NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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SUMMARY

During the first dekad of November 2005 the observed dry Bega weather condition could favor the on going harvest and post harvest activities in most parts of Meher growing areas. As the result harvest and post harvest activities were under way in most parts of Meher growing areas. On the other hand the observed rainfall amount ranging from 5-25 mm could have significant contribution on crops, which are at flowering and grain filling stages. However the occasional falls observed in some pocket areas could have negative influence on harvest and post harvest activities. With regard to extreme temperatures central highlands like Debre Zeit, Fiche, Enewary, Koffele, Debre Birhan and Mehal Meda, northern highlands like Adigrat including eastern highlands like Alemaya and Jijiga exhibited extreme minimum temperature less than 5°C. Moreover Debere Bihan experienced minimum temperature below 0°C lowering up to –3°C for three consecutive days. Thus this condition could have negative influence on the normal growth and development of plants. Shambu reported weed infestation on wheat crop. Limu Genet reported slight wilting due to moisture stress on cereal crop like millet as well as oil crop like nug.

During the second dekad of November 2005, Much of Oromya, Northern Somali, eastern half of SNNPR, eastern half of Amhara, southern half of Afar, some parts of southern, central and western Tigrai as well as pocket areas of eastern Benshangul –Gumuz experienced normal to above normal rainfall distribution while the rest parts of the country received below normal rainfall. Among some of the reporting stations, Cheffa, Jijiga, Sirinka, Hosaina, Bedelle, Bui, Mirab Abya, Dolo Mena, Kibre Mengist, and Harar Recorded 81.6, 47.0, 42.8, 38.4, 30.0, 30.0 29.0, 28.6, 26.9 and 23.9 mm of heavy rainfall in one rainy days respectively. The observed unseasonable rainfall over Meher growing areas of central, eastern, northern and southern parts of the country could have negative impact on crops that were at ripeness and harvesting stages. It may have negative impact on crops that were previously harvested and not placed appropriately. Thus there were reports of crop damge over the above-mentioned areas. On the other hand, the prevailed rainfall situation over southern lowland areas where agro pastoral activities are practiced and over western parts of Afar the rainfall could have significant contribution for the availability of pasture. Regarding crop phenological report Hosaina, Majete, Bedele and Alge reported crop damage. This situation may result in yield loss over the aforementioned areas. Regarding air temperature, central highlands (Kofelle, Debre Zeit, fitche, Mehal Meda), northern highlands (Wegeltena and Adigrat) and eastern highlands (Jijiga and Almaya) recorded extreme minimum temperature ranging from –1.0 to 4.9 ^{0}C for two to four consecutive days. This situation may affect the normal growth and development of short cycle crops.

1. WEATHER ASSESSMENT

1.1 RAINFALL AMOUNT (Fig. 1)

Northern SNNPR, pocket areas of southeastern Amhara, eastern and southern Oromya; pocket areas of southeastern Amhara received 50-100 mm of rainfall; much of SNNPR, Much of Oromya, eastern Amhara, pocket areas of northern Somali, south eastern Gambella and pocket areas of southern Tigrai received 25-50 mm of rainfall; southern Somali, southern and western Afar, parts of southern and central Oromya as well as southern Afar received 5 – 25 mm of rainfall. There was little or no rainfall for the rest parts of the country.

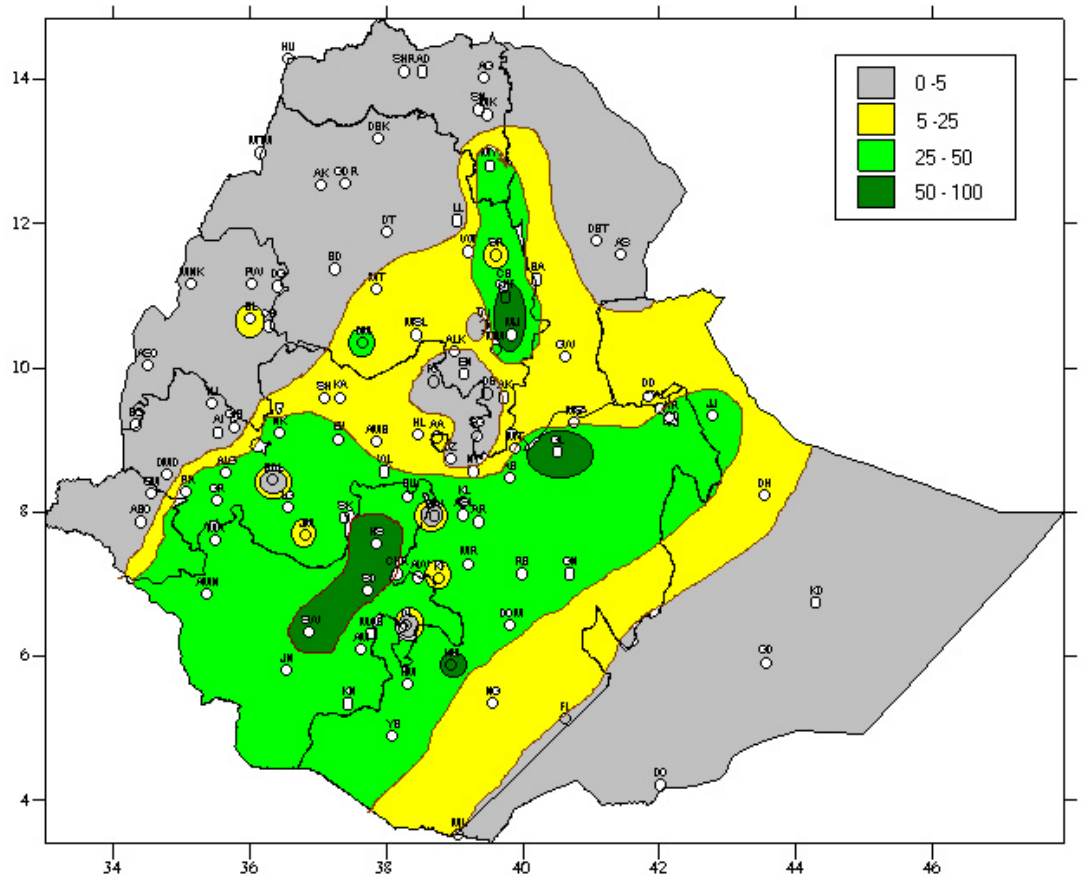

Fig 1. Rainfall distribution in mm (11-20 November, 2005)

1.2 RAINFALL ANOMALY (Fig. 2)

Much of Oromya, Northern Somali, eastern half of SNNPR, eastern half of Amhara, southern half of Afar, some parts of southern, central and western Tigrai as well as pocket areas of eastern Benshangul–Gumuz experienced normal to above normal rainfall distribution while the rest parts of the country received below normal rainfall.

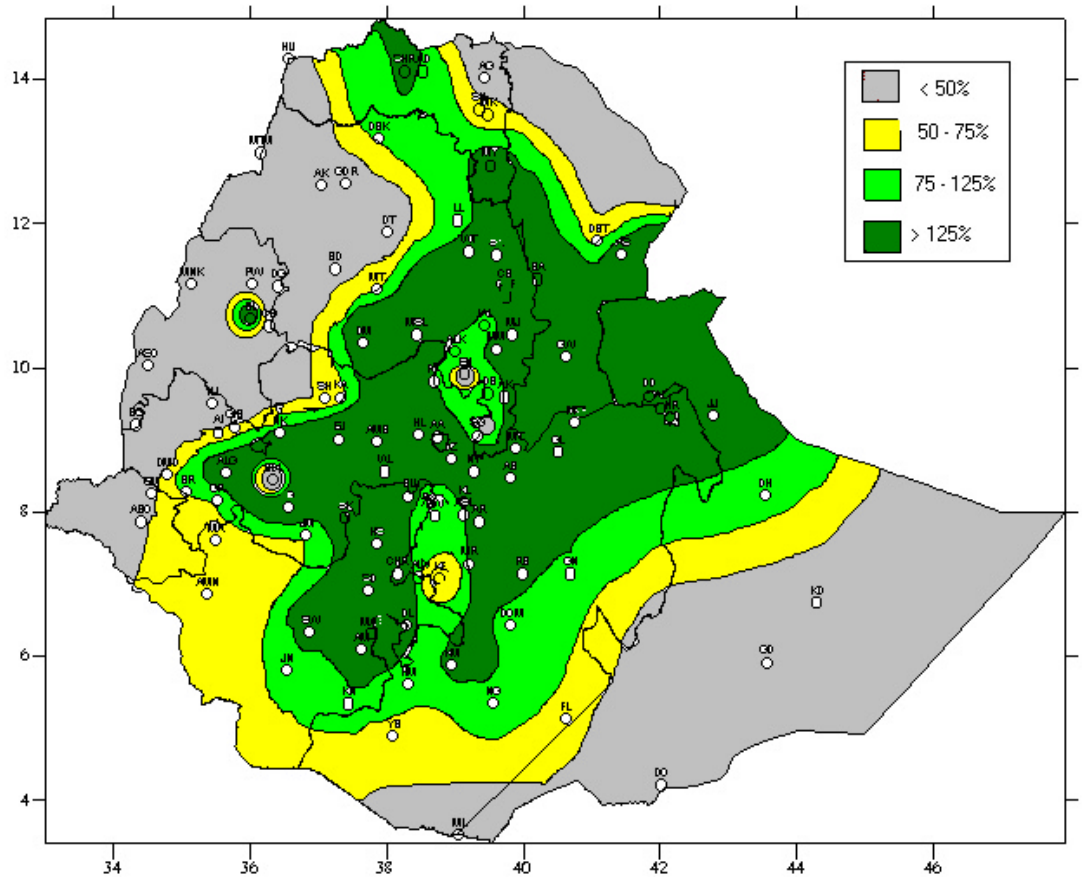

Fig.2 Percent of normal rainfall (11-20 November 2005)

Explanatory notes for the legend:

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

1.3 TEMPERATURE ANOMALY

Central highlands (Kofelle, Debre Zeit, fitche, Mehal Meda), northern highlands (Wegeltena and Adigrat) and eastern highlands (Jijiga and Almaya) recorded extreme minimum temperature ranging from – 1.0 to 4.9 ^{0}C for two to four consecutive days.

2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF NOVEMBER 2005

In the coming dekad, the meteorological system that bear unseasonal rain are forcasted to weaken day by day from the major portion of the country. Nonetheless, the unseasonal rains will reinstate across western portion of the country that is likely to include parts of the central and eastern Ethiopia. In this regard, SNNPR and Oromya regions are most likely favored from the anticipated upcoming unseasonal rainfalls. Similarly, due to westward retreat of rain – bearing systems, western Tigray and Amhara as well as Benshangul – Gumuz will have rains during the first half of the dekad. In general in the coming dekad, many places of Gambella, SNNPR and Oromya will get normal to above normal rains. Besides, eastern and western Amhara, Central parts of Tigray, northern and southern Somali and Benshangul – Gumuz are expected to get near normal rains at some places. The persistence of strong rain-bearing systems will produce occassinal heavy rain showers at some places of western, southwestern and southern section of Ethiopia.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed unseasonable rainfall over Meher growing areas of central, eastern, northern and southern parts of the country could have negative impact on crops that were at ripeness and harvesting stages. It may have negative impact on crops that were previously harvested and not placed appropriately. Thus there were reports of crop damage over the above-mentioned areas. On the other hand, the prevailed rainfall situation over southern lowland areas where agro pastoral activities are practiced and western parts of Afar could have significant contribution for the availability of pasture. Regarding crop phenological report Hosaina, Majete, Bedele and Alge reported crop damage. This situation may result in yield loss over the aforementioned areas. Regarding air temperature, central highlands (Kofelle, Debre Zeit, fitche, Mehal Meda) , northern highlands (Wegeltena and Adigrat) and eastern highlands (Jijiga and Almaya) recorded extreme minimum temperature ranging from – 1.0 to 4.9 ^{0}C for two to four consecutive days. This situation may affect the normal growth and development of short cycle crops.

In general, the unexpected rainfall situation over the above meher growing areas may result in production loss. Maize was at full ripeness stage in some areas of western Amhara like (Dangla) and eastern Amhara like (Majete) while it was at tassling stage in southeast Oromya (DoloMena). Sorghum was at ripeness stage in western Oromya like (Nedjo, Ghimbi, DembiDolo), eastern Amhara (Majete) and southwest parts of Benshangul-Gumuz (Assosa) while it was at flowering stage in some areas of western Oromya (Aira, Alge). Wheat was at wax and full ripeness stage in some areas of western Oromya like (Shambu, Gimbi, Dembidolo) and northern SNNPR (Hosanna) while it was flowering stage in some areas of south eastern Amhara (Shola Gebeya) and eastern Amhara (Wegel Tena). Teff was at ripeness stage in western Oromya (Chira) some areas of central Oromya (Fiche) eastern Benshangul-Gumuz (Bullen), northern SNNPR (Hosanna) while it was at flowering stage in some areas of central Oromya (Kachise) and western Amhara (Danigla) while it was at tassling stage in southeast Oromya (Dolo Mena). Millet was at flowering stage in western Oromya (Nedjo and Aira) while at shooting stage in eastern Benshangul- Gumuz. (Chagni) Nug was at yellow Ripeness stage in Bensahgul – Gumuz (Bullen, Assosa) while it was green ripness in wetern oromya (LimuGenet). Bean was at ripness stage in Wegel Tena and Barely was at flowering stage in some areas of Shambu. Some places of western Oromya (LimuGenet) Perennial crops like Coffee was harvested.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The anticipated unseasonable rainfall over central, western, southwestern and southern Ethiopia may have negative impact on crops, which were being harvested during the previous dekads, and not placed properly. More over, the expected near normal rainfall distribution over Tigray, eastern and western Amhara, Gambella and Benishangul-Gumuz may have negative impact on harvesting activities. Thus, activities related to the prevention of post harvest production loss should be undertyakent of occurrence of unseasonable rainfall.