NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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SUMMARY

During the first dekad of July 2006, the observed normal to above normal rainfall over most part of Oromia, Benshangul-Gumuze, Amhara, eastern and South Tigray including western margin of Tigray, most part of SNNPR, northern and southern margins of Afar could have significant contribution for the on going agricultural activities. Thus, as the crop phenological report indicates that the condition of crops was in a good shape over most part of the Meher growing areas. Nevertheless, some areas of central and western parts of Ethiopia exhibited heavy falls ranging from 31.5-81.6 mm in one rainy day. Besides, Debre Birhan, Gimbi, Shambu and Nekemt recorded heavy falls greater than 30mm for 2 - 4 days out of the ten days period. However no crop damage has been observed due to heavy fall from the reporting stations. On the other hand the observed deficient moisture condition over central Tigray, Gambela, southern parts of SNNPR, eastern half of Oromia and most part of northern Somali could have negative impact particularly over northern Somali and eastern half of Oromia in areas where there was deficient moisture condition during the preceding dekads.

During the second dekad of July 2006. the observed normal to above normal rainfall over most parts of Tigray, Amhara,, central and western Oromia, southern half of Bensahgul-Gumuz, Gambella, southern half of SNNPR, could have significant contribution for normal growth and development of plants. Sowing activities of cereal crops (wheat, Barely) was observed over some areas of northeastern highlands (WegelTena, Sirinka, Majete) and pulse crops (beans, haricot bean) were underway over some areas of northeastern lowlands. However, heavy fall (31.8 – 60.8 mm in one rainy days) was observed over some areas of northeastern(combolcha, DebreBrhan, Bati, Enwari) some areas of western (Arjo, Bedelle, Gambella, Gimbi, Limugenet) some areas of northwestern (Chagni, D/tabor, Mankush) as well as some areas of central (DberZeit, Addids Ababa). As a result, Bedelle reported perennial crop like Coffe, and cereal crops like Maize and sorghum damage due to heavy fall together with hailstorm to some extent. Moreover, the aforementioned heavy rainfall damage maize crop in some areas of Gambela. With regard to extreme maximum temperature, DireDawa, Methera, Semera, Assayta and Dubti recorded extreme maximum temperature as high as 36.2, 36.5, 42.2, 42.5 and 43.5 ^{O}C respectively.

1. WEATHER ASSESSMENT

1.1 July 11 – 20, 2006

1.1.1 RAINFALL AMOUNT (Fig.1)

Few areas of north western Tigrai, some areas of central, western and most parts of southern Amhara, pocket areas of western Oromia experienced 100-200mm of rainfall. Gambella, Benshangul-Gumuz, some areas of eastern, southern and southwestern tip of Tigrai, most parts of northwestern, parts of southern and southwestern Amhara, parts of western and southwestern Afar, most parts of western Oromia, parts of central Oromia, north western and southwestern SNNPR received 50-100mm of rainfall. Parts of northwestern, western and southwestern Afar, parts of eastern Oromia and eastern and southeastern SNNPR and pocket areas of central Benshangul-Gumuz and western Oromia received 25-50mm of rainfall. Eastern half of Afar, parts of northern Somali, eastern Oromia, and eastern half of SNNPR exhibited 5-25mm of rainfall. There was little or no rainfall for the rest parts of the country.

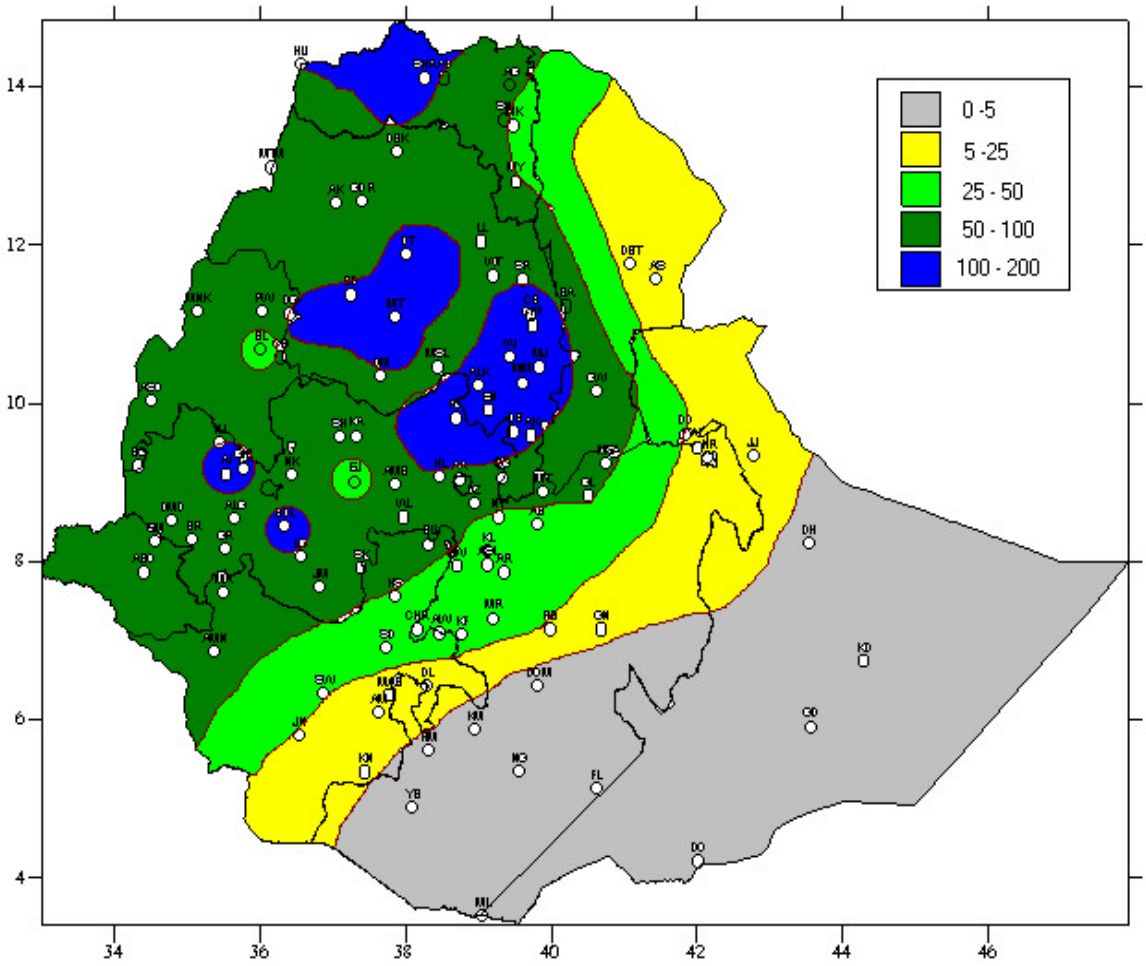

Fig 1. Rainfall distribution in mm (11 – 20 July, 2006)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Tigray, Afar, Gambela, most parts of Amhara, central, eastern and western Oromia, parts of southwestern tip of Benshagul-Gumuz and western tip of SNNPR experienced normal to above normal rainfall. The rest part of the country exhibited below to much below normal rainfall. Normally, Kiremt is not a rainy season for southern Oromia and southern and south eastern Somli.

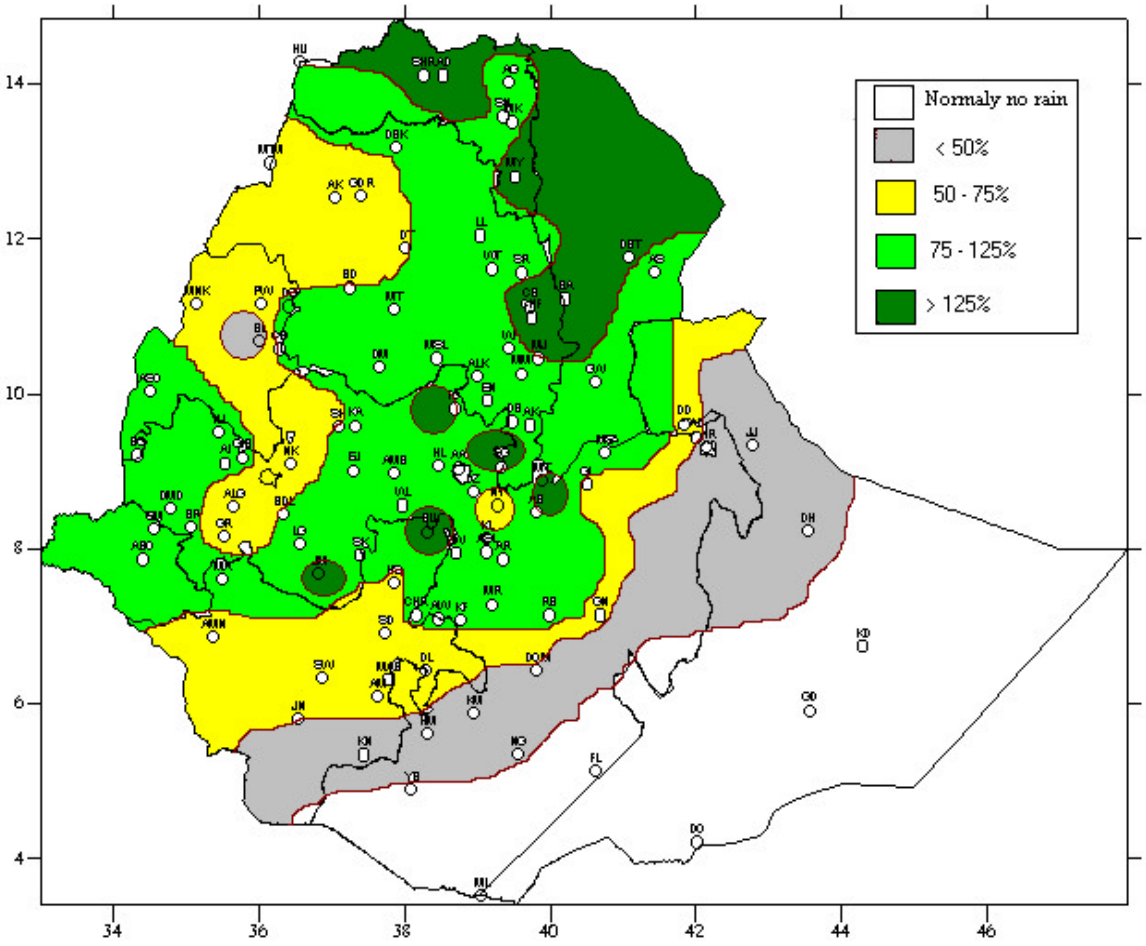

Fig.2 Percent of normal rainfall (11 – 20 July, 2006)

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

1.1 TEMPERATURE ANOMALY

DireDawa, Methera, Semera, Assayta and Dubti recorded extreme maximum temperature as high as 36.2, 36.5, 42.2, 42.5 and 43.5 ^{O}C respectively.

2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF JULY 2006

In the coming ten days, the forecasted and analyzed meteorological information indicated that the Kiremt rain-bearing systems will going to in a good condition over western half of the nation. In general, western Tigray, much of Amhara, western and central Oromia, Benshngul-Gumuz, Gambela as well as northern SNNPR region will receive normal to above normal rainfall. Besides, Afar, northern half of Somali, Dire Dawa, Harari and eastern Oromia are likely to get close to normal rainfall. However, in some places it will have a chance of below normal rainfall. On the otherhand, southern margin of Oromia and southern half of Somali will be under dry weather 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 Tigray, Amhara,, central and western Oromia, southern half of Bensahgul-Gumuz, Gambela, southern half of SNNPR, could have significant contribution for normal growth and development of plants. Sowing activities of cereal crops (wheat, Barely) were observed over some areas of northeastern highlands (WegelTena, Sirinka, Majete) and pulse crops (beans, haricot bean) were underway over some areas of northeastern lowlands. However, heavy fall (31.8 – 60.8 mm in one rainy days) was observed over some areas of northeastern(Combolcha, DebreBrhan, Bati, Enwari) some areas of western (Arjo, Bedelle, Gambela, Gimbi, LimuGenet) some areas of northwestern (Chagni, Debre Tabor, Mankush) as well as some areas of central (Dbre Zeit, Addis Ababa). As a result, Bedelle reported perennial crop like Coffee, and cereal crops like Maize and sorghum damage due to heavy fall together with hail storm to some extent. Moreover, the aforementioned heavy rainfall damaged maize crop in some areas of Gambela. Pursuant to crop phenological report, sowing of maize, Nug and sorghum was underway in some areas of eastern Amhara (Sirinka), southern Amhara (Majite) and western Oromia (Sahmbu) eastern Benshangul-Gumuz (Bullen) and western Oromia (Gimibi) respectively. Maize was at emergence stage in some areas of eastern Benshangul-Gumuz (Dangla) while at ninth leaf and tassling stage in some areas of central Oromia (Ziway), eastern Amhara (Bati) western Oromia(Alge, Ayra, Sekoru, and Gimibi). Moreover, it was at flowering, waxy ripeness and full ripeness stage in some areas of western Oromia (Bedelle), southern Oromia (KibreMengist), eastern Oromia (Gelemso), western Benshgul-Gumuz (Mankush) and western Oromia (Chira). Wheat and teff was at emergence stage in some areas of central Oromia (Ziway), southern Amhara (Shola Gebeya), northern Oromia (Fitche), central Oromia (Kulumsa); western Oromia (Chira), eastern Benshagul-Gumuz (Dangla) and southern Amhara (Alem Ketema) respectively.Sorghum was at tillering and tassling stage in some areas of western Oromia (Ayra), eastern Amhara (Batii) and western Benshangul-Gumuz (Mankush). Millet at emerging and third leaf stage in some areas of western Oromia (Ayra), eastern Benshagul-Gumz (Bullen, Chagni) and western Oromia (LimuGenet). Barely was at emerging and nug was at enlongation stage in some areas of northern Oromia (SholaGebeya) and southern Amhara (AlemKetema) respectively. Bean was at emergence and budding stage in some areas of northern Oromia (Shola Gebeya), central Oromia (Kulumsa) and northern Oromia (Fitche).

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The anticipated normal to above normal rainfall over most parts of western half of Tigray,much of Amhara, central and western Oromia, Benshangul-Gumuz, Gambela, western half of SNNPR would create favorable condition for sowing of cereal crops (wheat, barely, maize) in areas like northeastern (WegelTena, Sirinka, Majiete). Besides, it would have positive contribution for the existing crops in the field. Nevertheless, the expected heavy fall together with hail storm over some areas of western and central Oromia, Benshangul-Gumuz, some areas of Amhara, would have negative impact on crop field particularly over low-lying areas and near river banks. Thus proper attention should be undertaken in order to minimize the negative impact due to the expected excess moisture condition. On the other hand, even though the expected near normal rainfall over some areas of Afar, northern half of Somali, Dire Dawa, Harari and eastern Oromia, below normal rainfall is expected over most parts of the aforementioned areas. Besides it would also have negative impact on the availability of pasture and drinking water over pastoral and agro pastoral areas. Therefore, proper water harvesting techniques should be designed to minimize the risk due to the expected deficient moisture condition.