NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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SUMMARY

During the first dekad of August 2006, the observed normal to above normal rainfall over Kiremt benfiting areas generated the overflow of rivers and flash floods. This situation resulted in crop damage, which were attaining at different phenological stages; the situation is more severe on crop fields particularly over low-lying areas and riverbanks. On the other hand, the observed seasonal rainfall over Meher growing areas could have a positive impact to fulfill crop water requirements of long cycle crops, which were sown during the month of April, and attaining at mid-season growing stage. However, the pronounced widespread and intensified rainfall over different parts of the country might result in over saturation and water logging in crop fields; where the soil type is clay and this situation can affect negatively the ongoing season's agricultural activities. According to the reporting station, heavy rainfall was observed with the range of (30-75.4mm) in one rainy day. To mention some of them, Jinka, Gonder, Dangla, Pawe, Maichew, BahirDar, Alemya, Gambela, Kibre Mengist and Hosaina received 75.4, 70.5, 61.0, 55.0, 53.6, 52.4, 52.3, 46.2, 45.0, and 44.8 mm of heavy rainfall in one ranydays respectively.

During the second dekad of August 2006, the observed seasonal rainfall in terms of amount and distribution covered much of Meher growing areas of the country. Particularly, the observed seasonal rainfall over mid and highlands that are not flood prone areas had positive impact on crops, which are at different phonological stages. Besides the wet condition favored sowing activities in some areas. On the other hand, in terms of its persistency and strength resulted in water logging and over saturation on some crop fields. Moreover, this condition might create conducive condition for the outbreak of pests, which can be aggressive at the time of excess moisture condition. In addition to this, the observed persistent cloud coverage for consecutive dekads over the highlands could induce excess vegetative growth by minimizing thermal requirement of the crops that is important for normal growth and development of crops. In accordance to the crop phonological report Mezezo and Mota reported slight crop damage due to heavy rainfall and Gore reported flood damage on crop fields. On the contrary, the observed rainfall condition was favorable over most parts of the reporting stations. Some stations exhibited heavy fall within the range of (30.1-66.2mm) in one rainy day, to mention some of them, Pawe, Metema, A/A Bole, Aira, Chagni, Bedelle Ambo Agriculture, Majete, Alge Nekemte, received 66.2, 65.0, 61.7, 58.2, 53.3,50.0 49.0, 48.7, 46.0 44.0mm of heavy fall in one rainy days respectively.

1. WEATHER ASSESSMENT

1.1 August 11-20, 2006

1.1.1 RAINFALL AMOUNT (Fig. 1)

Pocket areas of northeastern Benshangul-Gumuz received 200-300 mm of rainfall. Parts of southern and southwestern Amhara, parts of central and western Oromia experienced 100-200mm of rainfall. Much of western and parts of northern Tigray, much of western, northwestern and some parts of southern Amhara, parts of southern Afar, central and western Oromia, southern Bensahgul-Gumuz, north and north western SNNPR, experienced 50-100mm of rainfall. Few areas of southern Tigray, western and south western Afar, parts of eastern Oromia, northern Somali, much of Gambela, parts of southern SNNPR, received 25-50mm of rainfall. Pocket areas of southern Tigray, parts of eastern Afar and northern Somli, parts of southern Oromia, southern SNNPR exhibited 5-25mm of rainfall. There was little or no rainfall for the rest parts of the country.

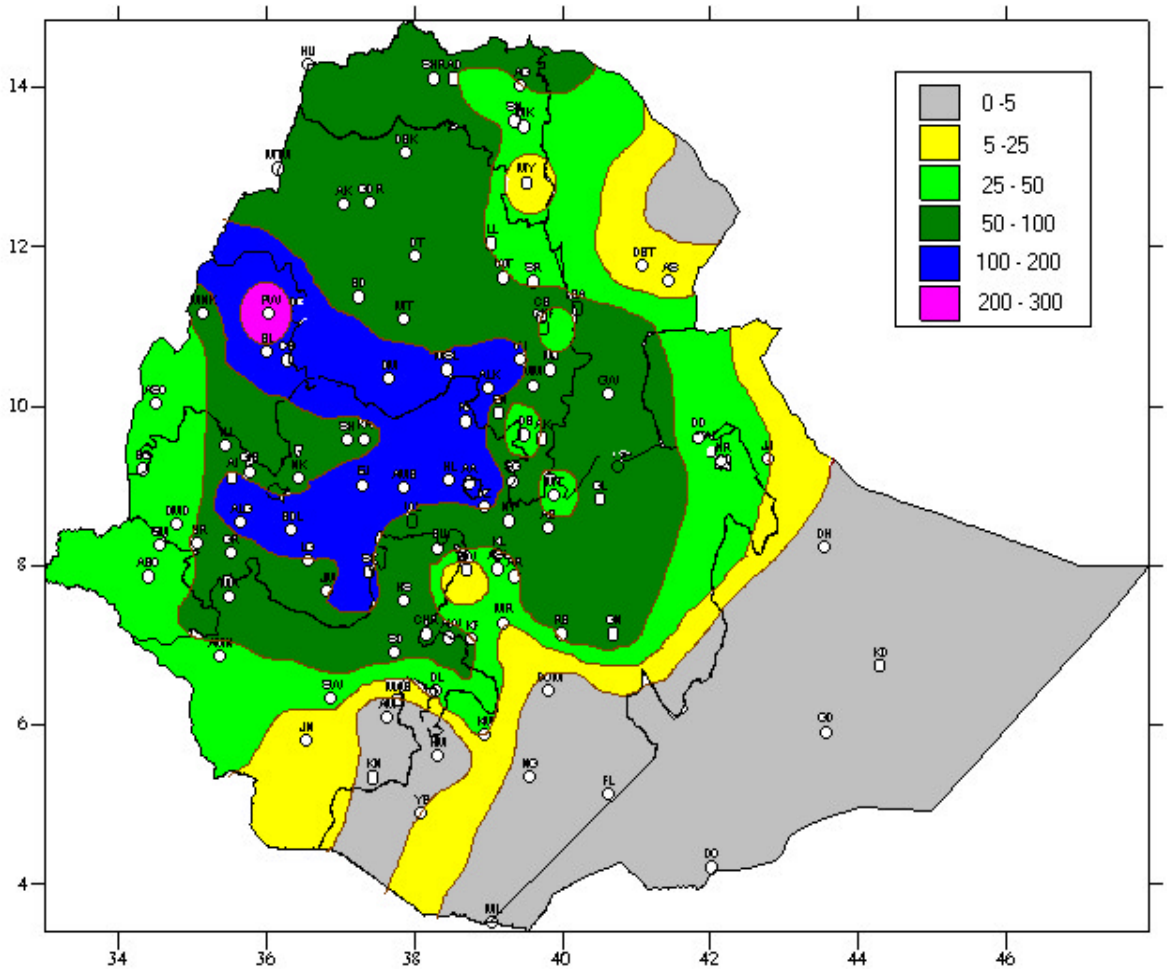

Fig 1. Rainfall distribution in mm (11- 20 August, 2006)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Some parts of western tip of Tigray, western and southern Amhara, eastern half of Afar, northern parts of Bensahgul-Gumuz, most parts of central, southern and eastern Oromia, northern SNNPR experienced normal to above normal rainfall. While, pocket areas of southern Tigriy and eastern Amhara, western tip of Oromia, southeastern SNNPR and some areas of south and south eastern Oromia received below to much below normal rainfall. Normally Kiremt is not a rainy season for southern Oromia and southern and southeastern Somali.

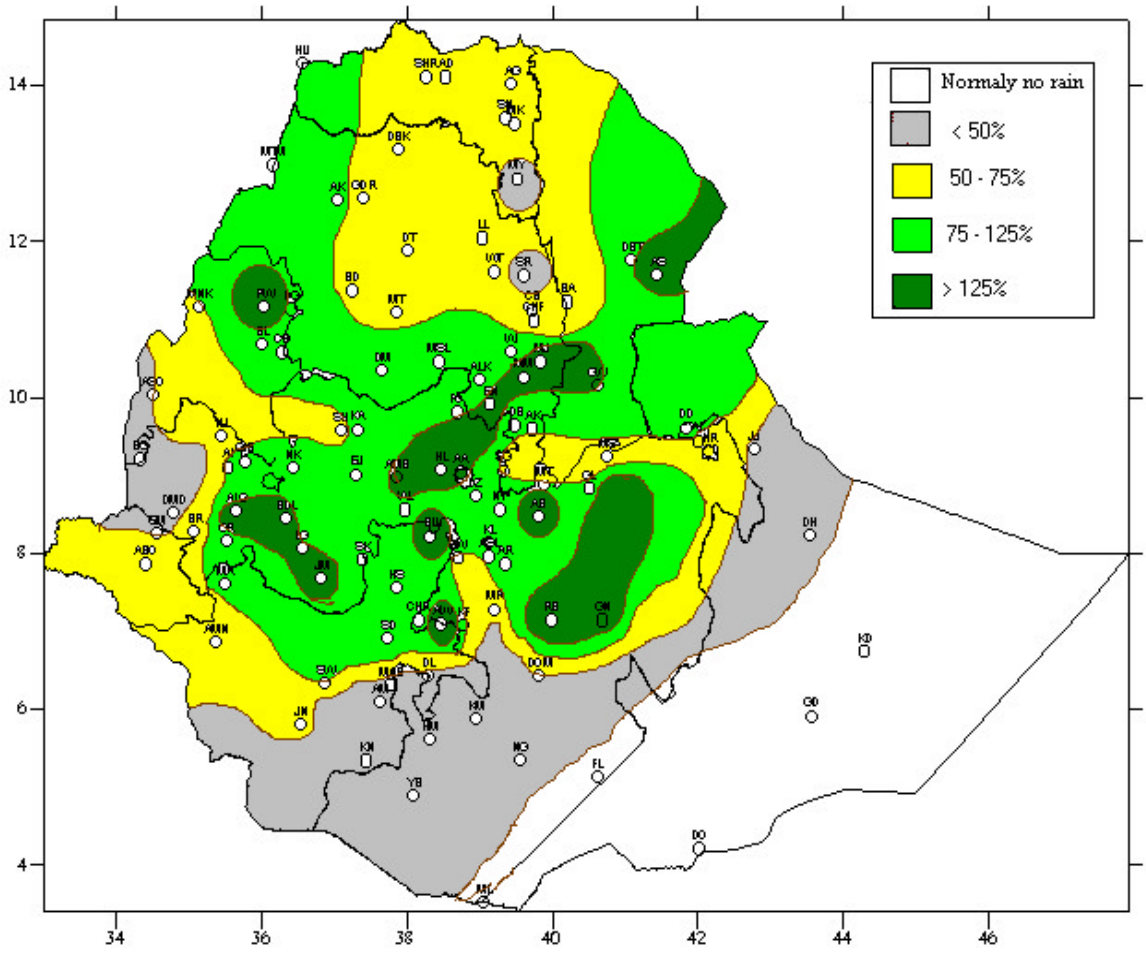

Fig.2 Percent of normal rainfall (11-20 August, 2006)

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 Dire Dawa exhibited extreme maximum temperature above 35 ^{0}C.

2. WEATHER OUTLOOK FOR THE THIRD DEKAD OFF AUGUST, 2006

In the coming ten days the forecasted and analyzed meteorological information indicate that the seasonal rainfall activity is continued in similar manner over the Kiremt rain-benefiting areas, hence, much of Tigray and Amhara, Benshngul-Gumuz, western and central Oromia, Gambela and northern SNNPR will have normal to above normal rainfall, Besides, some of the aforementioned areas there will be heavy fall that are accompanied by

thunder and hailstorm. On the other hand, Afar, eastern Oromia, Harari, DireDawa, northern Somali as well as southern half of SNNPR are anticipated to get close to normal rainfall. However, some of the areas will receive below normal rainfall.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed seasonal rainfall in terms of amount and distribution covered much of Meher growing areas of the country. Particularly, the observed seasonal rainfall over mid and highlands that are not flood prone areas had positive impact on crops, which are at different phonological stages. Besides the wet condition favored sowing activities in some areas. On the other hand, in terms of its persistency and strength resulted in water logging and over saturation on some crop fields. Moreover, this condition might create conducive condition for the outbreak of pests, which can be aggressive at the time of excess moisture condition. In addition to this, the observed persistent cloud coverage for consecutive dekads over the highlands could induce excess vegetative growth by minimizing thermal requirement of the crops that is important for the normal growth and development of crops. In accordance to the crop phonological report Mezezo and Mota reported slight crop damage due to heavy rainfall and Gore reported flood damage on crop fields. On the contrary, the observed rainfall condition was favorable over most parts of the reporting stations. Pursuant to the crop phenological report, Teff was at third leaf in some areas of eastern Anhara (Combolcha, Sirinka), western and central Oromia (Gimbi, Fitche), southern, eastern and western Amhara (Majete, Sirinka Dangala) while it was at emergence stage in some areas of western and central Oromia (Sekoru, Arsi Robe) eastern and western Amhara (Cheffa and Bati, Dangla), western Bensahngul-Gumuz (Assosa), northern SNNPR (Bui). Besides, it was at shooting stage in some areas of central Oromia (Zeway), southern Amhara (Alem Ketema) and western Oromia (Chira). Maize was at ninth leaf stage in some areas of eastern and southern Amhara (Combolcha and Bati, Majiete) and it was at emergence stage in some areas of eastern and western Amhara (Cheffa, Dangla) and it was at flowering stage in some areas of western and central Oromia (Nedjo, Gimbi, Aira, Sekoru, and Bedelle, Zeway), eastern Bensahgul-Gumuz (Chagni). It was at full ripeness in some areas of of western Bensahgul-Gumuz (Mankush). . Sorghum was at shooting stage in some areas of Eastern Amhara (Combolcha), western Oromia (Aira), western Benshangul-Gumua (Assosa), while it was at tillering stage in some areas of eastern Amhara (Cheffa, Bati). Moreover, it was at flowering stage in western Bensahgul-Gumuz (Mankush). Wheat was at emergence in some areas of western Oromia (Gimbi), eastern Amhara (Wegel Tena), northern SNNPR (Bui), central Oromia (Kulumsa), while it was at third leaf stage in some areas of northern SNNPR (Hosaina), central Amhara (Shola Gebeya). Millet was at tillering stage in some areas of western Oromia (LimuGenet, Nedjo), eastern Bensahgul-Gumuz (Chagni, Bullen), while it was at shooting in some areas of western Oromia (Aira, Shambu). Beans was at emergence in some areas of western and central Oromia (Shambu, Kulumsa), central Amhara (Shoal Gebeya), while it was at budding in some areas of eastern Amhara (Wegel Tena), and it was at flowering in some areas of central Oromia (Fitche). Peas was ate emergence and budding in some areas of northern SNNPR (Bui), eastern Amhara (Wegel Tena). Nug was at elongation in some areas of southern Amhara (Alem Ketema) while it was at flowering in western Bensahgul-Gumuz (Assosa). Cheffa reported severe crop damage due to disease. Western Oromia like Gimbi and Nedjo reported crop damage due to heavy fall accompanied with hailstorm.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The anticipated normal to above normal rainfall over most parts of Tigray, Amhara, Bensahgul-Gumuz, western and central Oromia, Gambela, SNNPR, and few areas of western Oromia would favor season's agricultural activities. Nevertheless the expected heavy falls accompanied with thunder and hailstorm would result in water logging and flash flood in some areas of the above mention areas. Thus appropriate measures should be under taken particularly over low-lying areas and near the riverbanks including in areas where the soil type is clay as per the objective reality of the area. Besides the expected wet condition would favor the occurrence of some diseases. Therefore, close monitoring and appropriate attention should be given over sensitive areas ahead of time in order to minimize the risk due to adverse weather conditions.