NATIONAL METEOROLOGICAL SERVICES AGENCY TEN DAY AGROMETEOROLOGICAL BULLETIN

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

1-10, April 2004 Volume 14 No. 10 Date of issue: April 13, 2004

SUMMARY

During the third dekad of March 2004, there was wide spread rainfall over most parts of the country and covers most parts of Belg growing areas including some highlands of western Ethiopia. Besides, some areas from the central and northeastern Ethiopia exhibited heavy falls more than 35 mm. Among the reporting stations Debre Zeit, Hosaina, Abomsa, Metehara and Bati recorded 35.2, 35.6, 39.0, 40.0 and 44.0 mm of heavy falls in one rainy day, respectively. However, Belg growing areas of parts of eastern and southern tip of South Tigray, parts of eastern Amhara, most parts of SNNPR, parts of central, eastern and southern Oromiya exhibited below to much below normal rainfall. Thus, this condition resulted in water stress on crops in some areas. There was erratic rainfall distribution with extended sunny outbreaks in some areas, which could favor the occurrence of pest and diseases.

During the first dekad of April 2004 most parts of the country received dekadal falls greater than 25 mm which could be suitable for land preparation and sowing activities of long cycle crops like maize and sorghum. Besides, it could create favorable condition for agro pastoral activities over the lowlands of Oromiya and Somali. Some areas of central, northeastern, eastern and southern parts of the country exhibited heavy falls ranging from 31 – 82mm in one rainy day. Among the reporting stations Kachise, Gelemso, Bati, Yabelo, Shambu, Addis Ababa (Bole), Negelle, Ziway, Koffele, Harar, Senkata, Sodo and Gursum recorded 30.7, 30.7, 32.2, 35.3, 36, 37.4, 38.1, 40.0, 47.0, 47.3, 49.0, 50.2 and 82.3 mm of rainfall in one rainy day, respectively. 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 has been reported due to water stress over eastern Amhara.

1. WEATHER ASSESSMENT

1.1 RAINFALL AMOUNT (Fig. 1)

Parts of southern Oromiya, pocket areas of northern SNNPR and eastern Oromiya experienced falls greater than 100 mm. Most parts of eastern Amhara, parts of central and southern and few areas of eastern Oromiya including northern tip and some areas of central SNNPR received falls in the range of 50 - 100 mm. Parts of western Amhara, most parts of eastern and western Oromiya, central and eastern SNNPR, eastern half of Benishangul Gumuz and parts of eastern Gambela exhibited falls ranging from 25 - 50 mm. The rest of the country received less than 25 mm.

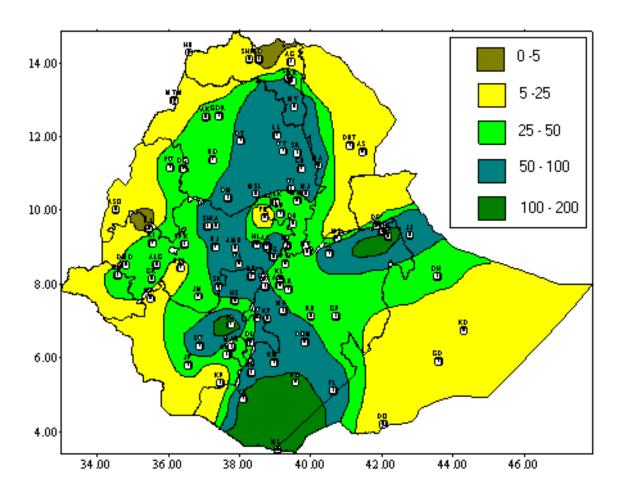


Fig 1. Rainfall distribution in mm (1-10, April 2004)

1.2 RAINFALL ANOMALY (Fig. 2)

With the exception of pocket areas of western Oromiya and southeastern SNNPR including southeastern Somali, most parts of the country experienced normal to above normal rainfall.

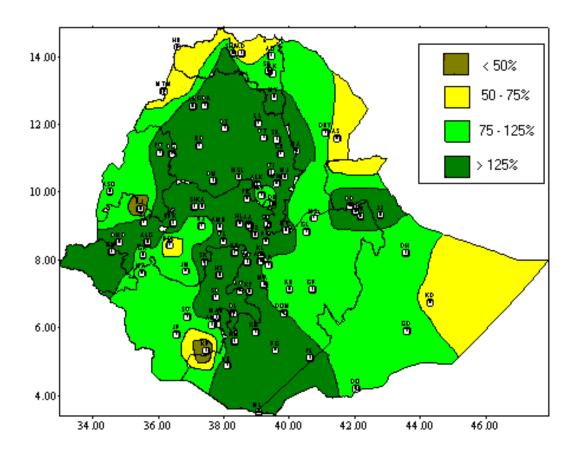


Fig.2 Percent of normal rainfall (1-10, April 2004)

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 last ten days.

2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF APRIL 2004

During the coming ten days much of Somali, Afar, northern SNNPR, Gambela, central and eastern Amhara are anticipated to get normal to above normal rainfall with heavy falls likely to occur at few places. Western Tigray, western Amhara, Benishangul Gumuz and southern SNNPR will have near normal rainfall though few places of those areas will get below normal rainfall.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed normal to above normal rainfall over most parts of the country has favourd season's agricultural activities. Under normal circumstance it is the time for land preparation and sowing of log 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 and 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 reported due to water stress over eastern Amhara.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DAKAD

The anticipated normal to above normal rainfall over most parts of Oromiya, SNNPR, central and eastern Amhara would favour sowing of haricot bean, maize and potato over parts of SNNPR namely: Hosaina, Sidama, Gedeo, Kenbata and Tembaro, Guragie, Silte, Bench and Keficho where sowing activity is the normal practice at this time of the year. Moreover, the expected rainfall situation would facilitate land preparation and sowing activities for long cycle crops like maize and sorghum over most parts of Oromiya. In case of eastern Amhara it would improve the stress condition which was persisted since the on set of Belg and would also be conducive for the sowing activities of sorghum in some areas like Majete, Chefa, Alem Ketema and Shola Gebeya where sowing of sorghum is the normal activity during this time. However, there would be a possibility of heavy falls in some areas of the aforementioned areas. Thus, attention should be given over low laying areas, in areas where the soil type is clay and near riverbanks. Besides, the expected normal to above normal rainfall over lowlands of pastoral areas would have a positive contribution for the availability of pasture and drinking water and it would also be helpful for sowing activities in agro pastoral areas. However, proper water harvesting technique is very important in order to not losing the expected moisture due to high temperature and the nature of soil type found in the areas which is dominantly characterized with sandy soil.

The anticipated near normal rainfall over western Tigray and Amhara including Benishangul Gumuz would have positive contribution for the coming Meher season's land preparation. Nevertheless, some areas of the above mentioned areas would get below normal rainfall. Therefore, proper water harvesting activities or other coping mechanisms should be designed to mitigate the effect of water stress.