LESOTHO METEOROLOGICAL SERVICES
(LEKALA LA TSA BOLEPI)

Ten-Day Agrometeorological Bulletin

21 – 29 February 2008

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

Contents

Highlights

- **Dry conditions persisted during the third dekad.**
- **Cumulative rainfall continuing to decrease.**
- **Crops at flowering to grain filling stages.**
- **Warm conditions with scattered rain expected.**

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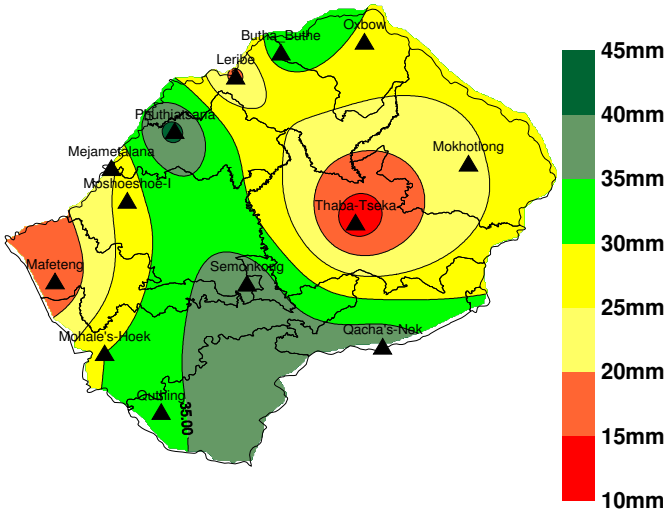
WEATHER SUMMARY

Scattered to widespread rain showers and thundershowers were observed in the last ten days of February. Moist tropical air was fed into southern interior of the subcontinent. Frequent passage of cold fronts induced moisture influx into the interior from the north. Low level moisture advection from the east by the Indian Ocean Anticyclone coupled with afternoon convergence enhanced rainfall activities over our area.

RAINFALL SITUATION



Map 1: February 2008, 3rd dekad Rainfall

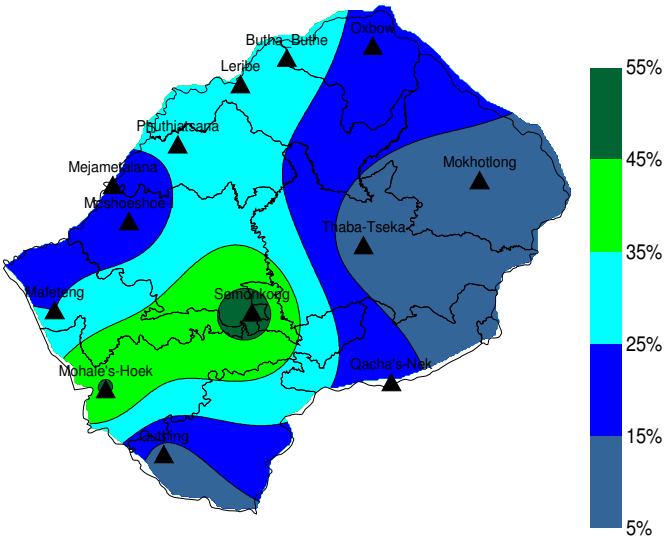
Dry conditions which persisted during the second dekad continued into the third dekad especially over the north eastern and western parts of the country. Mafeteng and Thaba-Tseka recorded the lowest dekadal rainfall of 15.1mm and 11.1mm respectively (Map1). However, the situation improved over most places towards the end of the dekad due to rainfall which occurred from the 26th up the 28th. Most of the rain occurred over some parts of lowlands extending across South eastern parts (Map 1 and fig 1). Phuthiatsana recorded the highest dekadal rainfall of 22.7mm.

The third dekad of February 2008 marks the fourth consecutive dekad, which received significantly low rainfall since the last dekad of January. Thus evidently, most parts of the country have experienced dry spells for a period of more than a month.

Cumulative Rainfall Percentage Departure From Normal Since September 2007.

Cumulative rainfall since September 2007 ending third dekad of February 2008 remains at normal to above normal conditions countrywide. However, rainfall departure from normal is continuously decreasing especially over the eastern parts of the country and this indicates a period of dry spells (map2). Dry spells can have a serious negative impact to crops since they are at their critical stage.

Map 2 depicts that the most of the eastern parts of the country have the lowest rainfall percentage departure from normal. This indicates that these places have been drier as compared to the rest of the country.



Map 2: Rainfall % Departure from Normal (Sept07-Feb 3rd 08)

TEMPERATURE

Mean temperatures were still warmer than normal during the third dekad of February 2008. Semonkong and Mohale's Hoek remained to be cooler than normal as it was the situation during the previous dekad. High dekadal mean temperature deviations, which continued into the dekad under

review led to high evapotranspiration. Resulting in great loss of soil moisture that caused water stress to some crops.

CROP STAGE AND CONDITIONS

Maize and sorghum crop still at flowering to grain filling stages and in good conditions. However, there are some crops, which show signs of withering at some places due to experienced dry spells. High temperatures and less rainfall continued to cause great loss of soil moisture resulting in water stress to some crops.

Normal dates for the onset of frost in the highlands is in March although the dates can differ from place to place. If frost can indeed occur in March, most of the crops will not have fully matured and the damage can be huge.

Summer wheat in the highlands is at vegetative stages and is in good conditions.

DEKADAL OUTLOOK

21– 29 February 2008

Scattered rain showers and thundershowers are expected to continue. Temperatures are anticipated to remain warm to hot for the period.

Table 1

Rainfall and Temperature Summaries

		Rainfall (mm)						Temperature (°C)				
		21 - 28 Feb 2008			Total From Sept07 to 3rd Dek Feb			21 - 28 Febl 2008				
STATION NAME	ALT. (M)	Actual R/Fall	Normal R/Fall	Rain Days	Actual	Normal	%Dept. from Normal	Minimum Lowest(Day)	Maximum Highest (Day)	Dekadal Mean	Dekadal Normal	Deviation
Butha-Buthe	1770	33.9	23.7	5	756.1	587.7	29	8.5 (28)	28.0(23, 24, 25)	19.8	17.8	2.0
Leribe	1740	17.9	26.7	4	682.0	519.0	31	8.4 (28)	29.5 (22)	20.2	19.8	0.4
Mafeteng	1610	15.1	25.6	4	573.8	460.1	25	12.5 (23)	29.4 (23)	20.3	19.8	0.5
Maseru Airport	1530	24.1	22.7	5	578.5	467.7	24	9.5 (28)	30.6 (22)	21.2	20.7	0.5
Mohale's hoek	1600	30.0	30.1	3	714.0	486.4	47	8.5 (28)	29.0 (23)	19.7	20.2	-0.5
Mokhotlong	2200	24.2	20.5	4	514.8	455.2	13	6.5 (28)	26.1 (21, 29)	17.3	17.0	0.3
Moshoeshoe I	1628	27.5	33.1	4	612.7	522.2	17	9.9 (28)	29.5 (22)	20.2	20.1	0.1
Phuthiatsana	1750	42.7	24.0	3	670.1	530.9	26					
Qacha's Nek	1970	39.2	27.4	4	678.8	576.5	18	9.4 (28)	27.3 (21)	19.1	17.5	1.6
Quthing	1740	33.5	30.2	5	586.6	530.9	10	10.6 (28)	28.5 (22)	20.2	20.0	0.2
Semonkong	2458	39.0	23.9	4	684.7	450.3	52	3.2 (28)	23.5 (22)	14.6	15.1	-0.5
ThabaTseka	2160	11.1	23.6	3	487.2	459.4	6	7.4 (28)	26.4 (22)	17.2	16.6	0.6

Fig.3

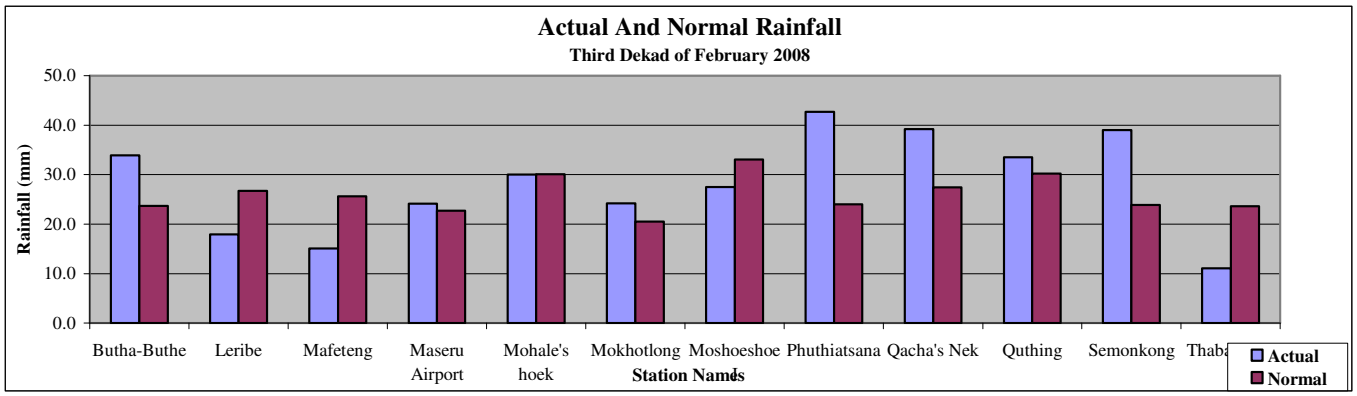
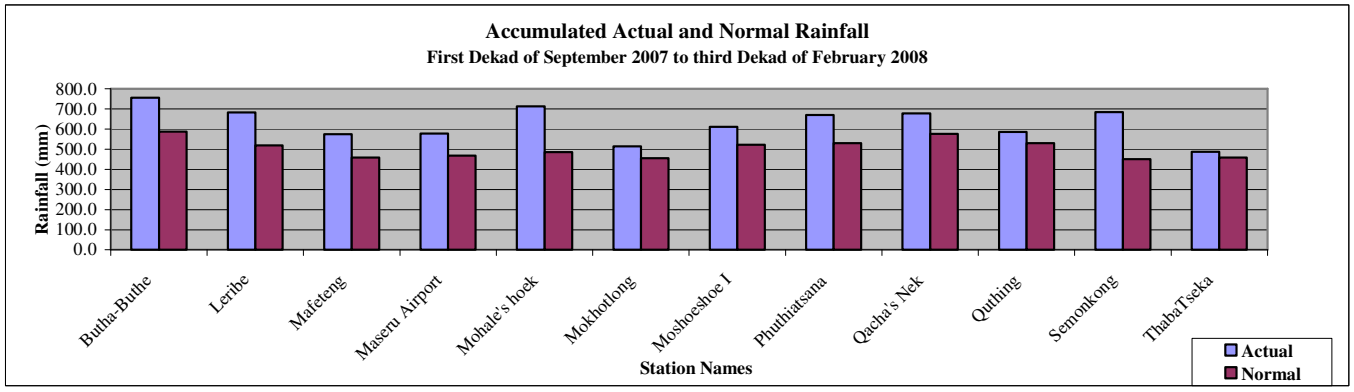


Fig.4



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 – simply implies how good or bad the vegetation is for the specific period.

This Bulletin is issued during the Summer Cropping Season (October – April).

And it is

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Comments and Contributions would be highly appreciated.