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

አህፅሮት

እ.ኤ.አ ማርች 2014

የማርች የመጀመሪያ አሥር ቀናት የበልግ ዝናብ ሰጭ የአየር ሁኔታ ክስተቶች ከሞላ ጎደል ከመጠናከራቸው ጋር ተያይዞ በአብዛኛው የበልግ ዝናብ ተጠቃሚ አካባቢዎች በሆኑት በደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል፣ በአማራ፣ በአብዛኛው ኦሮሚያ፣ በትግራይ፣ በቤንሻንጉል-ጉሙዝ፣ በጋምቤላ እና በምሥራቅ ኢትዮጵያ 30.1-82.0 ሚሜ መጠን ያለው ዝናብ አግኝተዋል። ይህም ሁኔታ የበልግ እርሻን ቀደም ብለው ለሚጀምሩ አካባቢዎች የማሳ ዝግጅትና የዘር እርሻ እና ለረዝም ጊዜ ሰብሎች የማሳ ዝግጅት፣ ለቋሚ ስብሎች የውሃ ፍላጐት መሞላት እንዲሁም ከላይ በተጠቀሱት አካባቢዎች ለሚገኙ አርብቶ አደሮችና ከፊል አርብቶ አደሮችለመጠጥ ውሀና ለግጦሽ ሳር አቅርቦት የጎላ ጠቀሜታ ነበረው።

በማርች የሁለተኛው አሥር ቀናት በከባቢው አየር ውስጥ የነበረው እርጥበታማ የአየር ሁኔታ በተሻለ መልኩ በመጠናከሩ ቀደም ብሎ በምዕራባዊው አጋማሽ ተወስኖ የነበረው ዝናብ በመጠንም ሆነ በስርጭት ወደ ደቡብና ምሥራቅ አጋማሽ የሀገሪቱ ክፍሎች ተስፋፍቶና ተጠናክሮ እንደነበር ዝናብ መረጃዎች ያሳያሉ። በዚህም ምክንያት በአብዛኛው በደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል፣ በምዕራብ እና በመካከለኛው ኦሮሚያ፣ በደቡብ ኦሮሚያ ከፍተኛ ሥፍራዎች፣ በአብዛኛው አማራና ትግራይ፣ በቤንሻንጉል-ጉሙዝ እና በጋምቤላ ከ2-8 ቀናት ከ 30.0- 97.5 ሚ.ሜ. ከባድ ዝናብ የተገኘ ሲሆን ይህም ሁኔታ ለበልግ እርሻ የስራ እንቅስቃሴ፣ ለረዝም ጊዜ ሰብሎች እንደ ማሽላና በቆሎ ለመሳሰሉት የማሳ ዝግጅትና ለዘር የስራ ፣ ለቋሚ ስብሎች የውሃ ፍላጐት መሞላት እንዲሁም ከላይ በተጠቀሱት አካባቢዎች ለሚገኙ አርብቶ አደሮችና ከፊል አርብቶ አደሮችለመጠጥ ውሀና ለግጦሽ ሳር አቅርቦት የጎላ ጠቀሜታ ነበረው።

በማርች ሶስተኛው አሥር ቀናት ለዝናብ መኖር አመቺ የሆኑ የአየር ሁኔታ ክስተቶች ከሞላ ጎደል ከመጠናከራቸው ጋር ተያይዘው በአብዛኛው የበልግ ዝናብ ተጠቃሚ የሀገሪቱ አካባቢዎች ከቀላል እሰከ ከባድ መጠን ያለው ዝናብ ነበራቸው። በመሆኑም በአብዛኛው ኦሮሚያ፣ በደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል፡ በምሥራቅና በደቡብ አማራ፣ በደቡብ ትግራይ፣ በአፋር፣ የጋምቤላ እና በሰሜን ሶማሌ አካባቢዎች ከቀላል እሰከ ከባድ መጠን ያለው ዝናብ አግኝተዋል። በአሥሩ ቀናት ውስጥ 30.8-84.0 በሚ.ሜ. የሚደርስ ከባድ ዝናብ ነበራቸው። ይህም ሁኔታ ለበልግ እርሻ የስራ እንቅስቃሴ፣ ለረዝም ጊዜ ሰብሎች እንደ ማሽላና በቆሎ ለመሳሰሉት የማሳ ዝግጅትና ለዘር የስራ ፣ ለቋሚ ስብሎች የውሃ ፍላጐት መሞላት እንዲሁም ከላይ በተጠቀሱት አካባቢዎች ለሚገኙ አርብቶ አደሮችና ከፊል አርብቶ አደሮችለመጠጥ ውሀና ለግጦሽ ሳር አቅርቦት የጎላ ጠቀሜታ ነበረው።

በአጠቃላይ ባላፈው በማርች 2014 በመጀመሪያው አሥር ቀናት የዝናቡ ስርጭትና መጠን በምዕራብ የሀገሪቱ አጋማሽ የተሻለ ጥንካሬ የነበረው ሲሆን በሁለተኛውና በሶስተኛው አሥር ቀናት በአብዛኛው የበልግ ዝናብ ተጠቃሚ በሆኑት የሀገሪቱ አካባቢዎች ከቀላል እስከ ከባድ መጠን ያለው ዝናብ ነበራቸው። ከዚህም ጋር ተያይዞ በላይበር 30.1፣ በደብረታቦር 66.2፣ በአሶሳ 22.0፣ በደባርቅ 38.5፣ በሴሩ 55.7፣ በነሎልቻ 45.3፣ በአዳማ 39.1፣ በሚኤሶ 40.2፣ በገዋኔ 84.2፣ በድሬዳዋ 42.0 እና በጂማ 36.2 በሚ.ሜ. የሚደርስ ከባድ ዝናብ በወሩ ውስጥ አግኝተዋል። ይህም ሁኔታ ለበልግ የእርሻን ስራ እንቅስቃሴ፣ ለረዝም ጊዜ ሰብሎች የማሳ ዝግጅት፣ ለቋሚ ሰብሎች የውሃ ፍላጐት መሞላት እንዲሁም ከላይ በተጠቀሱት አካባቢዎች ለሚገኙ አርብቶ አደሮችና ከፊል አርብቶ አደሮችለመጠጥ ውሀና ለግጦሽ ሳር አቅርቦት የጎላ ጠቀሜታ ነበረው።

SUMMARY

March **2014**

During the first dekade of March 2014, Belg rain bearing meteorological phenomenon were, strengthened over Belg rain benefiting areas of the country. As a result, SNNPR, Amhara, most parts of Oromia, Tigray, Benishagul-Gumuz, Gambela and eastern parts of the Ethiopia exhibited light to heavy rain fall ranging from 30.1-82.0 mm in one rainy day. This situation favored the ongoing Belg agricultural activities such as land preparation and sowing of Belg crops, land preparation and sowing activities for long cycle crops, water requirement for perennial plants and availability of drinking water and pasture over pastoral and agro pastoral areas of the country.

During the second dekade of March 2014 the rainfall activities further expanded to eastern and southern parts of the country with better spatial and temporal distribution which restricted to western parts of the country during the previous dekade. As a result of this, light to heavy rainfall experienced over much of SNNPR, western and central including southern high lands of Oromia, Tigray, Benishagul-Gumuz and Gambela. Moreover, heavy falls ranging from 46.3 to 97.5 mm of rainfall for one rainy day experienced over different parts of the country which result in normal to above normal rainfall over Oromia, Amhara ,Tigray, Benishagul-Gumuz, northern SNNPR, southern Gambela, northern and north western Somali, while the rest parts of the country received below normal rainfall. The situation favored the ongoing Belg seasonal agricultural activities, long cycle Meher crops like maize and sorghum, water requirement for perennial plants, pasture and drinking water availability in pastoral and agro pastoral areas of the country.

During the third decade of March 2014 Belg rain bearing meteorological phenomena strengthened over much of Belg rain benefiting areas of the country. In line to this much of Oromia, SNNPR, Eastern and Southern Amhara, Southern Tigray, Afar, Gambela and Northern Somali received light to heavy rainfall ranging from 30.8-84.0 mm. This situation has a positive impact for ongoing Belg agricultural activities, land preparation and sowing of long cycle crops such as Maize and Sorghum, water requirement for perennial plants and availability of drinking water and pastor over pastoral and agro-pastoral areas of the country.

In general during the month under review of March, 2014, in the first ten days of the month rain bearing meteorological phenomena was strengthened in amount and distribution over western half of the country, while in the second and third decade of the month Belg rain extended to most Belg rain Benefiting areas of SNNPR, Oromia, Amhara, Tigray, Beshangul-Gumuz, Gambela, Afar, Dire Dawa, Harari and northern Somali received light to heavy rainfall ranging from 30.0 - 97.5 mm of rainfall this might have favored ongoing Belg agricultural activities, land preparation and sowing of long cycle crops, water requirement for perennial plants and availability of drinking water and pastor for pastoral and agro-pastoral areas.

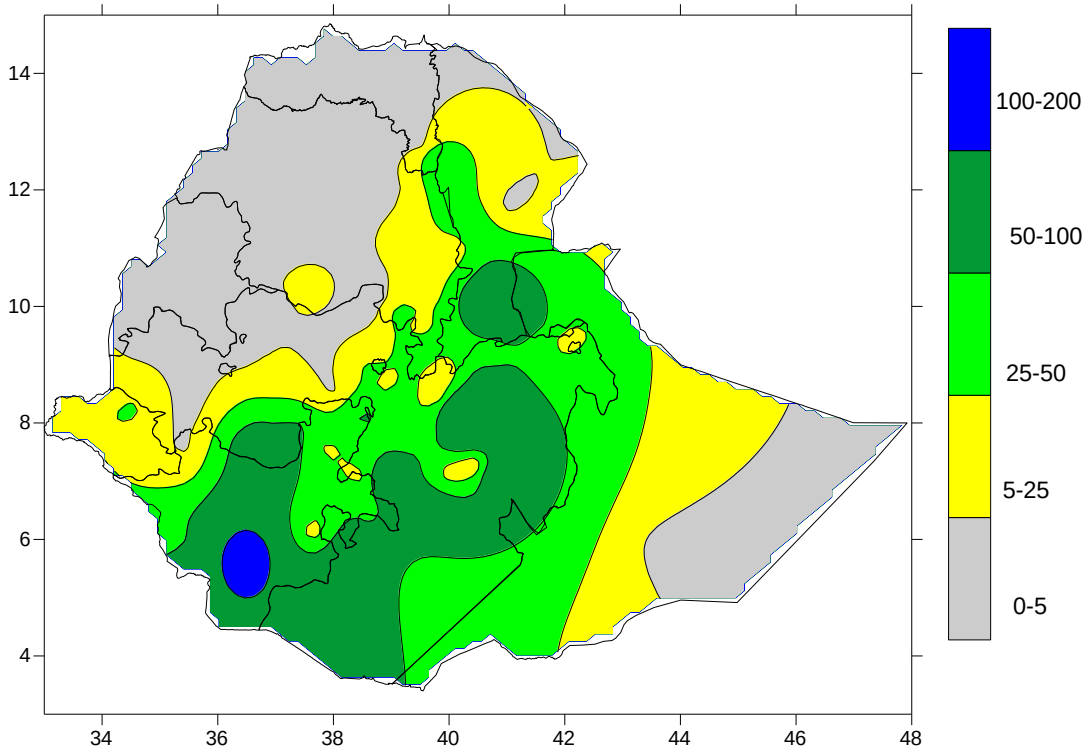

Fig 1. Rainfall distribution in mm (21 – 31 March, 2014)

1. WEATHER ASSESSMENT

1.1 (21- 31March, 2014)

1.1.1 Rainfall amount (Fig.1)

Few places of western SNNPR exhibited 100 -200 mm of rainfall. Much of SNNPR, south eastern and southern Oromia and southern Afar adjoining areas of northern Somali received 50-100 mm of rainfall. Much of eastern, southern and southeastern Oromia, northern Somali, and southern Afar experienced 25-50 mm of rainfall. Much of central Afar, southern Amhara, pocket areas of southern Tigray, northwest some pocket areas of Oromia and much of Gambela exhibited 5-25 mm of rainfall. The rest parts of the country experienced little or no rainfall

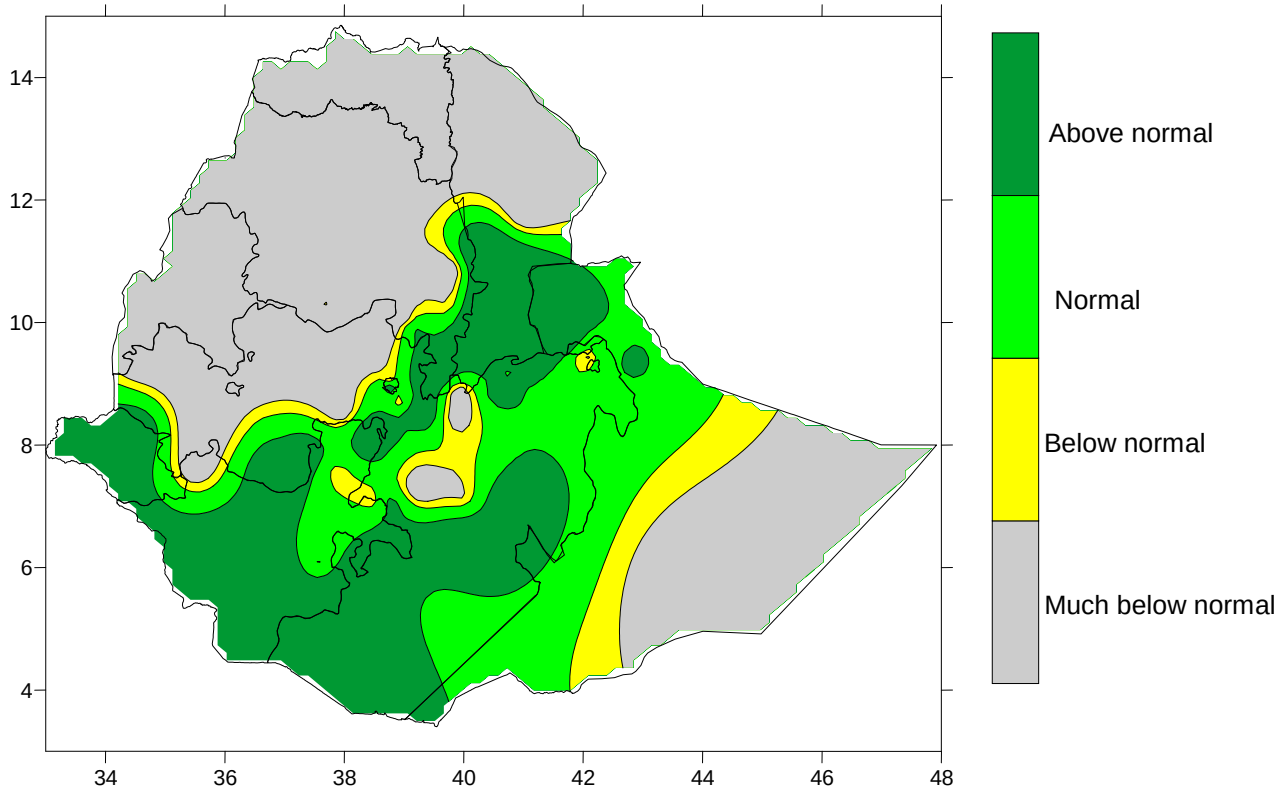

Fig. 2 Percent of normal rainfall distribution (21 – 31 March, 2014)

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)

Most parts of SNNPR, Gambela, eastern and southern Oromia, much of northern and central Somali, southern Afar exhibited normal to above normal rainfall. The rest parts of the country exhibited below normal to much below normal rainfall.

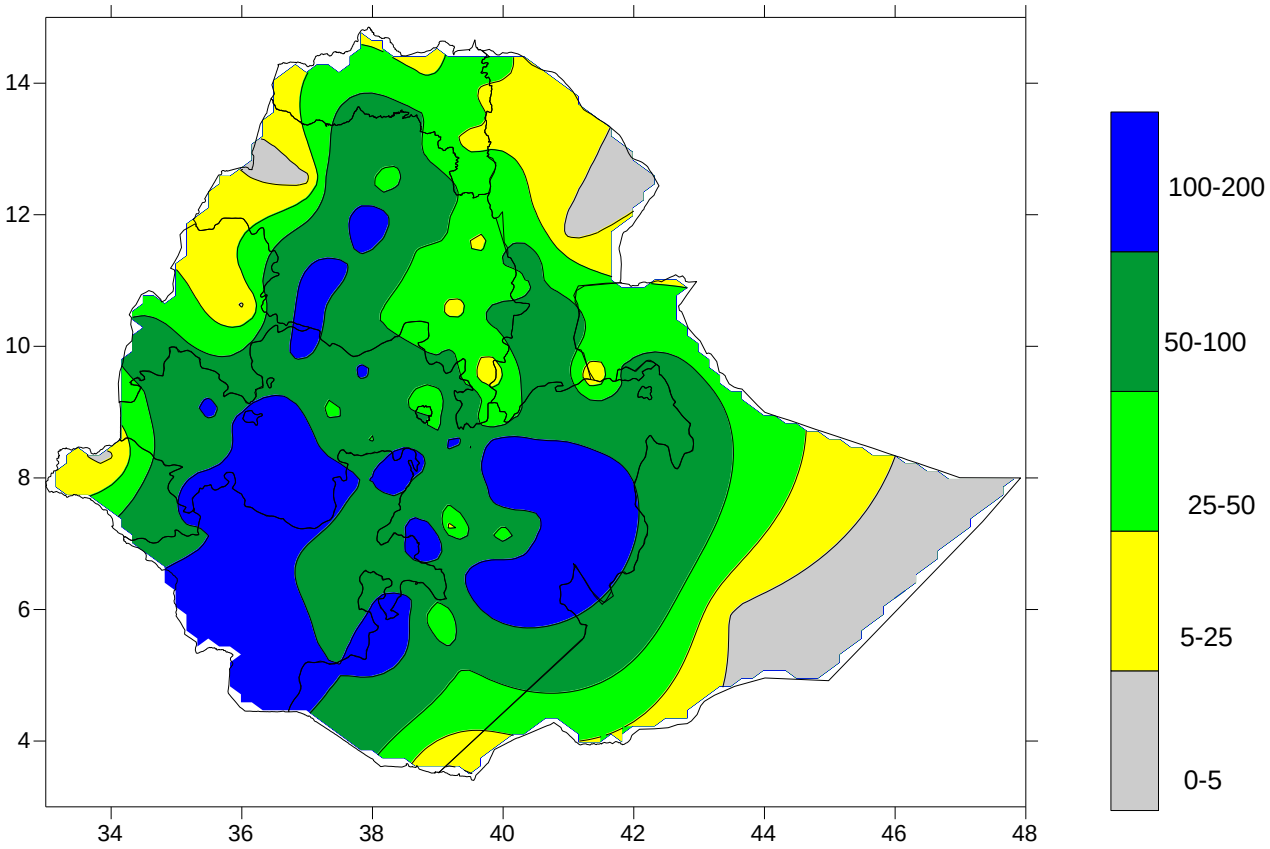

Fig. 3 Rainfall distribution in mm for the month of March, 2014

1.2 March 2014

1.2.1 Rainfall distribution (Fig.3)

Much of SNNPR, southeastern and southwestern Oromia and pocket areas of central and southwestern Amhara received 100-200 mm of rainfall. Much of Oromia, northeastern SNNPR, central and southwestern Amhara, southwestern Tigray, southern and southwestern Benshagul Gumuz, eastern Gambela, southwestern Somali received 50 -100 mm of rainfall. Much of Tigray, eastern and western Amhara, eastern and southern Benshangul- Gumuz, northern and central Gambela, northern, central and western Somali and southwestern and northern tip of Afar exhibited 25-50 mm of rainfall. Northern and western tip of Tigray, much of western Amhara, central and western Benshngul-Gumuz, and western Gambela, central and southwestern Somalia received 5-25 mm of rainfall. The rest parts of the country experienced little or no rain fall.

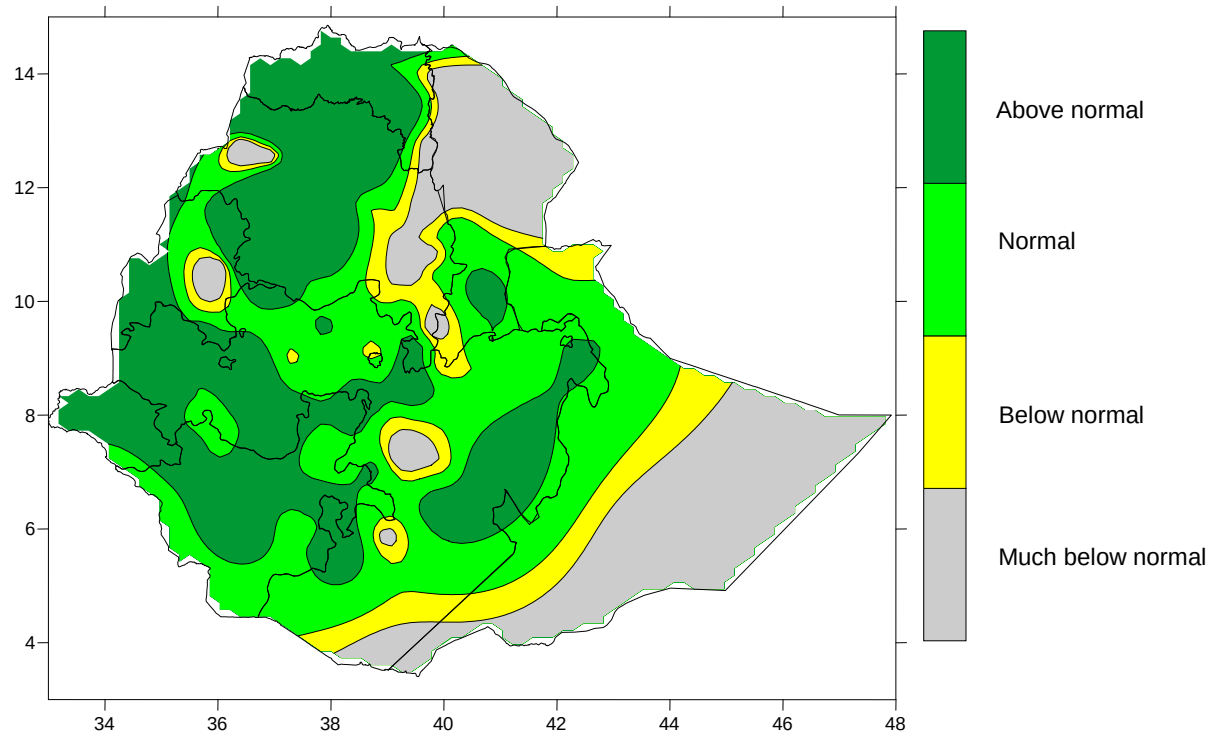

Fig. 4 Percent of Normal Rainfall n for the month of March, 2014

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)

Much of Tigray, Amhara, Oromia, Benshangul- Gumuz, Gambela, SNNPR northern Somali and southern Afar exhibited normal to above normal rainfall. The rest parts of the country experienced below normal and much below normal rainfall.

1.3 TEMPERATURE ANOMALY

During the month under review, some stations from the southern, eastern and western, lowland parts of the country exhibited extreme maximum air temperature ranging from 35.0-42.5°C. While some stations, from central, northern and eastern high lands of the country, reported extreme minimum temperature as low as 5.0^{o}C. To mention some of them; Adigrat, Mehal Meda, , Wegel Tena and Debre Berhan reported 3.0, 4.2, 4.5 and 4.6 °c. These extreme temperature experienced over aforementioned areas might have a negative impact on the normal growth and development of perennial plants and physiological activities and products of livestock.

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

In general during the month under review March, 2014, in the first ten days of the month rain bearing meteorological phenomena was strengthened in amount and distribution over western half of the country, while in the second and third decade of the month Belg rain extended to most Belg rain Benefiting areas. SNNPR, Oromia, Amhara, Tigray, Beshangul-Gumuz, Gambela, Afar, Dire Dawa, Harari and northern Somali received light to heavy rainfall ranging from 30.0 - 97.5 mm of rainfall this might have favored ongoing Belg agricultural activities, land preparation and sowing of long cycle crops, water requirement for perennial plants and availability of drinking water and pastor for pastoral and agro-pastoral areas.

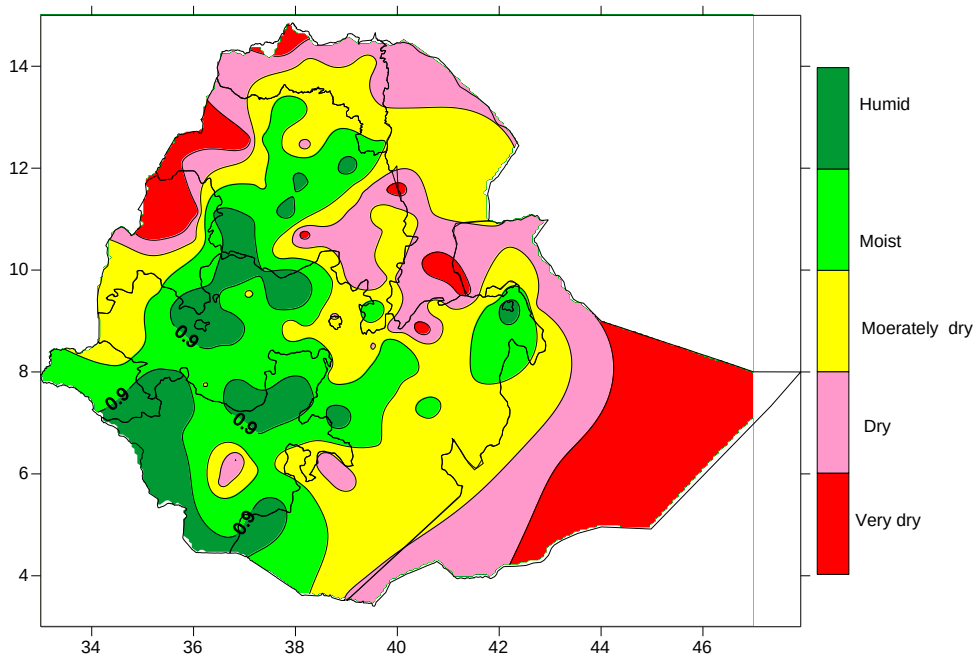

Fig. 5 moisture status for the month of March, 2014

Moisture status map shown above, indicate much of Gambela, SNNPr, southern, central and eastern Amhara, experienced moist to humid moisture condition. Some places of eastern and southern, Afar. Somali, Tigray, western and southern Amhara, western Benshangule Gumuz and Afar were prevailed under moderately dry moisture condition. Thus it might have favored ongoing Belg agricultural activities, land preparation and sowing of long cycle crops, water requirement for perennial plants and availability of drinking water and pastor for pastoral and agro-pastoral areas, while the rest parts of the country dominated by dry to very dry moisture condition.

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2.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING MONTH

In normal condition April is the month in which Belg rainfall is strengthen and covers large Belg rain receiving areas of the country. In relative to this it the month in which rains bearing meteorological condition will highly strength, thus unconditional flooding might during the month under review.

In general during this month rain bearing meteorological condition mostly expected to strengthen. However dry days expected to occur in some days of the month. This situation positive impact for ongoing Belg agricultural activities, land preparation and sowing of Belg crops, water requirement for perennial plants and availability of drinking water and pastor for pastoral and agro-pastoral areas. However heavy rain and flooding might have negative impact on growing crop and farming land and animals

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.

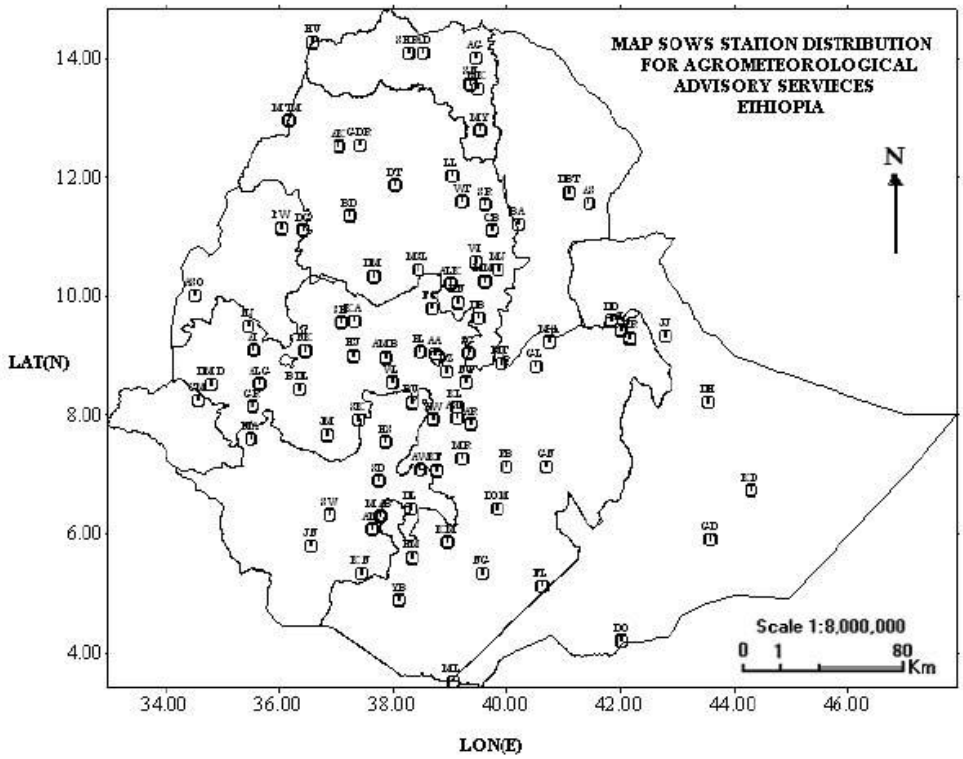
DEKAD: - First or second ten days or the remaining days of a month.

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

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