

NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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SUMMARY

During the third dekad of May 2005 with the exception of central Oromiya, north-western Amhara, northern Benishangul Gumuz, northern Somali and parts of southern Afar the rest and most parts of the country exhibited normal to above normal rainfall. As a result, the crops conditions were in a good shape over most parts of Belg growing and Meher growing areas as well. As the NDVI picture (USGS) indicates, there was an improvement of vegetation cover in most parts of the country during the third dekad of May due to the rainfall condition observed during the preceding dekads. With regard to adverse Weather conditions, Sodo reported bad and medium field condition due to severe and slight water logging on maize and peas crop fields caused by heavy falls. Aira reported maize crop damage due to heavy fall with strong wind. On the contrary, Debre Markos and Ziway reported medium field condition due to water stress during the third dekad of May.

During the first dekad of June 2005 below normal rainfall has observed over Tigray, most parts of Amara parts of central and eastern Oromiya including southern Oromiya, most parts of SNNP and northern Benishangul-Gumuz. On the contrary, some areas of western Ethiopia exhibited heavy falls repeatedly (2 -5 days). For instance, Gimbi recorded 38.1, 32.7, 44.2, 56.8 and 52.1 mm of rainfall and Aira recorded 42.6, 68.2 and 33.5 mm of rainfall in the ten days period. As a result, Aira reported fruit crop like banana and field crops damage due to heavy fall on June 03, 2005. Among the reporting stations Chagni, Dembi Dolo, Gimbi, Limu Genet, Masha, Nedjo, Nekemte, Aira, Bedelle, Begi, Bullen and Chira experienced 30-68.2 mm in a rainy day. In accordance with the crop phenological report (1-10 June 2005), sowing of sorghum was under way over some areas of northwestern parts of the country like Mankush. It was at early vegetative stage over some areas of western and northeastern parts of the country like Nedjo, Sekoru, Denbi Dolo, Gimbi and Bati. Maize was at wax ripeness stage over northern SNNPR like Sodo and eastern Amhara like Sirinka. It was at teaselling and ninth leaves stages in some areas of central Oromiya like Ziawy, eastern Oromiya like Gelemso and western Oromiya(Alge, Dembi Dolo, Gimbi, Bedelle and Aira) while at early vegetative stage over northwest Benishangul-Gumuz (Mankush) and western Oromiya (Sekoru, Limu Genet and Nejo). Pulse crops harvested in some areas of eastern Amhara like Sirinka. Millet was at third leaf and shooting stages in some areas of western (Limu Genet) and eastern Oromiya like Gelemso, respectively. Harvest of Potato was under way in some areas of northern SNNPR like Hosaina.

1. WEATHER ASSESSMENT

1.1 RAINFALL AMOUNT (Fig. 1)

Western Oromiya, few areas of southeastern Benishangul-Gumuz and northeastern Gambela received fall greater than 100 mm. Most parts of Gambela, northwestern SNNPR, parts of Benishangul-Gumuz received 50-100 mm rainfall. Northwestern Amara, parts of central Oromiya, parts of western SNNPR experienced 25-50 mm of rainfall. Most parts of eastern half of Oromiya, northern parts of central and northeastern SNNPR, parts of southwestern Amhara and few areas of northern Somali received 5-25 mm of rainfall. There was little or no rain for the rest of the country.

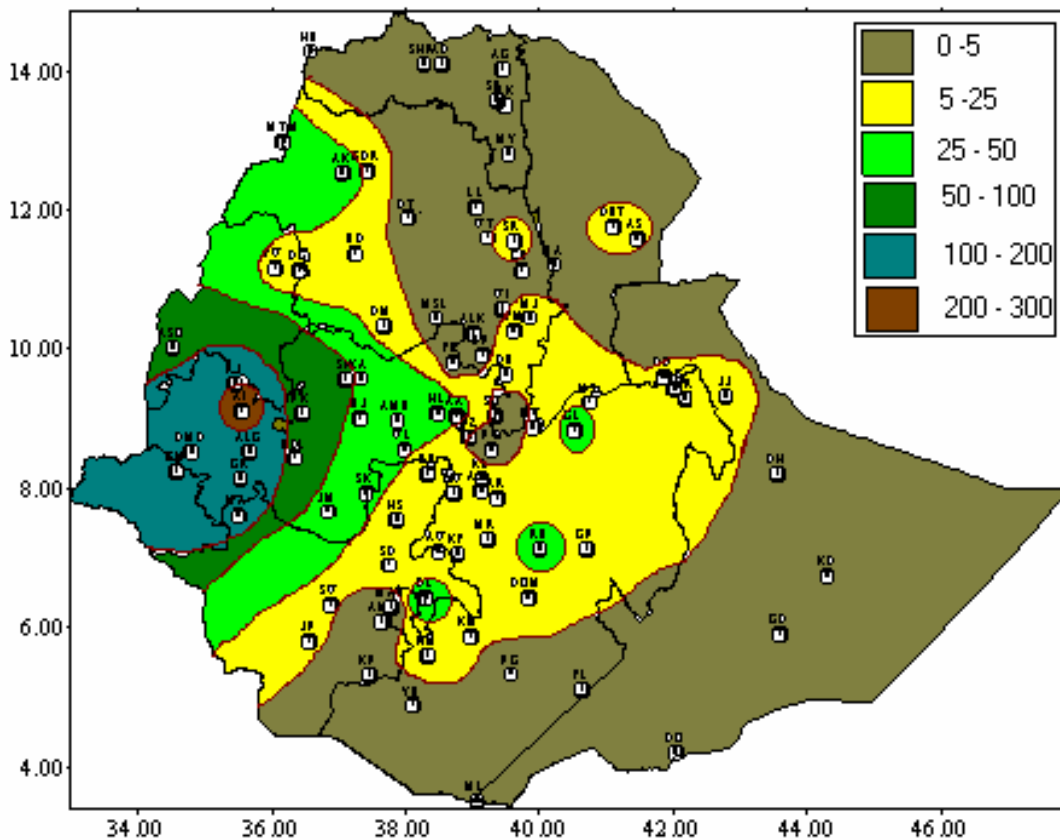


Fig 1. Rainfall distribution in mm (1-10 June, 2005)

1.2 RAINFALL ANOMALY (Fig. 2)

Few areas of northwestern and southeastern Amhara, southern half of Benishangul-Gumuz, western Oromiya, Gambela, pocket areas of central, southern and eastern Oromiya including parts of northeastern Afara experienced normal to above normal rainfall while the rest of the country received below normal rainfall.

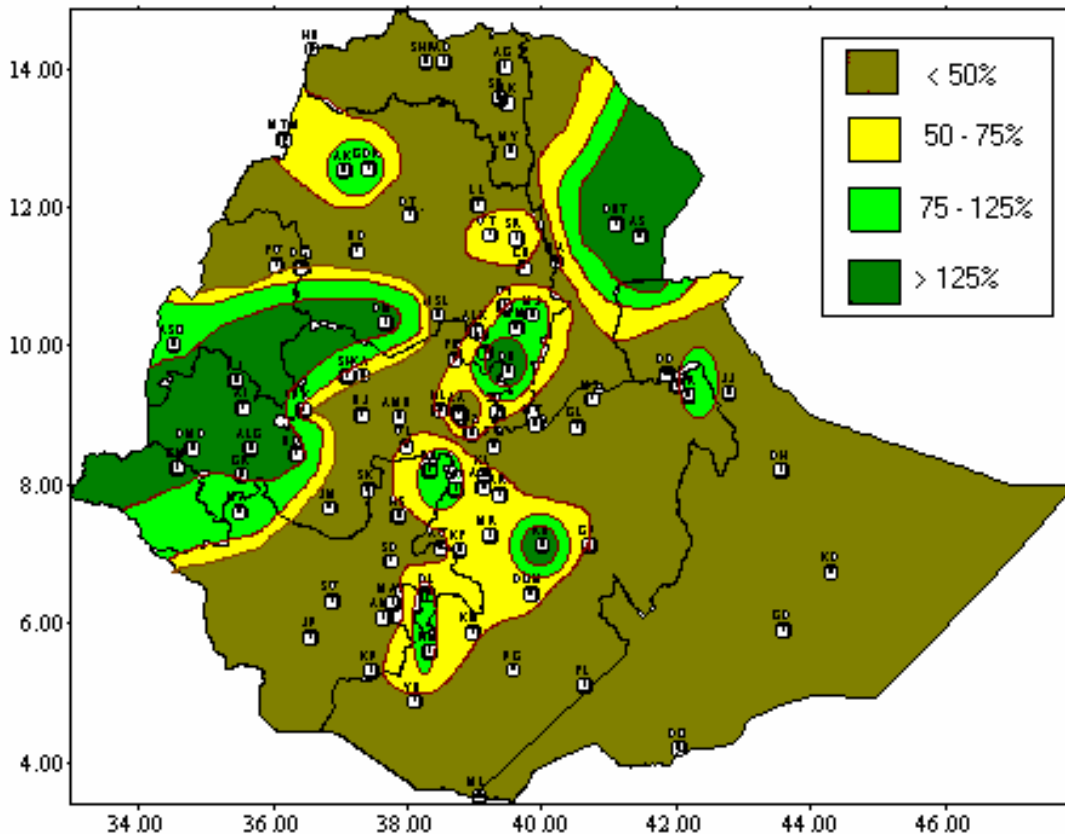


Fig.2 Percent of normal rainfall (1-10 June, 2005)

Explanatory notes for the legend:
<50 -- Much below normal
50—75% -- below normal
75—125% --- Normal
> 125% ---- Above normal

1.3 TEMPERATURE ANOMALY

No significant air temperature anomaly has been observed over the lowlands during the dekad under review.

2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF JUNE 2005

For the coming ten days, the rainfall activity is expected to have a better strength over the rain-benefiting areas. However, in association with inadequate moisture incursion, less rainfall is anticipated over most places of eastern half of the country. Hence, western parts of Tigray, Amhara and Oromya, Benishangul-Gumuz, northern half of SNNPR as well as Gambela are expected to get normal to above normal rainfall. On the other hand, Eastern, portions of Tigray and Amhara, Afar, eastern and Southern Oromya, Southern half of SNNPR and Somali will have below normal rainfall.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed heavy falls over some areas of western Ethiopia (2 -5 days in ten days period) could have negative impact on the normal growth and development of crops by causing physical damage as well as physiological disorder. For instance, Gimbi recorded 38.1, 32.7, 44.2, 56.8 and 52.1 mm of rainfall and Aira recorded 42.6, 68.2 and 33.5 mm of rainfall in the ten days period. As a result, Aira reported fruit crop like banana and field crops damage due to heavy fall (June 03 2005). Among the reporting stations Chagni, Dembi Dolo, Gimbi, Limu Genet, Masha, Nedjo, Nekemte, Aira, Bedelle, Begi, Bullen and Chira experienced 30-68.2 mm in a rainy day. In accordance with the crop phenological report (1-10 June 2005), sowing of sorghum was under way over some areas of northwestern parts of the country like Mankush. It was at early vegetative stage over some areas of western and northeastern parts of the country like Nedjo, Sekoru, Denbi Dolo, Gimbi and Bati. Maize was at wax ripeness stage over northern SNNPR like Sodo and eastern Amhara like Sirinka. It was at teaselling and ninth leaves stages in some areas of central Oromiya like Ziawu, eastern Oromiya like Gelemso and western Oromiya (Alge, Dembi Dolo, Gimbi, Bedelle and Aira) while at early vegetative stage over northwest Benishangul-Gumuz (Mankush) and western Oromiya (Sekoru, Limu Genet and Nejo). Pulse crops harvested in some areas of eastern Amhara like Sirinka. Millet was at third leaf and shooting stages in some areas of western (Limu Genet) and eastern Oromiya like Gelemso, respectively. Harvest of Potato was under way in some areas of northern SNNPR like Hosaina.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The anticipated normal to above normal rainfall over western Tigray, western Amhara, Benishangul-Gumuz and northern parts of SNNPR would have significant contribution particularly in areas where there was deficient moisture condition during the preceding dekads like parts of western Amhara, northern Benishangul Gumuz and northwestern SNNPR. In case of western Oromiya, there would be excess moisture condition in the crops field due to the abundant rainfall conditions observed during the preceding dekads particularly in low-lying areas and in areas where the soil type is clay. Thus, proper percussion should be taken in order to minimize the risk due to the excess moisture status of the soil. On the contrary the expected below normal rainfall over eastern Tigray, eastern Amhara, Afar, eastern and southern Oromiya, southern parts of SNNPR and Somali would exacerbate the persisted stress condition during the preceding dekad particularly in areas like eastern Tigray and Amhara including northern half of Somali and some areas of eastern Oromiya. Therefore, proper attentions are required for proper water harvesting techniques in the aforementioned areas to mitigate the effect of water stress to some extent.