REPUBLIC OF MALAWI

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HIGHLIGHTS

- **Good rains for agriculture production were experienced in most areas…**
- **Maize crop mainly at vegetative stage in most parts of Malawi…**
- **Scattered rains are expected to persist during 11 to 20th January, 2014…**

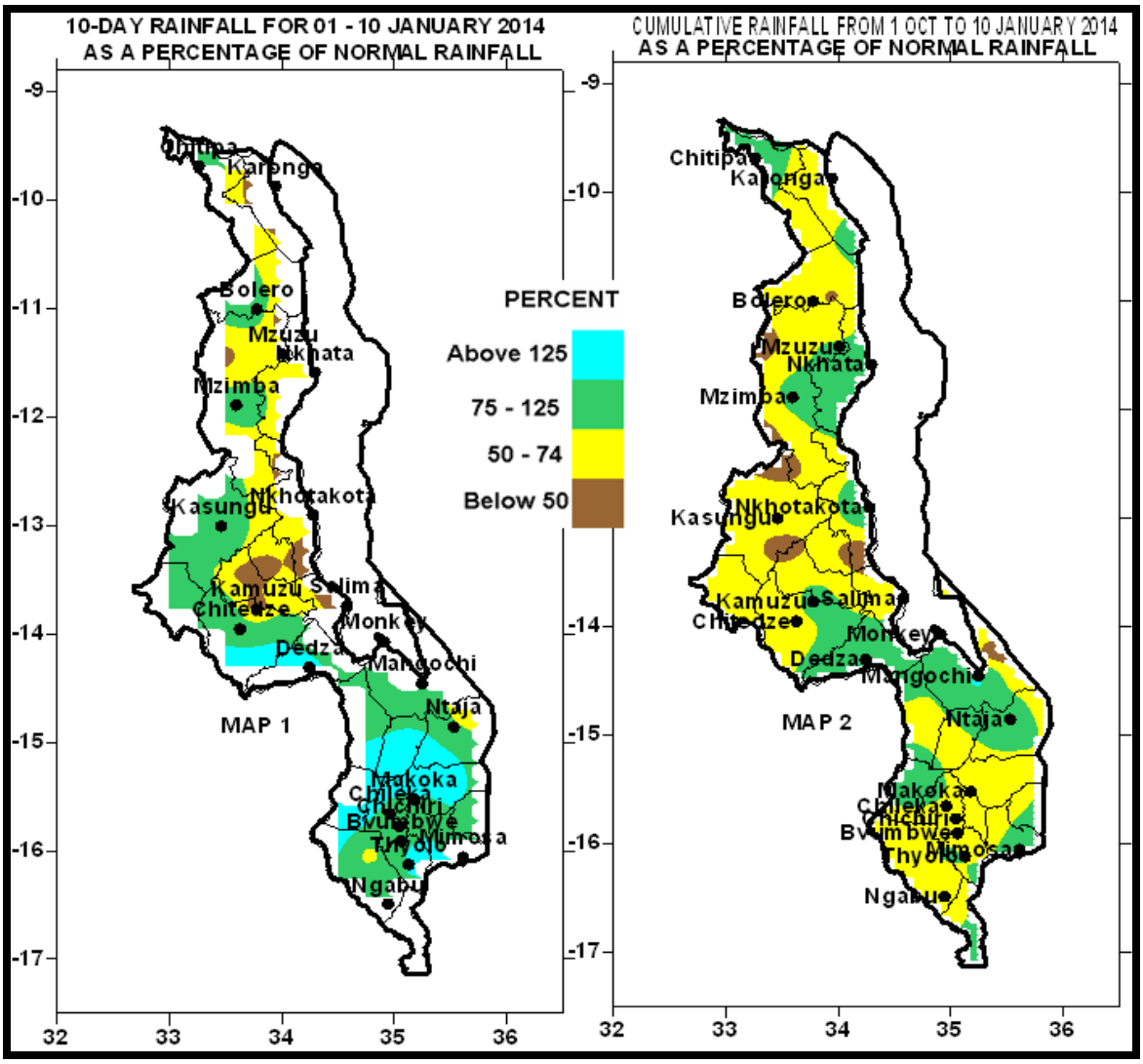

Figure 1: Rainfall Maps for Malawi for 01-10 January 2014

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1.0 WEATHER SUMMARY AND IMPACTS

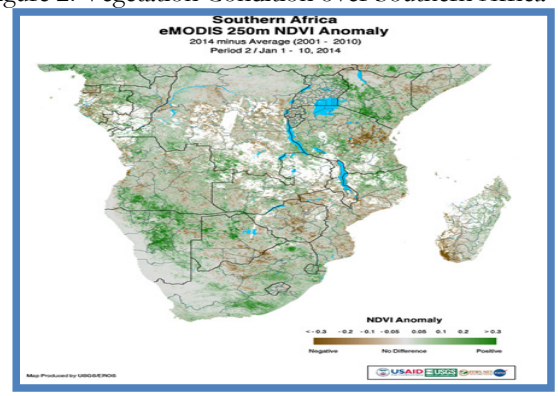
1.1 RAINFALL SITUATION

Scattered to widespread rains were experienced over Malawi during the period 01-10 January 2014 due to the combined effect of the two main rain-bearing systems namely Congo Air mass and Inter Tropical Convergence Zone. However, generally light to moderate rainfall amounts were reported in most areas during the period under review. This resulted in below average rainfall situation particularly in areas along the lakeshore (see Table 1 and map 1) and the number of rainy days was lower than six in some areas Stations that recorded significantly high cumulative rainfall amounts of at least 150mmwere confined to southern Malawi including Mwanza Boma (168mm), Neno Agric (167mm) and Zomba Agric (160mm). More details are on Table 1 and Map 1.

Map 2 depicts the situation of cumulative rainfall performance for the country since 1 October 2013. From the map, most areas in Malawi have experienced below average rainfall performance by 10 January 2014 (yellow and brown colours on Map 2). For more details also refer to 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 January 2014 showed improvement in most areas. (Figure2). Negative anomalies still exist in some parts of the region. This has been attributed to low rainfall received as a result of slow and delayed onset of the rainy season. Vegetation condition anomaly over Malawi showed no major differences over most areas. Even areas that showed negative deviations during the previous dekad showed improvement in the vegetation condition as a result of the grdual improvement in the performance of the rainfall season

1.3 AIR TEMPERATURE

Generally warm to hot tempratures were experienced over the country during the first ten days of January 2014. Mean maximum temperatures ranged from around 23.0°C at Dedza to 33°C at Ngabu. Mean minimum temperatures ranged from 15°C at Bvumbwe to 24°C at Ngabu Met. The highest absolute maximum temperature for the period was about 39°C, observed at Ngabu in Shire Valley. . For more details see Table 2.

1.4 WIND SPEEDS

Mean wind speeds at a height of two metres above the ground level ranged from 0.5 to 2.2 metres per second. The lowest mean wind speed was reported at Monkey Bay and Mzuzu 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 lead to increased evaporation rates.

1.5 RELATIVE HUMIDITY

During the period under review, air over Malawi was generally moist. Mean daily relative humidity values ranged from 67% at Karonga to 83% at Nkhata Bay. More details are on the Table 2. High relative humidity values are favourable for fungal diseases.

2. AGROMETEOROLOGICAL ASSESSMENT

During the first ten days of January 2014, there was a significant improvement in rainfall distribution and amounts particularly over southern Malawi. 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. Crops were at varying stages of development ranging from germination to advanced vegetative stages. On farm activities ranged from planting and weeding to applying basal and top dressing fertilizers. In most parts of the country, the maize crop was reported to be doing well and if good rainfall performance continues up to February and March then good harvests are inevitable in most parts of Malawi. Due to erratic and poor rainfall performance during the first half of the season, there have been reports of incidences of army worms in many districts in the country particularly in southern Malawi and red locusts have been reported threatening crops around Lake Chilwa basin.

3. PROSPECTS FOR 2013/14 RAINFALL SEASON

The rainfall outlook for December 2013 to February 2014 suggests that ***Malawi is likely to experience normal to above normal total rainfall amounts. However, it should be noted that the forecast does not address the timing of the rains, but only rainfall totals, summed over the three-month period from December to February 2014.***

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4. OUTLOOK FOR 11 – 20 JANUARY 2014

Models for short and medium range rainfall forecasts indicate that moist and unstable Congo Air mass will continue to influence rainfall over Malawi. Hence scattered locally heavy rainfall is expected to be maintained over Malawi during the period 11 to 20th January 2014

TABLE 1: DEKADAL RAINFALL FOR SELECTED STATIONS FOR 01 TO 10 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	111.7	84.1	133	221.6	333.5	66	6
Bvumbwe Met.	102.7	80.2	128	278.3	416.5	67	7
Chichiri Met.	98.7	88.2	112	403.5	666.2	61	5
Chikwawa Boma	35.6	66.8	53	215.0	326.7	66	8
Chileka Airport	62.6	68.1	92	228.4	352.8	65	6
Chingale Agric	134.5	70.4	191	262.2	362.6	72	5
Chiradzulu Agric	58.2	66.4	88	292.9	385.5	76	6
Lujeri Tea Estate	91.7	135.4	68	704.3	813.6	87	6
Mpilipili	60.1	91.9	65	180.0	346.7	52	4
Makoka Met	63.6	76.4	83	235.3	379.4	62	6
Mangochi Met.	61.7	54.2	114	267.1	210.7	127	6
Masambanjati Agric	94.7	96.9	98	394.4	513.9	77	4
Mimosa Met.	92.1	97.7	94	385.3	561.7	69	8
Monkey Bay Met.	46.2	49.1	94	200.4	199.4	101	6
Mpemba Vet	64.1	87.5	73	216.7	456.5	47	5
Mulanje Boma	118.6	107.1	111	640.4	702.4	91	6
Mwanza Boma	168.0	73.5	229	295.4	401.6	74	4
Namiasi Agric	66.9	59.0	113	159.3	269.6	59	4
Namwera Agric	31.0	89.6	35	168.4	385.2	44	6
Nchalo Sucoma	71.4	53.1	134	157.9	255.9	62	5
Neno Agric	167.0	96.0	174	515.6	415.2	124	4
Ngabu Met.	61.2	61.3	100	201.6	312.3	65	6
Nsanje Boma	48.6	75.7	64	357.2	430.9	83	5
Ntaja Met.	54.6	70.1	78	280.8	329.4	85	6
Phalula Agric	147.2	72.7	202	222.6	345.1	65	5
Satemwa Tea Est.	80.3	75.6	106	366.6	417.4	88	9
Thuchila Agric	91.2	67.7	135	150.7	331.5	45	6
Thyolo Met	145.0	80.2	181	447.7	433.7	103	8
Zomba RTC	159.7	81.7	195	286.2	469.0	61	9
CENTRAL REGION							
Chitedze Met.	68.9	68.9	100	210.6	321.0	66	4
Dedza Met	119.2	82.5	144	337.2	336.2	100	7
Dowa Agric	46.9	70.6	66	231.2	312.0	74	7
Dwangwa Sugar Corp.	25.4	85.8	30	246.6	418.9	59	6
K.I.A Met	27.1	72.7	37	250.3	295.4	85	7
Kasiya Agric	85.7	87.3	98	255.0	419.5	61	5
Kasungu Met	63.4	70.1	90	215.5	281.9	76	6
Lisasadzi	87.9	77.2	114	124.7	321.1	39	6
Madisi Agric	15.5	69.0	22	149.2	290.3	51	3
Mkanda Met	78.2	67.6	116	241.9	349.2	69	5
Mlangeni Njolomole	65.3	70.8	92	306.7	356.1	86	6
Mponela Agric	31.8	68.0	47	197.6	282.1	70	6
Nathenje Agric	95.7	72.1	133	240.0	311.2	77	7
Nkhotakota Met	56.6	108.8	52	508.3	423.0	120	6
Ntcheu - Nkhande	54.1	86.3	63	182.0	405.5	45	8
Salima Met	20.6	94.8	22	207.7	364.3	57	3
Dedza RTC	86.6	75.4	115	284.2	346.9	82	9
NORTHERN REGION							
Bolero Met	74.8	62.6	119	140.5	238.2	59	6
Bwengu Agric.	17.5	63.8	27	129.6	273.7	47	3
Chikangawa forest	65.1	82.4	79	353.8	368.8	96	7
Chitipa Met	78.2	71.2	110	322.1	332.3	97	9
Chintheche Agric	55.1	107.7	51	628.6	481.0	131	4
Emfeni Agric	65.7	77.0	85	133.3	313.2	43	3
Ekwendeni Agric.	85.5	86.3	99	184.6	350.1	53	6
Euthini Agric.	23.6	72.9	32	128.6	296.6	43	2
Karonga Met.	0.0	63.0	0	122.8	276.4	44	0
Mbawa Res. Stn	39.3	76.3	52	142.1	318.2	45	4
Mzimba Met	98.3	92.7	106	322.7	336.6	96	7
Mzuzu Met.	27.7	66.6	42	289.0	337.8	86	5
NkhataBay Met.	63.4	89.9	71	418.9	409.2	102	6
Rumphi Boma	20.4	64.5	32	42.1	245.6	17	5
Vinthukutu Agric	35.9	72.5	50	296.9	313.4	95	3
Zombwe Agric	35.4	68.6	52	201.2	265.2	76	3

TABLE 2: AGROMETEOROLOGICAL PARAMETERS FOR 01 TO 10 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	26.1	18.2	28.6	16.6	1.6	79	N/A
Karonga	31.1	22.5	34.2	21.0	1.5	67	N/A
MZUZU ADD							
Bolero	28.7	19.5	31.0	18.0	N/A	76	N/A
Mzuzu	27.2	17.9	30.0	17.0	1.3	77	N/A
Mzimba	27.0	17.5	28.2	16.5	0.7	78	N/A
Nkhata Bay	31.4	21.6	34.7	19.8	0.5	83	N/A
KASUNGU ADD							
Kasungu	28.0	N/A	31.1	N/A	0.5	73	N/A
LILONGWE ADD							
KIA	27.0	18.7	30.5	17.6	1.2	74	N/A
Chitedze	27.6	18.9	31.7	17.2	0.7	68	N/A
Dedza	23.2	16.2	27.3	14.4	0.8	79	N/A
SALIMA ADD							
Salima	29.9	23.0	31.5	21.9	1.8	77	N/A
Nkhotakota	28.3	22.3	30.4	21.8	1.5	82	N/A
MACHINGA ADD							
Ntaja	27.3	21.6	32.7	20.5	1.3	78	N/A
Mangochi	30.2	23.1	32.9	20.5	1.7	76	N/A
Monkey Bay	28.8	23.4	32.8	20.4	2.0	80	N/A
BLANTYRE ADD							
Chileka	29.6	20.4	37.3	19.8	2.2	74	N/A
Chichiri	26.6	18.3	30.0	17.4	0.6	79	N/A
Bvumbwe	25.7	15.2	29.1	14.1	1.5	82	N/A
Mimosa	31.7	20.4	34.6	18.3	1.3	71	5.5
SHIRE VALLEY ADD							
Ngabu	32.7	23.9	38.3	22.4	1.4	71	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