NATIONAL METEOROLOGICAL SERVICES AGENCY
TEN DAY AGROMETEOROLOGICAL BULLETIN
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11-20 AUGUST 2008 Vol. 18 No.23 DATE OF ISSUE AUGUST 26, 2008

SUMMARY

During the first dekad of August 2008, the seasonal rainfall covered much of the country. Hence, could have a positive impact to fulfill crop water requirement of Meher crops and long cycle crops that were sown during the month of April, and attaining at mid- season growing stage and favored the general Meher agricultural activities. Moreover, the observed heavy rainfall in most parts of the country, generated overflow of rivers and flash floods in Kiremt rain benefiting areas in low-lying areas and riverbanks. This situation resulted in crop damage, which were attaining different phenological stages. Thus, proper attention should be taken by farmers in order to mitigate the adverse condition. According to the reporting station, many stations observed heavy fall above 30mm. To mention some stations, which observed above 40 mm Gelemso, Arjo, Dangla, Bui, Shaura, Aider, Gore, Abomsa, and Kachise recorded 40.1, 41.1, 45.5, 49.5, 53.7, 55.0, 63.2, 73.0, and 79.2 respectively in one rainy days.

During the second dekad of August with the exception of southern and eastern parts of the country, most parts of Kiremt rain benefiting areas exhibited normal to above normal rainfall. Besides, the observed widely distributed rainfall condition over Afar, eastern Oromia, Harari, Dire Dawa, northern Somali and Bale zone might have positive impact for Meher crops which are found at different phenological stage and for crops which are sown at this time of the year. In line with this, Gambela, Amhara, Tigry, Oromia and Benshangul-Gumuz in some areas received heavyfall ranging from 30-112 mm in one rainy day. Nevertheless, crop phenological report indicated that, there was no crop damage due to heavy fall.

On the on ther hand the moisture status of the second dekad of August indicated that most Meher growing areas and kiremt benefiting areas have been experienced humid condition. Thus, the condition has a significant contribution for crops' water requirement. Moreover, it has a positive impact for perennial crops, availability of pasture development over Kiremt benefiting areas.

1. WEATHER ASSESSMENT

1.1 11-20 August 2008

1.1.1 RAINFALL AMOUNT (Fig.1)

Gambela, much of Benshangul-Gumuz, southern half of Amhara, parts of western and central Oromia, western SNNPR received 100-200 mm of rainfall. Northern half of Amhara, western half of Tigray, parts of western and central Oromia and northwestern Benishangul-Gumuz received 50-100 mm of rainfall. Parts of eastern Tigray, western & southern Afar, eastern & southern Oromia, southern & eastern SNNPR and northern Somali received 25-50 mm of rainfall. Much of Afar, parts of northern Somali and southern and eastern Oromia received 25-50 mm of rainfall. The rest parts of the country exhibited little or no rainfall.

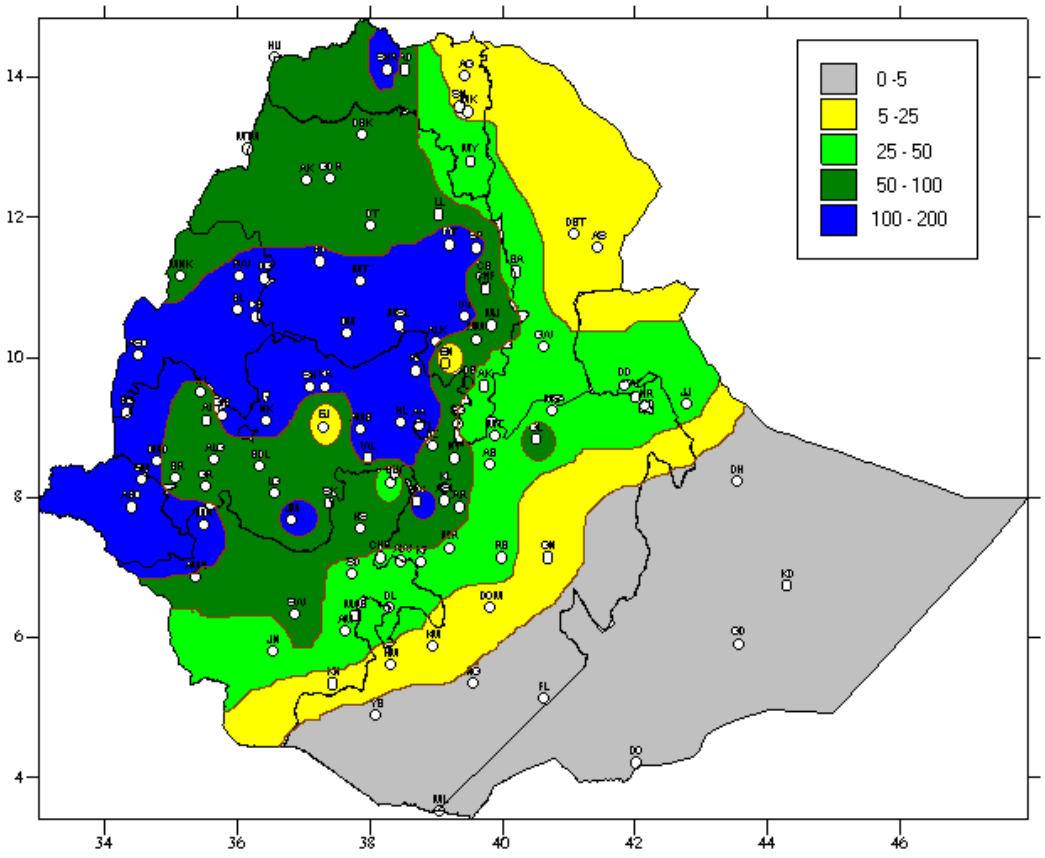


Fig 1. Rainfall distribution in mm (11-20 August 2008)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Much of Amhara, western half of Tigray, western, central and parts of southern Oromia, Gambella, Benshangul-Gumuz SNNPR, and pocket areas of northern Somali received normal to above normal rainfall. While the rest of the country exibited below to much below normal rainfall.

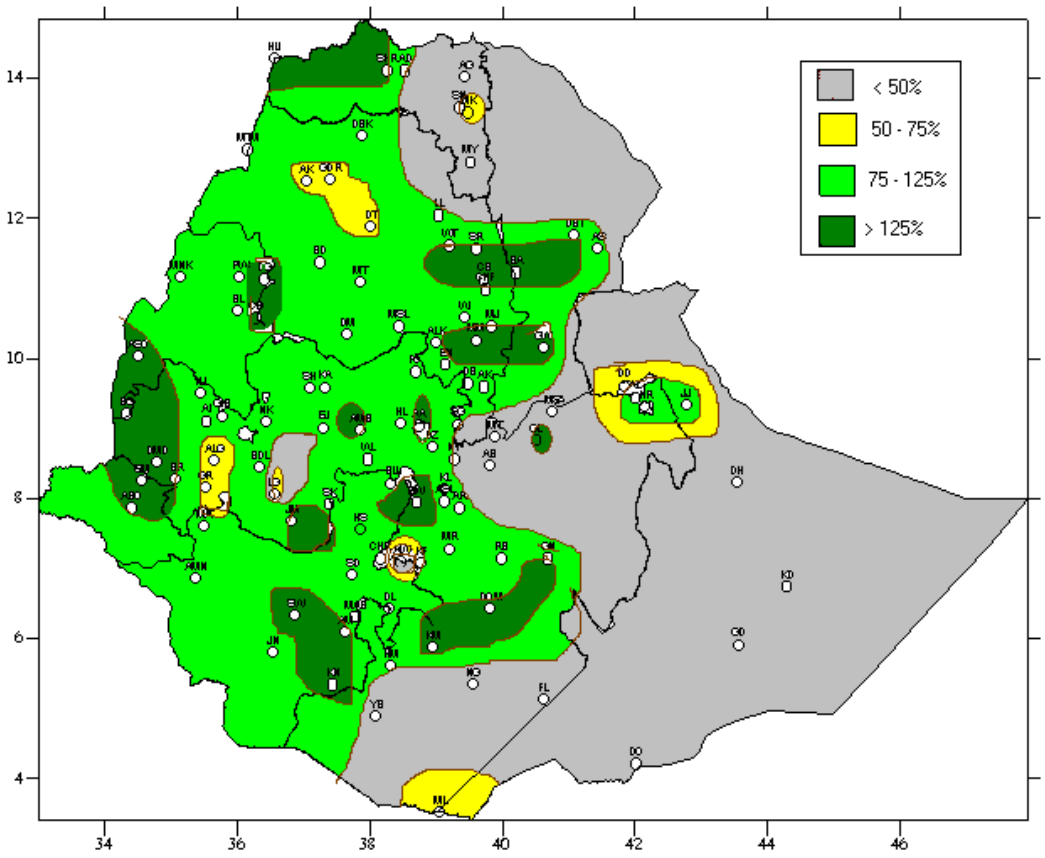


Fig.2 Percent of normal rainfall (11-20 August 2008)

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

1.1.3 TEMPERATURE ANOMALY

Some stations recorded extreme maximum temperature greater than 35^{o} C for 4 -10 days. Gode, Mille, Assayta, Dubti, Semera, Elidar, Gewane, Humera and Miesso reported extreme maximum temperature as high as , 36.2, 41.5, 41.0, 42.2 42.0, 42.5,40.2, 36.0 and 38.0 ^{o}C respectively.

2. Weather outlook for the third dekad of August 2008

For the up coming tendays, the kiremt rain-bearing system are expected to weaken across eastern half of the nation, while it will continue in well organised manner over western half. In general, Afar, Tigray and Amhara eastern portion, eastern Oomia including Bale Zone and southern SNNPR are likeil to have normal to below normal rainnfall. Western and centralTigray and Amhara, central and western Oromia, Gambela, Benshangul-Gumuz as well asnorthern SNNPR will get normal to above normal rainfall. On the other hand the rest portion of the country will be under partly cloudy weather condition.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

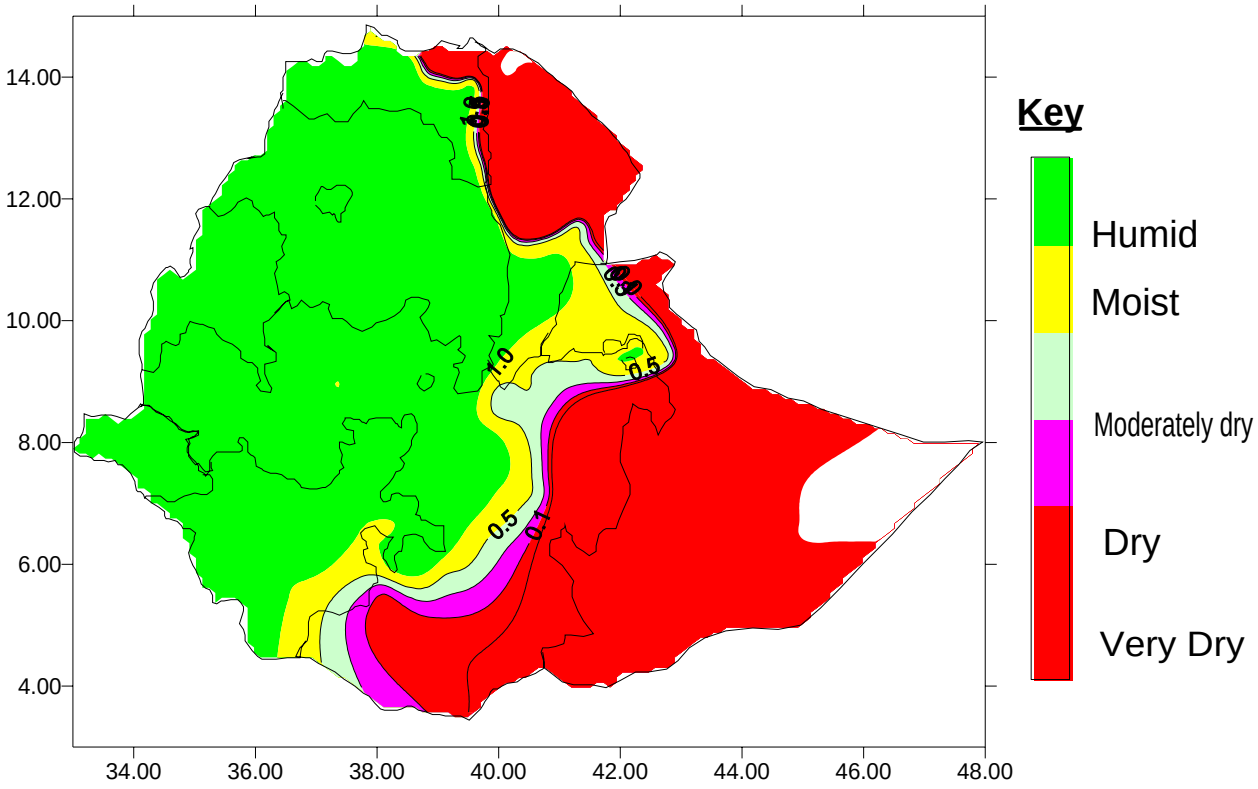
3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

During the second dekad of August with the exception of southern eastern parts of the country, most parts of Karat rain benefiting areas exhibited good rainfall condition. Besides, the observed widely distributed rainfall condition over Afar, eastern Oromia, Harari, DireDawa, northern Somali and Bale zone might have positive impact for Meher crops which are found at different phenological stage and for crops which are sown at this time of the year. In line with this, Gambela, Amhara, Tigray, Oromia and Benshangul-Gumuz in some areas received heavy falls ranging from 30-112 mm in one rainy day. Nevertheless, crop phenological report indicated that, there was no crop damage due to heavy fall.

On the other hand the moisture status of the second dekad of August indicated that most Meher growing areas and Kiremt benefiting areas have been experienced humid condition. Thus, the condition has a significant contribution for crops' water requirement. Moreover, it has a positive impact for perennial crops, availability of pasture development over Kiremt benefiting areas.
Please refer table1 for phenological details.

The analysis of moisture status (the relation ship between dekadal rainfall and the dekadal total reference evapotranspiration) as indicated in fig3. The observed moisture status during 11-20 August 2008 favored Meher crops that are found at different stages over most Meher growing areas of the country. Moreover, the situation might have favored availability of pasture and drinking water over Kiremt rain benefiting areas of the country.

Fig. 3 Moisture status for August 11-20/2008



3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

In the coming dekad the distribution and amount of Kiremt rain will decrease over eastern half of the country. However, kiremt rain will strengthen over western half of the country. Besides, central and western Tigray, central and we stern Amhara, western and central Oromia, Gambela, Benshangul-Gumuz and northern parts of SNNPR will expected to have normal to above normal rainfall. Thus, the expected normal to above normal rainfall would have favored for the general meher agricultural activities over western parts of the country. Moreover, it will highly contribute over areas where sowing activities are going on.

On the other hand Afar, eastern parts of Tigray and Amhara, Eastern Oromia, Bale zone including northern Somali and southern parts of SNNPR will expected to have normal to below normal rainfall., while south Somali and southern Oromia will have dry weather condition. Therfore, this condition could have a negative impact for growth and development of pasture, perennial crops and the availability of drinking water over pastoral and agro pastoral areas of southern Somali and southern Oromia.

Station name	Region	Zone	Woreda	Major Crops			Phases		
				1	2	3	1	2	3
Adet				Maize	Barley	Teff	Ta	Er	Ta
Aris Robe	Oromia	Mirab Arsi	Robe	Teff	Flux	-	Em	Fl	-
Alemkema	Amahara	Semen Shoa	Alemkema	Teff	-	-	Tl	-	-
Ayehu	Amahara	Mirab Gojam	Ankosha	Maize	Wheat	Wheat	Wr	-	-
Aykel				Barley	Teff	-	Sh	-	-
Bati				Teff	Peas		-	Fl	-
Bedelle	Oromia	Illubabor	Bedlle	Maize		-	-	-	-
Bullen	Benishagul	Metekel	Bullen	Maize	Millet	-	-	Ti	-
Chagni				Maize	-	-			
Chira	Oromia	Jimma	Gera	Maize	-	-	Fr	-	-
Debark				Wheat	Beans	-	P/S	P/S-	-
Debre Tabor	Amahara	Dabub Gonder	Debre Tabor	Teff	Beans	Wheat	Sh	Fl	Tl
Debre Birhan	Amahara			Barley	-	-	Sh	-	-
Dilla	SNNPR			Maize	Teff	-	Fl	-	-
Enewary	Amahara	Semen Shoa	Mortenajiru	Wheat	Teff	Beans	Em	Em	Bd
Gelemeso	Oromia	Mira Haraghe	Habro	Maize	Teff	-	-	Em	-
Ghion				Maize	Nug-	Teff	Wr	-	-
Gimbi	Oromia			Maize	Teff	-	Fl	Sh	-
Hossaina	SNNPR	SNNPR	Lemu	Maize		-	Fl		-
Kachise	Oromia	Mirab Shoa	Gindeberet	Teff	Sorghum	-	Em	Ta	-
Lalibela	Amahara	Semen Wollo	Lasta	Barely	Sunflower-	-	Ti	BD	-
Limugent	Oromia	Jimma	Limukosa	Teff	-	-	Tl	-	-
Meisso				Sorghum	Maize		Tl	Nl	
Majate	Amahara	Semen Shoa	Mizan antakiya	Teff	Maize		Tl	Nl	-
Motta				Teff	-	-	Em	-	-
Nedjo	Oromia	Mira Wollega	Nedjo	Maize	Sorghum		Wr	Ta	-
Mekane Selam				Wheat	Teff	Beans	-	Tl	-
Shaura	Amahara	SemenGonder	ALEF.T	Maize	Teff	-	Ta	Tl	-
Sokoru	Oromia	Jimma	Sokoru	Maize	Barely	Millet	Fl	E,m	Em
Ziway	Oromia	Misrak Shoa	Jidocombolcha	Beans	Wheat	-	Fl	-	-

Table1. crop Phenological report for 11-20 August, 2008

Key :

P/S= Plant/Sow
Em=emerge
Tl=Third 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