NATIONAL METEOROLOGICAL SERVICES AGENCY
TEN DAY AGROMETEOROLOGICAL BULLETIN

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

1-10, April 2005 Volume 15 No. 10 **Date of issue April 13, 2005**

SUMMARY

During the third dekad of March 2005, the observed below normal rainfall over most parts of Belg growing areas could have negative impact on crops water requirements of the recently sown Belg crops. Pursuant to crop phenological report some areas like Dolo Mena reported slight wilting due to water stress. Besides, it could affect sowing activities in areas where sowing activities are under question like Kulumsa, Kibre Mengist, Mega, Hosiana, Tepi, Sekoru, Wenago, Yirga Chefe, Kochere, Srinka and Mieso. The recently sown maize crop was at emergence stage over western and parts of eastern Oromiya including north-eastern SNNPR. Sowing of cereals like barley and sorghum was underway in some areas of eastern Amhara and western Oromiya. With regard to extreme maximum temperatures Arba Minch, Metehara, Elidar, Gode, Assayta, Pawe, Mankush, Dubti and Metema exhibited 35.2, 36.0, 38.5, 39.1, 39.5, 41.0, 41.5, 41.6 and 42.5 °C of extreme maximum temperatures, respectively. Moreover there was a rise in maximum temperature in some areas like Metehara, Gode, Assayta and Dubti by 1.41, 1.9, 2.16 and 5.07°C, respectively.

During the first dekad of April 2005 there was little or no rainfall over most parts of the country. This situation could exacerbate the persisted dry condition observed in most parts of the country during the preceding dekad, thereby negatively affecting the crop water requirements of Belg crops and the normal sowing activities of long cycle crops in areas where sowing activities were under question like Arsi Robe, Kulumsa, Ziway, Kibre Mengist, Robe, Limu Genet, Aman, Tepi, Sekoru, Wenago, Yirga Chefe, Kochere, Bule and Sirinka. Pursuant to the crop phenological report some areas of northern SNNPR (Hosaina), western Oromiya (Alge) and eastern Amhara (Majete) reported medium field condition due to water stress. Maize was at ninth leaf stage in some areas of northern SNNPR and western Oromiya. Sorghum was at third leaf stage in some areas of western Oromiya. Barley and pulse crops were at emergence stage in some areas of eastern Amhara and north-eastern SNNPR, respectively. Potato was at budding stage in some areas of northern SNNPR. With regard to maximum air temperatures, there was a rise in extreme maximum temperature over Assayta, Gode, Metehara, Arba Minch, Dere Dawa and Dubti by 3.9, 4.13, 4.24, 4.85, 6.25 and 6.4°C, respectively during the dekad under review. Thus, this condition could increase evapo transpiration in the areas.

1. WEATHER ASSESSMENT

1.1 RAINFALL AM OUNT (Fig. 1)

With the exception of parts of southern SNNPR there was little or no rainfall over most parts of the country.

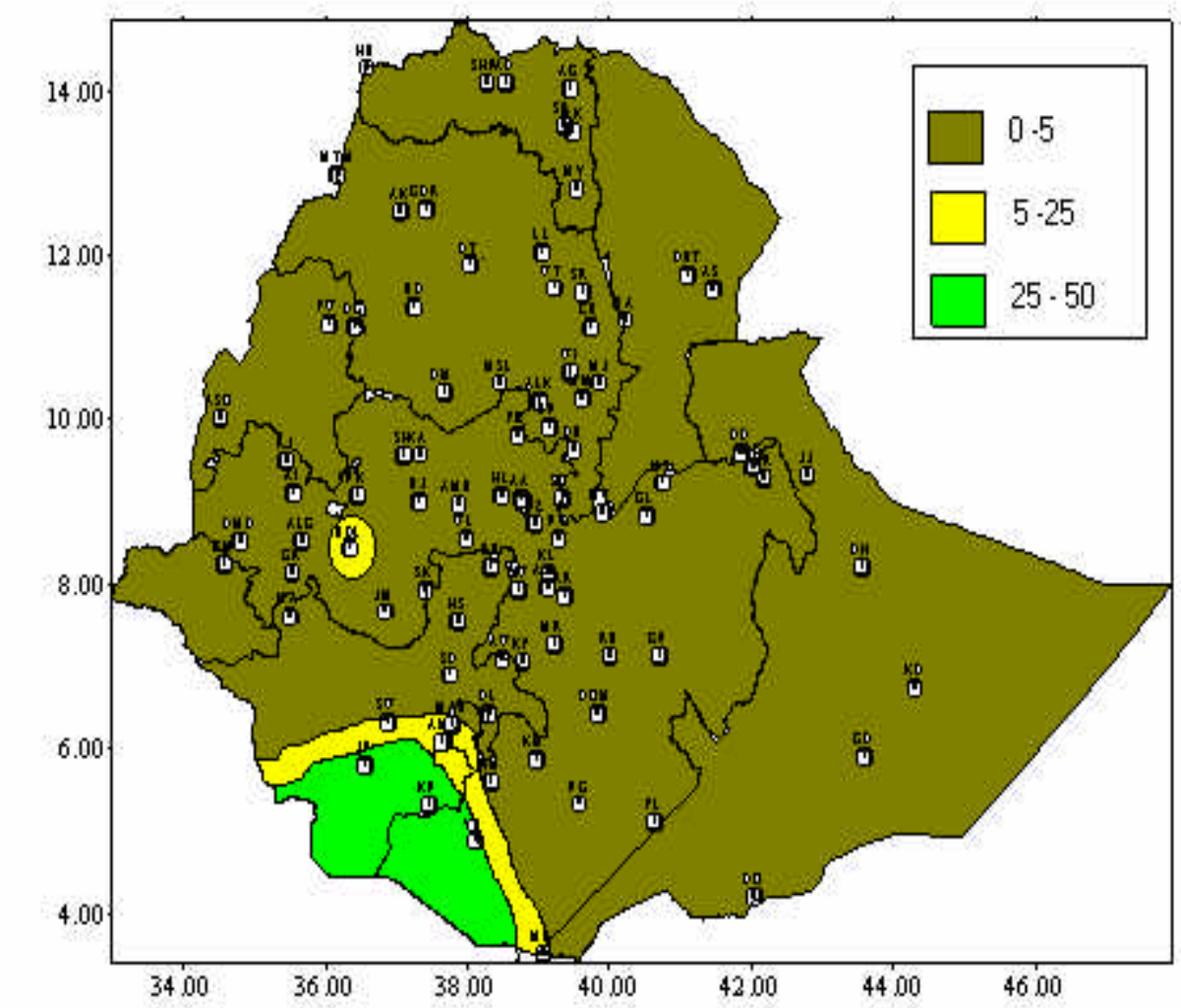

Fig 1. Rainfall distribution in mm (1-10 April, 2005)

1.2 RAINFALL ANOMALY (Fig. 2)

Most parts of the country exhibited below normal rainfall.

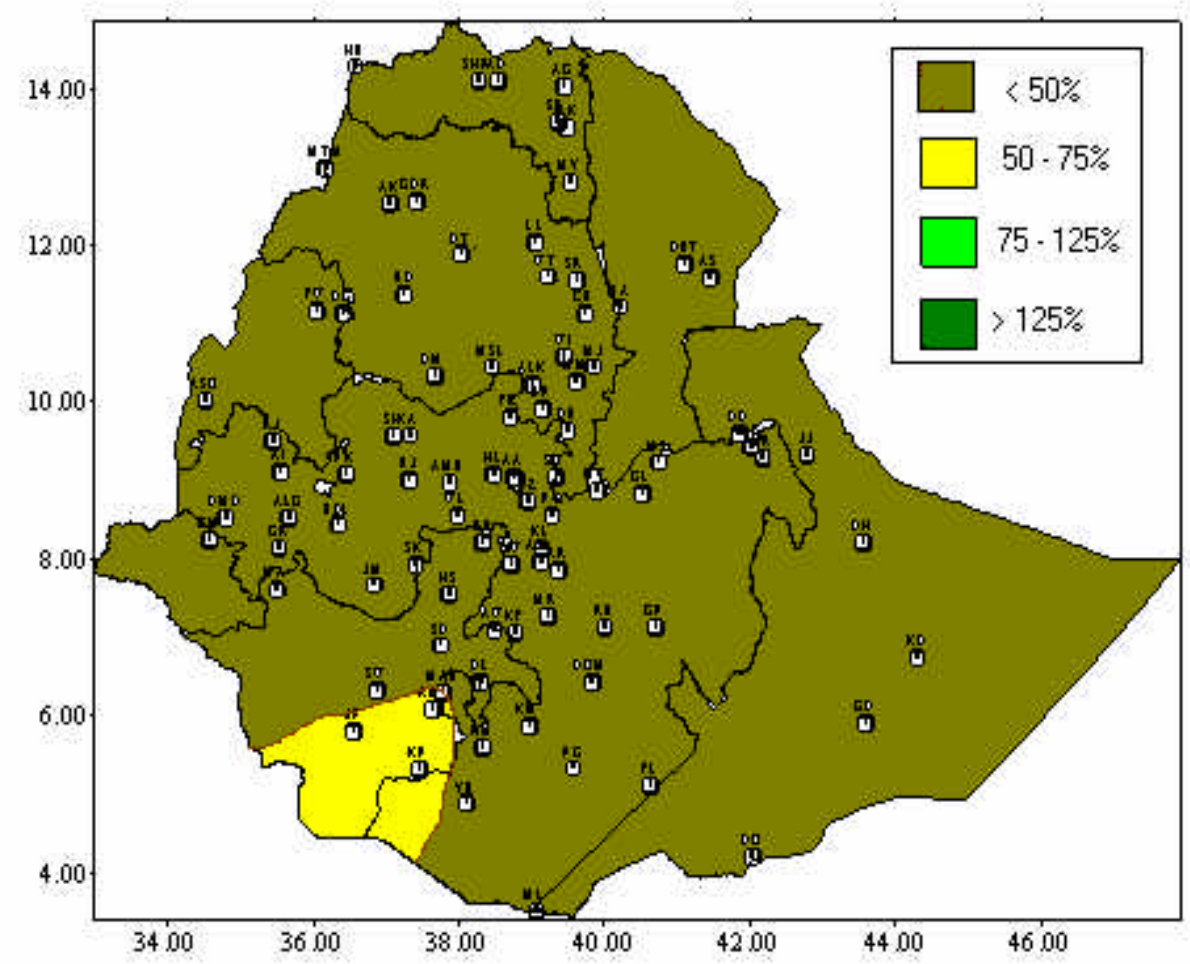

Fig.2 Percent of normal rainfall (1-10 April, 2005)

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

1.3 TEMPERATURE ANOMALY

Arba Minch, Mierab Abaya, Dire Dawa, Metehara, Gode, Elidar, Assayta, Dubti, Metema and Mankush experienced extreme maximum temperatures greater than 35°C during the dekad under review. Besides, there was a rise in extreme maximum temperature over Assayta, Gode, Metehara, Arba Minch, Dere Dawa and Dubti by 3.9, 4.13, 4.24, 4.85, 6.25 and 6.4°C, respectively during the dekad under review.

2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF APRIL 2005

In the coming ten days, an increase incursion of moisture is anticipated over various parts of the country. In general most parts of Somali, eastern and southern Ormiya, SNNPR as well as Gambela are anticipated to have near normal rains. Tgray, eastern Amhara and central Oromiya will have below normal rains. However they will have near normal rains at places. Most parts of western Amhara, Benishangul-Gumuz and western Oromiya will have near normal rains with below normal rains at places.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed dry and sunny weather situation could exacerbate the persisted water stress in most parts of the country during the preceding dekad, thereby negatively affecting the crop water requirements of Belg crops and the normal sowing activities of long cycle crops in areas where sowing activities were under question like Arsi Robe, Kulumsa, Ziway, Kibre Mengist, Robe, Limu Genet, Aman, Tepi, Sekoru, Wenago, Yirga Chefe, Kochere, Bule and Sirinka. Pursuant to the crop phenological report some areas of northern SNNPR (Hosaina), western Oromiya (Alge) and eastern Amhara (Majete) reported medium field condition due to water stress. Maize was at ninth leaf stage in some areas of northern SNNP and western Oromiya. Sorghum was at third leaf stage in some areas of western Oromiya. Barley and pulse crops were at emergence stage in some areas of eastern Amhara and north-eastern SNNPR, respectively. Potato was at budding stage in some areas of northern SNNPR. With regard to maximum air temperatures, there was a rise in extreme maximum temperature over Assayta, Gode, Metehara, Arba Minch, Dere Dawa and Dubti by 3.9, 4.13, 4.24, 4.85, 6.25 and 6.4°C, respectively during the dekad under review. Thus, this condition could increase evapotranspiration in the areas.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DAKAD

The anticipated below normal rainfall over most parts of eastern Tigray, Amhara and central Oromiya would exacerbate the persisted water stress observed during the preceding dekads over the areas. Thus attention should be given for sensitive areas. However, the expected near normal rainfall at places would have positive contribution to some extent. On the other hand the expected near normal rainfall over western Amhara, Benishangul - Gumuz and western Oromiya would favor land preparation for long cycle crops and the coming early Meher season's agricultural activities as well. Besides, the expected near normal rainfall over most parts of Somali, eastern and southern Oromiya, SNNPR and Gambela would favor crops over the highlands and the availability of pasture and drinking water over the lowlands of pastoral areas. Nevertheless, attention should be given for proper water harvesting techniques side by side in order to minimize unnecessary moisture losses.