

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.

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አህፅሮት

እ.ኤ.አ ኦገስት 2014

ባለፉት የኦገስት መጀመሪያዎቹ አሥር ቀናት ለክረምት ዝናብ መኖር መንስኤ የሆኑ የአየር ሁኔታ ገጽታዎች በይበልጥ በመጠናከር የተነሳ አብዛኛዎቹ የክረምት ዝናብ ተጠቃሚ በሆኑት በትግራይ፣ በአማራ፣ በቤንሻንጉል-ጉሙዝ፣ በጋምቤላ፣ በአብዛኛው ኦሮሚያ፣ በደቡብ ብሔር ብሔረሰቦችና ህዝቦች ፣ በአፋር፣ በድሬዳዋ፣ በሐረር እና በሰሜን ሶማሌ ከቀላል እስከ ከከባድ መጠን ያለው ዝናብ ተመዝግቧል። ይህም ሁኔታ በተለያዩ የእድገት ደረጃ ላይ ለሚገኙ የረጅም ጊዜ የአገዳ ሰብሎች እንደ ዳጉሳ፣ ማሽላና በቆሎ ለመሳሰሉት እንዲሁም ለቋሚ ሰብሎች የውሃ ፍላጎት መሟላት፣ ለመኸር ሰብሎች የዘር የእርሻ ስራ እንቅስቃሴና ለአርብቶ አደሩና ከፊል አርብቶ አደሩ ለግጦሽ ሣር ልምላሜና ለመጠጥ ውሃ አቅርቦት ጠቀሜታ ነበረው። ነገር ግን በአንዳንድ አካባቢዎች ላይ በ24 ሰዓት ውስጥ የጣለው ከ30.0 እስከ 100.5ሚ.ሜ መጠን ያለው ዝናብ ለቅጽበታዊ ጎርፍ መከሰትና ለወንዞች መሙላት ምክንያት ከመሆኑ ጋር ተያይዞ በአዝርእትና በእንሰሳት ላይ ጉዳት አድርጎታል። በሌላ በኩልም ቀደም ሲል የዝናብ እጥረት ተከስቶባቸው በነበሩት በስምጥ ሸለቆ፣ በምሥራቅ፣ በደቡብና በደቡብ ምስራቅ የአገሪቱ አካባቢዎቹን ያዳረሰ ከመሆኑ ጋር ተያይዞ የተገኘው እርጥበት የግጦሽ ሳር ልምላሜና ለመጠጥ ውሃው አቅርቦት ያሻሽላል ነበረ።

ባለፉት የኦገስት ሁለተኛ አሥር ቀናት ለክረምት ዝናብ መኖር መንስኤ የሆኑ የአየር ሁኔታ ክስተቶች በተጠናከረ መልኩ በመቀጠላቸው ምክንያት በአብዛኛው በትግራይ፣ በአማራ፣ በኦሮሚያ፣ በደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል፣ በጋምቤላ፣ በቤንሻንጉል-ጉሙዝ፣ በአፋር፣ በድሬዳዋ፣ በሐረር እና በሰሜን ሶማሌ ከቀላል እስከ ከከባድ መጠን ያለው ዝናብ ነበራቸው። ይህም ሁኔታ በተለያዩ የእድገት ደረጃ ላይ ለሚገኙ የረጅም ጊዜ ሰብሎች ለሆኑት እንደ ዳጉሳ፣ ማሽላና በቆሎ ለመሳሰሉት እንዲሁም ለመኸር ሰብሎችና ለቋሚ ሰብሎች የውሃ ፍላጎት መሟላት፣ ለአርብቶ አደሩና ከፊል አርብቶ አደሩ ለግጦሽ ሣር ልምላሜና ለመጠጥ ውሃ አቅርቦት ጠቀሜታ ቢኖረውም በአንዳንድ አካባቢዎች ላይ በ24 ሰዓት ውስጥ የጠጣለው ከ30.0 እስከ 64.6ሚ.ሜ መጠን ያለው ዝናብ ለቅጽበታዊ ጎርፍ መከሰትና ለወንዞች መሙላት ምክንያት ከመሆኑ ጋር ተያይዞ በአዝርእትና በእንሰሳት ላይ መጠነኛ ጉዳት አድርጏል።

ባለፉት የኦገስት ሶስተኛ አሥር ቀናት በሀገሪቱ የክረምት ዝናብ ተጠቃሚ የሀገሪቱ ክፍሎች ማለትም በትግራይ፣ በአማራ፣ በቤንሻንጉል-ጉሙዝ፣ በጋምቤላ፣ በአብዛኛው ኦሮሚያ፣ የደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል፣ በአፋር፣ በድሬዳዋ፣ በሐረር እና በሰሜን ሶማሌ የተገኘው ከቀላል እስከ ከከባድ መጠን ያለው ዝናብ ዘግይቶ ለተዘሩትና መደበኛ የእድገት ደረጃ ላይ ላልደረሱ ልዩ ልዩ የመኸር ሰብሎች፣ ቋሚ ተክሎች ለአርብቶ አደሩና ለከፊል አርብቶ አደሩ የግጦሽ ሣርና የመጠጥ ውሃ አቅርቦት የጎላ ጠቀሜታ እንደነበረው እሙን ነው። ከዚህም በተጨማሪ በአንዳንድ የሀገሪቱ ክፍሎች በአንድ ቀን ብቻ ከ30.8 እስከ 96.5 ሚ.ሜ. የሚደርስ ከባድ ዝናብ ቢኖርም በደረሰን ሪፖርት መሠረት የጎላ ጉዳት ባይኖርም መጠነኛ አሉታዊ ተጽዕኖ እንደነበረው ይታመናል። በሌላ አንጻር የዘነበው ዝናብ የውሀ ማቆር ሥራ ለሚሰሩ አካባቢዎች ከፍተኛ ጠቀሜታ እንደነበረው ገሀድ ነው።

በአጠቃላይ በአገሱ ወር የነበረው ዝናብ በስርጭትም ሆነ በመጠን ረገድ የተስፋፋ፣ የተጠናከረ እና የተስተካከለ ነበር። በመሆኑም ትግራይ፣ አማራ፣ ቤንሻንጉል-ጉሙዝ፣ ጋምቤላ፣ የደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል፣ በአብዛኛው ኦሮሚያ፣ አፋር፣ ድሬዳዋ፣ ሰሜን ሶማሌ ከቀላል እስከ ከባድ መጠን ያለው ዝናብ አግኝተዋል። የተመዘገበውም ከባድ ዝናብ ከ50-100 ሚ.ሜ. የሚደርስ በአንድ የዝናብ ቀን ብቻ ተመዘገበ ሲሆን የተገኘው ዝናብ ለወቅቱ የግብርና ሥራ እንቅስቃሴ አመቺ ሁኔታን እንደፈጠረ ግልጽ ነው። በተጨማሪም በአንዳንድ ሥፍራዎች የጣለው ከባድ ዝናብ አሉታዊ ተጽዕኖ እንደነበረው ይገመታል።

SUMMARY

August, 2014

During the first ten days of August 2014, Kiremt rain bearing meteorological phenomena was strengthened and bring rainfall over most of kiremt rain benefiting areas of the country. In line with this, Tigray, Amhara, Benishangul-Gumuz, Gambella, much of Oromia, SNNPR, Harari, DireDawa, southern Afar and northern Somali received light to heavy rainfall. As a result of this, Adigrat, Motta, Seru, Sirinka, Bahir Dare, Shola Gebeya, Ejaje, Aman, Debreziet, Lemugenet, Hosaina, Cheffa, Wegele tena. Majete, Mehal Meda, Gida ayana, Lalibela, Alemay, Pawe, Nefas mewcha, Aider, received heavy falls raging from 30.0 to 100.5 mm in one rainy day. These heavy falls associated with thunder might have caused river over flow and flash flood which might also caused water logging on crops, damage and loss of life of animals. Moreover, the refit valley, eastern and southern parts of the country which previously under influence of moisture stress also exhibited rain during this period. The situation might have favored ongoing Kermit agricultural activities, availability of pasture and drinking water over postural and agro pasture parts of the country. In general, Tigray, Amhara, Benishangul-Gumuz, eastern Gambella central, western and including pocket areas of southern high lands of Oromia, SNNPR and few place of eastern parts of the country received normal to above normal rainfall, while, the rest parts of the country, experienced below normal rainfall. The situation might have favored water requirement of long cycle crops like Maize, sorghum and finger millet, perennial plants, sowing of short cycle Meher cereal crops such as (Teff,etc.), improve pasture and drinking water availability particularly over postural agro pastoral areas of the country. On the other hand, below normal rainfall experienced over some kiremt rain benefitting areas, might have negative impact on going agricultural activities and on fulfill water requirement of high moisture need crops.

During the third dekade of August 2014, rain bearing meteorological phenomena strengthened and result rain fall good in amount even in distribution over most Kireimt rain benefiting areas of the country. Tigray, Amhara, Benishangul-Gumuz, Gambella, much of Oromia, SNNPR, Afar, Harari, DireDawa and northern Somali received light to heavy rainfall ranging from 30.8-96.5 mm of rainfall. The situation might have favor water requirement of different meher crops perennial plants, particularly late sown crops(Teff) due to prevailed dry spell at critical sowing time, agricultural activities, availability of pasture and drinking water over postural and agro pastoral parts of the country. In line with heavy fall experienced over some stations; Alem ketema, Abomsa ,Adawa,Aira, Alage ,Arjo, Awassa, Adell ,Bahir Dare, Bedalle, Begi, Bullen, Chagin, Chira, DebreTabor, Fiche, Gimbi, Ginner, Nekete, Axum, Aman, Burji, Gundomeskel, Golocha, Ebella Amdework, Chewaka, Kachisie, Limugenet, Maichew, Maji, Masha, Majete, Mankush, Nebelet, Quara, Shawura, Seru, Shire and Wereilu reported heavy rainfall ranging from 31.0 to 93.5 mm of rainfall in one rainy day. This might have minor negative impact on seasonal agriculture and activities, and flash and river over flow floods over low in laying areas and also caused water logging. Contrary, to this, heavy falls experienced favored water harvesting where practice is habited.

In general, the rainfall experienced during the month of August 2014, more strengthen, further expanded, good in amount and even in distribution .To sum up, the rain fall performance the month under review favored over all seasonal agricultural activities. As a result Tigray, Amhara, Much of Oromia, Afar, Dire Dewa, and Northern Somali received light to heavy rainfall. The situation favored ongoing seasonal agricultural activities. The heavy falls ranging from 50-100mm in one rainy day might have certain negative impact.

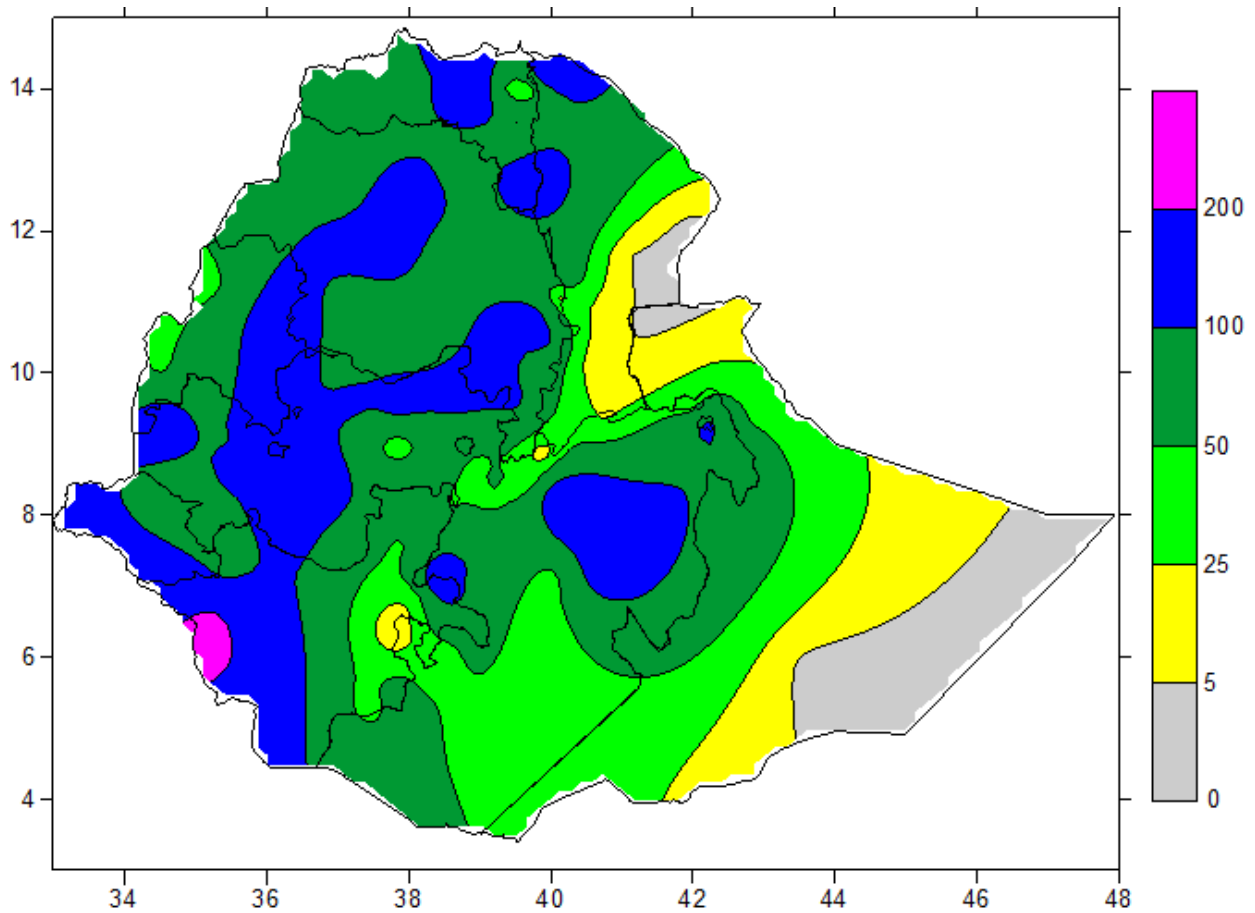


Fig 1. Rainfall distribution in mm (21 – 31 August 2014)
1. WEATHER ASSESSMENT

1.1. Rainfall amount (Fig.1)

Pocket area of south west SNNPR received > 200 mm of rainfall. Central and southern Tigray, parts of northern and western Afar, parts of southern and western Amhara, some parts of western southeastern and central Oromia, eastern half of Benshangul-Gumuz, southern half of Gambela and western half of SNNPR received 100-200 mm of rainfall. Most parts of Tigray, Amhara, Most parts of Afar, western half of Benshangul-Gumuz, most parts of Oromia, northern half of Gambela, eastern half of SNNPR western margin of Somali received 25-50 mm of rainfall. Most parts of southwestern Afar, pocket area of western SNNPR and central parts of Somali experienced 5-25 mm of rainfall. The rest parts of the country experienced little or no rainfall.

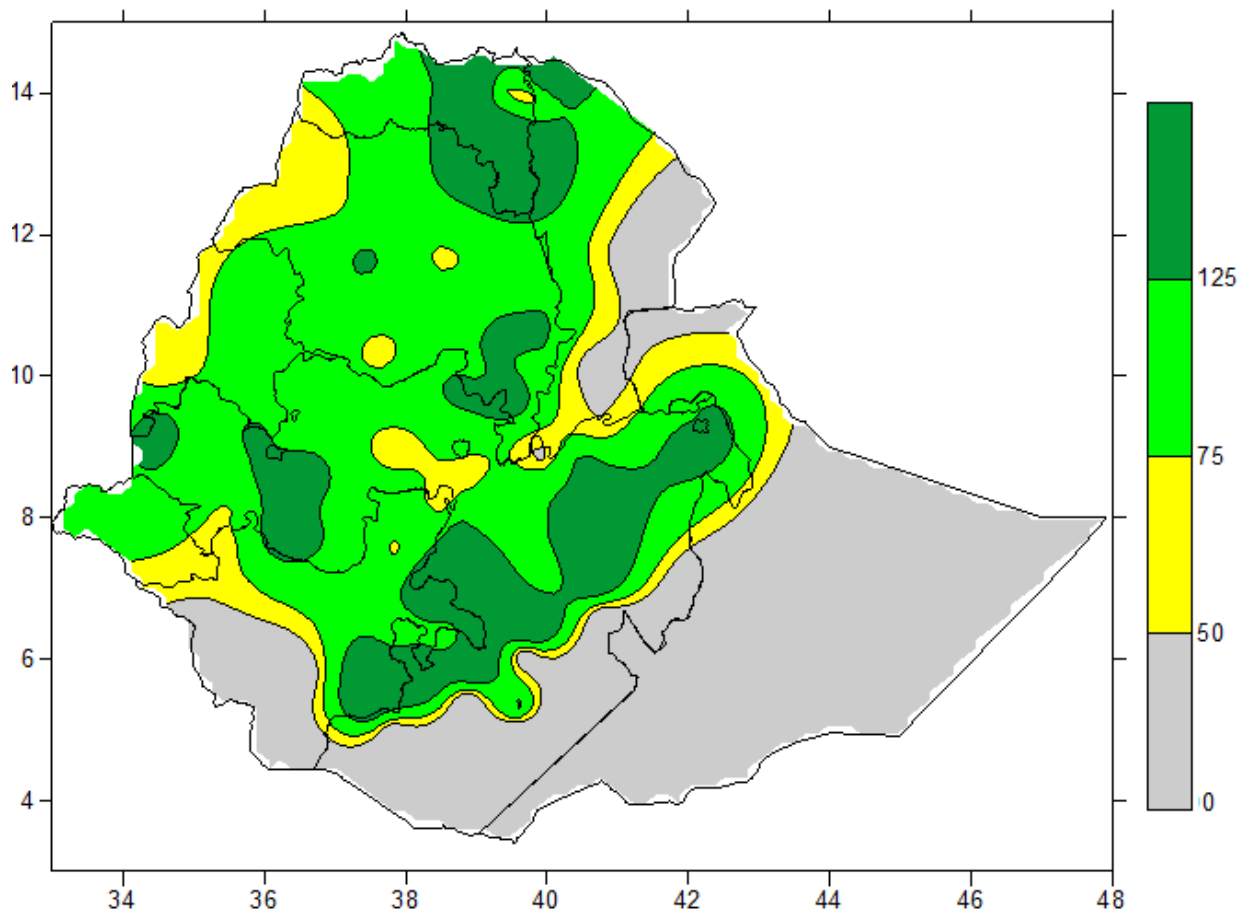


Fig. 2 Percent of normal rainfall distribution (21-31 August 2014)

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 Tigray, Amhara, Oromia, Benshangul-Gumuze, Gambela, northern and western margin of Afar, northern half of SNNPR and northern Somali exhibited normal to above normal rainfall. The rest parts of the country experienced below or much below normal rainfall.

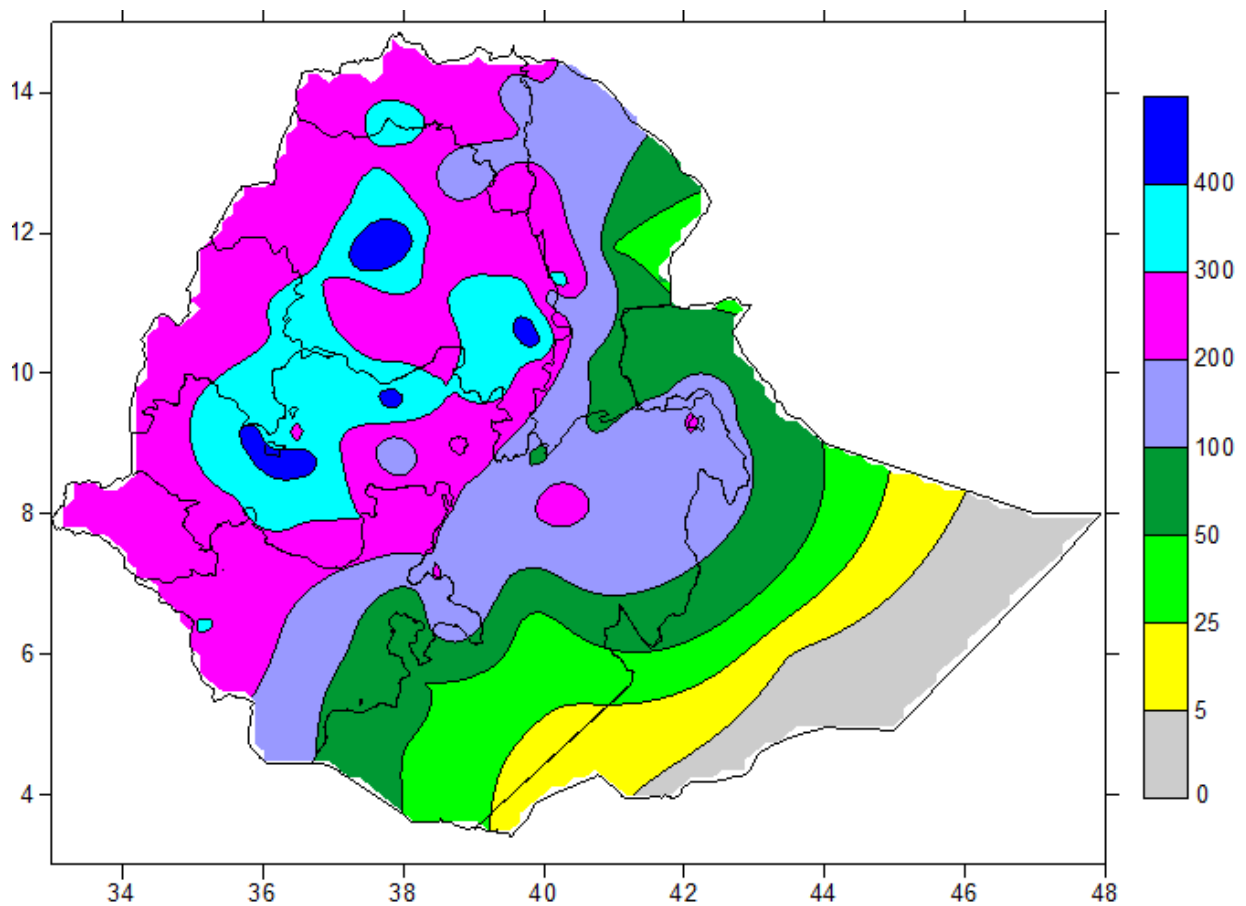


Fig. 3 Rainfall amount in mm for the month of August 2014

1.2.1 Rainfall amount (Fig.3)

Pocket areas of southern and central Amhara and northern and western Oromia received > 400 mm of rainfall. Southeastern, northern and central Amhara, parts of western and northern Oromia received 300-400 mm of rain fall. Moat of Tigray, Amhara, Gambela, western half of Benshangul-Gumuze, parts of western and central Oromia, eastern half of SNNPR received 200-300 mm of rainfall. Most of western half of Afar, central southeastern and eastern Oromia and central parts of SNNPR received 100-200 mm of rainfall. Most of wester half of Afar, northern half of Somali, southern Oromia and southeastern SNNPR received 25-100 mm of rainfall. The rest parts of the country experienced little or no rainfall.

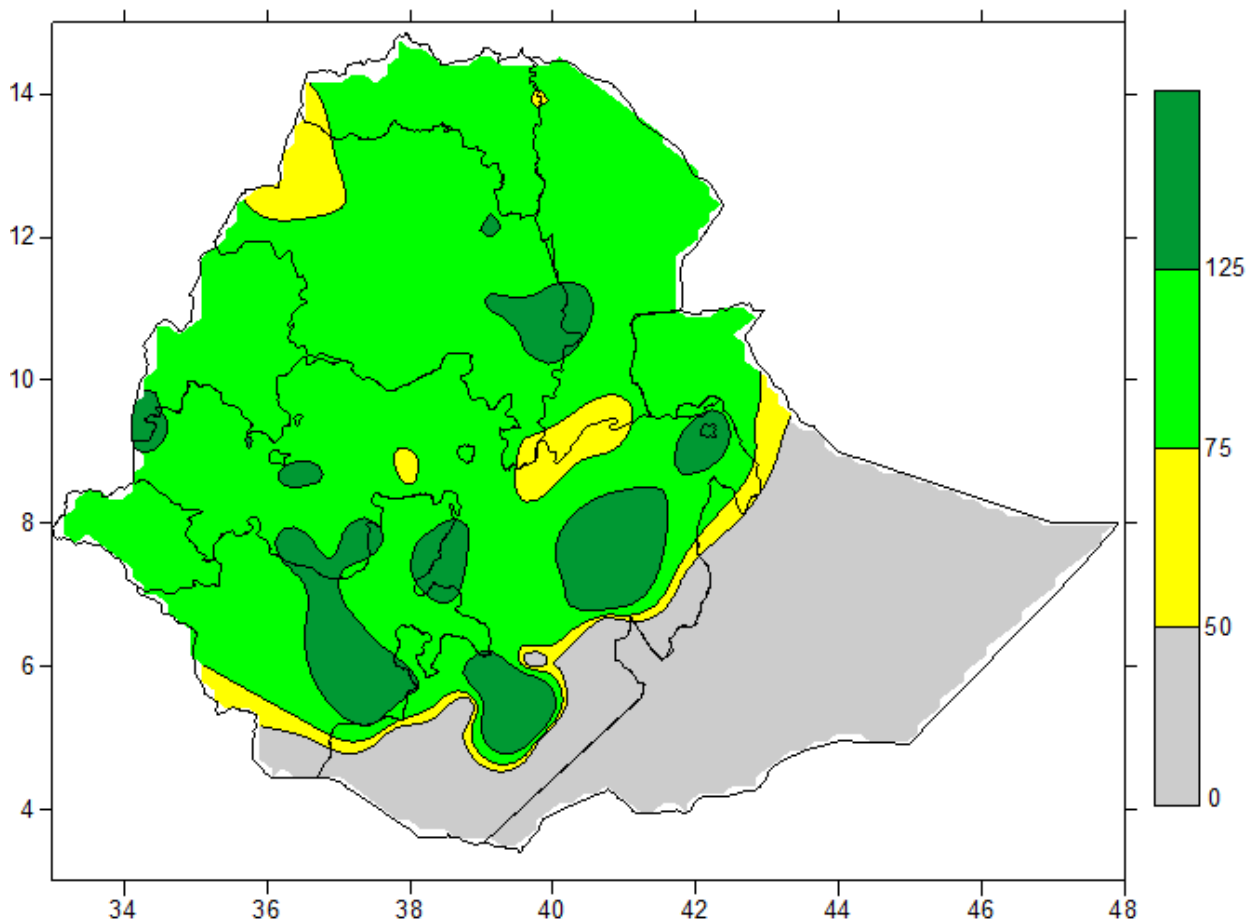


Fig. 4 Percent of Normal Rainfall for the month of August 2014

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)

Except western margin of Amhara and pocket area of southern Afar Most of Kiremt rain benefiting areas of the country experienced normal to above 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°C. Among reporting stations: Dubti, Elidar, Semera, Gewane, Awash Arba, Gode, Metehara, Tsitsika, Dire Dawa and Nure Era recorded 43.2, 42.5, 42.5, 38.8, 38.5, 38.0, 37.0, 35.6, 35.2 and 35.0°C respectively. The situation might have caused a negative impact on the normal growth and developments of plants, growth, feed intake and yield of livestock.

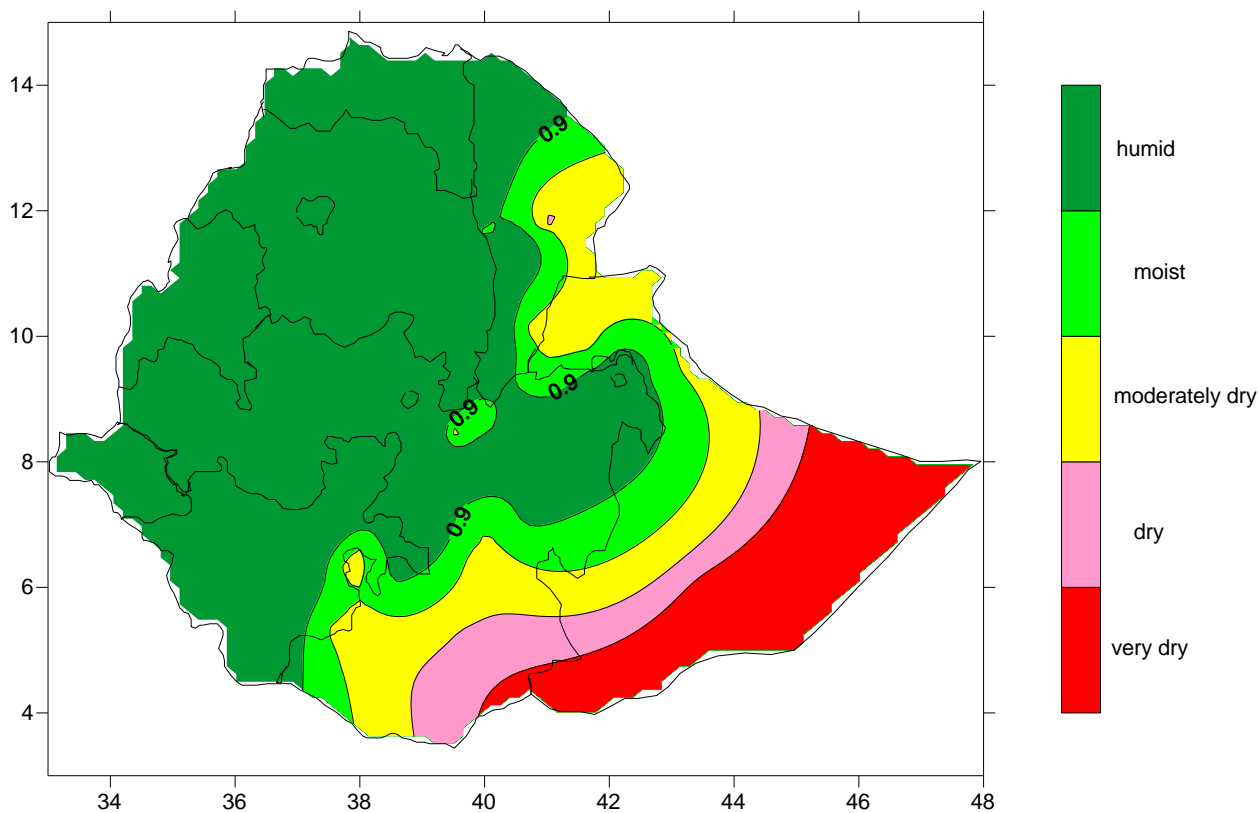


Fig. 5 moisture status for the month of August 2014

As indicated on the moisture status map above, most parts of Tigray, Amahra, Benishangul-Gumuz, Gambella, Oromia, SNNPR and northern western, southwestern and southern Afar experienced moist to humid moisture condition. While, eastern Afar, Northern and western Somali and southwestern Oromia, pocket area of southern SNNPR exhibited moderately dry condition, which might have favored ongoing 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

In general, the rainfall experienced during the month of August 2014, more strengthen, further expanded, good in amount and even in distribution .To sum up, the rain fall performance the month under review favored over all seasonal agricultural activities. As a result Tigray, Amhara, Much of Oromia, Afar, Dire Dewa, and Northern Somali received light to heavy rainfall. The situation favored ongoing seasonal agricultural activities. The heavy falls ranging from 50-100mm in one rainy day might have certain negative impact.

2.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING MONTH

In normal situation in the coming month of September the rainfall amount and distribution slightly decreases most places of kiremet rain benefiting areas of the country. In line with this The anticipated normal to above normal rainfall will expect over western Tigray, western Amhara, Benshangul-Gumuze, western and central Oromya, Gambela and most parts of SNNPR would have a positive contribution for the water requirement of most crops, which are at different phenological stages at this time of the year. Moreover the expected good moisture condition would favor sowing activities of pulses in most parts of the country. In addition to these, the expected normal to above normal September rainfall would favor the availability of pasture and drinking water over pastoral and agro pastoral areas of the country. On the other hand the expected near normal rainfall over eastern parts of Tigray, Amhara and Oromia and also northern Somali, Afar, Dire Dawa and Harrari would have a significant contribution for the availability of water and perennial plants over the areas. Moreover, the anticipated season rainfall over south and southeastern lowlands will create good condition over pastoral and agro pastoral areas on the availability of pasture and drinking water.

DEFINITION 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 covers 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.

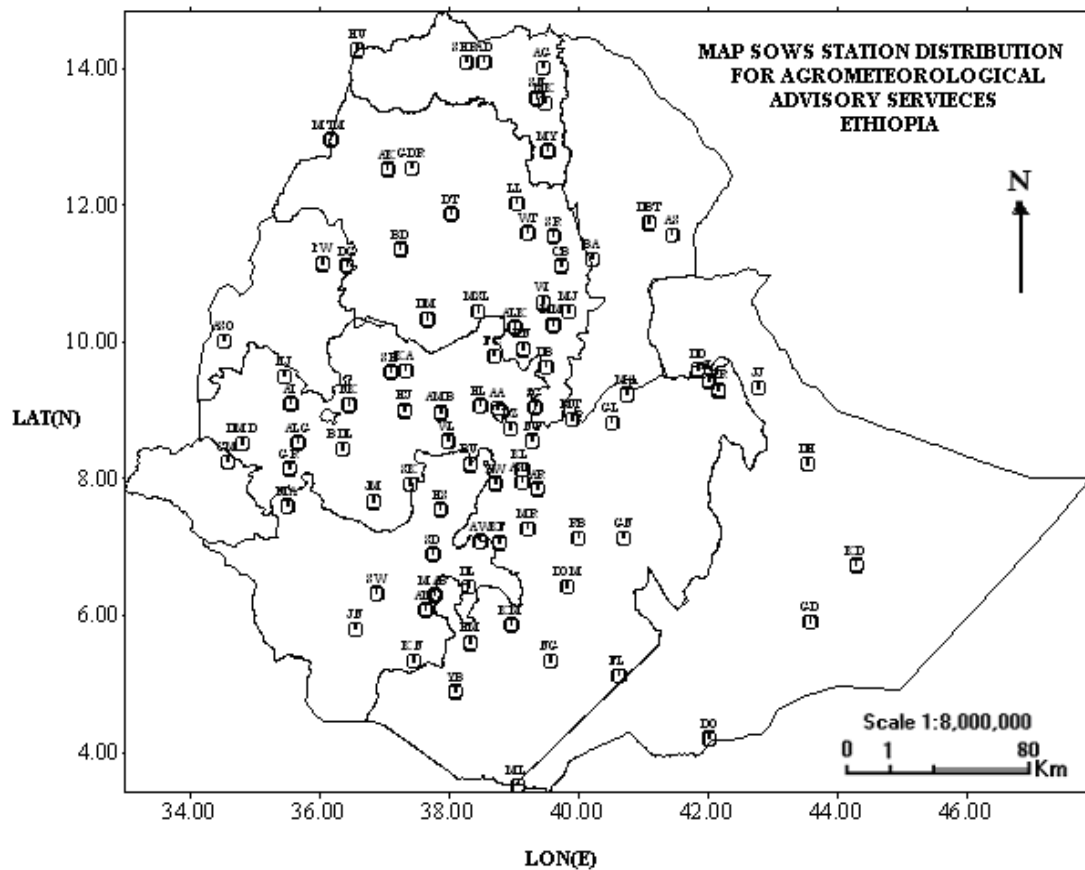
DEKAD: - First or second ten days or the remaining days of a month.

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