

**NATIONAL METEOROLOGICAL SERVICES AGENCY**  
**TEN DAY AGROMETEOROLOGICAL BULLETIN**  
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**SUMMARY**

During the first dekad of May 2004, the observed below normal rainfall condition in most parts of the country could cause water stress on crops and result in wilting. For instance, Ziway reported wilting of maize due to water stress during the dekad under review. The persistent deficient rainfall condition over some areas of western Oromiya may have caused a delay on the sowing of maize and sorghum. On the contrary, most parts of SNNPR, southwestern lowlands of Oromiya, pocket areas of central and eastern Amhara received normal to above normal rainfall. Besides, some areas received heavy falls ranging from 38 – 72 mm in one rainy day. As a result, some areas like Dembi Dolo reported crop damage and some reported flooding (Konso) due to heavy falls. Pursuant to the crop phenological report, sowing of maize and sorghum was under way in some areas of eastern and central Oromiya while maize was at emergence stage in eastern and central Oromiya; sorghum was at emergence and tasseling stages over western Oromiya and northern SNNPR, respectively. Teff was at flowering stage in some areas of eastern Amhara. Potato was at flowering stage in northern parts of SNNPR.

With regard to air temperature a rise in maximum temperature ranges has been observed over northeastern (Assayta and Dubti), eastern (Dire Dawa and Gewane) and southeastern lowlands (Gode) as well as along the Rift valley and its adjoining areas (Metehara). Thus, this condition could increase evapotranspiration in the areas and negatively affect the water requirements of the plant and availability of pasture and drinking water in pastoral areas.

During the second dekad of May 2004, with the exception of Gambela and some areas of western Oromiya, southern Benishangul-Gumuz and its adjoining areas of western Amhara as well as pocket areas of central Oromiya, the rest parts of the country experienced below normal rainfall distribution. In accordance with phenological reports, maize and sorghum were at emergence and tasseling stages in some areas of western, eastern, central and southern Oromiya. Besides, teff and maize were at vegetative stages in some areas of eastern and southeastern Amhara while teff was at full ripening stage in some areas of southeastern Amhara. Some areas of western Oromiya (Alge) reported slight hail damage and medium moisture condition. Regarding air temperature, a rise in maximum air temperature had observed over the low land of Afar, central and eastern Oromiya. Among the reporting stations Meiso, Gode, Dire Dawa, Metehara, Dubti, Assaita, Gewane, Elidar registered 36.4, 36.6, 38.1, 39, 43, 43, 41.9 and 44 °C extreme air temperature during the dekad, respectively. This situation can have negative impact on the well being of plants by accelerating the rate of evapo-transpiration over the aforementioned areas.

# 1. WEATHER ASSESSMENT

## 1.1 RAINFALL AMOUNT (Fig. 1)

Gambela, some areas of western Oromiya received falls 50-100 mm of rainfall, northwestern SNNPR, some areas of western Oromiya, southern Benishangul-Gumuz and its adjoining areas of western Amhara received falls 25-50 mm of rainfall while the rest parts of the country received below 25 mm.

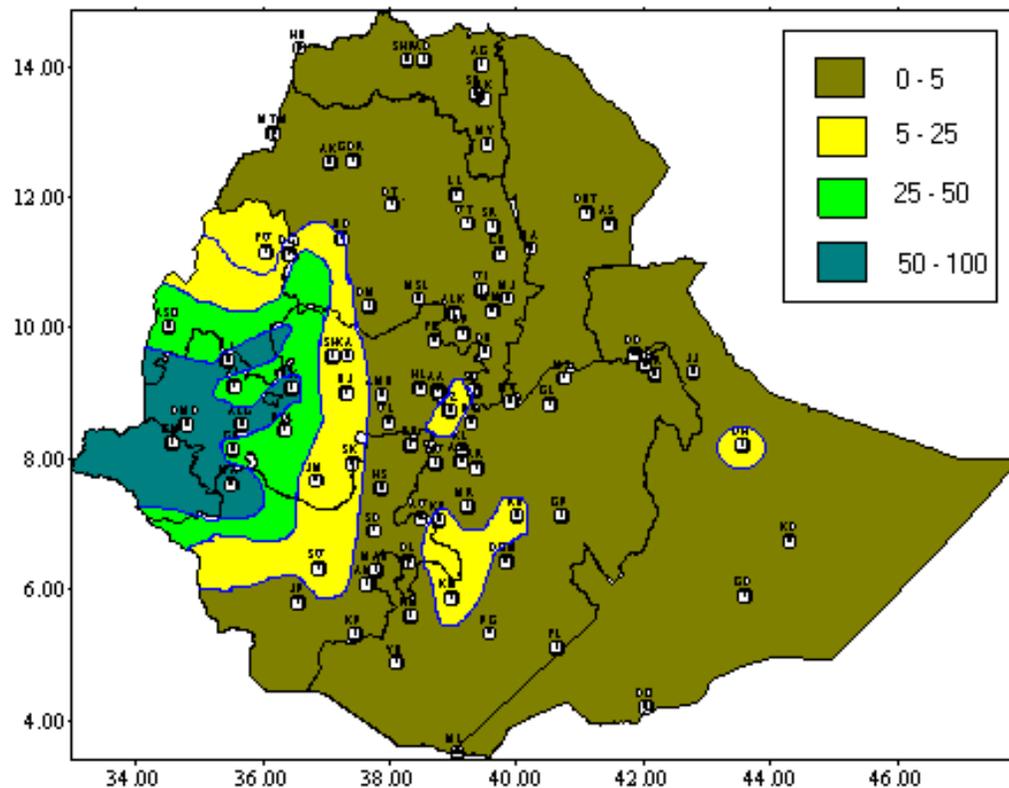
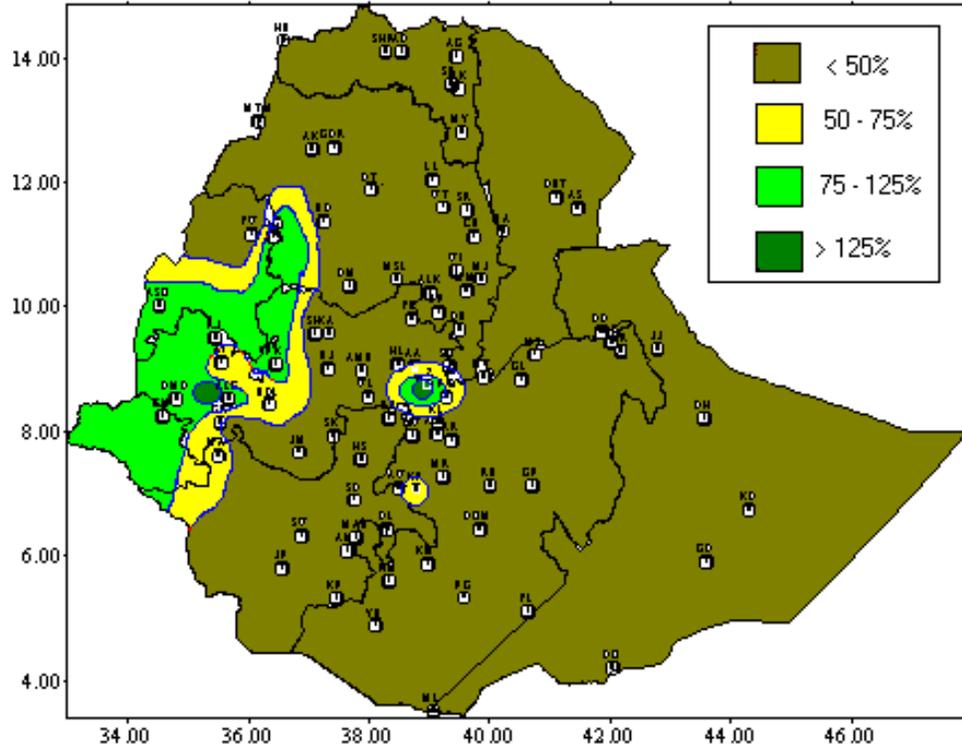


Fig 1. Rainfall distribution in mm (11-20, May 2004)

## 1.2 RAINFALL ANOMALY (Fig. 2)

With the exception of Gambela and some areas of western Oromiya, southern Benishangul-Gumuz and its adjoining areas of western Amhara as well as pocket areas of central Oromiya the rest parts of the country experienced below normal rainfall distribution.



**Fig.2 Percent of normal rainfall (11-20, May 2004)**

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

### **1.3 TEMPERATURE ANOMALY**

A rise in maximum air temperature had been observed over the low land of Afar, central and eastern Oromiya. Among the reporting stations Meiso, Gode, Dire Dawa, Metehara, Dubti, Assaita, Gewane, Elidar registered 36.4, 36.6, 38.1, 39, 43, 43, 41.9 and 44 °C extreme air temperature during the dekad, respectively. This situation can have negative impact on the well being of plants by accelerating the rate of evapo-transpiration over the aforementioned areas.

## **2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF MAY 2004**

In the coming ten days, western SNNPR, Gambela, western Oromiya, Benishangul-Gumuz and the adjoining areas of western Amhara will have normal to above normal rainfall. Though few places of Belg growing areas of SNNPR and the highlands of southern Oromiya are anticipated to get occasional rainfall within the forecast period, the amount of rainfall will be below normal. On the other hand, Afar, Tigray, much of Amhara, central and eastern Oromiya and Somali will be under dry weather conditions. In association with this, the daily maximum temperature is expected to continue with its strength.

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

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

The observed normal to above normal rainfall distribution over western Oromiya, Gambela and western SNNPR had positive impact on the recently sown long cycle crops. The observed heavy falls over some areas of western Oromiya as Alge resulted in crop damage. On the other hand, the dry weather condition that persisted during the previous dekad over Belg growing areas of southern and eastern Amhara and eastern Tigray would create moisture depletion on the existing crops growing on the field. A rise in the maximum temperature over some areas of the country could have negative effect by enhancing the rate of evapo-transpiration. However, the dry weather which persisted over some areas of Belg growing areas could favour crops that were ready for harvest. Pursuant to the crop phenological report, sowing of cereal crops like maize and sorghum was underway over eastern, central and western Oromiya. Whereas maize crop was at tasseling stages in some areas of highlands of southern Oromiya. Teff was at full ripening stage in some areas of southeastern Amhara. Alge reported slight hail damage due to hailstorm.

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

The anticipated normal to above normal rainfall distribution over western SNNPR, Gambela, western Oromiya, Benishangul-Gumuz and its adjoining areas of western Amhara would have significant contribution for recently sown long cycle crops over those areas. The expected dry weather situation over some Belg growing areas would create positive impact on harvest and post harvest activities. On the other hand, this dry weather condition over some Belg benefiting areas will result in moisture deficit on crops that do not attain maturity stage.