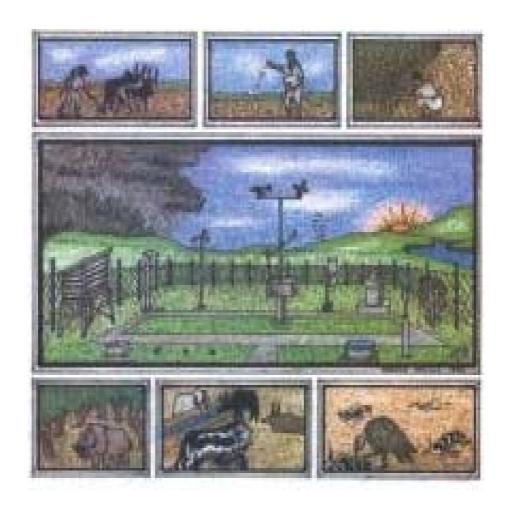
NATIONAL METEOROLOGICAL SERVICES AGENCY AGROMETEOROLOGICAL BULLETIN

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FORE WARD

This Agro met Bulletin is prepared and disseminated by the National Meteorological Services Agency (NMSA). The aim is to provide those sectors of the community involved in Agriculture and related disciplines with the current weather situation in relation to known agricultural practices.

The information contained in the bulletin, if judiciously utilized, are believed to assist planners, decision makers and the farmers at large, through an appropriate media, in minimizing risks, increase efficiency, maximize yield. On the other hand, it is vital tool in monitoring crop/ weather conditions during the growing seasons, to be able to make more realistic assessment of the annual crop production before harvest.

The Agency disseminates ten daily, monthly and seasonal weather reports in which all the necessary current information's relevant to agriculture are compiled.

We are of the opinion that careful and continuous use of this bulletin can benefit to raise ones agro climate consciousness for improving agriculture-oriented practices. Meanwhile, your comments and constructive suggestions are highly appreciated to make the objective of this bulletin a success.

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አህፅሮት እ.ኤ.አ ኦክቶበር 2006

እ.ኤ.አ በኦክቶበር 2006 በመጀመሪያዉ አስርተ ቀናት በአብዛኛው ትግራይ፣ በሰሜንና ምዕራብ አማራ፣ በቤንሻንጉል ጉምዝ ምስራቃዊ ክፍል፣ በምዕራብ ኦሮሚያ፣ የደቡብ ኦሮሚያ ደጋማ ስፍራዎችን ጨምሮ እንዲሁም በደቡብ ብሔር ብሔረሰቦችና ሕዝቦች አብዛኛው ክፍል የታየው መደበኛና ከመደበኛ በሳይ የሆን ዝናብ ገና በማደግ ሳይ ሳሉና በቅርቡ ለተዘሩ ማለትም በቡቃያ ደረጃ ሳይ ሳሉ አዝርዕቶች ምቹ ሁኔታን የሚልጥር ሲሆን በደቡብ ብሔር ብሔረሰቦችና ሕዝቦች ደቡባዊ ክፍል፣ በሶማሌ ደቡባዊ አጋማሽ፣ ክፊል የደቡብ ኦሮሚያን ጨምሮ የታየው መደበኛና ከመደበኛ በሳይ የሆን ዝናብ ለቆሳማው የአርብቶ አደሩ አካባቢ የግጦሽ ሳርና ውሃ አቅርቦት በጎ ጎን እንደሚኖረው እሙን ነው። ይሁንና ከሳይ በተጠቀሰው አስር ቀናት ጊዜ በአንዳንድ ኪስ ቦታዎች ከበድ ያለ ዝናብ ተመዝግቦ ነበር። ለምሣሌ በብሳቴ ጥሎ የነበረው ከባድ ዝናብ በባሕር ዛፍ ሳይ ጉዳት ማድረሱን ከደረሰው ሪፖርት መረዳት ተችሷል።

እ.ኤ.አ በኦክቶበር 2006 በሁለተኛዉ አስርተ ቀናት በደቡብ፣ ደቡብ ምዕራብ እና ምዕራብ አካባቢዎች ታይቶ የነበረዉ የተስፋፋ የዝናብ ስርጭት ገና በማደግ ላይ ላሉና በቅርቡ ለተዘሩ አዝርዕቶች ለቀጣዩ የዕድገት ደረጃቸዉ ምቹ ሁኔታን የሚጥር ሲሆን በደቡብ ምስራቅ ላሉት የቆላማዉ የአርብቶ አደሩ አካባቢ የግጦሽ ሳርና የዉሃ አቅርቦት በጎ ጎን እንደሚኖረዉ ይታመናል። ይሁን እንጂ በጅንካ፣ ገለምሶ፣ ንምቤላ፣ አሶሳ፣ ጅጅን እና በሞያሌ ከ30.7-120.8 ሚ.ሜ የሚደርስ ከባድ ዝናብ ተመዝግቦባቸዉ ነበር። የአየር ሙቀትን ስንመለከት በደብረብርሃን፣ በፍቼ እና በወገል ጤና ከ5°C በታች የሆነ ዝቅተኛ የአየር ሙቀት ተመዝግቦባቸዉ ነበር።

እ.ኤ.አ በኦክቶበር 2006 በሶስተኛወ, አስርተ ቀናት ከአፋር ሰሜን ምስራቅ አካባቢዎች በስተቀር አብዛኛዉን የሀገሪቱ ክፍሎች መደበኛና ከመደበኛ በላይ የሆነ ዝናብ ያገኙ ሲሆን ይህ የዝናብ ስርጭት በአብዛኛዉ የሀገሪቱ ክፍሎች ላይ በቅርቡ ስተዘሩት አዝርዕቶችና በተለያዩ የእድገት ደረጃ ላይ ለሚገኙት አዝርዕቶች በጎ ጎን እንደሚኖረዉ እሙን ነዉ። ይሁን እንጂ በአንዳንድ የሀገራችን ክፍሎች ላይ 30.674.4 ሚ.ሜ የሚደርስ ከበድ ያለ ዝናብ የተመዘገበ ሲሆን በዋቢ ሸበሌ ወንዝ ሙሳት የተነሳ በእንስሳት ላይ ከፍተኛ ጉዳትም አድርሷል። በተጨማሪ ይህ ከባድ ዝናብ በበደሌ፣ በጅንካ፣ በአቦምሳ እንዲሁም በጊናገር አካባቢዎች በበቆሎ፣ በጤፍ፣ በባቄላና፣ በምስር አዝሙራ ላይ ከፍተኛ ጉዳት ያስከተለ ሲሆን በአቦምሳ በተከሙሩ ሰብሎች ላይ ጉዳት ማድረሱን ከደረሰን ሪፖርት ለመረዳት ተችሷል። በተጨማሪም በኩሉምሳና በወገል ጤና ባሉ አካባቢዎች በሰብሎች ማሳ ላይ የዉሃ ማቆር ሁኔታ ታይቶ እንደነበር ተገልጿል።

ጠቅለል ባለ መልኩ እ.ኤ.አ ኦክቶበር 2006 ከዋቂት የመካከለኛውና ምዕራብ *ኑሮሚያ፣* የደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል ሰሜን ምሥራቃዊ ክፍል፣ ከፊል የአፋር ክልልን ጨምሮ ከነበረው ከመደበኛ በታች የሆነ ዝናብ በስተቀር በአብዛኛው የሀገሪቱ ክፍል መደበኛና ከመደበኛ በላይ የሆነ ዝናብ መታየቱ በማደግ ላይ ላሉና በቅርቡ ለተዘሩ ሰብሎች በነ ነን ቢኖረውም፤ በተለይ በወሩ የመጨረሻ አሥር ቀናት በብዙ አካባቢዎች ላይ ከባድ ዝናብ ተመዝግቦ ነበር። ለምሳሌ ከዘጋቢ ጣቢያዎቻችን ወደ 28 የሚደርሱ ጣቢያዎች ከ30-74.4 ሚ.ሜ ዝናብ በአንድ የዝናብ ቀን ብቻ ተመዝግቦ ነበር። ይህም ሁኔታ በተለይ ሰብል በተዳረሰባቸው አካባቢዎች ፍሬውን በማርገፍ እንዲሁም የሰብል ስብሰባ ሂደቱን በማደናቀፍ የማይናቅ አስተዋፅኦ እንደሚኖረው ይታመናል። በወሩ ውስጥ አንዳንድ አካባቢዎች የደረሰ ጉዳት ዘግበው ነበር። ለምሳሌ በብላቴ ከባዱ ዝናብ ዛፎችን በመነቃቀል። በባህርዳር በረዶ ቀሳቅሎ የጣለው ዝናብ በበቆሎ ሰብልና በቅጠሳ ቅጠል ላይ ጉዳት አድርሷል። በአልኔ በረዶ ቀሳቅሎ የጣለው ዝናብ በበቆሎ፣ በባቄሳና በአተር ሳይ ጉዳት አስከትሏል፤ በበደሌ በደረሰ ሰብልና በበቆሎ አዝመራ ላይ ጉዳት አስከትሎ ነበር። በጅንካ በጤፍ ማሳ ላይ ከፍተኛ ገዳት አስከትሏል። በአቦምሳ በደረሱ በእህል ክምር ላይ ጉዳት አድርሷል። እንዲሁም በጊናገር በባቄላ፣ የአርብቶ አደሩን አካባቢ በተመለከተ በወሩ መጨረሻ ላይ በደጋማ አካባቢዎች ላይ የጣለው ዝናብ ለዋቢ ሸበሌ ወንዝ ሙላት ምክንያት በመሆን በሰብልና እንስሳት ሳይ ጉዳት አስከትሎ ነበር።

SUMMARY October 2006

During the first dekad of October 2006, the observed normal to above normal rain fall over most part of Tigray, North and Western Amhara, Benshangul Gomez, western Oromia including southern high lands of Oromia and most parts SNNPR could favor crops which are found at different crop phonological stages and at early vegetative stage in case of recently sown crops. Besides the observed normal to above normal rainfall over southern SNNPR and southern half of Somali including southern half of Oromia could have positive contribution for the availability of pasture and drinking water over the lowlands of pastoral and agro postural areas of the aforementioned areas. Nevertheless the observed heavy falls in some pocket areas resulted in crop damage. Fore instance Bilate reported perennial crop damage (trees) due to heavy fall during the dekad under review.

During the second dekad of October 2006, the observed widespread rainfall condition over southern, southwestern and western parts of the country could favor crops, which are found at different phonological stages, and recently sown crops. Besides the observed good rainfall condition over southeastern parts of the country could have a positive contribution for the availability of pasture and drinking water over the lowlands of pastoral and agro postural areas. Nevertheless some areas like Jinka, Gelemso, Gambella, Assosa, Jijiga and Moyalle received heavy fall ranging from 30.7-120.8mm. With regard to air temperature Debre Birhan, Fitche and Wegel Tena recorded extreme minimum temperature less than 5 °C.

During the third dekad of October 2006, with the exception of northeastern Afar most parts of the country experienced normal to above normal rainfall. Thus, this condition could favor crops, which are found at different phonological stages and the recently sown crops. Nevertheless, some areas exhibited 30.6-74.4mm of heavy falls. Besides, heavy falls observed over the highlands resulted in the overflows of Wabishebelle River and caused crop damage and livestock losses. Moreover it causes crop damage (maize, teff, bean and lentil) in some areas of Oromia and SNNPR like Bedelle, Abomsa, Ginager and Jinka,. In addition to this some areas like Kulumsa and Wegel Tena reported water logging on crop fields.

Generally, during the month of October, with the exception of some areas of central and western Oromia, north eastern part of SNNPR, including parts of Afar the observed normal to above normal rainfall over most parts of the country could favor crops which are found at different phonological stages and recently sown crops in some areas. Nevertheless, the observed heavy falls in most parts of the country particularly during the third dekad of October resulted in crop damage and livestock losses. Fore instance about 28 stations from the reporting stations recorded heavy falls ranging 30 – 74 mm in a rainy day. Therefore this condition could have a negative impact on crops which are ready to harvest by shattering the seed and hindering harvest and post harvest activities. Some areas records crop damage during the month under review. For instance Bilate, Bahir Dar, Alge, Bedelle, Jinka, Abomsa and Ginager reported annual (maize, bean, pea, teff and lentil) and perennial crops (trees) damage. Regarding pastoral and agro pastoral areas the observed heavy falls over highlands especially towards the end of the month caused overflow of Wabishebele River, thereby resulting crop damage and livestock losses in areas around the riverbank.

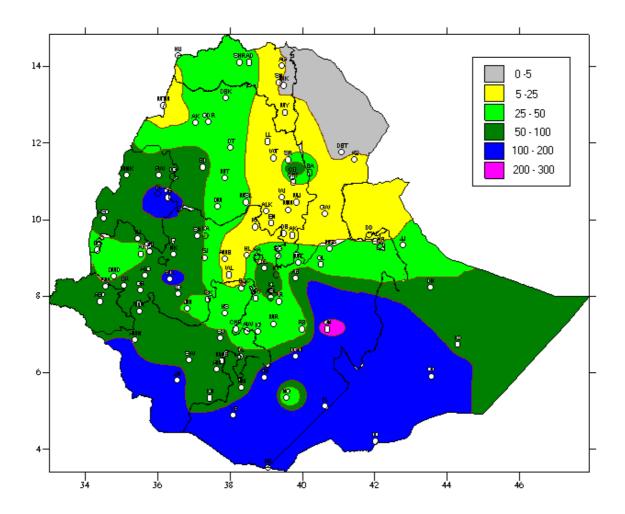


Fig 1. Rainfall distribution in mm (21-3l October, 2006)

1. WEATHER ASSESSMENT

1.1 (21-31 October, 2006)

1.1.1 Rainfall amount (Fig.1)

Pocket area of eastern Oromia received 200-300mm of rainfall. Some parts of southern, southeastern and pocket areas of western Oromia, southwestern SNNPR, pocket area of eastern Benshangul-Gumuz, south and southwestern Somali experienced 100-200mm rainfall. Most part of Benshangul-Gumuz, pocket area of central, eastern, southwestern and western Oromia, much of SNNPR, Gambella and some areas of western and eastern Amhara exhibited 50-100mm of rainfall. Most part of western Tigray, western Amhara, some areas of western, central and eastern Oromia received 25-50mm of rainfall. Eastern half of Tigray, western and southern Afar, some areas of northwestern and eastern Amhara, pocket area of central Oromia and some parts of northern Somali received 5-25mm of rain fall. There was little or no rainfall for the rest parts of the country.

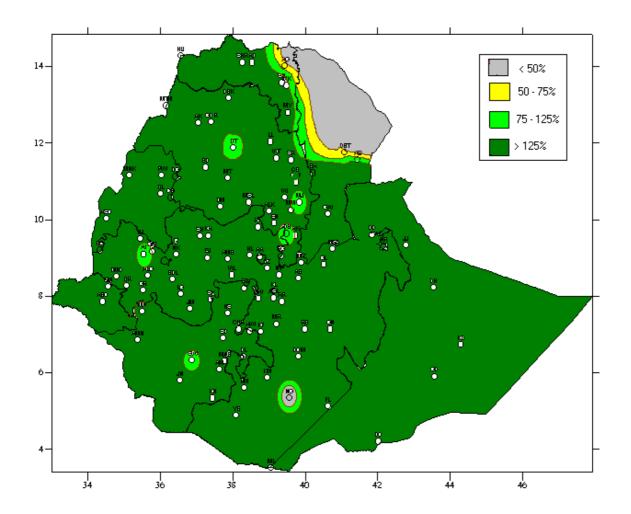


Fig. 2 Percent of normal rainfall (21-31 October, 2006)

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)

Most part of Tigray, Amhara, Benshangul Gumuz, Gambela, Oromia, SNNPR, Somali, and southern Afar experienced normal to above normal rainfall. Below to much below rainfall has been observed over the rest part of the country.

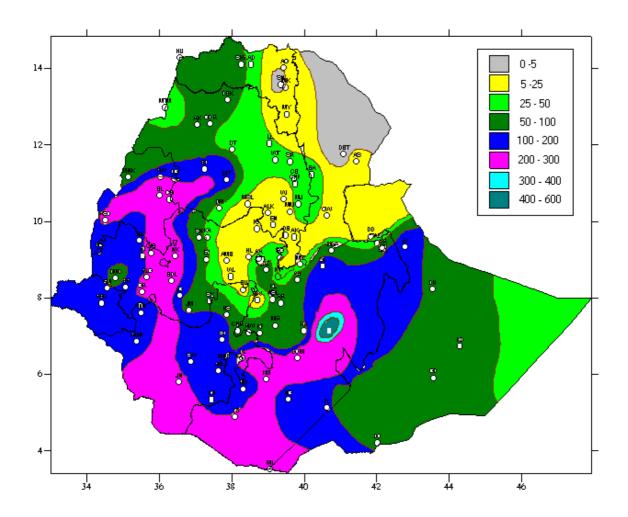


Fig. 3 Rainfall distribution in mm for the month of October 2006

1.2 October 2006

1.2.1 Rainfall distribution (Fig.3)

Pocket area of eastern Oromia experienced 400-600mm and 300-400mm of rainfall. Some areas of western, southern and eastern high lands of Oromia, western and south western SNNPR and much of Benshangul-Gumuze received 200-300mm of rainfall. Gambela, some areas of western, eastern and southern Oromia, much of eastern and some areas of western SNNPR, some areas of Benshangul-Gumuz, some areas of western Amhara, parts of eastern and southern Somali received 100-200mm of rainfall. Most parts of western Tigray, western Amhara, northern Benshangul-Gumuz, some areas of Oromia, some areas of eastern SNNPR and much of Somali received 50-100mm of rainfall. Some areas of central Tigray, eastern and western tip of Amhara, some areas of Oromia and southeastern Somali received 25-50mm of rainfall. Most part of eastern Tigray, northeastern and southern Amhara, western and southern Afar, central Oromia and northern Somali exhibited 5-25mm of rainfall. The rest part of the country exhibited little or no rainfall.

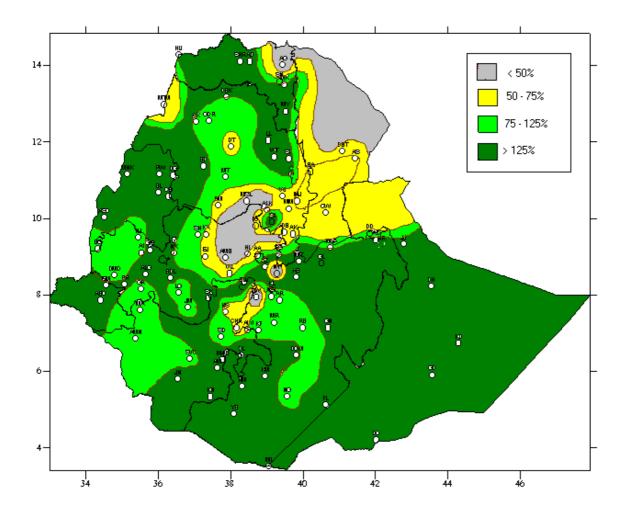


Fig. 4 Percent of Normal Rainfall for the month of October 2006

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

1.2.2 Rainfall Anomaly (Fig. 4)

Most part of Tigray, Amhara, Benshangul Gumuz, Oromia, Gambela, SNNPR and much of Somali exhibited normal to above normal rainfall.Below to much below normal rainfall has been observed over the rest parts of the country.

1.3 TEMPERATURE ANOMALY

Debre Birhan, Fitche, Wegel Tena and Ambamariam recorded extreme minimum temperature less than 5 0 C.

2. WEATHER OUTLOOK

2.1 For the first dekad of November 2006

For the coming ten days, the Bega's dry and sunny weather conditions will dominate much of the country. However, western, southwestern, southeastern and southern portion of the country will get light to moderate rain showers. In addition to this, due to the rain-bearing systems interactions north western Ethiopia are likely to have light rains at few places. In general, the next ten days, western and southern Oromia, Gambella and SNNPR regions will receive normal to above normal rainfall. Moreover, Benshangul- Gumuz, western Amhara, eastern and central Oromia as well as southern Somali are likely to get close to normal rainfall. However, in some areas it will be below normal. On the other hand, much of Tigray, eastern Amhara and Afar will be under Bega's dry weather conditions.

2.2 For the month of November 2006

For the up coming month, the rain producing systems are likely to be conducive over southern half of the country. On the other hand, northern, central and eastern Ethiopia are expected to have unseasonable rain for few days. Generally, western and southern Oromia, Gambella, SNNPR and southern Somali will get normal to above normal rainfall. On the contrary, dry weather conditions will be dominant over Benshangul-Gumuz, Amhara, Tigray, eastern and central Oromia, Harrari as well as northern Somali. However, there will be occasional unseasonable rainfall at some places. Nevertheless, Afar will have sunny and hot weather conditions.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

Generally, during the month of October, with the exception of some areas of central and western Oromia, north eastern part of SNNPR, including parts of Afar the observed normal to above normal rainfall over most parts of the country could favor crops which are found at different phenological stages and recently sown crops in some areas. Nevertheless, the observed heavy falls in most parts of the country particularly during the third dekad of October resulted in crop damage and livestock losses. Fore instance about 28 stations from the reporting stations recorded heavy falls ranging 30 – 74 mm in a rainy day. Therefore this condition could have a negative impact on crops which are ready to harvest by shattering the seed and hindering harvest and post harvest activities. Some areas reported crop damage during the month under review. For instance Bilate, Bahir Dar, Alge, Bedelle, Jinka, Abomsa and Ginager reported annual (maize, bean, pea, teff and lentil) and perennial crops (trees) damage. Regarding pastoral and agro pastoral areas the observed heavy falls over highlands especially towards the end of the month caused overflow of Wabishebele River, thereby resulting crop damage and livestock losses in areas around the riverbank. Pursuant to the crop phenological report maize was at ninth leaf stage in some areas of southern Oromia (Dolo Mene) while it was at tasseling and flowering stage in some areas of southern Amhara (Alem Ketema), eastern Benshangul-Gumuze (Dangla), northern SNNPR (Bui) and western Oromia (Shambu). Moreover it was at wax and full ripeness in some areas of western Oromia (Alge, Aira, Gimbi), eastern Amhara (Cheffa) and eastern Benshangul-Gumuze (Chagni). Teff was at shooting stage in some areas of western Oromia (Shambu) while it was at tasseling and flowering stage in some areas of northern Oromia (Fitche), central Oromia (Arsi Robe), eastern Benshangul-Gumuze (Dangla), western Oromia (Sekoru), eastern Oromia (Gelemso), southern Amhara (Enewary, Alem Ketema), south eastern Amhara (Wereilu) and eastern Amhara (Cheffa). Moreover it was at ripeness stage in some areas of western Oromia (Chira, Gimbi, Limu Gunet)

and eastern Amhara (Sirinka, Combolcha). Wheat was at tillering and shooting stage in some areas of central Oromia (Arsi Robe), eastern Amhara (Wegel Tena) and northern SNNPR (Bui) where as it was at earing and flowering stage in some areas of southern Amhara (Shola Gebeya, Enewary), western Oromia (Gimbi), northern Oromia (Fitche) and south eastern Amhara (Wereilu). Moreover it was at wax and full ripeness in some areas of central Oromia (Kulumsa). Sorghum was at flowering and ripeness stage in some areas of western Oromia (Aira, Nedjo), eastern Amhara (Combolcha, Cheffa). Millet was at flowering stage in some areas of western Oromia (Aira, Nedjo, Limu Genet) and eastern Benshangul-Gumuze (Chagni). Barley was at earing and ripeness stage in some areas of southern Amhara (Shola Gebeya, Amba Mariam). Beans were at flowering and ripeness stage in some areas of eastern Amhara (Wegel Tena), western Oromia (Chira), central Oromia (Kulumsa), northern Oromia (Fitche), southern Amhara (Shola Gebeya, Enewari) and southeastern Amhara (Wereilu). Peas were at ripeness stage in some areas of western Oromia (Shambu). Nug was at flowering stage in some areas of eastern Benshangul-Gumuze (Bullen). Seaseme was at emergence stage in some areas of southern Oromia (Dolomena). Flax was at elongation stage in some areas of southern Oromia (Dolomena).

3.2 EXPECTED WEATHER IMPACTS ON AGRICULTURE DURING THE COMING MONTH

The anticipated seasonal rainfall condition over southern half of the country would have a positive contribution especially for the lowlands of pastoral and agro pastoral in terms of season's agricultural activities. Besides, it would have positive impact on perennial vegetation like trees and bushes. On the other hand the expected unseasonable rainfall over northern, central and eastern part of the country would have a negative effect on harvest and post harvest activities especially in areas where the activities are under question. For instance the occasional falls would have negative impact on harvest and post harvest activities in areas where the activities are under question like northeastern parts of the country (Fitche, Enewary, Alem Ketema, Shola Gebeya, Combolcha, Bati and Ejaji), SNNPR (Sidama, Gedio, Hadiya, Wolaita, Gemo Gofa, Dawro, Gurage, Silite and Sheka), eastern (Gelemso), western (Nekemt, Aira and Gimbi), central (Holeta and Kulumsa) and southern part of the country (Yabele). Therefore farmers are advised to exploit the anticipated dry and sunny condition to harvest their crops on time in order to avoid post harvest loses. Moreover the post harvest processes like trashing; collecting the grain in the field and finally putting the dried grain in the store should be performed appropriately in order to avoid grain damage due to the occurrence of post harvest pests and diseases.

Table 1. Climatic and Agro-Climatic elements of different stations for the month of OCTOBER 2006

,	Stations	Region	A/ rainfall	Normal	%of Normal	Eto mm/day	Monthly Eto	Moisture
								status
1	Adigrat	TIGRAI	9.8	27.8	35	2.83	87.73	D
	Mekele		14.0		233	4.98	154.38	VD
3	Senkata		0.0	28.4	0	4.45	137.95	VD
4	Shire		98.0		331	3.55		
								VD
1	Assayta	AFAR	5.6	6.3	89	3.93	121.83	1
	Dubti		0.0		0	6.54		
1	A. Ketema	AMHARA	6.3	26.9	23	4	124	VD
	Bahirdar Bahirdar		153.7		159		124	
	Bati		31.1		103			
	Bullen		226.3		142		96.1	
	Combolcha		61.9		170			
	Chefa		23.5		56			
	D.Markos		43.4		53			
	Dangla		186.8		228			
	Enwary		15.3		437	4.47		
	Majete		34.9		103			
	Motta		118.0		113			
	Lalibela		25.6		154			
	S. Gebeya		46.8		162	3.51		
	Sirinka		38.0		64	3.8		
	Wegeltena		25.8		311	3.57		
	Wereilu		9.9		73		133.61	
10	Werena		0.0	10.0	70	4.01	100.01	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
1	Aira	OROMIYA	106.2	135	79	3.3	102.3	Н
	Alemaya	OKOMITA	70.2		156			
	Bedelle		207.9		161	4.1	127.1	
	D.dollo		98.0		89			
	D.Mena		271.7		127			
	D.Zeit		83.5		388			
	Fitche		7.9					
	Gelemso		123.1					1
	Gimbi		212.1		161	3.57		
	Gore		179.0					1
	H. Mariam		159.7		128			1
	Jimma		91.1		90			
	K.Mengist		278.7		152	2.81	87.11	
	Kachise		NA		NA	NA		
	Koffele		89		91	2.66		
	Kulumsa		77.0		202	3.96		
	Lumugenet		167.8		89			
	Metehara		37.5		173			
	Moyale		276.4		316		99.51	
	Nazreth		10.1		32		158.1	
	Neghele		149.2		92	3.3		
	Nedjo		143.9		115			
	Nekemte		211.8		142			
	Robe(Bale)		93.5		96			

25	Sekoru		99.1	72.1	137	3.48	107.88	М
26	Shambu		98.8	81.8	121	3.5	108.5	M
27	Wolliso		11.7	39.4	30	3.86	119.66	VD
28	Yabello		213.1	88.5	241	3.3	102.3	Н
29	Ziway		9.5	35.8	27	4.83	149.73	VD
1	Jijiga	SOMALI	108.8	49.5	220	NA	NA	NA
1	A.Minch	SNNPR	153.1	119.8	128	4.31	133.61	Н
2	Awassa		55.0	84.3	65	3.54	109.74	M
3	Hosaina		50.5	79.8	63	3.78	117.18	MD
4	Jinka		278.5	136.7	204	5.6	173.6	Н
5	Konso		136.3	88.2	155	4.23	131.13	Н
6	M.Abay		157.6	92.4	171	4.49	139.19	Н
7	Sawla		178.6	169.9	105	3.47	107.57	Н
1	Gambela	GAMBELA	142.1	104.3	136	3.8	117.8	Н
_	Assosa	B/GUMUZ	203.6	132.6	154	3.1	96.1	Н
2	Chagni		279.1	185.3	151	3.04	94.24	Н
1	A.A.Obs.	A.A	19.8	41.1	48	3.62	112.22	D
	•	A.A	ı					
	A.A. Bole		35.9	33.7	107	4.23	131.13	MD
1	Dire Dawa	D.D	15.8	25.5	62	4.62	143.22	D
1	Harar	Harai	127.0	42.4	300	2.99	92.69	Н

Legend

 VD
 Very Dry
 < 0.1</th>

 D
 Dry
 0.1 - 0.25

 MD
 Moderatly Dry
 0.25 - 0.5

 M
 Moist
 0.5 - 1

 H
 Humid
 >1

Explanatory Note

ETo Reference Evapotranspiration(mm)

DEFNITION OF TERMS

ABOVE NORMAL RAINFALL: - Rainfall in excess of 125% of the long term mean

BELOW NORMAL RAINFALL: - Rainfall below 75 % of the long term mean.

NORMAL RAINFALL: - Rainfall amount between 75 % and 125 % of the long term mean.

BEGA: - It is characterized with sunny and dry weather situation with occasional falls. It extends from October to January. On the other hand, it is a small rainy season for the southern and southeastern lowlands under normal condition. During the season, morning and night times are colder and daytime is warmer.

BELG: - Small Rainy season that extends from February to May and cover s southern, central, eastern and northeastern parts of the country.

CROP WATER REQUIREMENTS: - The amount of water needed to meet the water loss through evapotransipiration of a disease free crop, growing under non-restricting soil conditions including soil water and fertility.

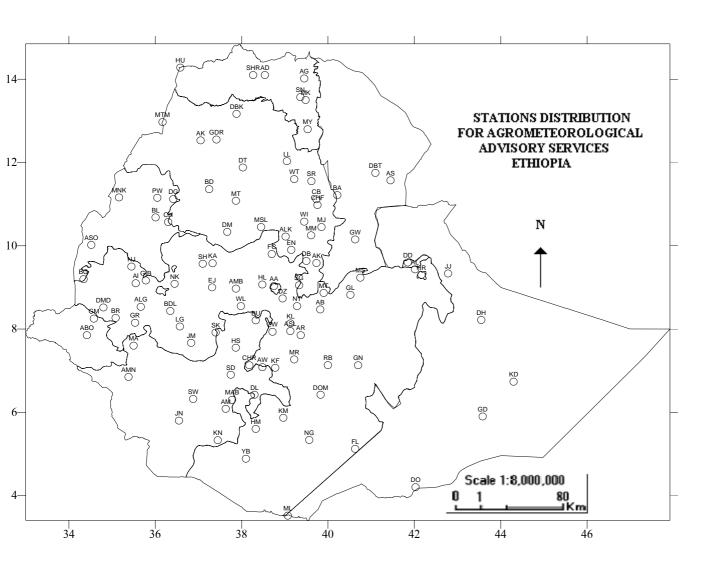
DEKAD: - First or second ten days or the remaining days of a month.

EXTREME TEMPERATURE: - The highest or the lowest temperature among the recorded maximum or minimum temperatures respectively.

ITCZ: - Intertropical convergence zone (narrow zone where trade winds of the two hemispheres meet.

KIREMT: - Main rainy season that extends from June to September for most parts of the country with the exception of the southeastern lowlands of the country.

RAINY DAY: - A day with 1 or more mm of rainfall amount.



Station	CODE	Combolcha	CB	Gonder	GDR	Metema	MTM
A. Robe	AR	Chagni	CH	Gore	GR	Mieso	MS
A.A. Bole	AA	Cheffa	CHF	H/Mariam	HM	Moyale	ML
Abomsa	AB	Chira	CHR	Harer	HR	Motta	MT
Abobo	ABO	D.Berehan	DB	Holleta	HL	M/Selam	MSL
Adigrat	AG	D.Habour	DH	Hossaina	HS	Nazereth	NT
Adwa	AD	D.Markos	DM	Humera	HU	Nedjo	NJ
Aira	AI	D.Zeit	DZ	Jijiga	JJ	Negelle	NG
Alemaya	AL	Debark	DBK	Jimma	JM	Nekemte	NK
Alem Ketema	ALK	D/Dawa	DD	Jinka	JN	Pawe	PW
Alge	ALG	D/Mena	DOM	K.Dehar	KD	Robe	RB
Ambo	AMB	D/Odo	DO	K/Mingist	KM	Sawla	SW
Aman	AMN	D/Tabor	DT	Kachise	KA	Sekoru	SK
Ankober	AK	Dangla	DG	Koffele	KF	Senkata	SN
Arbaminch	AM	Dilla	DL	Konso	KN	Shambu	SH
Asaita	AS	Dm.Dolo	DMD	Kulumsa	KL	Shire	SHR
Asela	ASL	Dubti	DBT	Lalibela	LL	Shola Gebeya	SG
Assosa	ASO	Ejaji	EJ	Limugent	LG	Sirinka	SR
Awassa	AW	Enwary	EN	M.Meda	MM	Sodo	SD
Aykel	AK	Fiche	FC	M/Abaya	MAB	Wegel Tena	WT
B. Dar	BD	Filtu	FL	Maichew	MY	Woliso	WL
Bati	BA	Gambela	GM	Majete	MJ	Woreilu	WI
Bedelle	BDL	Gelemso	GL	Masha	MA	Yabello	YB
Begi	BG	Gewane	GW	Mankush	MNK	Ziway	ZW
BUI	BU	Ginir	GN	Mekele	MK		
Bullen	BL	Gimbi	GIB	Merraro	MR		
Bure	BR	Gode	GD	Metehara	MT		