

# NATIONAL METEOROLOGICAL SERVICES AGENCY

## TEN DAY AGROMETEOROLOGICAL BULLETIN

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### SUMMARY

During the first dekad of June 2008, the observed rainfall distribution over Tigray, Amhara, Benshangul-Gumuz, much of Oromiya, Dire Dawa including Harari as well as SNNPR favored the ongoing seasons agricultural activities like land preparation and sowing of teff, wheat, barely, cereals and vegetations. Besides, the observed rainfall condition over western half of the country, which started their Meher agricultural activities earlier had an indispensable contribution for crops which attained at different phenological stage to fulfill their crop water requirements. On the other hand, the prevailed little and dry situation over eastern, south eastern, south and south eastern low lands might have negatively affected the water requirements of lately sown Belg crops. Moreover, it had negative impact on the availability of pasture and drinking water over pastoral and agro pastoral areas. On the other hand, observed heavy fall over parts of west and southwest parts of the country might have result in crop and livestock damage.

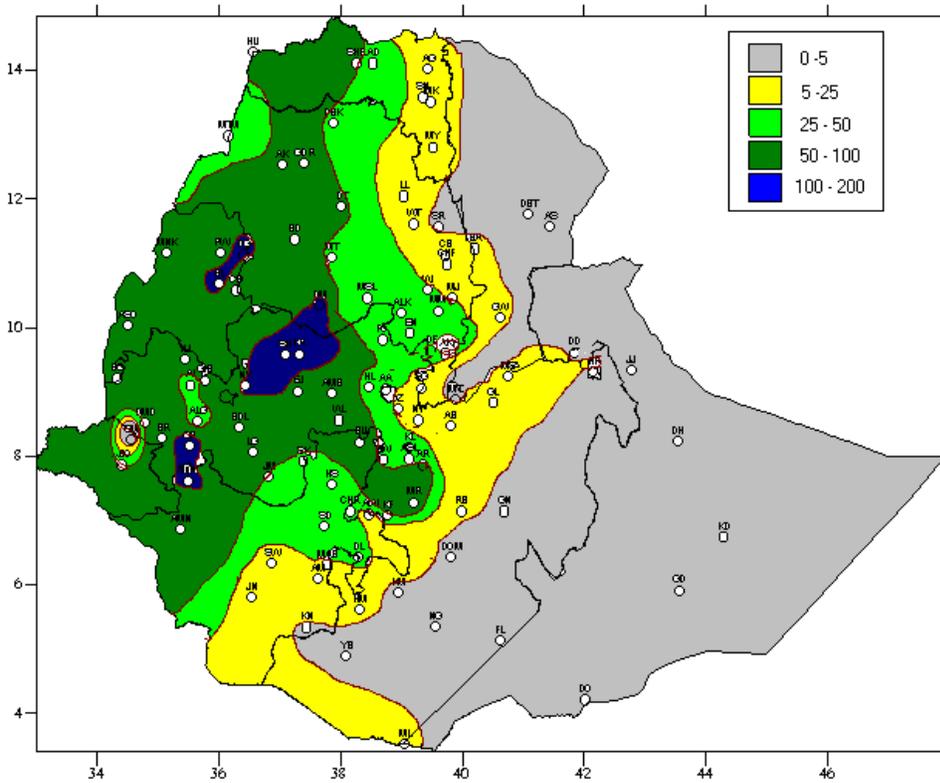
During the second dekad of June 2008, much of Oromiya, Benshangul-Gumuz, Amhara, Tigray, central and eastern parts of the country observed rainfall due to the intensification of rain bearing system over the country. This rainfall situation had a positive contribution for the ongoing Meher agricultural activities. Some stations observed heavy fall within the range of (30-58.5) mm in one rainy day. According to crop phenological report, Senkata reported damage on tomato and Shawra reported damage on crops, which were at early vegetative stage due to the observed heavy fall. The exhibited normal to above normal rainfall over much of Oromiya and pocket areas of SNNPR would have a positive impact for crops which were at different phenological stage and perennial crops interms of water requirement. On the other hand, much of Afar, and Somali, some areas of eastern Oromiya, Gambela and SNNPR exhibited below normal rainfall. This situation would have a negative impact for the availability of pasture and drinking water for pastoral and agro pastoral of the aforementioned Somali lowlands. Thus proper attention should be taken by the concerned personnel to take proper water harvesting technique.

### 1. WEATHER ASSESSMENT

#### 1.1 11-20 June 2008

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

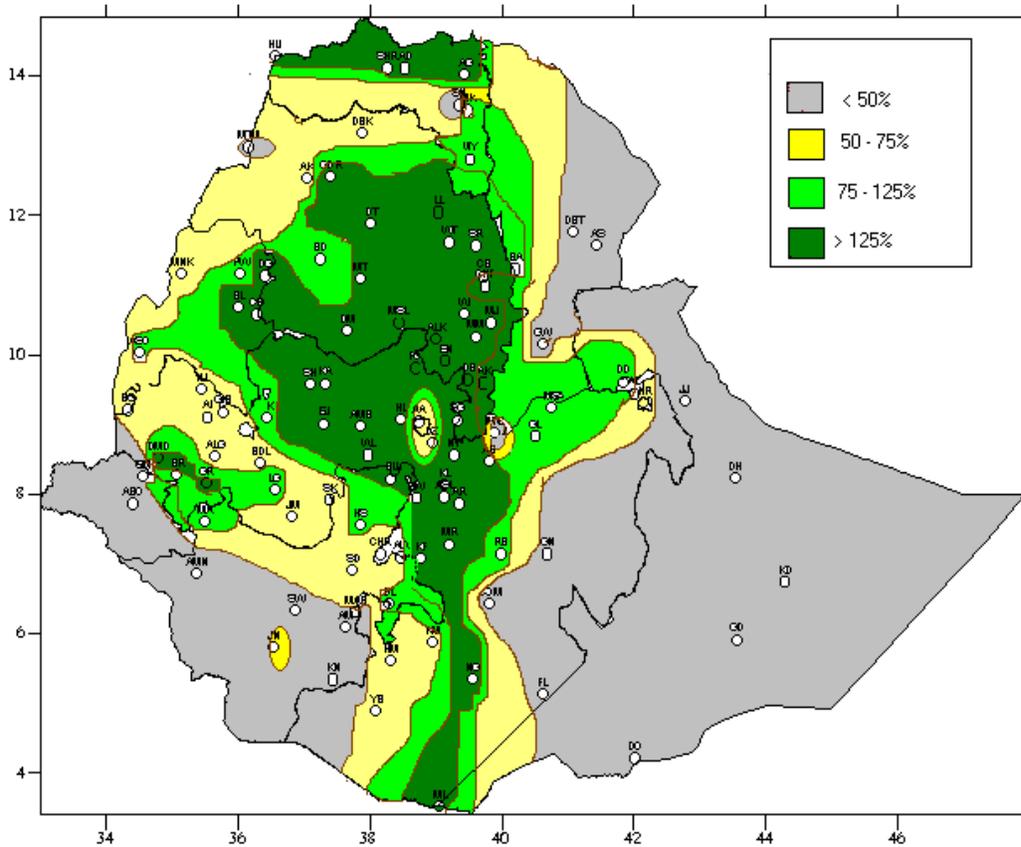
Pocket areas of northern and western Oromia and eastern Benshangul-Gumuz received 100-200 mm rainfalls. Much of Gambela, Benshangul-Gumuz and half of western Amhara, half of western Tigray, much of western and part of northern Oromia and parts of western and northern SNNPR experienced 50-100 mm rainfall. Parts of southern and northern SNNPR and central Tigray, parts of central and southern and pocket area of western Oromia and, margin of western half and part of western Amhara and pocket area of northern Gambela exhibited 25-50 mm rainfall. Parts of central, southern and eastern Oromia, eastern Amhara and southern Somali, eastern half of Tigray and pocket area of northern Gambela received 5-25 mm rainfall. The rest parts of the country exhibited little or no *rainfall*.



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

### 1.1.2 RAINFALL ANOMALY (Fig. 2)

Much of Oromia and Amhara, northern half and part of eastern Tigray, parts of northern and northeastern SNNPR and western and southern Afar, eastern half of Benshangul-Gumuz and tip of eastern Gambela and northern Somali received normal to above normal rainfall. The rest parts of the country experienced below normal to much below normal rainfall.



**Fig.2 Percent of normal rainfall (11-20 June 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°C for 4 -10 days. Dire Dawa, Shoa Robit, Methara, Metema, Aisha, Humera, Mille, Semera, and Dubti recorded extreme maximum temperature as high as 36.0,36.0, 37.0, 38.0, 39.5, 39.6, 43.0, 43.5 and 43.6 ° C respectively.

## 2. WEATHER OUTLOOK FOR THE THIRD DEKAD OF JUNE 2008

In the third dekad of June, the kiremt rain expands towards northern and central Ethiopia. Therefore, rain-producing systems, in the coming ten days, will have favorable condition for the occurrence of

rain. Eventhough the rain-bearing systems are likely to weaken near the beginning of the dekade, it will reorganize at the end of the days across Tigray, Amhara, Benshangul-Gumuz, Gambela, Oromiya and SNNPR.

Generally western parts of Tigray and Amhara, Benshangul-Gumuz Gambella, northern half of SNNPR including west and central Oromiya will have normal and above normal rainfall pattern. Likewise, east Tigray, eastAmhara, South of SNNPR, Harari, south and east Oromya and the adjoining places are expected to get near normal rainfall with a chance of below normal rain at pocket places. However, Afar and Somali regions remain partly cloudy.

### **3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE**

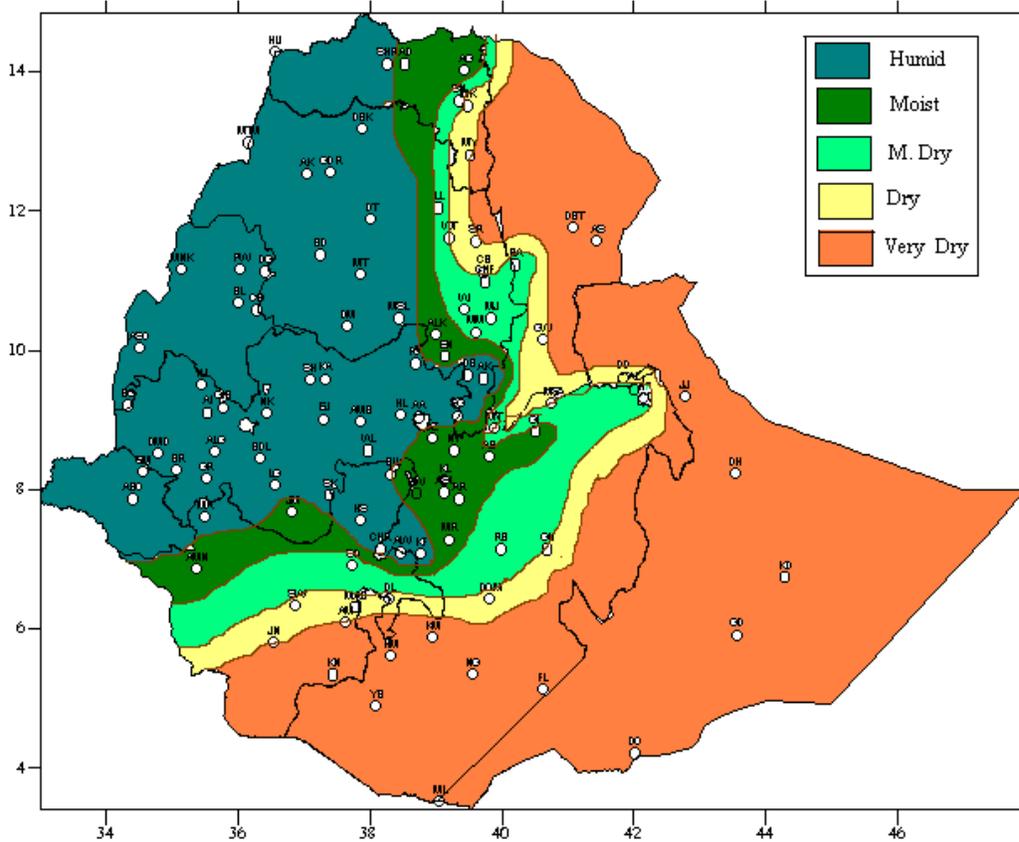
#### **3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE**

Much of Oromiya, Benshangul-Gumuz, Amhara, Tigray, central and eastern parts of the country observed rainfall due to the intensification of rain bearing system over the country. This rainfall situation had a positive contribution for the ongoing Meher agricultural activities. Some stations observed heavy fall within the range of (30-58.5) mm in one rainy day. According to crop phenological report, Senkata reported damage on tomato and Shawra reported damage on crops, which were at early vegetative stage due to the observed heavy fall. The exhibited normal to above normal rainfall over much of Oromiya and pocket areas of SNNPR would have a positive impact for crops which were at different pehnological stage and perennial crops interms of water requirement. On the other hand, much of Afar, and Somali, some areas of eastern Oromiya, Gambela and SNNPR exhibited below normal rainfall. This situation would have a negative impact for the availability of pasture and drinking water for pastoral and agro pastoral of the aforementioned Somali lowlands. Thus proper attention should be taken by the concerned personnel to take proper water harvesting technique.

. According to crop phenological report please refer table1

The analysis of moisture status (the relation ship between dekadal rainfall and the dekadal total reference evapotranspiration) as indicated in fig3. Much of western half of the country as well as central exhibited moist to humid moisture status condition. This situation shows that the observed moisture was good for the ongoing Meher agricultural activities. Besides, Afar, south Oromiya and eastern half of SNNPR observed dry to very dry moisture condition. .

### Moisture status Map for June11-20/2008



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

The anticipated heavy fall due to the intensification of rain bearing system over western parts of Tigray and Amhara, central and western Oromia, SNNPR and Benshangul-Gumuz would favor the ongoing Meher agricultural activities. Moreover, the expected normal to above normal rainfall over the aforementioned areas will have a positive impact for the Meher agricultural activities (Land preparation and sowing activities) and crops, which are at different phenological stage. Besides, the predicted near normal rainfall over eastern Amhara, southern parts of SNNPR Harari, the adjoining areas of south and eastern Oromiya will favor for the late sown crops and which are at different phenological stage and at full maturity stage. On the other hand partly cloudy condition are expected over Afar and the adjoining areas and southern Somali. Thus this situation will have a negative impact for the availability of pasture and drinking water for the aforementioned pastoral and agropastoral areas. Thus proper attention should take to use water-harvesting technique.

**Table 1. Crop Phenological Report for the Second dekad of June 2008**

Station name	Region	Zone	Woreda	Major Crops			Phases		
				1	2	3	1	2	3
Aira	Oromia	Wellega		Maize	-	-	-	-	-
Aris Robe	Oromia	Mirab Arsi	Robe	-	-	-	-	-	-
Alemkema	Amahara	Semen Shoa	Alemkema	-	-	-	-	-	-
Assosa	Benishagul	Assosa	Assosa	-	-	-	-	-	-
Ayehu	Amahara	Mirab Gojam	Ankossa	Maize	-	-	Nl	-	-
Bedelle	Oromia	Illubabor	Bedlle	Maize	-	-	Ta	-	-
Bullen	Benishagul	Metekel	Bullen	Maize	-	-	Em	-	-
Bui	SNNPR	Guarage	Sodo	-	-	-	-	-	-
Chagni	Amahara	Awi	Guagnua	Maize	Millet	Nug	-	-	-
Chira	Oromia	Jimma	Gera	Maize	-	-	Fl	-	-
Dangila	Benishagul	Awi	Dangila	Maize	-	-	Em	-	-
Debre Tabor	Amahara	Dabub Gonder	Debre Tabor	-	-	-	-	-	-
Dolomana	Oromia	Bale	Mena	Maize	Teff	-	Ta	TL	-
Enewary	Amahara	Semen Shoa	Mortenajiru	-	-	-	-	-	-
Fitche	Oromia	Semen Shoa	Girarjarso	Teff	-	-	-	-	-
Gelemeso	Oromia	Mira Haraghe	Habro	Maize	-	-	Nl	-	-
Ghion				Maize	-	-	NL	-	-
Gimbi	Oromia			Maize	-	-	Ta	-	-
Hossaina	SNNPR	SNNPR	Lemu	-	-	-	-	-	-
Kachise	Oromia	Mirab Shoa	Gindeberet	-	Teff	-	-	-	-
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	-	Nl	Ti	-
Pawe	Benishagul	Metekele	Pawe liyu	-	Sorghum	-	-	-	-
Shaura	Amahara	SemenGonder	ALEF.T	Maize	-	-	Em	-	-
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	Wheat	-	-	-	-	-
Waliso	Oromia	D.Mirab Shoa	Waliso	-	-	-	-	-	-
Ziway	Oromia	Misrak Shoa	Jidocombolcha	Maize	-	-	-	-	-

**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