# ETHIOPIA METEOROLOGY INSTITUTE Agrometeorological Bulletin

## MONTHLY AGROMETEOROLOGICAL BULLETIN

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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.

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#### አህፅሮት

#### እ.ኤ.አ ፌብርዋሪ 2025

ባሳለፍናቸው የፌብሪዋሪ የመጀመሪያዎቹ አስር ቀናት በአብዛኛው የሀገሪቱ ክፍሎች ላይ ደረቃማ የእርጥበት ሁኔታ አመዝኖ እንደነበረ የተተነተኑ የግብርና ሜቲዎሮሎጂ መረጃዎች ያመለክታሉ። ይህም የነበረው ደረቃማ የእርጥበት ሁኔታ በተለይም በዚህ ወቅት የበልግ ወቅት የማሳ ዝግጅት ለሚጀምሩ አካባቢዎች በመጠኑም ቢሆን አሉታዊ ተፅዕኖ ነበረው። ነገር ግን በመጨረሻዎቹ ቀናቶች በጥቂት የደቡብ፣ የመካከለኛው እና የምራብ ኪስ ቦታዎች ላይ መጠነኛ እርጥበት የነበራቸው ሲሆን ይህም የተገኘው መጠነኛ እርጥበት የአፈር ውስጥ እርጥበትን በጥቂቱ ከማሻሻል አንጻር አዎንታዊ ሚና ነበረው።

ባሳለፍናቸው የፌብሪዋሪ የሁለተኛው አስር ቀናት በምእራብ፣ በመካከለኛው እና በሰሜን ምስራቅ በብዙ ቦታዎቻቸው ላይ እርጥበት እንደነበራቸው የተሰበሰቡ የእርሻ ሚቲዎሮሎጂ መረጃዎች ያመሳክታሉ። ይህም የተገኘው እርጥበት በተለይም የበልግ አብቃይ በሆኑት አካባቢዎች የማሳ ዝግጅት ለማድርግ እና አስቀድመው የበልግ ወቅት የእርሻ እንቅስቃሴ ለሚያካሂዱ አካባቢዎች ዘር ለመዝራት ምቹ ሁኔታን የፌጠረ ነበር።

የፌብርዋሪ የሶስተኛዉ ስምንት ቀናት ከጥቂት የደቡብ ምዕራብ እና የሰሜን ምዕራብ ኪስ ቦታዎች በስተቀር አብዛኛዎቹ የሀገሪቱ ክፍሎች በደረቅ የእርጥበት ሁኔታ ስር እንደነበሩ የተሰበሰቡና የተተነተት የግብርና ሜቲዎሮሎጂ መረጃዎች ያመላክታሉ። በጥቂት ኪስ ቦታዎች ላይ የተገኘው እርጥበት በአካባቢው ለሚበቅሉ ለቋሚ ተክሎች አዎንታዊ ሚና ነበረው። በአንጻሩ ግን በአብዛኛው የተስተዋለው ደረቅ የአየር ሁኔታ ለበልግ የግብርና ስራ እንቅስቃሴም ሆነ ለቋሚ ስብሎችና ለፍራፍሬ ተክሎች የውኃ ፍላጎት መሟላት እንዲሁም ለግጦሽ ሳርና ለመጠጥ ውኃ አቅርቦት አሉታዊ ተጽዕኖ ነበረው።

በአጠቃላይ ባሳለፍነው የፌብርዋሪ ወር በተለይም የመጀመሪያዎቹ አስር ቀናት ደረቃማው የእርጥበት ሁኔታ በአብዛኛው የሀገሪቱ ክፍሎች ላይ አመዝኖ የተስተዋለ ነበር። ይህም የነበረው ፀሐያማና ሞቃታማ የአየር ሁኔታ ከነበረው የእርጥበት እጥረት ጋር ተዳምሮ በልግ ተጠቃሚ በሆኑት አካባቢዎች ላይ የግብርና ሥራ እንቅስቃሴ ላይ አሉታዊ ተፅዕኖ ነበረዉ። ነገር ግን በሁለተኛው አስር ቀናት እና በሶስተኛዉ ስምንት ቀናቶች በሰሜን ምስራቅ፣ በደቡብ ምዕራብ፣ በመካከለኛው እና በሰሜን ምዕራብ የአገሪቱ ጥቂት ቦታዎች ሳይ የአፈር ዉስጥ እርጥበት በመጠኑ እንደተሻሻለ የተተነተኑ የግብርና ሜቲዎሮሎጂ መረጃዎች ያመሳክታሉ። ይህም የተገኘው እርጥበት በተለይም የበልግ አብቃይ በሆኑት አካባቢዎች የማሳ ዝግጅት ለማድርግ ምቹ ሁኔታን የፈጠረ ቢሆንም በተከታታይ የነበሩት ደረቅ ሰሞናት በተፈለገው ደረጃ የእርሻ ስራ እንቅስቃሴን ለማከናወን ምቹ አልነበረም።

#### **SUMMARY**

#### **FEBRUARY 2025**

During the first dekad of February 2025, According to the Agro-meteorology information collected from different part of the country dry weather condition has observed across many parts. This situation might favour areas where post-harvest agricultural activities are not fully completed. However, after the first half of the dekad the moisture condition was experienced over some areas of southern, central and western parts of the country experiencing better moisture. This condition could be taken as crucial toward the enhancement of soil moisture and creating conductive condition for land preparation of Belg crops.

During the second dekad of February 2025, Agricultural meteorological data collected indicate that there was moisture in many areas of the West, Central, and Northeast. This moisture created favourable conditions for field preparation, especially in the Belg-growing areas, and for sowing seeds in areas that are already engaged in Belg agricultural activities. On the other hand the condition was importance the water need of perennial plants, pasture and the availability of drinking water for the pastoral and agro pastoral community.

During the third eight-day period of February, soil moisture was observed in the northeastern, southwestern, and northwestern parts of the country. This moisture was particularly beneficial for land preparation and sowing in the Belg-growing areas, as well as for meeting the water needs of permanent crops and fruit plants, and for the greening of pastures for pastoralists and semi-pastoralists. In the remaining areas, dry, sunny weather prevailed, which had a slight negative effect on the water needs of permanent crops, fruit plants, and the supply of pastures and drinking water.

During the month of February 2025, according to the analyzed agro-meteorological information, dry weather conditions prevailed in most parts of the country, especially during the first ten days. This combined with the lack of moisture in areas that had benefited from the rainy season, had a slightly negative impact on agricultural activities. However, data collected during the second and third ten-day periods indicate that soil moisture was present in some areas of the country, including the northeast, southwest, central, and northwest regions. This moisture created favourable conditions for field preparation, particularly in areas prone to the rainy season, as well as for sowing seeds in areas already engaged in

rainy-season agricultural activities. Additionally, it had a positive effect on permanent crops, providing water for fruit, pasture, and drinking needs.

#### 1. WEATHER ASSESSMENT

#### 1.1 Rainfall amount (21 – 28) February 2025

During Febuary third dekad the rain fall distribution was over pocket areas of Bahirdar, Illubabur, East wellega and East Gojam received 5-25 mm rainfall. Over pocket areas of Jimma received 25-50 mm rainfall. The rest part of the country was received 0-5 mm rain fall.

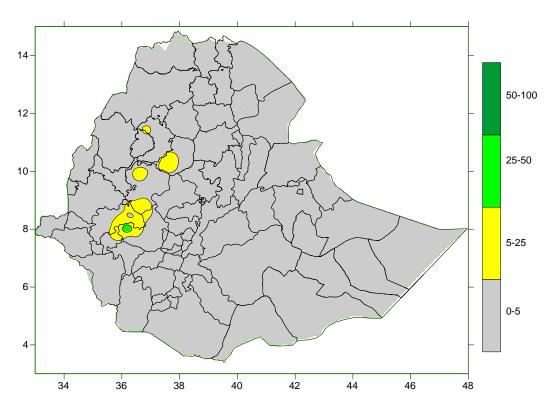


Figure 1. Rainfall distribution in mm (21 - 28) February 2025

#### 1.2 Rainfall Anomaly (21 – 28 February 2025)

During third Dekad of February perecent of normal distribition was over Assosa, Metekel, North Gonder, Afar zone 2, Bahirdar, Awi, West Gojam, Illubabur, Jimma and East Gojam exibited normal to above Normal rainfall.

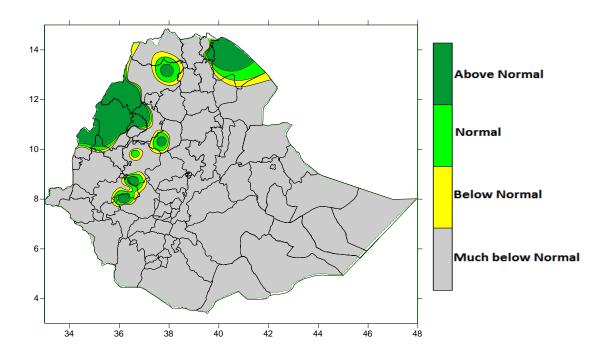


Fig. 2 Percent of normal rainfall distribution (21 – 28 February 2025)

#### **Explanatory notes for the Legend**

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

#### **1.3 Moisture status (21 – 28 February 2025)**

During the third dekad of February 2025, over pocket areas of Bahirdar, Illubabur, East wellega and East Gojam exhibited moderately dry to moist moisture conditions. The rest parts of the country experienced moderately dry to very dry moisture condition.

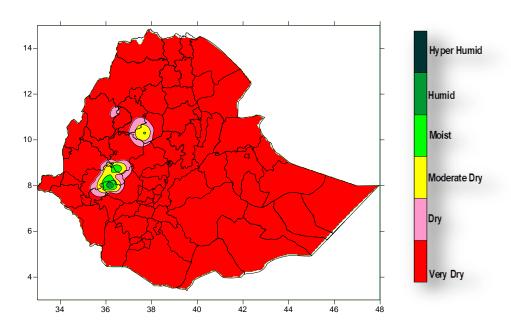
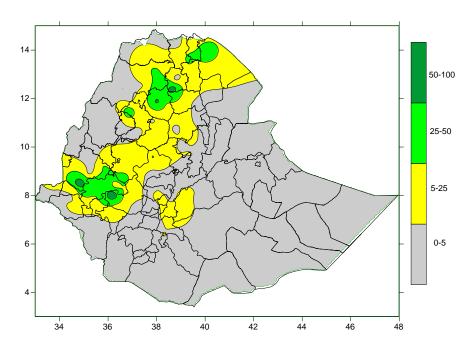


Fig. 3 Moisture Status (21-28 February 2025)

#### 1.4 Rainfall amount on the month of February 2025

During the month of February 2025, the rainfall distribution over Illubabur, Jimma, Bahirdar, South Gonder and East Tigray received 25-50 mm of rainfall. Over Selti, Arsi, Keffa, Godere, Sheka, Jimma, Gambela zone 1, West Wellega, Tongo, Kamashi, East Wellega, West Shewa, East and West Gojam, South and North Wollo, Waghimira, South Tigray, Central, Eastern and Western Tigray and Afar zone 2 & 4 zone received 5-25 mm rainfall. The rest part of the country was received 0-5 mm rainfall.



#### 1.5 Rainfall Anomaly on the month of February 2025

During the month of February 2025 the percent of normal rainfall distribution was over Gambela zone 1,2 & 3, Godere, Illubabor, Jimma, West and East Wellega, Tongo, Kamashi, North Shewa, West and East Gojam, Agew(Awi), Bahirdar, North & South Gonder, North Shewa, Waghimira, West, South, central & Eastern Tigray, Mekele, and Afar zone 2 exhibited Normal to Above Normal rainfall.

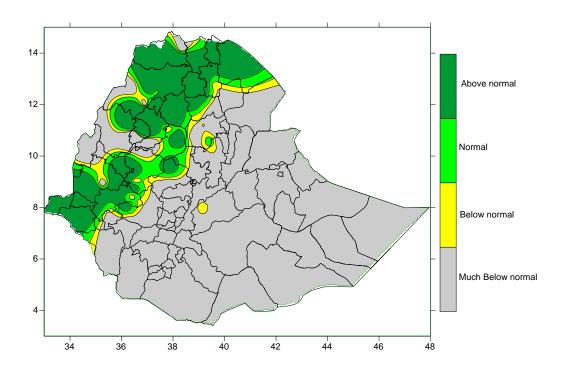


Fig. 5 Percent of Normal Rainfall for the month of February 2025

#### **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 2025

During the month of February 2025, Jimma exhibited moist conditions, while Illubabor and North Shewa experienced moderately dry conditions. The rest of the country experienced dry to very dry conditions.

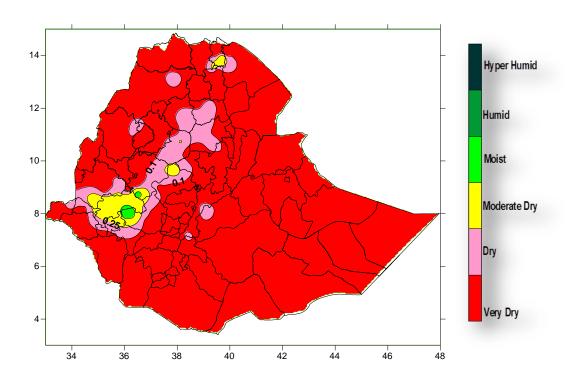


Fig. 6 moisture status for the month of February 2025

## 2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

# 2.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE ON THE MONTH OF FEBRUARY 2025

During the month of February 2025, vegetation conditions (NDVI, Fig. 7) slightly increased over the southern and southwestern parts of the country. Vegetation coverage improved dekad by dekad in the southwestern parts of the country. Therefore, the improvement in vegetation will benefit the agro-pastoral and pastoral areas of the country.

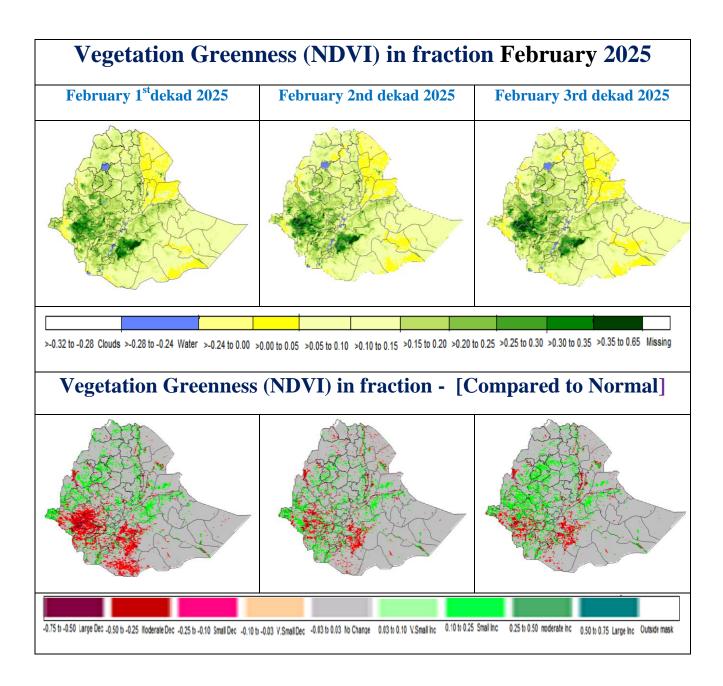


Fig.7 Vegetation Greenness (NDVI) in fraction and Compared to Normal February 2025.

## 2.1. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING MONTH OF MARCH 2025.

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.

In the coming month of March, the moderate rainfall expected in some of the country's Belg-growing areas will improve soil moisture, which will have a positive impact on preparing the fields for sowing crops starting in March, as well as sowing various Belg crops, improving the water supply for perennial plants, and enhancing the supply of pasture and drinking water. Farmers, pastoralists, and relevant stakeholders should make advance preparations to take advantage of these benefits and prepare the necessary seed inputs. However, considering the possible consecutive dry days associated with the changing nature of the Belg season, adequate preparations should be made for soil and water conservation efforts. On the other hand, since relatively dry weather conditions are expected to prevail after the middle of the month, it is important to collect and store rainwater in these areas for use during the dry seasons.

#### 3. <u>DEFNITION OF TERMS</u>

**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.

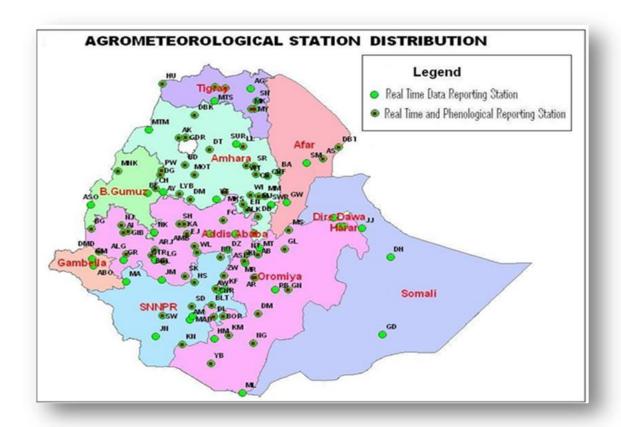
**DEKAD:** - First or second ten days or the remaining days of a month.

**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 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	WegelTena	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		
D. Markos	DM	Hossaina	HS	M/Selam	MSL		