

# **NATIONAL METEOROLOGICAL SERVICES AGENCY**

## **TEN DAY AGROMETEOROLOGICAL BULLETIN**

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### **SUMMARY**

During the first dekad of May 2005 normal to above normal rainfall has been observed over most parts of the country. As a result season's agricultural activities were in a good shape over most parts of Belg growing and Meher growing areas as well. Nevertheless some areas of central and southern Ethiopia exhibited heavy falls during the ten days period repeatedly. Thus some areas like Kibre Mengist, Hagera Mariam and Burji reported crop damage and livestock losses due to flood. Besides Arba Minch reported flood damage due to the over flow of rivers. Among the reporting stations Hosina, Konso, Dolo Mena, Negele, Kibre Mengist and Hagera Mariam experienced heavy falls reputedly ( for 2-4 days) ranging from 34.9 - 74.2 mm. With regard to air temperature no significant air temperature anomaly has been observed due to the continuous cloud cover which persisted over the lowlands during the dekad under review.

During the second dekad of May 2005 most parts of western half of the country received normal to above normal rainfall. Some areas of eastern, southern and southwestern highlands exhibited heavy falls ranging from 36.3 - 60.1 mm in one rainy day. As a result some areas like Ziway and Sodo reported slight crop damage due to water logging. Besides, Sodo reported slight hail damage on pulse crops. On the contrary, the observed deficient falls over most parts of western half of the country resulted in wilting on recently sown cereal crops like maize and sorghum in some areas (Debre Markos and Ghimbi). Pursuant to the crop phenological report maize was at emergence stage in some areas of western Oromiya (Aira, Ghimbi and Chira) while at ninth leaf stage in some areas of the same area like Alge and Bedelle. In addition, it was at tasseling stage in some areas of northern SNNPR and midlands of southern Oromiya. Sowing of sorghum was under way in some areas of western Oromiya (Gimbi) during the dekad under consideration while at third leaf stage in some areas of western Oromiya (Chira and Alge). Barley was at shooting stage in some areas of eastern Amhara. Pulse crops were at flowering stage in some areas of northern SNNPR. Oil crops like sesame were at flowering stage in some midland areas of south Oromiya. No pest damage has been reported. With regard to maximum air temperature Dire Dawa, Gode, Mankush, Assayta, Dubti and Metema recorded 35.7, 36.0, 41.0, 41.4, 42.0 and 42.5°C of extreme maximum temperatures during the dekad under review, respectively.

## 1. WEATHER ASSESSMENT

### 1.1 RAINFALL AMOUNT (Fig. 1)

Pocket areas of eastern southern and central Oromiya received falls greater than 100 mm. Most parts of SNNPR, parts of central, most parts of southern and eastern Oromiya including pocket areas of eastern Amhara and southwestern Somali received 50-100 mm of rainfall. South Tigray eastern Amhara, parts of central Oromiya, south and western margin of Afar, parts of southwestern Somali and parts of western SNNPR received falls ranging from 25-50mm. Most parts of Tigray, parts of central Amhara, most parts of Gambela, parts of central Afar, southwestern tip of Benishangul-Gumuz, parts of northern and most parts of southern Somali experienced 5-25mm of rainfall. There was little or no rainfall for the rest of the country.

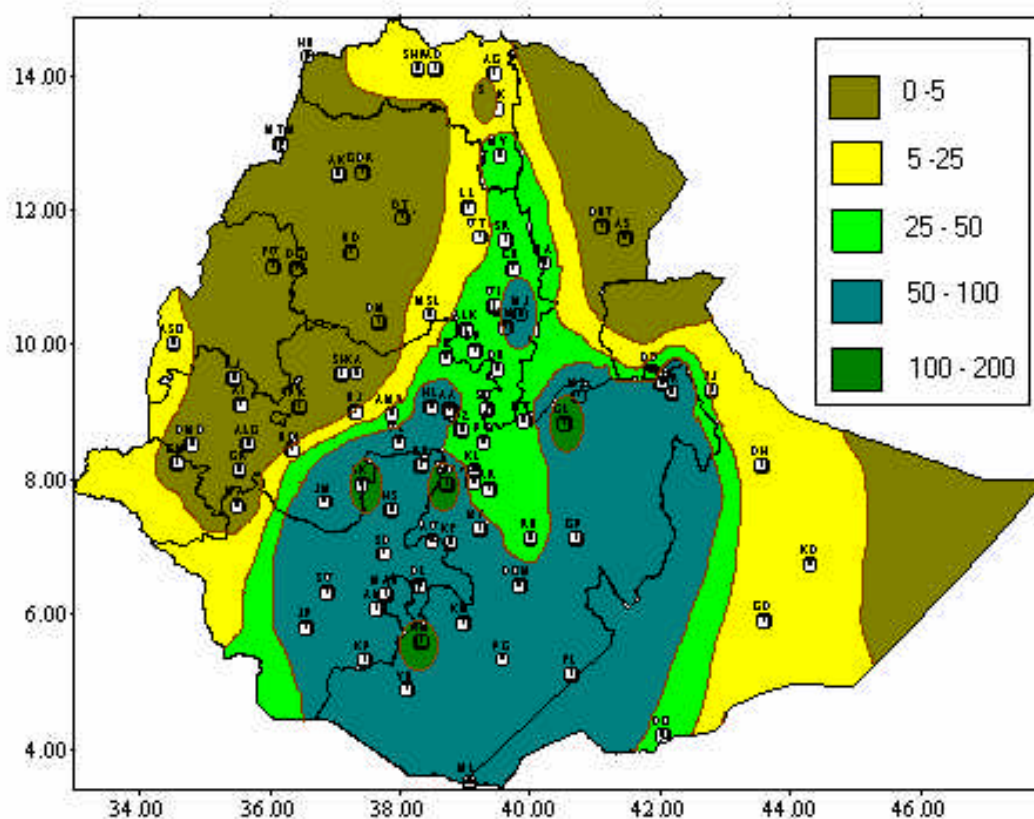
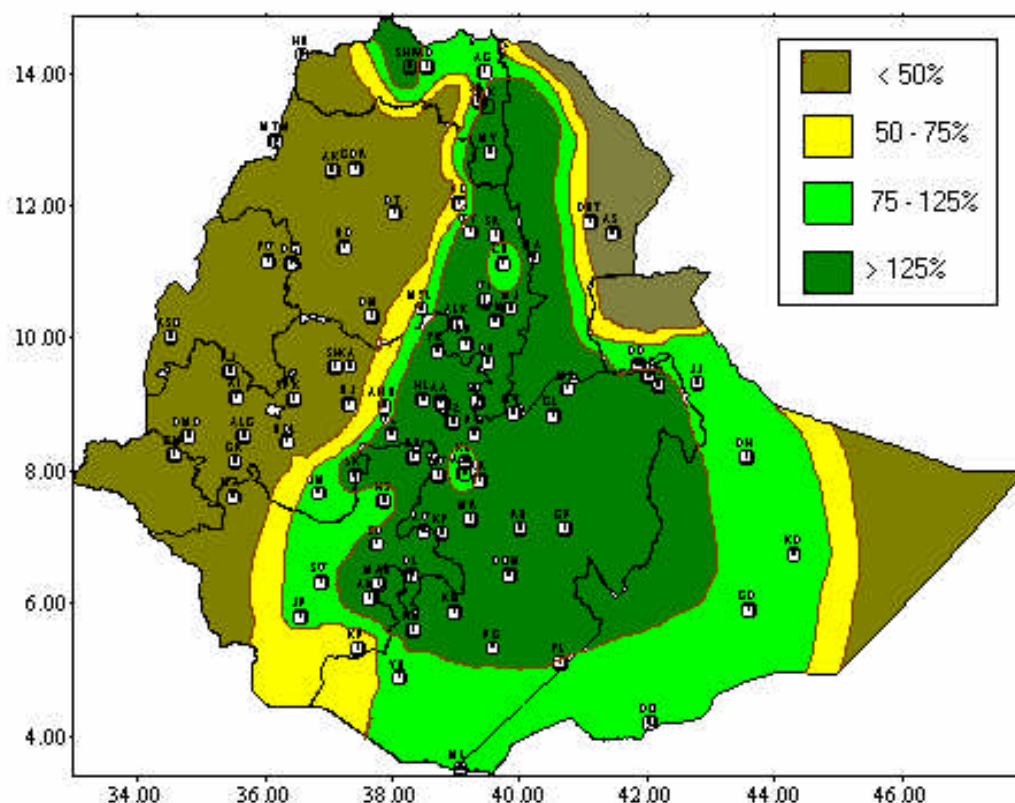


Fig 1. Rainfall distribution in mm (11-20 May, 2005)

## 1.2 RAINFALL ANOMALY (Fig. 2)

Most parts western half of the country including eastern parts of southwestern high lands exhibited normal above normal rainfall. The rest parts of the country experienced below normal rainfall.



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

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

## 1.3 TEMPERATURE ANOMALY

No significant air temperature anomaly has been observed over the lowlands during the dekad under review.

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

In the coming dekad normal to above normal rainfall is anticipated over SNNPR, Gambela, Western and Southern Oromiya, Benishangul-Gumuz, as well as western Amhara, western Tigray, Southern portions of Somali and eastern Oromiya will have near normal rains. Central Ethiopia eastern portion of Amhara and Tigray, northern Somali and Afar will have below normal rains with a possibility of near normal rains at places. In association with the dry weather condition, a rise in the daily maximum temperature is anticipated over Afar,

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

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

The observed heavy falls ranging from 36.3 - 60.1 mm in one rainy day over some areas of eastern, southern and southwestern highlands resulted in crop damage in some areas of central and southern parts of the country. Thus, some areas like Ziway and Sodo reported slight crop damage due to water logging. Besides, Sodo reported slight hail damage on pulse crops. On the contrary, the observed deficient falls over most parts of western half of the country resulted in wilting on recently sown cereal crops like maize and sorghum in some areas (Debre Markos and Ghimbi). Pursuant to the crop phenological report maize was at emergence stage in some areas of western Oromiya (Aira, Ghimbi and Chira) while at tasseling stage in some areas of the same area like Alge and Bedelle. It was also at tasseling stage in some areas of northern SNNPR and midlands of southern Oromiya. Sowing of sorghum was under way in some areas of western Oromiya (Gimbi) while at third leaf stage in some areas of western Oromiya (Chira and Alge). Barley was at shooting stage in some areas of eastern Amhara. Pulse crops were at flowering stage in some areas of northern SNNPR. Oil crops like sesame were at flowering stage in some midland areas of south Oromiya. No pest damage has been reported. With regard to maximum air temperature Dire Dawa, Gode, Mankush, Assayta, Dubti and Metema recorded 35.7, 36.0, 41.0, 41.4, 42.0 and 42.5°C extreme maximum temperatures during the dekad under review.

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

The anticipated normal to above normal rainfall over SNNPR, Gambela, western and southern Oromiya, Benishangul-Gumuz and western Amhara would alleviate the stress conditions which were persisted during the presiding dekad over some areas of western parts of the country. Besides it would favour season's agricultural activities in the aforementioned areas. On the other hand the expected below normal rainfall over central Ethiopia, eastern parts of Tigray and Amhara including northern Somali would have negative impact on the crops water requirement to some extent. But the effect would not be significant because of the stored soil moisture due to the abundant rainfall conditions observed during the preceding dekads (first and second dekad of May 2005) over the areas. However proper water harvesting techniques should be practiced particularly over the lowlands to compensate losses of moisture due to high evapotranspiration (the typical nature of the lowland areas)