NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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SUMMARY

During the third dekad of April 2006 the observed rainfall over most parts of Belg growing areas was in a good shape in terms of amount and distribution (observed in 3-7 rainy days in most areas). Besides, some midland and highlands of southern Ethiopia have exhibited falls in nine rainy days. Thus this condition could favor sowing activities of cereals and pulses in areas where sowing activity is under question like central (Meraro, Woliso, Ziway, Kachise and Adama), southern (Yabelo, Negele, Moyale and Awassa), western (Bedelle, Algea and Limu Genet), northeastern (Majete, Alem Ketema and Bati) and eastern highlands (Jijiga and Alemaya). Besides, the observed good rainfall amount and distribution favored crops, which were at different phenological stages. Among the reporting station Yabello, Bedelle, Sekoru, Konso, Sawela, Ginner, Sodo, Dembi Dolo, Gelemso, Belate, and Moyale received heavy rainfall 31.2, 32.0, 33.4, 33.7, 36.1, 38.3, 39.1, 41.5, 43.6, 48.0 and 93.4 mm in one rainy day, respectively. With regard to air temperature, Metema, Mankush, Semera, Assayta, Metehara, Gode, Chagni and Dire Dawa recorded extreme maximum temperature as high as 42.5,41.0, 40.5,40.2, 39.3, 36.5, 35.0 and 35.0^{0}C respectively.

During the first dekad of May the observed normal to above normal rainfall over Belg growing areas could favor the water requirement of the existing growing crops and the recently sown long cycle crops like Sorghum and Maize. Besides it could have a positive contribution for early season's agricultural activities of the coming Meher. Besides, it could favor sowing activity in areas where sowing activity is under question in case of long cycle crops. Nevertheless, some pocket areas of central Oromia and eastern Amhara reported crop damage due to moisture stress. Moreover, the observed deficient moisture condition over southern Afar, southern Oromia and most part of Somali could exacerbate the deficient condition persisted during the preceding dekad. Thus this condition could have negative impact on the normal growth and development of plant and the availability of pasture and drinking water as well. With regard to air temperature, Gode, Methara, Dire Dawa, Pawe, Metema, Assayta and Semera recorded extreme maximum temperature as high as 36.8, 38.5, 38.7, 40.5, 41.3, 42.0 and 43.0 ^{0}C respectively.

1. WEATHER ASSESSMENT

1.1 May 1- 10, 2006

1.1.1 RAINFALL AMOUNT (Fig. 1)

Pocket areas of western Oromia received rainfall amount greater than 100 mm. Gambela, much of western and some pocket areas of Oromia, northern, western and southwestern SNNPR, most part of southern and eastern Benshangul Gumuz, southwestern Amhara and most parts of eastern Tigray experienced 50-100 mm of rainfall. Central Tigray, northern tip of Afar, much of central Amhara, most part of Oromia, some areas of Benshangul Gumuze, much of eastern half of SNNPR and some areas of western Somali received rainfall amount ranging from 25-50 mm. Western and southern Tigray, western and some areas of eastern Amhara, some areas of northern and western Afar, northern Benshangule Gumuz, some areas of central Oromia and northern, central and southern

Somali experienced 5-25mm of rain fall. There was little or no rainfall for the rest parts of the country.

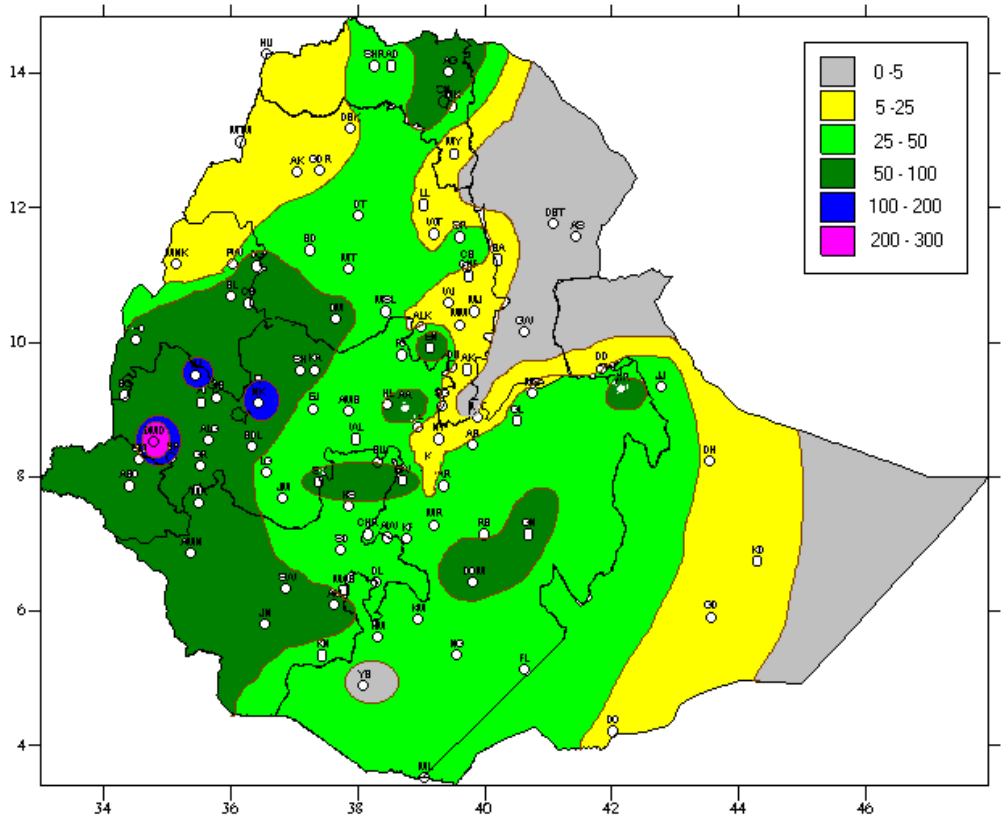

Fig 1. Rainfall distribution in mm (1 – 10 May, 2006)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Normal to above normal rainfall distribution has been observed over most part of Tigray, Amhara, Benshangul Gumuze, Gambela, and SNNPR, much of Oromia and pocket areas of Somali. The rest part of the country exhibited below normal to much below normal rainfall distribution.

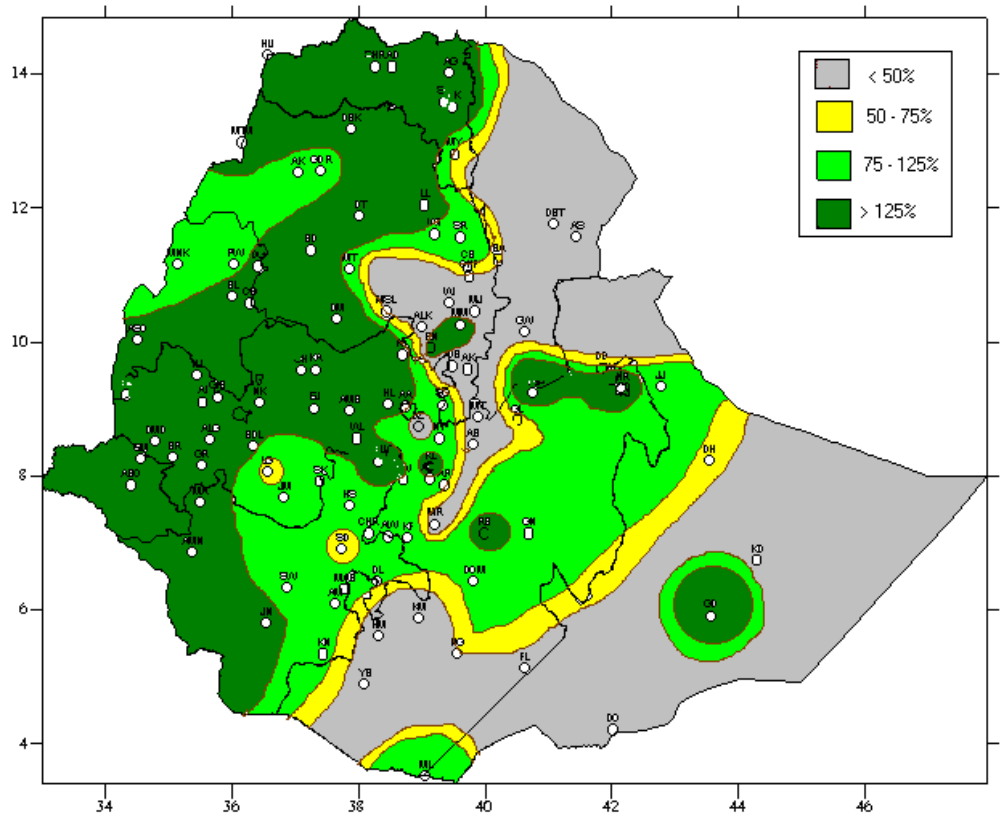

Fig.2 Percent of normal rainfall (1 – 10 May, 2006)

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

1.1 TEMPERATURE ANOMALY

Gode, Methara, Dire Dawa, Pawe, Metema, Assayta and Semera recorded extreme maximum temperature as high as 36.8, 38.5, 38.7, 40.5, 41.3, 42.0 and 43.0 ^{0}C respectively.

2. WEATHER OUTLOOK FOR THE SECON DEKAD OF MAY 2006

Predicted Meteorological information indicates that for the coming ten days rain producing systems are expected to have a better strength over the western half of the country. While it will be weaken from northeastern, central and eastern Ethiopia. Hence, the spatial rainfall distribution and amount is going to be weakening over most parts of the Belg growing areas of the country. In general, Benishagul-Gumuz, western Amhara and Tigray, western Oromiya, SNNPR and its adjoining areas of southern Oromiya will get near to normal rainfall. Where as the rainfall amount is expected to be heavy over some places of southwestern and central Ethiopia. On the other hand, eastern Amhara and Tigay and Oromia will have normal rainfall at few places. However below normal rainfall is highly likely to dominate many places. The rainfall amount which is expected over southern Somali and its adjoining areas of extreme portions of southern Oromia for a few days is highly likely close

to normal however its spatial distribution as well as its continuity is less likely to be consistency. Nevertheless, much of Afar will be under dry weather condition.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed normal to above normal rainfall over Belg growing areas could favor the water requirement of the existing growing crops and the recently sown long cycle crops like Sorghum and Maize. Besides it could have a positive contribution for early season's agricultural activities of the coming Meher. Besides, it could favor sowing activity in areas where sowing activity is under question in case of long cycle crops. Nevertheless, some pocket areas of central Oromia and eastern Amhara reported crop damage due to moisture stress. Moreover, the observed deficient moisture condition over southern Afar, southern Oromia and most part of Somali could exacerbate the deficient condition persisted during the preceding dekad. Thus this condition could have negative impact on the normal growth and development of plant and the availability of pasture and drinking water as well. Pursuant to the crop phenological report barley was at tillering and shooting stages in some areas of eastern Amahara like Wegel Tena and Sirinka, respectively. Maize was at emergency stage in some areas of western and eastern Oromia (Chira, Gelemso and Bedele) while it was at Tasseling and ninth leave stage in some areas of midlands of Oromia like Dollo Mena and Kebre Mengist; Teff was at shooting stage in some areas of eastern Amhara (Majete) and in some areas of midlands of Oromia (Dolomena); Peas was at budding stage in some areas of central Oromia like Arsirobe. With regard to air temperature, Gode, Methara, Dire Dawa, Pawe, Metema, Assayta and Semera recorded extreme maximum temperature as high as 36.8, 38.5, 38.7, 40.5, 41.3, 42.0 and 43.0 ^{0}C respectively.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The anticipated normal rainfall condition over western Amhara and Tigray, Benshangul Gumze, western Oromia, Gambela, SNNPR and adjoining areas of southern Oromia would have positive contribution for Meher season land preparation and sowing activities particularly over western half of country. Thus, farmers should prepare themselves and give appropriate attention to exploit the expected better moisture condition ahead of time. Nevertheless, the expected heavy fall over central Ethiopia would have a negative impact particularly on croplands, which are found around riverbanks and low-lying areas. Therefore, proper attention should be given at the time of seedbed preparation in order to mitigate the problem of excess moisture to minimize the risk to some extent. On the other hand with the exception of some areas of eastern Oromia, the expected below normal rainfall over much of eastern Amhara and Tigay including eastern Oromia and northern Somali, and the anticipated deficient and erratic rainfall condition over southern parts of Somali and adjoining areas of southern Oromia would have negative impact on the water requirement of crops in case. Besides, the expected deficient and erratic rainfall particularly over some areas of southern Somali would exacerbate the prolonged dry situation persisted during the preceding dekads. Hence the concerned personnel should undertake and design special mitigating measures to get rid of the possible risk. Incase of other areas like Belg growing areas of eastern Ethiopia to tackle the expected deficient moisture condition proper attention should be given for sound water harvesting techniques to make use of the expected little moisture in the areas. The expected erratic and deficient rainfall condition would favor the outbreak of pest. Thus, proper attention and close monitoring action has paramount importance to take appropriation protection measures ahead of time.