

# LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



## Ten-Day Agrometeorological Bulletin

01 – 10 October 2008



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

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## Highlights

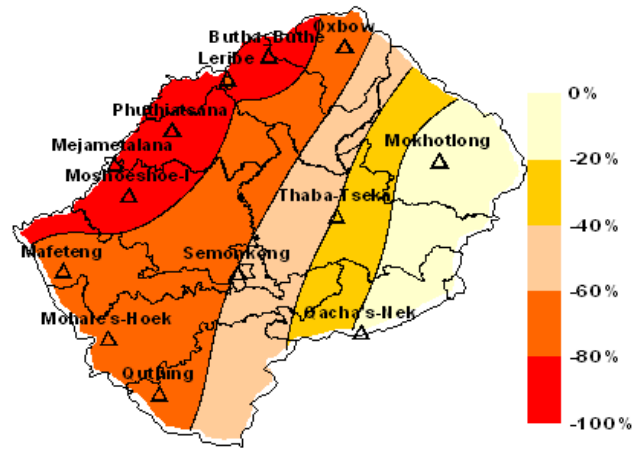
- ❑ Lengthy dry spells are continuing
- ❑ Normal mean temperatures experienced in most places.
- ❑ No agricultural activities in progress.

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### DEKADAL WEATHER SUMMARY

Mostly isolated rain showers and thundershowers were experienced due to little tropical moisture advection into the subcontinent induced by the passage of cold fronts over the southern interior. Cold fronts have been very active over the southwest coast of Cape Town resulting in widespread activities over these areas. On the contrary, passage of the cold fronts resulted in minor activities over our area as the subcontinent was mostly invaded by cool dry air brought by the ridging Atlantic Ocean from the west after the passage of the cold fronts. Ridging Anticyclone over the interior inhibited or delayed moisture influx into the subcontinent thereby delaying the onset of the much anticipated rainfall.



Map 2: Cumulative Rainfall % Departure from Normal

### RAINFALL SITUATION

First dekad of October 2008 was predominantly dry all over the country. Quthing (14mm) and Mafeteng (9mm) were the only areas to record about normal dekad rainfall. The highest dekad rainfall was recorded at Quthing while the lowest dekad rainfall was received at Leribe (0.6mm).

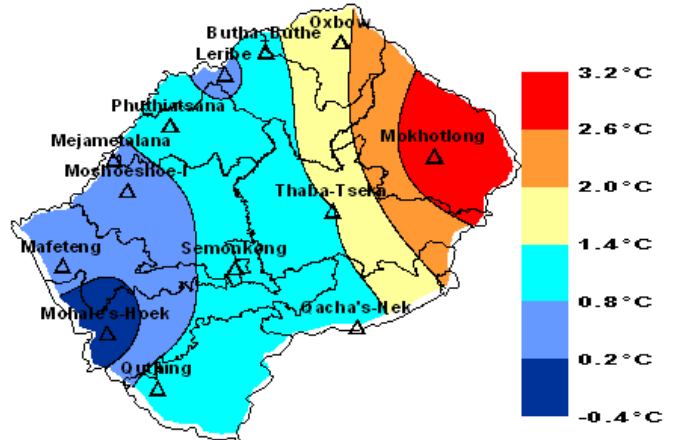
Rain days during the dekad under review range from a day in most parts of the country to three days in some areas in the eastern parts of the country.

#### Cumulative Percentage Rainfall Departure from Normal

Cumulative rainfall since the first dekad of September ranges from below normal in most parts of the country to normal only in the eastern parts of the country (see Map 2 & Fig.2). Low cumulative rainfall leaves the soil moisture very poor and presently the land surface is uncultivable.

### TEMPERATURE

Mean temperature had been largely normal except at Mokhotlong. Map 3 below shows mean temperature from normal, and the highest deviation was experienced in the northeastern parts of the country. Even though temperatures were normal during the dekad, their effects could be bad. Evapotranspiration rates on the already water stressed soil surfaces and water resources were increased.



Map 3. Dekadal Mean Temperature Deviation from Normal

### RAINFALL ANOMALIES

Rainfall performance had been poor for about three consecutive months until now. Fig.3 below shows the rainfall anomalies in percentages in different agroecological zones since September. The low anomalies which are dominant indicate that dry spells had been prominent since September (reporting period) and there have been very little rainfall activities. Dry spells especially at this time of the year

make onset of the agricultural season extremely difficult. More importantly, the onset of the season is getting shortened.

Although dry spells are common in spring, they have been lengthy with little rainfall interruptions this time when compared with the last eight years.

### **CROP STAGE AND CONDITIONS**

Moisture content of the soil is very low and ideally no agricultural activities can take place. Land cultivation which was supposed to be in progress for summer cropping has not started.

Wheat grown in winter is at vegetative stages and conditions range from bad to fair.

Pastures and livestock in general are in bad state. Water resources are also expected to be fully stretched especially in the rural areas. Potable water shortages are reported at some places.

### **DEKADAL OUTLOOK**

**11 – 20 October 2008**

Isolated rain showers and thundershowers are anticipated especially over the north-eastern parts of the country. Thus next dekad is expected to be predominantly dry. Expected rains should not bring any significant improvements to current conditions and this implies that onset of the rains will be further delayed.

Fig.1

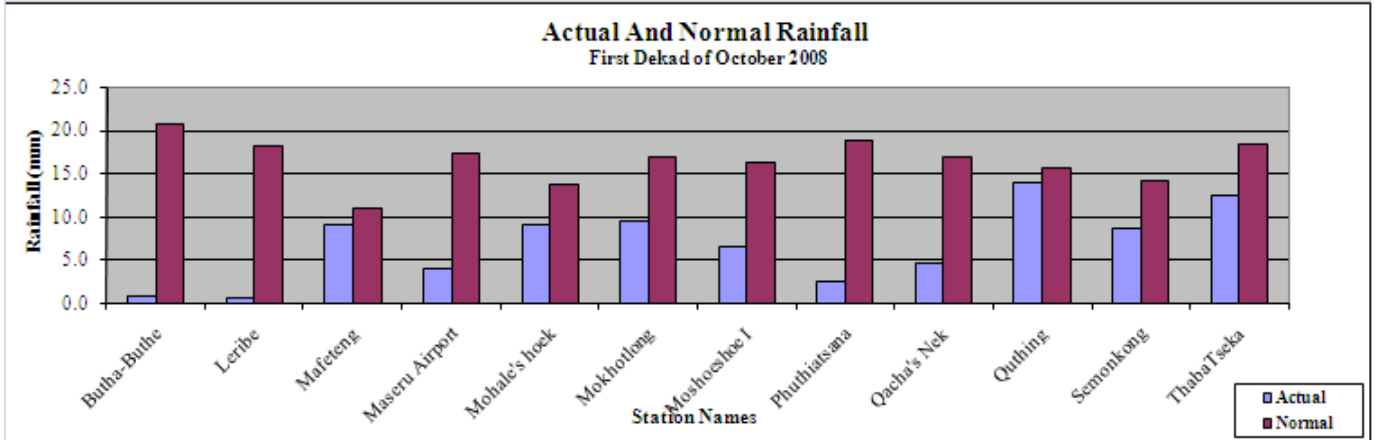


Fig.2

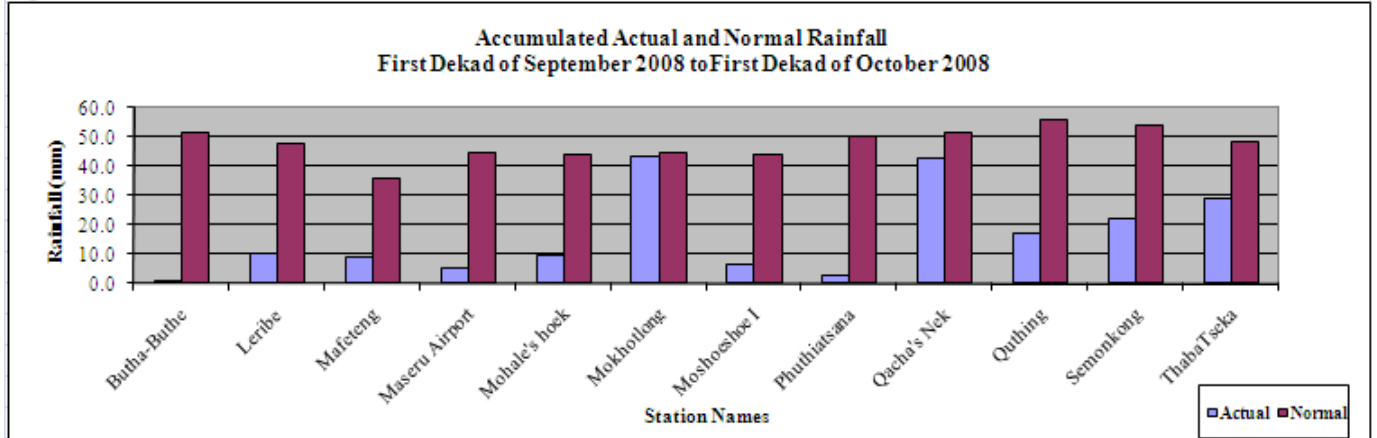
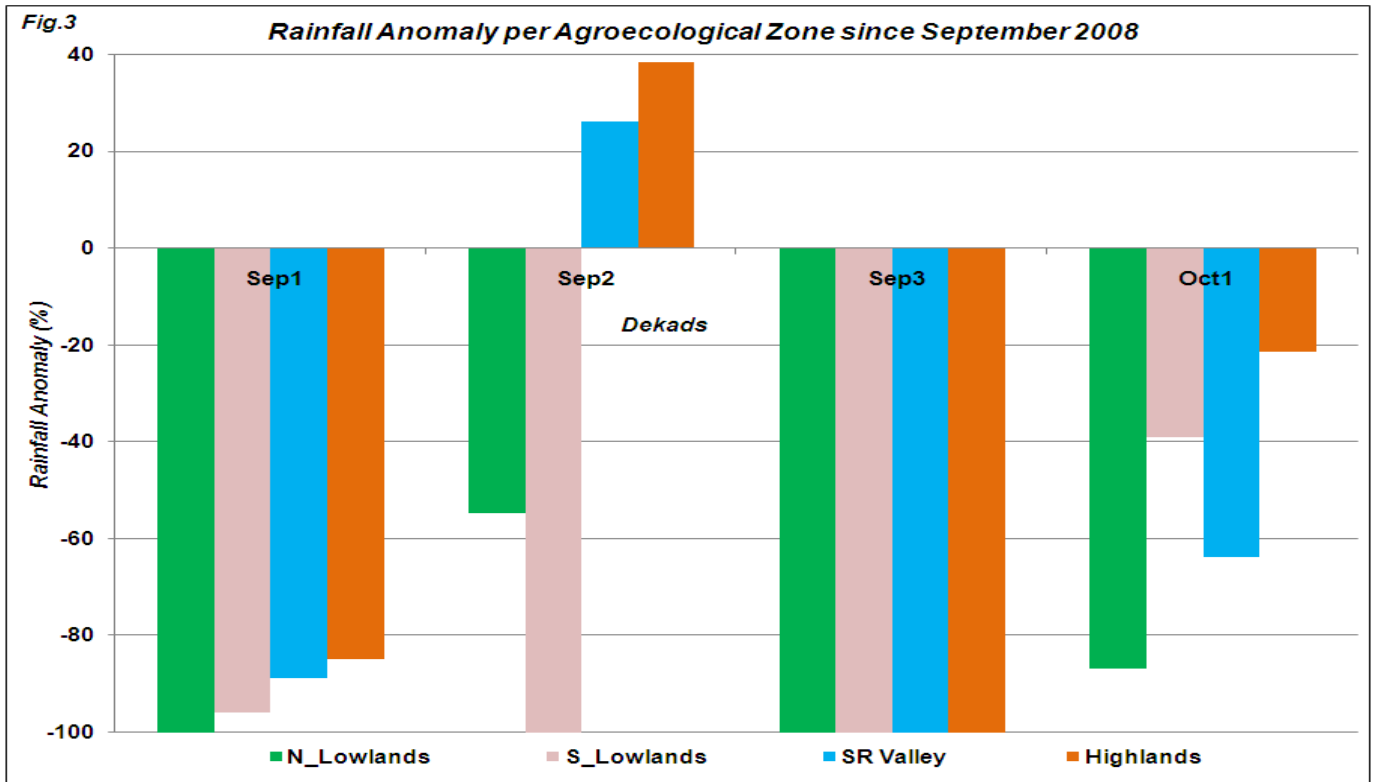


Fig.3



## **Glossary**

**Dekad :** Ten day period

**Normal:** Average figure over a specific time period.

**% Rainfall Departure from Normal:**  $(\text{Actual Rainfall} - \text{Normal Rainfall}) / \text{Normal Rainfall} \times 100$

**NDVI:** Normalized Difference Vegetation Index – simply implies how good or bad the vegetation is for the specific period.

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And it is

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Comments and Contributions would be highly appreciated.