

# NATIONAL METEOROLOGICAL SERVICES AGENCY

## TEN DAY AGROMETEOROLOGICAL BULLETIN

P.BOX 1090 ADDIS ABABA TEL 512299 FAX 517066 E-mail nmsa@ethionet.et

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### SUMMARY

During the third dekad of December 2005, the observed dry and sunny condition over most parts of the country could have a positive impact for the on going harvest and post harvest activities. On the other hand, the observed shortage of moisture particularly over northern and northeastern high lands like Sirinka, Bati and Cheffa in areas which are supposed to get 9 – 30 mm of rainfall at this time of the year under normal circumstances, could have a negative impact on season's agricultural activities like land preparation and sowing in some pocket areas. With regard to extreme minimum air temperature, in some areas like Adigrat, Michew, WegelTena, Alemya, Fitcha and MehalMeda recorded extreme minimum temperature below 5<sup>0</sup>C throughout the dekad. Besides, Alemya recorded below 0<sup>0</sup>C lowering up to -2.5<sup>0</sup>C. This situation could exacerbate the persisted stress condition on plants due to frost during the preceding dekads in some areas like Alemya and Debre Brehan.

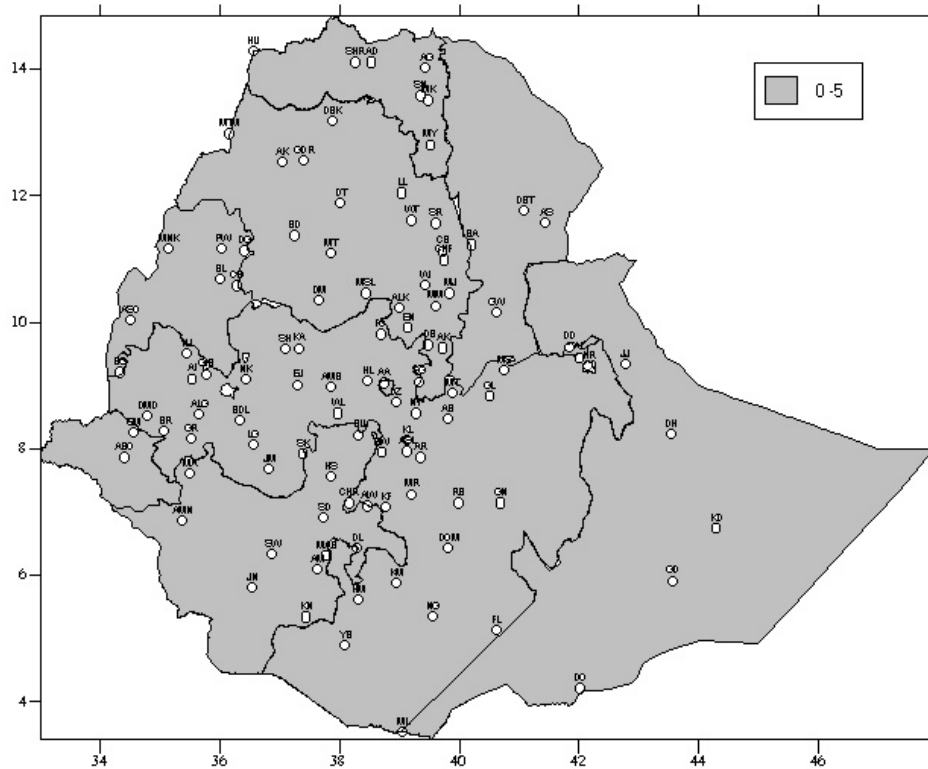
During the first dekad of January 2006, the observed Bega's dry and sunny condition over most parts of the country could have a positive contribution for the ongoing post harvest activities. On the other hand, the observed below normal rainfall particularly over some areas of northeastern and western highlands, could have negative impact in areas where land preparation is the main practice at this time of the year. Moreover, it could also have negative impact on perennial crops and other plants to some extent. Concerning air temperature even though, no station recorded extreme minimum temperature below 0<sup>0</sup>C, some station like Debre Zeit, Kulumsa, Arsi Robe, Wegel Tena, Almaya, Dangla and Adigrat which were experienced frost during the preceding dekads exhibited the extreme minimum temperature below 5<sup>0</sup>C for 6-9 consecutive days in the dekad under consideration. This situation indicated that the influence of frost on the normal growth and development of plants to some extent.

# 1. WEATHER ASSESSMENT

## 1.1 January 1-10, 2006

### 1.1.1 Rain fall Amount (Fig.1)

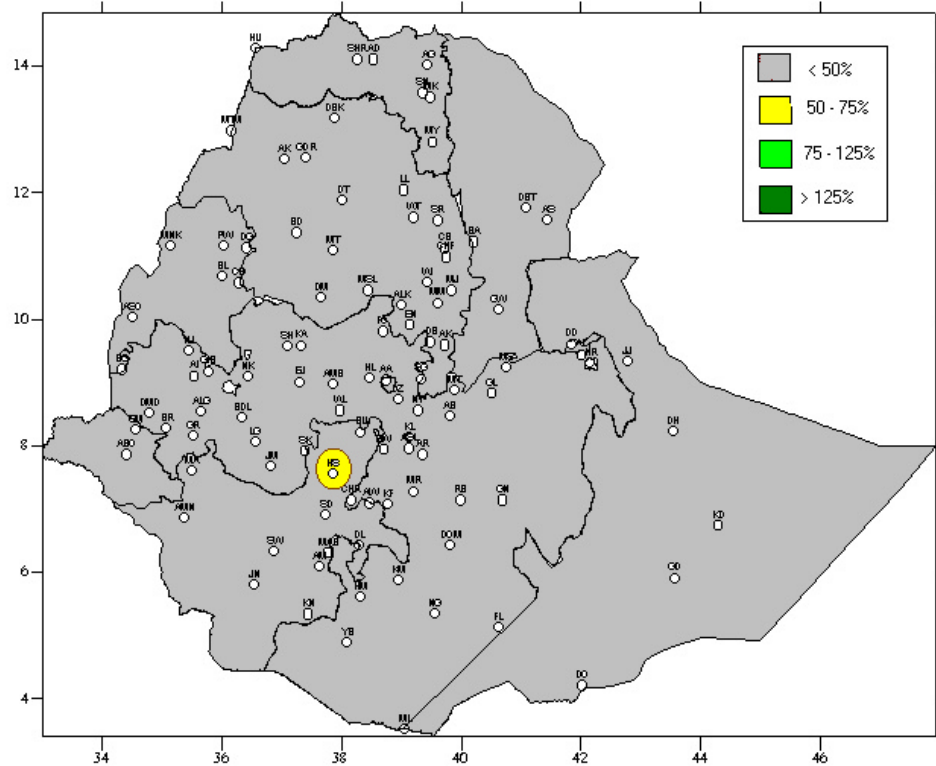
It has been a dry spell in most parts of the country.



**Fig.1 Rainfall distribution (1- 10 January 2006)**

### 1.1.2 RAINFALL ANOMALY (Fig. 2)

With the exception pocket areas of northern SNNPR below normal rainfall distribution was observed in most parts of the country.



**Fig.2 Percent of normal rainfall (1- 10 January 2006)**

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

### 1.2 TEMPERATURE ANOMALIES

Some areas like Addis Ababa (Bole engineering), Debre Zeit, Fitcha, Kulumsa, Arsi Robe, Debre Brehan, Jimma, Bale Robe, Adigrat, Alemya, Dangla, Wegel Tena and Jijiga experienced extreme minimum temperature less than 5<sup>0</sup> C for 2-9 consecutive days.

## **2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF JANUARY 2006**

In the coming dekad significant increase in moist air is anticipated across the various portion of the country. In line with this, the Bega's dry weather condition that had persisted over the country will be modified particularly, over the rift valley and the adjoining highlands. Thus eastern and western escarpments, south and southwest Ethiopia will get light to moderate rain showers at some places. Besides, an increase in cloud coverage is anticipated over the southeast and central regions. Also, night and early morning temperature will significantly increase over the major portions of highland regions.

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

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

The observed Bega's dry and sunny condition over most parts of the country could have a positive contribution for the ongoing post harvest activities. On the other hand, the observed below normal rainfall particularly over some areas of northeastern and western highlands, could have negative impact in areas where land preparation is the main practice at this time of the year. Moreover, it could also have negative impact on perennial crops and other plants to some extent. Concerning air temperature even though, no station recorded extreme minimum temperature below 0°C, some station like Debre Zeit, Kulumsa, Arsi Robe, Wegel Tena, Almaya, Dangla and Adigrat which were experienced frost during the preceding dekads exhibited the extreme minimum temperature below 5°C for 6-9 consecutive days in the dekad under consideration. This situation indicated that the influence of frost on the normal growth and development of plants to some extent.

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

The anticipated decreased Bega's dry weather influence over northeastern Ethiopia and the expected little rainfall over southern and southwestern Ethiopia, would have a positive impact to ease the prolonged dry situation persisted for the last successive dekads. Besides, it would have positive contribution for land preparation for Belg season in some areas. The expected increased in cloud coverage over the lowland of southern and southeastern Ethiopia could alleviate the stressful condition of plants observed especially over southeastern lowlands due to extreme maximum temperature persisted during the preceding dekads to some extent.