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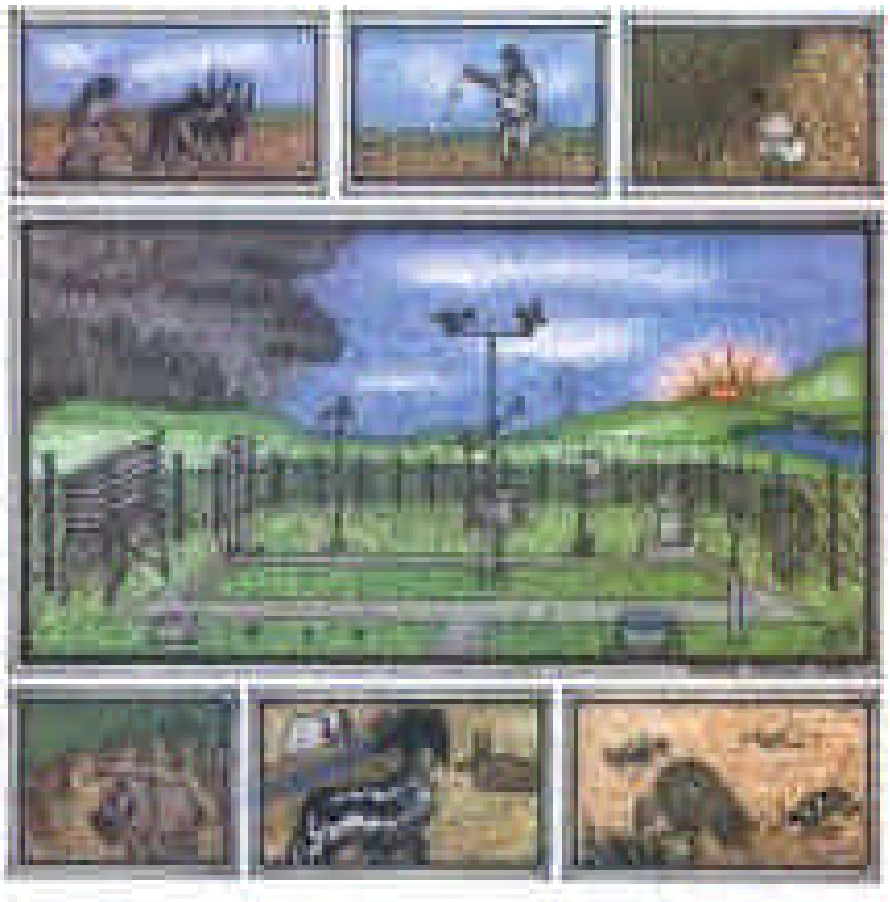

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FORE WARD

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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SUMMARY
JUNE 2005

During the first dekad of June 2005 below normal rainfall was observed over Tigray, most parts of Amara parts of central and eastern Oromiya including southern Oromiya, most parts of SNNP and northern Benishangul-Gumuz. However, in accordance with the crop phenological report sowing of cereal crops was under way over some areas of northwestern parts of the country like Mankush. Besides, crops were in a good shape over some areas of western and northeastern parts of the country like Alge, Nedjo, Sekoru, Denbi Dolo, Gimbi and Bati. Pulse crops were harvested in some areas of eastern Amhara like Sirinka. Harvest of Potato was under way in some areas of northern SNNPR like Hosaina. On the contrary, some areas of western Ethiopia exhibited heavy falls repeatedly (2 -5 days). For instance, Gimbi recorded 38.1, 32.7, 44.2, 56.8 and 52.1 mm of rainfall and Aira recorded 42.6, 68.2 and 33.5 mm of rainfall in the ten days period. As a result, Aira reported fruit crop like banana and field crops damage due to heavy fall on June 03, 2005.

During the second dekad of June 2005 the observed normal to above normal rainfall over most parts of western half and highlands of southern and eastern Ethiopia favoured the on going season's agricultural activities. Nevertheless, some areas like Gimbi and Debre Tabor reported crop damage due to heavy falls. On the other hand, there was deficient falls over most parts of Tigray, northern Somali, eastern Amhara and parts of central Oromiya including few areas of eastern Oromiya and northeastern SNNPR.

During the third dekad of June 2005 with the exception of most parts of SNNPR, eastern and southern Oromiya, the rest parts of Meher growing areas received normal to above normal rainfall. As a result, crops were in a good condition in most parts of Meher growing areas. Nevertheless, some areas of northwestern and western parts of the country like Dangla, Metema, Nedjo, Limu Genet, Bullen, Bedelle, Chagni, Bahir Dar and Mota exhibited heavy falls ranging from 31.0 - 61.2 mm in one rainy day. Thus, this condition could have negative impact on crops, which are found in low-lying areas, and the soil type is clay. Pursuant to the crop phenological report (21-30 June 2005), sowing of cereals and pulses was underway over some areas of central Oromiya, northwestern and eastern Amhara. Maize was at full ripeness stage over midlands of southern Oromiya like Dolo Mena. It was at taselling and ninth leaves stages in some areas of central Oromiya like Ziawy, eastern Oromiya like Gelemso, north-western Amhara like Chagni, north-western Benishangul-Gumuz (Mankush) central Oromiya (Woliso)and western Oromiya (Sekoru, Limu Genet, Gimbi, Bedelle and Alge) while at flowering stage over northern SNNPR like Hosaina and western Oromiya (Bedele). Sorghum was at early vegetative stage in northwestern Benishangul-Gumuz (Mankush) and western Oromiya (Gimbi, Dembi Dolo, Aira, Assosa and Alge). Millet was at early vegetative stage in some areas of western Oromiya like Limu Genet and Aira. Wheat was at early vegetative stage in some areas of central Oromiya. Sesame was at ripeness stage in some midland areas of Oromiya like Dolo Mena.

Generally, the rainfall amount and distribution particularly during the second and third dekad of June 2005 was favourable for the on going season's agricultural activities in most parts of Meher growing areas. Nevertheless, the observed heavy falls in some pocket areas of western and northwestern Ethiopia resulted crop damge in some areas like Gimbi and Debre Tabor. On the contrary the deficient moisture condition over eastern Tigray and Oromiya including some areas of lowlands of eastern Amhara could exacerbate the deficient moisture condition persisted during the preceding month.

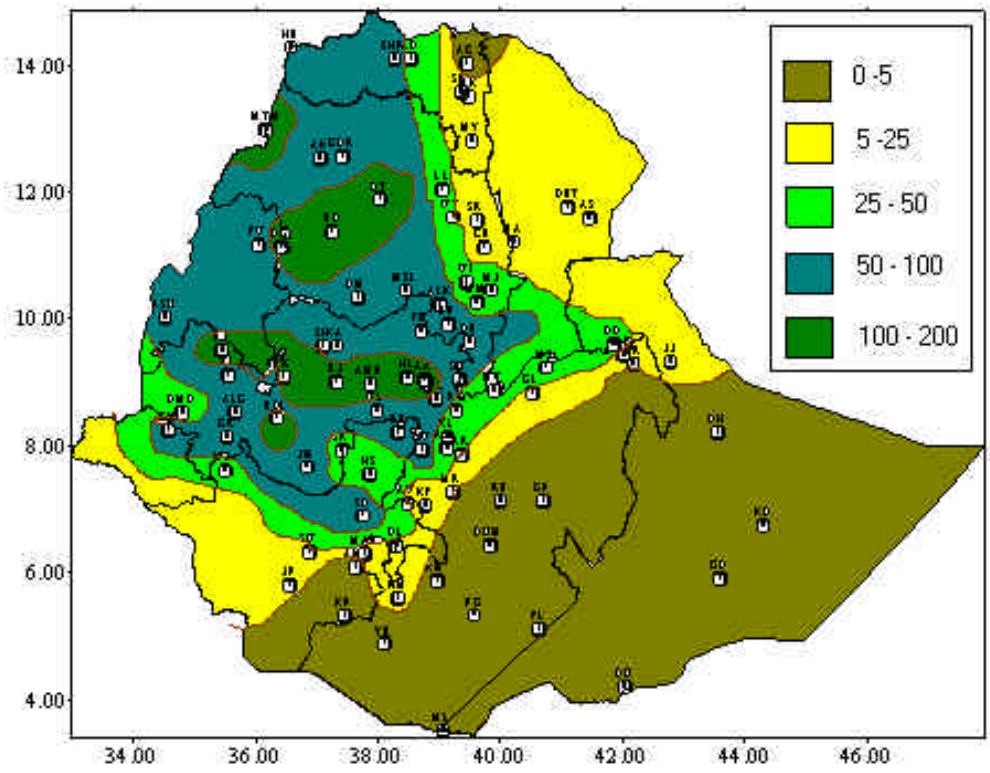


Fig 1. Rainfall distribution in mm (21-30 June, 2005)

1. WEATHER ASSESSMENT

1.1 21-30 June, 2005

1.1.1 Rainfall amount (Fig.1)

Parts of central Amhra, parts of central and western Oromiya exhibited greater than 100 mm of dekadal cumulative rainfall. Western half of Tigray, most parts of Amhara, parts of central and western Oromiya, northeastern SNNPR and Gambela received 50 -100 mm of rainfall. Parts of eastern Tigay, eastern Amhara and parts of eastern Oromiya, few areas of northern SNNPR and northwestern margin of northen Somali received 25 - 50 mm of rainfall. The rest parts of the country received falls less than 25 mm. There was litle or no rain over eastern, southern Oromiya and midlands of southern Oromiya and most parts of Somali.

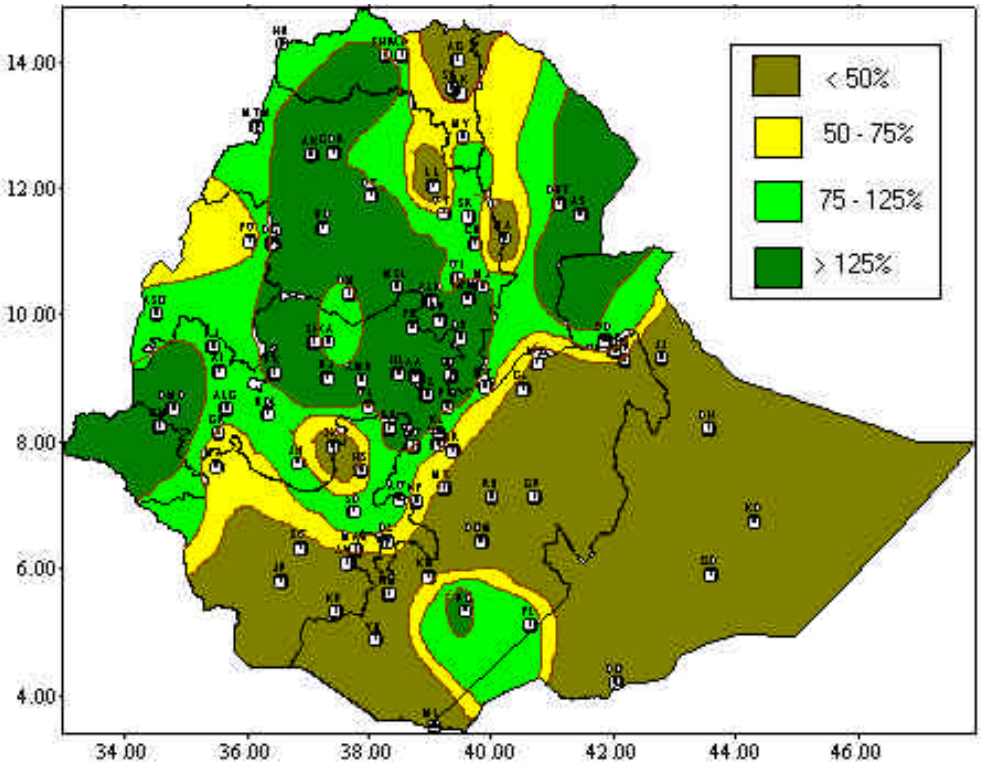


Fig. 2 Percent of normal rainfall (21-30 June, 2005)

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)

With the exception of southern half of SNNPR, eastern and southern Oromiya eastern Tigray and parts of northern Afar including moat parts of Somali the rest of Meher growing areas exhibited normal to above normal rainfall.

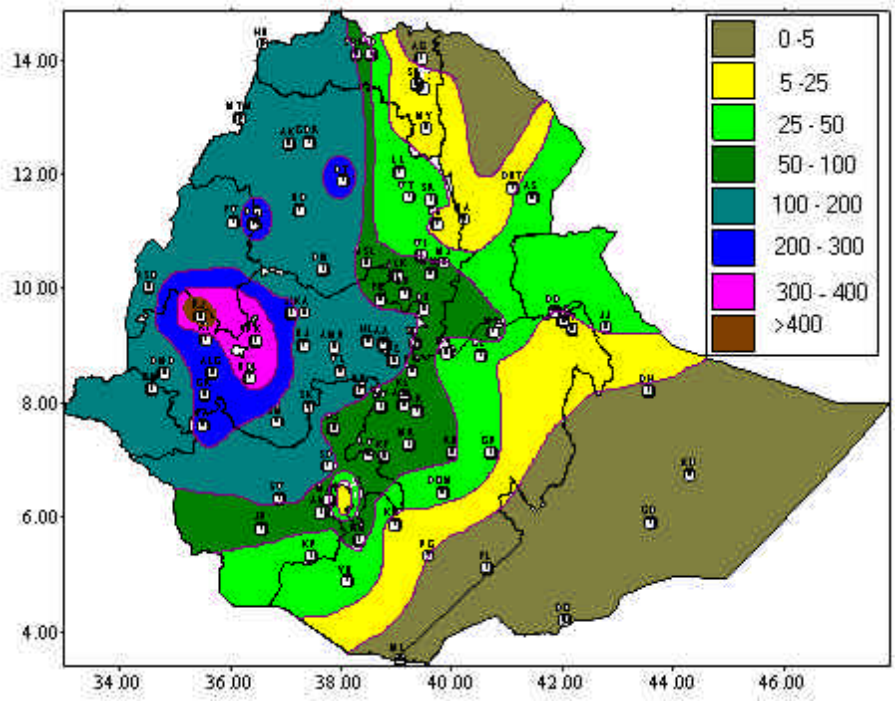


Fig. 3 Rainfall Distribution in mm for the month of June, 2005

1.2 June, 2005

1.2.1 Rainfall Amount (Fig.3)

Southeastern parts of Benoshangul-Gumuz and parts of western Oromiya received falls greater than 200 mm. Western half of Tigray and Amhara, parts of central and western Oromiya, Gambela, parts of northwestern and few areas of SNNPR received 100 - 200mm of rainfall. Parts of central Oromiya, eastern Amhara, South and eastern Tigray, southwestern tip of Afar eastern and central SNNPR received 50 - 100 mm of rainfall. The rest parts of the country received falls less than 50 mm.

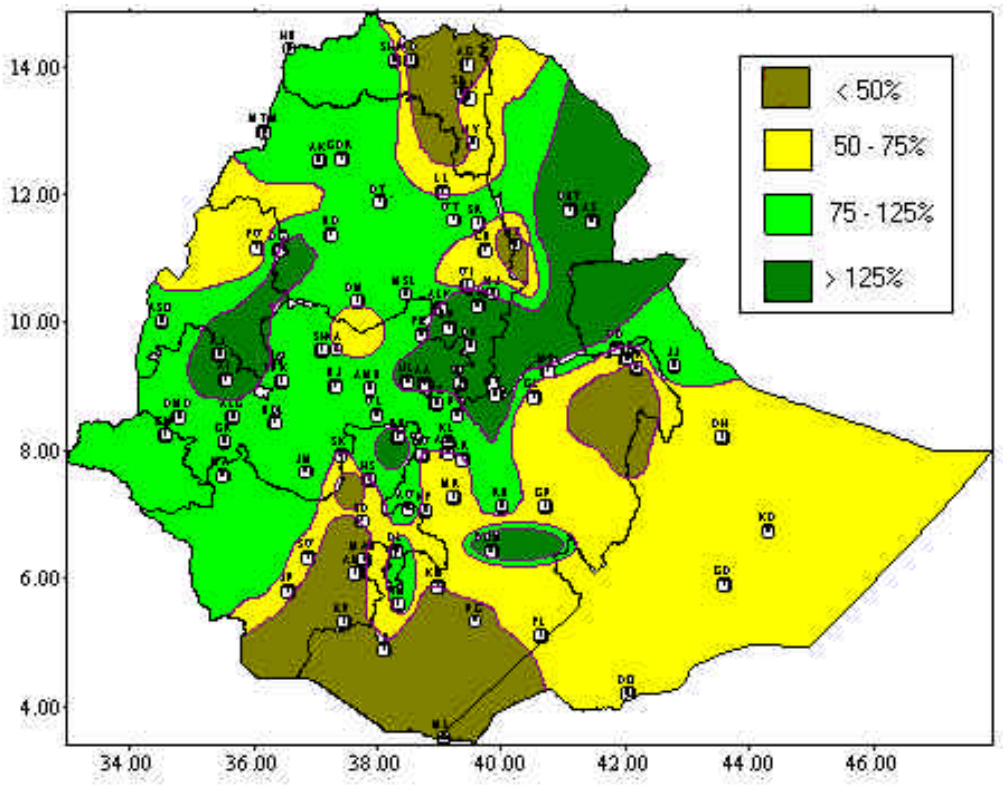


Fig. 4 Percent of Normal Rainfall for the month of June, 2005

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)

Western parts of Tigray, most parts of Amhara, central,western and few areas of eastern Oromiya, Gambela, northwestern and northeastern tip of SNNPR, most parts of Afar and northern Somali experienced normal to above normal rainfall. The rest of the country received below to mach below normal rainfall.

1.3 TEMPERATURE ANOMALY

No significant temperature anomaly was observed over the lowlands due to the extended cloud cover over most areas during the month under review.

2. WEATHER OUTLOOK

2.1 For the first dekad of July 2005

For the coming ten days, a day to day strengthening in the rain-bearing systems are expected over the Keremt rain benefiting areas of the country. Besides, it is expected to further expand towards north eastern and eastern Ethiopia. In general, Tigray, western and Central Amhara, Benhangul-Gumzuz , western and central Oromeya, Gambela as well as northern and western portions of SNNPR are expected to get normal to above normal rainfall with a chance of heavy fall at places. More over, Afar, eastern Amhara, eastern Oromya, northern part of Somali and highlands of SNNPR are anticipated to have close to normal rainfall with a possibility of below normal rains at pocket areas. On the other hand, dry weather condition will prevail over southern and southeastern lowlands of the country.

2.2 For the month of July 2005

The rain-bearing systems are expected to have better strength over most parts of the Kiremt rain benefiting areas. In general, normal to above normal rains with heavy falls, which can result in flash flooding at places are anticipated over Tigray, western and central Amhara, western and central Oromiya, Gambela, northern half of SNNP Benishangul-Gumuz and Addis Ababa. Eastern Oromiya, highlands of southern Oromiya, eastern Amhara, Afar and northern Somali will have near normal rains with a chance of below normal rains at pocket areas. Southern and southeastern portion of the country will be under dry weather condition but will have light rains at places.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

Generally, the rainfall amount and distribution particularly during the second and third dekad of June 2005 was favourable for the on going season's agricultural activities in most parts of Meher growing areas. Nevertheless, the observed heavy falls in some pocket areas of western and northwestern Ethiopia resulted in crop damge in some areas like Gimbi and Debre Tabor. On the contrary the deficient moisture condition over eastern Tigray and Oromiya including some areas of eastern Amhara could exacerbate the deficient moisture condition which persisted during the preceding month. Pursuant to the crop phenological report (21-30 June 2005), sowing of cereals and pulses was underway over some areas of central Oromiya, northwestern and eastern Amhara. Maize was at full ripeness stage over midlands of southern Oromiya like Dolo Mena. It was at teaselling and ninth leaves stages in some areas of central Oromiya like Ziawy, eastern Oromiya like Gelemso, north-western Amhara like Chagni, north-western Benishangul-Gumuz (Mankush) central Oromiya (Woliso)and western Oromiya(Sekoru, Limu Genet, Gimbi, Bedelle and Alge) while at flowering stage over northern SNNPR like

Hosaina and western Oromiya (Bedele). Sorghum was at early vegetative stage in northwestern Benishangul-Gumuz (Mankush) and western Oromiya (Gimbi, Dembi Dolo, Aira, Assosa and Alge). Millet was at early vegetative stage in some areas of western Oromiya like Limu Genet and Aira. Wheat was at early vegetative stage in some areas of central Oromiya. Sesame was at ripeness stage in some midland areas of Oromiya like Dolo Mena.

3.2 EXPECTED WEATHER IMPACTS ON AGRICULTURE DURING THE COMING MONTH

The anticipated better rainfall activity over most parts of Kiremt benefiting areas would favour season's agricultural activities in the areas. However, heavy falls that can result in flash flooding is expected over some pocket areas of western, central and northwestern parts of Ethiopia. Thus, attention should be given in areas where normal to above normal rainfall is expected namely: Tgray, western and central Amhara, western and central Oromiya, Gambela, northern half of SNNPR, Benishangul-Gumuz and Addis Ababa. The expected near normal rainfall over eastern Oromiya, highlands of southern Oromiya, eastern Amhara, and Afar and northern Somali would ease the deficient moisture condition, which persisted during the preceding month. Besides, it wound favour satisfaction of crop water requirements over the highlands and midlands. It would also favour the availability of pasture and drinking water over eastern and northeastern pastoral and agro pastoral areas. However proper water-harvesting technique is important in some pocket areas of the aforementioned areas where below normal rainfall is expected.

Table 1 Climatic and Agro-Climatic elements of different stations for the month of June 2005

	Stations	Region	A/ rainfall	Normal	%of Normal	ETo mm/day	Monthly ETo	Moisture status
1	Adigrat	TIGRAI	2.4	32	7.5	4.99	149.7	VD
2	Adwa		28.8	72.7	39.6	NA	NA	NA
3	Mekele		18.2	27.3	66.7	5.35	160.5	D
4	Michew		18.1	34.8	52.0	5.12	153.6	D
5	Senkata		23.3	115.5	20.2	NA	NA	NA
6	Shire		123.2	145.9	84.4	4.86	145.8	M
1	Assayta	AFAR	25.3	3.3	766.7	NA	NA	NA
1	Bahirdar	AMHARA	188.8	189.4	99.7	4.42	132.6	H
2	Bati		8.5	79.3	10.7	4.92	147.6	VD
3	Bullen		326.4	264.8	123.3	NA	NA	NA
4	Chagni		390.2	263.6	148.0	NA	NA	NA
5	Chefa		2.9	165.8	1.7	3.37	101.1	VD
6	Combolcha		20.9	32.7	63.9	NA	NA	NA
7	D.Birhan		93	47.4	196.2	4.08	122.4	M
8	D.Markos		150.1	161.3	93.1	3.36	100.8	H
9	D.Tabor		206.4	182.6	113.0	NA	NA	NA
10	Enwary		91.2	58	157.2	4.23	126.9	M
11	Gonder		143.5	172.6	83.1	4.48	134.4	H
12	Lalibela		36.4	42.6	85.4	4.7	141	MD
13	M.Meda		54.5	38.4	141.9	NA	NA	NA
14	Metema		195	183.4	106.3	4.77	143.1	H
15	Mota		138.5	120.1	115.3	NA	NA	NA
16	S.Gebeya		107.3	62.5	171.7	3.88	116.4	M
17	Sirinka		26.7	29.3	91.1	4.8	144	D
18	Woreilu		27.5	47	58.5	4.93	147.9	D
19	Wegeltena		25.7	26.3	97.7	4.47	134.1	D
1	Alge	OROMIYA	255.6	287	89.1	NA	NA	NA
2	Aira		375.1	190.4	197.0	3.26	97.8	H
3	Alemaya		19.2	57.7	33.3	4.12	123.6	D
4	Bedelle		343.8	294.6	116.7	2.72	81.6	H
5	Begi		294.1	255	115.3	NA	NA	NA
6	Bui		116.8	34.1	342.5	NA	NA	NA
7	D.Dolo		184.1	191.2	96.3	2.88	86.4	H
8	D.Mena		43.6	27.5	158.5	3.29	98.7	MD
9	D.Zeit		99	92.7	106.8	4.19	125.7	M
10	Fitche		76.4	84.3	90.6	3.91	117.3	M
11	Gelemso		48	85.5	56.1	3.96	118.8	MD
12	Gimbi		438.2	330.1	132.7	3.56	106.8	H
13	H.Mariyam		73.1	63.7	114.8	NA	NA	NA
14	Jimma		175.9	215.9	81.5	3.11	93.3	H
15	K.Mengist		23	62.6	36.7	2.81	84.3	MD
16	Kachise		164.4	249.1	66.0	NA	NA	NA
17	Kulumsa		63.9	89.8	71.2	4.06	121.8	M
18	Masha		267.6	294.1	91.0	2.57	77.1	H
19	Meisso		75.6	48.1	157.2	5.39	161.7	MD

20	**Metehara**		35.7	24.1	148.1	6.25	187.5	D
21	**Nazreth**		49.8	65.6	75.9	3.49	104.7	MD
22	**Neghele**		4.6	12.1	38.0	3.37	101.1	VD
23	**Nedjo**		402	303.6	132.4	3.18	95.4	H
24	**Nekemte**		320.5	376	85.2	NA	NA	NA
25	**Robe(Bale)**		62.9	54	116.5	3.91	117.3	M
26	**Sekoru**		151.7	225.2	67.4	3.45	103.5	H
27	**Shambu**		279.9	244.4	114.5	3.61	108.3	H
28	**Zeway**		55.4	84.7	65.4	5.05	151.5	MD
1	**Gode**	**SOMALI**	47	0.9	5222.2	7.16	214.8	D
2	**Jijiga**		47	50.9	92.3	3.79	113.7	MD
1	**A.Minch**	**SNNPR**	16.3	61.4	26.5	3.73	111.9	D
2	**Awassa**		72.2	96.6	74.7	3.78	113.4	M
3	**Hosaina**		61.7	124.1	49.7	3.15	94.5	M
4	**Jinka**		51.5	94	54.8	3.07	92.1	M
5	**Konso**		3.7	40.5	9.1	NA	NA	NA
6	**M.Abay**		19.3	77.7	24.8	NA	NA	NA
7	**Sodo**		108.5	150.1	72.3	3.12	93.6	H
1	**Pawe**	**B/GUMUZ**	173.7	295.5	58.8	NA	NA	NA
2	**Assossa**		179.5	194.5	92.3	3.61	108.3	H
1	**A.A.Obs.**	**A.A**	178.9	122.3	146.3	2.96	88.8	H
1	**Diredawa**	**D.D**	43.9	22.8	192.5	7.06	211.8	D
1	**Harar**	**Harai**	16.2	68.2	23.8	3.34	100.2	D

Legend

VD	Very Dry	< 0.1
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.

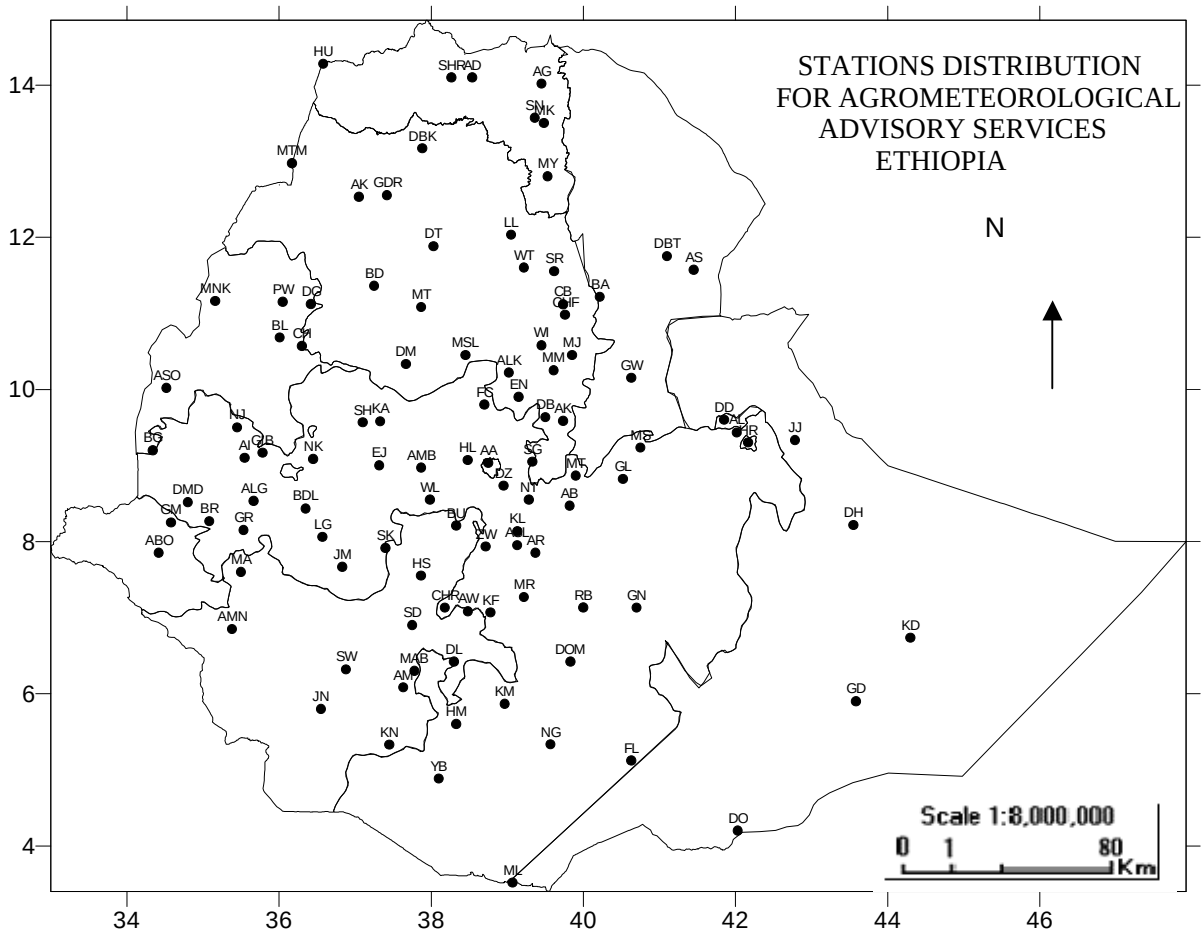
DEKAD: - First or second ten days or the remaining days of a month.

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		