

# NATIONAL METEOROLOGICAL SERVICES AGENCY

## TEN DAY AGROMETEOROLOGICAL BULLETIN

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

**11-20 September, 2006 Vol. 16 No.26**

**Date of issue September 22, 2006**

### SUMMARY

During the first dekad of September, 2006 the observed seasonal rainfall distribution decreased from most parts of the country to some extent. However, in some areas of northeastern (Combolcha, Bati, Majete) central (Debre Zeit, Nazreth, Ginchi), western (Alge, Gore, Aira, Arjo, Bedele, Gimbi and Nedjo) northwestern (Gonder, Debre Tabor, Metema), northern (Shire) and eastern (Harar) parts of the country exhibited heavy fall ranging from 30-76 mm in one rainy day. Besides, from the aforementioned areas, Arjo, Bedelle, DebreTabor and Metema records heavy rainfall for 2- 3 days in the ten days period. This condition would have a negative impact for normal growth and development of plants. Nevertheless, in accordance with the crop phenological report, with the exception of few areas like Nedjo (reported slight crop damage due to heavy fall) and Wegel Tena (reported water logging) the condition of crop were in good shape in most parts of the country. Generally, the observed rainfall distribution, (most parts of crop growing areas received falls in 5-10 rainy days during the ten days period) over meher growing areas favored season's agricultural activities and have significant contribution for other vegetation as well. Among the reporting stations, Alge, Bati, Alemya, Metema, Shire, Majete, Gore, Nekente, Gonder, A.AObs, Nejo, Chagni, and Arjo recorded heavy fall 76.0, 72.5, 70.2, 65.4, 58.4, 54.0, 51.7, 48.6, 47.4, 43.5, 43.0, 41.7, and 41.3 mm in one rainy days respectively.

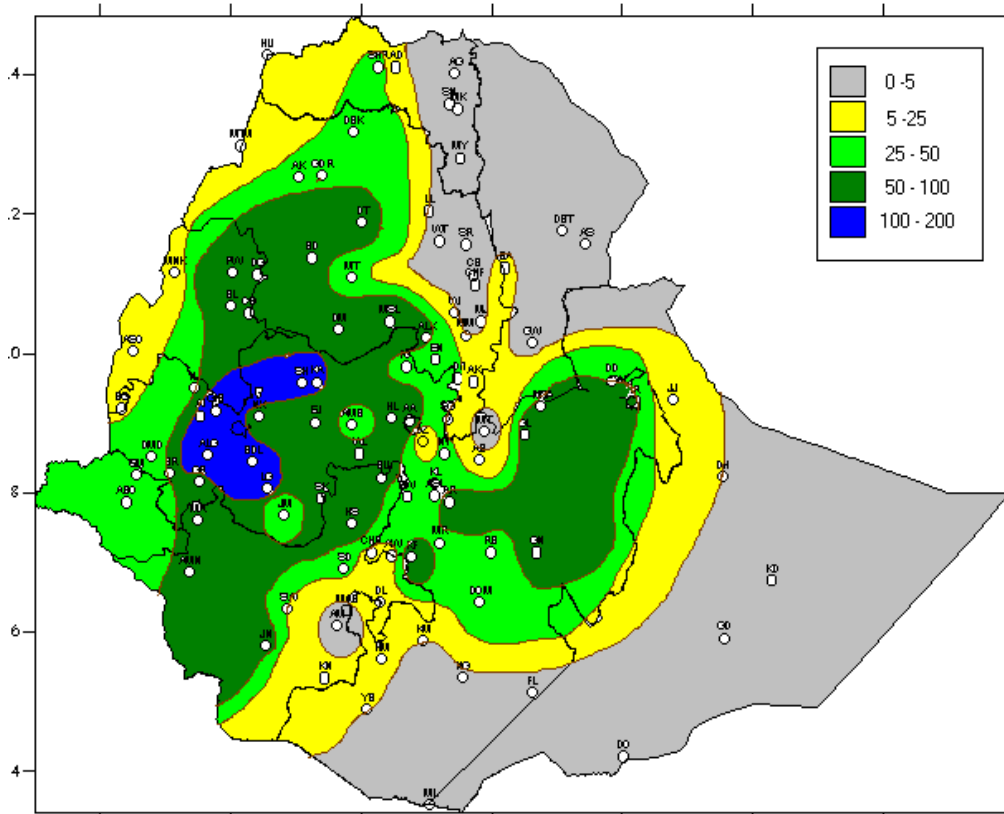
During the second dekad of September 2006 comparing with the preceding dekad, the observed heavy rainfall activity decreased from most parts of the country, particularly from north and northeastern, and some areas of central, and thus also a decrease in crop damage. On the other hand, the exhibited heavy fall over some areas of southwestern and western parts of the country would have a negative impact on normal growth and development of plants. In accordance with phenological report Bedele reported slight damage on crops due to heavy fall (40mm) in one rainy day. According to the reporting stations, heavy fall has been observed in some areas of western and northwestern parts of the country ranging from (31-80mm) of rainfall in one rainy day. To mention them, Alge, Debre Tabor, and Limu Genet, Bullen - Bedelle, Arjo, Shambu, and Aira recorded heavy fall 80.0, 60.0, 51.7, 40.0, 40.0, 38.3, 37.0 and 31.0 mm in one rainy day respectively.

## **1.WEATHER ASSESSMENT**

### **1.1 SEPTEMBER 11-20, 2006**

#### **1.1.1 RAINFALL AMOUNT (FIG1)**

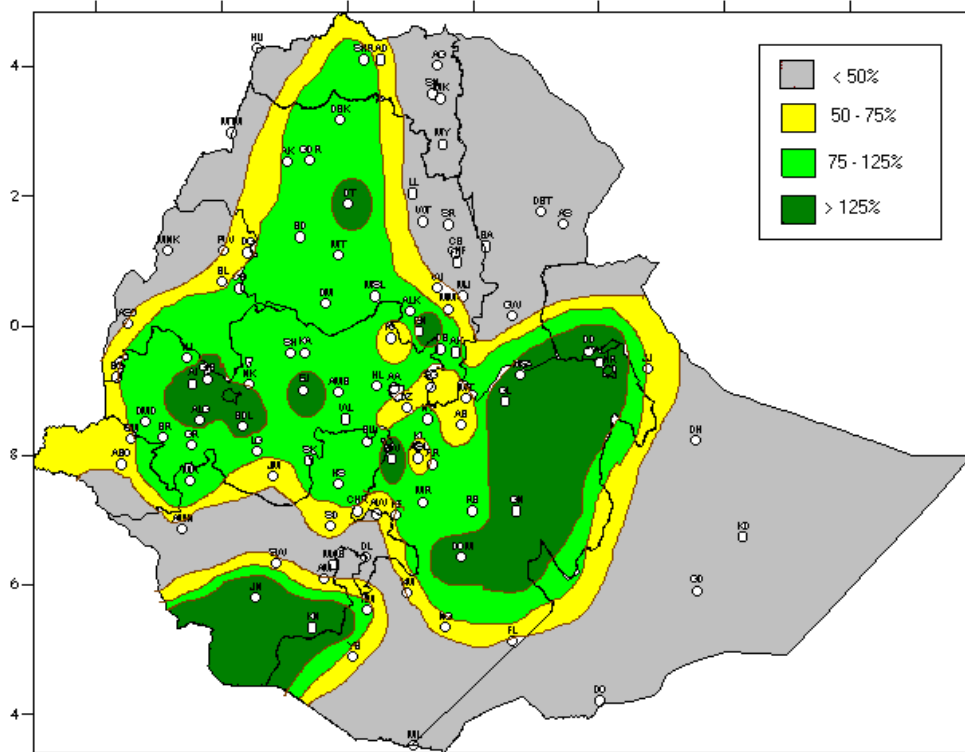
Some areas of western Oromia received 100-200mm of rainfall. Gambela, parts of central Tigray, northern, northwestern and southern Amhara, parts of western half of Benshangul-Gumuz pocket areas, parts of central, south and southwestern and western Tip of Oromia and northern and south eastern SNNPR exhibited 25-50 mm of rainfall. Some areas of western and parts of central Tigray, parts of western, northern, southern and south eastern Amhara, parts of north and south western Tip of Benshangul - Gumuz, parts of north and northwestern Somali, southern Oromia and eastern half of SNNPR received 5-25mm of rainfall. There was little or no rainfall for the rest parts of the country.



**Fig 1. Rainfall distribution in mm (11 – 20 September, 2006)**

**1.1.2 RAINFALL ANOMALY (Fig. 2)**

Parts of central Tigray, central and western Amhara, most parts of western, eastern and southern Oromia, south eastern SNNPR, parts of southern half of Benshangul-Gumuz, eastern Gambela, and northern Somali exhibited normal to above normal rainfall. Below to much below normal rainfall has been observed over the rest parts of the country.



**Fig.2 Percent of normal rainfall (11- 20 September, 2006)**

Explanatory notes for the legend:

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

### 1.1 TEMPERATURE ANOMALY

Some areas of eastern and northeastern parts of the country like Dubti, Semera, Assayta and Methara exhibited extreme maximum temperature above 35 °C as high as 42.3, 42.0, 41.5 and 36.0 °C respectively.

## 2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF SEPTEMBER 2006

In the upcoming ten days the seasonal rain-bearing systems are expected to weaken over northern half of the nation, which it will have, strengthens across the southern half of the country. In general, western Tigray and Amhara, Benshngul-Gumz, Gambela, much of Oromia as well as SNNPR regions are likely to get normal rainfall. Central and eastern Tigray and Amhara and Afar are anticipated to receive below normal rainfall. On the other hand, central and southern half of Somali gradually will receive seasonal rain; it will be close to normal rainfall over some places.

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

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

Comparing with the preceding dekad, heavy rainfall activity the observed seasonal rainfall distribution decreased from most parts of the country, particularly from north and northeastern, and some areas of central, and thus also a decrease in crop damage. On the other hand, the exhibited heavy fall over some areas of southwestern and western parts of the country would have a negative impact on normal growth and development of plants. In accordance with phenological report Bedele reported slight damage on crops due to heavy fall (40mm) in one rainy day. According to the reporting stations, heavy fall has been observed in some areas of western and northwestern parts of the country ranging from (31-80mm) of rainfall in one rainy day. Pursuant to crop phenological report, teff was at third leaf stage in some areas of northern Oromia (Fitcha) and southern Amhara (Mota) while it was at tassling and shooting stage in some areas of eastern Amhara (Combolcha), western Oromia (Gimbi), eastern Amhara (Majete) and central Oromia (Arsi Robe), western Benshangul-Gumuz (Assosa), western Oromia (Limu Genet, Sekoru), eastern Amhara (Sirinka, Bati and Cheffa), southern Amhara (Enwary, Alem Ketema), eastern Oromia (Gelemso), northern SNNPR (Bui), eastern Bensahngul-Gumuz(Dangla) respectively. Moreover, it was at floweing and ripeness stage in some areas of central Oromia (Ziway), western oromia (Chira) and southern Amhara (Debre Brhan). Sorghum was at shooting and tassling stage in some areas of eastern Amhara (Combolcha, Bati), southern Amhara (DebreBrhan) and western Oromia (Aira, Nedjo) and eastern Amhara (Cheffa) respectively. Maize was at ninth leaf stage in some areas of eastern Benshagul-Gumuz (Dangla) whereas it was at tassling and flowering stage in some areas of eastern Amhara (Sirinka, Bati, Cheffa, Comblcha), western Oromia (Alge). Moreover, it was at waxy and full ripeness stage in some areas of western Oromia (Aria, Nedjo, Gimbi, Sekoru, Bedele), eastern Oromia (Gelemso). Sowing of wheat was underway and it was at shooting stage in some areas of central Oromia (Arsi Robe, Kulumsa) while it was at third leaf stage in some areas of western Oromia (Gimbi). Besides, it was at tillering and earing stage in some areas of southern Amhara (Enwary), northern SNNPR (Hosaina, Bui), northern Oromia (Fitcha), and central Oromia (Ziway). Millet was at shooting and tillering stage in some areas of western Oromia (Aira), eastern Bensahgul-Gumuz (Bullen) while it was at tassling and flowering stage in some areas of western Oromia (Nedjo, Limu Genet). Harvesting of bean was underway in some areas of eastern Amhara (Wegel Tena) while it was at budding and flowering stage in some areas of central Oromia (Kulumsa), northern Oromia (Fitcha), western Oromia (Shambu, Chira), southern Amhara (Enwary, AlemKetema). Peas were at budding and flowering stage in some areas of western Oromia (Shambu) and northern SNNPR (Bui) respectively. Flax was at yellow green ripeness stage in some areas of southern Amhara (Debre Brhan). Moreover, crop phenological report indicates that slight hail damage on crops and slight water logging on crop fields in Nedjo, Bedelle, Amba Mariam, WegelTena, Alge, and Hosanna.

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

The anticipated near normal rainfall over western Tigray and Amhara, Benshangul-Gumuz, much of Oromia and SNNPR, will have a positive contribution for the crops at different phenological stages interms of water requirement. Besides, according to phenological report the above expected near normal rainfall will have a positive impact for crops like teff and wheat, for long cycle crops (maize and Sorghum), and perennial crops (tree, fruits), interms of moisture condition. Moreover, the expected near normal seasonal rainfall over central and southern half of Somali would have a significant contribution for pasture and drinking water. Thus proper attention should be given for water harvesting technique particularly over the lowlands of the above-mentioned areas so as to maximize the favorable condition.