

NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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SUMMARY

During the first dekad of April 2004, the observed normal to above normal rainfall over most parts of the country has favoured season's agricultural activities. Under normal circumstance it is the time for land preparation and sowing of long cycle crops in most parts of Belg growing areas and southern half of Meher growing areas as well. Thus, it was believed that the rainfall amount and distribution observed during the first dekad of April has paramount importance for sowing of maize and sorghum in most parts of the country where sowing of those crops was under question. Besides, it could assist the availability of pasture and drinking water over pastoral areas and it could create favorable condition for sowing activities of haricot bean, wheat, maize and sorghum in agro pastoral areas of southern Oromiya and lowlands of Somali. Some areas of central, northeastern, eastern southern parts of the country exhibited heavy falls ranging from 31 – 82mm in one rainy day. This condition could have negative impact on existing crops in the field. In accordance with the crop phenological report, the late sown cereal crops were at early vegetative stage over northeastern SNNPR and some areas of eastern Amhara. Nevertheless, medium field condition was reported due to water stress over eastern Amhara.

During the second dekad of April 2004, Somali, SNNPR, much of Oromiya, southern and eastern Amhara, southern half of Afar and pocket areas of south eastern Tigray experienced normal to above normal rainfall distribution while the rest of the country received below normal rainfall. Among some of reporting stations Kibre Mengist, Gelemso, Asgori, Buie, Metehara, Sodo, Dire Dawa, Meiso, Hosaina and Koffele received 70.5,75.5,75.9,82.5, 88.6, 92.7, 96.2, 96.8, 110.4 and 123.8 mm of dekad rainfall, respectively. In addition to this, Mehal Meda, Kibre Mengist, Majete, Dembi Dolo, Koffele, Gode, Dubti, Sodo, Dire Dawa, Fithch, Asgori and Metehara recorded 30.2, 31.6, 32.0, 32.0, 32.7, 35.8, 46.2, 46.9, 47.5, 53.8, 54.0 59.4 mm of heavy fall in one rainy day, respectively. In general, the observed widespread rainfall distribution have indispensable contribution on the ongoing seasons agricultural activities over Belg growing areas of the country and the availability of pasture and drinking water for pastoral and agro-pastoral areas.

1. WEATHER ASSESSMENT

1.1 RAINFALL AMOUNT (Fig. 1)

Western half of Tigray and Amhara, Benishangul Gumuz, parts of western Oromiya and Gambela received falls below 5 mm. Parts of western Tigray, northern half of Afar, parts of western Oromiya, most parts of eastern Oromiya received falls ranging from 5 – 25 mm. Parts of eastern Amhara, parts of southern Afar, parts of central and eastern Oromiya, most parts of Somali and parts of central SNNPR exhibited falls ranging from 25- 50 mm. Southern tip of Afar, southern and northern SNNPR, parts of southern and eastern Oromiya, southeastern Somali and pocket areas of eastern Amhara experienced falls in the rang of 50 – 100 mm. Pocket areas of northern SNNPR and central Oromiya exhibited greater than 100 mm of rainfall.

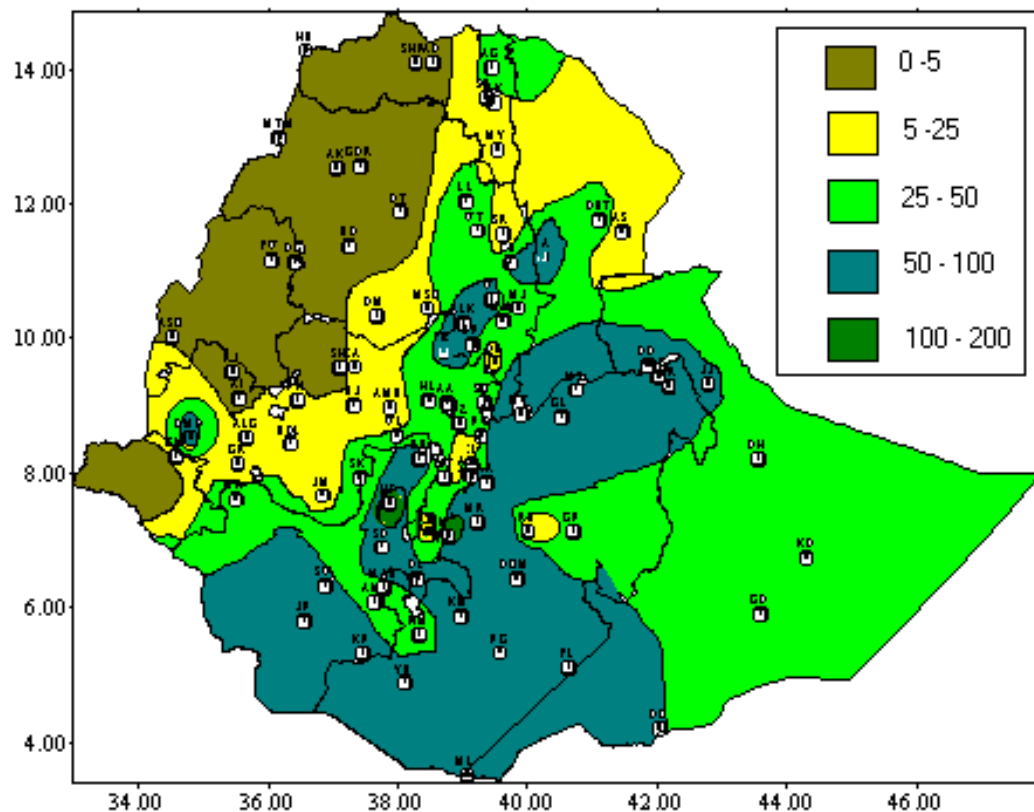


Fig 1. Rainfall distribution in mm (11-20, April 2004)

1.2 RAINFALL ANOMALY (Fig. 2)

Somali, SNNPR, much of Oromiya, southern and eastern Amhara, southern half of Afar and pocket areas of south eastern Tigray experienced normal to above normal rainfall distribution while the rest of the country received below to much below normal rainfall.

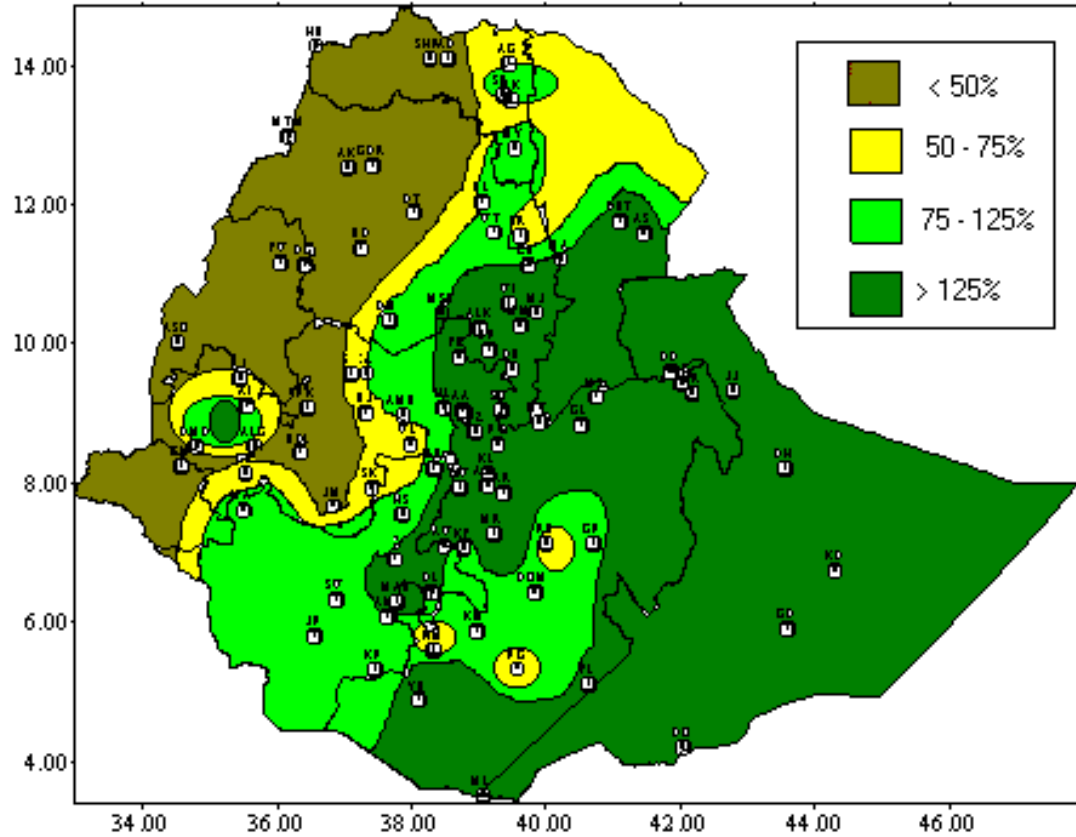


Fig.2 Percent of normal rainfall (11-20, April 2004)

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 temperature anomaly was observed during the dekad.

2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF APRIL 2004

The rain giving systems are, expected to continue in well-organized manner over southern half of the country. However, these systems are anticipated to wane over northern half of this country. Generally, Benshangul-Gumuz, Gambella, Oromiya, SNNPR and Somali will have normal to above normal rainfall. Furthermore, torrential rain that leads to flash flood are highly likely to occur over those areas mentioned above. Besides, close to normal rainfall is expected over few places western Amhara and western Oromiya. Although Tigray, eastern Amhara and Afar are anticipated to have discontinuous rainfall pattern within the decade, the amount of rainfall is expected to be below normal.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

Generally the abundant falls observed during the second dekad of April over most parts of southern half of the country including eastern and northeastern parts of Ethiopia favored season's agricultural activities such as sowing and land preparation for long cycle crops in areas where the activities are under question. Besides, it could create favorable condition for the existing crops in the fields. The observed widespread rainfall distribution would also have indispensable contribution on the availability of pasture and drinking water for pastoral areas and for sowing of Gena crops in agro-pastoral areas as well.

Pursuant to the crop phenological report, sowing of teff was under way in some areas of highlands of southern Oromiya while it was at shooting stage in some areas of eastern Amhara. Maize and sorghum were at emergence and third leaf stage in some areas of northern SNNPR and southern highlands of Oromiya. Nevertheless, the observed heavy falls in some areas of the country resulted in crop damage and livestock losses in some areas. For instance, Sodo reported slight water logging on maize field during the dekad under review.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DAKAD

The anticipated normal to above normal rainfall over Benishangul Gumuz, Oromiya, SNNPR and Somali would favour sowing of haricot bean, maize and sorghum in central Ethiopia, sorghum, haricot bean wheat and teff in southern and southeastern, millet, haricot bean maize and potato over parts of SNNPR. Besides, it would create favorable condition for the existing crops on the field at vegetative and emergence stage. Nevertheless, the expected heavy falls over some areas of the aforementioned areas would result in soil erosion on sloppy crop fields and water logging on low laying crop fields. Thus, the concerned personnel should take proper measure ahead of time in order to mitigate the effect of excess water.

The anticipated near normal rainfall over western Oromiya and Amhara would have positive contribution for the coming Meher season's land preparation.

On the other hand, the expected below normal rainfall over most parts of eastern half of Tigray and Amhara would cause water stress on crops, which were under stress condition during the preceding dekad over parts of eastern Tigray and pocket areas of eastern Anhara. Therefore, proper water harvesting activities or other coping mechanisms should be designed to mitigate the effect of water stress.