

### **SUMMARY**

During the first dekad of May 2010 rain producing system strengthens widely over Belg rain benefiting area of the country. SNNPR, central and southern Oromia, eastern Amhara received rainfall for consecutive days in the dekad. The observed moisture situation might have favored the ongoing Belg agricultural activities especially crops that were found different stages of development and areas where planting of long cycle crops started earlier. Moreover, much of Amhara, eastern and southern Tigray, eastern parts of the country, western Oromia, Somali, Benshangul-Gumuz, and Gambela exhibited light to heavy rainfall which favored Belg agricultural activities, long cycle crops, and availability of pasture and water over pastoral and agro pastoral areas. On the other hand, some of reporting stations recorded extreme heavy falls ranging from 33.8 to 200 mm in one rainy day over different parts of the country. In line with this, reportedly crops to have damaged over Ginner and Fitcha due to water logging. This situation might have occurred in others places particularly in low lying areas where the soil type is clay. Therefore, care must be taken in order to minimize crop damage due to water logging.

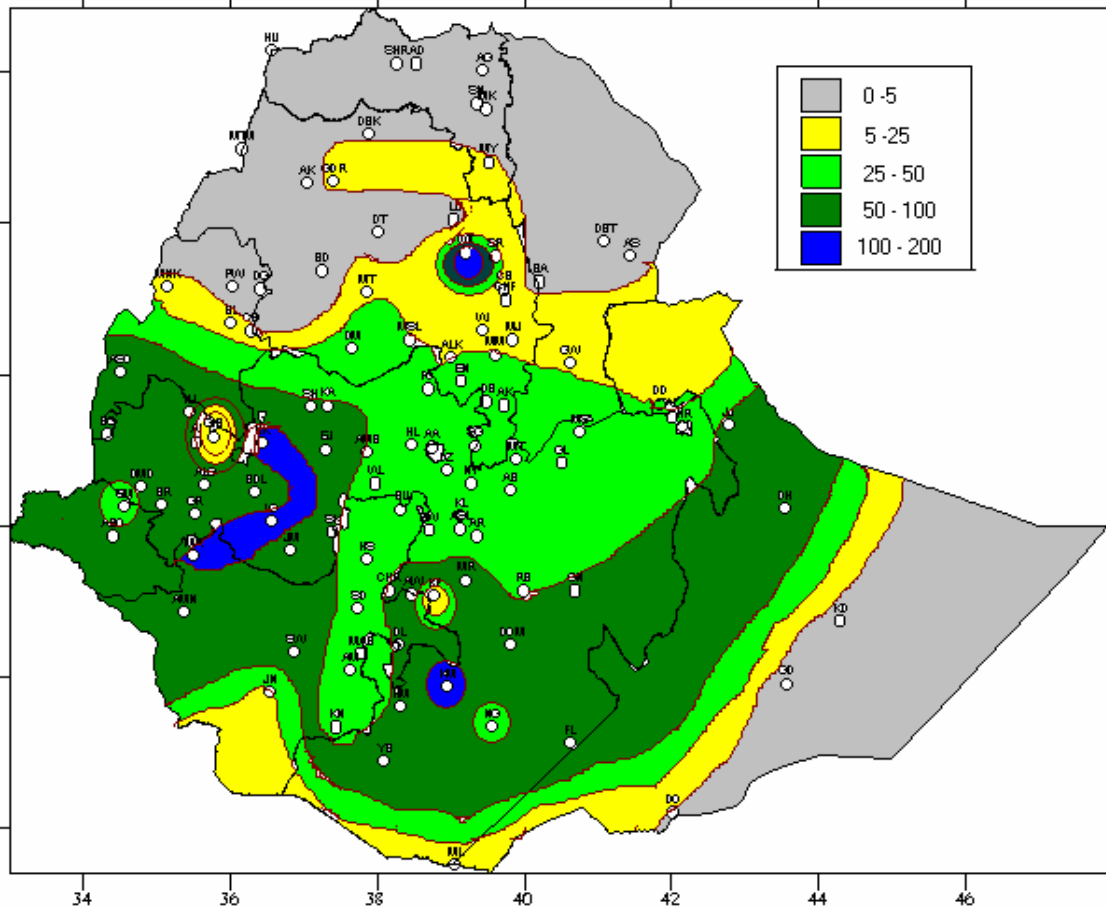
During the second dekad of May 2010 rain bearing meteorological phenomena declined, as a result the amount and distribution of rainfall decreased over most parts of the country. The situation might have minimized shocks related to water logging in places particularly in low lying areas of clayey soils and performance of Belg crops that were found at different phenological stages. On the other hand, Southwestern, Central and Eastern portions of the country received sufficient amount of rainfall. Some station reported heavy fall. Among them Nekemte, A.A (Obs), Alge, Amba Mariam, Arsi Robe, Assosa, Chira, Ginir, Hara, Kachise, Lemu genet, Zeway and Shola Gebeya recorded heavy falls in the range of 37.0 to 83.0 mm in one rainy day. This situation might have favored agricultural activities, long cycle crops, and availability of pasture and water over pastoral and agro pastoral areas. However, extreme heavy fall might have caused water logging in low-laying areas of the country.

## **1. WEATHER ASSESSMENT**

### **1.1 11-20 May 2010**

#### **1.1.1 RAINFALL AMOUNT (Fig.1)**

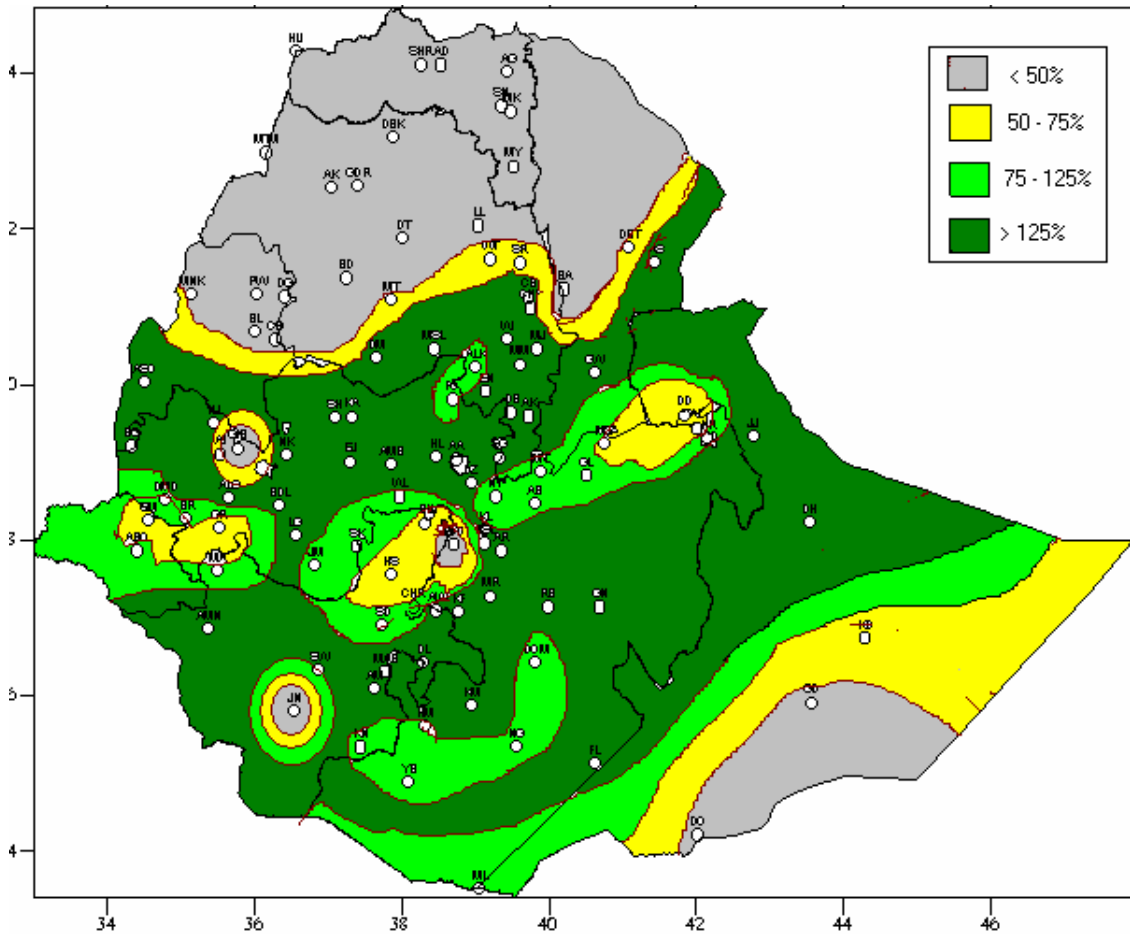
Pars of western Oromia, pocket areas of southern Oromia, northern SNNPR and eastern Amhara received 100-200 mm rainfall. Much of Gambela, parts of Southern half of Benishangul-Gumuz, western half of SNNPR, western, southern and central Oromia, Harari, Dire Dawa and parts of Somali received 50-100 mm rainfall. Central and eastern Oromia, part of Benishangul-Gumuz, parts of eastern half of SNNPR and pocket areas of southern Amhara, Gambella, southern Oromia and Somali received 25-50 mm rainfall. Parts of southern and eastern Amhara, Benishangul-Gumuz, pocket areas of Oromia and SNNPR, parts of Somali and southern half of Afar received 5-25 mm of rainfall. The rest experienced little or no rainfall.



**Fig 1. Rainfall distribution in mm (11-20 May, 2010)**

**1.1.2 RAINFALL ANOMALY (Fig. 2)**

Much of Tigray, Amhara and Afar , northern part of Benshangul-Gumuz ,pocket areas of western and eastern Oromia ,pocket area of Gambela ,pocket areas of SNNPR, and parts of Gambela and southern and southeastern Somali received much below normal to below normal rainfall. The rest parts of the country experienced normal to above normal rainfall.



**Fig2. Percent of normal rainfall distribution (11-20 May, 2010)**

**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 in the low lands and western border of the country recorded extreme maximum temperature greater than 35 °C, to mention some of them Dire Dawa, Gode, Metehara, Ayhsa, Chagni, Cheffa, Dubti, Elidar, Gambela, Gewane, Mankush, Mile, Maytsemre, Nazreth, Nura Era, Pawe, Shenka, Sherkole, and Awash Arba recorded 36.8, 37.1, 38.5, 35.5, 35.5, 40.3, 41.8, 38.0, 45.0, 39.5, 41.5, 38.6, 35.0, 36.0, 38.5, 43.0, 40.0, 37.0 and 38.0 °C, respectively. The situation might have a negative impact on the normal growth and development of plants and livestock.

## 2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

### 2.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

Rain bearing meteorological phenomena declined, as a result the amount and distribution of rainfall decreased over most parts of the country. The situation might have minimized shocks related to water logging in places particularly in low laying areas of clayey soils and performance of Belg crops that were found at different phenological stages. On the other hand, Southwestern, Central and Eastern portions of the country received sufficient amount of rainfall. Some station reported heavy fall. Among them Nekemte, A.A (Obs), Alge, Amba Mariam, Arsi Robe, Assosa, Chira, Ginir, Hara, Kachise, Lemu genet, Zeway and Shola Gebeya recorded heavy falls in the range of 37.0 to 83.0 mm in one rainy day. This situation might have favored agricultural activities, long cycle crops, and availability of pasture and water over pastoral and agro pastoral areas. However, extreme heavy fall might have caused water logging in low-laying areas of the country.

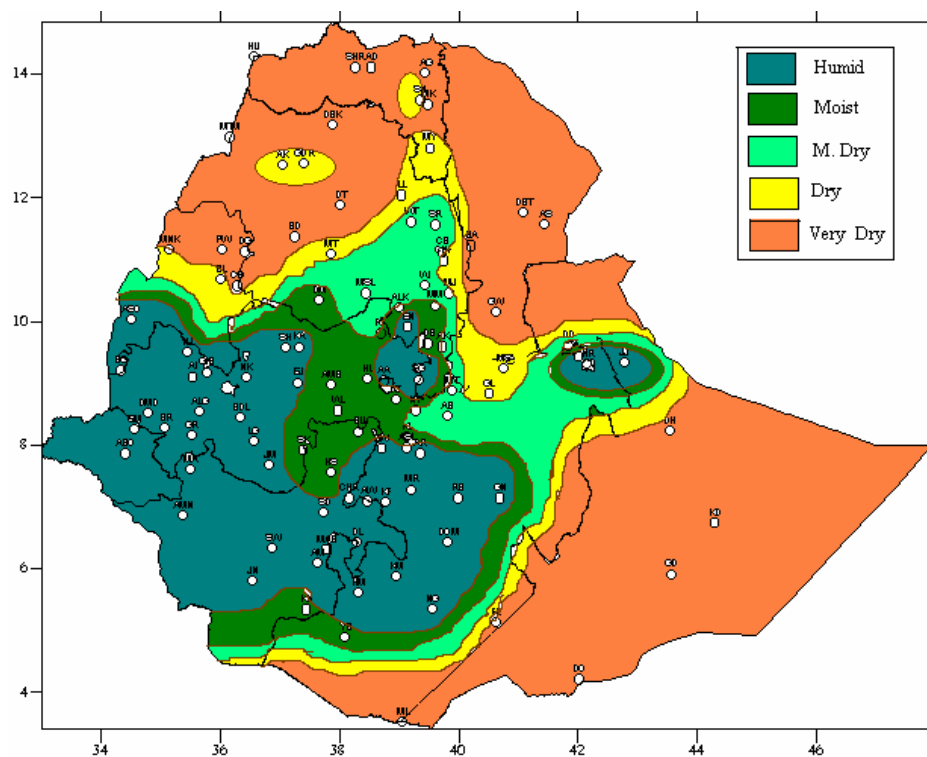


Fig.3 Moisture Status for (11-20 May, 2010)

As indicated on Fig.3; Gambela, SNNPR, most parts of Oromia and central parts of the country received Moist to Humid moisture condition and parts of northern Benshangul-Gumuz, parts of eastern and southern Amhara and parts of eastern Oromia received moderately Dry moisture status. The situation favored Belg agricultural activities as well as availability of pasture and drinking water particularly in pastoral and agro pastoral areas of the country. On the other hand, most parts of Somali, north eastern and north western parts of the country experienced dry and very dry moisture condition, in line with this might have negatively affected the seasonal agricultural activities.

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

In the coming ten days normal dry and warm weather condition expected to prevail over eastern and southern portions of the country, as a result the amount and distribution of rainfall decreased over most parts of the country. The situation might have minimized shocks related to water logging in places particularly in low laying areas of clayey soils and performance of Belg crops that were found at different phenological stages. On the other hand, northern portions of SNNPR, Gambela, western portions of Oromia, Benshangul Gumuz, western Amhara, and eastern portions of the country expected to have normal to above normal rainfall, while southern portions of SNNPR, southern Oromia, most parts of Somalia will expect near normal rainfall. Hence, the situations will have positive impact on the on going Belg agricultural activities, long cycle crops which are found at different phenological stages, perennial crops and availability of pasture and drinking water over pastoral and agro pastoral areas in the aforementioned areas. On the contrary, Tigray, most parts of Afar, Amhara and central portions of the country expected dry weather condition and the situation will have positive impact over areas where the previous dekads damages due to water logging in places particularly in low laying areas of clayey soils and Belg agricultural crops which are found at different phenological stages. However, there should be moisture stress where prolonged dry spells occurred.