

# NATIONAL METEOROLOGICAL SERVICES AGENCY

## TEN DAY AGROMETEOROLOGICAL BULLETIN

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### SUMMARY

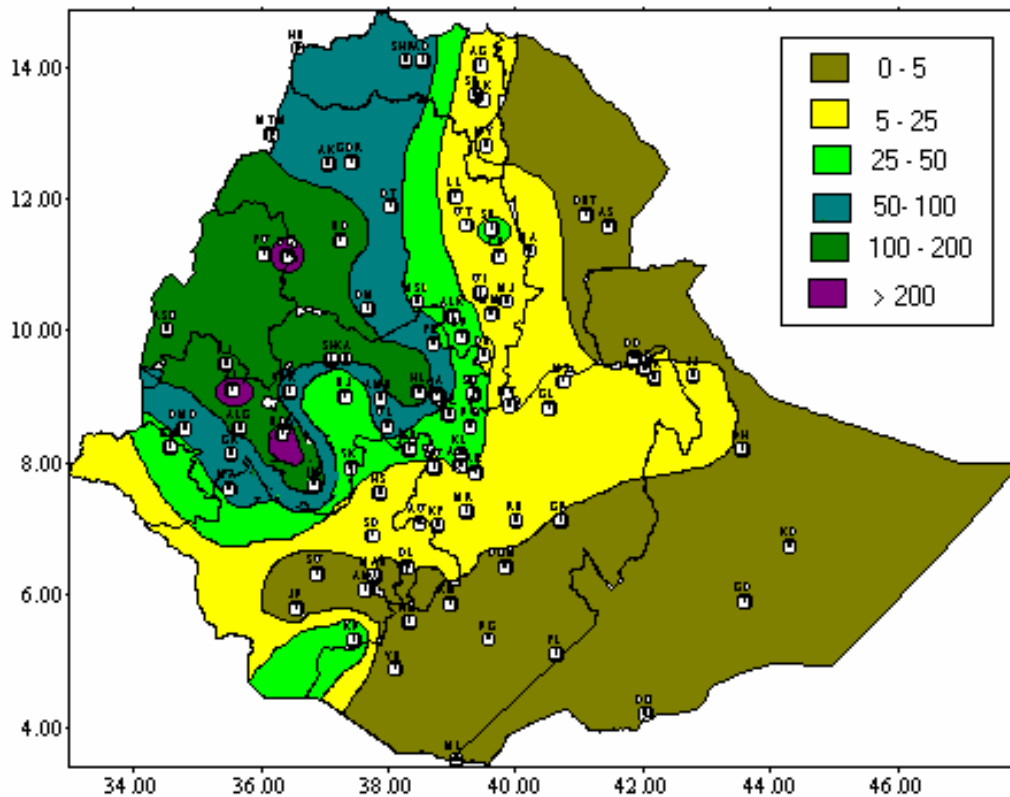
During the third dekad of June 2004 Tigray, Amhara, most parts of Benishangul Gumuz, western half of Afar, most parts of western and central Oromiya including southern Oromiya, northern and western Gambela, northeastern tip of SNNPR and few areas of northern Somali received normal to above normal rainfall. As a result, season's agricultural activities were in a good shape in the aforementioned areas. Nevertheless, some areas of central and southern highlands (Bui and Dolo Mena), eastern (Gelemso and Mieso), western (Assosa), northeastern (Kombolcha) and northern parts of southern highlands (Sodo) reported medium to bad general field condition due to water stress. On the other hand, some areas of northern (Adawa), western (Gore, Nekemte, Bedele, Gimbi, Limu Genet and Shanbu), northeastern highlands (Enewary, Debre Birhan), central (Arsi Robe, Nazerat, Kachisie) and northwestern (Pawe, Bullen) reported heavy falls ranging from 31 – 51 mm in one rainy day. Besides some areas like Nekemte, Bedele, Enewary, Kachisie, Limu Genet and Shambu exhibited heavy falls 2-4 times during the ten days period. As a result, some areas of eastern and western Oromiya reported crop damage due to heavy falls and hailstorm.

During the first dekad of July 2004 the observed normal to above normal rainfall over most parts of western Tigray, Amhara, Benishangul Gumuz, parts of western Oromiya, Gambela and northwestern SNNPR favoured season's agricultural activities while the reverse was true in some areas eastern Tigray, Amhara and eastern Oromiya including most parts of SNNPR. For instance, Kombolcha, Mieso and Dolomena reported slight wilting and partial drying on sorghum and maize fields due to water stress. On the contrary, some areas of western Amhara, western and central Oromiya including central Tigray and northern Benishangul Gumuz received heavy falls ranging from 30 – 74 mm. Some areas like Bedele, Gimbi, Aira, Dangla, Nedjo and Chagni exhibited falls greater than 30 mm for two to five days with in the ten days period. As a result, some areas of the aforementioned areas reported crop damage due to heavy falls. With regard to air temperature there was no significant minimum or maximum temperature anomalies during the dekad under review. Pursuant to the crop phenological report sowing of cereals like millet, sorghum and teff including pulses was under way in some areas of western Amhara, eastern and central Oromiya. The recently sown cereals like wheat and millet were at emergence stage in some areas of central and western Oromiya. Maize was at teaseling and ninth leaf stages in most parts of maize growing areas while at wax ripeness stage in some areas of southern highlands of Oromiya. Nug was at emergence and elongation stages in central Oromiya. Asosa and Bui reported medium crop (Sorghum) field condition due to slight disease and weed infestation.

## 1. WEATHER ASSESSMENT

### 1.1 RAINFALL AMOUNT (Fig. 1)

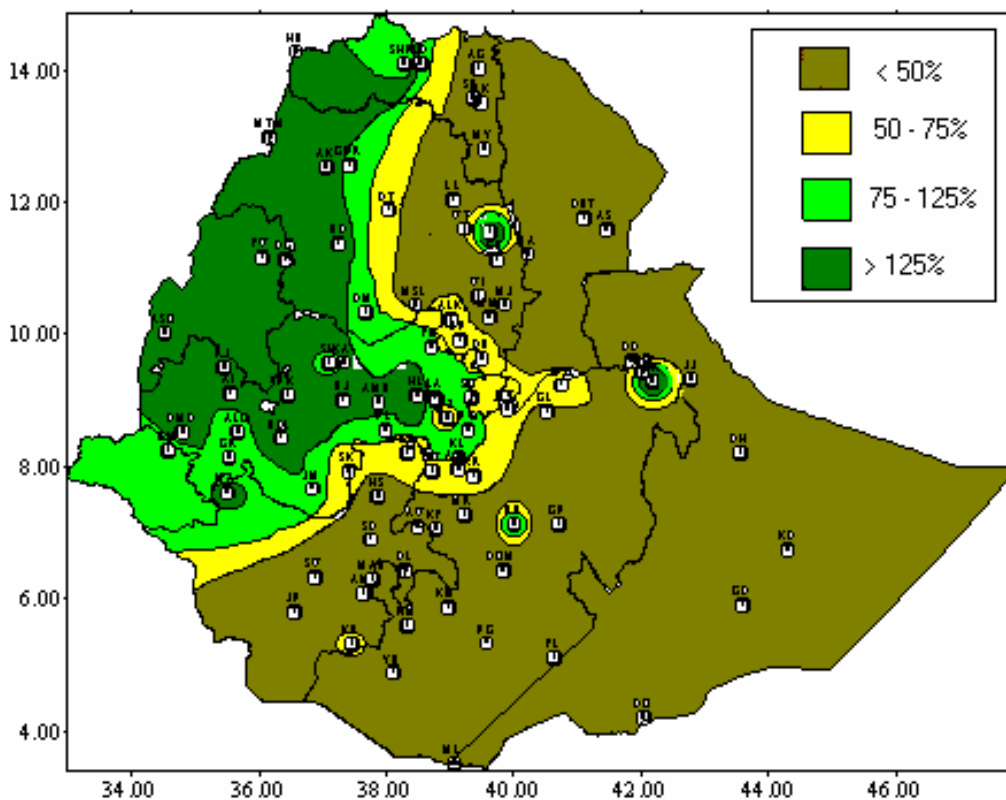
Benishangul Gumuz and parts of western Amhara including parts of western and central Oromiya received falls greater than 100 mm; western half of Tigray, parts of western half of Amhara, few areas of central and parts of western Oromiya experienced falls ranging from 50 – 100 mm; eastern Tigray, Amhara and eastern Oromiya, parts of SNNPR and northeastern margin of Gambela received 25 – 50 mm of rainfall. There was little or no rainfall for the rest parts of the country.



**Fig 1. Rainfall distribution in mm (1-10, July 2004)**

### 1.2 RAINFALL ANOMALY (Fig. 2)

Normal to above normal rainfall has been observed over most parts of western Tigray, Amhara, Benishangul Gumuz, and parts of western Oromiya, Gambela and northwestern SNNPR while the reverse was true over eastern Tigray, Amhara and eastern Oromiya including most parts of SNNPR.



**Fig.2 Percent of normal rainfall (1-10, July 2004)**

Explanatory notes for the legend:

- <50 -- Much below normal
- 50—75% -- below normal
- 75—125% --- Normal
- > 125% ---- Above normal

### 1.3 TEMPERATURE ANOMALY

There was no significant minimum or maximum temperature anomalies during the dekad under review.

## 2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF JULY 2004

In the coming ten days Gambela, western Oromiya, Benishengul-Gumuz, central Ethiopia, western SNNPR will have normal to above normal rainfall. Furthermore, heavy falls that leads to flash flood is highly likely to occur over few places of the aforementioned areas. Besides, southern Afar, northern Somali and eastern Oromiya are anticipated to get rainfall amount close to normal. Eastern Amhara and Tigray, Afar, northern half of Somali, eastern and northern SNNPR the highlands of Bale will get normal rainfall amount over much of the areas, however, pocket areas of the above mentioned places are expected to get below normal rainfall. On the other hand, the southern and southeastern lowlands will be partly cloudy condition.

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

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

The observed normal to above normal rainfall over most parts of western Tigray, Amhara, Benishangul Gumuz, parts of western Oromiya, Gambela and northwestern margin of SNNPR favored season's agricultural activities. Nevertheless, some areas of Kiremt benefiting areas of eastern Amhara like Kombolcha, eastern Oromiya like Mieso and Gelemso, southern high grounds of Oromiya like Dolo Mena and some areas of SNNPR like Sodo reported bad crop field condition due to water stress. On the contrary, the observed heavy falls ranging from 30 – 74 mm over some areas of western Amhara, western and central Oromiya including central Tigray and northern Benishangul Gumuz resulted in crop damage in some pocket areas. With regard to air temperature there was no significant minimum or maximum temperature anomalies during the dekad under review. Pursuant to the crop phenological report sowing cereals like millet, sorghum and teff including pulses was under way in some areas of western Amhara, eastern and central Oromiya. The recently sown cereals like wheat and millet were at emergence stage in some areas of central and western Oromiya. Maize was at teaseling and ninth leaf stages in most parts of maize growing areas while at wax ripeness stage in some areas of southern highlands of Oromiya. Nug was at emergence and elongation stages in central Oromiya. Asosa and Bui reported medium crop (Sorghum) field condition due to slight disease and weed infestation.

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

The anticipated normal rainfall over eastern Amhara, Tigray, and northern and eastern SNNPR would favor land preparation and sowing activities of teff, wheat and barley. Besides, it would also fulfill the water requirement of the growing crops, which are at different phenological stages at this time of a year. Nevertheless, attention should be given for water harvesting techniques in order to mitigate the effect of deficient falls, which is expected over some areas of the aforementioned areas. The expected above normal rainfall over Benishangul Gumuz, western Amhara and Tigray, western Oromiya, central Ethiopia, western SNNPR and Gambela would favor season' agricultural activities. The expected normal rainfall over southern Afar, northern Somali and eastern Oromiya would favour the availability of pasture and drinking water over pastoral areas. It would also favour agricultural activities over agro pastoral areas. The anticipated heavy falls in areas where above normal rainfall is expected would result in crop damage. Thus attention should be given for crop fields which are found in low lying areas and near river banks in order to minimize the effect of excess water. Attention is required in areas where erratic rainfall distribution is prominent since the situation is favorable to the occurrence of pest and diseases in order to control the damage ahead of time.