

NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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

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SUMMARY

During the first dekad of August 2007, Kiremt rain was distributed fairly over Meher growing areas of the country areas as result favored crops at different growth stages. Some of reporting stations recorded extreme heavy falls in the range of 85.6 to 106 mm in one rainy day over different parts of the country. The situation might have caused damages on crops at their critical stages of developments (flowering, emergence), in line with this reportedly different crops to have damaged due to water lodging over Majete.

During the second dekad of August, the observed widely distributed kiremt rainfall over Meher growing areas could have a significant contribution for crops which are found at medium growth stages and lately sown crops over the areas. On the other hand, the consecutive and heavy kiremt rainfall condition might cause water logging on crop fields particularly in low-lying areas and in areas where the soil type is clay. Therefore, care must be taken in order to decrease crop damage due to water logging. Moreover replanting of crops is necessary over crop damaged areas in order to replace the damaged ones. Regarding adverse weather condition Aira reported land slid over the areas and Arjo reported crop damage (Barley and Bean) and shattering of trees over the areas due to heavy fall. The rainfall amount was 60.6 and 63.2mm respectively.

1. WEATHER ASSESSMENT

1.1 August 11-20, 2007

1.1.1 RAINFALL AMOUNT (Fig.1)

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

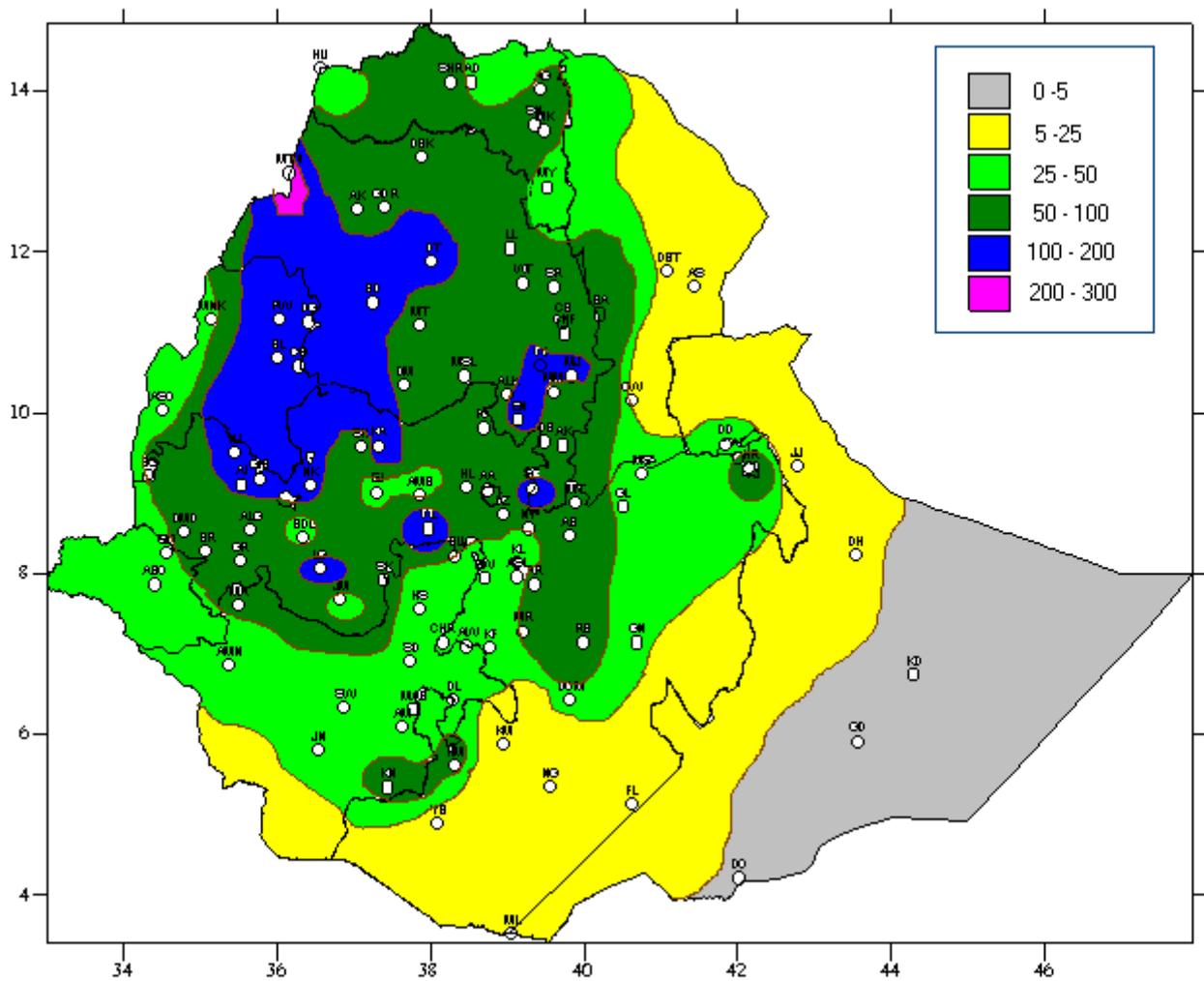


Fig 1. Rainfall distribution in mm (11- 20 August, 2007)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Most parts eastern and southern Somali, some part of eastern northern and pocket area southern Afar, tip of western Beshangul-Gumuz and pocket areas of central, western, eastern and northern Oromia, northern SNNPR, western, northern and eastern Tigray and southern and eastern Amhara reviewed below normal to much below normal rainfall.

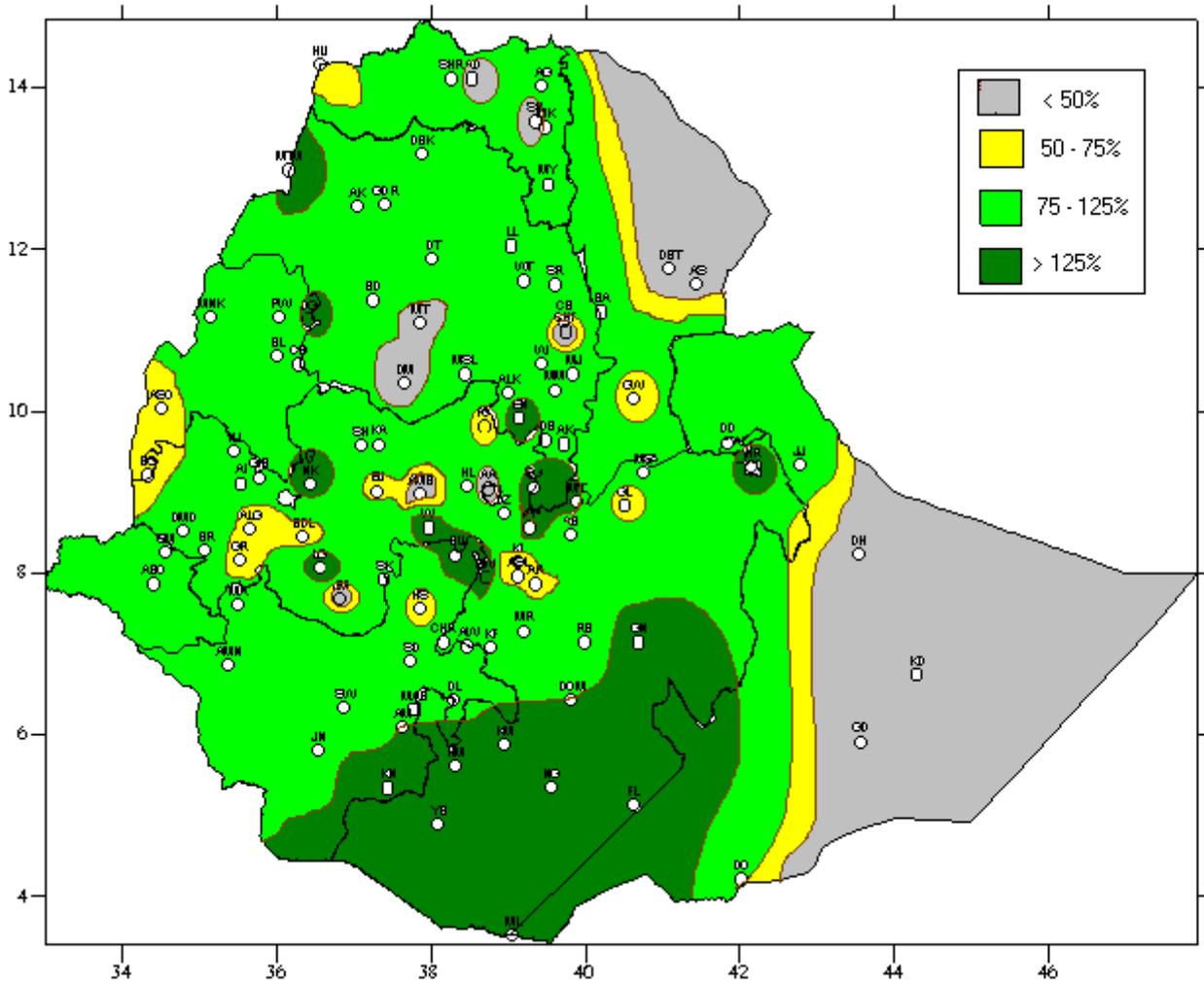


Fig.2 Percent of normal rainfall (11-20 August, 2007)

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 recorded extreme maximum temperature 35° C and above for 2-11 consecutive days. Gode, Gambella, Gowane, Assayita, Elida, Dubti and Semera recorded extreme maximum temperature as high as 37.0, 37.0, 38.5, 40.6, 40.8, 41.6 and 41.6 °C respectively.

2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF AUGUST 2007

Kiremt rain-producing systems are likely to attain better strength particularly during the first days of the coming dekad. As a result, the seasonal rains widely be distributed and increased in amount across much of the Kiremt rain-benefiting regions. Whereas, there will be a slight weakening of the rain-producing systems though it will not be as significant to affect the overall performance of the seasonal rains across the country. In general, in the coming dekad, Tgray, Amhara, Benshangul-Gumuz, west and central Oromiya, Gambella and SNNPR will get normal to above normal rains. In addition to this, heavy rains that will be accompanied by hail and thunder showers will occur at some places of the aforementioned region. On the other hand, much of Afar and the adjoining lowland of northeast regions, east Ethiopia as well as southern portions of SNNPR and Oromiya will get near normal rains despite below normal rains at some places of eastern Ethiopia.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed widely distributed kiremt rainfall over Meher growing areas could have a significant contribution for crops which are found at medium growth stages and lately sown crops over the areas. On the other hand, the consecutive and heavy kiremt rainfall condition might cause water logging on crop fields particularly in low-lying areas and in areas where the soil type is clay. Therefore, care must be taken in order to decrease crop damage due to water logging. Moreover replanting of crops is necessary over crop damaged areas in order to replace the damaged ones. Regarding adverse weather condition Aira reported land slid over the areas and Arjo reported crop damage (Barley and Bean) and shattering of trees over the areas due to heavy fall. The rainfall amount was 60.6 and 63.2mm respectively.

Pursuant to crop phonological report maize was at ninth leaf stage in some areas of western Oromia (shambu), eastern Benshangul Gumuze (chagni), and northeastern Benshangul Gumuze (Pawe). While it was at flowering stage in some areas of northern Tigray (Shire), western Oromia (Bedele). Moreover it was at wax ripeness stage in some areas of central Oromia (wolisso), eastern Oromia (Gelemso) and Western Oromia (Nedjo). Sowing of teff underway in some areas of Southwestern Oromia (Sokoru), Eastern Oromia (Gelemso), while it was at emerging stage in some areas of northern Tigray (shire), Southwestern Oromia (chira and Limugenet), Western Oromia (Kachise), northern SNNPR (Bui) and Southern Amhara (Enewary). It was at third leaf stage in some areas of central Oromia (Wolliso). Where as it was at tillering stage in some areas of central Amhara (D/Tabor) and it was at shooting stage in southern Amhara (Alem ketema) eastern Amhara (Majete). Moreover it was at Flowering stage in some areas of eastern Amhara (Bati). Wheat was at emerging stage in some areas of western Oromia (Shambu), SNNPR (Bui). While it was at third leafstage in some areas of eastern Amhara (Wegel tena), Southern Amhara (Enewary and Shola Gebeya), north Oromia (Fitcha). Moreover it was at shootig stage in some areas of central Oromia (Zeway) central Amhara (D/Tabor). Sowing of barley underway in some areas of western Oromia (Shambu) and it was at emerging stage in some areas of northern SNNPR (Hosaina). Moreover it was at third leaf and earing stage in some areas of eastern Amhara (Mehal Meda) and central Amhara (D/Tabor). Sorghum was at third leaf stage in some areas of SNNPR (Bui). While it was at tillering and flowering stage in some areas of Western Oromia (Nedjo), south western Oromia (chira). Millet was at emerging stage in some areas of Western Amhara (Dangila). It was at ninth leaf stage in some areas of SNNPR (Chagni), it was at tillering stage in some areas of eastern Benshangul Gumuze (Bullen) and it was at shooting stage in some areas of western Oromia (Nedjo). Beans were at third leaf stage in some areas of northern Oromia (Fitcha), it was at budding stage in some areas of eastern Amhara (Mahal Meda), Sothern Amhara (Shola Gebeya) western Oromia (Kachise). Peas were at flowering stage in some areas of central Amhara (Ayehu). Oats at third leaf stage in some areas of eastern Amhara (Wegel Tena).

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The anticipated normal to above normal rainfall condition over eastern, northeastern, central including the western half of Ethiopia, northwestern, western, south western and central parts of the country would favor for crops which are found at different phonological stages and lately sown crops. Nevertheless the expected heavy falls accompanied with thunder and hailstorm would result in water logging and flash flood in some areas of the aforementioned areas. Thus, appropriate measures should be under taken particularly over low-lying areas and near the riverbanks including in areas where the soil type is clay. The expected near normal rainfall condition over some areas of eastern and southern highlands, SNNPR and southern Oromia would have a significant contribution for the availability of water over pastoral and agro pastoral areas.