANUARY 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	18.0	102.2	**18**	244.8	505.9	**48**	4
Bvumbwe Met.	126.0	106.7	**118**	475.9	607.2	**78**	9
Chichiri Met.	108.7	53.8	**202**	554.0	794.8	**70**	10
Chikwawa Agric	120.8	74.5	**162**	335.8	462.4	**73**	6
Chikweo Agric.	89.6	98.7	**91**	417.1	595.3	**70**	10
Chileka Airport	75.1	81.3	**92**	348.5	498.0	**70**	9
Chingale Agric	99.1	90.7	**109**	433.9	517.7	**84**	10
Chiradzulu Agric	78.9	99.6	**79**	436.9	545.4	**80**	7
Mpilipili	93.3	78.9	**118**	333.2	491.5	**68**	8
Makoka Met	156.1	89.6	**174**	450.3	548.4	**82**	9
Mangochi Met.	92.7	70.7	**131**	647.3	346.0	**187**	9
Masambanjati Agric	175.1	93.9	**186**	745.3	690.0	**108**	6
Mimosa Met.	87.3	117.1	**75**	612.8	772.6	**79**	10
Monkey Bay Met.	91.3	74.0	**123**	452.1	327.4	**138**	8
Mpemba Vet	141.4	95.8	**148**	358.1	641.1	**56**	3
Mwanza Agric	80.5	94.4	**85**	423.0	565.9	**75**	4
Namiasi Agric	61.6	75.1	**82**	380.6	423.0	**90**	4
Nchalo	66.4	50.7	**131**	246.0	364.7	**67**	6
Neno Agric	120.2	103.0	**117**	685.8	613.9	**112**	5
Ngabu Met.	82.1	61.2	**134**	356.6	429.3	**83**	6
Nsanje Agric	48.6	84.8	**57**	405.8	613.5	**66**	2
Ntaja Met.	119.4	91.4	**131**	612.4	496.0	**123**	10
Phalula Agric	66.2	74.1	**89**	301.5	481.1	**63**	4
Satemwa Tea Est.	158.1	90.3	**175**	732.7	569.2	**129**	9
Thyolo Boma	138.2	91.2	**152**	518.8	606.3	**86**	8
Thyolo Met	129.3	103.9	**124**	785.3	621.6	**126**	6
Zomba RTC	98.1	107.3	**91**	432.5	667.0	**65**	9
CENTRAL REGION							
Chitedze Met.	69.2	79.2	**87**	338.4	479.7	**71**	9
Dedza Met	130.0	102.1	**127**	657.9	507.6	**130**	10
Dowa Agric	124.8	92.4	**135**	423.9	486.4	**87**	6
Dwangwa	52.2	84.7	**62**	366.3	585.2	**63**	7
Kaluluma DTC	74.5	75.7	**98**	102.4	459.7	**22**	4
K.I.A Met	135.3	69.5	**195**	540.7	452.1	**120**	10
Kasiya Agric	95.0	67.3	**141**	558.6	540.7	**103**	5
Kasungu Met	64.1	70.0	**92**	326.4	414.2	**79**	7
Madisi Agric	61.9	74.3	**83**	265.2	446.1	**59**	4
Mkanda Met	55.7	71.0	**78**	411.6	503.5	**82**	6
Mlangeni Njolomole	107.0	73.6	**145**	564.6	512.1	**110**	8
Nkhotakota Met	91.8	97.8	**94**	752.7	626.7	**120**	7
Ntcheu - Nkhande	84.6	84.6	**100**	306.0	587.7	**52**	7
Salima Met	38.9	99.2	**39**	417.9	580.7	**72**	7
NORTHERN REGION							
Bolero Met	116.5	53.3	**219**	329.2	343.5	**96**	10
Chikangawa forest	80.5	73.1	**110**	578.3	525.4	**110**	11
Chitipa Met	52.5	75.3	**70**	526.6	473.5	**111**	9
Chintheche Agric	63.2	91.6	**69**	773.7	655.7	**118**	3
Euthini Agric.	66.6	58.9	**113**	360.6	408.1	**88**	4
Karonga Met.	23.0	56.0	**41**	193.5	387.7	**50**	7
Mbawa Res. Stn	45.9	63.2	**73**	236.4	440.8	**54**	6
Mzimba Met	60.0	68.6	**87**	570.7	476.3	**120**	3
Mzuzu Met.	88.8	68.9	**129**	413.5	476.0	**87**	6
NkhataBay Met.	187.7	64.2	**292**	659.5	539.0	**122**	10
Rumphi Agric	21.1	70.0	**30**	124.9	373.5	**33**	4
Vinthukutu Agric	45.8	58.8	**78**	411.7	441.2	**93**	4
Zombwe Agric	79.9	54.2	**147**	404.3	373.4	**108**	6

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR 21 TO 31 JANUARY 2014

STATION	MAX TEMP (°C)	MIN TEMP (°C)	ABS MAX (°C)	ABS MIN (°C)	WIND SPEED (m/s)	RH (%)	EVAP (mm)
KARONGA ADD							
Chitipa	26.9	18.1	29.0	17.5	1.5	78	N/A
Karonga	30.2	21.4	32.1	20.6	1.1	75	N/A
MZUZU ADD							
Bolero	27.9	19.3	30.8	17.0	N/A	80	N/A
Mzuzu	25.4	17.4	27.8	16.0	1.0	81	N/A
Mzimba	26.0	17.4	28.5	16.4	0.7	78	N/A
Nkhata Bay	30.2	21.4	32.4	20.5	0.5	80	N/A
KASUNGU ADD							
Kasungu	24.3	N/A	28.1	N/A	0.5	80	N/A
LILONGWE ADD							
KIA	25.5	18.6	27.3	18.1	1.0	82	3.6
Chitedze	25.9	19.2	27.9	18.4	0.4	86	N/A
Dedza	22.7	16.2	23.7	15.6	1.6	85	N/A
SALIMA ADD							
Salima	29.4	22.1	30.5	20.1	1.5	83	N/A
Nkhotakota	27.9	21.7	29.6	20.4	1.1	82	N/A
MACHINGA ADD							
Ntaja	28.1	21.6	30.1	20.6	0.7	82	N/A
Mangochi	30.0	22.3	31.0	21.0	1.0	79	N/A
Monkey Bay	29.4	22.8	30.2	21.2	1.5	80	N/A
BLANTYRE ADD							
Chileka	29.2	21.1	31.5	20.0	2.0	77	N/A
Chichiri	29.4	21.1	29.4	19.0	0.5	78	N/A
Bvumbwe	25.8	15.7	27.8	14.6	1.2	82	N/A
Mimosa	30.8	20.5	32.3	18.9	0.8	81	2.0
SHIRE VALLEY ADD							
Ngabu	33.9	24.5	36.0	22.6	1.4	74	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