

## **SUMMARY**

During the first dekad of February cloudy condition was observed over most parts of the country. Some areas of southwestern, central and northeastern parts of the country exhibited little rainfall. Generally, little to moderate amount of rainfall was experienced over some areas of western and central Oromia, SNNPR and eastern Amhara. The situation might have favored the seasonal agricultural activities like land preparation over areas where Belg agricultural activities start earlier. Moreover, some lowland areas exhibited extreme maximum temperature above 35<sup>0</sup>C. Among the reporting stations: Gambela, Gode, Mankush, Pawe and Semera recorded extreme maximum temperature ranging from (35<sup>0</sup>C-40.5<sup>0</sup>C) for two-ten consecutive days. This condition could exacerbate the stress due to moisture deficiency by increasing the rate of evapotranspiration. Besides, the observed dry weather condition over most parts of the country might have a negative impact on the availability of pasture and drinking water.

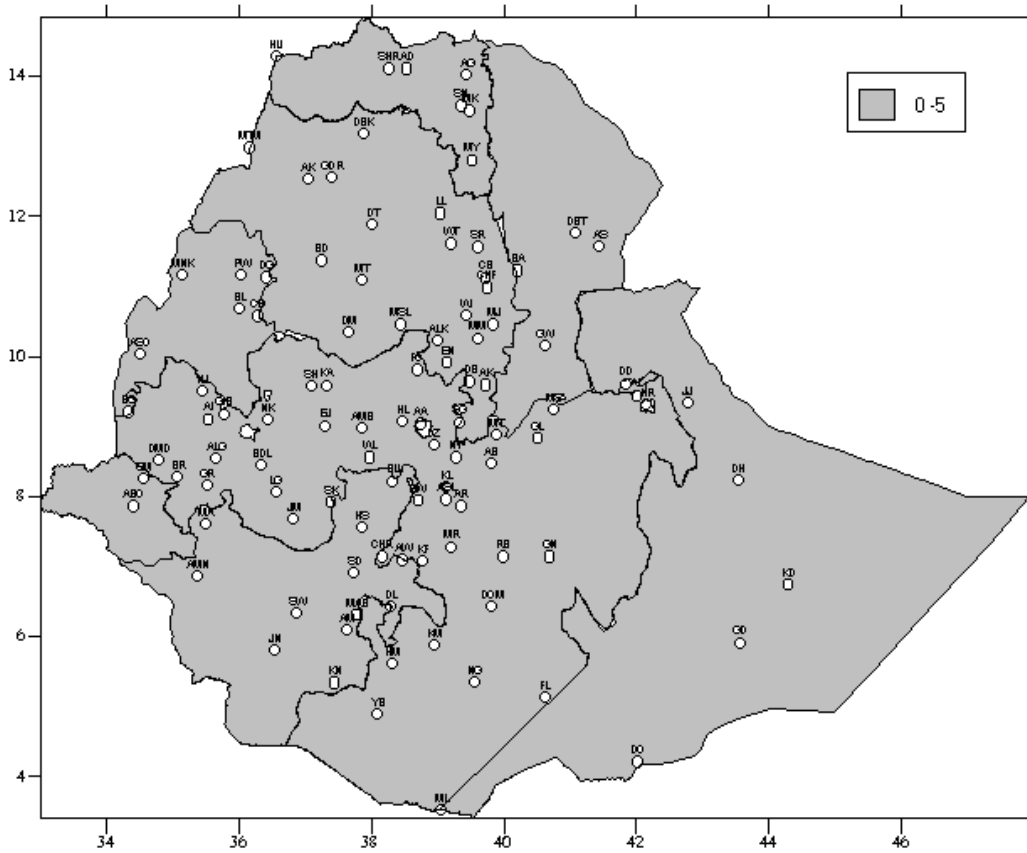
During the second dekad of February dry and windy condition was observed over most parts of the country. However, in the last days of the decade in relation to the increasing of cloud coverage over SNNPR, eastern, western and central Oromia, Tigray and central Amhara exhibited little rainfall. The situation might have favored the Belg agricultural activities like land preparation over the areas where normally Belg agricultural activities start around mid February like northern Tigray, eastern Amhara, central and eastern Oromia and half of eastern SNNPR. However, the dry and sunny weather condition in the last days of the dekad might have negative impact on the Belg Agricultural activities. In addition in the northwestern, southeastern, southwestern and eastern lowlands of the country the daily maximum temperature that have an impact on the rate of evapo-transpiration to increase, hence, the condition might have caused moisture stress on perennial crops.

### **1. WEATHER ASSESSMENT**

#### **1.1 11-20 February 2008**

##### **1.1.1 RAINFALL AMOUNT (Fig.1)**

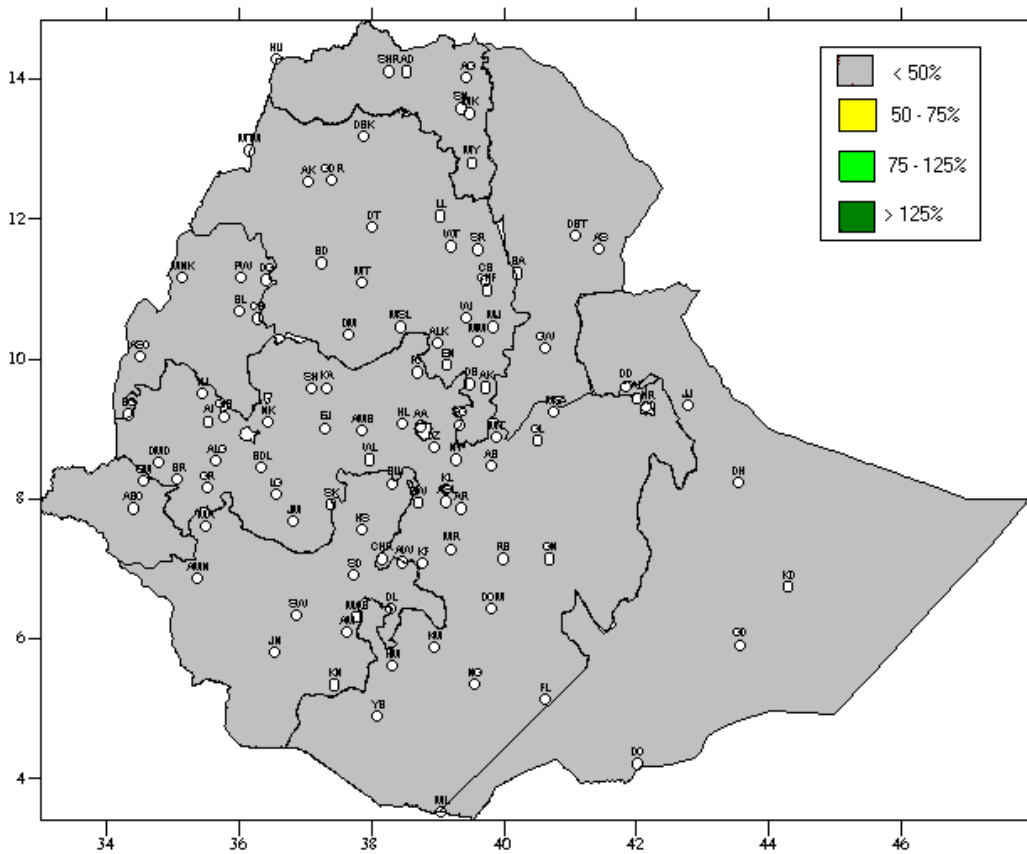
Most parts of the country experienced little or no rainfall.



**Fig 1. Rainfall distribution in mm (11-20 February 2008)**

**1.1.2 RAINFALL ANOMALY (Fig. 2)**

Most parts of the country exhibited much below normal.



**Fig.2 Percent of normal rainfall (11-20 February 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° C for 8-10 consecutive days. Pawe, Gode, Mankush, Metema and Gambella recorded extreme maximum temperature as high as 37.0, 38.0, 38.0, 38.5, and 41.0°C respectively.

## **2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF FEBRUARY 2008**

For the coming ten days, mostly dry and sunny weather condition dominated much if the country despite the fact that, the wet weather activity will be better along southwestern, northeastern high land of Ethiopia.

In general, SNNPR, Gambella, western Oromia and eastern Tigray and Amhara will get near normal rainfall. Besides central and eastern Ethiopia as well as southern Oromia are likely to have a chance of light rain shower at few places from their cloud cover. Western Tigray and Amhara and Benshangul-Gumuz will be under partly cloudy condition. In other hand the rest parts of the nation are likely to have dry and sunny weather condition

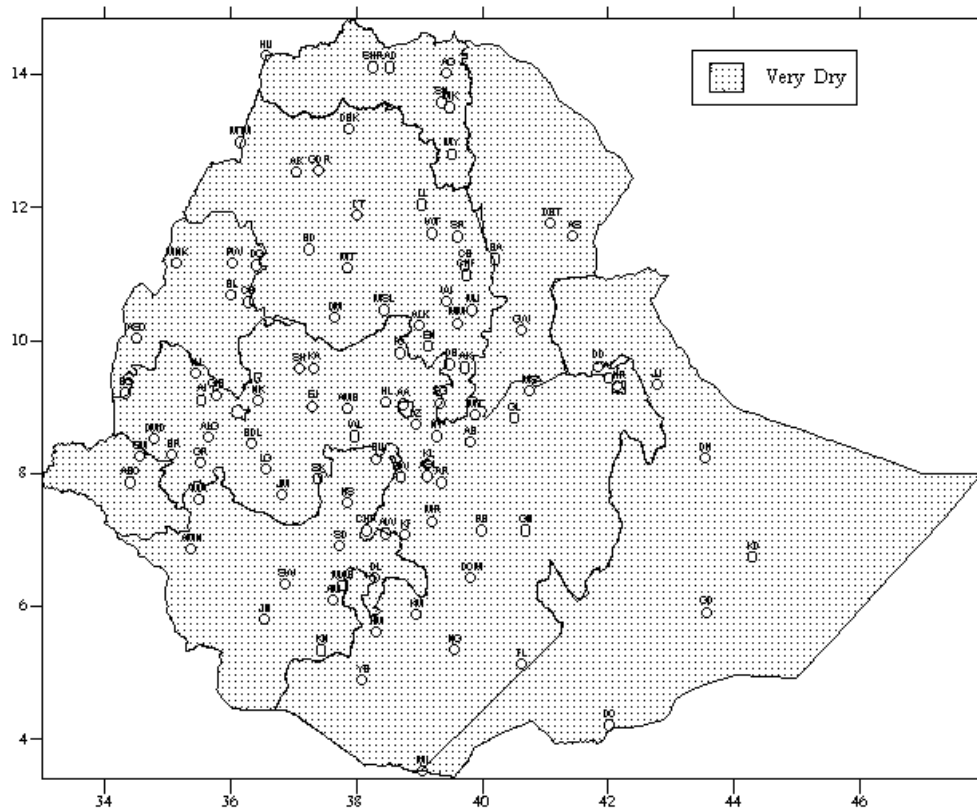
## **3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE**

### **3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE**

Dry and windy condition was observed over most parts of the country. However, in the last days of the decade in relation to the increasing of cloud coverage over SNNPR, eastern, western and central Oromia, Tigray and central Amhara exhibited little rainfall. The situation might have favored the Belg agricultural activities like land preparation over the areas where normally Belg agricultural activities start around mid February like northern Tigray, eastern Amhara, central and eastern Oromia and half of eastern SNNPR. However, the dry and sunny weather condition in the last days of the dekad might have negative impact on the Belg Agricultural activities. In addition in the northwestern, southeastern, southwestern and eastern lowlands of the country the daily maximum temperature that have an impact on the rate of evapo-transpiration to increase, hence, the condition might have caused moisture stress on perennial crops.

In addition during the second dekad of February 2008, the analysis of moisture status (the relationship between total dekad rainfall and the dekad total reference evapo transpiration) as indicated on fig.3 below was very dry over most parts of the country, thus the moisture condition was not favorable for Belg agricultural activities and availability of pasture and drinking water.

**Fig.3 Moisture status for (11-20 February 2008)**



### 3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

Analyzed meteorological information reveal that rain bearing systems are anticipated to favor rainfall activities till the mid of the coming dekad. Hence northerwestern, southeastern highland, rift valley areas including central highlands expected to have rainfall. The expected situation will have positive impact on Belg agricultural activities like land preparation over southwestern, southeastern and central Ethiopia high lands. On the other hand the maximum air temperature expected to increase over northwestern, western, southeastern and northeastern lowlands areas in line with this there will be an increase in the rate of evapo transportation, hence the situation will have negative impact on perennial crops availability of water and pasture and drinking water as well.