NATIONAL METEOROLOGICAL SERVICES AGENCY
TEN-DAY AGROMETEOROLOGICAL BULLETIN
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SUMMARY

During the first decade of April 2010, rain bearing meteorological phenomena decreased from eastern portions of the country and shifted to the rift valley and adjoining areas of western portion of the country, in line with this central and southern Amhara, eastern and southern Tigray, western and central Oromiya and southern portions of SNNPR would receive better rains. Chercher and Welliso reported heavy fall 44.0 and 50.0mm for one rainy day respectively. The situation might have favored belg crops that are found at different phenological stages, water requirement for perennial plants, land preparation and sowing of long cycle crops, improvement of pasture and availability of water over pastoral and agro pastoral areas of the country. On the other hand, eastern and southern portions of the country, Benshangul-Gumuz, eastern portions of the country experienced little amount of rainfall that might have led to moisture stress on improvement of pasture and drinking water over postural and agro pastoral aforementioned areas.

During the second decade of April 2010, rain bearing meteorological phenomena considerably increased over Belg rain benefiting areas of central and southern Oromia, eastern Amhara, SNNPR and eastern portions of the country. Some stations recorded heavy fall in one rainy day. Among recording stations Errer, Addis Ababa (obs), Bui, Gode, Negele, Debre Zite, Senkata, Sawla and Addis Ababa (bole) reported 72.0, 67.0, 51.0, 42.3, 41.3, 39.5, 39.7, 36.7 and 35.8 mm of rainfall in one rainy day. Parts of western and southern Amhara, eastern and southern Tigray, western Oromia, southern Somalia, Gambela and adjoining areas of Benshangul Gumuz would receive normal to above normal rainfall. The situation might have favored Belg crops that are found at different phenological stages, water requirement for perennial plants, land preparation and sowing of long cycle crops, improvement of pasture and availability of drinking water over pastoral and agro pastoral areas of the country. On the other hand, some lowlands of north eastern, northwestern and western portions of the country experienced daily maximum temperature greater than 40°C, which might have led to moisture stress on the availability of pasture and drinking water over aforementioned areas.

1. WEATHER ASSESSMENT

1.1 11-20 April 2010

1.1.1 RAINFALL AMOUNT (Fig.1)

Most of SNNPR, pocket areas of eastern and central Oromia, posket areas of southern Somalia and Dira Dawa received 50-100 mm of rainfall. Most of Oromia, Afar, eastern and southern Tigray, southern and eastern Amhara and much of eastern parts of the country experienced 25-50 mm of rainfall. Parts of central and southern Tigray, central and southe western Amhara and eastern parts of Benishangul-Gumz received 5-25 mm of rainfall. The rest parts of the country exhibited little or no rainfall.

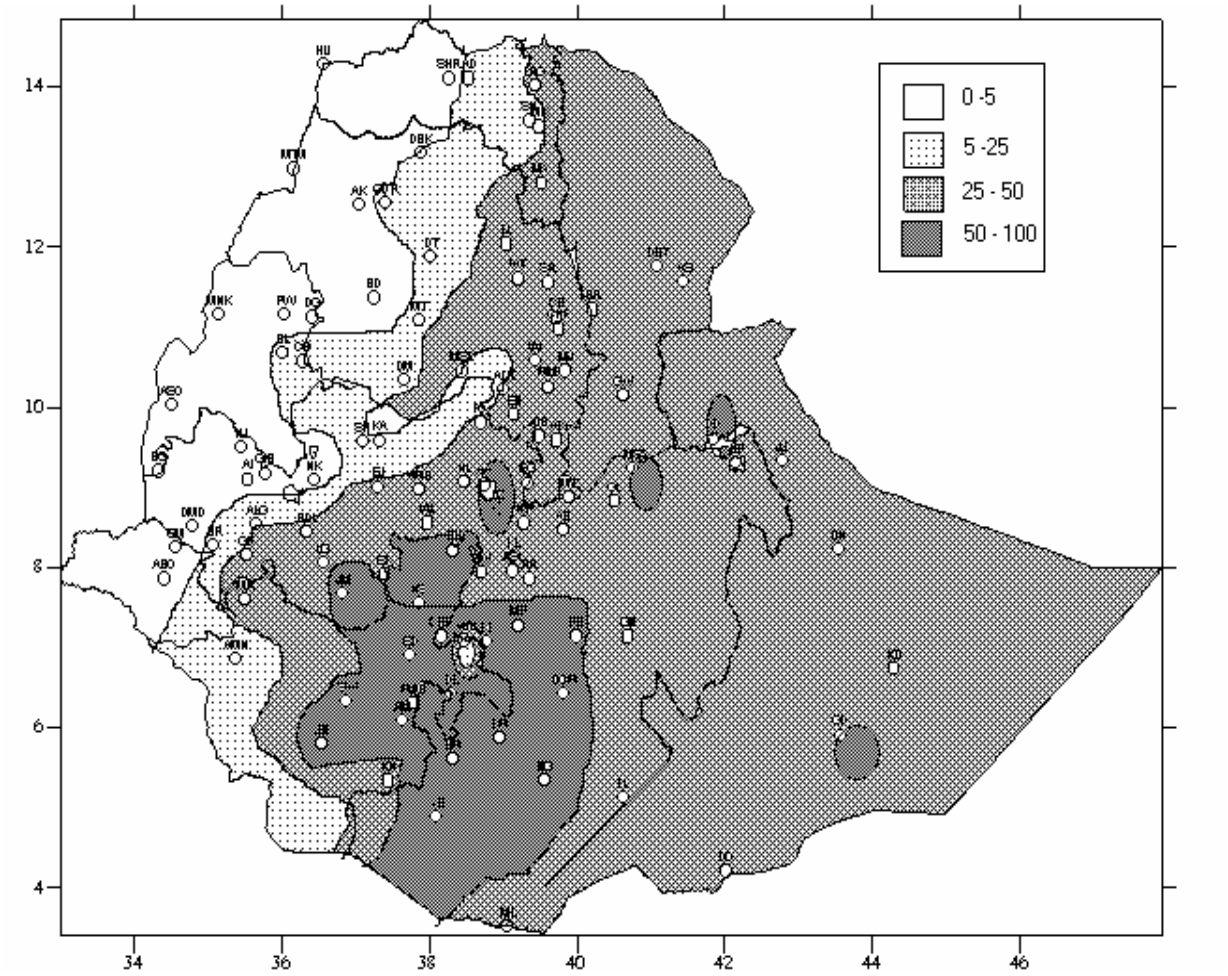

Fig 1 Rainfall distribution in mm (11-20 April 2010)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Except western and northwestern parts the country much Oromia, SNNPR, Somali, Afar and eastern half of Amhara and Tigray received normal to above normal rainfall.

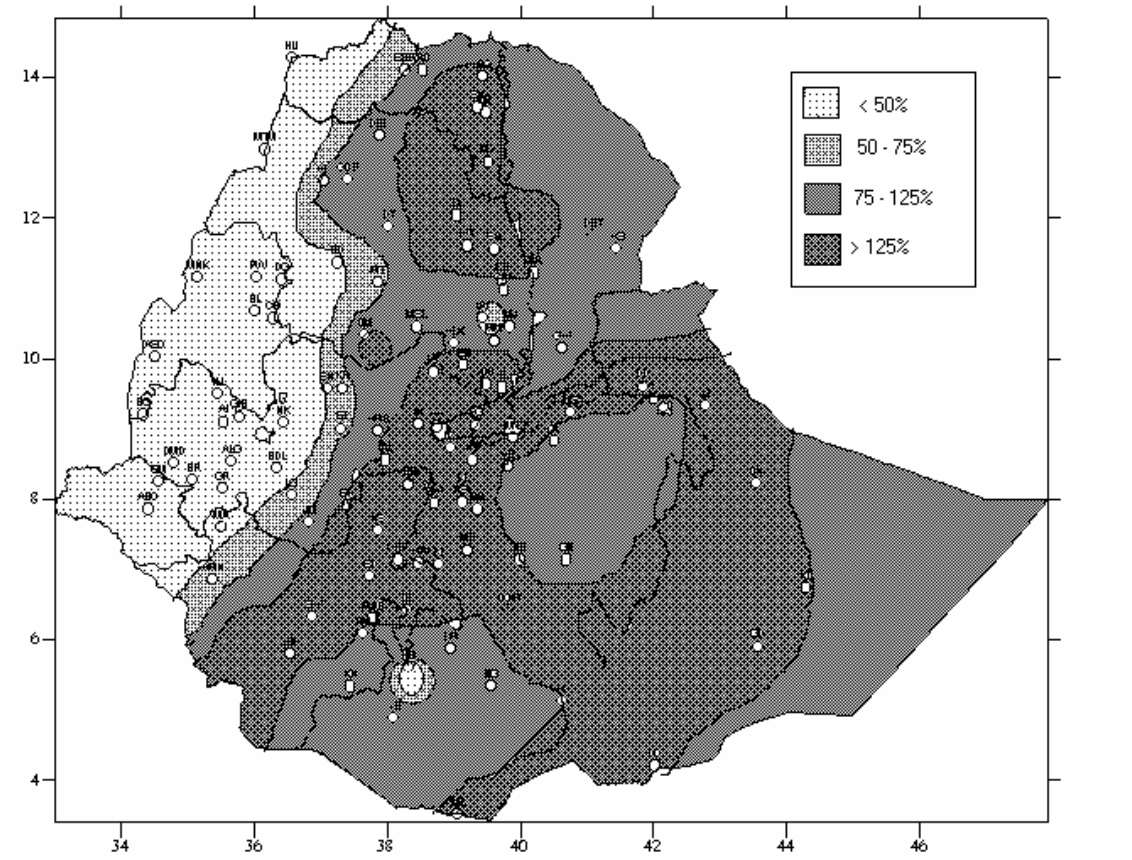

Fig.2 Percent of normal rainfall (11-20 April 2010)

Explanatory notes for the legend:

<50 -- Much below normal

50—75% -- below normal

75—125% --- Normal

- **125% ---- Above normal**

1.1.3 TEMPERATURE ANOMALY

Some stations in the low lands and western border of the country recorded extreme maximum temperature greater than 35 ^{o}C., Dire Dawa, Gode , Methara, Assayita, Aysha, Chagni, Dubti, Gambella, Gewane, Ghion, Humera, Mankush, Mieso, Mile, Mytsebre, Nura Era, Nejo, Pawe, Semera, Sherkole, Sirba Abaya and Awash Arba, reported 36.2, 38.0, 38.0, 40.5, 38.0, 37.0, 41.5, 42.2, 37.4, 43.9, 42.8, 33.0, 40.5, 38.5, 36.0, 35.2, 40.0, 41.0, 42.5, 41.2 and 40.0 ^{o}C respectively, while Debre Tabour reported a minimum temperature as low as 4.5°C. The situation might have a negative impact on the normal growth and development of plants and livestock.

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

Rain bearing meteorological phenomena considerably increased over Belg rain benefiting areas of central and southern Oromia, eastern Amhara, SNNPR and eastern portions of the country. Some stations recorded heavy fall in one rainy day. Among recording stations Errer, Addis Ababa (obs), Bui, Gode, Negele, Debre Zite, Senkata, Sawla and Addis Ababa (bole) reported 72.0, 67.0, 51.0, 42.3, 41.3, 39.5, 39.7, 36.7 and 35.8 mm of rainfall in one rainy day. Parts of western and southern Amhara, eastern and southern Tigray, western Oromia, southern Somalia, Gambela and adjoining areas of Benshangul Gumuz would receive normal to above normal rainfall. The situation might have favored Belg crops that are found at different phenological stages, water requirement for perennial plants, land preparation and sowing of long cycle crops, improvement of pasture and availability of drinking water over pastoral and agro pastoral areas of the country. On the other hand, some lowlands of north eastern, northwestern and western portions of the country experienced daily maximum temperature greater than 40°C, which might have led to moisture stress on the availability of pasture and drinking water over aforementioned areas.

As indicated on moisture map below, Most of southern, southeastern southwestern, northeastern, central and eastern portions of the country experienced humid to moist moisture condition, while pocket areas of northwestern SNNPR, southern and eastern Amhara, most parts of Afar, and southern and eastern Tigray exhibited moderately dry condition. The situation might have favored Belg agricultural activities as well as availability of drinking water and pasture while, much of western and northwestern portions of the country prevailed dry to very dry condition, this situation might cause water stress for perennial crops as well as availability of pasture and drinking water of the aforementioned areas.

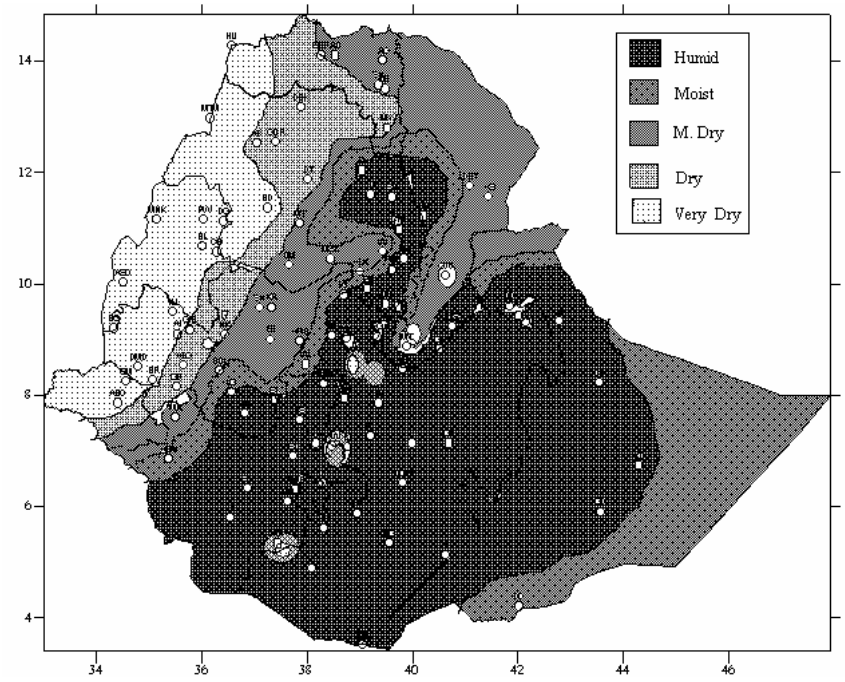

Fig.3 Moisture Status for (11-20 April 2010)

2.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

In the coming ten days SNNPR, highlands of southern and eastern Oromia, most parts of Somalia, expected to receive normal to above normal rainfall. While, Gambela, northern portions of western, central and eastern Oromia, northern Somalia, southern portions of Benshangul- Gumuz, eastern and central Amhara, eastern and southern Tigray expected to have near normal rainfall. The condition will have a positive impact for perennial plants, Belg agricultural activities, land preparation and sowing of long cycle crops and availability of pastor and drinking water over pastoral and agro-pastoral areas. On the other hand, northern portions of Benshangul-Gumuz, western Amhara and western Tigray and much of Afar will expect to have from its little cloud coverage and the daily maximum temperature will expect to exceed 40°C. Hence, the situation will cause slight moisture stress on perennial plants, Belg agricultural activities, and pasture and drinking water availabilities over pastoral and agro-pastoral areas.