NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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

1-10 December 2006 Vol. 16 No.34

Date of issue December 12, 2006

SUMMARY

During the third dekad of November 2006, some areas of southern Oromia, northern parts of Tigray and western Oromia, received normal to above normal rainfall distribution. Thus, this condition had a negative impact for harvest and post harvest activities over Meher growing areas. On the contrary, the observed extreme minimum temperature below 5°C over the highlands of southern Amhara (Debre Brhan), and eastern Oromia (Alemya), could have a negative contribution for the crops under different phenological stages. Besides, the observed dry and sunny weather condition over northern half of Tigray had a positive contribution for harvest and post harvest activities. On the other hand, the decrease in extreme minimum temperature over the highlands could have a negative impact on frost prone areas. On the other hand, according to the meteorological report, the observed rainfall over western and southern half of the country would have a positive or negative impact depend upon on the areas. The observed good rainfall over southern and southeastern parts of the country could have a significant contribution for the availability of pasture and drinking water. Moreover, it could have a positive impact for short-cycle crops, in agro pastoral areas. According to the reporting station, heavy fall above 30mm, observed over Hagere Mariam, Sekoru, Moyalle and Bedele 38.9, 36.3, 35.4 and 30.0 mm in one rainy day respectively.

During the first dekad of December 2006 the observed normal to above normal rainfall over eastern Tigray, most part of Amhara, Benshangul Gumuze, most part of Oromia, Gambela, SNNPR and Somali could have a positive contribution for crops which are found at different phenological stage at this time of the year. Nevertheless this rainfall condition could have a negative impact on crops, which are ready to harvest. On the other hand some areas like western Oromia (Gore, Arjo, Beddele, Nekemte), northeastern Oromiya (Showa Robit), SNNPR (Konsso), eastern high lands (Jijiga), midlands and southern Oromia (Ginir, Borena and Bilate) recorded heavy fall ranging from 30-73.2 mm in one rainy day. Due to this heavy fall Bedelle reported crop damage on teff and coffee, Ginager and Bilate reported damage on crops, which are ready to harvest, and perennial trees respectively. Regarding minimum air temperature, Debre Birhan, Fitche and Koffele recorded extreme minimum temperature below 0 0 C lowering up to -0.8 0 C. This condition could have a negative impact on normal growth and development of the plants.

1. WEATHER ASSESSMENT

1.1 December 1-10, 2006

1.1.1 RAINFALL AMOUNT (Fig.1)

Only pocket area of eastern Oromia received 100-200 mm rainfall. Most part of eastern western Oromia, northern tip and pocket area of southern SNNPR, northern Somali and northern tip of Afar exhibited 50-100 mm rainfall. Most parts of SNNPR, western, eastern, southern and few areas of central Oromia, southern and pocket area of western Amahara, northwestern Somali, and southern Afar experienced 25-50mm rainfall. Most parts of southern,

southwestern and southeastern Somali, central, western and southern oromia, southern, southwestern and eastern Amahara, western Benshalgul Gumez, central Tigray and few areas of central Afar exhibited 5-25mm rainfall. The rest parts of the country received little or no rainfall.



Fig 1. Rainfall distribution in mm (1-10 December, 2006)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Most parts of Afar, western and eastern Tigray, western Amahara, western Benshalgul Gumuz and pocket area of central Oromia received below to much below normal rainfall. The rest parts of the country received normal to above normal rainfall.



Fig.2 Percent of normal rainfall (1- 10 December, 2006) Explanatory notes for the legend:

- <50 -- Much below normal
- 50—75% -- below normal 75—125% --- Normal
- >125% ---- Above normal

1.1 TEMPERATURE ANOMALY

Alemaya, Debre Birhan, Fitche and Koffele exhibited extreme minimum temperature less than 5^{0} C. From the aforementioned areas Debre Birhan experienced extreme minimum temperature below 0 0 C lowering up to -0.8^{0} C.

2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF DECEMBER 2006

For the next ten days, unlike the previous ten days the Bega's dry weather condition is expected to dominate much of the country. In association with this, there will be nighttime and early morning coldness across different places. However, light rain showers are anticipated over western, southern and parts of the nation. In general, western and southern Oromia, SNNPR and some parts of Somali will get close to normal rainfall. Besides, central Ethiopia, eastern Amhara and Oromia high lands will have increment of cloud coverage in line with this; there will be unseasonal light rains. On the Other hand, much of Tigray, Afar, western and central Amhara as well as Benshangul Gumuz will be under Bega's dry and sunny weather conditions.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed normal to above normal rainfall over eastern Tigray, most part of Amhara, Benshangul Gumuze, most part of Oromia, Gambela, SNNPR and Somali could have a positive contribution for crops which are found at different phenological stage at this time of the year. Nevertheless this rainfall condition could have a negative impact on crops, which are ready to harvest. On the other hand some areas like western Oromia (Gore, Arjo, Beddele, Nekemte), northeastern Oromia (Showa Robit), SNNPR (Konsso), eastern high lands (Jijiga), midlands and southern Oromia (Ginir, Borena and Bilate) recorded heavy fall ranging from 30-73.2 mm in one rainy day. Due to this heavy fall Bedelle reported crop damage on teff and coffee, Ginager and Bilate reported damage on crops, which are ready to harvest, and perennial trees respectively. Regarding minimum air temperature, Debre Birhan, Fitche and Koffele recorded extreme minimum temperature below 5 ⁰C. Besides Debre Birhan recorded extreme minimum temperature below 0 °C lowering up to -0.8 °C. This condition could have a negative impact on normal growth and development of the plants. Pursuant to crop phenological report teff was at ripeness stage in some areas of southeastern Amhara (Enewary) and northern Oromia (Fitche). Wheat was at wax and full ripeness stage in some areas of southeastern Amhara (Enewary, Shola Gebeya) while it was at flowering stage in some areas of eastern Amhara (Wegel Tena). Maize was at flowering stage in some areas of southern Oromia (Dollo Mena).

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The anticipated near normal rainfall over some areas of western and southern Oromia, SNNPR and Somali would have a positive contribution in areas which is time for land preparation like SNNPR (Gurage, Bench Magi, Keffa). Besides this near normal rainfall would have a significant impact on the availability of pasture and drinking water over pastoral and agro pastoral areas of Somali region. On the other hand the expected unseasonale rainfall over central Ethiopia, eastern Amhara and some high lands of eastern Oromia would have a negative impact on areas which have not completed their harvesting activities from Central (Holleta), north eastern (Were Ilu) areas. Generally, compared to the last dekad, the expected minimum rainfall distribution for the next dekad would have a better contribution for the on going harvest and post harvest activities.