NATIONAL METEOROLOGICAL SERVICES AGENCY
TEN DAY AGROMETEOROLOGICAL BULLETIN

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SUMMARY

During the third dekad of December 2004, most parts of SNNPR, parts of eastern, western and southeastern Oromiya, eastern Amhara as well as parts of southwestern Somali experienced normal to above normal rainfall while the rest portions of the country were under below normal rainfall. The pronounced dry spells over much of the country favored the on going harvest and post harvest activities over much of Meher growing areas of the country. On the other hand, the observed better rainfall condition over southern, southeastern and parts of western Oromiya, SNNPR and southwestern Somali could have indispensable contribution to perennial plants, the availability of pasture and drinking water over the above mentioned pastorals and agro pastorals areas. However, the observed wet weather condition over some areas of southern Oromiya like Dolo Mena and Kibre Mengist could have negative impact on the on going harvest and post harvest activities. Regarding air temperature, eastern Oromiya(Alemaya), some areas of the highlands of eastern Tigray (Adigrat), southern Amhara (Mehal Meda) and eastern Amhara(Wegel Tena) as well as western Amhara (Dangla), exhibited extreme minimum air temperature below 5^0C for two to seven consecutive days.

During the first dekad of January 2005, Bega's dry weather dominated over much of the country. This situation favored the on going post harvest activities over Meher growing areas of the country as well as southern Oromiya and southeastern and western portions of SNNPR. Regarding air temperature, the highlands of Amhara (Bahir Dar, Combolcha, Amba Mariam, Bati, Cheffa, Dangila, Debre Birhan, Enewary, Mehal Meda, Wegel Tena and Mota), Oromiya (Debre Zeit, Jimma, Robe, Alamaya, Begi, Fitche, Kibre Mengist, Kulumsa and Meisso), some areas of northern SNNPR (Hossaina), Tigray (Adigrat and Mychew) and northern Somali (Jijiga) experienced extreme air temperature below 5^0C for two to ten consecutive days. Particularly, Alemaya, Debre Berihan, Debre Zeit, Mehal Meda, Wegel Tena and Jijiga recorded extreme air temperature below 0^0C as low as -7.5, -5.0, -2.5, -1.2, -0.5, -0.3 ^{0}C for two to seven consecutive days, respectively. This situation resulted in crops damage over eastern Gojam (Mota) and western Hararghe (Kombolcha). It may also affect the quality of short cycle crops like cheek peas and lentil. In addition to this, it negatively affected the normal growth and development of perennial plants over the aforementioned areas.

1. WEATHER ASSESSMENT

1.1 RAINFALL AMOUNT (Fig. 1)

During the first dekad of January 2005, little or no rainfall was observed over much portions of the country.

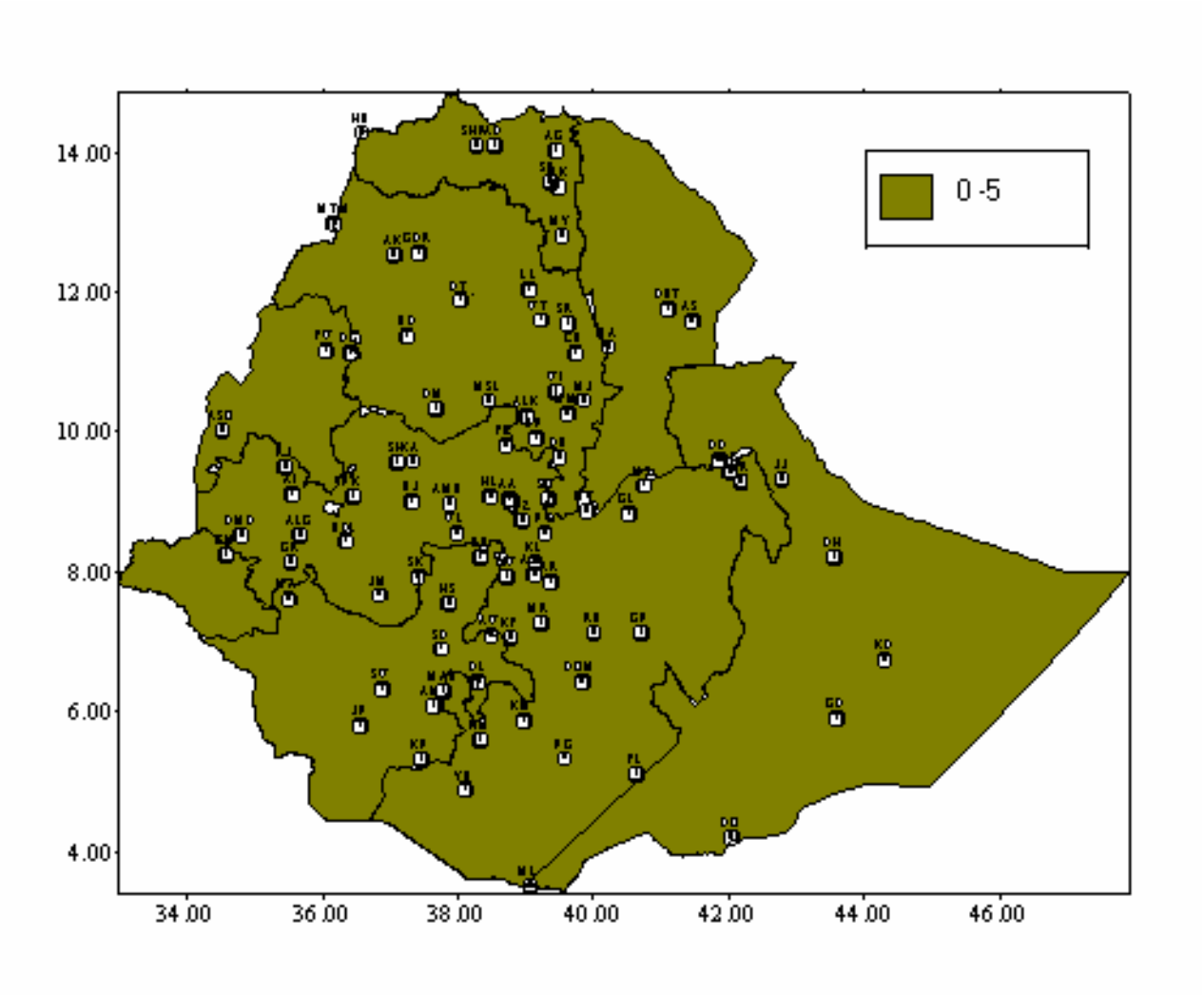

Fig 1. Rainfall distribution in mm (1-10, January 2005)

1.1 RAINFALL ANOMALY (Fig. 2)

Below normal rainfall distribution was observed over much portions of the country.

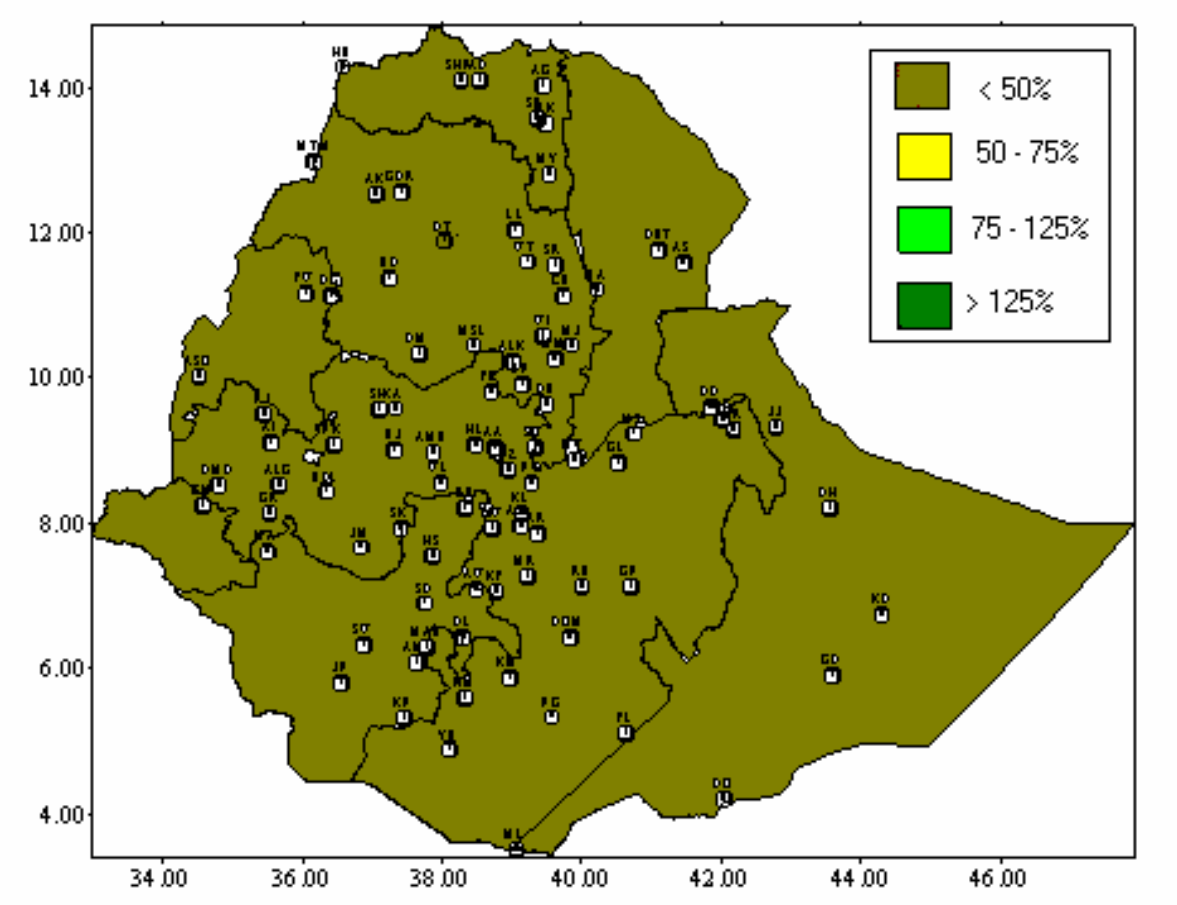

Fig.2 Percent of normal rainfall (1-10, January 2005)

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

1.2 TEMPERATURE ANOMAL

The highlands of Amhara (BahirDar, Combolcha, Amba Mariam, Bati, Cheffa, Dangila, DebreBirhan, Enewary, MehalMeda, Wegel Tena and Mota), Oromiya (Debre Zeit, Jimma, Robe, Alamaya, Begi, Fitche, Kibre Mengist, Kulumsa and Meisso), some areas of northern SNNPR (Hossaina), Tigray (Adigrat and Mychew) and northern Somali (Jijiga) experienced extreme air temperature below 5^0C for two to ten consecutive days. Particularly, Alemaya, Debre Berihan, Debre Zeit, Mehal Meda, Wegel Tena and Jijiga recorded extreme air temperature below 0^0C as low as -7.5, -5.0, - 2.5, -1.2, -0.5, -0.3 ^{0}C for two to seven consecutive days.

2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF JANUARY 2005

In the coming dekad, eastern and southern Amhara, pocket areas of central Ethiopia, Gambela and pocket areas of western portions of SNNPR will have a chance of getting less rainfall while the rest portions of the country namely Tigray, much of Amhara, much of Afar, Somali, eastern and southern Oromiya as well as eastern parts of SNNPR will have partly cloudy condition. In addition to this, the persisted cold and dry weather condition, which prevailed over the highlands of northern parts of the country, will be expected to continue and result in a fall in minimum air temperature.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed Bega's dry weather over Meher growing areas and southern Oromiya, western and southwestern portions SNNPR assisted to perform the ongoing post harvest activities. However, the pronounced cold and dry air over the highlands of Tigray, Amhara, Oromiya, northern SNNPR and northern Somali resulted in a fall in minimum air temperature below 5^0C, which induced the occurrence of frost. Thus, the highlands of Amhara (Bahir Dar, Combolcha, Amba Mariam, Bati, Cheffa, Dangila, Debre Birhan, Enewary, Mehal Meda, Wegel Tena and Mota), Oromiya (DebreZeit, Jimma, Robe, Alamaya, Begi, Fitche, Kibre Mengist, Kulumsa and Meisso), some areas of northern SNNPR (Hossaina), Tigray (Adigrat and Mychew) and northern Somali (Jijiga) experienced extreme air temperature below 5^0C for two to ten consecutive days. Particularly, Alemaya, Debre Berihan, Debre Zeit, Mehal Meda, Wegel Tena and Jijiga recorded extreme air temperature below 0^0C as low as -7.5, -5.0, -2.5, -1.2, -0.5, -0.3 ^{0}C for two to seven consecutive days. This situation resulted in wilting and crops damage over eastern Gojam (Mota) and western Hararghe (Kombolcha). It may also affect the quality of short cycle crops like chickpeas and lentil. In addition to this, it negatively affected the normal growth and development of perennial plants over the aforementioned areas.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DAKAD

The anticipated dry weather condition over much of Tigray, Amhara, eastern and southern Oromiya, eastern portion of SNNPR will have positive impact on the ongoing post harvest activities over the above mentioned areas where harvest and post harvest activities have not been started on time. On the other hand, the expected rain over some portions of eastern and southern Amhara, western and eastern Oromiya, pocket areas of central Ethiopia, Gambela and eastern portions of SNNPR will have significant contribution to the availability of pasture and drinking water. On the other hand, anticipated cold and dry air over the highlands of parts of Amhara, Tigray and eastern Oromiya results in a fall in minimum air temperature which result in the occurrence of frost that affects the normal growth and development of perennial plants and short cycle cash crops.