FORE WARD

This Agro met Bulletin is prepared and disseminated by the National Meteorological Agency (NMA). 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.

Director General
NMA
P.O.Box 1090
Tel: 011661-57-79
FAX 00251-11-6625292
E-mail nmsa@ethionet.et
Addis Ababa

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እ.ኤ.አ ጁን 2013

በጁን 2013 የመጀመሪያዎቹ አሥር ቀናት የክረምት ዝናብ በመጠናከር የአገሪቱን ምዕራብዊ አጋማሽ ከማዳረሱ ጋር ተያይዞ በምዕራብ፣ በደቡብ ምዕራብ፣ በሰሜን ምዕራብና የመካከለኛው የሀገሪቱ ክፍሎችን ጨምሮ በምሥራቅና በደቡብ የሀገሪቱ ከፍተኛ ሥፍራዎች ከ32-58 ሚሜ ዝናብ በአንድ ቀን ዝናብ አግኝተዋል። ይህም ሁኔታ ዘግይቶ ተዘርተው በተለያየ የእድገት ደረጃ ላይ ለሚገኙ የበልግ ሰብሎችና በአካባቢው ለሚበቅሉት ቋሚ ተክሎች የውሃ ፍላጎት መሟላት፣ ለመኸር ሰብሎች ማሣ ዝግጅትና ቀደም ብሎ ለተዘሩት የረጅም ጊዜ ሰብሎች እንደ ዳጉሳ፣ በቆሎና ማሽላ ለመሳሰሉት እንዲሁም በአርብቶ አደሩና ከፊል አርብቶ አደሩም አካባቢ ለግጦሽ ሣርና ለመጠጥ ውሃ አቅርቦት ጠቀሜታ ነበረው።

በጁን 2013 ሁለተኛ አስር ቀናት በመጠንም ሆነ በሥርጭት የተስተካከለ ዝናብ በአብዛኛው የክረምት ዝናብ ተጠቃሚ በሆኑት በአብዛኛው ትግራይ፣ አማራ፣ ቤንሻንጉል ጉምዝ፣ ጋምቤላና በደቡብ ብሔር ብሔረሰቦች እና ህዝቦች ክልል ከ 50-125 ሚሜ ዝናብ ለተከታታይ ቀናት አግኝተዋል። ይህም ሁኔታ ለወቅቱ የእርሻ ስራ እንቅስቃሴ ለማሣ ዝግጅትና ለዘር ስራ፣ ቀደም ብለው ለተዘሩት የመኸር ሰብል፣ የረጅም ጊዜ ሰብሎች እንደ ዳጉሳ፣ በቆሎና ማሽላ ለመሳሰሉት የውሀ ፍላጎት መሟላት እንዲሁም በአርብቶ አደሩና ከፊል አርብቶ አደሩም አካባቢ ለግጦሽ ሣርና ለመጠጥ ውሃ አቅርቦት ጠቀሜታ ነበረው።

በጁን 2013 ሶስተኛው አስር ቀናት የክረምት ዝናብ ከመጠናከሩ ጋር ተያይዞ በአብዛኛው የክረምት ዝናብ ተጠቃሚ በሆኑት በአማራ፣ በትግራይ፣ በአብዛኛው ኦሮሚያ፣ በጋምቤላ፣ በቤንሻንጉል- ጉምዝ እና በደበብ ብሔር ብሔረሰቦች እና ህዝቦች ክልል ከቀላል እስከ ከባድ መጠን ያለው ዝናብ አግኝተዋል። የዝናብም መጠን በአንዳንድ በታዎች ላይ ከ32-59 ሚሊ ሜትር የሚደርስ ዝናብ በአንድ ቀን አግኝተዋል። ከላይ በተጠቀሱት አካባቢዎች የተገኘው ዝናብ በአካባቢው ለሚበቅሉት ቋሚ ተክሎች፣ ቀደም ብለው ለተሚዘሩት የረጅም ጊዜ የአገዳ ሰብሎች እንደ በቆሎና ማሽላ ለመሳሰሉት የውሃ ፍላጎት መሟላት፣ ለመኸር ሰብሎች የማሣ ዝግጅትና የዘር የእርሻ ስራ እንቅስቃሴ እንዲሁም ለአርብቶ አደሩና ከፊል አርብቶ አደሩ አካባቢ ለግጦሽ ሣርና ለመጠጥ ውሃ አቅርቦት ጠቀሜታ ነበረው።

በአጠቃላይ በጁን ወር 2013 የክረምት ዝናብ ከመጠናከሩ ጋር ተያይዞ ከጁን ሁለተኛ አስር ቀናት ጀምሮ በደቡብ ምዕራብና በምዕራብ የሀገሪቱ ክፍሎች ላይ ተወስኖ የነበረው ዝናብ ወደ አብዛኛው የክረምት ዝናብ ተጠቃሚ የሀገሪቱ ክፍሎች ተስፈፍቶ ታይቷል። ከዚህም የተነሳ ባሳለፍነው የሰኔ ወር አማራ፣ ትግራይ፣ አብዛኛው ኦሮሚያ፣ ጋምቤላ፣ ቤንሻንጉል ጉምዝ እና በደቡብ ብሔር ብሔረሰቦች እና ህዝቦች ክልል ከቀላል እስከ ከባድ መጠን ያለው ዝናብ አግኝተዋል። የዝናብም መጠን በአንዳንድ በታዎቻቸው ላይ ከ35.0-58.6 ሚሊ ሜትር የሚደርስ ከባድ ዝናብ በአንድ የዝናብ ቀን ነበራቸው። የዝናቡ አጀማመር በአብዛኛው መልኩ መደበኛ ፈሩን የተከተለ እና በመጠንም ሆነ በስርጭት ረገድ ጥሩ ስለነበረ ለወቅቱ የእርሻ ስራ እንቅስቃሴ ለማሳ ዝግጅትና ለዘር እንዲሁም በበልግ ወቅት ተዘርቶ በተለያየ የዕድገት ደረጃ ላይ ለሚገኙ የረጅም ጊዜ የመኸር ሰብሎቸና ለቋሚ ተክሎች የውሃ ፍላጎት መሟላትና ለአርብቶ አደሩና ከፊል አርብቶ አደሩ አካባቢ ለግጦሽና ለመጠጥ ውሃ አቅርቦት የጎላ ጠቀሜታ ነበረው። በሌላ በኩል አንዳንድ ቦታዎች ላይ የጣለው ከባድ ዝናብ ምንም እንኳን የደረሰ ሪፖርት ባይኖርም የአፈር መሸርሸር እና በሰብሎቸ ላይ መጠነኛ ጉዳት እንደሚያደርስ ይታመናል ።

SUMMARY

JUNE 2013

During the first dekad of June 2013, rain bearing meteorological phenomena brings better rainfall amount over western portion of the country as a result western, southwestern, northwestern as well as high lands of eastern and southern parts of the country experienced normal to above normal rainfall. More over Gambela, SNNPR, southern Tigray, western Amhara, Beshangul-Gumuz, western and central Oromia exhibited rainfall ranging from 30.1-236.8 mm for 5-10 days. The situation favored Meher agricultural activities, such land preparation and sowing *of* Meher crops in areas where Meher crops normally sown early, water satisfaction for perennial plants and long cycle crops and availability of pasture and drinking water over pastoral and agro pastoral areas of the country.

During the second dekad of June 2013, due to the strengthening of Kiremt rain bearing meteorological phenomenon, better rainfall in amount and distribution prevailed over much of kiremt rain benefiting areas of the country such as much of Tiray, Amhara, northern Benshagul-gumuz, western, central and southern Oromia and SNNPR received rainfall ranging from 50-120 mm for 6-10days while eastern Tigray, Amhara and Behsangul-Gumuz, western Oromia and Gambela exhibited ranging from 5-50mm of rainfall for 2-6 days. The situation might have a positive impact on on-gowning seasonal agricultural activities such as land preparation, sowing of Meher crops, water requirement for long cycle Meher crops found at different growing phase, perennial plants, pasture and drinking water availability over pastoral and agro pastoral areas of the country.

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During the third decade of June 2013, rain bearing meteorological phenomena farther strengthened over much of kiremt rain benefiting areas of the country. As a result, much of Amhara, Tigray, Gambella, Benshangul-gumz, Oromia and SNNPR received light to heavy rainfall. Some places of aforementioned areas exhibited heavy falls ranging from 32.4-59.0 mm in one rainy day. Thus, the situation might have favored Meher agricultural activities such as land preparation and sowing Meher crops, long cycle crops that were found at different growing phasewater requirement for perennial plants, improvement of pasture and drinking water availability over pastoral and agro pastoral areas of the country.

Generally, the rainfall activity during June 2013 covered much of Kiremt rain benefiting areas of the country. In line with this, SNNPR, much of Oromia, Amhara, Tigray, Gambella, Benshangulu-Gumuz received light to heavy rainfall. Some places of aforementioned areas exhibited heavy falls ranging from 35-59mm in one rainy day. The situation might have favored Kiremt Agricultural activities, water requirement of perennial plants, availability of pasture and drinking water over pastoral and agro pastoral areas.

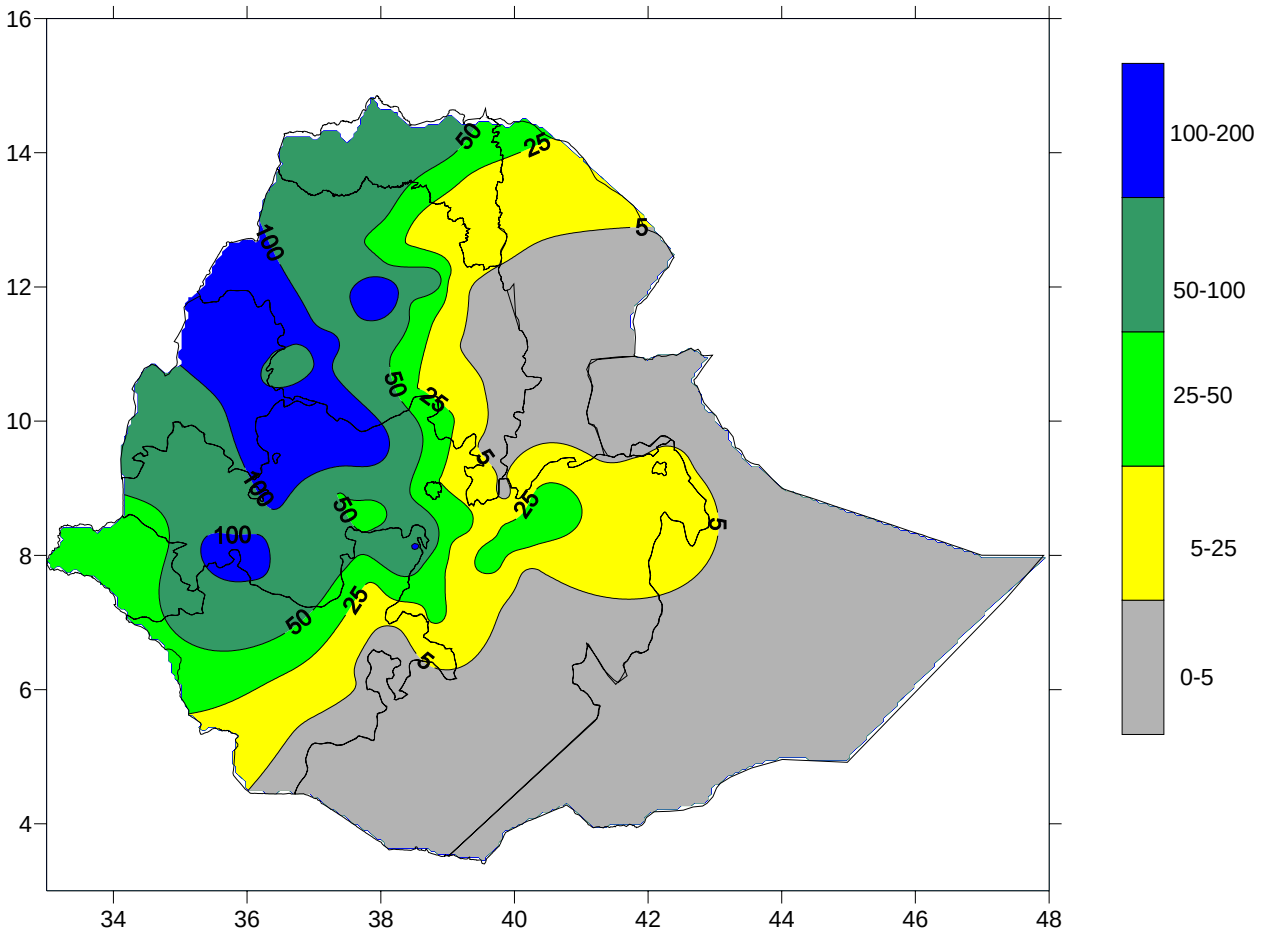


Fig 1. Rainfall distribution in mm (21 – 30 June 2013)

1. WEATHER ASSESSMENT

1.1. Rainfall amount (Fig.1)

Parts of western and southern Benshangul-Gumuz, pocket area of central and south western Amhara, western Oromia and north tip of SNNPR exhibited 100-200 mm of rainfall. Much of SNNPR, western Oromia, western and central Amhara, north western Tigray, southern parts of Beshangul –Gumuz, eastern margin of Gambela and parts of north SNNPR received 50-100 mm of rainfall. Much of Gambela, parts of central and eastern SNNPR, parts of eastern Amahra and Tigray, western tip, eastern and pocket areas of central Oromia received 25-50 mm of rainfall. Parts of eastern Amhara and Tigray, parts of northern and southern Afar, parts of eastern and southern Oromia, Harari, Dire Dawa, parts of northern Somalia and southern SNNPR received 5-25 mm of rainfall. While, the rest parts of the country exhibited little or no rainfall.

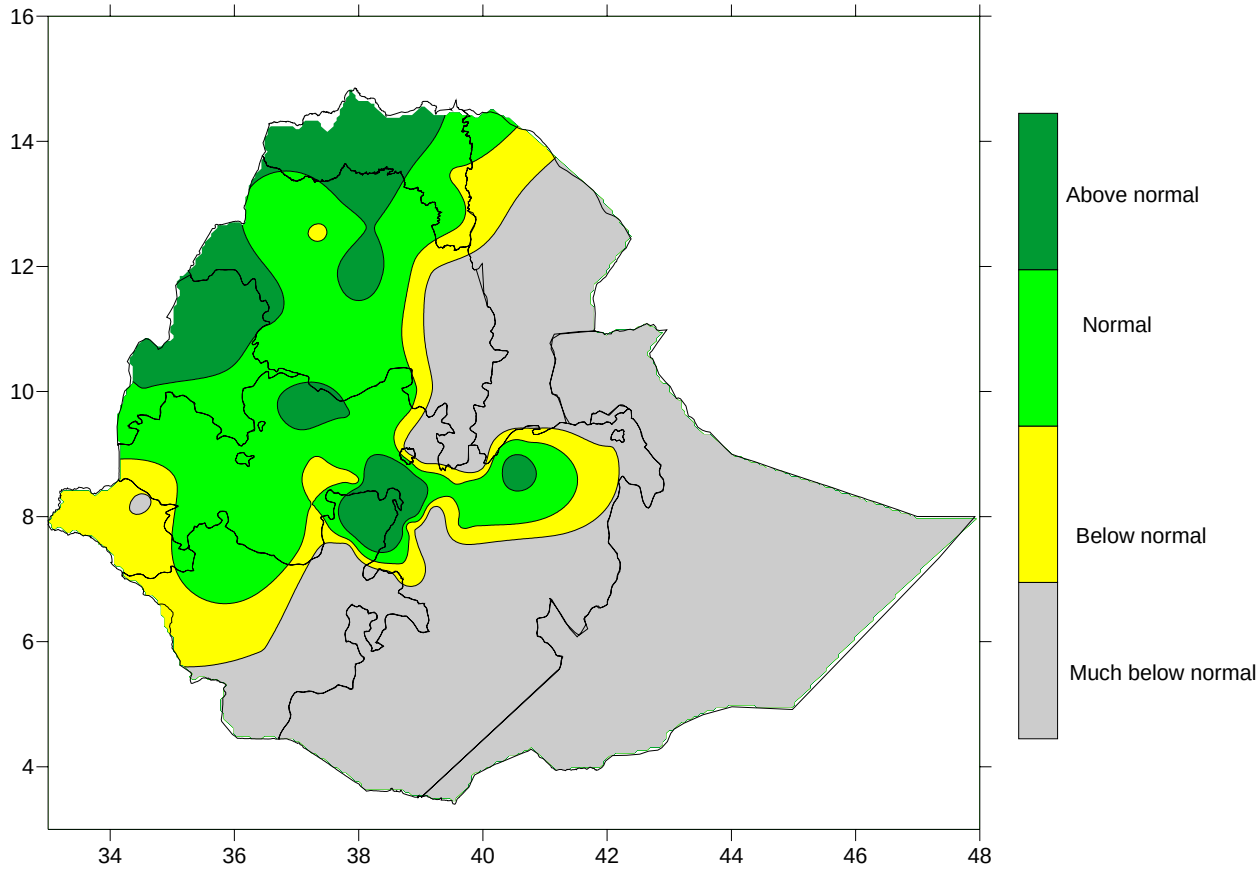


Fig. 2 Percent of normal rainfall distribution (21-30 June 2013)

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)

Much of Benshangul-Gumuz, western central and pocket areas of eastern Oromia, Amhara, Tigray exhibited and north tip of SNNPR normal to above normal rainfall. The rest parts of the country received below normal too much below normal rainfall.

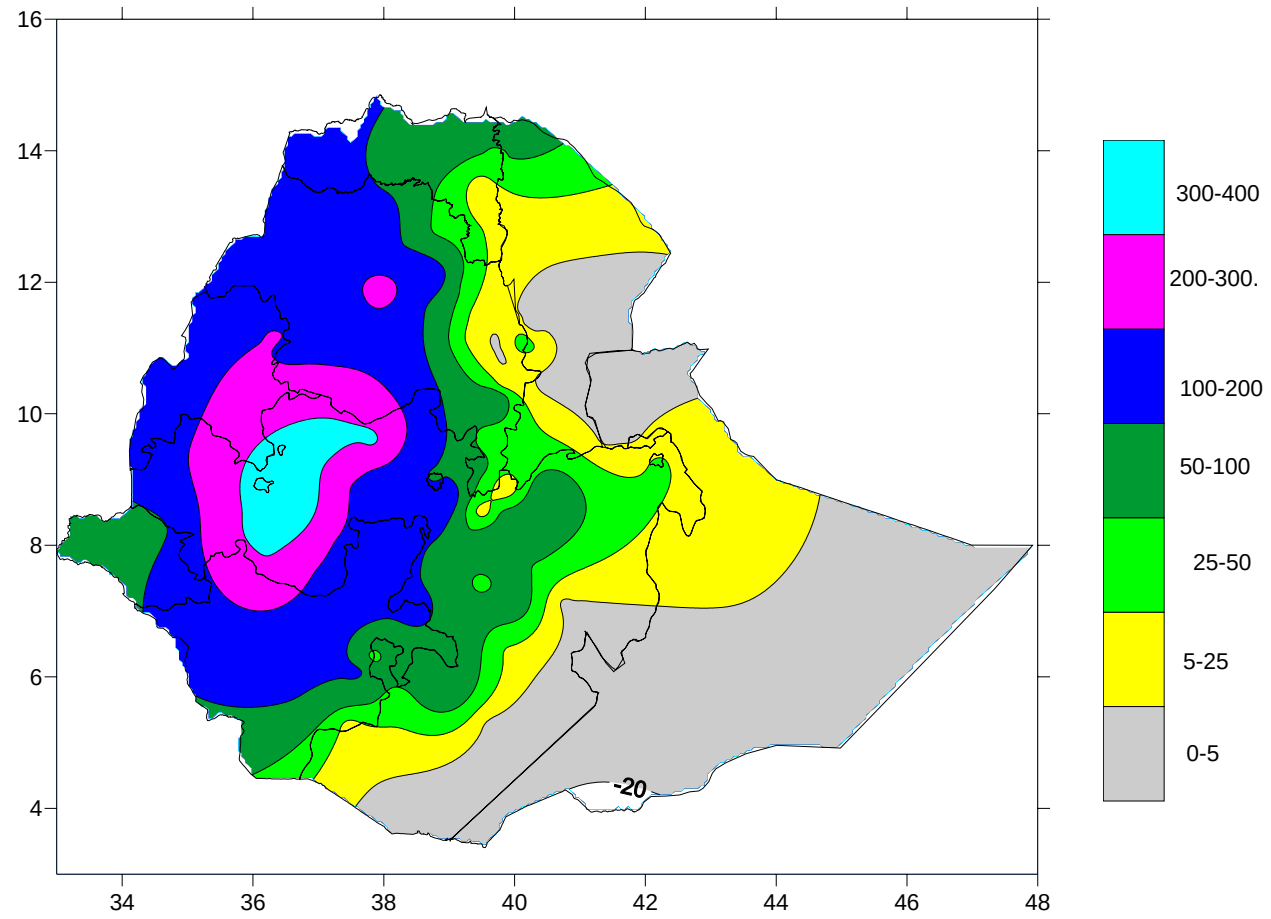


Fig. 3 Rainfall amount in mm for the month of June 2013

1.2.1 Rainfall amount (Fig.3)

Pocket areas of western Oromia and adjusant arears of Benshangul-Gumuz exhibited 300-400 mm of rainfall. Parts of western Oromia, eastern Benshangul-Gumuz, parts of northern SNNPR and parts of southern and pocket area of central Amhara received 200-300 mm of rainfall Much Amhara, Benshangul-Gumuz and SNNPR, western Tigray, eastern part of Gambella, western and central Oromia exhibited 100-200 mm of rainfall. Much of eastern half Tigray and western half of Gambella, eastern and southern Oromia, eastern Amhara and northern tip of Afar received 50-100 mm of rainfall. Parts of northern and southern Afar, southern Tigray, eastern Amhara, eastern and southern Oromia, Harari and Diredawa received 25-50 mm of rainfall. Much of north Somali parts of northern central Afar, parts of southern Tigray and eastern Amhara received 5-25 mm of rainfall. While, the rest parts of the country exhibited little or no rainfall.

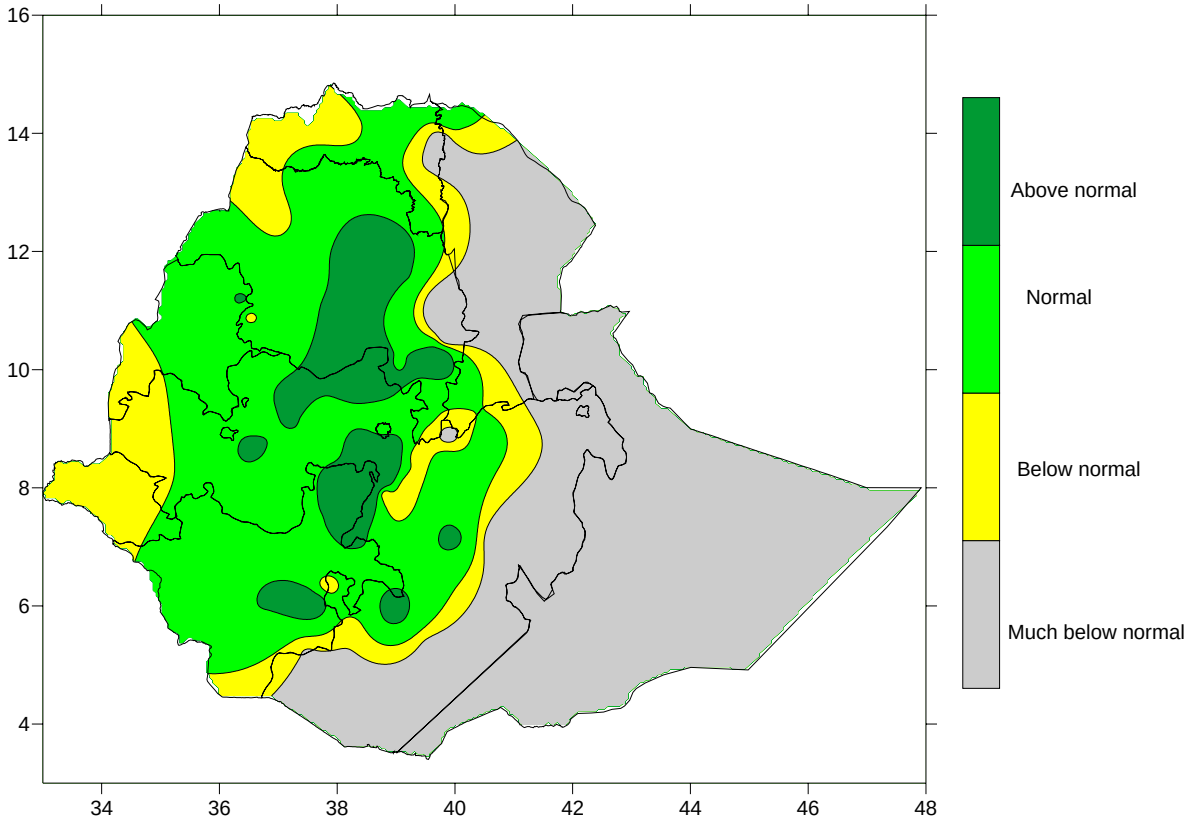


Fig. 4 Percent of Normal Rainfall for the month of June 2013

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)

Much of Amhara, Oromia,Benshangul-Gumuz, SNNPR western central and pocket areas of eastern , eastern half of Tigray and parts of southern and north tip of Afar exhibited normal to above normal rainfall. The rest parts of the country received below normal too much below normal rainfall.

1.3 TEMPERATURE ANOMALY

During the month under review, some stations found in the lowlands of the country exhibited extreme maximum temperature above 35^{o}C. Among reporting stations: Dire Dawa, Gode, Methara, Abobo, Cheffa, Dubti, Elider, Errer, Gambela, Gewane, Mille, Mytsebre, Nura-era, Semera, Quara and Tsitsika recorded 35.0-43.8 ^{o}C. The condition might have caused a negative impact on the normal growth and developments of plants and animals.

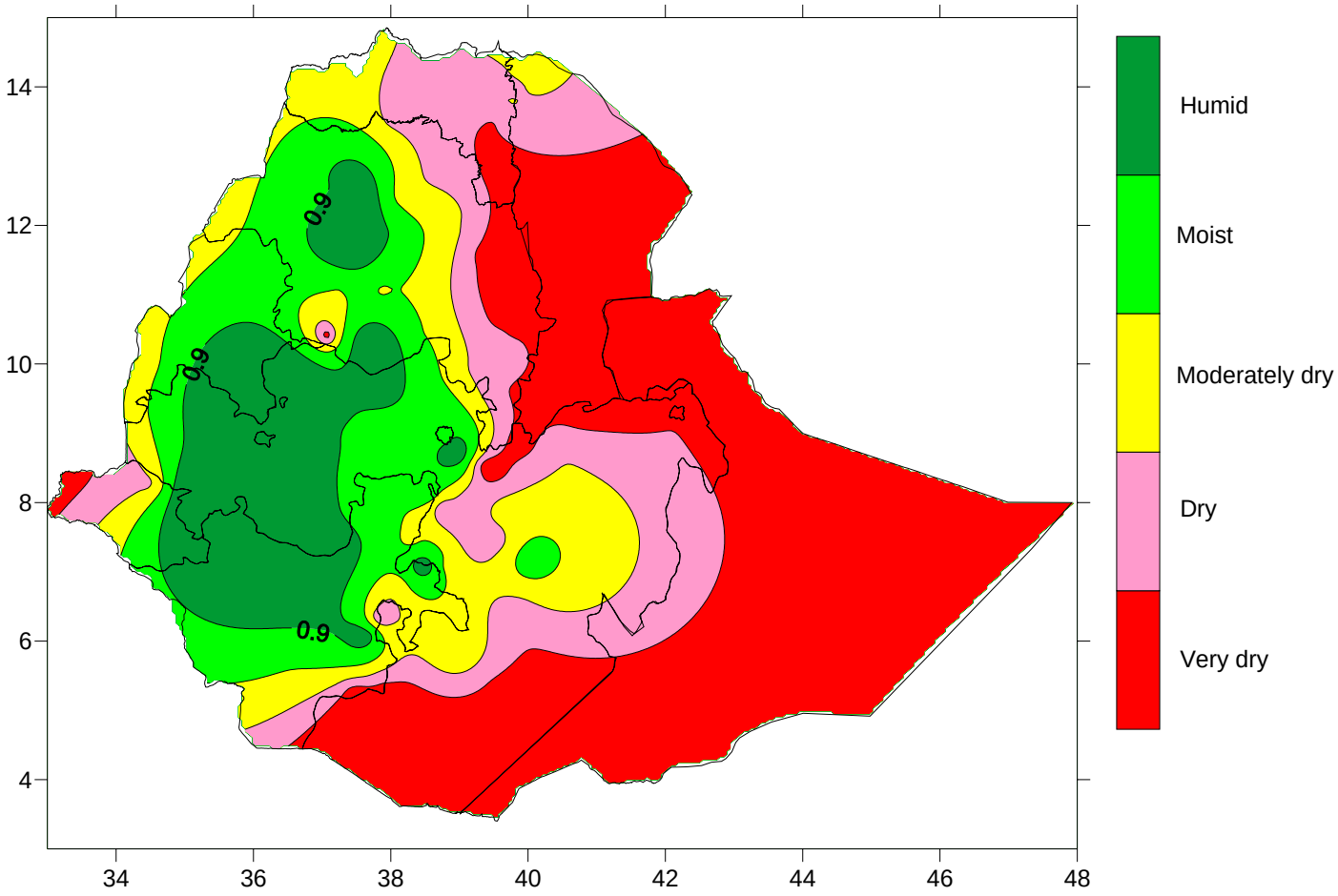


Fig. 5 moisture status for the month of June 2013

As indicated on the moisture status map above, most of SNNPR, eastern Gambela, western and southwestern Oromia, Benishangul-Gumuz, central and western Amhara experienced moist to humid moisture condition. While, northern tip of Afar, northern and western Tigray, eastern and western margin of Amhara, central Gambella, southern Oromia, and southern tip of SNNPR exhibited moderately dry condition, which might have favor on going agricultural activities, water availability for perennial plants and drinking water and pasture over pastoral and agro pastoral areas of the country. The rest parts of the country experienced dry to very dry moisture condition.

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

The rainfall activity during June 2013 covered much of Kiremt rain benefiting areas of the country. In line with this, SNNPR, much of Oromia, Amhara, Tigray, Gambella, Benshangulu-Gumuz received light to heavy rainfall. Some places of aforementioned areas exhibited heavy falls ranging from 35-59mm in one rainy day. The situation might have favored Kiremt Agricultural activities, water requirement of perennial plants, availability of pasture and drinking water over pastoral and agro pastoral areas.

2.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING MONTH

In the coming month, Kiremt rain bearing meteorological phenomena will expected farther strengthen over kiremt rain benefiting areas of the country. As a result of this, much of Tigray, Amhara, Benshangul- Gumuz, Gambela, Oromia and SNNPR will expect normal to above normal rainfall. In some place there might have heavy rainfall associated with hail and thunder storm. Thus there might be a probability of getting flash flood and river over flow over some of the above normal rainfall anticipated areas. Hence the farmers and the concerned bodiea should give attention to minimize the risk. While most parts of Afar, Dire Dawa, Harari and Somalia will expect near normal rainfall. Thus the situation will favor the seasonal agricultural activities, water requirement for perennial plants and long cycle crops and availability of pasture and drinking water over pastoral and agro pastoral areas of the country. We would like to give advice for the farmers and concerned bodies to utilize the available moisture properly by using different mechanisms and techniques of water conservation for farther use.

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 evapotranspiration of a disease free crop, growing under non-restricting soil conditions including soil water and fertility.

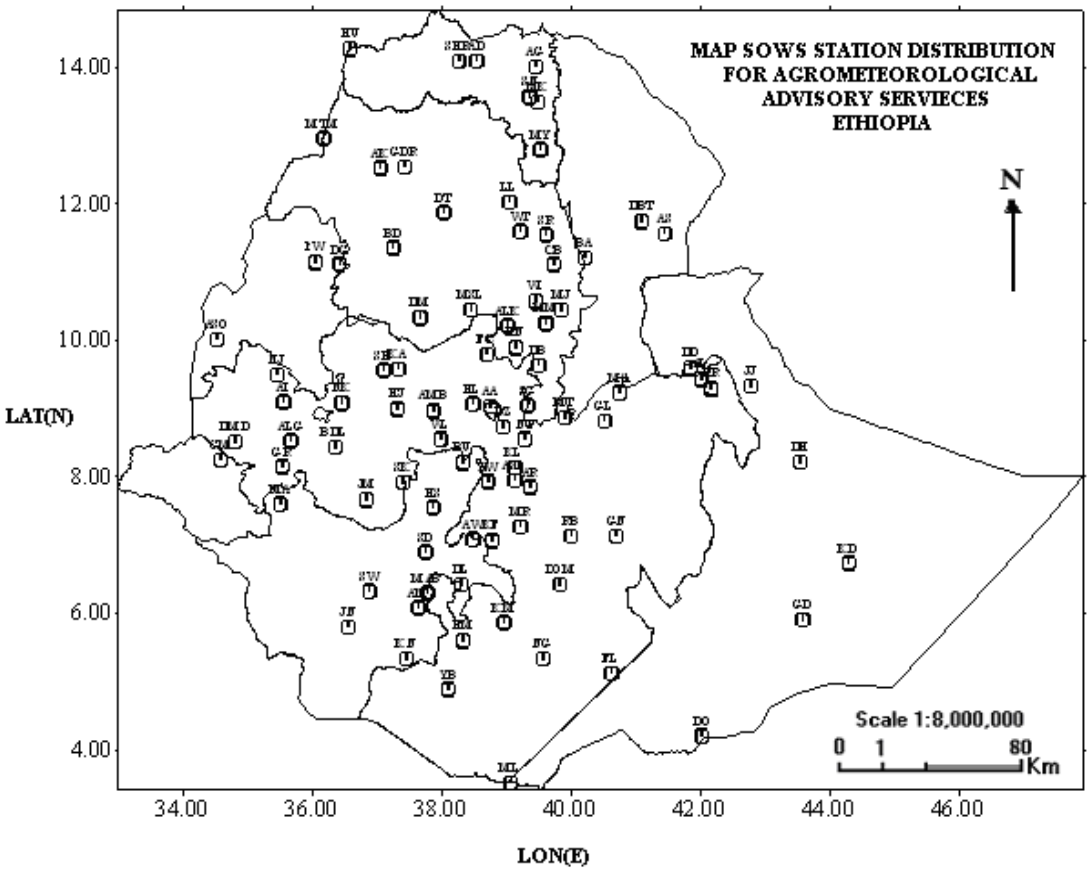
DEKAD: - First or second ten days or the remaining days of a month.

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**	D. Berehan	DB	Gore	GR	Mekele	MK
A. Robe	AR	D. Habour	DH	H/Mariam	HM	Merraro	MR
A.A. Bole	AA	D. Markos	DM	Harer	HR	Metehara	MT
Adigrat	AG	D. Zeit	DZ	Holleta	HL	Metema	MTM
Adwa	AD	D/Dawa	DD	Hossaina	HS	Mieso	MS
Aira	AI	D/Mena	DOM	Humera	HU	Moyale	ML
Alemaya	AL	D/Odo	DO	Jijiga	JJ	M/Selam	MSL
Alem Ketema	ALK	D/Tabor	DT	Jimma	JM	Nazereth	NT
Alge	ALG	Dangla	DG	Jinka	JN	Nedjo	NJ
Ambo	AMB	Dilla	DL	K.Dehar	KD	Negelle	NG
Arba Minch	AM	Dm.Dolo	DMD	K/Mingist	KM	Nekemte	NK
Asaita	AS	Dubti	DBT	Kachise	KA	Pawe	PW
Asela	ASL	Ejaji	EJ	Koffele	KF	Robe	RB
Assosa	ASO	Enwary	EN	Konso	KN	Sawla	SW
Awassa	AW	Fiche	FC	Kulumsa	KL	Sekoru	SK
Aykel	AK	Filtu	FL	Lalibela	LL	Senkata	SN
B. Dar	BD	Gambela	GM	M.Meda	MM	Shambu	SH
Bati	BA	Gelemso	GL	M/Abaya	MAB	Shire	SHR
Bedelle	BDL	Ginir	GN	Maichew	MY	Shola Gebeya	SG
BUI	BU	Gode	GD	Majete	MJ	Sirinka	SR
Combolcha	CB	Gonder	GDR	Masha	MA	Sodo	SD

Wegel Tena	WT	Woreilu	WI	Ziway	ZW
Woliso	WL	Yabello	YB		