

# NATIONAL METEOROLOGICAL SERVICES AGENCY

## TEN DAY AGROMETEOROLOGICAL BULLETIN

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### SUMMARY

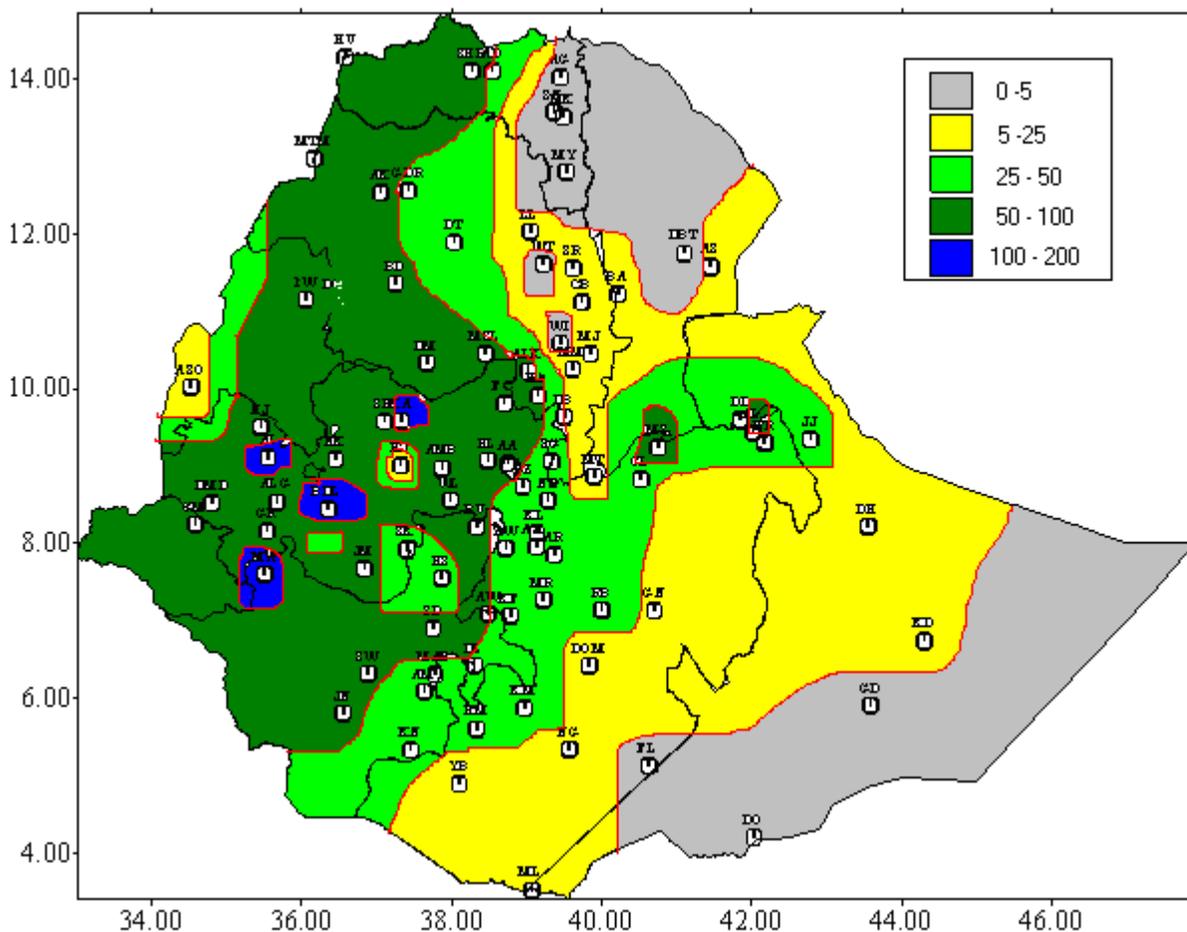
During the first dekad of September 2005, even though eastern and south Tigray and parts of eastern Amhara including Arsi and Bale zones of Oromiya, experienced deficient rainfall the crop condition was in a good shape over most parts of Meher growing areas due to better rainfall observed during the dekad under review (1-10 September 2005). On the other hand some pocket areas of northwestern, western, central and eastern parts of the country received heavy falls ranging from 30-86.5 mm in one rainy day. Moreover some areas like Nekemt and Limu Genet exhibited heavy falls repeatedly for three days during the ten-day period. As a result Limu Genet reported crop damage due to hailstorm. In accordance with the crop phenological report (1-10 September 2005) harvest of Millet was underway in some areas of northeastern Benishangul-Gumuz like Bullen while at flowering and tasseling stage over west Oromiya like Limu Genet and Nedjo including eastern Oromiya like Gelemso. Sowing of teff has been carried out in some areas of eastern Amhara like Sirinka. With regard to the effect of heavy falls and continuous wet condition observed in some pocket areas like Assosa, Limu Genet and Kombolcha resulted in weed infestation; hail damage and water logging during the first dekad of September 2005, respectively. As a result medium field condition has been observed over the areas.

During the second dekad of September 2005 most parts of Meher growing areas received normal to above normal. As a result crops were in a good condition in most places. However some pocket areas of western, northwestern and central parts of the country exhibited 30.7-52.5 mm of heavy rainfall in one rainy day. Hence, this situation could have negative impact in areas where crops are ready to harvest like Aira, Bedelle, Gimbi and Nedjo. Fore instance Gimbi reported maize and sorghum crops damage due to hailstorm during the dekad under review. Harvest activity was underway in some areas of northeastern SNNPR like Hosaina during the second dekad of September 2005. On the contrary the persisted moisture deficiency during the preceding two successive dekads over western Benishangul-Gumuz, and highlands of southern Oromiya could have negative impact on crops water requirement. Besides, the persisted below normal situation particularly over northern Afar could exacerbate the deficient moisture condition persisted over the areas.

# 1. WEATHER ASSESSMENT

## 1.1 RAINFALL AMOUNT (Fig. 1)

Pocket areas of western Oromiya and northwestern SNNPR exhibited fall greater than 100 mm. Western half of Tigrai, most parts of western half of Amhara and western Oromiya, Gambela, northern and western SNNPR, eastern half of Benishangul-Gumuz, pocket areas of northern Somali and eastern highlands received 50 – 100 mm of rainfall. The rest of the country received below 50 mm of rainfall. Little or no rainfall has been observed over south and southeastern lowlands including northern half of Afar.



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



## **2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF SEPTEMBER 2005**

The rain prevailing systems are anticipated to continue across the western half of the country. As a result, normal to above normal rains will permit over western Tigraya and Amhara , Benishangu-Gumuz, western Oromya and SNNPR region. Farther more, near normal rains are likely to prevail over some places of central and eastern Ethiopia, with north eastern and parts of central regions will receive occasional rain showers. On the other hand, a relative increase in cloud coverage is anticipated over the low lands of south and southeastern parts of the country. Likewise, the presses strong sunny weather is highly likely to enhance occasional heavy falls accompanied with hailstorms over the localized places of the country.

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

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

Crops were in a good condition in most places due to the observed good rainfall over most parts of Meher growing areas during the dekad under review. However some pocket areas of western, northwestern and central parts of the country exhibited 30.7-52.5 mm of heavy rainfall in one rainy day. Hence, this situation could have negative impact in areas where crops are ready to harvest like Aira, Bedelle, Gimbi and Nedjo. Fore instance Gimbi reported maize and sorghum crops damage due to hailstorm during the dekad under review. On the contrary the persisted moisture deficiency during the preceding two successive dekads over western Benishangul-Gumuz, and highlands of southern Oromiya could have negative impact on crops water requirement. Besides, the persisted below normal situation particularly over northern Afar could exacerbate the deficient moisture condition persisted over the areas. According to the crop phenological report (11-20 September 2005) harvest of maize was underway in some areas of northeastern SNNPR like Hosaina while it was at wax and full ripeness stages in some areas of western Oromiya like Aira, Bedelle, Nedjo, Gimbi and Alge. Moreover it was at flowering stage in some areas of eastern Amhara like Sirinka. Teff was at early vegetative stage in some areas of eastern Amhara like Bati and northern Oromiya like Fitcha while at flowering stage in some areas of eastern Amhara like Sirinka and Majete including some areas of western Oromiya like Bedelle. Sorghum was at tasseling stage in some areas of eastern Amhara (Bati and Majete) and western Oromiya (Aira, Nedjo and Alge) where as it was at flowering stage in some areas of western Oromiya like Gimbi. Millet was at shooting stage in some areas of western Oromiya like Aira while at flowering and tasseling stage in some areas of eastern Oromiya like Gelemso and western Oromiya like Nejo and Limu Genet. Wheat was at early vegetative stage like third leaf, tillering and shooting stage in some areas of eastern Amhara like Shola Gebeya and central Oromiya like Kulumsa and northern Oromiya like Fitcha. Beans were at flowering stage over eastern Amhara like Shola Gebeya and over northern Oromiya like Fitcha while at ripeness stage in central Oromiya like Kulumsa.

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

The anticipated continuation of good rainfall over the western half of the country would help crops, which are found at different phenological stages, and the recently sown pulse crops like chickpeas. Besides it would create favorable condition for perennial crops. Moreover, the expected near normal rainfall over central and western parts of Tigray, eastern Amhara and Oromiya including northern parts of Somali and Harari would ease the persisted deficient conditions particularly over the lowlands of the aforementioned areas. Thus attention should be given for the on going water harvesting practices over drought prone areas. The expected dominant below normal rainfall over southern Oromiya and southern parts of SNNP including the expected little rainfall amount over southern half of Somali would not have significant contribution for plants and the availability of pasture and drinking water as well because of higher evapotranspiration due to high temperature of the areas. Therefore proper attention and close monitoring should be practiced ahead of time to mitigate the effects of moisture stress. Last but not least the enhanced occasional falls accompanied with hailstorm over localized areas of the country would result in crop damage and livestock losses. Thus attention should be given for proper precaution ahead of time particularly in areas where harvest and post harvest activities are under question.