

**NATIONAL METEOROLOGICAL SERVICES AGENCY**  
**TEN DAY AGROMETEOROLOGICAL BULLETIN**  
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**11-20, February 2005 Volume 15 No. 5**

**Date of issue February 22, 2005**

**SUMMARY**

During the first dekad of February 2005, with the exception of pocket areas of northwestern SNNPR, the rest portions of the country were under below normal rainfall. This below normal rainfall condition could have negative impact on early Belg season's agricultural activities in areas like southern Tigray and southeastern Amhara. Besides it could result in water stress in some areas on the recently sown Belg crops. Regarding air temperature, the highlands of central Oromiya (Debre Zeit, Fitcha, and Kulumsa), western Oromiya (Jimma) and eastern Oromiya (Alamaya) and Bale highlands (Robe), southern Amhara (Debre Birhan and Mehal Meda) and northeast Amhara (Wegel Tena), southern Tigray (Adigrat) and northern Somali (Jijiga) as well as Addis Ababa reported extreme air temperature below 5°C for two to five consecutive days. Particularly, Debre Birhan and Alamaya experienced below 0°C as low as -2.4 and -1.0°C, respectively.

During the second dekad of February 2005, there was little or no rainfall in most parts of Belg growing areas. As a result most parts of the areas exhibited below to much below normal rainfall. This condition could have negative impact in areas where their Belg agricultural activities start earlier like South Tigray and eastern Amhara. Moreover it could exacerbate the prolonged dry spell persisted as of 21 -31 January, 2005 in case of South Tigray while as of first dekad of February in case of eastern Amhara. With regard to extreme maximum temperature Mierab Abaya, Assayta, Methara, Dubti, Gewane, Gode, Pawe, Metema and Mankush recorded extreme maximum temperature greater than 35°C for four to ten consecutive days during the ten days period. A rise in extreme maximum temperatures by 4.9 - 5°C was observed in some areas like Gewane, Methara and Pawe as compare to that of the long term mean during the ten days period which is very significant in terms of thermal requirement of the plants.

# 1. WEATHER ASSESSMENT

## 1.1 RAINFALL AMOUNT (Fig. 1)

There was little or no rainfall in most parts of Belg rain benefiting areas during 11-20 February, 2005. Pocket areas of northern and northeastern Amhara, pocket areas of eastern and central Oromiya including few areas of western Oromiya, northern half of Gambela and few areas of northwestern SNNPR received 5 - 25 mm of rainfall. Southern half of Gambela and northwestern SNNPR experienced 25 - 50 mm of rainfall. Poket area of northwestern SNNPR (Masha) received 55 mm of rainfall.

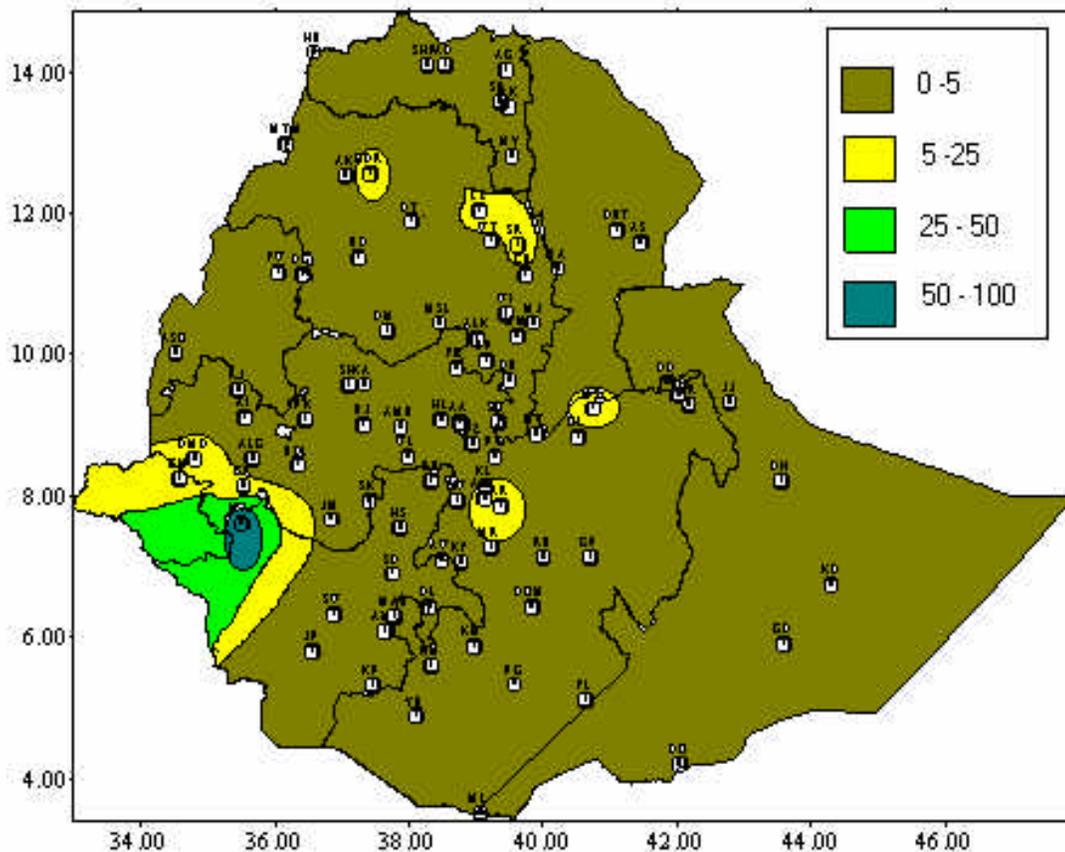
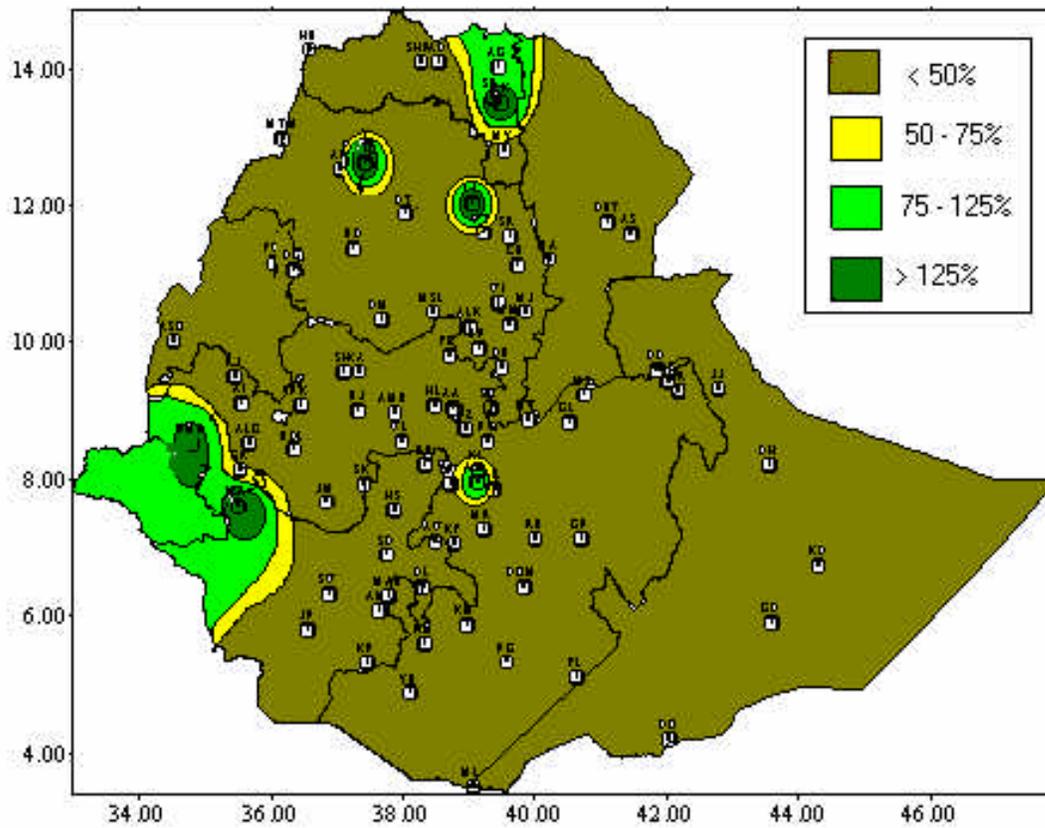


Fig 1. Rainfall distribution in mm (11-20, February 2005)

## 1.2 RAINFALL ANOMALY (Fig. 2)

Most parts of the country exhibited below to much below normal rainfall during the dekad under review.



**Fig.2 Percent of normal rainfall (11-20, February 2005)**

Explanatory notes for the legend:

<50 - Much below normal

50—75% - below normal

75—125% --- Normal

> 125% ---- Above normal

### **1.3 TEMPERATURE ANOMALY**

Mierab Abaya, Assayta, Methara, Dubti, Gewane, Gode, Pawe, Metema and Mankush recorded extreme maximum temperature greater than 35°C for four to ten consecutive days during the ten days period.

## **2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF FEBRUARY 2005**

In the coming ten days most parts of eastern Tigray, eastern Amhara, Afar, central Ethiopia, western parts of eastern Oromiya, much of SNNPR and western Oromiya will have rains. However, it will be below normal in most places. Few areas of the aforementioned areas will have near normal rainfall. Dry and sunny weather condition will be dominant for the rest of the country.

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

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

The observed little or no rainfall in most parts of Belg growing areas could have negative impact in areas where their Belg agricultural activities start earlier like South Tigray and eastern Amhara. Moreover it could exacerbate the prolonged dry spell persisted as of 21 -31 January, 2005 in case of South Tigray while as of first dekad of February in case of eastern Amhara. With regard to extreme maximum temperature Mierab Abaya, Assayta, Methara, Dubti, Gewane, Gode, Pawe, Metema and Mankush recorded extreme maximum temperature greater than 35°C for four to ten consecutive days during the ten days period. A rise in extreme maximum temperatures by 4.9 - 5°C was observed in some areas like Gewane, Methara and Pawe as compare to that of the long term mean during the ten days period which is very significant in terms of thermal requirement of the plants.

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

The anticipated below normal rainfall in most parts of eastern Tigray, eastern Amhara, Afar, central Ethiopia, western parts of eastern Oromiya, most parts of SNNPR and most parts of western Oromiya together with the persistence the deficient falls for the preceding two dekad would have negative impact on the early Belg season's agricultural activities in South Tigray and eastern Amhara where Belg agricultural activities started earlier than other Belg growing areas. However, the expected near normal rainfall over few areas of the aforementioned areas would have some contribution for land preparation. Thus, attention is required in terms of proper water harvesting techniques and selecting of appropriate varieties of crops which can resist the existing water stress in the areas.