NATIONAL METEOROLOGICAL SERVICES AGENCY
TEN DAY AGROMETEOROLOGICAL BULLETIN

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SUMMARY

During the third dekad of February 2004, most Belg benefiting areas experienced dry weather condition. This situation has created negative impact on the normal season's agricultural activities over the aforementioned areas and the availability of pasture and drinking water over pastoral and agro-pastoral areas. In general the extended dryness may require alternate coping mechanisms of the season's agricultural activity such as replanting, use of short cycle and drought resistant variety of crops. With regard to air temperature, Assayta, Metema and Pawe exhibited maximum temperature greater than 35°C while Debre Birhan, Alemaya, Bui and Arsi Robe experienced extreme temperature less than 5°C lowering up to – 0.6°C during the dekad.

During the first dekad of March 2004, below to much below normal rainfall was observed over much of country. This circumstance has worsened the persisted moisture deficit over Belg producing areas since the beginning of February. Similarly the observed much below normal rainfall together with a raise in temperature over Afar, the lowlands of northwestern Amhara, and northern Benishangul-Gumuz including Gambela had negative effect on the availability of pasture and drinking water. Regarding air temperature Assaita, Dubti, Metema, Pawe and Gambella registered extreme maximum air temperature, which were as high as 36.6, 37.5, 40.2, 40.5 and 42°C, respectively. This condition could maximize the rate of evapo-transpiration and negatively affected the normal growth and development of plants as well. Some highlands of central and eastern Oromiya, southern and southeastern Amhara, southern Tigray and northern SNNPR experienced extreme minimum temperature below 5°C during the dekad.

1. WEATHER ASSESSMENT

1.1 RAINFALL AMOUNT (Fig. 1)

Pocket areas of southern and western Oromiya received falls ranging from 5 – 50 mm of rainfall.

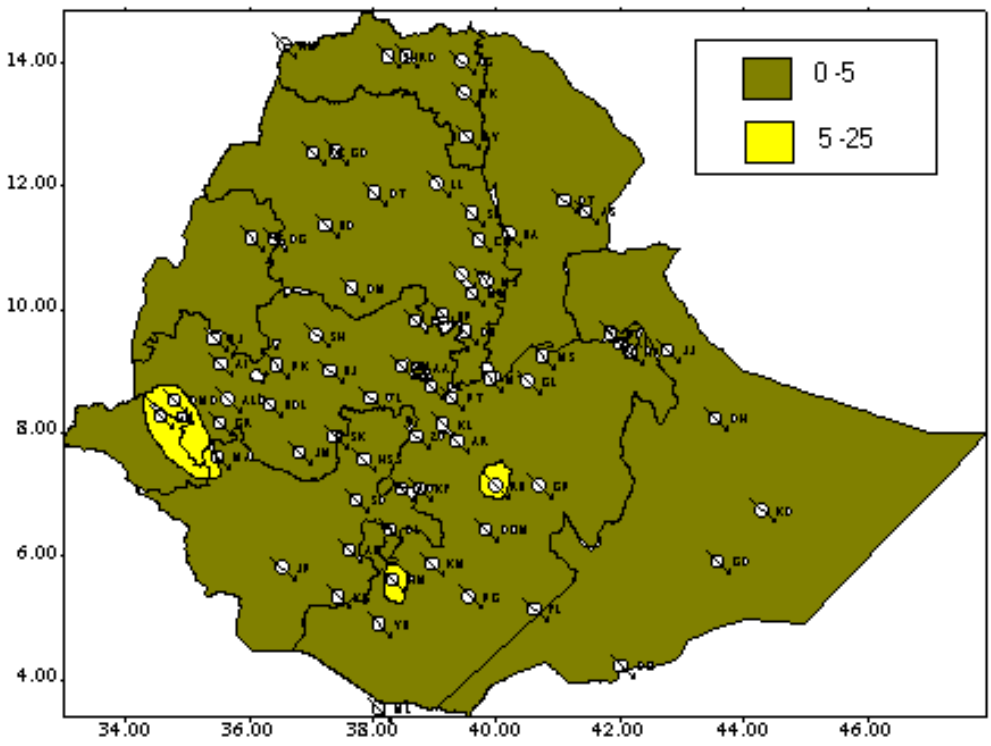

Fig 1. Rainfall distribution in mm (1-10, March 2004)

1.2 RAINFALL ANOMALY (Fig. 2)

Below to much below rainfall was observed over much of the country.

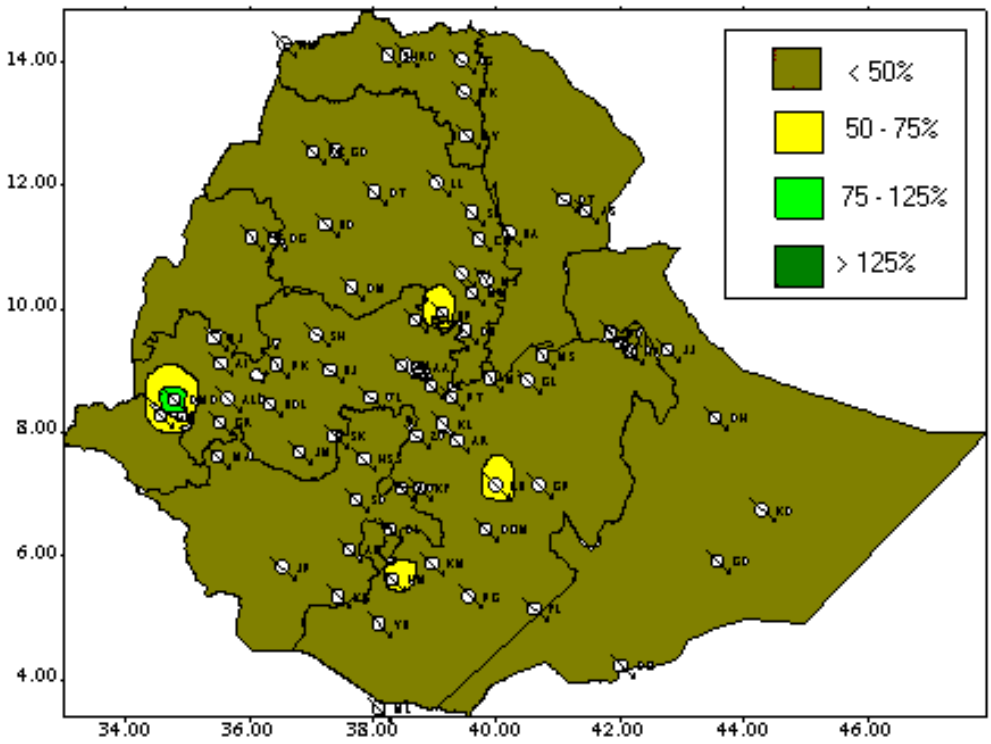

Fig.2 Percent of normal rainfall (1-10, March 2004)

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

1.3 TEMPERATURE ANOMALY

During the dekad Assaita, Dubti, Metema Pawe and Gambella exhibited maximum air temperature values which were as high as 36.6, 37.5, 40.2, 40.5 and 42 °C respectively whereas Robe, Koffele, Mehal Meda, Adigrat, Wegel Tena, Debre Zeit, Arsi Robe, Bui, Alemaya, Debre Birhan reported extreme air temperature below 5°C lowering up to 0°C.

2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF MARCH 2004

The rain producing systems are expected to boost in the coming ten days as compared that of the first decade of March. As a result much of Tgrai and Amhara, Afar, Benishngul-Gumuz, Gambela and western Oromiya are expected to get normal to above normal rainfall. Besides, much of SNNPR, central and eastern Oromya and northern Somali will get normal rainfall amount. In contrast, much of Somali and southern Oromia are anticipated to get below normal rainfall.

In general, the highlands of western Amhara, eastern Tigray, Gambela southern border of western Oromiya are expected to get normal to above normal rainfall. On the other hand, western Tigray, Afar, Much of Amhara, much of Oromiya, SNNPR and Somali are anticipated to get below normal rainfall.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed below to much below normal rainfall over much of country during the first dekad of March 2004 has worsened the persisted moisture deficit over Belg producing areas since the beginning of February. Similarly the observed much below normal rainfall together with a raise in temperature over Afar, the lowlands of northwestern Amhara, and northern Benishangul-Gumuz including Gambela had negative effect on the availability of pasture and drinking water. Regarding air temperature Assaita, Dubti, Metema, Pawe and Gambela registered extreme maximum air temperature, which were as high as 36.6, 37.5, 40.2, 40.5 and 42°C respectively. This condition could maximize the rate of evapo-transpiration and negatively affected the normal growth and development of plants as well. Some highlands of central and eastern Oromiya, southern and southeastern Amhara, southern Tigray and northern SNNPR experienced extreme minimum temperature below 5°C during the dekad.

In general the extended dryness may require alternate coping mechanisms of the season's agricultural activity such as replanting, use of short cycle and drought resistant variety of crops.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DAKAD

The anticipated better moisture incursion towards our area would favor season's agricultural activities. Thus, the expected normal to above normal rainfall over Belg growing areas of South Tigrai, eastern and southern Amhara would have positive impact on Belg agricultural activities and the availability of pasture and drinking water a well. The anticipated normal to above normal rainfall over western Oromiya, Gambela and Benishangul-Gumuz would ease the dry condition persisted over the areas and would have positive contribution to land preparation for log cycle of crops. The expected near normal rainfall over most pars of SNNPR, central, eastern Oromiya and northern Somali would improve the pasture condition of pastoral areas. Besides, it would favour land preparation and sowing activities.

On the contrary the expected below normal rainfall over most parts of Somali would have negative impact on the availability of pasture and drinking water and exacerbate the deficient condition persisted over the areas. Thus, those areas need close monitoring in order to respond appropriately.