

# NATIONAL METEOROLOGICAL SERVICES AGENCY

## TEN DAY AGROMETEOROLOGICAL BULLETIN

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### SUMMARY

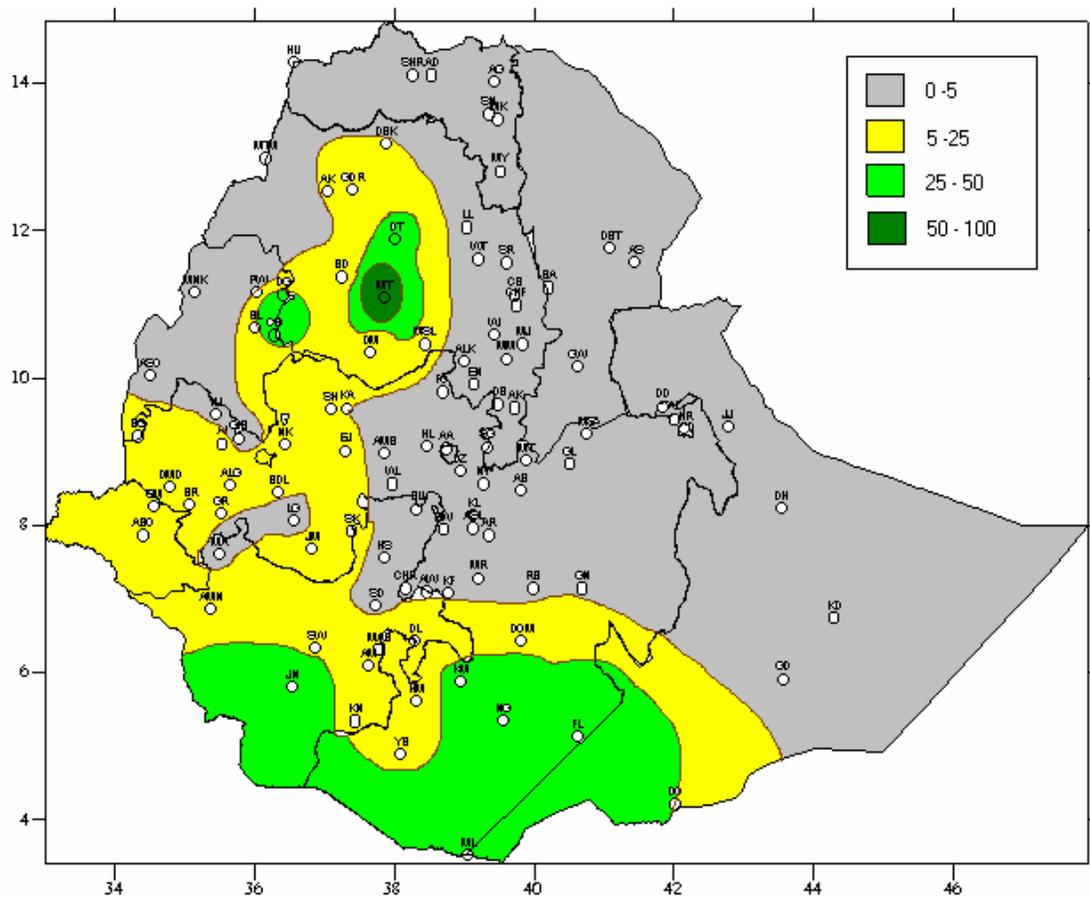
During the third dekad of October 2005 western, southwestern and parts of southern Ethiopia exhibited normal to above normal rainfall. Thus this condition could have significant contribution to fulfill the water requirement of crops, which are not attaining maturity. It could also favor perennial crops and the availability of pasture and drinking water particularly over southern SNNPR and southern Oromiya. On the other hand the observed dry weather situation over eastern Amhara and Tigray, central and eastern Oromiya including northeastern SNNPR could favor harvest and post harvest activities. In accordance with the crop phenological report harvest of maize and beans was under way in some areas of western Oromiya, eastern Amhara and some areas of northern SNNPR. Assossa reported slight crop damage due to insect and disease on teff and nug crops respectively. Shola Gebeya and Fiche reported slight maize crop damage due to insect pest. Limu Genet and Bedelle reported slight wilting due to moisture stress on cereal crop like teff and millet as well as oil crop like nug. With regard to extreme minimum temperature some areas of northern Ethiopia like Adigrat, eastern highlands like Alemaya, northeastern (Wegel Tena) and central highlands like Debre Birhan, Fiche and Mehal Meda exhibited extreme minimum temperature less than 5°C for 2-11 days during the third dekad of October 2005.

During the first dekad of November 2005 the observed dry Bega weather condition could favor the on going harvest and post harvest activities in most parts of Meher growing areas. As the result harvest and post harvest activities were under way in most parts of Meher growing areas. On the other hand the observed rainfall amount ranging from 5-25 mm could have significant contribution on crops, which are at flowering and grain filling stages. However the occasional falls observed in some pocket areas could have negative influence on harvest and post harvest activities. With regard to extreme temperatures central highlands like Debre Zeit, Fiche, Enewary, Koffele, Debre Birhan and Mehal Meda, northern highlands like Adigrat including eastern highlands like Alemaya and Jijiga exhibited extreme minimum temperature less than 5°C. Moreover Debre Bihan experienced minimum temperature below 0°C lowering up to -3°C for three consecutive days. Thus this condition could have negative influence on the normal growth and development of plants. Shambu reported weed infestation on wheat crop. Limu Genet reported slight wilting due to moisture stress on cereal crop like millet as well as oil crop like nug.

# 1. WEATHER ASSESSMENT

## 1.1 RAINFALL AMOUNT (Fig. 1)

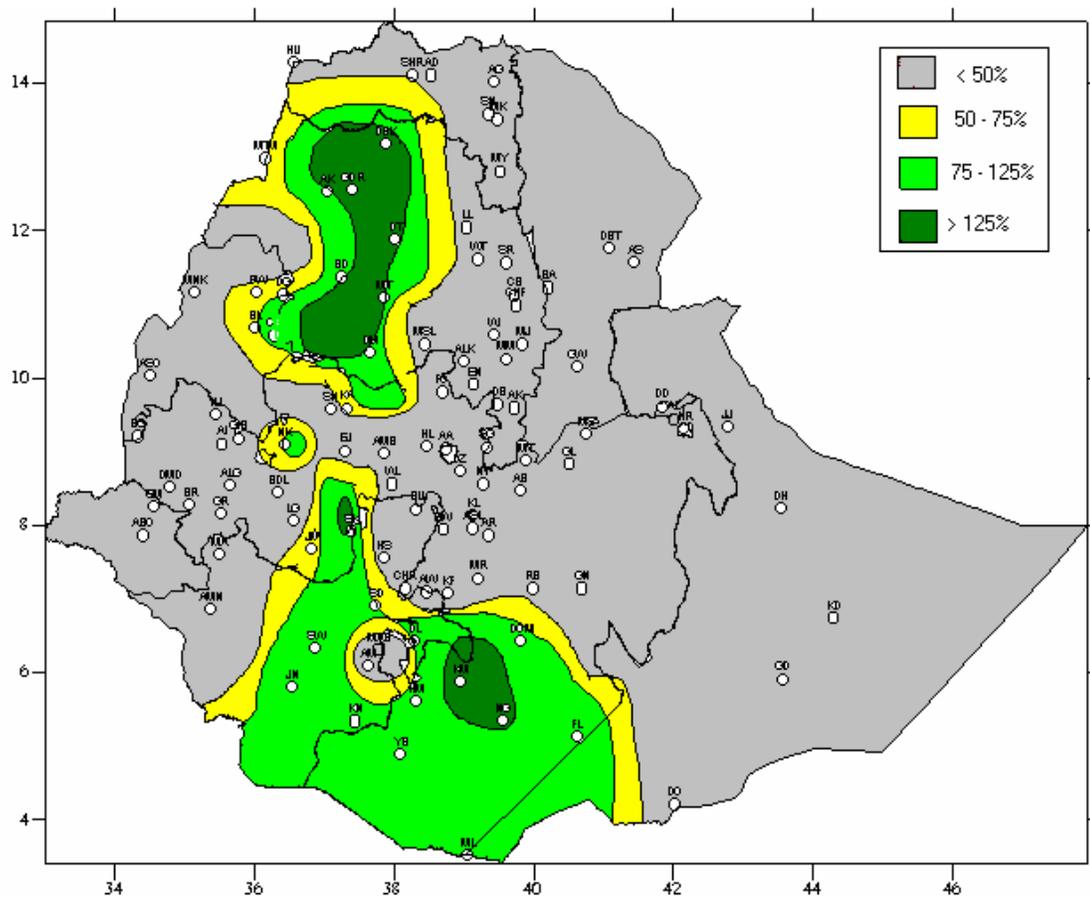
Pocket area of central Amhara received 50-100mm of rainfall. Eastern margin of Benishangul Gumuz, southwestern part of SNNPR, southern part of Oromia, few areas of southwestern Somali, some areas of central Amhara received 25-50mm of rainfall. Parts of northern and southern part of Amhara, western and parts of southern Oromiya, most parts of SNNPR, few areas of southern Somali, Gambella, parts of eastern Benshangul Gumuz received 5-25mm of rainfall. There was little or no rainfall for the rest of the country.



**Fig 1. Rainfall distribution in mm (1-10 November, 2005)**

## 1.2 RAINFALL ANOMALY (Fig. 2)

With the exception of pocket areas of western Oromya, most parts of southern Oromya, much of SNNPR and most parts of western half of Amhara, the rest parts of the country exhibited below too much below normal rainfall.



**Fig.2 Percent of normal rainfall (1-10 November 2005)**

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

### **1.3 TEMPERATURE ANOMALY**

Central highlands like Debre Zeit, Fiche, Enewary, Koffele, Debre Birhan and Mehal Mehad, northern highlands like Adigrat including eastern highlands like Alemaya and Jijiga exhibited extreme minimum temperature less than 5°C. Moreover Debre Birhan experienced minimum temperature below 0°C lowering up to -3°C for three consecutive days.

## **2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF NOVEMBER 2005**

After the second half of the coming dekads east-ward moving frontal system are forecasted to intrude for the northern hemisphere while they will influence the overall weather pattern of the country.

In association with this, unseasonable rains are anticipated across various performs of Ethiopia. In particular, northern, north eastern, central, and eastern sectors are likely to benefit better than the remaining region. Nevertheless, western, southwestern, and southern Ethiopia is expected to receive substantial rainfall amounts at many places. Besides, some places of southern Somali will get rains for few days. The anticipated decadal rainfall, however, is less likely to improve deficient rains that had persisted over the region.

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

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

The observed dry Bega weather condition could favor the on going harvest and post harvest activities in most parts of Meher growing areas. As the result harvest and post harvest activities were under way in most parts of Meher growing areas. On the other hand the observed rainfall amount ranging from 5-25 mm could have significant contribution on crops, which are at flowering and grain filling stages. However the occasional falls observed in some pocket areas could have negative influence on harvest and post harvest activities. With regard to extreme temperatures central highlands like Debre Zeit, Fiche, Enewary, Koffele, Debre Birhan and Mehal Mehad, northern highlands like Adigrat including eastern highlands like Alemaya and Jijiga exhibited extreme minimum temperature less than 5°C. Moreover Debre Bihan experienced minimum temperature below 0°C lowering up to -3°C for three consecutive days. Thus this condition could have negative influence on the normal growth and development of plants. Maize was at wax and full ripeness stage in some areas of eastern Amhara like Wegel Tena and Majete while it was at tasseling and ninth leaf stage in western Amhara (Dangila) and southern midlands of Oromiya (Dolo Mena). Sorghum was at ripeness stage in western Oromiya (Dembi Dolo and Nedjo) and eastern Amhara while at flowering stage in some areas of western Oromiya (Gimbi and Alge) and eastern Amhara (Majete). Wheat was at wax and full ripeness stage in some areas of western Oromiya like Dembi Dolo and Shambu and northern SNNPR (Hosaina) while at flowering stage in some areas of western Oromiya (Gimbi) and southeastern Amhara (Shola Gebeya). Besides it was at tillering stage in some areas of midlands of Oromiya (Kibre Mengist). Millet was at flowering and shooting stages in some areas of western Oromiya (Nedjo and Limu Genet). Beans were at flowering in some areas of eastern Amhara like Wegel Tena, while at ripeness stage in some areas of Oromiya like Fitcha and southeastern Amhara like Shola Gebeya. Shambu reported weed infestation on wheat crop. Limu Genet reported slight wilting due to moisture stress on cereal crop like millet as well as oil crop like nug.

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

The anticipated rise in minimum temperature due the expected better moisture conditions in some places would ease the frost stress persisted over some frost prone areas of the country like Adigrat, Alemaya, Debre Birhan, Mehal Meda and Fitcha during the preceding dekad. With regard to occasional falls the expected unseasonable rains over Tigray, eastern Amhara, central and eastern Oromiya including the adjoining areas would result in harvest and post harvest losses. Thus the concerned personnel should undertake appropriate precaution ahead of time to minimize the possible risk. On the other hand the expected better moisture condition would have positive impact on crops which are at flowering and early grain filling stages in some areas of the country. The expected insufficient rainfall amount over southern and southeastern Somali would not have significant contribution in terms of the availability of pasture and drinking water. Therefore proper attention should be given in the areas to take appropriate measures and designing possible alternate strategy on time.