

NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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SUMMARY

During the first dekad of September 2004, Benishangul-Gumuz, much of Oromiya, southern half of Amhara, southern Afar, northern tip of Somali and southern, central and northern SNNPR experienced normal to above normal rainfall. In addition to this, Bahir Dar, Pawe, Alge, Nekemt, Meisso, Ejaji, Enewary, Arsi Negele, Gimbi, Limu Genet and Majete recorded 77.5, 71.8, 47.3, 39.5, 36.5, 35.9, 32.7, 32.6, 32.1, 32 and 31.1mm of heavy fall in one rainy day, respectively. The observed heavy falls associated with hailstorm over western Ormiya (Dembi Dolo), eastern SNNPR (Bodit and Shone), eastern Benishangul-Gumuz (Pawe) and western Amhara (Bahir Dar) resulted in crop damage and livestock loss.

During the second dekad of September 2004, much of Oromiya, much of SNNPR, Gambela, Benishangul-Gumuz, Amhara, southern half of Afar, western half of Tigray and northern Somali experienced normal to above rainfall while the rest of the country received below normal rainfall. The observed normal to above normal rainfall had positive impact on the existing crops to fulfill the water requirement for the remaining growing periods and the sowing of short cycle pulses. On the other hand, the observed heavy falls over western Oromiya, eastern Benishangul-Gumuz, western Amhara and central Ethiopia might result in crop damage and livestock loss. In accordance with crop phenological reports, sowing of oat was under way in some areas of northeastern Amhara during the dekad under review. Maize was at full ripeness stage in eastern and central Ormiya (Gelemso and Woliso) while at wax ripens stage in western Oromiya (Dembi Dolo, Gimbi, Nejo, Alge and Aira as well as Sekoru) and northern SNNPR (Bui) and eastern Amhara (Sirinka) and at early vegetative stage in Dolo Mena. Sorghum was at flowering stage in western and eastern Oromiya (Gimbi and Gelemso) and at tasseling stage in northern SNNPR (Bui), western Oromiya (Nejo), southwestern Benishangul-Gumuz (Assosa) as well as eastern Amhara (Combolcha) and at shooting stage in western Oromiya (Aira) and eastern Amhara (Cheffa). Teff was at flowering stage in western and central Oromiya (Gimbi and Zeway), eastern Amhara (Combolcha), northeastern SNNPR (Sodo) and at tasseling stage in eastern, western and central Oromiya (Gelemso, Sekoru and Nazareth) while at shooting stage in eastern and western Amhara (Bati and Dangila), southwestern Benishangul-Gumuz (Assosa) and central Oromiya (Kachissei) and at tillering stage in some areas of central Oromiya (Woliso) while at 3rd leaf stage in western Oromiya (Shambu), northern SNNPR (Bui) as well as eastern Amhara (Cheffa) and early vegetative stage in southern Oromiya (Dolo Mena). Wheat and Barley were at flowering stage in northeastern Amhara (Lalibela), at earing stage in central and northern Oromiya (Kulumsa and Fitcha), south and eastern Amhara (Debre Birehan and Combolcha) and at tillering stage in western Oromiya (Shambu) while at 3rd leaf stage in western Oromiya (Dolo Mema) and northeastern Amhara (Wegel Tena). Millet was at tasseling stage in western Oromiya (Nejo), at shooting stage in western Amhara (Bullen) while at tillering stage in eastern Benishangul-Gumuz (Chagni). Pulse crops like beans and peas were at ripeness stage in central Oromiya (Kulumsa) while at flowering stage in northern Oromiya (Fitcha), at budding stage in northeastern Amhara (Wegel Tena) and at early vegetative stage in northeastern SNNPR (Sodo) flowering stage in northern Oromiya (Fitcha). Oil crop like nug was at yellow ripeness stage in central Oromiya (Woliso), at budding stage in western Amhara (Bullen) and

southwestern SNNPR (Asossa) while at elongation stage in western Oromiya (Aira). In addition to this, some areas of central Oromiya, southern and eastern Amhara reported slight wilting on maize, wheat and barely fields. Besides, the erratic rainfall together with long dry spells favored the outbreak of pest and disease as well as weed infestation in some areas of southwestern Benishangul-Gumuz (Asossa), western Oromiya (Gimbi and Shambu).

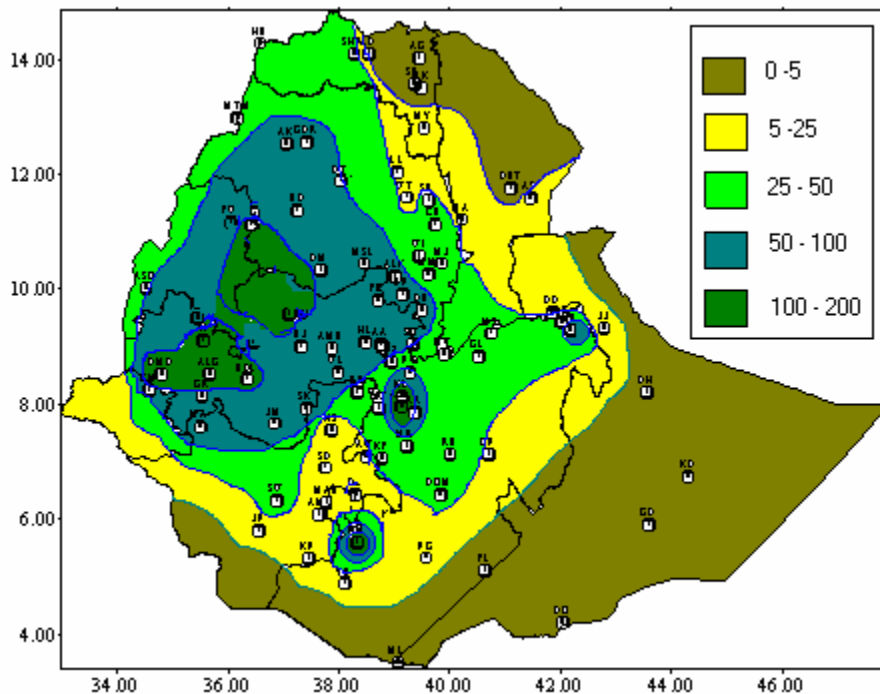


Fig 1. Rainfall distribution in mm (11-20, September 2004)

1. WEATHER ASSESSMENT

1.1 RAINFALL AMOUNT (Fig. 1)

Gimbi, Chagni, Aira, Shambu, Dangila, Bullen, Alge, Kulumsa, Bedelle and Hagere Mariam recorded 213.2, 157.2, 152.6, 146.3, 144.6, 114.8, 139.5, 111.1, 106.6 and 100.8 mm of dekadal rainfall, respectively.

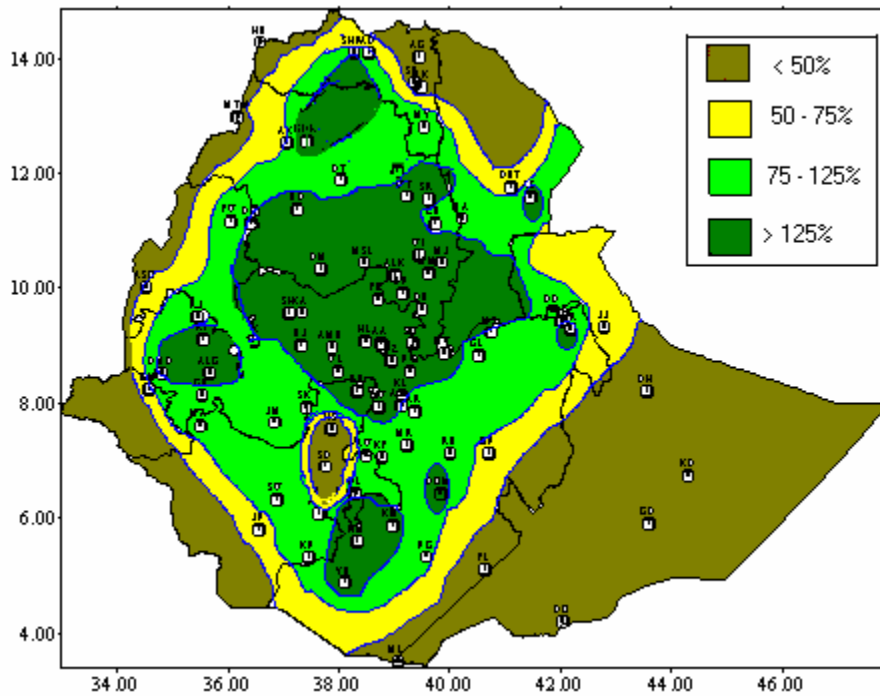


Fig.2 Percent of normal rainfall (11-20, September 2004)

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

1.2 RAINFALL ANOMALY (Fig. 2)

Much of Oromiya, much of SNNPR, Gambela, Benishangul-Gumuz, Amhara, southern half of Afar, western half of Tigray and northern Somali experienced normal to above rainfall while the rest of the country below normal rainfall.

1.3 TEMPERATURE ANOMALY

There was no significant temperature anomaly during the dekad under review.

2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF SEPTEMBER 2004

For the coming ten days, the Kiremt rain-bearing systems are expected to weaken gradually from northern Ethiopia. However, they are going to strengthen from southern portions of the country. Central and southern Somali, southern Oromiya and southern portions of SNNPR, which were dry under normal condition, will start to get their seasonal rain. In general, most parts of Afar, eastern and central Tigray, eastern and central Amhara, southern portions of SNNPR and Borena will have below normal rains. Besides, western Tigray and Amhara, most parts of Somali are expected to get near normal rainfall. On the other hand, western Oromiya, Gambela and Benishangul-Gumuz will have normal to above normal rainfall.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed normal to above normal rainfall had positive impact on the existing crops to fulfill the water requirement for the remaining growing periods and the sowing of short cycle pulses. On the other hand, the observed heavy falls over western Oromiya, eastern Benishangul-Gumuz, western Amhara and central Ethiopia might result in crop damage and livestock loss. In accordance with crop phenological reports, sowing of oat was under way in some areas of northeastern Amhara during the dekad under review. Maize was at full ripeness stage in eastern and central Oromiya (Gelemso and Woliso) while at wax ripens stage in western Oromiya (Dembi Dolo, Gimbi, Nejo, Alge and Aira as well as Sekoru) and northern SNNPR (Bui) and eastern Amhara (Sirinka) and at early vegetative stage in Dolo Mena. Sorghum was at flowering stage in western and eastern Oromiya (Gimbi and Gelemso) and at tasseling stage in northern SNNPR (Bui), western Oromiya (Nejo), southwestern Benishangul-Gumuz (Assosa) as well as eastern Amhara (Combolcha) and at shooting stage in western Oromiya (Aira) and eastern Amhara (Cheffa). Teff was at flowerig stage in western and central Oromiya (Gimbi and Zeway), eastern Amhara (Combolcha), northeastern SNNPR (Sodo) and at tasseling stage in eastern, western and central Oromiya (Gelemso, Sekoru and Nazareth) while at shooting stage in eastern and western Amhara (Bati and Dangila), southwestern Benishangul-Gumuz (Assosa) and central Oromiya (Kachissei) and at tillering stage in some areas of central Oromiya (Woliso) while at 3rd leaf stage in western Oromiya (Shambu), northern SNNPR (Bui) as well as eastern Amhara (Cheffa) and early vegetative stage in southern Oromiya (Dolo Mena). Wheat and Barley were at flowering stage in northeastern Amhara (Lalibela), at earing stage in central and northern Oromiya (Kulumsa and Fitch), south and eastern Amhara (Debre Birehan and Combolcha) and at tillering stage in western Oromiya (Shambu) while at 3rd leaf stage in western Oromiya (Dolo Mema) and northeastern Amhara (Wegel Tena). Millet was at tasseling stage in western Oromiya (Nejo), at shooting stage in western Amhara (Bullen) while at tillering stage in eastern Benishangul-Gumuz (Chagni). Pulse crops like beans and peas were at ripeness stage in central Oromiya (Kulumsa) while at flowering stage in northern Oromiya (Fithce), at budding stage in northeastern Amhara (Wegel Tena) and at early vegetative stage in northeastern SNNPR (Sodo) flowering

stage in northern Oromiya (Fitcha). Oil crop like nuga was at yellow ripeness stage in central Oromiya (Woliso), at budding stage in western Amhara (Bullena) and southwestern SNNPR (Asossa) while at elongation stage in western Oromiya (Aira). In addition to this, some areas of central Oromiya, southern and eastern Amhara reported slight wilting on maize, wheat and barely fields. Besides, the erratic rainfall together with long dry spells favored the outbreak of pest and disease as well as weed infestation in some areas of southwestern Benishangul-Gumuz (Asossa), western Oromiya (Gimbi and Shambu).

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DAKAD

The expected normal to above normal rainfall distribution over western Oromiya, Gambela and Benishangul-Gumuz would have significant contribution for long cycle crops that are attaining reproductive and grain formation stages including perennial plants. Nevertheless, there would be a possibility of heavy falls in some areas where above normal rainfall is expected. Thus, proper precaution measures should be undertaken ahead of time particularly in areas where the soil type is clay and low lying areas. The anticipated near normal rainfall on western Tigray, western Amhara, SNNPR, much of Somali, central and eastern Oromiya would ease the persisted moisture stress on the existing crops over those areas. Moreover, it would create suitable situation for the sowing of short cycle cereal pulses like lentil, vetch peas, beans and chickpeas. Besides, it would have positive impact for the availability of pasture and drinking water over the lowlands. On the contrary, the expected below normal rainfall in eastern and central Tigray, eastern and central Amhara, much of Afar will have negative impact on crop water requirements, particularly over the above mentioned areas where dry spells persisted during the previous dekad.