1-10 March 2008 Vol. 18 No. 7 **Date of issue March 12, 2008**

SUMMARY

During the third Dekad of February 2008, southwestern and western Oromia exhibited little rainfall. This situation might have favored Belg agricultural activities like land preparation over southwestern parts of the country. Moreover, the moisture condition, which was observed over part of western Oromia, might have positive impact for perennial crops and pasture. On the other hand the rise in maximum temperature has been exhibited over northwestern, western, southeastern and northeastern lowland areas of the country, the situation might have negative impact on perennial crops and the availability of pasture and drinking water over pastoral and agro-pastoral areas.

During the first dekad of March, dry and sunny condition was dominated over most parts of the country, in line with this observed an increase in maximum temperature over lowlands of the country that have an impact on the rate of evapo-transpiration to increase, hence, the condition might have caused moisture stress on perennial crops, availability of pasture and drinking water. Little rain was received over areas of southern, southwestern and SNNPR and might have benefited perennial crops, availability of pasture and drinking water.

1. WEATHER ASSESSMENT

1.1 1-10 March 2008

1.1.1 RAINFALL AMOUNT (Fig.1)

Parts of western Oromia, Gambela and pocket areas of SNNPR received 5-25 mm of dekadal rainfall. Most parts of the country experienced little or no rainfall.

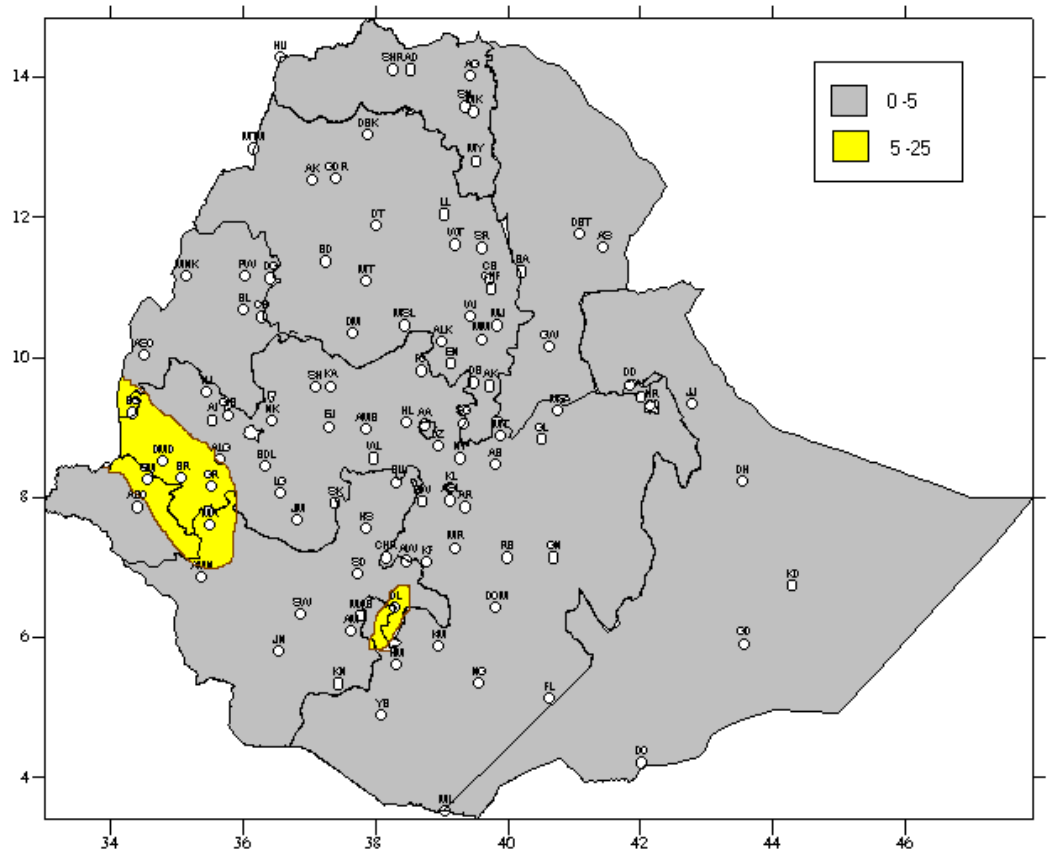


Fig 1. Rainfall distribution in mm (1-10 March 2008)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Parts of western Oromia and Gambela received normal to above normal dekadal rainfall. Most Areas of western Oromia and Gambela and pocket areas of SNNPR received below normal rainfall. The rest of the country experienced much below normal rainfall.

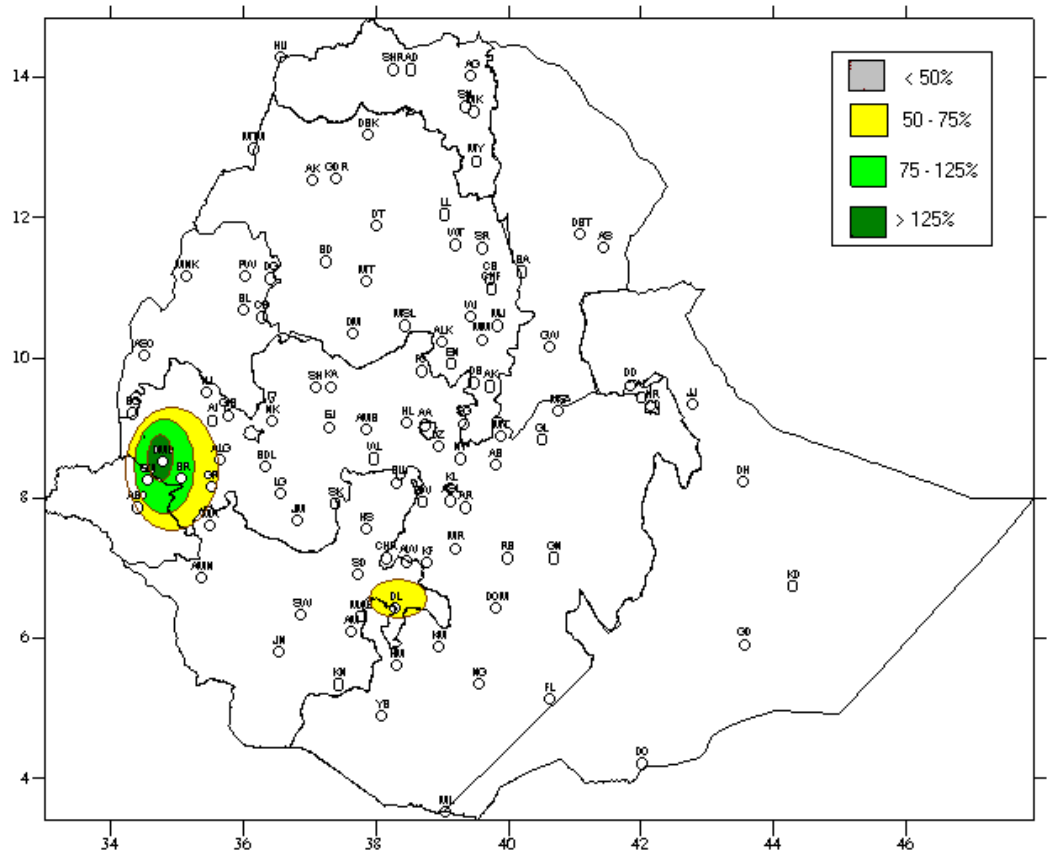


Fig.2 Percent of normal rainfall (1-10 March 2008)

Explanatory notes for the legend:
<50 -- Much below normal
50—75% -- below normal
75—125% --- Normal
> 125% ---- Above normal

1.1.3 TEMPERATURE ANOMALY

Some stations recorded extreme Maximum temperature above 35^{o} C for 7-10 consecutive days. Humera, Gambella, Metema, Pawe, Mankush, Gode, Dubti and Mille recorded extreme maximum temperature as high as 43.5, 42.0, 41.0, 40.0, 40.0, 37.5, 36.5 and 36.5^{0}C respectively. The condition might have affected the normal situation of crops as well as living livestock over the aforementioned areas.

2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF MARCH 2008

For the coming ten days, dry, windy and hot weather condition will dominate much of the country. As a result, the daily maximum temperature is expected to rise across the lowlands of northeastern, northwestern, southwestern and southeastern Ethiopia. However, at the end of the forecasting dates relative moisture intrusion is anticipated to wards west, southwest and south portions of the nation resulted in increment of cloud coverage and some wet weather activity along the aforementioned areas.

In general, western Oromia, Gambella and western SNNPR are likely to have near normal rainfall. Besides, eastern Tigray and Amhara, central and eastern Oromia highlands and Borena zone from their clod coverage will receive light rain shower at few places. The amount will be below normal.

On the other hand, Western Tigray and Amhara, Benshangul-Gumuz, Afar and much of Somali will be under hot, dry and windy weather condition.

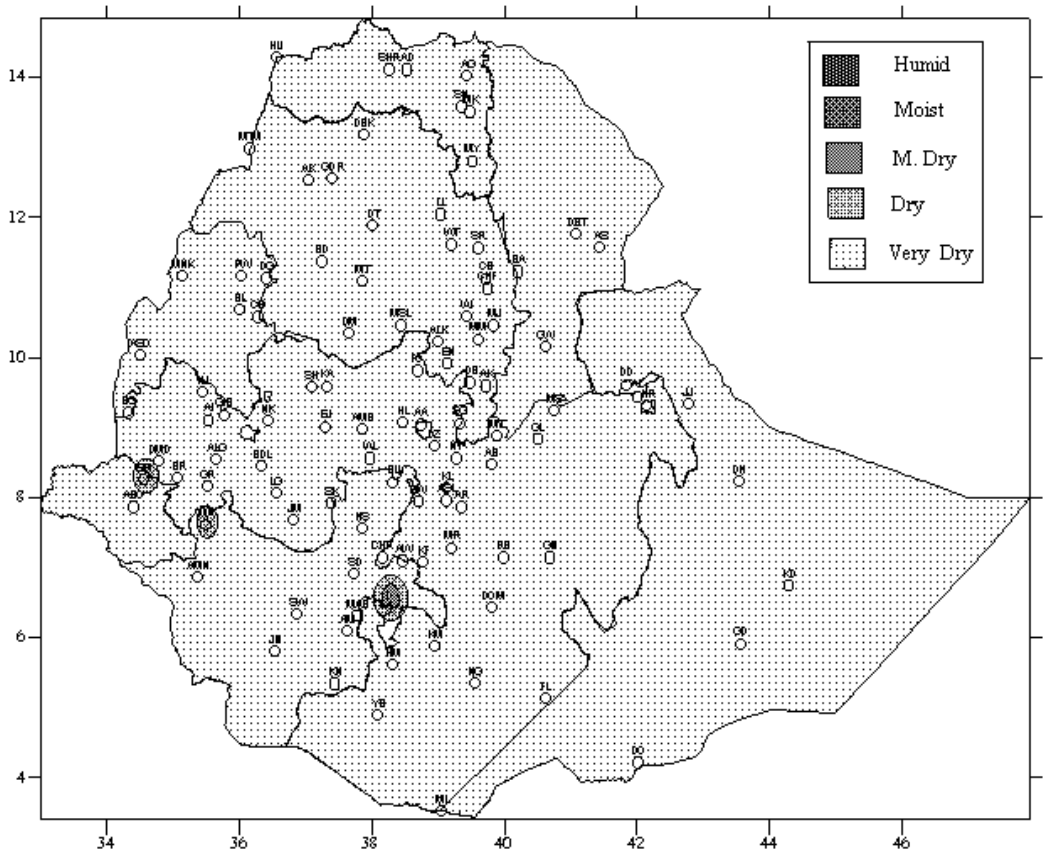
3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

Dry and sunny condition was dominated over most parts of the country, in line with this observed an increase in maximum temperature over lowlands of the country that have an impact on the rate of evapo-transpiration to increase, hence, the condition might have caused moisture stress on perennial crops, availability of pasture and drinking water. Little rain was received over areas of southern, southwestern and SNNPR and might have benefited perennial crops, availability of pasture and drinking water.

In addition during the first dekad of March 2008, the analysis of moisture status (the relationship between total dekadal rainfall and the dekadal total reference evapo transpiration) as indicated on fig.1 below was very dry over most parts of the country, except pocket areas of western Ethiopia and SNNPR, where received from moderately dry to moist condition, over most parts of the country the observed very dry condition leads to the depletion of soil moisture and might have caused negative impact not only for Belg agricultural activities but also for availability of pasture and drinking water.

Fig.3 Moisture status for (1-10 March 2008)



3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

In the coming dekad, dry and sunny weather is expected to dominate over most parts of the country in line with this expected to dominate morning and mid night cold weather over highlands. However, extreme maximum temperature will rise over lowland areas of the country, hence; will increase the rate of evapo-transpiration thereby accelerate the depletion of soil moisture. The situation may cause negative impact on perennial crops, availability of pasture and drinking water, more over; the situation will have positive impact on the general Belg agricultural activities over southwestern Ethiopia.

In relation to the incursion of moist air to the country, in terms of distribution and amount, little and erratic rains expected over southern and southwestern Ethiopia. However, near normal rains expected over parts of southern and western Oromia, Gambella and SNNPR, hence, the situation expected to favor perennial crops, availability of pasture and drinking water.

On the other hand, the expected dry and sunny weather over most of Tigray, Afar, Benishangul-Gumuz, central and eastern Ethiopia and Somali expected to have negative impact on perennial crops availability of water and pasture and drinking water as well.