NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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1-10July 2007 Vol. 17 No. 19 Date of issue July 13, 2007

SUMMARY

During the third dekad of June 2007, the kiremt rainfall intensified over the western half of the country, central Ethiopia and northeastern parts of the country in which the onset of rain fall seasons rainfall earlier. As a result, heavy fall ranging from 30-104 mm recorded on the aforementioned areas. Among the reporting stations, Nekemte, Aykel, Bedele, Chagni, DebreTabor, Ejaji, Gimbi, Hosaina, Kachise, Mankush, Metema, Pawe, Sekoru, Senkata, Shambu, Bahir Dar, Debre Zeit, Dire Dawa, Ambo, Arjo and Ayou recorded 45.7, 56.8, 40, 46, 34.3, 104.4, 35.9, 42.3, 51.2, 49.2, 98.1, 59.5, 40, 44.6, 32.3, 43.2, 38.1, 36.3, 34.7, 31.2, and 75mm in one rainy day, respectively. This rainfall situation could favor the ongoing seasons agricultural activities like land preparation and sowing activities and for the existing crops which are found at different phenological stages. Besides, it would also favor for the availability of pasture and drinking water in pastoral and agro pastoral areas, which are located in northeastern parts of the country. The observed below average up to average rainfall over eastern Ethiopia could favor for the availability of pasture and drinking water for pastoral and agro pastoral areas.

During the first dekad of July 2007, kiremt rainfall strengthened over the western part of the country and central Ethiopia. In addition in northeastern and eastern part of the country the rainfall distributed widely to covered most part of the country. Thus, this rainfall situation could have a positive contribution for the existing Meher crops. On the other hand eastern, northeastern part of the country received rainfall in some places. Therefore, this rainfall condition could have a significant contribution for the availability of pasture and drinking water over pastoral and agro pastoral areas of southern, eastern and northeastern part of the country. Most of our station reported heavy fall greater than 30mm even though some station reported above 50mm heavy fall like A/ketema, Assosa, Bahir Dar, Bati, Chagni, Cheffa, Combolcha, Dubti, Ejaji, Enawary, Meiso and Mytsemeri. 60.9, 103, 57.7, 59.6, 55.5, 66.3, 54.3, 58.6, 84.6, 51.3, 50.2 and 59.2 mm respectively. This heavy fall caused damage on bean and barley crop in Mehal Meda.

1. WEATHER ASSESSMENT

1.1 July 1-10, 2007

1.1.1 RAINFALL AMOUNT (Fig.1)

Only pocket area of eastern Amhara received 200-300mm rainfall. Most parts of eastern and southern and some part of northern Amhara, some parts of central, western and northern Oromia, northern SNNPR, western Afar, merge of south-northern Tigray and tip of western Gambela experienced 100-200mm rainfall. Some parts of western, central and southern Oromia, western Amhara, western and eastern Tigray, southern and western Afar, eastern Gambela, eastern, southern and western Beshangul-Gumuz and northern and northeastern SNNPR exhibited 50-100mm rainfall. Most part of Gambela, some parts of western, southern and eastern SNNPR, western, southern and eastern Oromia, northern Afar, northwestern Beshangul-Gumuz, eastern Afar and eastern Tigray received 25-50 mm rainfall. Some parts of southern and eastern SNNPR, southern and eastern Oromia and northern and northeastern Somali experienced 5-25mm rainfall. The rest parts of the country exhibited little or no rainfall.

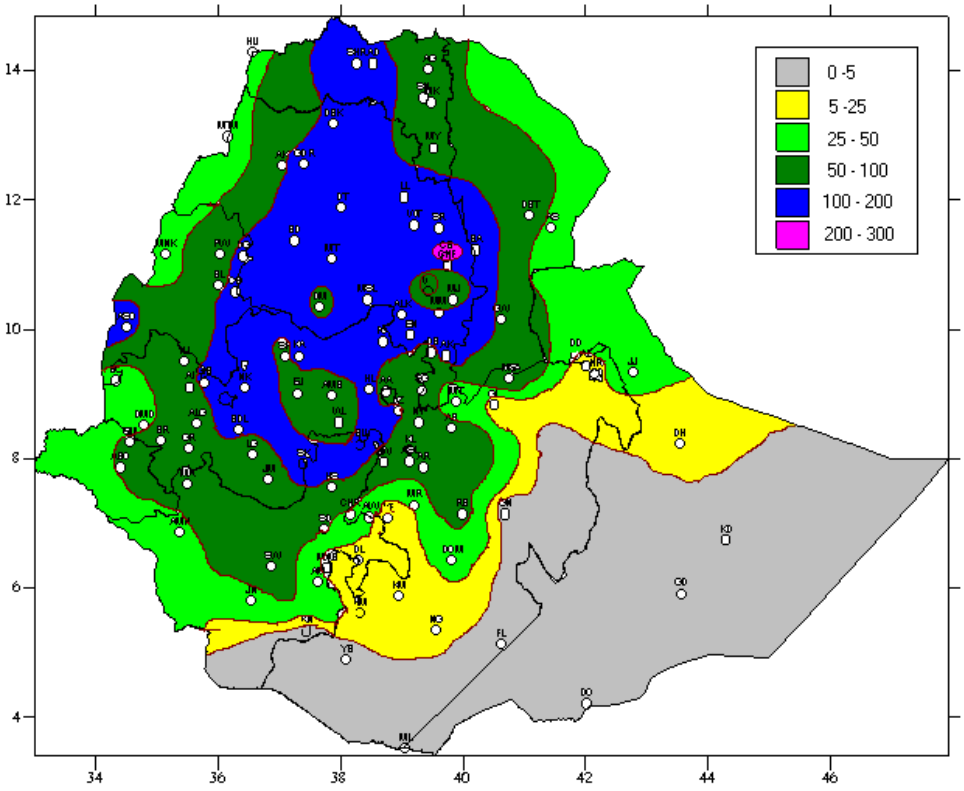

Fig 1. Rainfall distribution in mm (1- 10 July, 2007)

1.1.2 RAINFALL ANOMALY (Fig. 2)

All part of Gambela, most part of Somali, some parts of western, southern and eastern Oromia, western and southern SNNPR and tip of western Amhara received below normal to much below normal rainfall. The rest parts of the country exhibited normal to above normal rainfall.

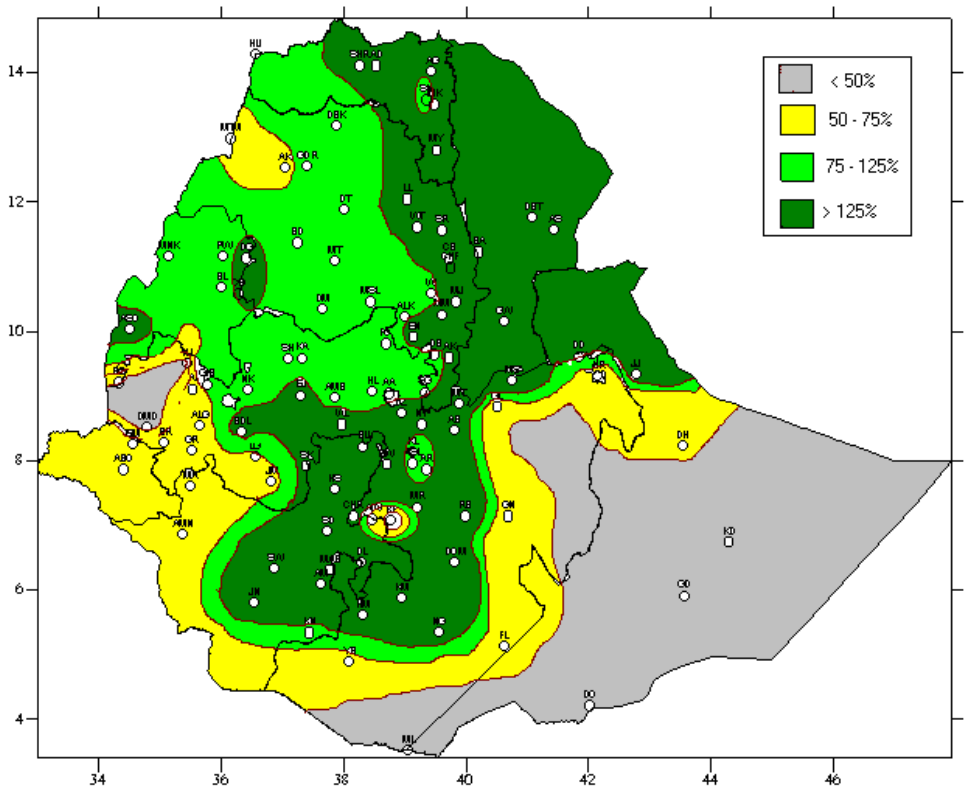

Fig.2 Percent of normal rainfall (1- 10 July, 2007)

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^{o} C. Assayta, Dubti, Semera, Gambela and Methara recorded extreme maximum temperature as high as 42.3, 42.8, 42.5, 37.5 and 36.5 ^{o} C respectively.

The duration of the extreme maximum temperature that exceed 35 ^{o} C was ten consecutive days over Assayta, Dubti and Semera, while with the frequency of only two days over Gambela and Methara.

2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF JULY 2007

In the second decade of July, the kiremt rain producing system will cover much of the kiremt rain benefiting areas. In the coming ten days, much of Benishangul-Ggumuz, Amhara, Tigray and central Ethiopia are expected to receive rain showers for many days, with normal and above normal pattern. As a result, occasional occurrences of heavy rains from strong cloud clusters are anticipated at some places. On the other hand, places that did not experience significant wet weather activity previously like eastern Oromia, Dire Dawa, Harari and northern half of Somali will start to get the kiremt rain with nearly normal conditions at some places. Moreover, Afar and the adjoining areas of northeastern lowlands will receive normal rainfall.

In general, during the coming ten days, the predictable heavy rain showers likely to result flash flooding at some places. Therefore, the responsible body should take preventive measure at those places. In association with the shifting of the rain–producing systems towards the northern half, Gambela, western part of SNNPR and western Oromia will receive below normal rainfall. However, the above-mentioned areas will get nearly normal at some days. Additionally, southern parts of SNNPR and the neighboring areas of southern Oromia will remain dry with chance of light rain at few days.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

kiremt rainfall strengthened over the western part of the country and central Ethiopia. In addition in northeastern and eastern part of the country the rainfall distributed widely that covered most part of the country. Thus, this rainfall situation could have a positive contribution for the existing Meher crops. On the other hand eastern, northeastern part of the country received rainfall in some places. Therefore, this rainfall condition could have a significant contribution for the availability of pasture and drinking water over pastoral and agro pastoral areas of southern, eastern and northeastern part of the country. Most of our station reported heavy fall greater than 30mm even though some station reported above 50mm heavy fall like A/ketema, Assosa, Bahir Dar, Bati, Chagni, Cheffa, Combolcha, Dubti, Ejaji, Enawary, Meiso and Mytsemeri 60.9, 103, 57.7, 59.6, 55.5, 66.3, 54.3, 58.6, 84.6, 51.3, 50.2 and 59.2 mm respectively. This heavy fall to occurred damage on bean and barley crop in Mehal Meda.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The anticipated normal to above normal rainfall condition over most parts of Benshangul-Gumuz, Amara, Tigray and central Ethiopia would have a significant contribution for long cycle crops which are found at different phenological stage and lately sown crops over the aforementioned areas. Nevertheless, the expected heavy fall over some areas of the aforementioned areas would have negative impact on crop fields particularly over low-lying areas and near riverbanks. Thus proper attention should be taken to minimize the risk that would happen due to the expected excess moisture condition. On the other hand, the expected near normal rainfall condition over some areas of eastern Oromia, Dire Dawa, Harari and northern half of Somali and normal rainfall over Afar and adjoining areas of north eastern low lands would have a positive contribution for perennials crops, pasture and drinking water over pastoral and agro pastoral areas.