NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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

1-10 August 2007 Vol. 17 No. 22 **Date of issue August 14, 2007**

SUMMARY

During the third dekad of July 2007 the seasonal rainfall was distributed widely over most Kiremt rain benefiting areas. The condition favored Meher agricultural activities, land preparation, sowing activities, development of crops at different stages and perennial crops as well. Many stations recorded heavy falls that exceed 30 mm in one rainy day. Some stations reported rainfall that exceeds 50 mm in one rainy day among reporting stations: Nejo, Senkata, Pawe, Adwa, and Assosa recorded 55.2, 55.3, 56.6, 68.2 and 102.5 mm respectively in one rainy day. The condition might have negative impact on agricultural activities over steep slope and riverbank areas.

During the first dekad of August 2007 Kiremt rainfall was distributed fairly over Meher growing areas of the country areas as result favored crops at different growth stages and perennial crops. Some of reporting stations recorded extreme heavy falls in the range of 85.6 to 106 mm in one rainy day over different parts of the country. The situation might have caused damages on crops at their critical stages of developments (flowering, emergence), in line with this reportedly different crops to have damaged due to water logging over Majete.

1. WEATHER ASSESSMENT

1.1 August 1-10, 2007

1.1.1 RAINFALL AMOUNT (Fig.1)

Pocket area of southeastern Amhara experienced 200-300mm rainfall. Most parts of Amhara, eastern half of Beshangul-Gumuz, eastern half of Tigray, western and central Oromia, pocket areas of SNNPR and Gambella received 100-200mm rainfall. Parts of western, eastern and southern Amhara, western Beshangul-Gumuz, western, central and eastern Oromia, western and eastern Tigray, parts of western and northern margins of SNNPR and eastern of half of Gambela exhibited 50-100mm rainfall. Eastern half of Afar, eastern, parts of central and western margin Oromiya, eastern half of SNNPR, western half of Gambella, northern tip of Somali, and eastern margin of Tigray received 25-50mm rainfall. Parts of northern Somali,pocket areas of southern and eastern Oromia, pocket areas of southeastern SNNPR, eastern Afar and parts of western Tigray experienced 5-25mm rainfall. The rest parts of the country exhibited little or no rainfall.

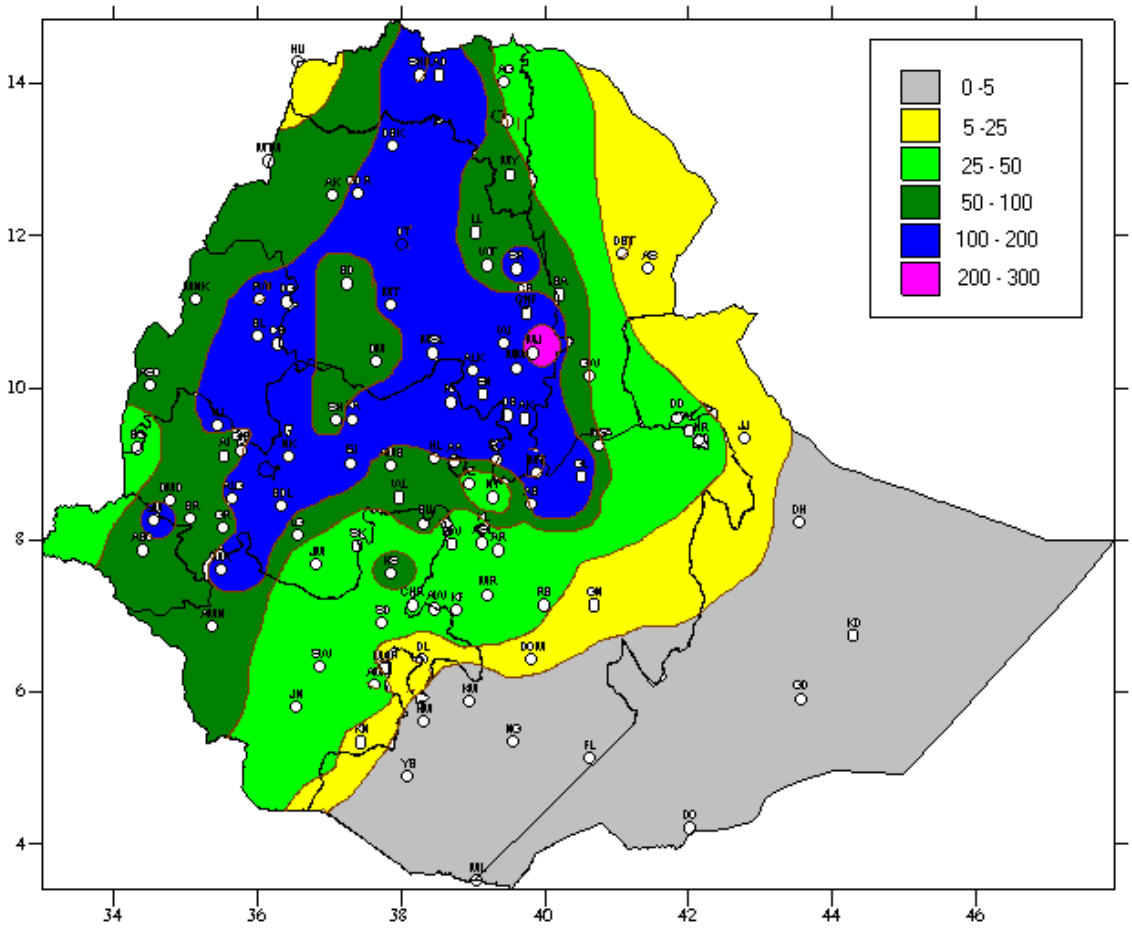

Fig 1. Rainfall distribution in mm (1- 10 August, 2007)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Tigray, Amhara, Benishangul-Gumuz, Gambella, SNNPR, Afar, western, eastern, parts of central and pocket areas of southern Oromiya and northern Somali received normal to above normal decadal rainfall. Most parts of Somali and parts of central, southern and pocket areas of eastern Oromiya, Pocket areas of northern and central Amhara and northern Benishangul-Gumuz and parts of northern Somali received below normal to much below normal rainfall.

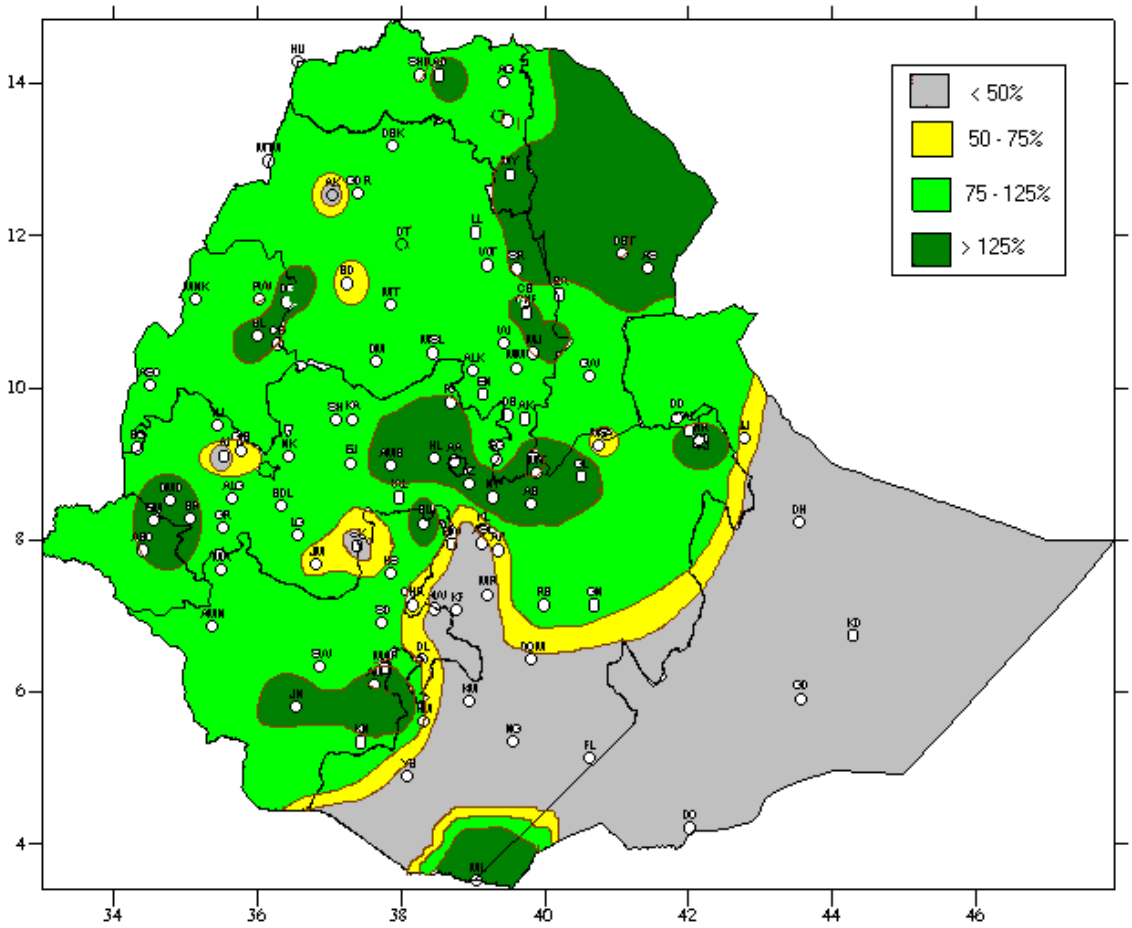

Fig.2 Percent of normal rainfall (1-10 August, 2007)

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

1.1.3 TEMPERATURE ANOMALY

Some stations recorded extreme maximum temperature 35^{o} C and above for 8-10 consecutive days. Assayta, Dubti, Gambella, and Gode recorded extreme maximum temperature as high as 40.5, 40.0, 37.5 and 35.5 ^{o}C respectively.

2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF AUGUST 2007

The rain-producing systems are expected to be strengthened over western half of the country. As a result, much of Tigray, Amhara, Benishangul-Gumuz, central and western Oromia, Gambella and western SNNPR will get normal to above normal rain, with the probability of heavy rains at places. On the other hand, a slight weakening of meteorological systems are highly likely over eastern half of Ethiopia. Hence, eastern margins portions of Tigray and Amhara, eastern Oromia, Dire Dawa, Harari, northern half of Somali as well as southern and eastern portions of SNNPR and the adjoining parts of Oromia will get near normal rains at some place though blow normal rains will be the rule over some portions of the country.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

Kiremt rain was distributed fairly over Meher growing areas of the country, as result favored crops at different growth stages and perennial crops as well. Some of reporting stations recorded extreme heavy falls in the range of 85.6 to 106 mm in one rainy day over different parts of the country. The situation might have caused damages on crops at their critical stages of developments (flowering, emergence), in line with this reportedly different crops to have damaged due to water logging over Majete.

Pursuant to crop phenological report planting of wheat was under way in some areas of southern Amhara (Debre Markos). While it was at emerging and third leaf stage in some areas of eastern Amhara (Wegel Tena) and southern Amhara (Shola Gebeya). Teff was at emerging stage in some areas of western Oromia (Kachise), southern Amhara (Debre Markos). Maize was at third leaf stage in some areas of southern Amhara (Majete). While it was at tasseling and flowering stages in some areas of eastern Benshangul Gumuz (Bullen, Chagni & Pawe), western Oromia (Bedelle). More over it was at wax and full ripening stages in some areas of western Oromia (Chira & Ayehu). Sorghum was at emerging and flowering stages in some areas of eastern Benshangul Gumuz (Bullen & Chagni). Millet was at emerging and third leaf stages in some areas of eastern Benshangul Gumuz (Dangla & Chagni), northwestern Amhara (Shahura). Barley was at third leaf stage in some areas of eastern Amhara (Lalibela). Beans were at emerging stage in some areas of southern Amhara (Shola Gebeya) and eastern Amhara (Wegel Tena), where as it was at flowering stage in some areas of western Oromia (Kachise). Pea was at budding stage in some areas of eastern Amhara (Bati). Oats were at emerging stage in some areas of eastern Oromia (Wegel Tena). Sesame was at budding stage in some areas of eastern Benshangul Gumuz (Pawe).

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The anticipated strong and widely distributed rainfall condition over western, south western and northern Ethiopia would have a positive contribution for Meher agricultural activities particularly for the western half of the country where Meher agricultural activities is mainly practiced. Besides it would have a significant contribution for crops, which are found at different phenological stages over the aforementioned areas. On the other hand the expected heavy fall over central and north eastern highlands might have a negative impact over areas with clay soil, due to poor water percolation to the depth of to the soil. Therefore, proper attention should be given over such areas in order to minimize crop damage due to excess water over crop field. The anticipated near normal rainfall condition over some lowland areas of eastern Amhara and Tigray, southern and eastern parts of SNNPR, eastern Oromia, Harari, Dire Dawa, northern half of Somali and Afar could have a significant contribution for the availability of pasture and drinking water over pastoral and agro pastoral areas.