

NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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SUMMARY

During the first dekad of May 2006 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 °C respectively.

During the second dekad of May 2006, as per the forecast given before, the rainfall activity decreased from Belg growing areas and shift to Meher growing areas. As a result Meher growing areas received falls for 5 – 9 days out of the ten days period. Moreover, southern Somali and parts of southern Oromiya received better rainfall in 3 – 9 rainy days with above normal rainfall in some places. Thus this rainfall condition favored crops, which are at different phenological stage at this time of the year. Besides, the observed moisture condition could favor land preparation for the coming Meher season. In case of pastoral and agro pastoral areas of southern Oromia and southern Somali the wet condition could favor more of the availability of pasture and drinking water. In fact it could favor crops in some areas particularly in southern Oromia in areas where they have received good rainfall since the on-set of the season. In addition to this the observed better rainfall activity particularly in southern Somali could alleviate the stress condition persisted during the preceding dekads. Nevertheless, some areas of western and northwestern parts of the country exhibited heavy falls ranging from 30 – 57 mm. As a result Aira and Bedelle reported banana and maize crop damage due to heavy fall during the dekad under review. According to the reporting station, Pawe, Chgni, Dembi Dolo, Bedelle, Gimibi, Debre Tabor, Aira and Gambela exhibited heavy rainfall 30.0, 34.3, 38.1, 40.0, 47.8, 56.0 56.3 and 56.7mm in one rainy day, respectively. With regard to air temperature, Pawe, Negelle, Dire Dawa, Gode, Methera, Metema, Assayta, and Semera recorded extreme maximum temperature as high as 36.0, 36.5, 37.0, 37.5, 38.0, 39.0, 41.4 and 41.2 °C respectively.

1. WEATHER ASSESSMENT

1.1 May 11-20, 2006

1.1.1 RAINFALL AMOUNT (Fig. 1)

Pocket areas of western Oromia and southern SNNPR, received 100 – 200 mm of rainfall. Most parts of western Tigray, Amhara, Oromia, and SNNPR some areas of Benshangul-Gumuz, Gambella and pocket areas of southern Oromia experienced 50 – 100 mm of rainfall. Parts of western Amhara, Tigry, Oromia, northern and southern SNNPR and parts of southern Oromia received 25-50 mm of rainfall. Some areas of western Tigray, Amhara, Oromia, SNNPR and most parts of eastern Oromia and southern Somali exhibited 5-25 mm of rainfall. There was little or no rainfall for the rest parts of the country.

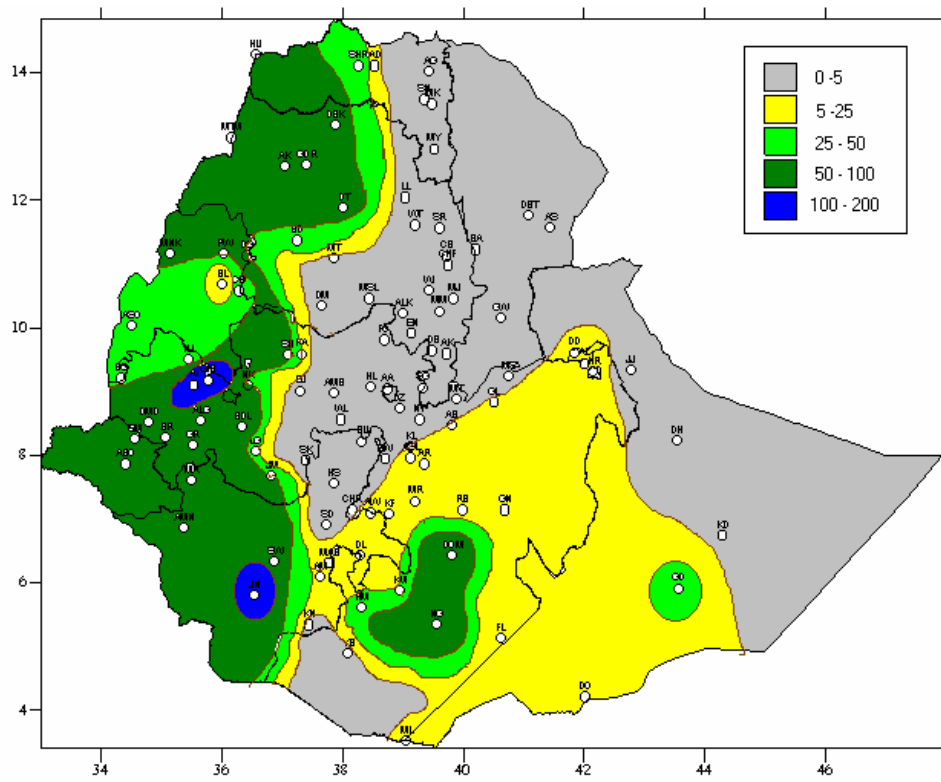


Fig 1. Rainfall distribution in mm (11 – 20 May, 2006)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Western half of Tigray, Amhara, Benshangul-Gumuz, Oromia and Gambela, some areas of southern Oromia and Somali experienced normal to above normal rainfall while the rest part of the country exhibited below to much below normal rainfall.

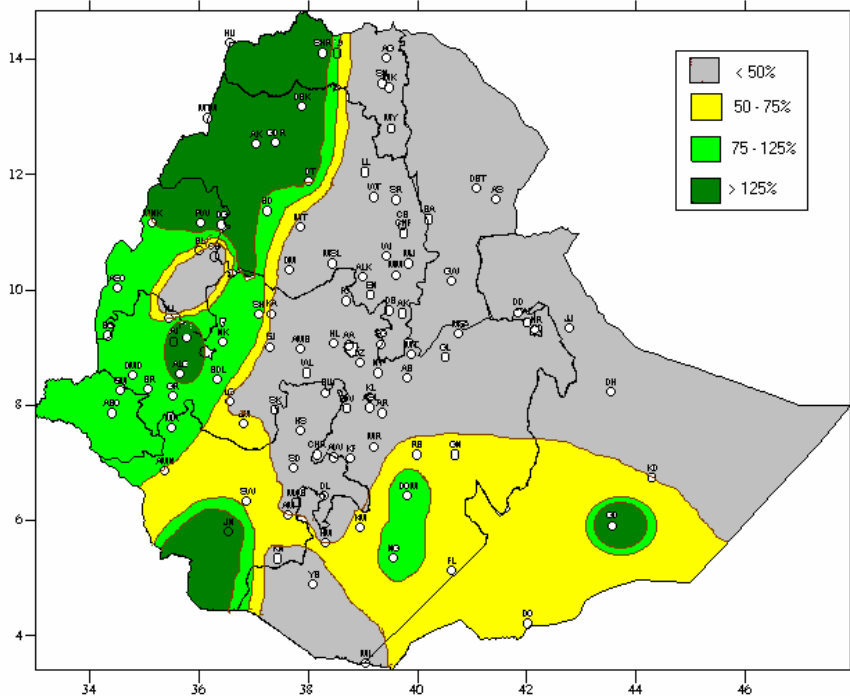


Fig.2 Percent of normal rainfall (11 – 20 May, 2006)

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

1.1 TEMPERATURE ANOMALY

Pawe, Negelle, DireDawa, Gode, Methera, Metema, Assayta, and Semera recorded extreme maximum temperature as high as 36.0, 36.5, 37.0, 37.5, 38.0, 39.0, 41.4 and 41.2 °C respectively.

2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF MAY 2006

For the coming ten days the rain producing systems are expected to have a better strength over western half of the country. As a result, western Tigray and Amahra, western and southern Oromia, Bensahngul-Gumuz, Gambela as well as SNNPR regions are likely to have normal to above normal rainfall over many places. Moreover, eastern, Central portions of the nation will get nearly normal rainfall at some localities. Southern Somali will receive light rain showers for few days it may met nearly normal rainfall. Nevertheless, the remaining parts of the country will experience dry weather condition.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

As per the forecast given before, the rainfall activity decreased from Belg growing areas and shift to Meher growing areas. As a result Meher growing areas received falls for 5 – 9 days out of the ten days period. Moreover, southern Somali and parts of southern Oromiya received better rainfall in 3 – 9 rainy days with above normal rainfall in some places. Thus this rainfall condition favored crops, which are at different phenological stage at this time of the year. Besides, the observed moisture condition could favor land preparation for the coming Meher season. In case of pastoral and agro pastoral areas of southern Oromia and southern Somali the wet condition could favor more of the availability of pasture and drinking water. In fact it could favor crops in some areas particularly in southern Oromia in areas where they have received good rainfall since the on-set of the season. In addition to this the observed better rainfall activity particularly in southern Somali could alleviate the stress condition persisted during the preceding dekads. Nevertheless, some areas of western and northwestern parts of the country exhibited heavy falls ranging from 30 – 57 mm. As a result Aira and Bedelle reported banana and maize crop damage due to heavy fall during the dekad under review. According to the reporting station, Pawe, Chgni, Dembi Dolo, Bedelle, Gimibi, Debre Tabor, Aira and Gambela exhibited heavy rainfall 30.0, 34.3, 38.1, 40.0, 47.8, 56.0 56.3 and 56.7mm in one rainy day, respectively. With regard to air temperature, Pawe, Negelle, Dire Dawa, Gode, Methera, Metema, Assayta, and Semera recorded extreme maximum temperature as high as 36.0, 36.5, 37.0, 37.5, 38.0, 39.0, 41.4 and 41.2 °C respectively. Pursuant to the crop phenological report, sowing of maize crop was under way in some areas of northwestern and western parts of the country like Chagni, Ghimbi and Alge. Maize was at emergence stage and ninth leaf stage in western and eastern Oromia (Aira, Bedelle, Gelemso and Chira) while at tassling stage in western and midland of Oromia (Alge and Dolo Mena) Teff was at flowering and tassling stage in some areas of eastern and central Amhara (Sirinka and Majetie) barley was at tillering and shooting stage in some areas of eastern Amhara (Sirinka and Wegel Tena).

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The anticipated normal to above normal rainfall over western Tigray, Amhara, Benshangul-Gumuz, western and southern Oromia, Gambela, much of SNNPR as well as some areas of central and eastern Ethiopia would have significant contribution where land preparation starts after mid May in some areas of western (Nedjo, Assosa) and central (Arsi Robe, Meraro, Kulumsa) where sowing of pulse and cereal crops are under question. The expected below normal rainfall over central and eastern Ethiopia would exacerbate the dry condition persisted during the preceding dekads. Thus, appropriate attention should be given for proper soil and water management techniques to minimize the risk due to the expected deficient condition. The anticipated near normal rainfall as well as cloud coverage over southern Somali could have positive contribution for pasture and drinking water. Besides, the expected cloud coverage would minimize the rate of evapotranspiration, which is common in the areas due to high temperature. However, the existing water harvesting mechanism should be strengthened to exploit the expected little moisture at maximum level.

On the other hand, the expected below normal rainfall together with the deficient moisture observed during the preceding dekad over eastern Tigray and Amhara would have negative impact on the recently sown crops. Moreover, the expected little moisture with the extended sunny outbreak would favor the outbreak of pests and disease. Hence, close monitoring and proper precaution should be undertaken over sensitive areas ahead of time in order to minimize the risk.