# NATIONAL METEOROLOGICAL SERVICES AGENCY TEN DAY AGROMETEOROLOGICAL BULLETIN P.BOX 1090 ADDIS ABABA TEL 512299 FAX 517066 E-mail nmsa@ethionet.et

1-10 May 2008 Vol. 18 No.21

Date of issue May14, 2008

# SUMMARY

During the third dekad of April 2008, the observed light to heavy rainfall condition over SNNPR, Benshangul-Gumuz, western and southern Oromia including Arsi and Bale highlands might have a positive contribution for Belg agricultural activities and for the development of pasture and availability of water over lowlands of southern Oromia. On the other hand, some areas of eastern Oromia, Dire Dawa, Harari, and Tigray, central and western Amhara has been received light to medium amount of rainfall. Thus, the condition might have favored general Belg agricultural activities over Belg growing areas and for the availability of pasture and drinking water over pastoral and agro pastoral areas.

During the first dekad of May 2008, the rainfall distribution was decreased over south and southeastern parts of the country. However, the rainfall distribution was covered northern tip to southern tip of the country and Belg benefiting areas as well. This condition has a positive impact for late sown Belg crops due to the moisture stress observed during the preceding dekad. In addition, it would have a positive contribution for the ongoing seasons agricultural activities (land preparation) and for perennial crops as well. Regarding to heavy fall, northern, eastern central and much of western parts of the country exibited heavy fall within the range of (30-65.5) mm in one rainy days. To mention some station observed above 40 mm: Gimbi, LimuGenet, DembiDolo, Moyale, Konso, Gelemso, Mekele, and Gore experienced 42.3, 43.3, 43.6, 44.3, 50.1, 57.2, 60.9 and 65.0 mm of rainfall in one rainydays. This rainfall have positive contribution for Belg and Meher agricultural activities. According to the report of adverse condition, station Sodere report damage on onion due to heavy fall observed on 08/05/08. Besides the decreased in moisture over south and southeastern parts of the country would have a negative impact for the availability of pasture and drinking water over pastoral and agro pastoral areas of south and southeastern lowlands of the country.

## 1. WEATHER ASSESSMENT

1.1 May 1-10, 2008

## 1.1.1 RAINFALL AMOUNT (Fig.1)

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

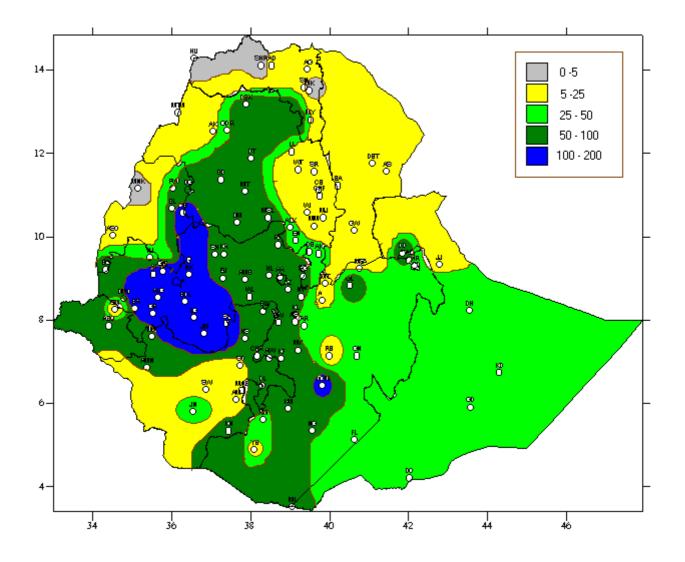


Fig 1. Rainfall distribution in mm (1-10 May, 2008)

#### 1.1.2 RAINFALL ANOMALY (Fig. 2)

Much of Amhara, Gambela, western, southern and pocket area of eastern Oromia, northern and southern SNNPR, pocket areas of northern and southern Somali, pocket area of Afar exhibited normal to above normal rainfall while the rest parts of the country experienced below to much below normal rainfall.

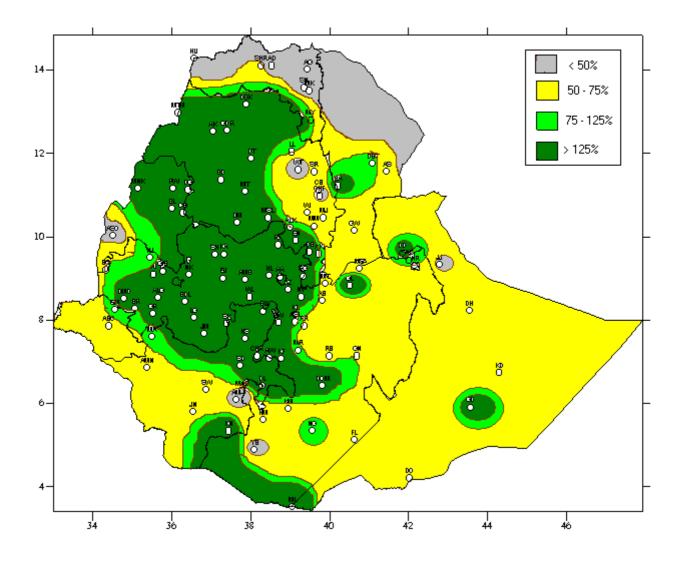


Fig.2 Percent of normal rainfall (1-10 May, 2008) Explanatory notes for the legend: <50 --- Much below normal 50—75% --- below normal 75—125% --- Normal

> 125% ---- Above normal

#### **1.1 TEMPERATURE ANOMALY**

Some stations recorded extreme Maximum temperature above 35° C for 3-11 consecutive days, Humera, Gewane, Dubti, Metema, Mille Semera, Sheraro, Methara, Aisha, Mankush, Mytsemrie, Sirba Abey, Gode, Gambela, ShewaRobit and Chefa recorded extreme maximum temperature as high as 44.5, 44.0, 41.5, 41.0, 41.5, 41.5, 39.2, 38.0, 38.0, 37.6, 37.6, 36.5, 36.4, 36.0, 35.5 and 35.2° C respectively.

#### 2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF MAY 2008

The upcoming ten days, the Meteorological systems are expected to have a better strength across southern half and western portions of the nation. As a result western Amhara, Benshangul-Gumuz, western Tigray, Gambela, western Oromia and SNNPR are likely to have normal rainfall. Besides, central, southern and eastern Oromia, Somali eastern Tigray, eastern Amhara as well as southern Afar will get close to normal rainfall. However, there will be below normal in some positions of the above-mentioned areas. On the other hand, much of Afar will have dry weather condition.

#### 3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

#### 3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The rainfall distribution was decreased over south and southeastern parts of the country. However, the rainfall distribution was covered northern tip to southern tip of the country and Belg benefiting areas as well. This condition has a positive impact for late sown Belg crops due to the moisture stress observed during the preceding dekad. In addition, it would have a positive contribution for the ongoing seasons agricultural activities (land preparation) and for perennial crops as well. In accordance with crop phenological report, maize was at emergence and at third leaf stage in some areas of western (Aira and Chira, and Gimbi) respectively. Maize was at third leaf stage in some areas of eastern (Gelemso) and at emergence stage in some areas of south (DoloMena). According to the report of adverse condition, station Sod ere report damage on onion due to heavy fall observed on 08/05/08.

In addition to the first dekad of May 2008, the analysis of moisture status (the relationship between total dekadal rainfall and the dekadal total reference evapotranspiration) as indicated in fig3. Better moisture condition (moist to humid moisture status) exhibited over much of western half of the country, southern Oromia central and some areas of eastern Oromia Bale Arsi zones as well. This situation would have a positive contribution for Meher agricultural activities. Besides, the rest parts of the country experienced dry to very dry moisture condition according to moisture status Map.

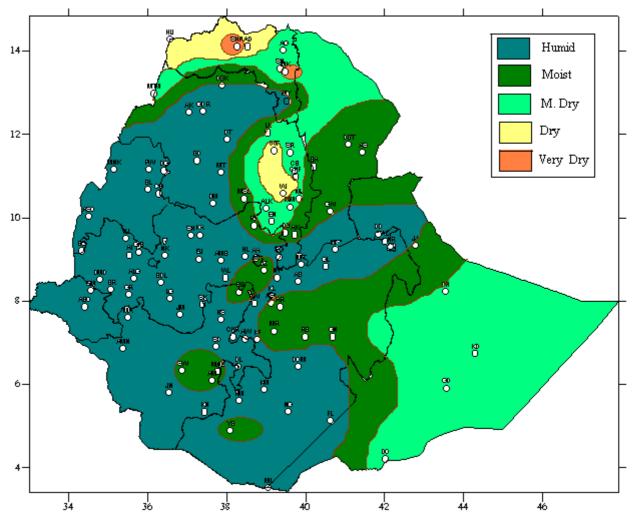


Fig .3 Moisture Status for (1-10 May 2008)

# 3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The anticipated normal rainfall over Benshangul-Gumuz, western Amhara, Gambela, western Oromia and SNNPR will have a positive impact for the coming Meher agricultural activities like sowing activities and land preparation in some areas of Benshangul-Gumuz like Assosa for (Sorghum), SNNPR like Awassa for (Haricotbecan, Potato). Moreover, the expected near normal rainfall over some areas of central, southwestern Oromia, Somali, Tigray and eastern Amhara would have a positive contribution for the sowing activities of Meher crops central like Abomsa for (Maize and Sorgum) eastern Oromia like Alemya (Potato and sweat potato). However, below normal rainfall expected over some areas of the aforementioned areas. Thus appropriate attention should be given for proper m management technique to minimize the risk due to the expected deficient condition.