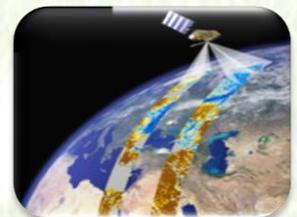


ETHIOPIA METEOROLOGY INSTITUTE

Agrometeorological Bulletin

MONTHLY AGROMETEOROLOGICAL BULLETIN

FEBRUARY 2024 VOLUME:-40 No. 06 DATE OF ISSUE: March 6, 2024



Ethiopia Meteorology Institute P.O.BOX 1090, ADDIS ABABA, ETHIOPIA

Website: [http:// www.ethiomet.gov.et](http://www.ethiomet.gov.et) E-mail nmsa@ethionet.et Fax 251-1-517066, Tel. 251-1-512299

TABLE OF CONTENTS

FOREWARD	2
SUMMARY	4
1. WEATHER ASSESSMENT	5
1.1. Rainfall amount (21 – 29 February, 2024)	5
1.2. Rainfall Anomaly (21 – 29 February, 2024)	6
1.3. Moisture Condition (21 – 29 February 2024)	7
1.4. Rainfall amount on the month of February 2024	8
1.5. Rainfall Anomaly on the month of February 2024	9
1.6. Moisture status on the month of February 2024	10
2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE	11
2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE	11
2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING MONTH OF MARCH, 2024	12
1. DEFNITION OF TERMS	13

FOREWARD

This Agro met Bulletin is prepared and disseminated by the Ethiopia Meteorology Institute (EMI). 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
EMI
P.O.Box 1090
Tel: 011661-57-79
FAX 00251-11-6625292
E-mail nmsa@ethionet.et
Addis Ababa

አህፅዮት

እ.ኤ.አ ፌብሩዋሪ 2024

ባላለፍናቸው የፌብሩዋሪ የመጀመሪያዎቹ አስር ቀናት በደቡብ፣ በደቡብ ምዕራብ፣ በመካከለኛው እንዲሁም በሰሜን እና ሰሜን ምስራቅ የሀገሪቱ ክፍሎች በብዙ ቦታዎቻቸው ላይ ከቀላል እስከ ከባድ መጠን ያለው እርጥበት እንደነበረ የተተነተኑ የግብርና ሚቲዎሮሎጂ መረጃዎች ያመለክታሉ። ይህም ሁኔታ ለቋሚ ተክሎች የውሃ ፍላጎት መሟላት ለአርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች የግጦሽ ሳርና የመጠጥ ውሃ አቅርቦትን ከማሻሻል አንጻር አዎንታዊ ሚና የነበረው ሲሆን በተለይም በደቡብ ምዕራብ፣ በመካከለኛውና በሰሜን ምስራቅ የበልግ ሰብል አምራች በሆኑት አካባቢዎች የነበረው እርጥበት የማሳ ዜግጅት ለማከናወንና የተለያዩ የበልግ ወቅት ሰብልችን አስቀድሞ ለመዝራት የጎላ ጠቀሜታ ነበረው።

ባላለፍነው የፌብሩዋሪ የሁለተኛ አስር ቀናት በደቡብ፣ በደቡብ ምዕራብ፣ በመካከለኛው እና በሰሜን እንዲሁም በሰሜን ምስራቅ የሀገሪቱ ክፍሎች ላይ የተሻለ የአፈር ውስጥ የእርጥበት ሁኔታ ነበራቸው። ይህም ሁኔታ ለበልግ የእርሻ ስራ እንቅስቃሴ የማሳ ዝግጅት ለማድረግ፣ ለቋሚ ተክሎች የውሃ ፍላጎትን ለማሟላት፣ ለአርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች የግጦሽ ሳርና የመጠጥ ውሃ አቅርቦትን ለማሻሻል ከፍተኛ ጠቀሜታ የነበረው ሲሆን፣ በተለይም በደቡብ፣ በደቡብ ምዕራብ፣ በመካከለኛው እና በሰሜን ምስራቅ የበልግ አብቃይ በሆኑት የሀገሪቱ አካባቢዎች የነበረው የአፈር ውስጥ እርጥበት የማሳ ዝግጅት ለማከናወንና የተለያዩ የበልግ ወቅት ሰብልችን አስቀድሞ ለመዝራት አመች ሁኔታን የፈጠረ ነበር።

ባላለፍነው የፌብሩዋሪ የመጨረሻ ዘጠኝ ቀናት በአብዛኛዎቹ የበልግ አብቃይና እርጥበት ተጠቃሚ በሆኑት የሀገሪቱ ክፍሎች ላይ ከቀላል እስከ መካከለኛ መጠን ያለው የእርጥበት ሁኔታ ነበራቸው። ይህም ሁኔታ የአፈር ውስጥ እርጥበትን በማሻሻል የበልግ ወቅት ሰብልችን በወቅቱ ለመዝራት፣ ለቋሚ ተክሎች የውሃ ፍላጎት መሟላት እንዲሁም ለአርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች የግጦሽ ሳርና የመጠጥ ውሃ ፍላጎትን ከማሟላት አንጻር ከፍተኛ ጠቀሜታ ነበረው።

በአጠቃላይ በፌብሩዋሪ ወር የነበረው የእርጥበት ሁኔታ ሲገመገም በአብዛኛዎቹ የበልግ አብቃይና እርጥበት ተጠቃሚ በሆኑት የሀገሪቱ ክፍሎች በተለይም በመጀመሪያውና በሁለተኛው አስር ቀናት ከቀላል እስከ ከባድ መጠን ያለው የእርጥበት ሁኔታ እንደነበራቸው የተተነተኑ የግብርና ሚቲዎሮሎጂ አመለካኾች ያሳያሉ። ይህም ሁኔታ የአፈር ውስጥ እርጥበትን በማሻሻል የበልግ ወቅት የማሳ ዝግጅትን አስቀድሞ ለመጀመርና ሰብልችን በወቅቱ ለመዝራት፣ የግብርና ግብዓቶችን አስቀድሞ ለማቅረብና ለማሟላት እንዲሁም ለቋሚ ተክሎች የውሃ ፍላጎት ማሟላት ከፍተኛ ጠቀሜታ ነበረው። በተጨማሪም የነበረው ከፍተኛ የእርጥበት ሁኔታ ለአርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች የግጦሽ ሳርና የመጠጥ ውሃ አቅርቦትን ከማሻሻል አንጻር እንዲሁም የአረንጓዴ ዕጽዋት ልምላሜና ሽፋንን ከማሻሻል አኳያ ከፍተኛ ጠቀሜታ ነበረው።

SUMMARY

During the first dekad of February 2024, as of the collected and analyzed agro meteorological information, during the dekad, dry moisture condition was prevailing over most parts of the country. This condition could favor to complete the ongoing post-harvest activities. On the other hand, at beginning and end of the dekad over central and southern Rift Valley and adjacent areas of the country was experiencing slight to moderate amount of rainfall. This situation could be taken as crucial toward the enhancement of soil moisture and creating conducive condition for land preparation, sowing of crops, the water need of perennial plants and the regeneration of pasture and the availability of drinking water for the pastoral and agro pastoral community.

During the Second dekad of February 2024, According to the Agro-meteorology information collected from different part of the country dry weather condition has observed across much parts of the country. This situation might favor areas where harvest and post-harvest agricultural activities are not fully completed. However, after the first half of the dekad the moisture condition was improving over southern, south-western, central, northern and north-eastern Ethiopia had been experiencing better moisture. This condition could be taken as crucial toward the enhancement of soil moisture and creating conducive condition for land preparation, sowing of crops, the fulfillment of perennial plants of water need. In addition, it was also positive for the regeneration of pasture and the availability of drinking water for the pastoral and agro pastoral community.

During the third Dekade of February 2024, especially over Belg growing and rainfall benefiting areas of the country received light to moderate moisture and some places recorded heavy fall >30 in one rainy day. In relation to this the moisture condition was enhanced and have positive role for land preparation, sowing activity of Belg crops as well as satisfy the water need of perianal plants and for availability of pastors and drinking water and pastoral and agro-pastoral areas.

In general, during the month of February, particularly in the first and second dekad of the month, According to the agro-meteorological information collected from various parts of the country, light to moderate rainfall was recorded over southern, south-western, central, northern and north-eastern Ethiopia including southern Rift Valley and adjacent areas. The moisture obtained during the month played certain positive role for conducting land preparation in the

southwest, the north-east and central parts of the country, where Belg season agricultures are practiced widely. In addition, it might also have positive contribute toward the supply of water for perennial plants and ensure the availability of drinking water and pasture for pastoral and agro pastoral communities.

1. WEATHER ASSESSMENT

1.1. Rainfall amount (21 – 29 February, 2024)

During Third Dekad of February 2024, Central, West and South Tigray, Waghimera, North Wello, Oromia Zone, pocket areas of Afar Zone 3&s, Shineli, pocket areas of East Hararghe, pocket areas of Illibabur Guragi, Siliti, Alaba and Hadiya, Sheka, Jimma, Godere, Kefa, Dawero, Sidama, pocket areas of Bale, South Omo, Amaro, Konso and pocket areas of Borena Zones are Exhibited 5-25 mm rain fall. Pocket areas of Jimma, South Omo and Konso Zones are 25-50 mm rain fall recived. The rest part of the country was exhibited 0-5mm rain fall.

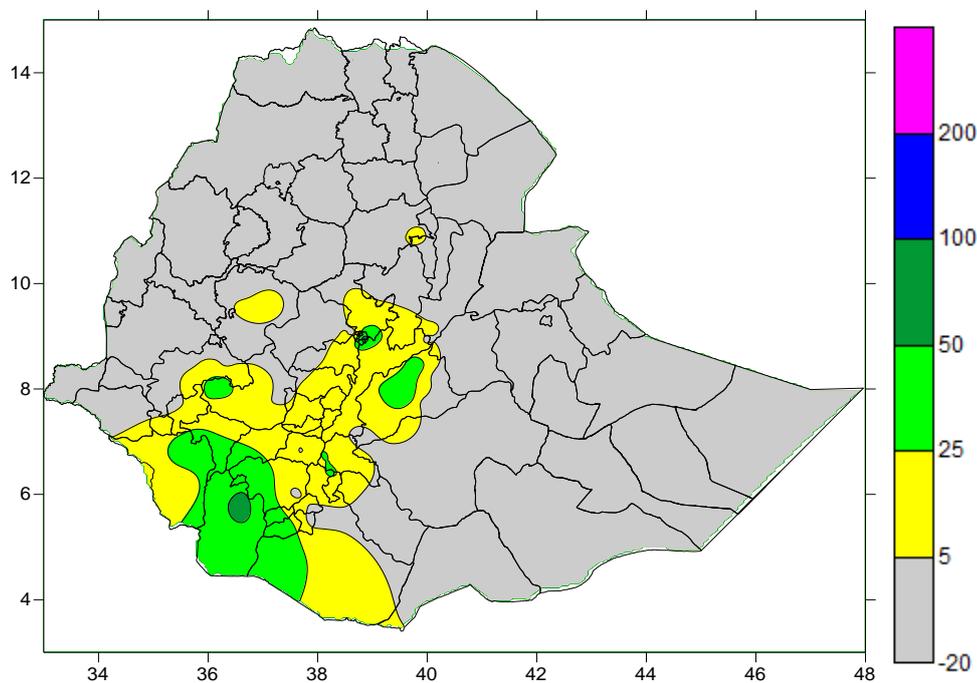


Figure 1. Rainfall distribution in mm (21– 29) February 2024

1.2. Rainfall Anomaly (21 – 29 February, 2024)

During the Third Dekad of February 2024, the rain fall anomaly Shineli, pocket areas of Afar Zone 3&5, South West Shewa, Jimma, Pocket areas of Illibabur, Alaba, Hadiya, Dawero, Sidama, Godere, Seka, Kefa, Bench maji, South Omo, Konso, pocket areas of Borena, Zones are Normal to Above Normal Rain fall was exhibited. on the other hand, much of the country was experienced Below Normal rainfall.

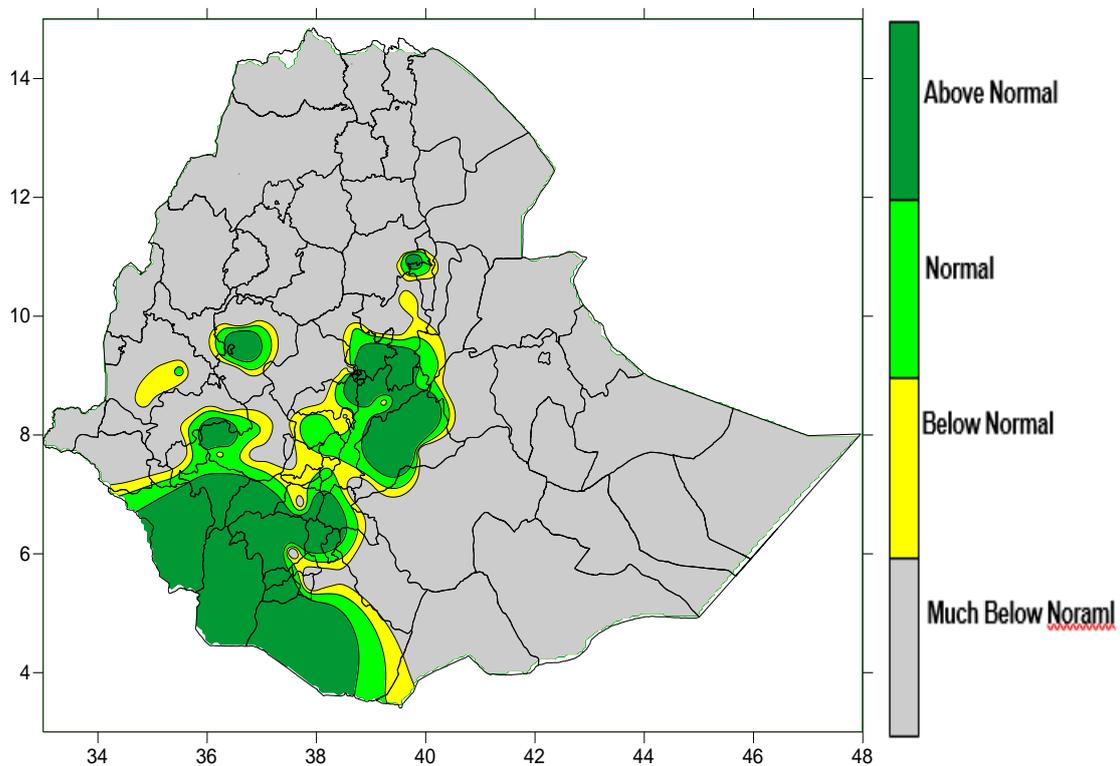


Figure 2: Percent of normal rainfall distribution (21– 29) February 2024

Explanatory notes for the Legend

- < 50-Much below normal
- 50-75%-Below normal
- 75-125%- Normal
- > 125% - Above normal

1.3. Moisture Condition (21 – 29 February 2024)

During Third Dekad of February 2024, North Wello, Oromia Zone, pocket areas of Afar Zone 3&s, Shineli, pocket areas of East Hararghe, pocket areas of Illibabur Guragi, Siliti, Alaba and Hadiya, Sheka, Jimma, Godere, Kefa, Dawero, Sidama, pocket areas of Bale, South Omo, Amaro, Konso and pocket areas of Borena Zones are moist to Humid Moisture conditions. On the other hand, the rest part of the country was Dry to Very dry condition.

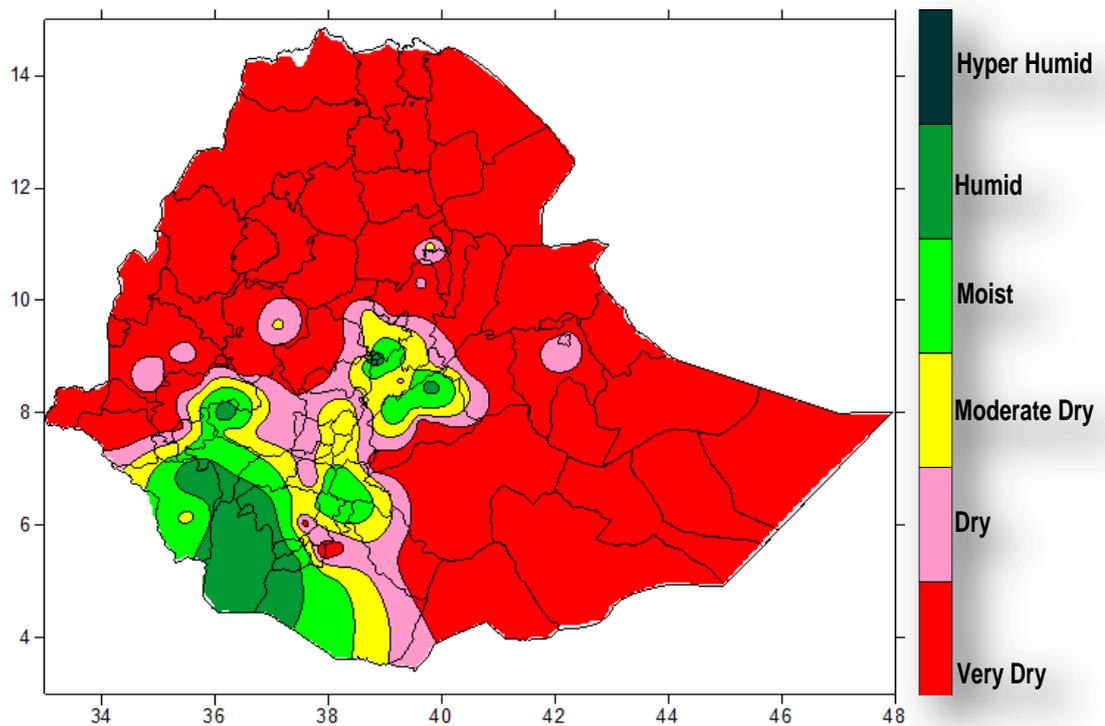


Figure.3. Moisture Status (21– 29) February 2024

1.4. Rainfall amount on the month of February 2024

During the month of February 2024, most areas of the South, Southwestern, Central and Northeastern parts of the country were received above 200 mm of Rainfall. In line with this South Omo, Konso, Benchi Maji, Jimma, Keffa, Kanta zones were dominantly prevailed above 200 mm of rainfall. In addition to this Illubabur, Jimma, Keffa, Wolyta, Sidama, silte, Dawuro, Gammo Goffa, South Shawa, West Shawa, Guraghe, Hadiya and some Belg Benefiting areas were dominantly prevailed 100-200 mm of rainfall. In addition to this most parts of South and North Wollo, North Shawa and East Gojam, Bahirdar, Awi and the neighboring Zones were received 50-100 mm of rain fall. However, the rest parts of the southern, southeastern, Eastern, Northern and western parts of the countries experienced 0-25 mm of rainfall.

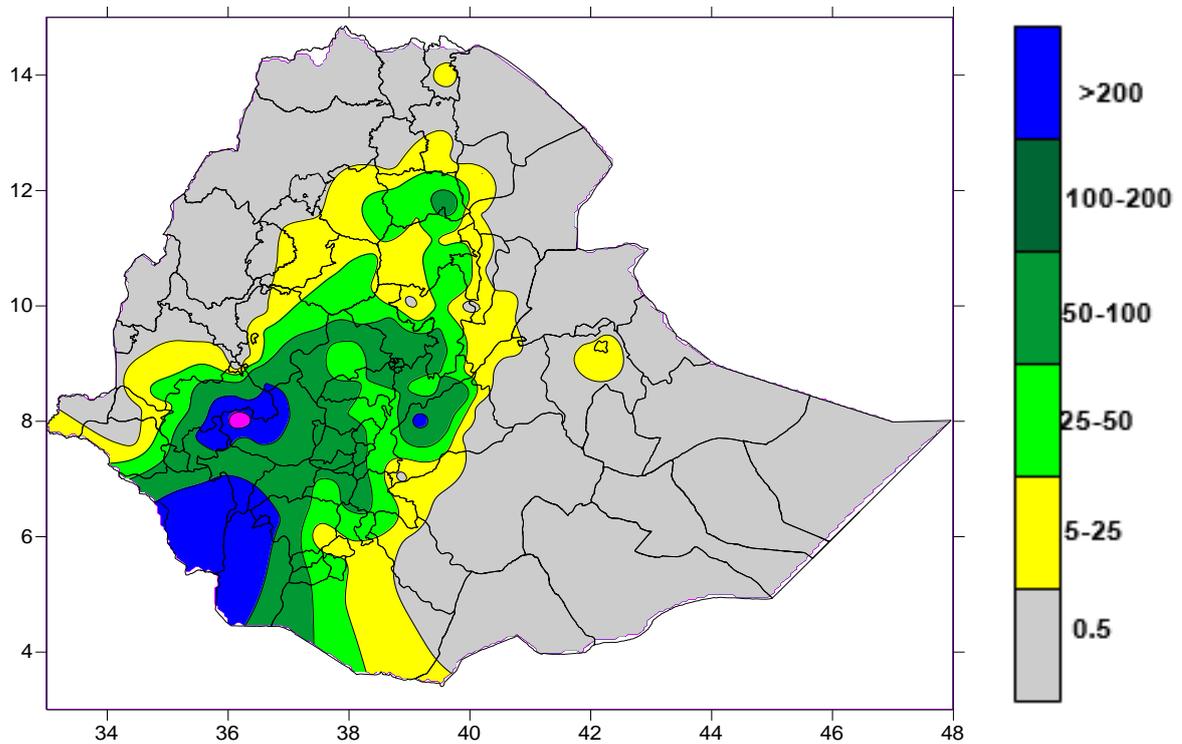


Fig. 4 Rainfall amount in mm for the month of February 2024

1.5. Rainfall Anomaly on the month of February 2024

During the month of February 2024, most of Belg growing areas including western and south western Belg rain benefiting parts experienced Normal to Above Normal rainfall. The rest parts of the countries receive Below Normal too Much Below Normal.

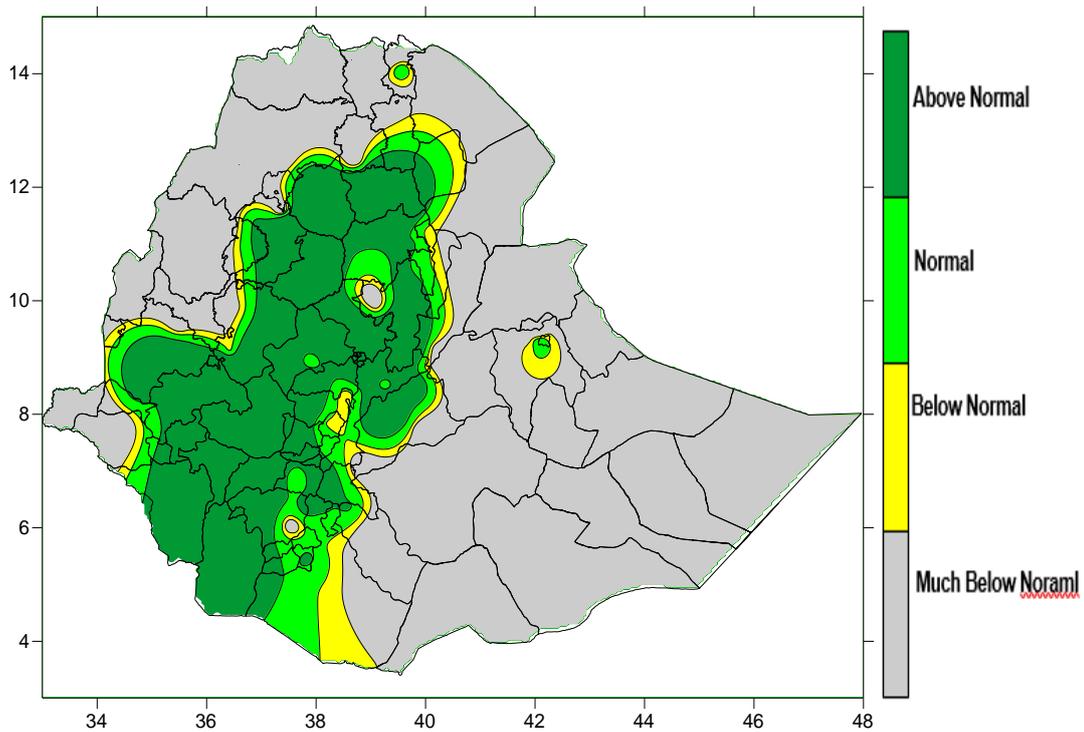


Fig. 5 Percent of Normal Rainfall for the month of February 2024

Explanatory notes for the Legend

- < 50-Much below normal
- 50-75%-Below normal
- 75-125%- Normal
- > 125% - Above normal

1.6. Moisture status on the month of February 2024

As indicated on the moisture status map below in the month of February 2024, the moisture condition over most of Belg growing areas including western and south western Belg rain benefiting parts experienced moist to hyper humid moisture. The rest parts of the countries receive moderately dry to very dry Moisture condition.

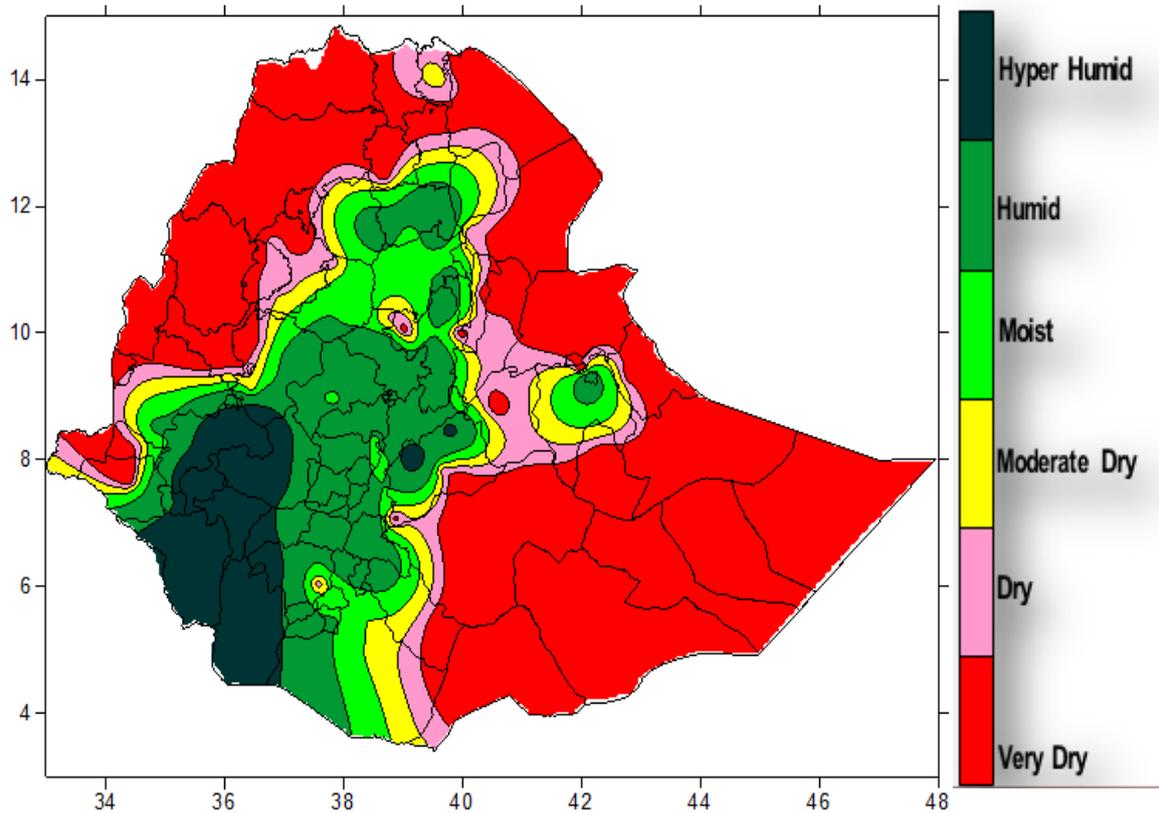


Fig. 6 moisture status for the month of February 2024

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE

During the Month of February 2024, Vegetation conditions are slightly increasing from the South to Central and Northeastern and Southwestern parts of the country improved the vegetation coverage dekad by dekad. Therefore, the improvement of the vegetation will benefit the Agro pastoral and pastoral areas of the country.

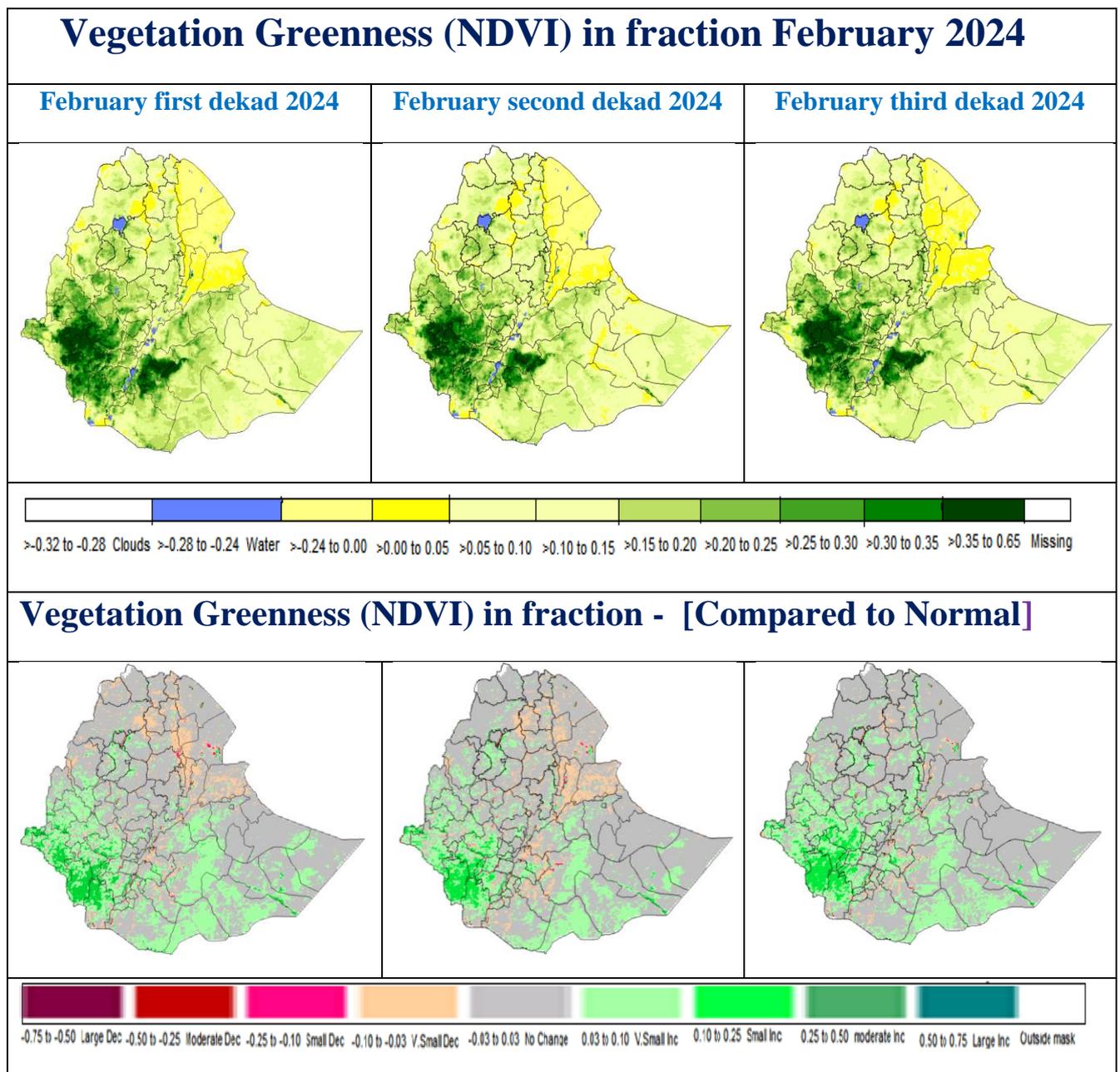


Fig. 7 Vegetation Greenness (NDVI) in fraction and Compared to Normal February 2024

2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING MONTH OF MARCH, 2024

Normally in the Month of March Belg rain systems strength most part of Belg growing and rain benefiting areas received the seasonal rainfall and in relation to this most farmers are widely involved in land preparation and sowing of Belg crops.

According to the weather forecast indicated in the coming month of March 2024, rain bearing weather systems likely to be strengthening over Belg rain benefiting and growing areas will have high chance of getting better moisture during the coming month of March. This situation would have expected to be favorable to perform land preparation and sowing of various Belg season crops over Belg crop growing areas. Moreover, the expected enhanced moisture may also favor to satisfy the daily water need of perennial plants and the expected to extend moisture after the mid of the month ensure the availability of pasture and drinking water over the south and south-eastern pastoral and agro pastoral communities that indicated in the moisture expected areas. However, as it was indicated in the weather outlook, few places across the country are likely to experience erratic moisture. Thus, farmers are advised to make their own plan for collecting and storing of rain water particularly for moisture stress areas so that they may utilize it at the time of dry days on the coming month.

1. 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 south eastern 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 north-eastern 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.

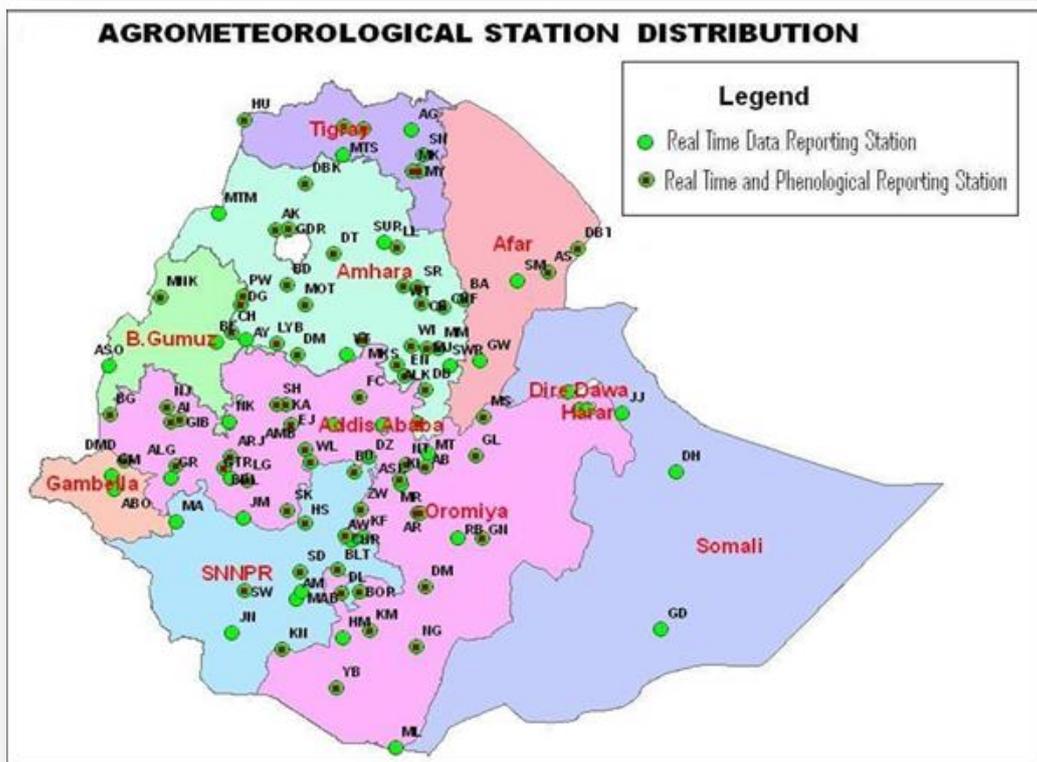
DEKAD: - First or second ten days or the remaining days of a month.

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

ITCZ:- Inter-tropical 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 south-eastern lowlands of the country.

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



Station	Code	Station	Code	Station	Code	Station	Code
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
AlemKetema	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	SG
Assosa	ASO	Filtu	FL	M/Abaya	MAB	Gebeya	SG
Awassa	AW	Gambela	GM	Maichew	MY	Sirinka	SR
Aykel	AK	Gelemso	GL	Majete	MJ	Sodo	SD
B. Dar	BD	Ginir	GN	Masha	MA	WegelTena	WT
Bati	BA	Gode	GD	Masha	MA	Woliso	WL
Bedelle	BDL	Gonder	GDR	Mekele	MK	Woreilu	WI
BUI	BU	Gore	GR	Merraro	MR	Yabello	YB
Combolcha	CB	H/Mariam	HM	Metehara	MT	Ziway	ZW
D. Berehan	DB	H/Mariam	HM	Metema	MTM		
D. Habour	DH	Harer	HR	Mieso	MS		
D. Markos	DM	Holleta	HL	Moyale	ML		
		Hossaina	HS	M/Selam	MSL		