# 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 third decade of April 2013, rain bearing meteorological phenomena was strengthened over much of Belg rain benefiting areas of the country. As a result, much of Oromia, SNNPR, central and eastern Amhara, eastern Tigray, Gambella, Dire Dawa, Harari and Somali received light to heavy rainfall ranging from 31.5-100.2 mm in one rainy day. Thus, the situation might have favored water requirement for Belg crops that were found at different phonological stages, perennial plants, Meher agricultural activities such as land preparation and sowing of long cycle crops, improvement of pasture and drinking water availability over southern, southeastern northeastern pastoral and agro pastoral areas of the country. On the other hand, Tenta, Gumady, Gato, Gidole, Konso, Fefen and Burje reported heavy rainfall, which might have caused damage on Belg crops, perennial plants and animals in the area.

During the first dekad of May 2013, rain bearing meteorological system was strengthened over southern, eastern and central as well as western and south western parts of the country. In line with this most of southern half of the country, central and eastern Oromia, some parts of Benshangul Gumuze received 50-217 mm of rainfall (observed in 4-9 rainy days). Besides, Tigray, Amhara Afar and eastern Somali exhibited 5- 50 mm of rainfall up to two days. The situation might have favored Belg crops that were found at different phenological stages, water requirement for perennial plants as well as recently sown long cycle Meher crops like Sorghum and Maize and availability of pasture and drinking water over southern and south eastern pastoral and agro pastoral areas. Some stations recorded heavy falls ranging from 43.3-75.8 mm in one rainy day, the situation might have caused flash flood in some pocket areas which might have caused slight damage on Belg crops over the aforementioned areas. On the other hand, some lowlands of northeastern, northwestern and western portions of the country experienced daily maximum temperature greater than 35°C, which might have led to moisture stress for perennial plants and negative impacts on the availability of pasture and drinking water.



### **1. WEATHER ASSESSMENT**

### 1-10 May 2013

## **RAINFALL AMOUNT (Fig.1)**

Pocket area of southeastern Oromia experienced 200-300mm of rainfall. Some parts of southeastern Amahra, northwestern Somalia, pocket areas of northern SNNPR, northern tip of Gmbela, and southern Benshangul- Gumuz, received 100-200 mm of rainfall. Much of SNNPR, Oromia Gambela, Benshangul- Gumuz, southwestern and central Somalia and pocket areas of central and southern Amahra exhibited 50-100 mm of rainfall. Much of southwestern and northern Somali, northern Oromia, northern Benshangul- Gumuz, pocket areas northwestern and southern Afar, pocket areas southern and eastern Amhara and Tigray received 25-50 mm of rainfall. Much of northern and southwestern Somalia, Amhara, Tigray, and Afar received 5-25 mm of rainfall. The rest parts of the country exhibited little or no rainfall.



Fig.2 Percent of normal rainfall (1-10 May 2013) Explanatory notes for the legend: <50 -- Much below normal 50—75% -- below normal 75—125% --- Normal >125% ---- Above normal

# 1.1.2 RAINFALL ANOMALY (Fig. 2)

Much of SNNPR, Oromia, Gambela, Benshangul- Gumuz, Somalia, central and southern Afar, and southern and eastern Amahara and southern margin of Tigray exhibited normal to above normal rainfall. The rest parts of the country received below normal to much below normal rainfall.

## **1.1.3 TEMPERATURE ANOMALY**

Some stations in the low lands and western border of the country recorded extreme maximum temperature greater than  $35^{\circ}$ C, to mention some of Dire dawa, Gode, Methara, Awash arba, Dubti, Errer, Gambela, Gewane, Mille, Mytsebri, Quara and Semera reported 35.6, 35.2, 37.5, 39.0, 41.0, 36.5, 37.5, 40.0, 41.0, 36.6, 41.5 and 40.6 °C, respectively. This situation might have a negative impact on the normal growth and development of plants and livestock.

## 2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

# 2.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

On the beginning of the first half of the dekad rain bearing meteorological system was strengthened over southern, eastern and central as well as western and south western parts of the country. In line with this most of southern half of the country, central and eastern Oromia, some parts of Benshangul Gumuze received 50-217 mm of rainfall (observed in 4-9 rainy days). Besides, Tigray, Amhara Afar and eastern Somali exhibited 5- 50 mm of rainfall up to two days. The situation might have favored Belg crops that were found at different phenological stages, water requirement for perennial plants and recently sown long cycle crops like Sorghum and Maize and availability of pasture and drinking water over southern and south eastern pastoral and agro pastoral areas. Some stations recorded heavy falls ranging from 43.3-75.8 mm in one rainy day, the situation might have caused flash flood in some pocket areas which might have caused slight damage on Belg crops over the aforementioned areas. On the other hand, some lowlands of northeastern, northwestern and western portions of the country experienced daily maximum temperature greater than 35°C, which might have led to moisture stress for perennial plants and negative impacts on the availability of pasture and drinking water.



As indicated on the moisture map above, most parts of SNNPR, Oromia, Gambela, Somali and Benshangul- Gumuz, eastern and southeastern Amhara and adjoining areas of Tigray and Afar experienced humid to moist moisture condition. While southern and northern tip of Somalia, central Afar, central and southern Amhara, northern tip of Benshangul- Gumuz experienced moderately dry condition. The situation might have a positive impact on general agricultural activities over Belg growing areas, land preparation and sowing of long cycle Meher crops. The rest parts of the country were influenced dry to very dry condition which might have a negative impact on water availability for perennial plants and pasture and drinking water.

### 3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

In the coming ten days, western Tigray and Amhara, Benshangul-Gumuze, Gambela, western and southern Oromiaand SNNPR will expect normal and above normal rainfall and central and eastern Oromia, some parts of eastern Amhara and Tigray will expect near normal rainfall. The situation might have favored Belg crops that were found at different phenological stages, water requirement for perennial plants, availability of pasture and drinking water over pastoral and agro pastoral areas and also it would have positive contribution for Meher season land preparation and sowing activities particularly over western half of the country. On the other hand, dry weather condition will be expected over eastern and south eastern lowland of the country. The situation will have a negative impact for the ongoing agricultural activities and availability of pasture and drinking water.