NATIONAL METEOROLOGICAL SERVICES AGENCY

TEN DAY AGROMETEOROLOGICAL BULLETIN

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SUMMARY

During the first dekad of May 2008, the rainfall distribution was decreased over south and southeastern parts of the country. However, the rainfall distribution was covered northern tip to southern tip of the country and Belg benefiting areas as well. This condition has a positive impact for late sown Belg crops due to the moisture stress observed during the preceding dekad. In addition, it would have a positive contribution for the ongoing seasons agricultural activities (land preparation) and for perennial crops as well. Regarding to heavy fall, northern, eastern central and much of western parts of the country exibited heavy fall within the range of (30-65.5) mm in one rainy day. To mention some station observed above 40 mm: Gimbi, LimuGenet, DembiDolo, Moyale, Konso, Gelemso, Mekele, and Gore experienced 42.3, 43.3, 43.6, 44.3, 50.1, 57.2, 60.9 and 65.0 mm of rainfall in one rainyday. This rainfall has positive contribution for Belg and Meher agricultural activities. According to the report of adverse condition, station Sodere report damage on onion due to heavy fall observed on 08/05/08. Besides the decreased in moisture over south and southeastern parts of the country would have a negative impact for the availability of pasture and drinking water over pastoral and agro pastoral areas of south and southeastern lowlands of the country.

During the second dekad of May 2008, the observed strong rainfall condition over western half, eastern, northeastern, central, south and southeastern parts of the country might have a positive impact for Belg agricultural activities, pasture and drinking water over the areas. Besides, the observed little amount of rainfall over Belg growing areas of central, eastern and northeastern areas might have good contribution for Belg crops and also for long cycle crops like maize and sorghum. Moreover, the observed better rainfall distribution over Afar and Somali areas might have favored for the development of pastures and drinking water. Regarding weather adverse condition Kofele and Alge reported crop damage due to heavy fall on potato crop and perennial trees respectively.

1. WEATHER ASSESSMENT

1.1 May 11-20, 2008

1.1.1 RAINFALL AMOUNT (Fig.1)

Some areas of western Oromia and pocket area of SNNPR received (100-200mm) of rainfall. Some parts of northern Tigray, western Amhara, southern half of Benshangul-Gumuz, western and southern Oromia, much of Gambela, some parts of south western SNNPR experienced 50-100mm of rainfall. Much of Tigray, parts of western Amhara, northern half of Benshangul-Gumuz parts of western, eastern and southern Oromia experienced 25-50mm of rainfall, southern Tigray, Parts of eastern Amhara, western Tip and southern Afar, Central Oromia, northern Somali, parts of southeastern SNNPR and southern Oromia experienced 5-25 mm of rainfall. Little or no rainfall observed over the rest parts of the country.

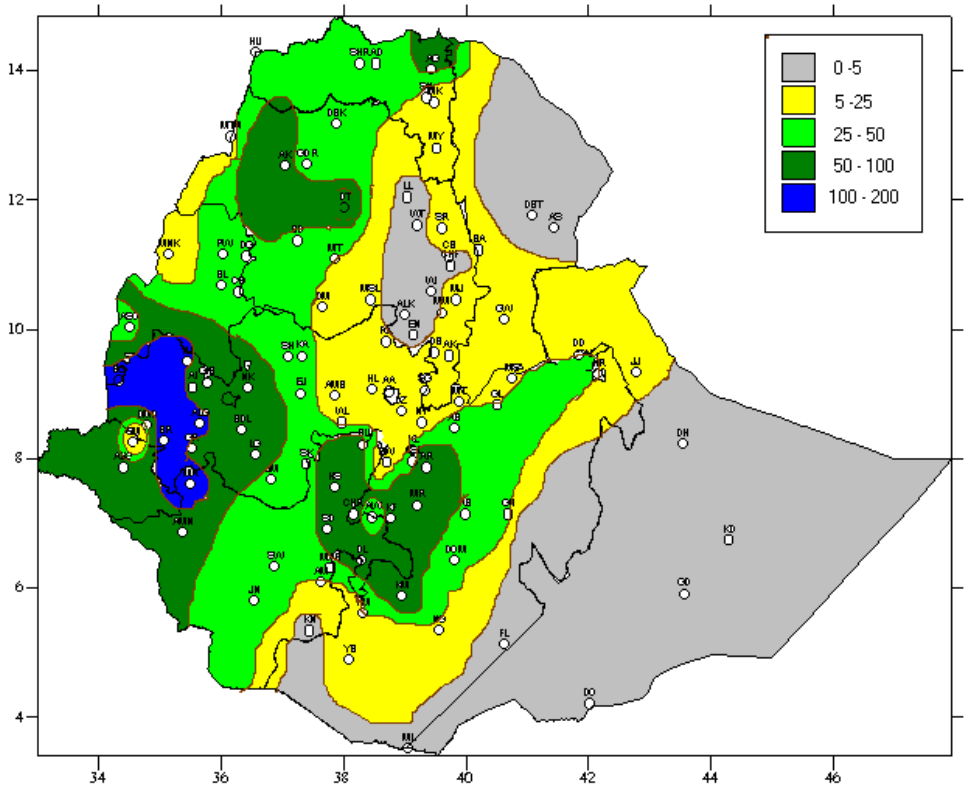

Fig 1. Rainfall distribution in mm (11-20 May, 2008)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Most parts of northwestern Tigray, western Amhara, pocket areas of eastern Amhara, parts of northern Benshangul-Gumuz, much of western, eastern and southern Oromia northern half of SNNPR experienced normal to above normal rainfall. While the rest parts of the country expiated below to much below normal rainfall.

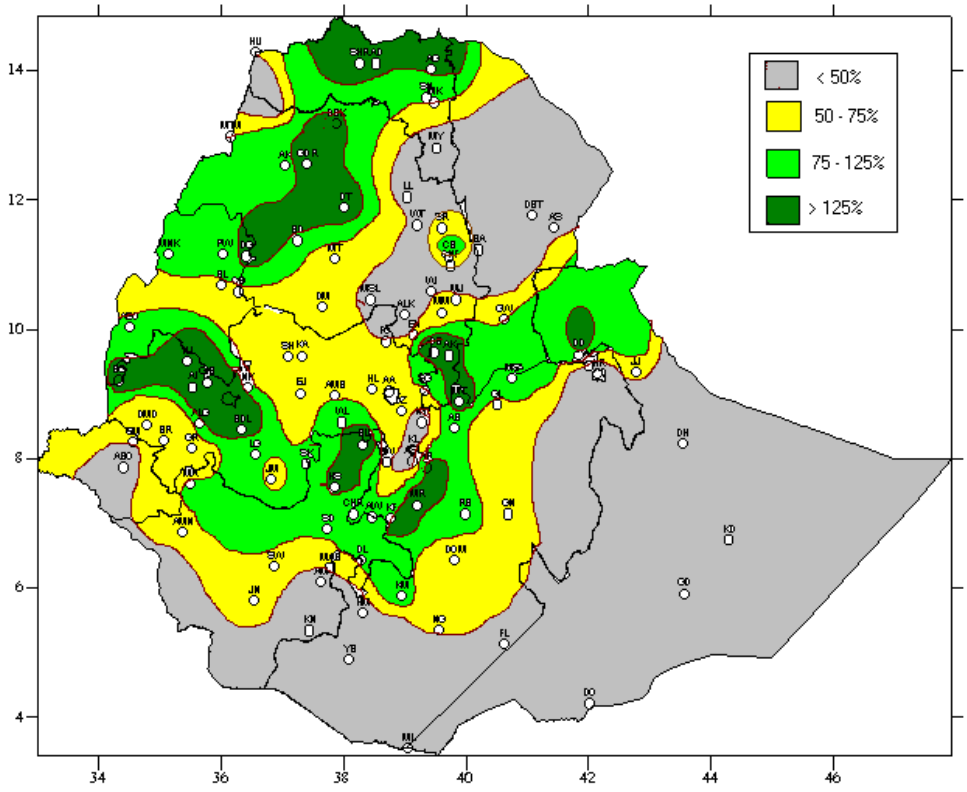

Fig.2 Percent of normal rainfall (11-20 May, 2008)

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

1.1.3 TEMPERATURE ANOMALY

During the dekad some stations recorded extreme maximum air temperature above 35 ^{0}C for 3-10 consecutive days. Among the recording stations Gewane, Humera, Elidar, Dubti, Asayita, Mille, Semera, Metema, Sheraro, Mankush, Pawe, Aisha, Gambella, Mytsemire, Gode, Dere Dawa and Showa Robit as high as 44.6, 44, 42.5, 42.5, 42.4, 42, 41.6, 41, 38.5, 38.4, 38, 38, 37.5, 36.8, 36.5, 36 and 35.5 respectively.

2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF MAY 2008

For the coming ten days the rain producing systems will have better strength. Hence, western Tigray, western Amhara, Benshangul Gumuz, Gambella, SNNPR and western Oromia are highly likely to have below normal rain while some places will have above normal. Besides central, eastern and southern Oromia including Arsi and Bale highlands as well as most parts of Somali will get close to normal rainfall with a great possibility of below normal rainfall at some places. Moreover, eastern Tigray and eastern Amhara as well as southern Afar will get rain at some places from the prevailing clouds with most likely to have less in rainfall amount. Much of Afar are anticipated to be sunny and dry. On the other hand, the hottest weather condtion is expected to continue over the low lands of the country.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed strong rainfall condition over western half, eastern, northeastern, central, south and southeastern parts of the country might have a positive impact for Belg agricultural activities, pasture and drinking water over the areas. Besides, the observed little amount of rainfall over Belg growing areas of central, eastern and northeastern areas might have good contribution for Belg crops and also for long cycle crops like maize and sorghum. Moreover, the observed better rainfall distribution over Afar and Somali areas might have favored for the development of pastures and drinking water. Regarding weather adverse condition Kofele and Alge reported crop damage due to heavy fall on potato crop and perennial trees respectively.

In addition to this, the analysis of moisture status of the second dekad (the relationship between total decadal rainfall and the decadal total reference evapotranspiration) as indicated in fig.3 most parts of southern and western Ethiopia, southwestern, western Amhara, eastern Tigray, Benshangul-Gumuz and Gambella exhibited moist to humid moisture status over the aforementioned areas. The rest parts of the country experienced little moisture status condition. Thus, this condition might have significant contribution for the water requirement of the existing crops and the availability of pasture and drinking water. Therefore, it is advisable for farmers to strength agricultural activities over the areas.

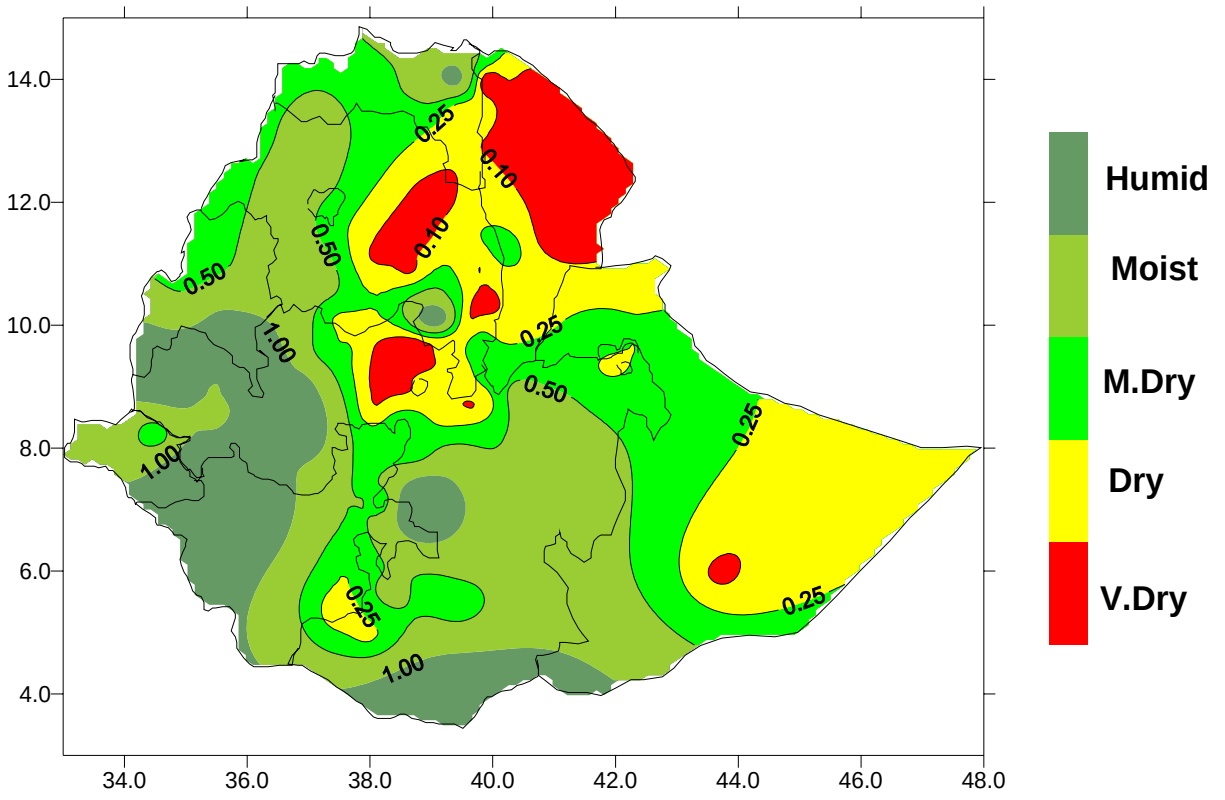

Fig .3 Moisture Status for (11-20 May, 2008)

Table 1. Crop Phenological Report for the second dekad of May 2008

Station name	Region	Zone	Woreda	Major Crops			Phases		
				1	2	3	1	2	3
Arsi Robe	Oromia	Mirab Arsi	Robe	-	-	-	-	-	-
Alem Ketema	Amhara	Semen Shoa	Alem Ketema	-	-	-	-	-	-
Assosa	Benishagul	Assosa	Assosa	-	-	-	-	-	-
Ayehu	Amahara	Mirab Gojam	Ankosha	Maize	-	-	Em	-	-
Bedelle	Oromia	Illubabor	Bedlle	Maize	-	-	Nl	-	-
Bullen	Benishagul	Metekel	Bullen	Maize	-	-	P/S	-	-
Bui	SNNPR	Guarage	Sodo	-	-	-	-	-	-
Chagni	Amahara	Awi	Guagnua	-	-	-	-	-	-
Chira	Oromia	Jimma	Gera	-	-	-	-	-	-
Dangila	Benishagul	Awi	Dangila	-	-	-	-	-	-
Debre Tabor	Amahara	Dabub Gonder	Debre Tabor	-	-	-	-	-	-
Dolomana	Oromia	Bale	Mena	Maize	Teff	-	Nl	Tl	-
Enewary	Amahara	Semen Shoa	Mortenajiru	-	-	-	-	-	-
Fitche	Oromia	Semen Shoa	Girarjarso	-	-	-	-	-	-
Gelemeso	Oromia	Mira Haraghe	Habro	-	-	-	-	-	-
Ghimbi	Oromia	West Wolega		Maize	-	-	Nl	-	-
Hossaina	SNNPR	SNNPR	Lemu	Maize	-	-	Nl	-	-
Kachise	Oromia	Mirab Shoa	Gindeberet	-	-	-	-	-	-
Lalibela	Amahara	Semen Wollo	Lasta	-	-	-	-	-	-
Limugent	Oromia	Jimma	Limukosa	-	-	-	-	-	-
Majate	Amahara	Semen Shoa	Mizan antakiya	-	-	-	-	-	-
Mehal Meda	Amahara	Semen Shoa	Gira mider	-	-	-	-	-	-
Nedjo	Oromia	Mira Wollega	Nedjo	Maize	Sorghum	-	Em	Em	-
Pawe	Benishagul	Metekele	Pawe liyu	-	-	-	-	-	-
Shaura	Amahara	SemenGonder	alef.t	-	-	-	-	-	-
Shambu	Oromia	HoroWollega	Horo	-	-	-	-	-	-
Shire	Tigiray	Mirab Tigray	Endasilasie	-	-	-	-	-	-
Sirinka	Amahara	Semen Wollo	Habru	-	-	-	-	-	-
Sokoru	Oromia	Jimma	Sokoru	-	-	-	-	-	-
Shola gebeya	Amahara	Semen Shoa	Hagaramariam	-	-	-	-	-	-
Wagel Tena	Amahara	Semen Wollo	Delanta	-	-	-	-	-	-
Waliso	Oromia	D.Mirab Shoa	Waliso	-	-	-	-	-	-
Ziway	Oromia	Misrak Shoa	Jidocombolcha	Maize	-	-	Em	-	-

Key :

P/S= Plant/Sow
Em=emerge
Tl=Third leaf
Fl=Fifth leaf
Sl=Seventh leaf
Yr=Yellow ripe
Nl= Ninth leaf
El= Elongation
Ta = Tassel
Ti=Tiller
Sh=shoot
Bs= Berry soft
Bh= Berry hard
Ph= Pin heading
Ea= Earing
He= Heading
Bu= budding
Fl=Flower
R = ripeness
Cr= Consumer ripeness
Gr= Green ripeness
Wr= Wax ripeness
Yg r= yellow green ripeness
Lgr =light green ripeness
Dr= dark ripeness
Fr= Full ripeness
H =Harvested
-Data not available

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

For the coming ten days the rain bearing systems will have more strength over western half of the country. Therefore, Tigray, west Amahara, B/Gumuz, Gambella and west Oromia will expect to get above normal rainfall. This condition will have positive impact for the Belg agricultural activity and long cycle crops over the area mentioned. In addition the expected near normal rainfall over central parts of the country, east and south oromia, Arsi Bale, and Somali will have positive impact for the growing Belg crop, long cycle crop and availability pasture and drinking water. On the other hand, the cumulative effect of expected below normal rainfall, extreme max & minimum temperature over northeast Tigray, east amahara and south Afar will have negative impact on Belg agricultural activity and availability of pasture and drinking water by increasing evaporation.