1-10 November 2007 Vol. 17 No. 31 **Date of issue November 13, 2007**

SUMMARY

During the third dekad of October 2007 normal to above normal rainfall experienced over western Amhara, Benshangul-Gumuz, western Oromia, and adjoining area of Amhara, SNNPR, eastern and southern Oromia, Somali as well as eastern half of Afar. Thus this condition could have a positive impact for crops, which are found at different phenological stage and the recently sown crops. Besides the observed good rainfall over southern Oromia and Somali and eastern half of Afar could favor for the availability of pasture and drinking water over the low lands for pastoral and agro pastoral areas. Besides, below normal rainfall observed over much of Tigray and Amhara, some areas of Afar, central Ethiopia, Gambela, north Somali and pocket areas of southern Oromia. This rainfall would favor crops, which are ready to harvest. On the other hand it would have a negative impact for the availability of pasture and drinking water for pastoral and agro pastoral areas. With regard to heavy fall, Dolo Mena reported 30.9 mm in one rainy day.

During the first dekad of November 2007, the seasonal rain over the southern half of the country favored agricultural activities, crops at different stages of development. On the other hand, the normal sunny might have favored harvest activities. However, the cold mid night and morning weather condition over some highland areas might have a negative impact on cereals at seed filling stages. The observed normal to above normal rains over Somali, SNNPR, eastern Ethiopia, southern & western Oromia, Amhara, Benishangul Gumuz and Gambella might have a positive impact on crops at pre maturing stages, although, it might have a negative impact on crops at full maturity and harvesting activities. Heavy fall has been reported that caused crop damage in Bore and Jinka. The moist condition reduced the cold mid night and morning weather, hence favored the normal growth of crops.

1. WEATHER ASSESSMENT

1.1 1-10 NOVEMBER 2007, 2007

1.1.1 RAINFALL AMOUNT (Fig.1)

Pocket area of southern SNNPR received 100-200mm rainfall. Pocket areas of southern SNNPR, eastern & western Oromia and eastern Benshangul-Gumuz exhibited 50-100mm rainfall. Parts of southern SNNPR, western, southern & eastern Oromia, eastern Benshangul-Gumuz, and western Amhara received 25-50mm rainfall. Gambela, Most of Somali, Benshangul-Gumuz and Oromia, parts of northern half of SNNPR, parts of western half of Amhara and northeastern tip of Tigray experienced 5-25mm rainfall. The rest parts of the country exhibited little or no rainfall.

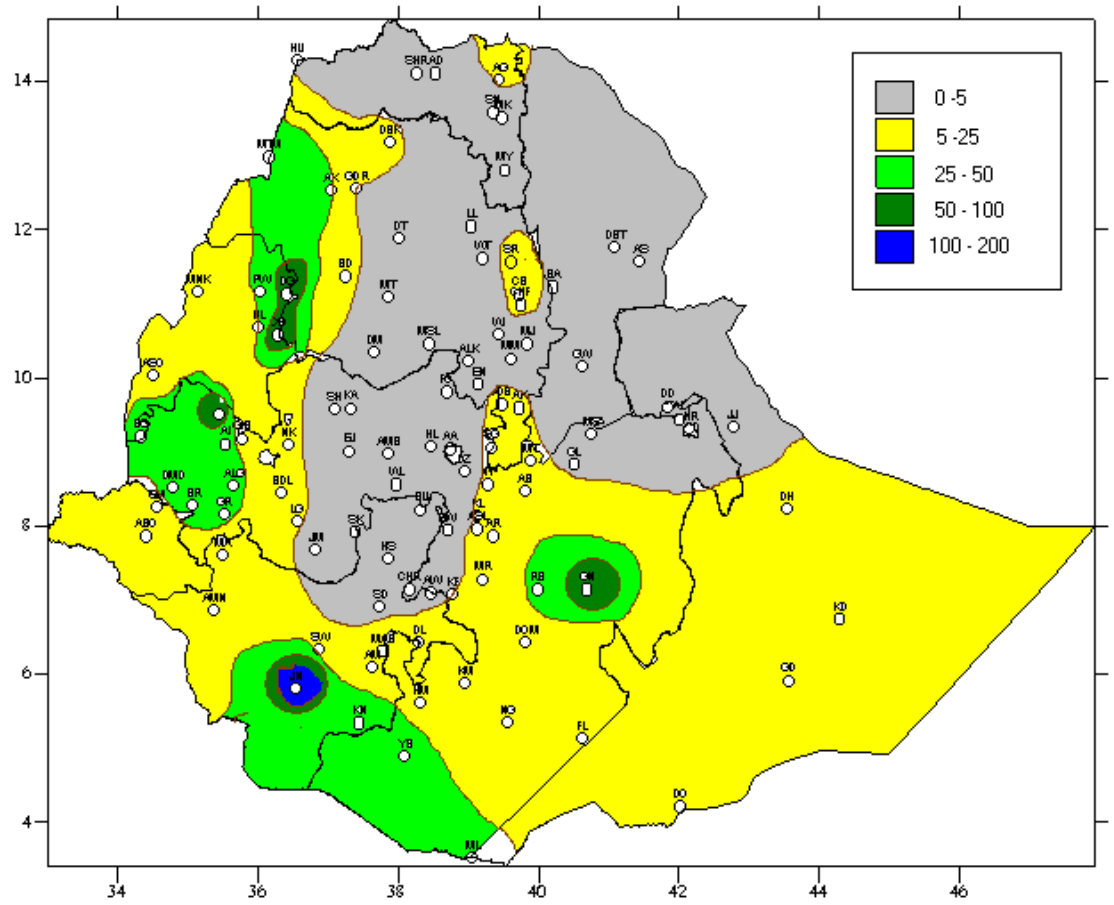

Fig 1. Rainfall distribution in mm (1- 10 November 2007)

1.1.2 RAINFALL ANOMALY (Fig. 2)

Gambela, Beshangul-Gumuz, southern half of SNNPR, western, central and southern Oromia, western Amhara, northeastern Tigray and pocket area of central Somali received normal to above normal rainfall. The rest parts of the country exhibited below normal to much below normal rainfall.

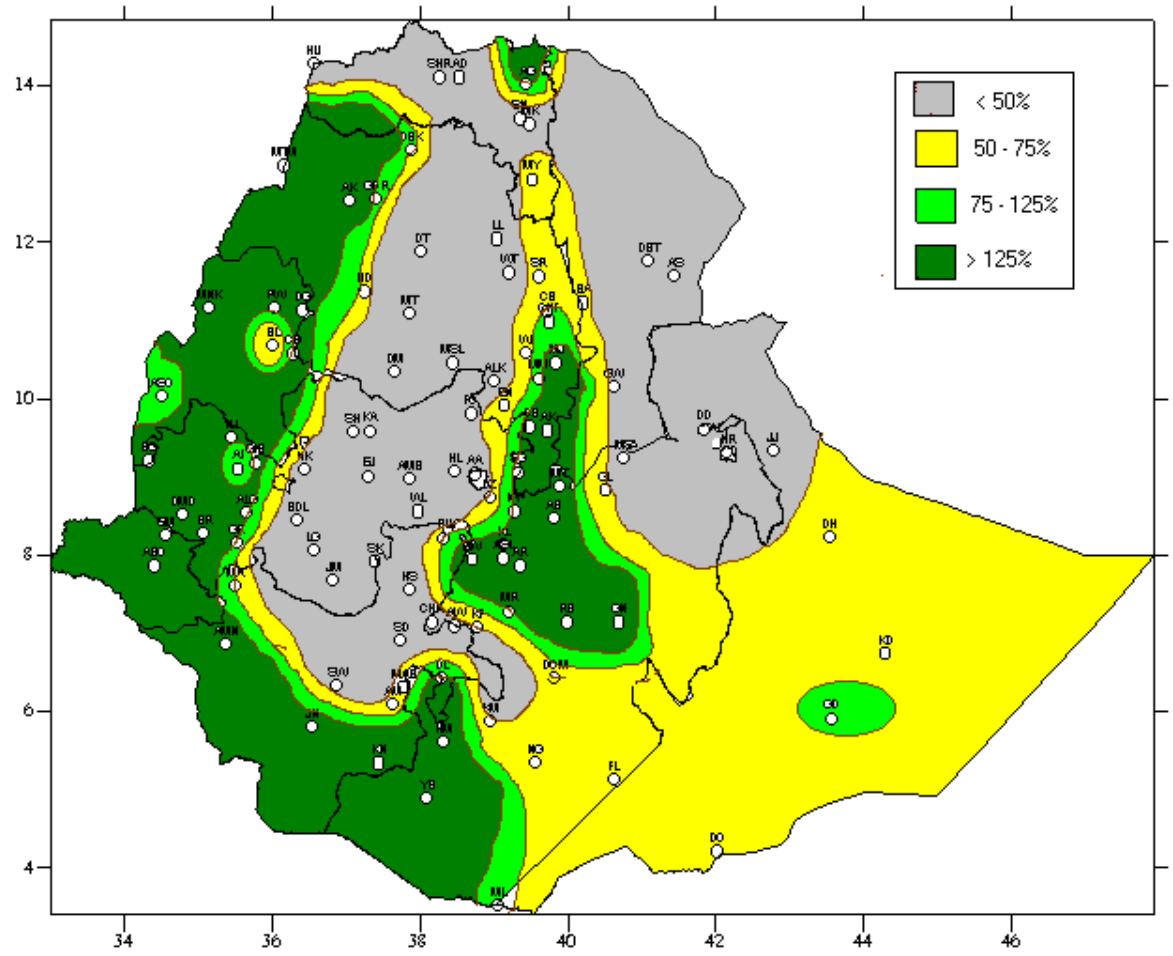

Fig.2 Percent of normal rainfall (1-10 November 2007)

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 35^{o} C and above for 3-10 consecutive days. Gode, Gambella, Assayta, Dubti, Elidar, Semera and Humera recorded extreme maximum temperature as high as 35.5, 38.0, 37.6, 36.6, 37.5, 37.7, and 40.0 ^{o} C respectively. The situation might have a negative impact on the normal activities over pastoral and agro-pastoral areas.

On the other hand, some stations recorded extreme minimum temperature below 5^{o} C for 2-6 days. Wegel Tena, Fiche, Debre Birhan and Alemaya recorded extreme minimum temperature as low as 4.8, 4.0, 0.2, and 2.5 ^{o} C respectively. The situation might slightly affect the normal performances of cereals over the aforementioned areas.

2. WEATHER OUTLOOK FOR THE SECOND DEKAD OF NOVEMBER 2007

Occasional rain showers that prevailed over the various regions had resulted in unusual wet spells particularly across northeast, central, rift valley as well as northeast Ethiopia. In the coming dekad the meteorological systems that caused wet condition are expected to weaken from northern half while limited to the southern half of Somali, western and southern portions of Oromia (including the highlands of Bale), southern and western SNNPR, Gambela, Benishangul Gumuz and western margin of Amhara will get near normal rains. In fact, pocket places of central, eastern and northeastern regions are likely to get light rains during the first half the dekad. A further weakening in wet weather activity will result in a fall in night and early morning temperatures particularly over the highlands of northern, central and eastern regions.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The observed rain over the southern half of the country might have favored agricultural activities, crops at different stages of development. On the other hand, the normal sunny might have favored harvest activities. However, the cold mid night and morning weather condition over some highland areas might have a negative impact on cereals at seed filling stages. The observed normal to above normal rains over Somali, SNNPR, eastern Ethiopia, southern & western Oromia, Amhara, Benishangul Gumuz and Gambella might have a positive impact on crops at pre maturing stages, although, it might have a negative impact on crops at full maturity and harvesting activities. Heavy fall to have been caused crop damage in Bore and Jinka. The moist condition reduced the cold mid night and morning weather, hence favored the normal growth of crops. Heavy fall caused damage on maize and Teff at Bedelle, heavy fall accompanied by hailstorm at Bahir Dar and Teppi caused crop damage. Pursuant to crop phenological report, please refer to the table on the next page.

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DEKAD

The rain bearing systems expected to gradually decrease in the coming dekad, as a result the expected near normal rains over western Amhara, Benishangul Gumuz, western & southern Oromia southern & western parts of SNNPR and southern half of Gambella will have a positive impact on perennial crops, crops at seed filling stages and availability of pasture and drinking water.

On the other hand, the expected below normal rains over Afar, Tigray, most Amhara, Benishangul Gumuz, central and eastern Oromia, northern Somali and northern parts of SNNPR will have a negative impact on agricultural activities and availability of pasture and drinking water over pastoral and agro-pastoral areas.

The expected cold mid night and morning weather condition may affect the normal growth of cereal crops at seed filling stages.

Table 1. Crop Phenological Report For the Second dekad of October 2007

Station name	Region	Zone	Woreda	Major Crops			Phases		
				1	2	3	1	2	3
Aris Robe	Oromia	Mirab Arsi	Robe	teff	wheat	-	Ta	Tl	-
Alemkema	Amahara	Semen Shoa	Alemkema	Teff	-	-	R	-	-
Assosa	Benishagul	Assosa	Assosa	Sorghum	-	-	Fl	-	-
Ayehu	Amahara	Mirab Gojam	Ankosha	Maize	Peas	Pepper	-	-	-
Bedelle	Oromia	Illubabor	Bedlle	Maize	-	-	-	-	-
Bullen	Benishagul	Metekel	Bullen	Millet	Nug	Maize	Fl	Fl	R
Bui	SNNPR	Guarage	Sodo	Teff	Wheat	Sorghum	-	-	-
Chagni	Amahara	Awi	Guagnua	Maize	Millet	Nug	Fr	Ta	Fl
Chira	Oromia	Jimma	Gera	-	Sorghum	Teff	-	-	-
Dangila	Benishagul	Awi	Dangila	Millet	-	-	Sh	-	-
Debre Tabor	Amahara	Dabub Gonder	Debre Tabor	Wheat	Barely	Teff	-	-	-
Dolomana	Oromia	Bale	Mena	Maize	Sea same	-	Ta	Bu	-
Enewary	Amahara	Semen Shoa	Mortenajiru	Wheat	Teff	-	Fl	Fl	-
Fitche	Oromia	Semen Shoa	Girarjarso	Teff	Wheat	Beans	Fl	R	R
Gelemeso	Oromia	Mira Haraghe	Habro	-	-	Teff	-	-	Fl
Hossaina	SNNPR	SNNPR	Lemu	Barely	-	-	Fl	-	-
Kachise	Oromia	Mirab Shoa	Gindeberet	Beans	Teff	-	R	Fl	-
Lalibela	Amahara	Semen Wollo	Lasta	barely	-	-	-	-	-
Limugent	Oromia	Jimma	Limukosa	Rice	Teff	-	R	H	-
Majate	Amahara	Semen Shoa	Mizan antakiya	Teff	-	Maize	-	-	-
Mehal Meda	Amahara	Semen Shoa	Gira mider	-	Beans	-	-	Fl	-
Nedjo	Oromia	Mira Wollega	Nedjo	-	Sorghum	Millet	-	R	Fl
Pawe	Benishagul	Metekele	Pawe liyu	Maize	Sorghum	Sea same	H	Fl	H
Shaura	Amahara	SemenGonder	ALEF.T	Maize	Millet	-	Fr	Ta	-
Shambu	Oromia	HoroWollega	Horo	Beans	Wheat	Barely	-	-	-
Shire	Tigiray	Mirab Tigray	Endasilasie	Maize	Teff	-	H	Fl	-
Sirinka	Amahara	Semen Wollo	Habru	Teff	Maize	Millet	R	Fr	H
Sokoru	Oromia	Jimma	Sokoru	-	Teff	-	-	Fl	-
Shola gebeya	Amahara	Semen Shoa	Hagaramariam	Wheat	Beans	-	-	-	-
Wagel Tena	Amahara	Semen Wollo	Delanta	Wheat	Beans	Peas	-	-	-
Waliso	Oromia	D.Mirab Shoa	Waliso	Maize	Nug	Teff	-	H	R
Ziway	Oromia	Misrak Shoa	Jidocombolcha	Maize	Wheat	-	-	-	-

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