



Meteorological Applications Division Lesotho Meteorological Services



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Agro-Met. Monthly Update

January 2007

Date of issue: 06 January 2007

Highlights

1. January the driest month of the season so far
2. Cumulative rainfall reduced significantly
3. Normal to above normal temperatures experienced in January
4. Crops at vegetative to grainfilling stages; experienced water deficits of varying magnitudes
5. **Suppressed Rainfall expected for period February – March 2006**

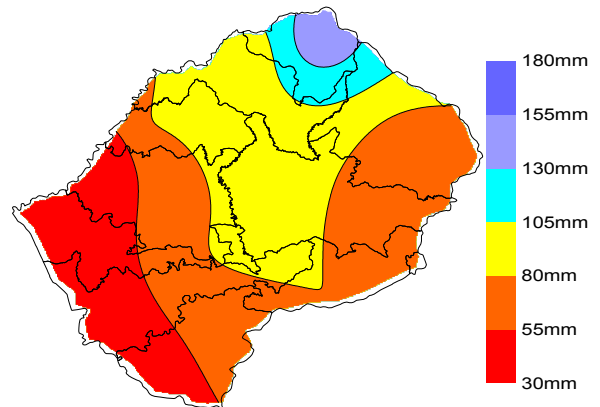
Rainfall

Monthly Actual Rainfall

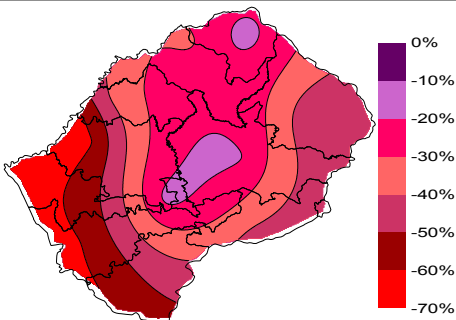
Unlike the previous month, the month of January 2007 has been the driest month since the commencement of the 2006/2007 agricultural season. Monthly rainfall has been below normal being near normal in a few localities over the country. Spatial distribution was highly variable where the lowest monthly rainfall of 41.8mm was recorded at Maseru. The highest monthly rainfall of 151.7mm accumulated at Ox-Bow (see table 1, map 1).

The areas from west to south have experienced a deficit of about 60% of their normal monthly rainfall. The eastern highlands too had far below normal rainfall in this month (see map 2).

The rain days range from 6 days at Mafeteng to 17 at Ox-Bow and Qacha's Nek

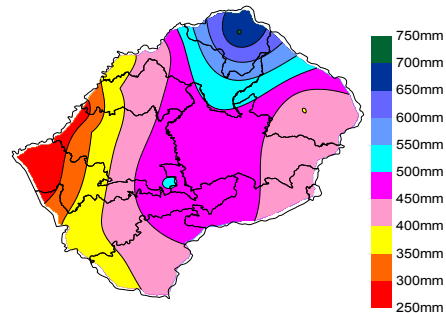


Map 1: Actual monthly rainfall



Map 2: Monthly Rainfall % Departure from normal

Cumulative Rainfall Since September 2006



Map 3: Cum. rainfall September 2006 – January 2007

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January is normally a month that receives the highest rainfall. For that reason, suppressed rain in January affects the seasonal cumulative rainfall. This is evidenced by the greatly reduced percentage departure from normal of cumulative rainfall since September 2006 until January 2007 when compared with similar calculations of December 2006.

The percentage departures from normal of cumulative rainfall have reduced by close to 20% from the December 2006 figures. The cumulative rainfall ranges from 262.5mm at Maseru to 705.4mm at Ox-Bow (see table 1 & map 3).

Temperatures

Generally, temperatures have been normal to above normal in this month under review. Semonkong and Mokhotlong however, experienced normal monthly mean temperatures. Butha-Buthe and Leribe were 0.3°C above

average while the rest of the country 0.5°C or more (see table 1). The highest daily maximum temperatures rose to as high as 34°C at Maseru Airport (Mejametalana) on the 14th.

Crop Stage and Conditions

The summer crops are at varying stages. There are some that are still at vegetative stage while some are at flowering and grain filling stages. Summer crops in the southern lowlands and the Senqu river valley are reported to be in poor conditions due to long dry spells and high temperatures. In the northern and northeastern parts of the country crops are reported to have not been affected as in the other regions.

The AgrometShell tool shows that the water deficit experienced by the maize crop was high especially in the southern lowlands, Senqu river valley and the eastern parts of the country. Deficits were more in the flowering crops.

Seasonal Forecast February-March 2007

As per earlier forecast, the period February-March is likely to experience suppressed rainfall. These chances of below average rainfall are further reinforced by the prevailing El-Nino conditions in the Equatorial Pacific Ocean. For Lesotho, El-Nino conditions generally result in drought or erratic rainfall with increased indices of lightening and hailstorms during the months of November to March.

Lesotho Meteorological Services wishes to advise that only drought resistant vegetables might be the best option for Farmers at this stage.

Table 1

Station Name	ALT. (M)	Monthly R/Days	Monthly Rainfall (mm)		Cumulative Rainfall since September 2006			Temperatures		
			Monthly R/Fall	Normal R/Fall	Actual R/Fall	Normal R/Fall	%Dep. from Normal	Monthly Mean		Deviation
								Actual	Normal	
Butha-Buthe	1770	10	81.60	119	514.8	474.3	9	20.5	20.2	0.3
Leribe	1740	12	86.10	120.7	412.6	410.9	0	21.0	20.7	0.3
Mafeteng	1610	6	42.20	112.1	269.3	365.6	-26	21.3	20.6	0.7
Maseru	1530	10	41.80	111.9	262.5	375.1	-30	22.4	21.8	0.6
Mohale's Hoek	1600	7	42.90	112.7	380.9	383.8	-1	22.1	21.2	0.9
Mokhotlong	2200	13	57.90	112.3	398.2	372	7	17.7	17.7	0.0
Moshoeshoe 1	1628	9	46.20	120.6	348.8	410.3	-15	21.8	21.3	0.5
Ox-Bow	2660	17	151.7	182.2	705.4	697.1	1	13.2	12.7	0.5
Phuthiatsana	1750	11	83.40	128	399.2	429.8	-7	21.9	21.2	0.7
Qacha's Nek	1970	17	79.90	144	451.7	456.2	-1	19.2	18.4	0.8
Quthing	1740	10	43.60	104	385.9	422.3	-9	21.8	21.1	0.7
Semonkong	2458	15	83.60	101	505.3	367.8	37	15.9	15.9	0.0
Thaba-Tseka	2160	13	83.60	103	474	366	30	17.4	17.2	0.2