

# NATIONAL METEOROLOGICAL AGENCY

## TEN DAY AGROMETEOROLOGICAL BULLETIN

P.B.OX 1090 ADDIS ABABA TEL 00251-11-6615779 FAX 00251-11-6625292 E-mail nmsa@ethionet.et

1- 10 April, 2006 Volume 16 No.10

Date of issue April 12, 2006

### SUMMARY

During the third dekad of March 2006 the observed normal to above normal rainfall over most parts of Belg benefiting areas of the country could have positive impact particularly for those areas which start their land preparation and sowing activities during this time like central (Adama, Meraro, Ziway, Bui and Weliso). Eastern (Meiso, Gelemso, Jijiga, and Alemya) and northeastern (AlemKetema, Majete, Cheffa and Bati) parts of the country. However, some areas like LimuGenet, Mehal Meda, Alem Ketema, Bedelle, Sirinmka, Hosaina, Jima Bati, WegelTena, Sekoru, Arjo, Konso, Addis Ababa Bole, Enewari, Cheffa and Bui received heavy rainfall ranging from 30.4 – 72.7 mm in one rainy day. Thus, this condition could have a negative impact on crop field that are found low-lying areas. Pursuant to the crop phenological report, teff was at emerging stage in some areas of northeastern (Majete, and Sirinka).

During the first dekad of April 2006 the observed rainfall amount and distribution over most parts of Belg benefiting areas of the country could have significant positive contribution for the ongoing agricultural activities. Nevertheless, in some areas like northern (Mekelle, Michew), Northeastern (Bati, Majete, Sirinka), Central (Arsi, Robe, Bui, Kulumsa, Ziway), southern (Awassa, Dolomena, Moyale, Sodo, Bale Robe,) and eastern (Alemaya, Harar, Meiso) parts of the country exhibited heavy rainfall ranging from 30 -75 mm in one rainy day. From the aforementioned areas, Bati, Harari, Meiso and Moyale records heavy rainfall for 2 - 3, days in the ten days period. This condition indicates that the erratic nature of rainfall distribution observed in some areas. Besides, some areas like Ziway and Ginir reported some damages due to heavy fall. On the other hand the observed below normal rainfall over south and southeastern Somali could have negative impact for the availability of pasture and drinking water in the areas. Moreover, the deficient moisture condition over Gambela and western Oromia could exacerbate the deficient condition persisted during the preceding dekads, thereby negatively affecting the water requirement of the existing crops and other vegetation like perennial plants, grasses and bushes. Pursuant to the crop phenological report, sowing of wheat was underway in some areas of southern midlands of Oromiya like Kibre Mengist. With regard to air temperature, Assayta, Dubti, Mankush, Metema, Pawe and Semera experienced extreme maximum temperature ranging from 35.0 – 40.5 °C during the dekde under review.

# 1. WEATHER ASSESSMENT

## 1.1 April 1- 10, 2006

### 1.1.1 RAINFALL AMOUNT (Fig. 1)

Pocket areas of midlands of southern Oromia received greater than 200-300mm of rainfall. Eastern margin of Amhara, western margin of Afar, some areas of north, eastern, most part of south eastern and central Oromia, some part of northern and south western Somali received 100-200mm of rainfall. Some areas of south and few areas eastern Tigray, eastern margin of Amhara, most parts western half of Afar including most parts of eastern, few areas of central and parts southern Oromia, most parts of SNNPR and parts of central and south western Somali experienced 50-100mm of rainfall. Few areas of eastern Tigray, few areas of eastern and southeastern Amhara, some areas of central Oromia, some areas of SNNPR and some areas of Somali received 25-50mm of rainfall. Most part of eastern Amhara, eastern Tigray, some areas of eastern Afar, some areas of western Oromia, some areas of western SNNPR and few areas of southern Somali received 5-25mm of rainfall. There was little or no rainfall for the rest parts of the country.

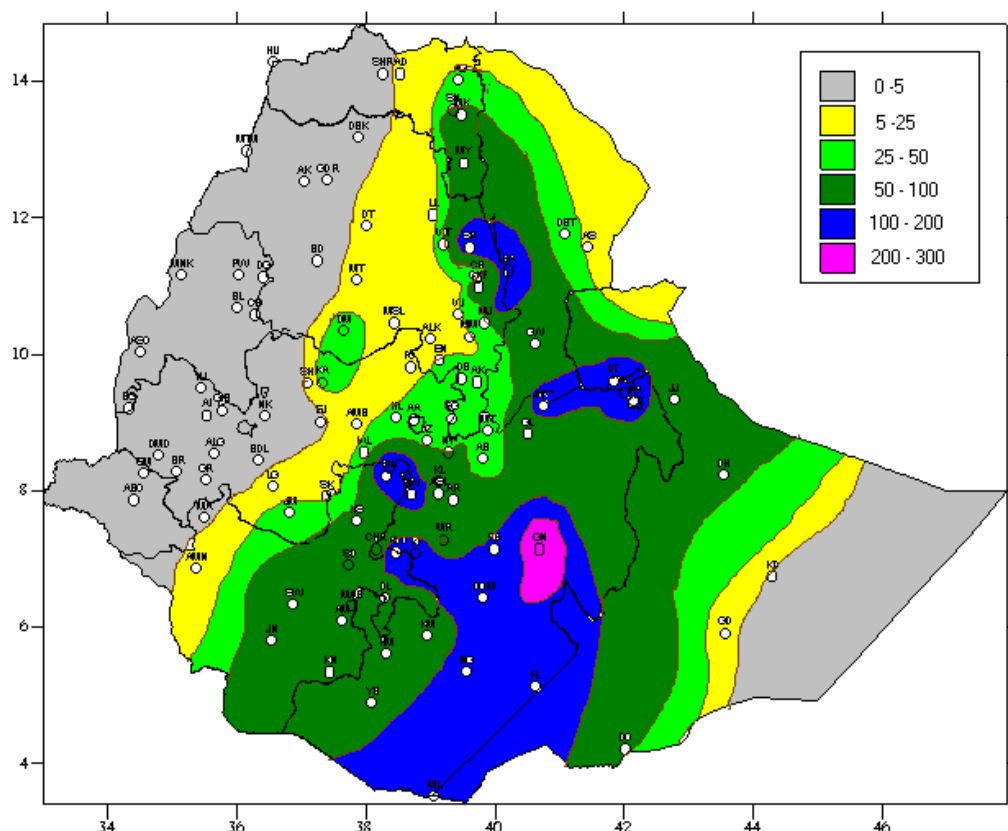
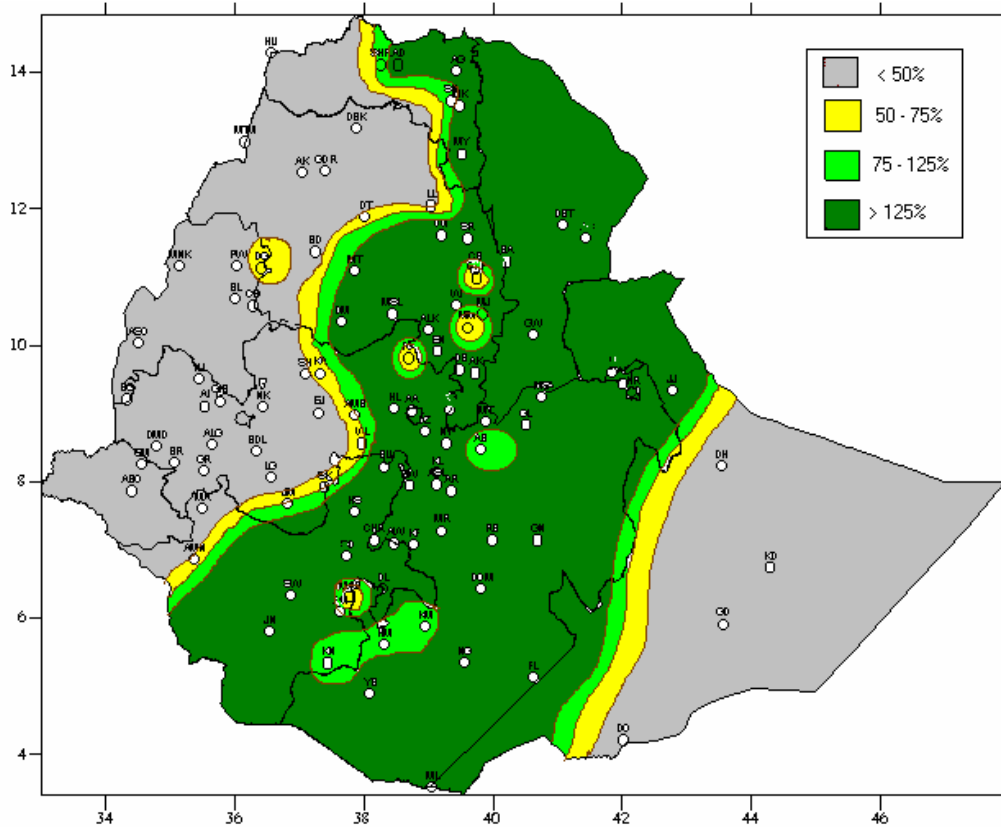


Fig 1. Rainfall distribution in mm (1 – 10 April, 2006)

### 1.1.2 RAINFALL ANOMALY (Fig. 2)

Most parts of Oromia, SNNPR, southeastern, parts of eastern and central Amhara, Afar, South, parts of central and eastern Tigray, northern and south western margin of Somali exhibited normal to above normal rainfall while the rest parts of the country experienced below normal rainfall.



**Fig.2 Percent of normal rainfall distribution (1 – 10 April, 2006)**

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

### 1.2 TEMPERATURE ANOMALY

Assayta, Dubti, Mankush, Metema, Pawe and Semera exhibited extreme maximum temperature ranging from 35.0 – 40.5 °C.

## 2. WEATHER OUTLOOK FOR THE SECON DEKAD OF APRIL 2006

For the coming ten days, the Belg rain-producing systems are expected to be come a day-to-day weakening over the major Belg rain benefiting areas. Generally, central and southern Oromia, SNNPR regions, western oromiya, Benishangul- Gummuz. Gambella and western Amhara are likely to get normal rainfall; some places will get above normal rainfall. Easter Tigray and Amharas as well as adjoining rift valley areas are anticipated to receive close to normal rainfall. On the other hand, Easter Oromia, Dire Dawa, Hararri, much of Oromia and southern Oromia escarpment as well as Afar are likely to have a probability of getting below normal rainfall.

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

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

The observed rainfall amount and distribution over most parts of Belg benefiting areas of the country could have significant positive contribution for the ongoing agricultural activities. Nevertheless, in some areas like northern (Mekelle, Michew), Northeastern (Bati, Majete, Sirinka), Central (Arsi, Robe, Bui, Kulumsa, Ziway), southern (Awassa, Dolo Mena, Moyale, Sodo, Bale Robe,) and eastern (Alemaya, Harar, Meiso) parts of the country exhibited heavy rainfall ranging from 30 -75 mm in one rainy day. From the aforementioned areas, Bati, Harari, Meiso and Moyale records heavy rainfall for 2 - 3, days in the ten days period. This condition indicates that the erratic nature of rainfall distribution observed in some areas. Besides, some areas like Ziway and Ginir reported some damages due to heavy fall. On the other hand the observed below normal rainfall over south and southeastern Somali could have negative impact for the availability of pasture and drinking water in the areas. Moreover, the deficient moisture condition over Gambela and western Oromia could exacerbate the deficient condition persisted during the preceding dekads, thereby negatively affecting the water requirement of the existing crops and other vegetation like perennial plants, grasses and bushes. Pursuant to the crop phenological report, sowing of wheat was underway in some areas of southern midlands of Oromia like Kibre Mengist. Teff was at third leaf stage in some areas of northeastern (Majete and Sirinka). Maize and teff were at ninth leaf and emerging stage, respectively in some areas of southern Oromia. With regard to air temperature, Assayta, Dubti, Mankush, Metema, Pawe and Semera experienced extreme maximum temperature ranging from 35.0 – 40.5 °C during the dekade under review.

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

The anticipated normal to above normal rain fall over central, western and south Oromia, SNNPR, Benshangul- Gumuz, Gambela and western Amhara would create conducive condition for season's agricultural activities. However, in relation to the expected above normal rainfall, there would be heavy falls in some areas, therefore proper attention should be given for croplands, which are found in low-lying areas and near riverbanks in order to avoid crop damage due to flooding and water logging. On the other hand, even though near normal rain is expected over eastern Tigray and Amhara including adjoining areas of the Rift Valley, there will be a possibility of below normal rainfall in some areas. Therefore appropriate water harvesting techniques should be designed in order to minimize the risk due to the expected below normal rainfall in some parts of the aforementioned areas. The expected below normal rainfall over south eastern Oromia, most parts of southern Somali, eastern Oromia, Dire Dawa, Harari most part of Somali, adjoining areas of south Oromia and Afar would exacerbate the deficient moisture condition persisted particularly over south eastern margin of southern Oromia, most parts of southern Somali. Thus, appropriate strategy should be designed to undertake alterative measures in terms of water harvesting techniques.