# NATIONAL METEOROLOGICAL SERVICES AGENCY
# TEN DAY AGROMETEOROLOGICAL BULLETIN

**P.BOX 1090 ADDIS ABABA TEL 512299 FAX 517066 E-mail nmsa@telecom.net.et**

**11-20, March 2005 Volume 15 No. 8** **Date of issue March 23, 2005**

## SUMMARY

During the first dekad of March 2005, the observed better rainfall activity up to 32.7 mm in one to four rainy days over eastern Amhara like Mehal Meda, Kombolcha, Bati, and Majete could ease the persisted moisture deficient during the preceding dekads. Among the reporting stations Sodo and Hosaina exhibited 31.2 and 33.4 mm of heavy falls, respectively. From central Oromiya, Bui and Eteya reported 43.2 and 51.7 mm of rainfall in one rainy day, respectively. Besides southern highlands like Dolo Mena and Kibre Mengist received falls up to 78.2 mm during the ten days period. As a result a decrease in extreme maximum temperature has been observed in some areas like Assosa, Dire Dawa, Chagni, Arba Minch, Mieso and Metehara as compared to that of the preceding dekad, thereby decreasing eveapotraspiration to some extent in the areas. However, still a rise in extreme maximum temperatures by 2.25 - 4°C has been observed in some areas like Gode, Metehara and Pawe as compared to that of the long term average. In general the above mentioned rainfall condition could have significant contribution for land preparation and sowing activities in some areas of central Oromiya, most parts of SNNPR, parts of eastern Oromiya and parts of eastern Amhara.

During the second dekad of March 2005, most parts of the country received normal to above normal rainfall. Among the reporting stations some stations (About 21) exhibited 30-65.3 mm of heavy falls in one rainy day. However, in accordance with adverse conditions report with the exception of some areas like Gebre Guracha there was no significant negative impact on the on going season's agricultural activities over much of Belg growing areas. Generally the observed normal to above normal rainfall over much of the country could favour Belg crops over Belg growing areas. Besides, it could have positive contribution for land preparation and sowing activities for long season crops like sorghum and maize in most parts of long cycle growing areas. With regard to air temperature, there was a relatively decrease in maximum temperature in most parts of the country. Nevertheless a rise in maximum temperature has been observed in some areas like Assayita, Metahara, Pawe, Dubti and Dire Dawa by 2, 3.3, 3.4, 3.5 and 4.6 °C, respectively, as compared to that of the long term mean during the dekad under review.

## 1. WEATHER ASSESSMENT

### 1.1 RAINFALL AMOUNT (Fig. 1)

Few areas of western SNNPR and western Oromiya received falls greater than 100 mm. Gambela, most parts of SNNPR, western and few areas of eastern Oromiya , pocket areas of central Tigray, parts of eastern and central Amhara experienced 50- 100 mm of rainfall. Most parts of Tigray, southern and western margin of Afar, Amhara, parts of central, eastern and southern Oromiya, northeastern tip of SNNPR and northern Somali received 25-50 mm of rainfall. Western and eastern Tigray, most parts of Benishangul-Gumuz, parts of central Afar, parts of southern and eastern Oromiya, few areas of central and parts of southern Oromiya received 5-25 mm of rainfall. There was little or no rainfall over most parts of southern half of Somali, northern half of Afar and northwestern margin of Amhara.

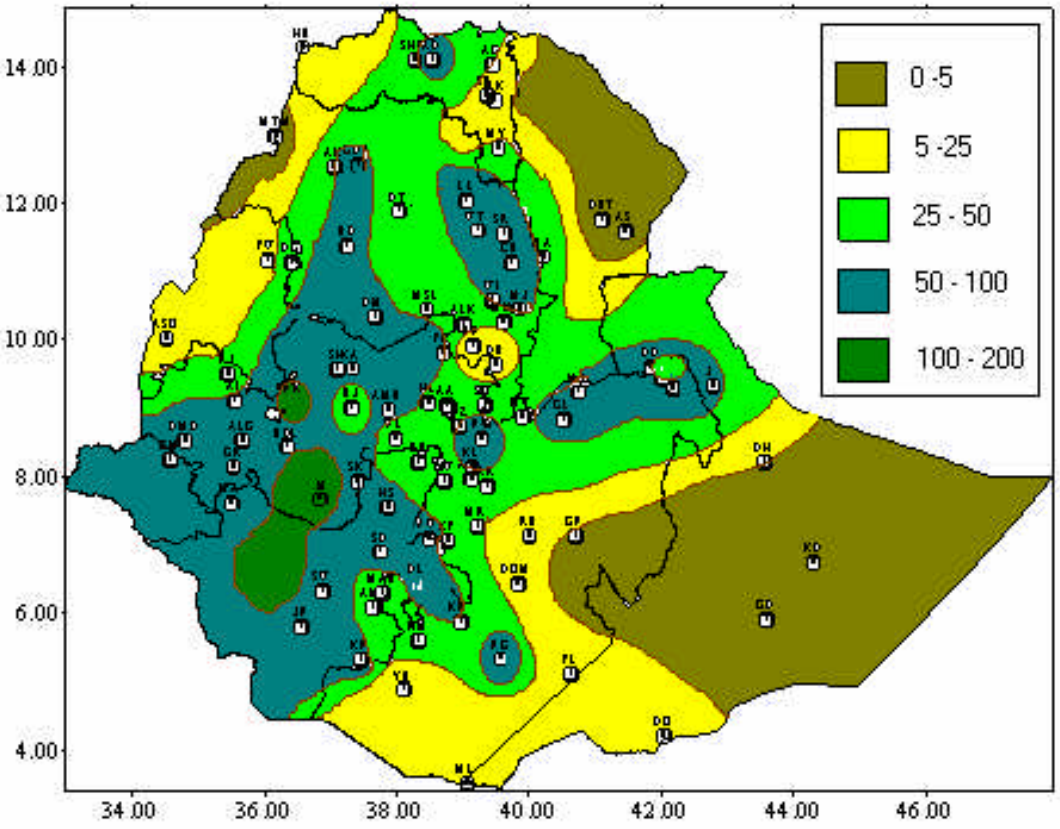


**Fig 1. Rainfall distribution in mm (11-20 March, 2005)**

## 1.2 RAINFALL ANOMALY (Fig. 2)

Most parts of Belg growing areas of the country received normal to above normal rainfall.

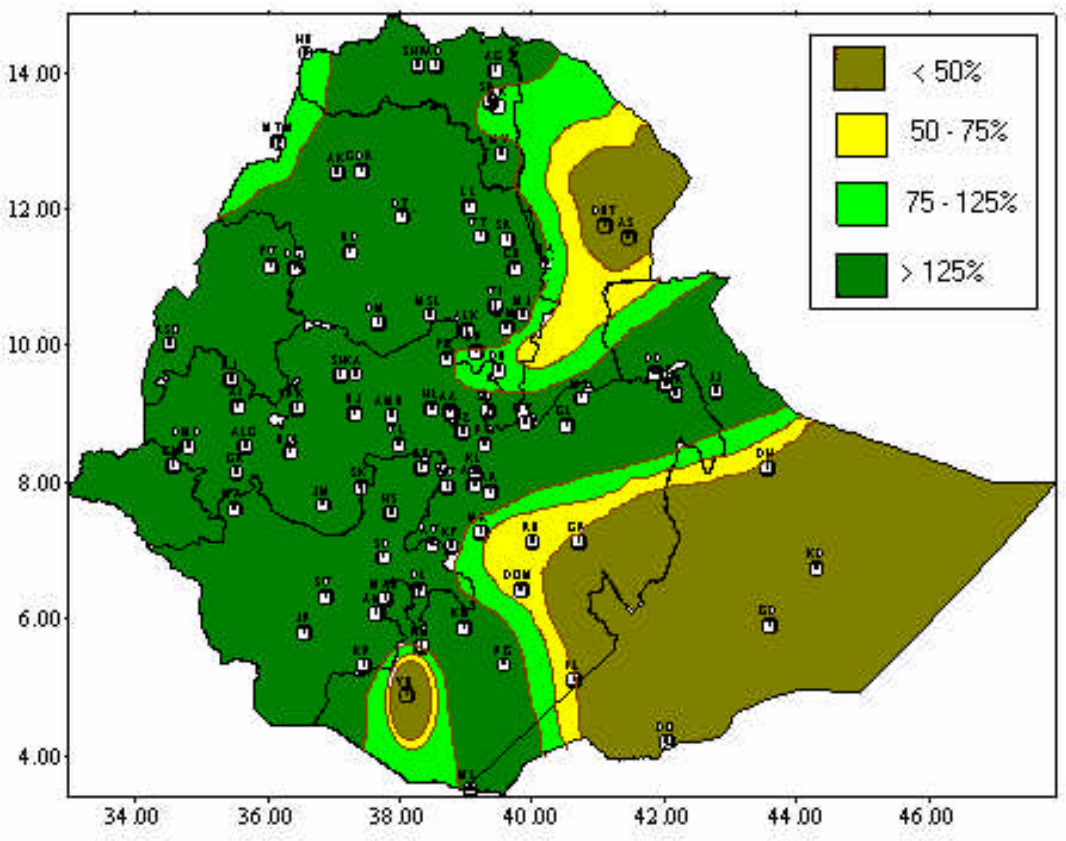


**Fig.2 Percent of normal rainfall (11-20 March, 2005)**

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

## 1.3 TEMPERATURE ANOMALY

A rise in maximum temperature has been observed in some areas like Assayita, Metahara, Pawe, Dubti and Dire Dawa by 2, 3.3, 3.4, 3.5 and 4.6 °C respectively as compared to that of the long term mean during the dekad under review.

## 2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF MARCH 2005

In the coming dekad near normal rains are anticipated over Tigray, western Amhara, western Oromiya, western portion of SNNPR and Benishangul-Gumuz, and most parts of Eastern Amhara, Afar, central and eastern Oromya. Somali, eastern portions of SNNPR and Borena will have below normal rains but near normal rains are anticipated over pocket areas.

## 3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

### 3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed normal to above normal rainfall over much of Belg growing areas of the country could favour Belg crops over Belg growing areas. Besides, it could have positive contribution for land preparation and sowing activities for long season crops like sorghum and maize in most parts of long cycle crop growing areas.

### 3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DAKAD

The anticipated near normal rainfall distribution over much of Tigray, western Amhara, western Oromiya, western portion of SNNPR and Benshangul-Gumuz would have indispensable contribution for field preparation and sowing activities of long cycle crops like maize and sorghum. On the contrary, the expected below normal rainfall over Belg growing areas of eastern Amhara, central and eastern Oromiya as well as eastern portion of SNNPR would have negative impact on crop water requirements of recently sown Belg crops. The scanty moisture condition together with the extended sunny out break would create conductive atmosphere for the outbreak of pests and diseases. Besides, the anticipated rise in maximum temperature over the low lands of the country would enhance rate of evapo-transpiration. This situation negatively affects the normal growth and development of plants over the areas. However, in order to use the expected near normal rainfall over few areas of the above mentioned areas effectively proper water harvesting techniques should be practiced.