NATIONAL METEOROLOGICAL SERVICES AGENCY TEN DAY AGROMETEOROLOGICAL BULLETIN

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

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SUMMARY

During the third dekad of January 2006 the observed normal to above normal over some areas of southern Tigray, southeastern Amhara and few areas of eastern and central Oromya rainfall (1-2 days rainfall in most places) could have a positive impact on season's agricultural activities like land preparation to some extent. Nevertheless, the observed deficient moisture condition could not be sufficient for sowing activity that is the major practices in some places like South Tigray and some areas of eastern Amhara. With regard to air temperature, southeastern lowland (Gode), northwestern lowland (Mankush, Pawe, Metema) and western lowland (Gambela) reported extreme maximum air temperature ranging from $35.8 - 41.5^{\circ}$ C for two to eleven consecutive days. This condition could exacerbate the stress condition due to moisture deficiency by increasing the rate of evapotranspiration.

During the first dekad of February 2006, with the exception of Gambela, western Oromya and few areas of northwestern and southern Afar most parts of the country exhibited below normal rainfall distribution. Besides some lowland areas of southeastern, northwestern and central Ethiopia exhibited extreme maximum temperature ranging from 36-42.6°C that could aggravate the stress condition on plants by increasing potential evapotranspiratin. Moreover the deficient condition could affect early season's agricultural activities like land preparation and sowing activities in areas where Belg activities are started earlier. Among the reporting stations Semera, Metehara, Gode, Pawe, Mankush, Gambela, and Metema recorded extreme maximum temperature as high as 36.3, 37.0, 37.2, 38.5, 39.6, 41.5 and 42.6 °C respectively.

1. WEATHER ASSESSMENT

1.1 February 1-10, 2006

1.1.1 RAINFALL AMOUNT (Fig. 1)

Pocket areas of western and northwestern Oromya received rainfall amount ranging from 25-50mm and pocket areas of Benshgul-Gumuz, parts of southern Amhara, western and northwestern Oromya received 5—25mm of rainfall. There was little or no rainfall for the rest parts of the country.



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

1.1.2 RAINFALL ANOMALY (Fig. 2)

Normal to above normal rainfall distribution was observed over pocket areas of northern, northwestern, pocket areas of southwestern Oromya, Gambela, and some parts of southern Amhara. The rest parts of the country exhibited below to much below normal rainfall



Fig.2 Percent of normal rainfall (1-10 February, 2006) Explanatory notes for the legend: <50 -- Much below normal 50—75% -- below normal 75—125% --- Normal > 125% ---- Above normal

1.1 TEMPERATURE ANOMALY

Semera, Metehara, Gode, Pawe, Mankush, Gambela, and Metema recorded extreme maximum temperature as high as 36.3, 37.0, 37.2, 38.5, 39.6, 41.5 and 42.6 ^oC respectively.

2. WEATHER OUTLOOK FOR THE SECONND DEKAD OF FEBRUARY 2006

For the coming ten days, the rain producing system will have better strength over the country. Hence, isolated rainfall is anticipated over various parts of the country. Northeastern and eastern, as well as Rift Valley and its adjoining areas are also expected to have rain showers. On the other hand, hot weather condition will dominate much of the country. In general SNNPR, western Oromya and Gambela will have normal rainfall. The adjoining areas of rift valley, eastern Amhara as well as central and eastern Oromya are anticipated to get near normal rainfall whereas below normal rain is expected at some places. Much of Tigray, central and western Amhara, Bensahngul-Gumuz, most parts of Somali and Afar are mostly expected to be dominated by sunny and dry weather condition. Therefore, below normal rainfall is anticipated over the aforementioned areas of the country

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

With the exception of Gambela, western Oromya and few areas of northwestern and southern Afar most parts of the country exhibited below normal rainfall distribution during the first dekad of February 2006. Besides some lowland areas of southeastern, northwestern and central Ethiopia exhibited extreme maximum temperature ranging from 36-42.6°C that could aggravate the stress condition on plants by increasing potential evapotranspiratin. Moreover the deficient condition could affect early season's agricultural activities like land preparation and sowing activities in areas where Belg activities are started earlier.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The expected rainfall condition over northeastern, eastern and the surrounding areas of Rift Valley would ease the dry situation persisted during the preceding dekads. Besides, the expected better moisture condition would minimize the rate of evapotransparation to some extent. The expected near normal rainfall over SNNPR, western Oromya, Gambela would create conducive situation for land preparation and sowing activities .On the other hand, the expected sunny and dry weather condition as well as below normal rainfall distribution over most Tigray, central and western Amhara, Benishangul Gumuz including most parts of Somali and Afar would exacerbate the deficient moisture condition persisted during the preceding dekades particularly in South Tigry thereby negatively affecting early season's agricultural activities in the areas. Even though better rainfall activity is expected over the above mentioned areas attention should be given for proper water harvesting techniques in order to minimize the negative effect due to moisture stress.