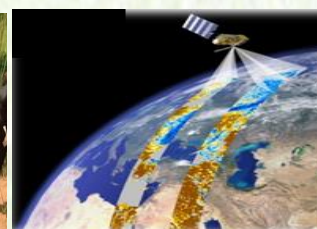


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FORE WARD

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

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Addis Ababa

አህፅሮት
እ.ኤ.አ ኦክቶበር 2024

ባሳለፍነው የኦክቶበር 2024 በደቡብ፣ በሰሜን ምዕራብ፣ በምዕራብ፣ በመካከለኛው፣ በሰሜን ምሥራቅና በምሥራቅ የሀገሪቱ አካባቢዎች ላይ የተገኘው በመጠንም ሆነ በስርጭት የተስፋፋ ዝናብ የአፈር ውስጥ እርጥበትን ከማሻሻል ጋር ተያይዞ ቀደም ሲል ተዘርተው በተለያዩ የእድገት ደረጃና ፍሬ በመሙላት ላይ ለሚኙት እንደ ማሽላና በቆሎ ላሉት የረጅም ጊዜ ሰብሎች፣ ፍሬ በማፍራትና በማበብ ላይ ለሆኑት የመካከለኛና የአጭር ጊዜ ሰብሎች፣ ለቋሚ ተክሎች፣ ለፍራፍሬዎችና ለጓሮ አትክልቶች የውሃ ፍላጎታቸውን ከማሟላት አንጻር ከፍተኛ ጠቀሜታ ነበረው። በተለይም በጋ ሁለተኛ የዝናብ ወቅታቸው በሆኑት በደቡብ የሀገሪቱ ክፍሎች ላይ የተገኘው እርጥበት ጥምር ግብርና ለሚያከናውኑ የበደቡብ ኦሮሚያ አካባቢዎች የማሳ ዝግጅት ለማከናወንም ሆነ ዘር ለመዝራት ምቹ ሁኔታ የፈጠረ ነበረ። እንዲሁም በደቡብ እና በደቡብ ምስራቅ ቆላማው አካባቢ ለሚኖሩ አርብቶ አደሮችና ከፊል አርብቶ አደሮች በቂ የግጦሽ ሣርና የመጠጥ ውሃ አቅርቦት እንዲኖር ከማስቻል አንጻር አዎንታዊ ሚና ነበረው።

ባሳለፍነው የኦክቶበር 2024 ሁለተኛው አስር ቀናት የእርጥበት ሁኔታ በሰሜን ምዕራብ፣ በምዕራብ፣ በመካከለኛው፣ በሰሜን ምሥራቅና በምሥራቅ የሀገሪቱ ክፍሎች ላይ በመጠንም ሆነ በስርጭት የተስፋፋ እርጥበት እንደነበራቸው ከተለያዩ የሀገሪቱ ክፍሎች ላይ የተሰበሰቡ የግብርና ሚቲዎሮሎጂ መረጃዎች ያመለክታሉ። ይህም ሁኔታ በተለያዩ ምክንያት ዘግይተው ለተዘሩና እድገታቸውን ላላጠናቀቁ እንዲሁም ተጨማሪ እርጥበት ለሚያስፈልጋቸው የመኸር ጊዜ ሰብሎች፣ ለቋሚ ተክሎች፣ ለፍራፍሬዎችና ለጓሮ አትክልቶች የውሃ ፍላጎታቸውን ከማሟላት አንጻር ከፍተኛ ጠቀሜታ ነበረው። በአንጻሩ በዚህ ወቅት በመደበኛ ሁኔታ ዝናብ የሚያገኙት የደቡብ ኦሮሚያ፣ የደቡብ ኢትዮጵያ፣ የደቡብ ምዕራብ ኢትዮጵያና የሲዳማ አካባቢዎች ከቀላል እስከ መካከለኛ መጠን ያለው እርጥበት ያገኙ ቢሆንም የደቡብ ሶማሌ አካባቢ ግን በጥቂት ቦታ አነስተኛ መጠን ያለው እርጥበት ተመዝግቧል ይህም ሁኔታ በተለይም በደጋማው አካባቢ የማሳ ዝግጅት ለማድረግና ዘር ለመዝራት ምቹ ሁኔታ የፈጠረ ሲሆን በአርብቶ አደሩ አካባቢ ለግጦሽ ሳርና ለመጠጥ ውሃ አቅርቦት መሻሻልና የዝናብ ውሃን ለመሰብሰብና ለማከማችት ገንቢ ሚና ነበረው።

ባሳለፍነው የኦክቶበር 2024 የሶስተኛው አስራ አንድ ቀናት በጋ ሁለተኛ የዝናብ ወቅታቸው በሆነው በደቡብና ደቡብ ምስራቅ የሀገሪቱ ክፍሎች ላይ የተገኘው እርጥበት በቦረናና በጉጂ ዞኖች ለተዘሩ መጠነኛ የበጋ ሰብሎች ምቹ ሁኔታ የፈጠረ ሲሆን፤ በአርብቶ አደሩ አካባቢ ለግጦሽ ሳርና ለመጠጥ ውሃ አቅርቦት መሻሻልና የዝናብ ውሃን ለመሰብሰብና ለማከማችት ገንቢ ሚና ነበረው። በአንጻሩም ከክረምት ጀምሮ ዝናብ እያገኘ በነበሩት በደቡብ ምዕራብ አጋማሽ የመኸር አብቃይ አካባቢዎች የተገኘው እርጥበት ቀደም ብለው ለተዘሩና ፍሬ በማፍራት ላይ ለሚገኙ፤ ዘግይተው ተዘርተው በተለያዩ እድገት ደረጃ ላይ ላሉ ሰብሎች፤ ለቋሚ ተክሎች፤ ለፍርፍሬዎች እንዲሁም በአረንጓዴ አሻራ መርሃ ግብር ለተተከሉ የተለያዩ የዛፍ ችግኞች የተሟላ እድገት እንዲኖራቸው ከማድረግ አንፃር አዎንታዊ ሚና ነበረው። እንዲሁም በተለይም በዚህ ወቅት በመደበኛ ሁኔታ ደረቃማ የአየር ሁኔታ የሚስተዋልባቸው የሰሜን፤ የሰሜን ምስራቅ፤ የመካከለኛው እና የምስራቅ የሀገሪቱ አካባቢዎች አልፎ አልፎ የነበረው ወቅቱን ያልጠበቀ ዝናብ በተለይም በደረሱ እና በመሰብሰብ ላይ በሚገኙ እንደ ሰሊጥ፤ ጤፍ እና ስንዴ በመሳሰሉ ሰብሎች ላይ አሉታዊ ተፅእኖ ነበረው። በአንፃሩ በአንጻንድ የሀገሪቱ አካባቢዎች ላይ ከነበረው ከባድና ተከታታይነት ካለው እርጥበት ጋር ተያይዞ በተለይም በወላይታ ዞን በካዋ ኮይሻ ወረዳ በተከሰተው የመሬት መንሸራተት በሰው ህይወትና በንብረት ላይ ጉዳት አድርጓል።

ባጠቃላይ ባሳለፍነው የኦክቶበር ወር የነበረው የእርጥበት ሁኔታ በጋ ሁለተኛ የዝናብ ወቅታቸው በሆኑት በደቡብና በደቡብ ምስራቅ የሀገራችን አካባቢዎች በተለይም በቦረናና ጉጂ ዞኖች ለሚካሄደው መጠነኛ የሰብል ልማት የማሳ ዝግጅት ለማድረግና ዘር ለመዝራት ምቹ ሁኔታ የፈጠረ ሲሆን፤ በደቡብ ምዕራብና በምዕራብ አጋማሽ በሚገኙ የሀገራችን አካባቢዎች ተጨማሪ እርጥበት ለሚያስፈልጋቸውና ፍሬ በመሙላት ላይ ለሚገኙ የመኸር ጊዜ ሰብሎች የውሃ ፍላጎታቸውን ከማሟላት አንጻር ከፍተኛ ጠቀሜታ ነበረው። በተጨማሪም በዚህ ወቅት የተገኘው እርጥበት በተለይም ለአርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች የግጦሽ ሳርና የመጠጥ ውሃ አቅርቦትን ከማሻሻል አንጻር ከፍተኛ ጠቀሜታ ነበረው።

በሌላ በኩል በሰሜን፤ በሰሜን ምዕራብ፤ በሰሜን ምስራቅ፤ በምስራቅና በመካከለኛው የሀገሪቱ ክፍሎች ላይ የነበረው እርጥበት ዘግይተው ተዘርተው እድገታቸውን ላልጨረሱና ከመስከረም ወር መጀመሪያ ጀምሮ በአፈር ውስጥ በሚገኝ እርጥበት ለተዘሩ እንደ ሽንብራና ንያ ላሉ የጥራጥሬ ሰብሎች፤ ለቋሚ ተክሎች፤ ለጓሮ አትክልቶችና ለፍራፍሬዎች እንዲሁም በአረንጓዴ አሻራ ለተተከሉ ተክሎች የውሃ

ፍላጎታቸውን ከማሟላት አንጻር አዎንታዊ ጎን ነበረው፡፡ በአንጻሩ ግን በተለይም በሰሜን፣ በሰሜን ምዕራብ፣ በሰሜን ምስራቅና በምስራቅ እንዲሁም በአንዳንድ የመካከለኛው የሀገራችን አካባቢዎች የነበረው ወቅቱን ያልጠበቀ ዝናብ በመኸር ሰብል ስብሰባና ድህረ ሰብል ስብሰባ ላይ በመጠኑም ቢሆን አሉታዊ ተጽዕኖ ነበረው፡፡

SUMMARY

OCTOBER 2024

During the first dekad of October 2024, the widespread rains in the South, North West, West, Central, North East and East regions of the country, in terms of amount and distribution, along with improving soil moisture, have resulted in long-term crops such as sorghum and maize, which were found at different stages of growth and fruiting, producing fruits and It was of great importance in terms of improving their water needs for the flowering stage of medium and short term crops, perennial plants, fruits and vegetables. In particular, the moisture extended in the southern parts of the country, which are in their second rainy season in Bega, created a favourable condition for the southern Oromia areas, which practice combination agricultural practices, to land preparation and to sow seeds. It also played a positive impact in enabling pastoralists and semi-pastoralists over in the south and southeast lowlands to have enough pasture and drinking water. On the other hand the observed continuous and heavy fall from 30-84.6 mm in 24 hours over some parts of the country experience excess soil moisture this might lead to water logging and runoff.

During the second dekad of October 2024, the analysed agro meteorological information's indicated that the enhanced moisture condition was observed over the western and south-western parts of the country. This situation was believed to be favourable for various Meher season crops which were under different phenological phases and lately planted and currently found at various growing stages which requiring additional moisture for their further development. Moreover the expanded moisture over southern half of the country might have positive impacts for the southern and few parts of south-eastern pastorals and agro-pastorals areas where Bega is the second rain season. The enhanced dry situation over northern half of the country was favarable for harvest and post-harvest activities of fully matured Meher season crops.

During the third dekad of October 2024, the analyzed agro meteorological information's indicated that the moisture condition was enhanced over the southern and south-eastern Bega rain benefiting areas. The received moisture during the dekad could play very crucial role to perform different agricultural activities like fulfilling the water need of various Meher crops and perennial plants. Additionally, the condition had positive impact for improving the availability of pasture and drinking water and significantly important to regenerate natural and artificial ponds over both the pastoral and agro pastoral community.

On the other hand the observed heavy fall over southern and south-western parts of the country had a good opportunity to collect rain water harvesting. Moreover the receiving moisture over western half of the country might have favourable for various Meher season crops which were under different phenological phases and lately planted and currently found at various growing stages which requiring additional moisture for their further development, perennial plants, fruits and vegetables as well as it would have significant contribution for the production of pulse crops (chickpea) which planted at the end of the season (September) with residual moisture. On the other hand, the observed unseasonal rainfall in the northern, north-eastern, central and eastern parts of the country might have a negative impact for harvest and post-harvest activities of crops and areas that had received heavy and continuous rainfall might experience landslides over some parts of the country. In particular, field report indicates that there has been death and property damage due to landslide over Wolita zone Kawa koish Woreda.

Generally during the month of October 2024 under review, according to the analyzed agro meteorological information, particularly in the third dekad of the month better moisture prevail over southern and south-eastern parts of the country. The observed enhanced moisture had positive implication for planting and required the daily water needs of Bega season crops particularly Borena and Guji highlands and also the observed improved moisture might be positive implication for pasture and drinking water and significantly important to regenerate natural and artificial ponds over both the southern and south-eastern pastoral and agro pastoral community where Bega is the second rain season. On the other hand the observed better rainfall over southern and south-eastern parts of the country had a good opportunity to collect rain water harvesting. Moreover the observed rainfall over western half of the country had been favour the existing Meher crops, which were under different phenological phases and lately planted and currently found at various growing stages which requiring additional moisture for their further development, perennial plants, fruits and vegetables as well as it would have significant contribution for the production of pulse crops which planted at the end of the season with residual moisture. On the other hand, the observed unseasonal rainfall in the northern, north-western, north-eastern, eastern and central parts of the country might have a negative impact for harvest and post-harvest activities of crops and areas that had received heavy and continuous rainfall might experience landslides over some parts of the country. In particular, field report indicates that there has been death and property damage due to landslide over Wolita zone Kawa koish Woreda.

1. WEATHER ASSESSMENT

1.1. Rainfall amount (21 – 31) October 2024

During October third dekad the rain fall distribution was On Western and Eastern Tigray North Gonder, Bahir Dar Metkel,Kamashi, East Wellega, Illibabur, Jimma,West Shewa,Gambella Zone 2,Sheka, Goneder, Keffa, Dawero,Bench Maji, Basketo,Alaba, Woliyta, Hadiya,Gamo Gofa, Gedo, Guji, Sidama, Bale,Half of Liben,Afder.Gode.Fik,East and West Hararghe Zones are received 50-200mm rain fall. Waghimera, South Tigray, South Wello, Oromi Zone, Afar Zone 4, Addis Ababa Zone, West Shewa,Arsi, Jijiga ,Degahabur Korahe and Wrdar Zones are received 5-50mm rain fall. The rest part of the country was received 0-5 mm rain fall.

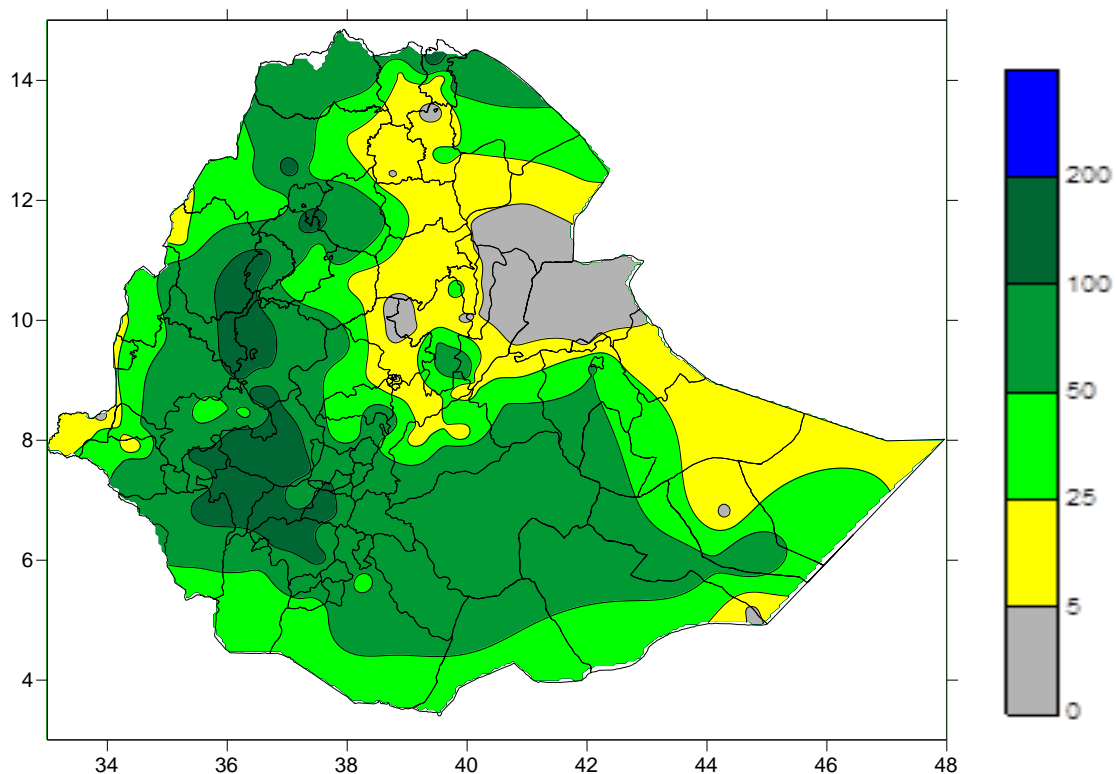


Fig 1. Rainfall distribution in mm (21 – 31) October 2024

1.2. Rainfall Anomaly (21 – 31 October 2024)

During third Dekad of october perecent of normal distrbition was most part of the country Northern, North Western, North Eastern, Western, Central Southern, and South Western areas of the country was exhibited normal to above Normal rain fall. The rest part of the country Eastern ans South Estern areas exhibited Below Normal Rain fall.

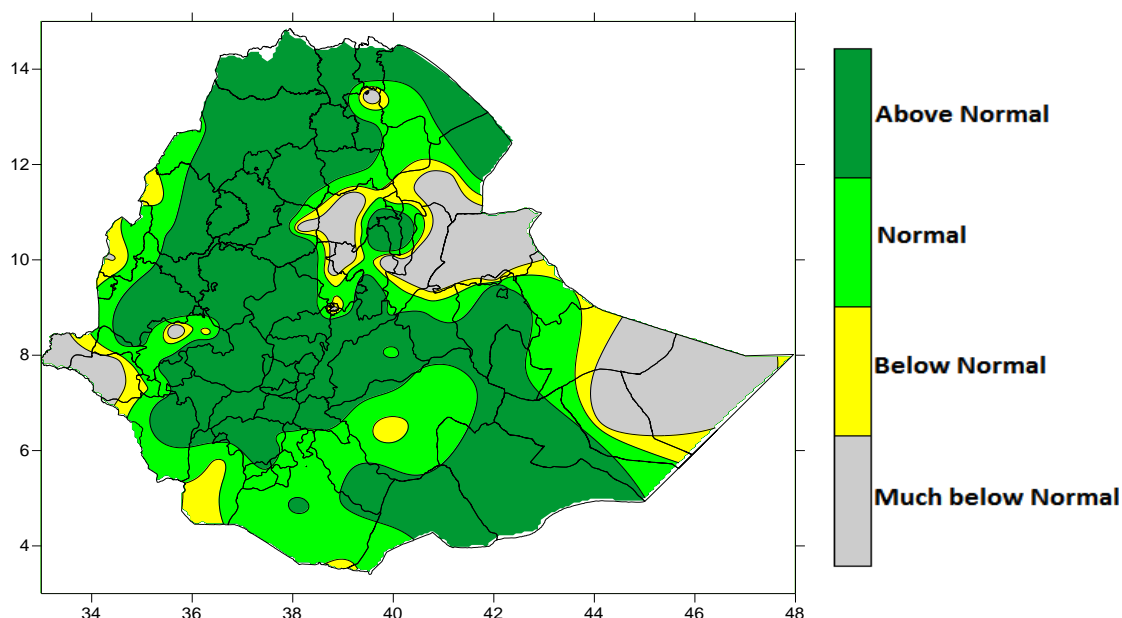


Fig. 2 Percent of normal rainfall distribution (21 – 31 October 2024)

Explanatory notes for the Legend

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

1.1. Moisture status (21 – 31 October 2024)

Except most parts of Afar, some parts of eastern Amhara and south Somali exhibited moderately dry to very dry moisture status. The rest parts of the countries exhibited hyper humid to moist moisture condition

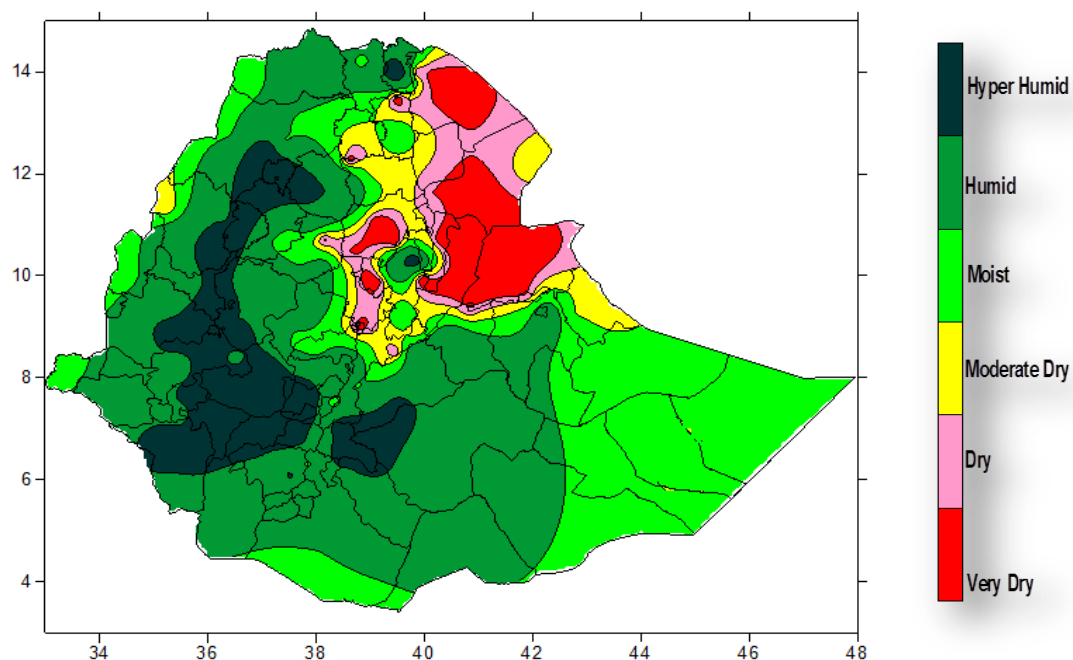


Fig. 3 Moisture Status (21-31 October 2024)

1.1. Rainfall amount on the month of October 2024

During the month of October 2023, the rainfall distribution Tip areas of North Gonder and West Welega, pocket areas of Illibabur Jimma, Keffa and Dawero, Basketo, South Omo, Konso, Gedo, half of Bale, Liben and Afder Zones are received $\geq 200\text{mm}$ rain fall. Metkel, Bahir Dar, Assosa, Kamashi, Tango, West and East Wellega, Illibabur, Gambella Zone 1,2&3, Godere, Sheka, Jimma, Keffa, Dawero, Bench Maji, Basketo, South Omo, Dirasho, Gedo, Amaro, Borena, Guji, Liben, Afder Zones are received 100-200mm rain fall. North and South Gonder, East Gojam, East Wellega, West and South West Shewa, Gurage, Alaba, Hadiya, Arsi, West and East Hararghe, Fik, Degahabur, Gode, Korahe, Wardar Zones are 50-100mm rain fall. West, Centera, and South Tigray, Waghamera, South Wello, pocket areas of Zone 3,4&5, pocket areas of Shinile and Jijiga Zones are received 25-50mm rain fall. The rest part of the country was received 0-5mm rain fall

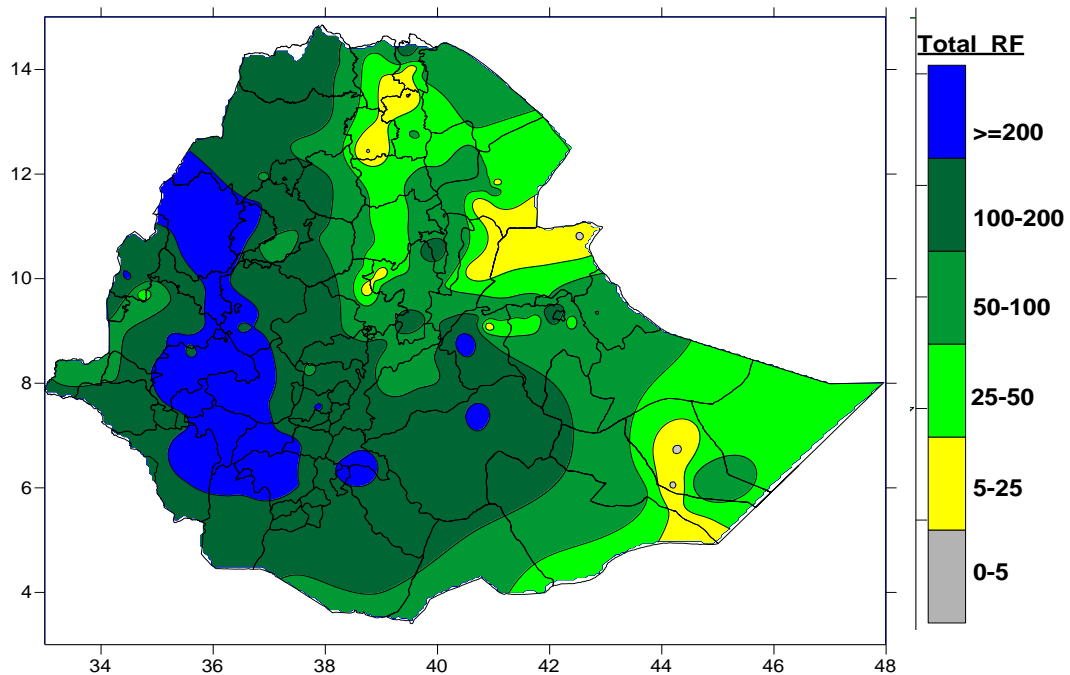


Fig. 4 Rainfall amount in mm for the month of October 2024

1.1. Rainfall Anomaly on the month of October 2024

During the month of October 2024 the percent of normal rain fall was most part of the country exhibited Normal to Above Normal rain fall except south eastern and some areas of Eastern part of the country.

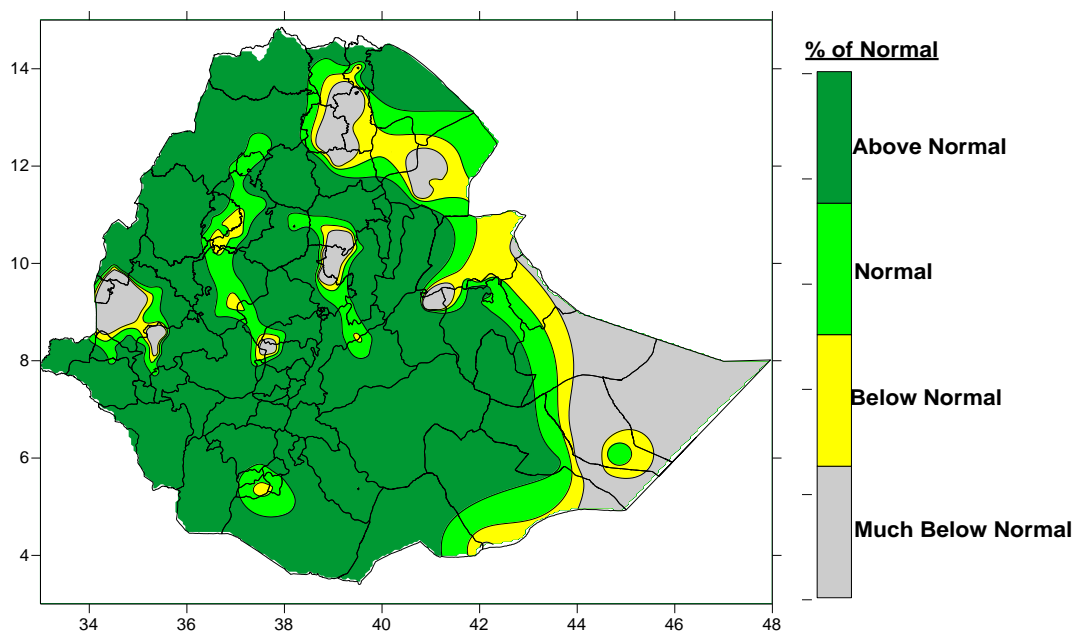


Fig. 5 Percent of Normal Rainfall for the month of October 2024

Explanatory notes for the Legend

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

1.1. Moisture status on the month of October 2024

In accordance with the moisture status map below, except most parts of Afar, some parts of eastern Amhara and south Somali exhibited moderately dry to very dry. The rest parts of the countries exhibited hyper humid to moist moisture condition

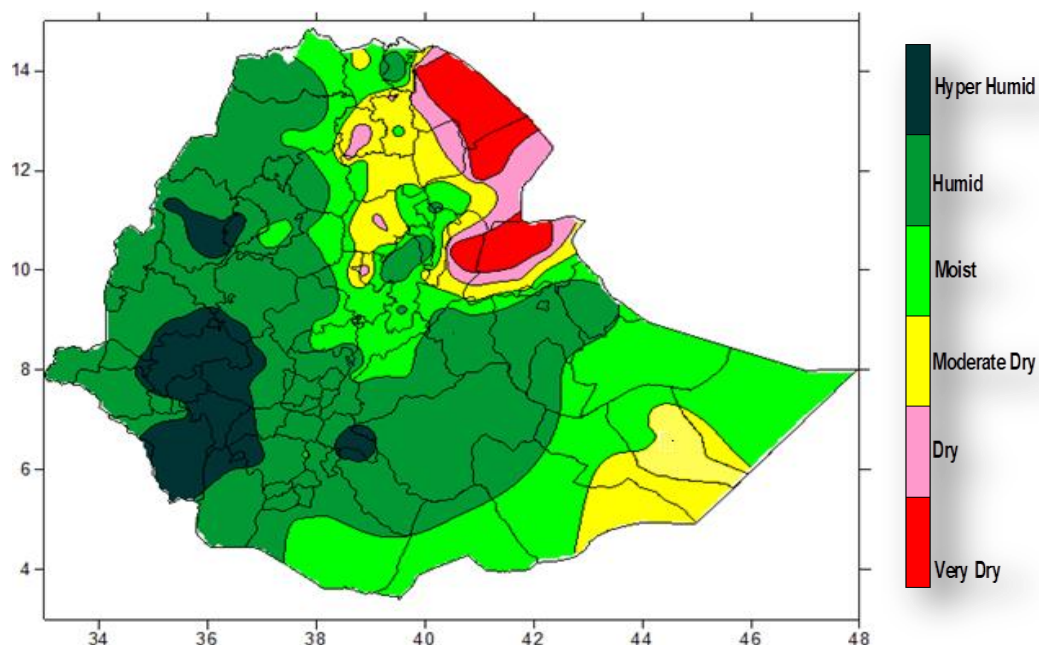


Fig. 6 moisture status for the month of October 2024

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE ON THE MONTH OF OCTOBER 2024

During the month of October 2024, Due to dekad by dekad increasing of the enhanced moisture the NDVI Fig.7 (green plant coverage) and RLWRSI over southern and south-eastern region during the month could play very crucial role to perform different agricultural activities and the condition had positive impact for improving the availability of pasture and drinking water over both the pastoral and agro pastoral community.

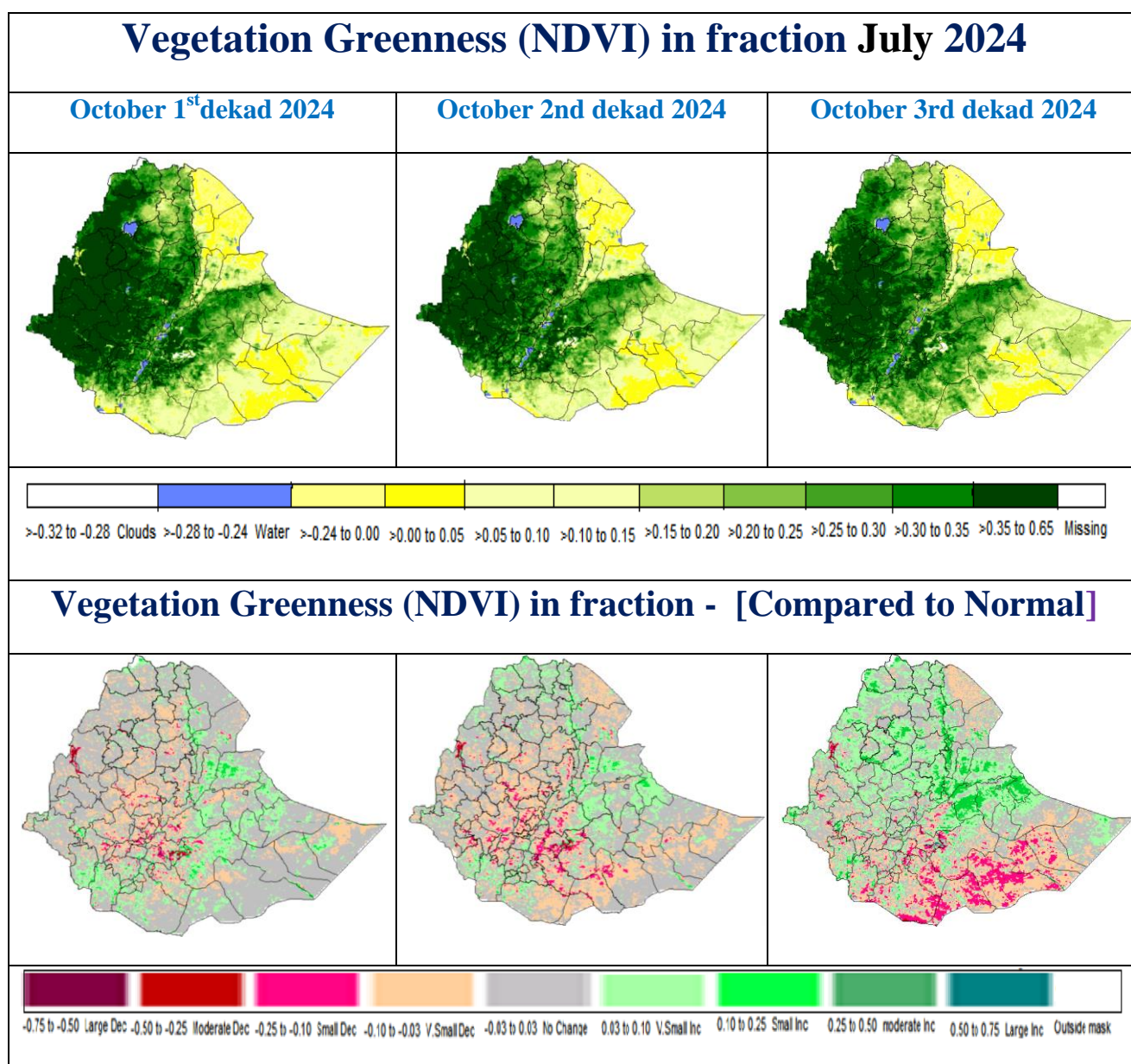


Fig.7 Vegetation Greenness (NDVI) in fraction and Compared to Normal October 2024.

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

In normal condition, during the month of November most part of the country is subjected to harvest and post-harvest activities of Meher crops in line with the prevailing dry moisture condition over most of Mehere crop growing areas and fully matured crops are widely performed in most Meher season growing areas, while some of the south-western, southern and south eastern part of the country receives some amount of rainfall.

In the coming month of November, over south-western, south and south-eastern parts of the country are likely to receive substantial amount of rainfall that can favour to satisfy the water needs of Bega crops which are planted over Borena and Guji highlands and ensure the availability of pasture and drinking water to improve animals feeds and fodder as well as will have a good opportunity to collect and store rainwater. Moreover, the enhanced moisture over western half, central, eastern and north-eastern Meher producing areas of the country might have positive contribution to satisfy the daily water need of some crops which are yet requiring additional moisture. Besides, it will have significant contribution for the production of pulse crops which planted at the end of the season with residual moisture that need complete growth, perennial plants, fruits and vegetables and the water need of trees which planted in the green legacy program as well as to improve the availability of pasture and drinking water particularly over the south-western portion of the country. On the other hand, the expected occasional unseasonal rain may disrupt the on-going harvest and post-harvest activities over the places, including central, eastern and north-eastern parts of the country where crops like Sesame, Teff, Barly, Oat and Wheat as well as early planted long cycle crops such as Maize and Sorghum. Thus, harvest and post-harvest activities should be undertaken on time in order to avoid unnecessary harvest and post-harvest loses.

3. 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 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 covers 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.

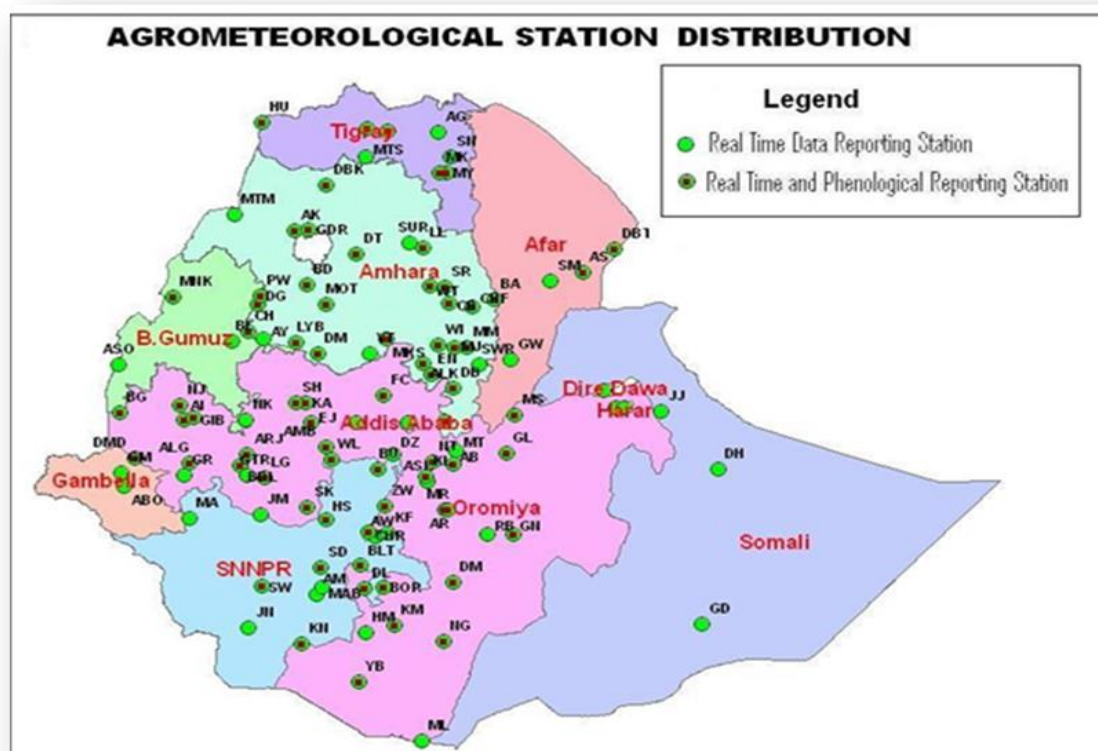
DEKAD: - First or second ten days or the remaining days of a month.

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	SR
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	Mekele	MK	Woliso	WL
Bedelle	BDL	Gonder	GDR	Merraro	MR	Woreilu	WI
BUI	BU	Gore	GR	Metehara	MT	Yabello	YB
Combolcha	CB	H/Mariam	HM	Metema	MTM	Ziway	ZW
D. Berehan	DB	Harer	HR	Mieso	MS		
D. Habour	DH	Holleta	HL	Moyale	ML		
D. Markos	DM	Hossaina	HS	M/Selam	MSL		