

NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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

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SUMMARY

During the first dekad of June 2004, with the exception of western Amhara, Benishangul-Gumuz, parts of western and central Oromiya including few areas of eastern Oromiya most parts of the country exhibited below to much below normal rainfall. Thus, this condition could result in water stress on the existing crops in the field at this time of a year. Besides, it could exacerbate the deficient moisture condition persisted over most parts of Tigray, parts of eastern Amhara and SNNPR including parts of northern Somali and eastern Oromiya. For instance, Combolcha and Sodo reported slight wilting and partial drying due to water stress on sorghum and maize field, respectively. On the contrary some areas of western and central Oromiya reported heavy falls ranging from 30 – 40 mm. Among the reporting stations Bedelle, Woliso, Arsi Negele, Nekemte and Nedjo recorded 30, 32, 33.8, 38.4 and 40 mm of rainfall in one rainy day. With regard to temperature, there was no significant temperature anomaly as compared to that of the long years mean in most places.

During the second dekad of June 2004 the observed normal to above normal rainfall over most parts of Tigray, Amhara and SNNPR, parts of western and central Oromiya including pocket areas of eastern Oromiya favoured season's agricultural activities. On the contrary, some areas of eastern, central and western Oromiya were still under deficient condition. As a result, some areas of eastern (Gelemso), central (Bui) and western (Assosa) Oromiya including eastern Amhara (Combolcha) reported medium field condition due to water stress during the dekad under review. In accordance with the crop phenological report sowing of pulses were under way in some areas of central Oromiya. The recently sown maize crop was at emergence stage over central and western Oromiya while it was at tasseling stage in some areas of western Oromiya, which was sown earlier as of April 2004. Sorghum was at emergence and third leaf stages in some areas of eastern Amhara, western and central Oromiya. Nug was at emergence stage in some areas of central Oromiya. Sodo reported bad general field condition on maize field due to water stress. With regard to air temperature no significant anomaly was observed, however, there was a decrease in maximum temperatures (1.4 – 2.47 °C), which has no significant effect on crop growth, in some areas of eastern Ethiopia as compared to that of the long-term average.

1. WEATHER ASSESSMENT

1.1 RAINFALL AMOUNT (Fig. 1)

Western half of Tgray and Amhara, most parts of western half of Oromiya, eastern half of Benishangul Gumuz and northern SNNPR received falls ranging from 50-100; parts of central Tigray and Amhara, few areas of central and western Oromiya, parts of western and eastern SNNPR, central parts of Benshngul Gumuz experienced 25-50 mm of rainfall; eastern Oromiya, southern SNNPR, eastern half of Gambela, eastern Tigray, few areas of eastern Amhara and few areas of western Benishangul Gumuz received 5-25 mm of rainfall. There was little or no rain for the rest of the country.

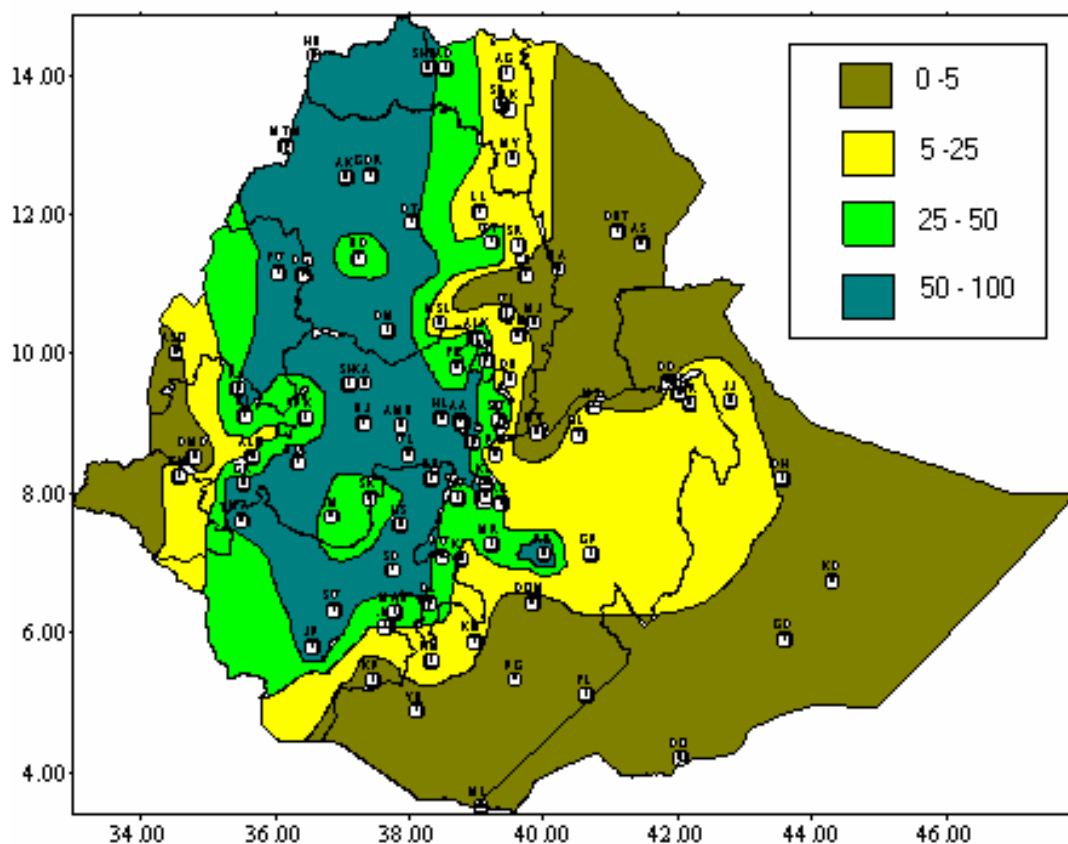


Fig 1. Rainfall distribution in mm (11-20, June 2004)

1.2 RAINFALL ANOMALY (Fig. 2)

Most parts of Tigray, Amhara and SNNPR including central and pocket area of Oromiya exhibited normal to above normal rainfall while the rest of the country received below to much below normal rainfall

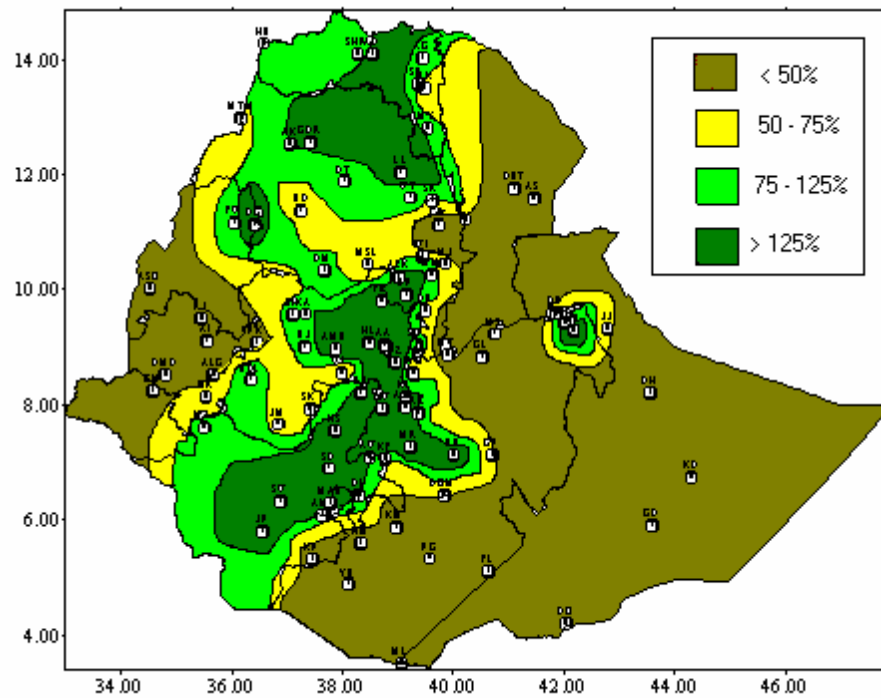


Fig.2 Percent of normal rainfall (11-20, June 2004)

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

1.3 TEMPERATURE ANOMALY

No significant temperature anomaly was observed over most parts of the country; however, there was a decrease in maximum temperatures (1.4 – 2.47 °C) in some pocket areas. Among the reporting stations, a decrease in maximum temperature has been observed over Gewane, Dire Dawa, and Bati by 1.4, 1.44 and 2.47 °C, respectively.

2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF JUNE 2004

In the coming ten days, much of Tigray and Amhara, Benishangul-Gumuz, Gambela, SNNPR, central and western Oromiya will have normal to above normal rainfall. In association with this, torrential rain accompanied with hail and thunder is highly likely to occur over western half of the country. Besides, eastern Amhara and Tigray, Harari, eastern Oromiya and the adjoining areas Afar and Somali are expected to get near normal rainfall. However, pocket places of the aforementioned areas will get below normal rainfall. On the other hand, partly cloudy condition will dominate over Afar, southern half of Somali as well as the lowlands of southern Oromiya and southern borders of SNNPR.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed normal to above normal rainfall over most parts of Tigray, Amhara and SNNPR, parts of western and central Oromiya including pocket areas of eastern Oromiya favoured season's agricultural activities. Nevertheless, heavy fall ranging from 32 – 56 mm, which could cause crop damage, has been observed over some areas of central, western and northeastern parts of the country in one rainy day. On the contrary, some areas of eastern, central and western Oromiya were still under deficient condition. As a result, some areas of eastern (Gelemso), central (Bui) and western (Assosa) Oromiya including eastern Amhara (Combolcha) reported medium field condition due to water stress during the dekad under review. In accordance with the crop phenological report sowing of pulses were under way in some areas of central Oromiya. The recently sown maize crop was at emergence stage over central and western Oromiya while it was at tasseling stage in some areas of western Oromiya, which was sown earlier as of April 2004. Sorghum was at emergence and third leaf stages in some areas of eastern Amhara, western and central Oromiya. Nug was at emergence stage in some areas of central Oromiya. Sodo reported bad general field condition on maize field due to water stress. With regard to air temperature no significant anomaly was observed, however, there was a decrease in maximum temperatures (1.4 – 2.47 °C), which has no significant effect on crop growth, in some areas of eastern Ethiopia as compared to that of the long-term average.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DAKAD

The anticipated normal to above normal rainfall over much of Tigray and Amhara, Benishangul-Gumuz, Gambela, SNNPR, central and western Oromiya would favour season's agricultural activities. Nevertheless the expected torrential rain accompanied with hail and thunder over some areas of western half of the country would result in crop damage on low lying crop fields and crop fields which are near the riverbanks. Besides, it would cause water logging on crops field in areas where the soil type is clay. Therefore, proper precaution is needed over those sensitive areas in order to mitigate the effect of the expected adverse weather condition. The expected near normal rainfall over eastern Amhara and Tigray, Harari, eastern Oromiya and the adjoining areas of Afar and Somali favour the on going agricultural activities. Moreover, it would facilitate the availability of pasture and drinking water over the above-mentioned pastoral areas. However, pocket places of the aforementioned areas will get below normal rainfall. Thus, those areas needing attention in terms of water harvesting technique. The anticipated dominant partly cloudy condition over Afar, southern half of Somali as well as the lowlands of southern Oromiya and southern borders of SNNPR would minimize evapotranspiration in the areas.