NATIONAL METEOROLOGICAL SERVICES AGENCY
TEN DAY AGROMETEOROLOGICAL BULLETIN

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SUMMARY

During the third dekad of February 2005, with the exception of some areas of central and parts of southern Ethiopia most parts of Belg growing areas exhibited below to much below normal rainfall. This condition could have negative effect on moisture availability over Belg growing areas of South Tigray like Enda Mehoni, Korem, Raya Azebo and Alamata including parts of eastern Amhara like Wegel Tena, Sirinka, Bati and Mehal Meda areas where the duration of agricultural activities of the Belg season extends from December/January to May. Thus, it could shorten the growing season and result in shift in sowing date thereby shifting harvesting time and affecting early Kiremt season's agricultural activities like land preparation and sowing. On the other hand the observed better rainfall activities over Belg growing areas of central and parts of southern Oromiya including parts of eastern and southern parts of SNNPR could favor season's agricultural activities. With regard to air temperature, Chagni, Sawula, Ejaji, Assossa, Dire Dawa, Arba Minch, Meisso, Merab Abaya, Gode, Assayta, Dupti, Metehara, Pawe, Metema and Mankush recorded 35.5, 35.6, 35.9, 36.0, 36.3, 36.8, 36.8, 37.4, 37.5, 37.6, 38.5, 40.0, 41.5, 42.0 and 42.7 °C extreme maximum temperatures, respectively during the third dekad. Besides, a rise in maximum temperature by 1.3 - 6.07 °C has been observed in some areas like Gode, Assayta, Arba Minch, Dubti, Sawula, Pawe, Dire Dawa, Assossa and Metahara as compared to that of long term mean.

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.

1. WEATHER ASSESSMENT

1.1 RAINFALL AMOUNT (Fig. 1)

Northern SNNPR and southern midlands of Oromiya received falls in the range of 50 - 100 mm. Most parts of SNNPR, few areas of southern and central Oromiya, pocket areas of eastern Amhara received 25 -50 mm of rainfall. South Tigray, most parts of eastern Amhara, most parts of Oromiya, Gambela and northern Somali experienced 5 - 25 mm of rainfall. There was little or no rainfall for the rest of the country.

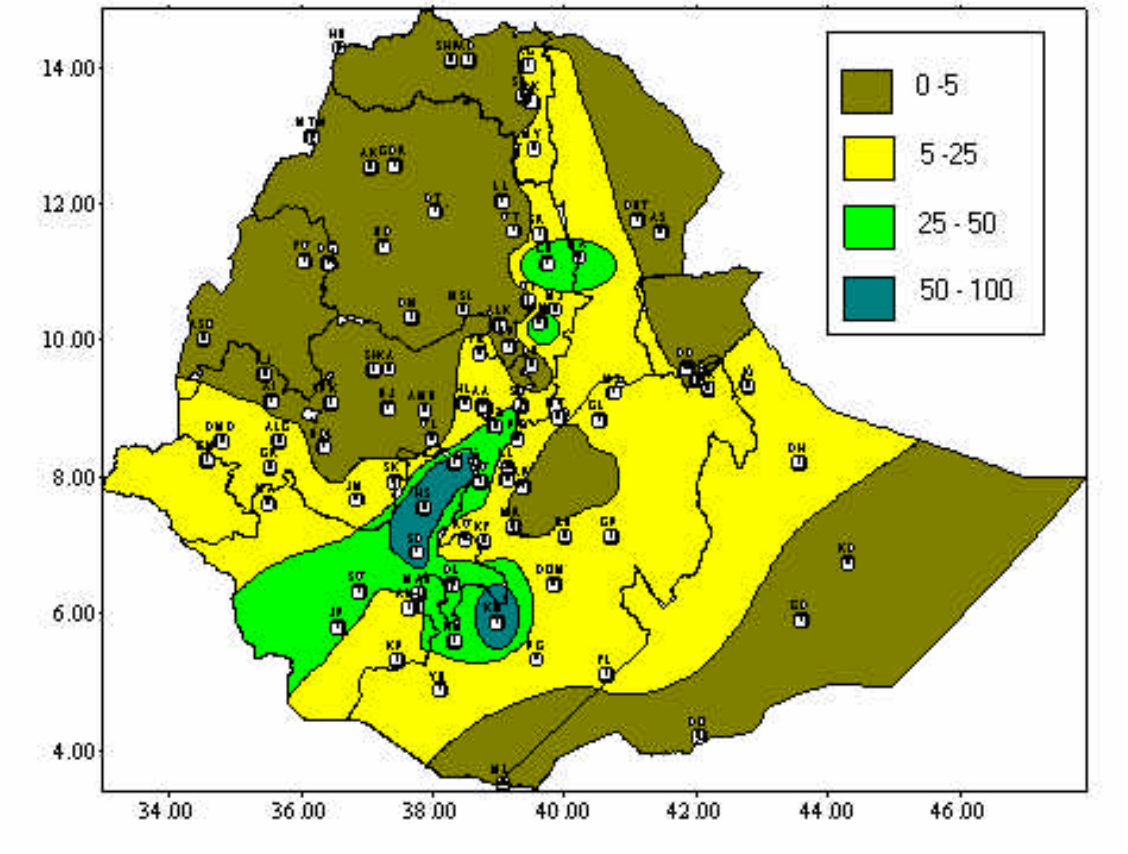

Fig 1. Rainfall distribution in mm (1-10 March, 2005)

1.2 RAINFALL ANOMALY (Fig. 2)

Parts of South Tigray, parts of eastern Amhara and adjoining areas of Afar, central, parts of eastern and southern Oromiya, Gambela and most parts of SNNPR exhibited normal to above normal rainfall while the rest of the country received below normal rainfall.

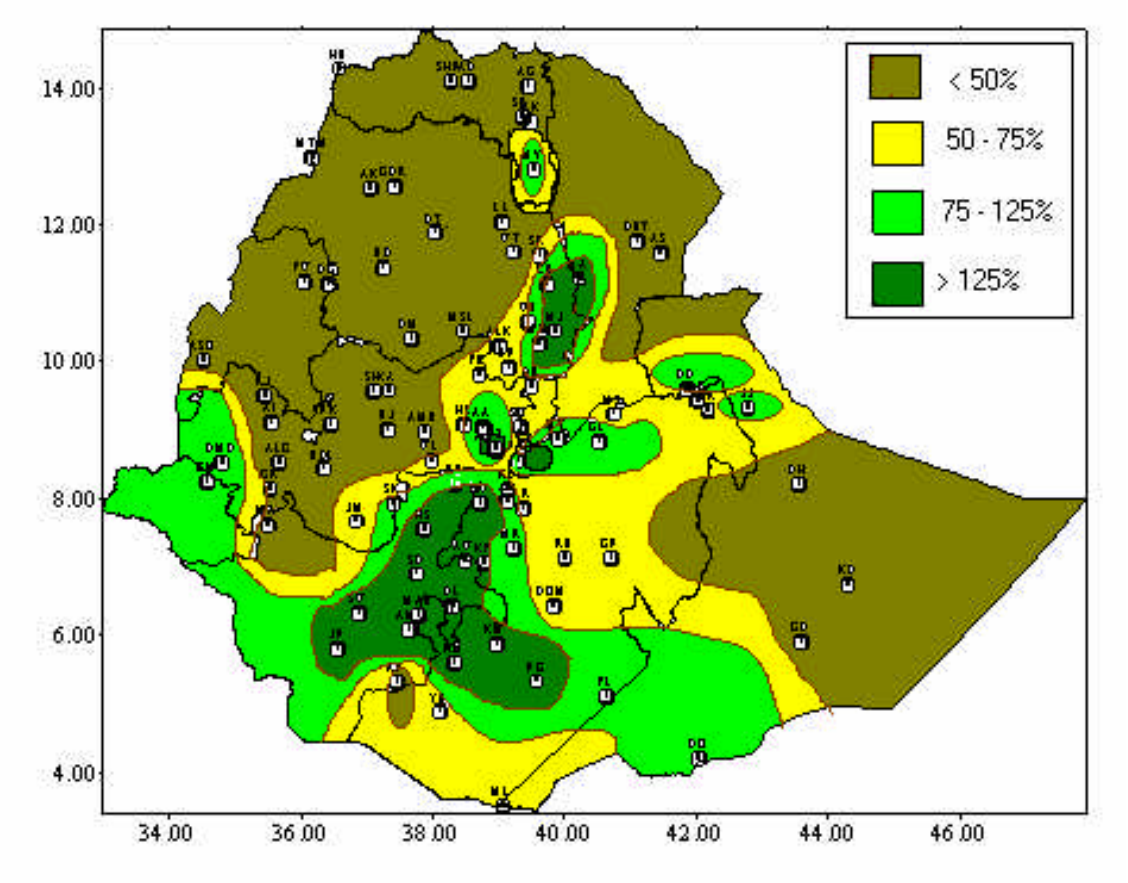

Fig.2 Percent of normal rainfall (1-10 March, 2005)

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

1.3 TEMPERATURE ANOMALY

A decrease in extreme maximum temperature has been observed in some areas like Assosa, Dire Dawa, Chagni, Arba Minch, Mieso and Metehara as compare to that of the preceding dekad. However 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.

2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF MARCH 2005

In the coming dekad eastern Tigray, eastern Amhara, western part of Afar, central and eastern Oromya, northern Somali as well as northern portion of SNNPR and the adjoining area of western Oromya will get normal to above normal rainfall with a chance of heavy rains at some places. Besides, western Tigray, western Amhara, Benishangul-Gumuz, southern parts of SNNPR, Gambela , Southern Oromyiya as well as southern Somali and eastern Afar are expected to have near normal rainfall.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

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, Methehara 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.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DAKAD

The anticipated normal to above normal rainfall over eastern Tigray, eastern Amhara, western Afar, central and eastern Oromiya, northern Somali, northern SNNPR and adjoining areas of western Oromiya would favour land preparation for long cycle crops like sorghum and maize. Besides, it would help sowing activities of the same cereal crops in areas where their sowing activities is at this time of the year(mid March) like Hosiana, Aman, Tepi, Sekoru, Wonago, Yirga Chefe, Limu Genet, Dolo Mena and Kulumsa. The expected near normal rainfall over western Tigay, western Amhara, Benishangul - Gumuz, southern SNNPR, Gambela, southern Oromiya, southern Somali and eastern Afar would favour land preparation over the highlands and would favour the availability of pasture and drinking water over the lowlands of pastoral areas of the above mentioned areas. Thus, attention should be given for proper water harvesting techniques in order to exploit the expected conducive wet condition.