

NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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

11-20 April 2008 Vol. 18 No.11

Date of issue April 23, 2008

SUMMARY

During the first dekad of April 2008, the observed rainfall amount and distribution over most parts of Belg benefiting areas of the country was increased comparing to the preceding dekad. Thus, this situation could decrease the exhibited dry weather situation during the preceding dekad. Moreover it could favor the ongoing Belg agricultural activities like land preparation and sowing activities in some areas of western, southwestern, central and eastern parts of the country. Moreover, the observed rainfall over some areas of eastern Ethiopia and southern Oromia could have a positive contribution for the availability of pasture and drinking water in lowlands of southern Oromia and eastern Ethiopia. With regard to heavy rainfall, some areas like Addis Ababa, Jinka, NuraEra, DebreZeit, Hirna, DireDawa, Konso, Nazreth and Ankober received 30.8, 31.4, 38.0, 38.0, 51.2, 54.8, 70.3, 72.5 and 80 mm of heavy rainfall in one rainy day respectively. Generally this rainfall situation could have a positive impact for the ongoing Belg agricultural activities and long cycle crops. Thus farmers are advised to continue the ongoing Belg agricultural activities.

During the second dekad of April 2008, most parts of the country received better rainfall over the areas. But after half of the dekad, the rainfall was limited to western, southwestern, south and southeastern parts of the country. This situation might have created conducive condition to minimize the deficient moisture condition, which was observed during the preceding dekad. Besides, this situation could have a positive contribution for crops, which are sown, over Belg growing areas and for long cycle crops grown over western parts of the country. Moreover the observed moisture over southern and southeastern parts of the country might have a significant contribution for the availability of pasture and drinking water over pastoral and agro pastoral areas of the country. In addition to this some areas of the country experienced heavy fall within the range of (35-65.9) mm in one rainy day. To mention some of them Adet, Nekemte, Dilla, Gode, Jinka, Chagni, Bahir Dar and Ginir exhibited 65.9, 55.3, 54.8, 45.5, 41.3, 36.3, 36.1 and 35.8 mm of rainfall respectively.

1. WEATHER ASSESSMENT

1.1 April 11-20, 2008

1.1.1 RAINFALL AMOUNT (Fig.1)

Southern Oromia and southern Somali received 100-200mm of rainfall. Some areas of western Amhara, western Oromia, pocket areas of eastern & southern SNNPR and some areas of Somali and southern Oromia experienced 50-100mm of rainfall. Much of Gambella, SNNPR, western and southern Oromia, some areas of southern Somali and southern half of Benshangul-Gumuz exhibited 25-50mm of rainfall. Western Tigray, northern and southern Amhara, much of eastern Oromia, southern Afar, some areas of Benshangul-Gumuz, northern and eastern Somali and pocket areas of Gambella, western Oromia and eastern SNNPR received 5-25mm of rainfall. The rest parts of the country exhibited little or no rainfall.

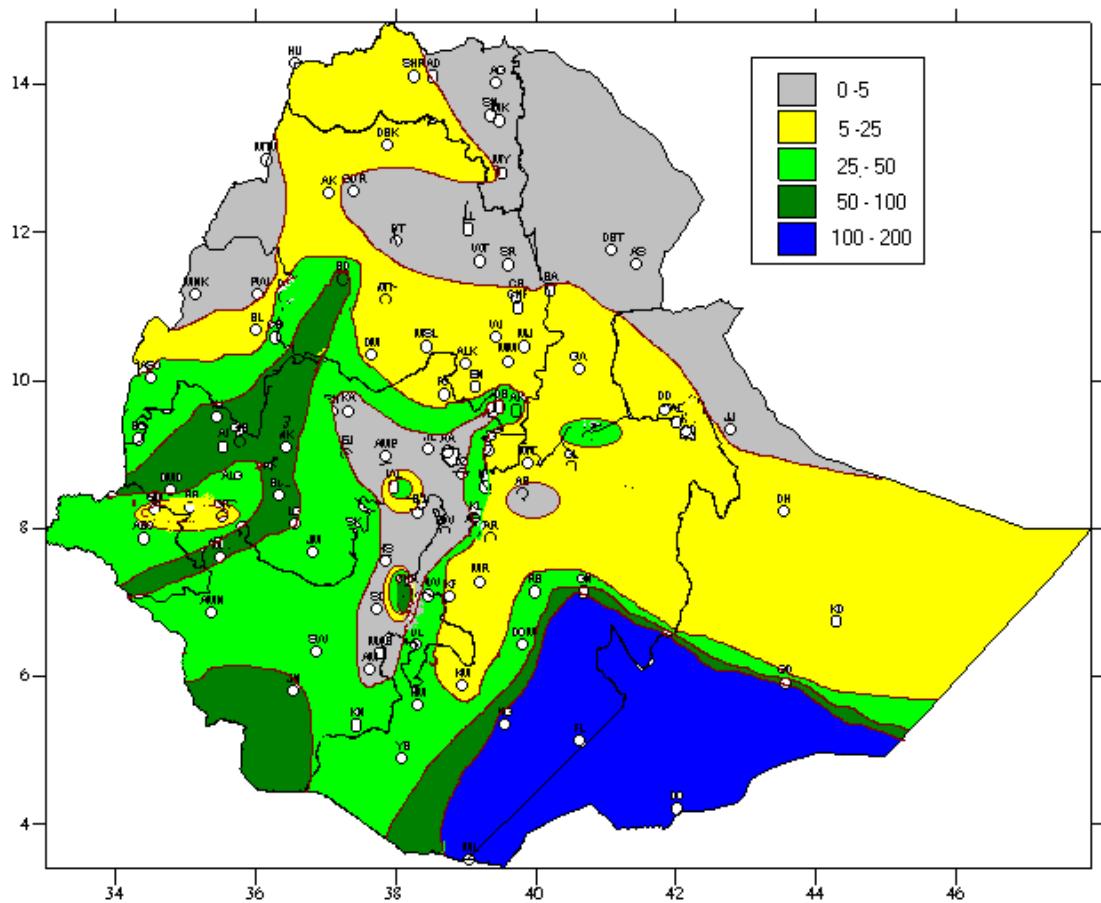


Fig 1. Rainfall distribution in mm (11-20 April, 2008)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Pocket areas of western Tigray, eastern, southern and southwestern Amhara, much of Beneshangul-Gumuz, western, eastern and southern Oromia, Gambella, western half of SNNPR, much of Somali experienced normal to above normal rainfall while the rest parts of the country exhibited below to much below normal rainfall.

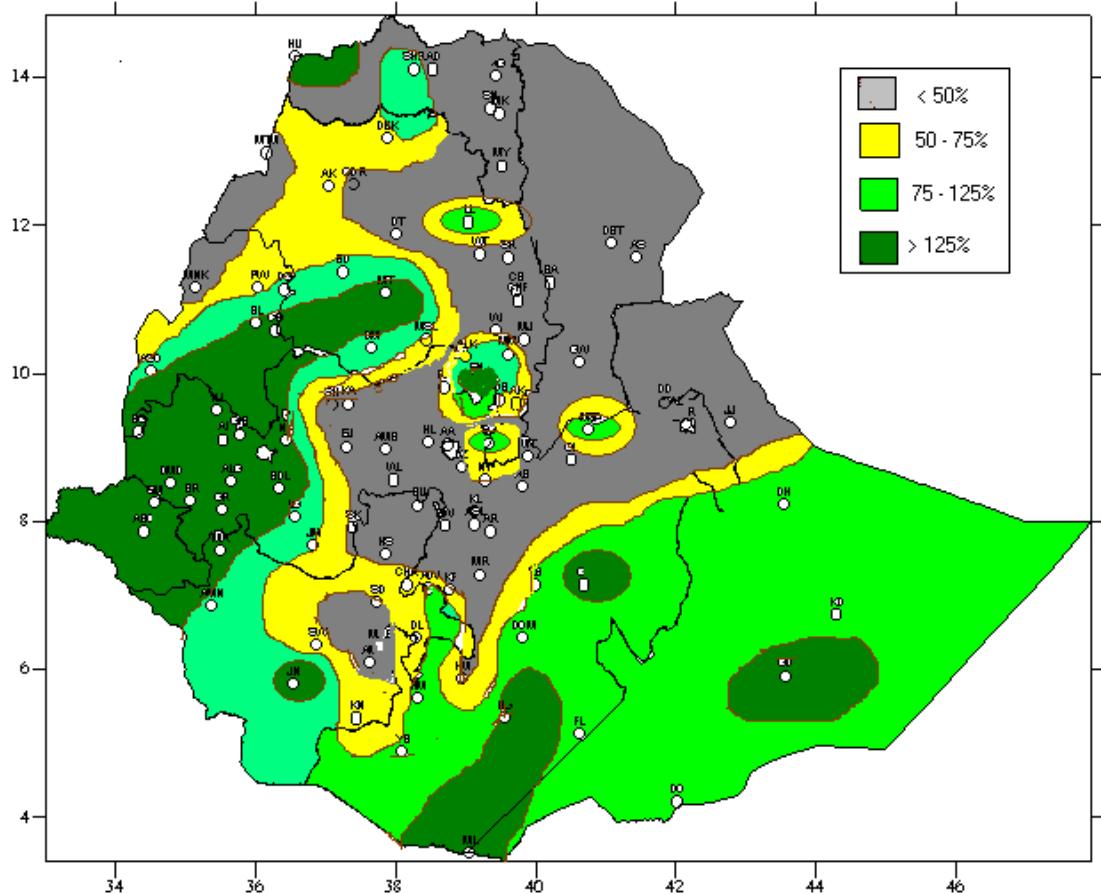


Fig.2 Percent of normal rainfall (11-20 April, 2008)

Explanatory notes for the legend:

<50 -- Much below normal

50—75% -- below normal

75—125% --- Normal

> 125% ---- Above normal

1.1 TEMPERATURE ANOMALY

Diredawa, Maytsemrie, Mankush, Sirba-Abay, Pawe, Metehara, Gode, Aisha, Sheraro, Metema, Asyaita, Semera, Gambella, Elidar and Mille recorded extreme maximum temperature above 35 °C as high as 36.1, 36.6, 36.6, 36.7, 36.8, 37.0, 37.5, 38.0, 38.4, 39.5, 39.6, 40.0, 40.3, 40.5 and 41.0 for 4 - 10 consecutive days.

2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF APRIL 2008

In April, Belg rain nourishes most parts of Belg growing regions. For the coming ten days, rain-producing systems will continue across southern half and western Ethiopia almost in a similar manner. Therefore, west, southwest, south and southeast Ethiopia are expected to have better rainfall coverage.

In general, western Amhara, Benshangul- Gumuz, SNNPR, west and south Oromia including Bale and Arsi zone are likely to receive normal rainfall while west Tigray, central and eastern Oromia as well as southern Somali will get nearly normal rainfall despite these are some places to have below standard. On the other hand Tigray, eastern Amhara, some of eastern & central Ethiopia and northern Somali are anticipated to have patches of clouds with chance of light rains at few places. Mostly sunny & hot weather likely to dominate over Afar. Moreover, the daily maximum temperature will rise across the lowland areas of the country.

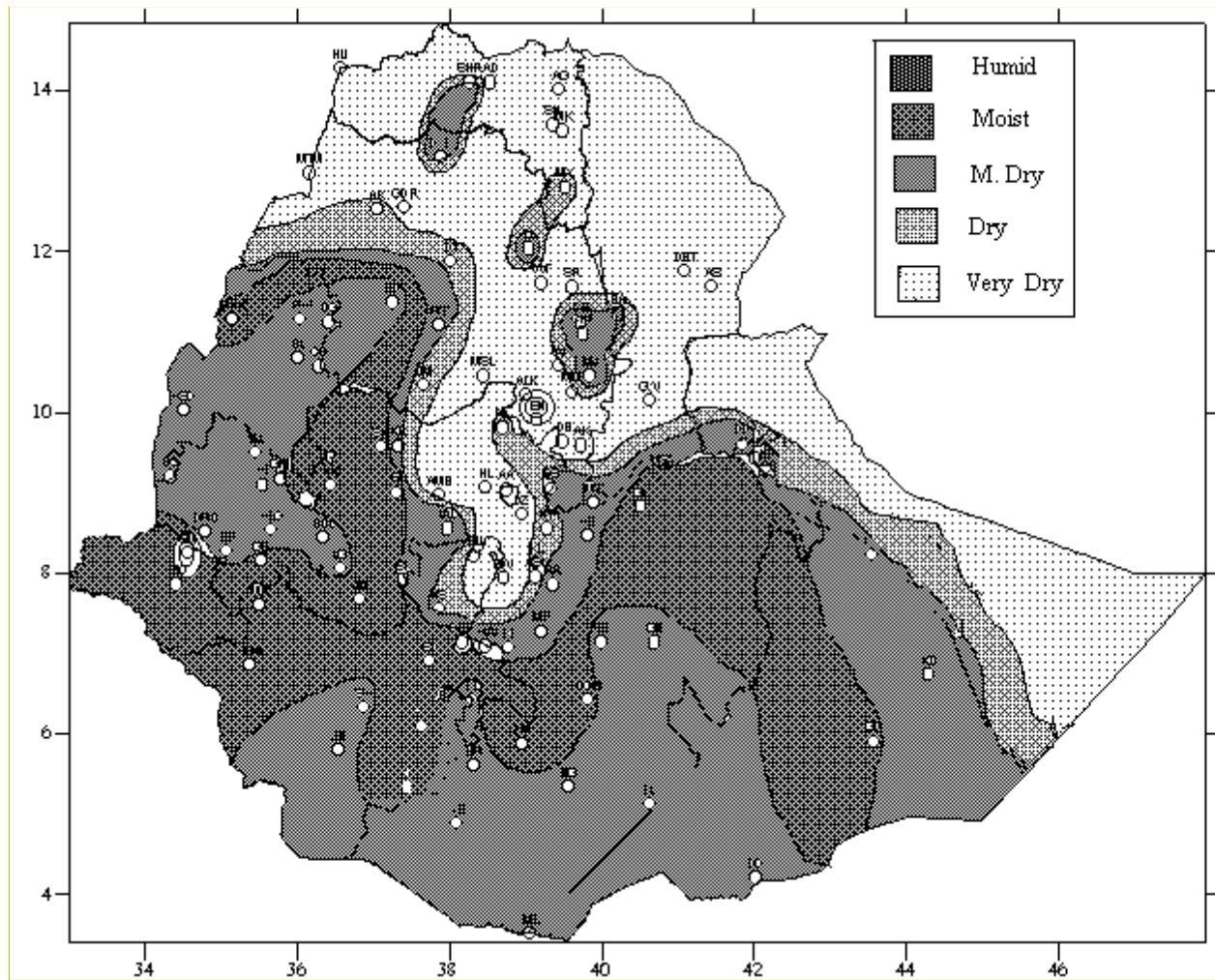
3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

Most parts of the country received better rainfall over the areas. But after half of the dekad, the rainfall was limited to western, southwestern, south and southeastern parts of the country. This situation might have created conducive condition to minimize the deficient moisture condition, which was observed during the preceding dekad. Besides, this situation could have a positive contribution for crops, which are sown, over Belg growing areas and for long cycle crops grown over western parts of the country. Moreover the observed moisture over southern and southeastern parts of the country might have a significant contribution for the availability of pasture and drinking water over pastoral and agro pastoral areas of the country. In addition to this some areas of the country experienced heavy fall within the range of (35-65.9) mm in one rainy day. To mention some of them Adet, Nekemte, Dilla, Gode, Jinka, Chagni, Bahir Dar and Ginir exhibited 65.9, 55.3, 54.8, 45.5, 41.3, 36.3, 36.1 and 35.8 mm of rainfall respectively.

In addition to the first dekad of April 2008, the analysis of moisture status (the relationship between total dekadal rainfall and the dekadal total reference evapotranspiration) as indicated in fig.3 most parts of western half of the country, SNNPR, southern and eastern Oromia including Bale and Arsi exhibited better moisture condition over the areas. Thus, this situation could have significant contribution for Belg agricultural activities and long cycle crops, which are grown over western parts of the country. On the other hand little moisture condition has been observed over central Tigray, western Amhara, northern Somali and pocket areas of eastern Amhara. The rest parts of the country exhibited dry to very dry moisture condition.

Fig .3 Moisture Status for (11-20 April, 2008)



3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

Western Amhara, Bensahngul-Gumuz, western and southern Oromia including Bale and Arsi zones will expected to receive normal rainfall. This situation will have a positive contribution for water requirement of the existing crops over Belg growing areas and also favor for the development of pasture and availability of drinking water over lowlands of southern Oromia. Moreover, the expected near normal rainfall over western Tigray, central and eastern highlands and southern Somali would have a significant contribution for season's agricultural activities like land preparation and sowing activities for long cycle crops (sorghum and maize), perennial crops (tree and fruit). In addition to these, it will have a positive impact for the availability of pasture and drinking water over some areas of Somali. Besides, the expected below normal rainfall over much of Tigray, eastern Amhara and southern Somali will have a negative impact for water requirement of the existing growing crops and availability of drinking water over pastoral areas of southern Somali.