

**NATIONAL METEOROLOGICAL SERVICES AGENCY  
TEN DAY AGROMETEOROLOGICAL BULLETIN**

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**SUMMARY**

During the third dekad of September 2005 with the exception of Gambela, most parts of SNNPR, southern, and most parts of eastern Oromiya, southern half of Afar and most parts of Somali the rest parts of the country exhibited normal to above normal rainfall. This condition could have positive impact on crops, which were sown, delayed by two to three weeks in some lowland areas due to the deficient falls observed at the beginning of the season. It could also have significant contribution over the mid lands and highlands of Meher producing areas like Nedjo, Alge, Shambu, Aira, Bedelle and Dembi Dolo where sorghum and millet are at tasseling and flowering stage, in western Amhara like Dangila and Mota where maize and teff are at tasseling stage, in eastern Amhara like Wegel Tena and Sirinka where teff and beans are at flowering stage, in case of SNNPR it could favor wheat, teff and sorghum and in case of western Tigray it could have significant contribution for the normal growth and development of crops like barley, wheat and millet. However the observed heavy falls ranging from 30-74 mm could have negative impact on crops which are at flowering and ripeness stages by shattering the flower before fertilization and shattering the seeds of crops which are ready to harvest. Fore instance some areas reported crop damage due to heavy fall like Hosaina (on teff and wheat crop), Bedelle (on teff, sorghum, maize and beans) and Dangila (on teff and maize crops) during the third dekad of September (21-30). On the other hand the dominant below normal condition persisted over most parts of Somali, Bale zone and southern Oromiya could have negative influence on crops which are at different phenological stages and have negative impact on the availability of pasture and drinking water over pastoral and agro pastoral areas.

During the first dekad of October 2005 the observed normal to above normal rainfall over western Tigray, most parts of western half of Amhara, northern and eastern Benishangul Gumuz, western and central Oromiya, Gambela and southern Oromiya could favour crops which are at different phenological stages. Besides it could have significant contribution for the availability of pasture and drinking water over pastoral areas of southern Oromiya. However some pocket areas of western Oromiya and northwestern Amhara exhibited 30-54 mm of heavy rainfall in a rainy day. As a result some areas like Limu Genet reported plant damage due to heavy fall. On the other hand the dry spell observed over eastern Amhara, central Oromiya and northeastern SNNPR could favor harvest and post harvest activities in areas like Amba Mariam, Mehal Meda, Chefa, Were Ilu, Sirinka, Abomsa, Adama, Kulumsa, Kofele, Ziway and Hosaina where harvest and post harvest activities are under question. The observed below normal rainfall over southeastern and southern parts of Ethiopia could have negative impact on the availability of pasture and drinking water in the areas.

# 1. WEATHER ASSESSMENT

## 1.1 RAINFALL AMOUNT (Fig. 1)

Some pocket areas of western Oromiya and northeastern SNNPR received falls greater than 100 mm. Southwestern Amhara and parts of western and pocket areas of southern Oromiya, and pocket areas of Benishangul-Gumuz received 50 – 100 mm of rainfall. Most parts of western half of Amhara, most parts of Oromia, SNNPR, Gambela, Benishangul-Gumuz and most parts of Somali received 25-50 mm of rainfall. Western half of Tigray, parts of eastern half of Amhara, central Oromiya, few areas of central SNNPR, few areas of northern Somali and pocket areas of Benishangul Gumuz received 5 – 25 mm of rainfall. The rest of the country received below 5 mm of rainfall.

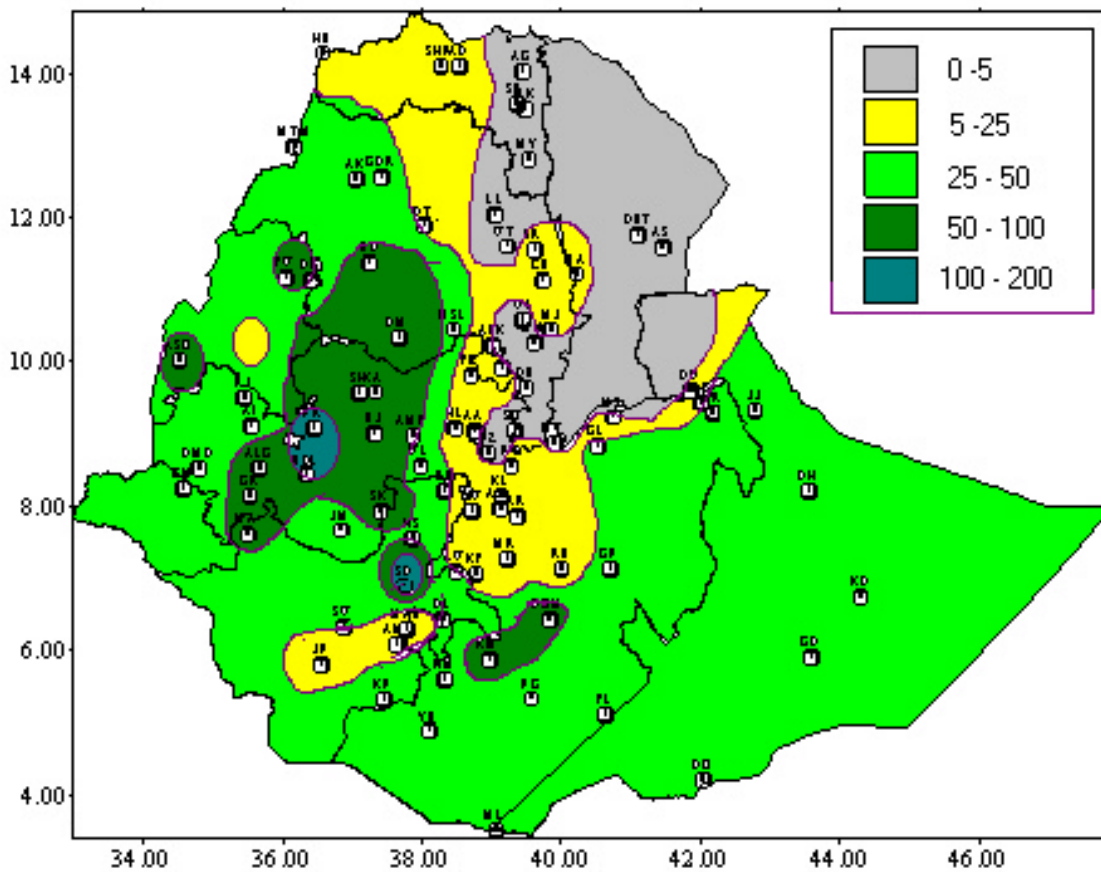
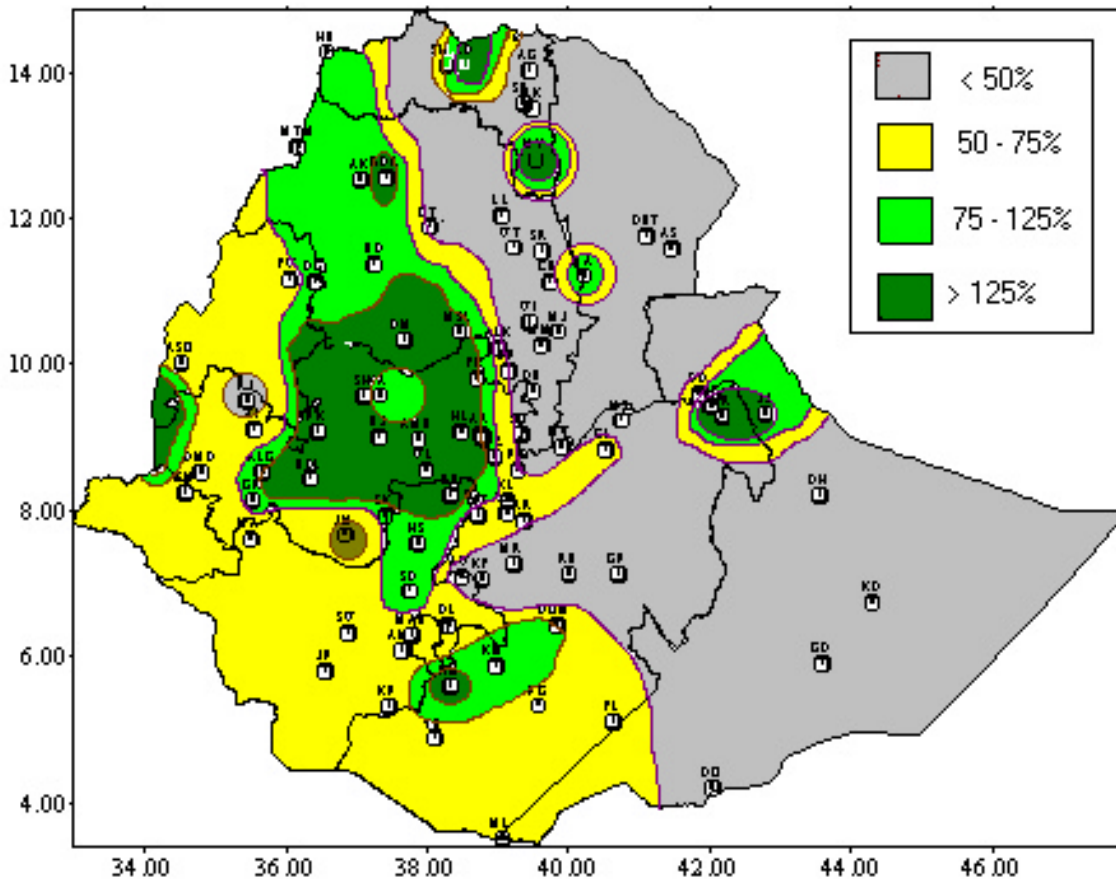


Fig 1. Rainfall distribution in mm (1-10 October, 2005)

## 1.2 RAINFALL ANOMALY (Fig. 2)

Most parts of western half of the country and parts of southern Ethiopia including pocket areas of eastern highlands, pocket areas of eastern Amhara, central and southern Tigray exhibited normal to above normal rainfall.



**Fig.2 Percent of normal rainfall (1-10 October 2005)**

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

## 1.3 TEMPERATURE ANOMALY

No significant air temperature anomaly was observed over most parts of the country during the dekad.

## 2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF OCTOBER 2005

The rain- producing weather systems are highly likely to continue in well-organized manner across many places of the country. In particular, the wet weather condition will continue over western half, central and southern Ethiopia. As a result, western Amhara, Benshangul-Gumuz, western and southern Oromya, central and eastern Ethiopia, Gambela and SNNPR will get normal to above normal rains. Similarly, a southern portion of Somali is likely to receive near normal rains over some places.

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

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

The observed normal to above normal rainfall over western Tigray, most parts of western half of Amhara, northern and eastern Benishangul Gumuz, western and central Oromiya, Gambela and southern Oromiya could favor crops which are at different phenological stages. Besides it could have significant contribution for the availability of pasture and drinking water over pastoral areas of southern Oromiya. However some pocket areas of western Oromiya and northwestern Amhara exhibited 30-54 mm of heavy rainfall in a rainy day. As a result some areas like Limu Genet reported plant damage due to heavy fall. On the contrary the observed below normal rainfall over southeastern and southern parts of Ethiopia could have negative impact on the availability of pasture and drinking water in the areas. The dry spell observed over eastern Amhara, central Oromiya and northeastern SNNPR could favor harvest and post harvest activities in areas like Amba Mariam, Mehal Meda, Chefa, Were Ilu, Sirinka, Abomsa, Adama, Kulumsa, Kofele, Ziway and Hosaina where harvest and post harvest activities are under question. Pursuant to the crop phenological report harvest of beans was underway in some areas of eastern Amhara like Amba Mariam while it was at flowering and ripeness stages in some areas of eastern Amhara (Wegel Tena) and in some areas of northern Oromiya (Fitcha), respectively. Maize was at tasseling and flowering stages in some areas of western Amhara (Dangila), eastern Amhara (Bati) and western Oromiya (Limu Genet) where as it was at wax and full ripeness stage over western Oromiya (Nedjo, Dembi Dolo, Bedelle and Gimbi), eastern Amhara (Majete) and western Amhara (Chagni). Sorghum was at tasseling and flowering stages in some areas of western Oromiya (Alge, Dembi Dolo, and Gimbi) and eastern Amhara (Bati and Majete). Teff was at tasseling and flowering stage over western Amhara (Mota), eastern Amhara (Bati) while at emergence stage over some areas of southern Oromiya like Dolo Mena. Millet was at shooting stage in some areas of western Amhara (Chagni) while at flowering stage in some areas of western Oromiya (Aira and Limu Genet). Wheat was at shooting stage in some areas of eastern Amhara (Wegel Tena and Shambu) while at earing and flowering stages in some areas of western Oromiya like Dembi Dolo, some areas of northern Oromiya and eastern Amhara like Shola Gebeya and Agere Mariam. It was at ripeness stage in some areas of central Oromiya. Peas were at flowering stage over some areas of eastern Amhara (Wegel Tena). Nug was at budding stages over northwestern Benshangul Gumuz (Bullen), some areas of eastern Amhara and western Oromiya (Limu Genet).

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

The anticipated normal rainfall activity over southern and western Oromiya, western half of Amhara, Benishangul Gumuz, Gambela and SNNPR would have significant contribution in terms of crop water requirement for crops which are at different phenological stages at this time of the year. Besides it would be helpful for the availability of pasture and drinking water over southern Oromiya. Nevertheless the expected above normal rainfall over some areas of the aforementioned areas would have negative effect for harvest and post harvest activities. Thus farmers are advised to take proper precaution on time in order to avoid unnecessary post harvest losses. The expected better rainfall activity over southern Somali would ease the persisted dry spell during the preceding dekads and would have some contribution for the availability of drinking water in the areas. However the impact will not be significant because of the nature of the areas in terms of the presence of high evapotranspiration. Moreover the expected below normal rainfall over some areas of the above mentioned areas would exacerbate the persisted dry condition observed the previous dekads. Thus attention should be given for proper water harvesting techniques.