LESOTHO METEOROLOGICAL SERVICES
(LEKALA LA TSA BOLEPI)

Ten-Day Agrometeorological Bulletin

11th – 20th February 2006

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…dedicated to the agricultural community
… aimed at harmonizing agricultural activities with weather and climate

Contents

Highlights

- **Improved rainfall situation during this period.**
- **Weeding in the Lowlands is in progress.**
- **Low to medium vegetation cover dominated.**
- **Rainfall expected to decrease in the next ten days.**

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WEATHER SUMMARY

The previous dekad was one of the wettest dekads since the summer rains resumed. This was due o the deepening of the trough which has been oscillating over the sub-region since January 2006. It drew lot of moisture from the tropics into the region. As a result, it rained continuously almost every day during this period. Apart from these conditions (stratiform) rains which were still occurring throughout the day on the 8th, thundershowers also occurred in the evening. As a result, large amounts of rain were recorded on the 8th, with Moshoeshoe I recording highest of 78.9mm in 24 hours.

RAINFALL SITUATION

Above normal dekadal rainfall was received throught the country. The highest rainfall was registered in the highlands with Oxbow registering 74.7mm followed by Moshoeshoe I and Phuthiatsana with 67.1mm and 63.6mm respectively. Due to the high rainfall amounts, waterlogging has been experienced in most parts of the country and this has a negative impact on crops.

Cumulative percentage rainfall departure from Normal

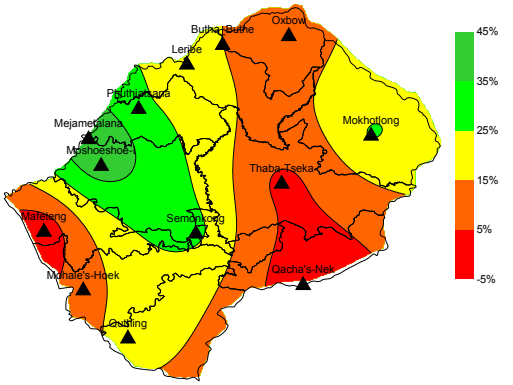


Fig.1: Cumulative rainfall departure from normal since 1st Sept to 2nd dek.Feb 06.

Cumulative percentage rainfall departure from normal plot in fig.1 shows that most parts of the country have received normal to above normal rainfall. Even figure 4 proves the point that, the cummulative rains received during this dekad are far above the normal cummulative rainfall in most parts of the country.

TEMPERATURE

Above normal temperatures were experienced throughout the country. This is depicted by the positive temperature deviations (see Table 1 under temperature). The temperatures were favourable to crop development as they did not allow for rapid soil moisture loss through evapotranspiration.

CROP STAGE AND CONDITION

Weeding in the Lowlands is in progress and it is reported that most crops are at tassling and flowering stages. Winter wheat is now at the maturity stage in highlands; only few fields are planted. Farmers are in full force removing weeds from the fields, since the rains and the floods experienced recently gave them no chance to do anything in their fields. The pastures have also improved a lot due good rains received during these two months (January and February).

VEGETATION CONDITION

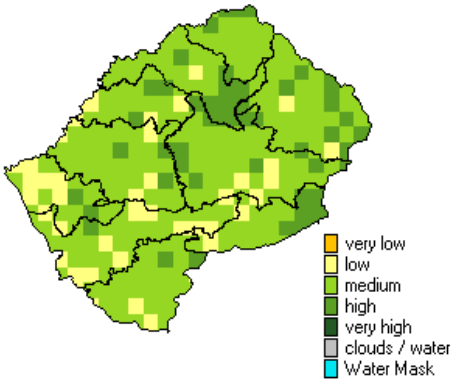


Fig.2: Normalized Difference Vegetation Index(NDVI) Image for 2nd Dekad of February 2006.

The dekad under discussion was dominated by medium to high vegetation cover with some patches of low vegetation (see **fig.2** above). The

improvement in vegetation cover might be due to the excess rains received over the last three dekads. However, as a result of the high rainfall experienced, so some crops have been destroyed and some fields have been washed away by flash floods.

DEKADAL OUTLOOK

21st - 28th February 2006

The trough is expected to weaken but continue oscillating over the sub-region. As a result, rains are anticipated to decrease slightly but they will continue throughout this forecast period. Due to the fact that soil is almost saturated, any small amounts of rains are likely to cause flooding and water logging. Temperatures will be generally warm.

Table 1

Summaries		Rainfall and Temperature										
		Rainfall (mm)						Temperature (°C)				
		11 - 20 Feb 2006			Total From Sept 05 to 2nd Dek Feb 06			11 - 20 Feb 2006				
STATION NAME	ALT. (M)	Actual R/Fall	Rain Days	Normal R/Fall	Actual	Normal	%Dept. from Normal	Minimum Lowest(Day)	Maximum Highest (Day)	Dekadal Mean	Dekadal Normal	Deviation
Butha-Buthe	1770	70.2	3	42.3	649.1	564.0	15	14.0 (20)	28.0 (15)	20.7	19.4	1.3
Leribe	1740	61.0	4	42.3		492.3		14.5 (20)	28.4 (15)	21.0	19.8	1.2
Mafeteng	1610	51.2	5	38.6	422.8	434.5	-3		28.1 (17)		20.0	
Maseru Airport	1530	59.0	5	36.1	639.1	445.0	44	15.5 (13)	29.3 (17)	21.8	20.8	1.0
Mohale's hoek	1600	55.7	7	38.4	504.1	456.3	10	13.5 (14)	28.5 (15)	20.8	20.6	0.2
Mokhotlong	2200	53.1	7	30.4	546.4	434.7	26	10.6 (20)	26.1 (14)	18.0	16.9	1.1
Moshoeshoe I	1628	67.1	6	40.5	696.9	489.1	42	11.5 (12)	28.5 (15)	20.3	20.1	0.2
Ox-Bow	2600	74.7	6	49.2	886.6	803.3	10	6.0 (20)	20.2 (17)	14.0	12.1	1.9
Phuthiatsana	1750	63.6	2	34.0	645.0	506.9	27	15.1(13)	29.5 (17)	21.6	20.4	1.2
Qacha's Nek	1970	29.7	6	42.1	532.4	549.1	-3	13.7 (14)	27.6 (18)	20.0	17.4	2.6
Quthing	1740	57.7	5	38.3	597.0	500.7	19	14.7 (14)	28.7 (15)	20.6	20.2	0.4
Semonkong	2458	39.6	8	25.4	545.8	426.4	28	9.5 (14)	23.7 (15)	16.5	15.1	1.4
ThabaTseka	2160	50.4	6	32.2	445.7	435.8	2	12.0 (17)	24.6 (15)	17.3	16.4	0.9

Fig.3

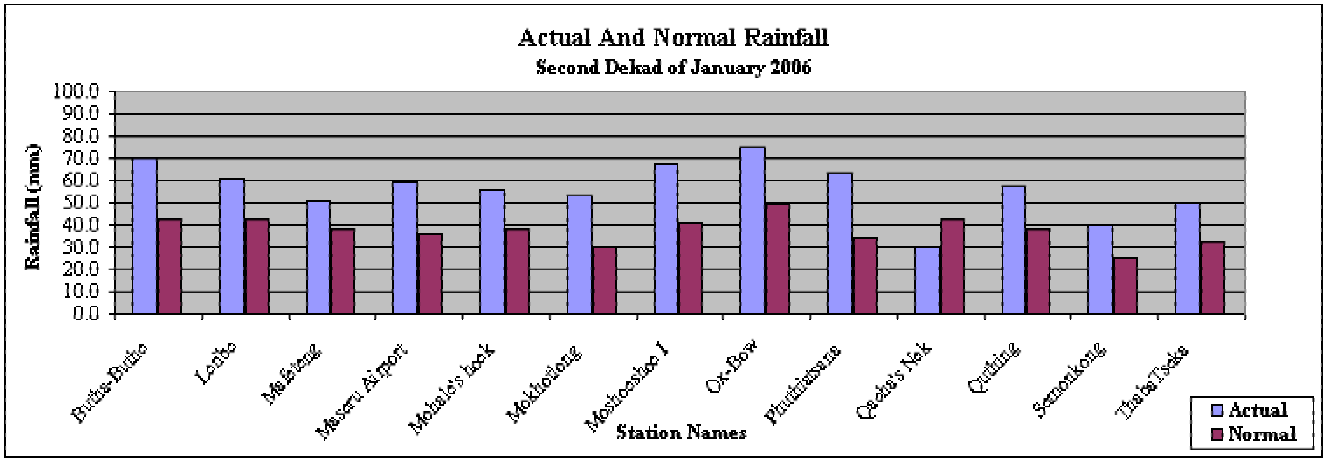
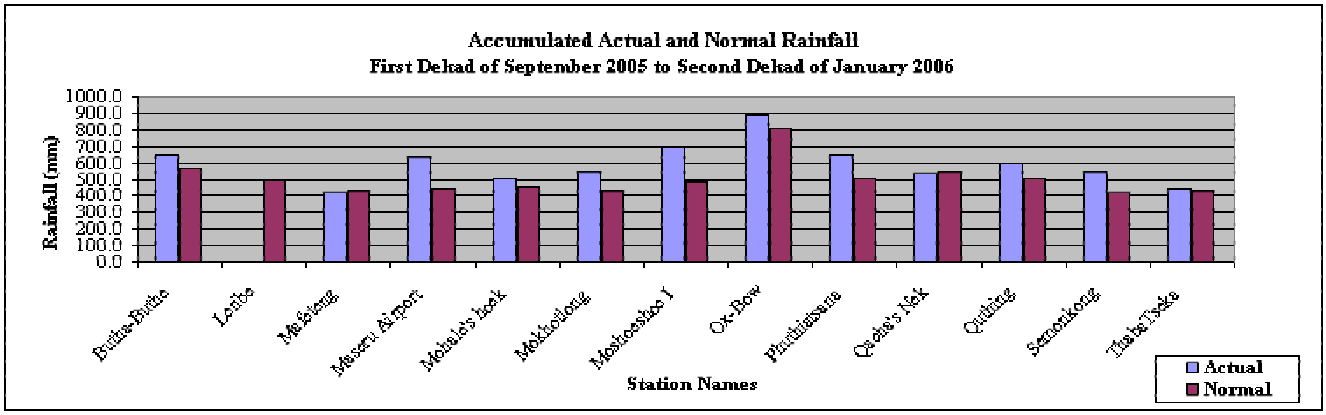


Fig.4



Glossary

Dekad : Ten day period

Normal: Average figure over a specific time period.

% Rainfall Departure from Normal: (Actual Rainfall – Normal Rainfall)/ Normal Rainfall x 100

NDVI: Normalized Difference Vegetation Index

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And it is

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Comments and Contributions would be highly appreciated.