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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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SUMMARY

During the third dekad of July, agricultural meteorology data collected and analyzed from different parts of the country indicated widespread moisture in areas benefiting from kiremt rains, supporting the growth of meher crops. This moisture was crucial in meeting the water needs of mid-term meher crops at various stages of development and long-cycle meher crops such as maize and sorghum, which were sown in April. Additionally, it significantly contributed to the growth of various perennial plants and garden vegetables. The available moisture was also important for late-sown short-duration crops such as oats. In pastoral and semi-pastoral areas benefiting from kiremt rains, the moisture positively impacted the supply of drinking water and pasture grass. However, heavy and continuous rains in various parts of the country led to floods and landslides, causing significant damage to human lives, animals, and crops. Notably, the Gofa zone in Geze Gofa woreda, the Middle Sidama zone in Wonsho woreda, Dessie city in the South Wollo zone, Gera woreda in the Jimma zone, and Kofele woreda experienced severe damage to people, animals, crops, and property due to these landslides.

During the first dekad of August 2024, over large areas of Kiremt rain benefiting as well as Meher crop growing areas were continuously receiving enhanced moisture within the range of Moist to Hyper humid condition. In line with this, Gambella, West and Central Oromia, Benshangul Gumuz, East and West Amhara, Tigray, Central region of Ethiopia, Sidama, Afar and Southwest Ethiopia region recorded moderate to heavy rainfall in many places. According to the weather report, many places across the country exhibited heavy fall in the range between (30.0 to 84.4mm) within 24hrs interval. This situation was of great importance for the water needs of long-term crops such as Maize and sorghum, for various permanent plants fruit and vegetables, as well as for short- and medium-term crops that are in different stages of growth. In addition, the moisture obtained had a positive role in terms of improving the supply of pasture and drinking water in pastoral and Agro-pastoral areas that benefited from kiremt rains. On the other hand, areas which have been receiving rainfall in continuous manner might experience floods, landslides, excess soil moisture which might lead to water logging and runoff. To find out from various field data that there has been damage to human life, property, animals and crops in connection with heavy and continuous rains in Kefa zone Telo woreda , Dredawa city Wahil woreda , Adwa woreda in Tigray

region, Mustahil woreda in Shebele zone, Khao Koishana and Kanda Kodesha woreda in Wolayita zone.

1. WEATHER ASSESSMENT

1.1. Rainfall amount (1 – 10 August 2024)

During the 1st dekad of August 2024, some parts of North Tigray and Afar, Souh and North Gonder, North and South Wollo, Oromia Special zones Bahirdar, Agew Awi, East and West Gojam, pocket areas of Metekel, some parts of illubabore, pocket areas of Jimma, and South and West Shewa Zones were dominantly received above 100 mm of rainfall. Most Kiremt rain benefiting areas were dominantly received 50-100 mm of rainfall. In addition to this pocket areas of Afar Zone 1 and 4 Jigjiga, Shinle, East Hararghe, Bale, Alaba, Arsi and Keffa, Zones were received 25-50 mm of rainfall. However, the rest parts of the country which does not get Meher rainfall (South and Southeast) parts of the country were received 0-25 mm of rainfall.

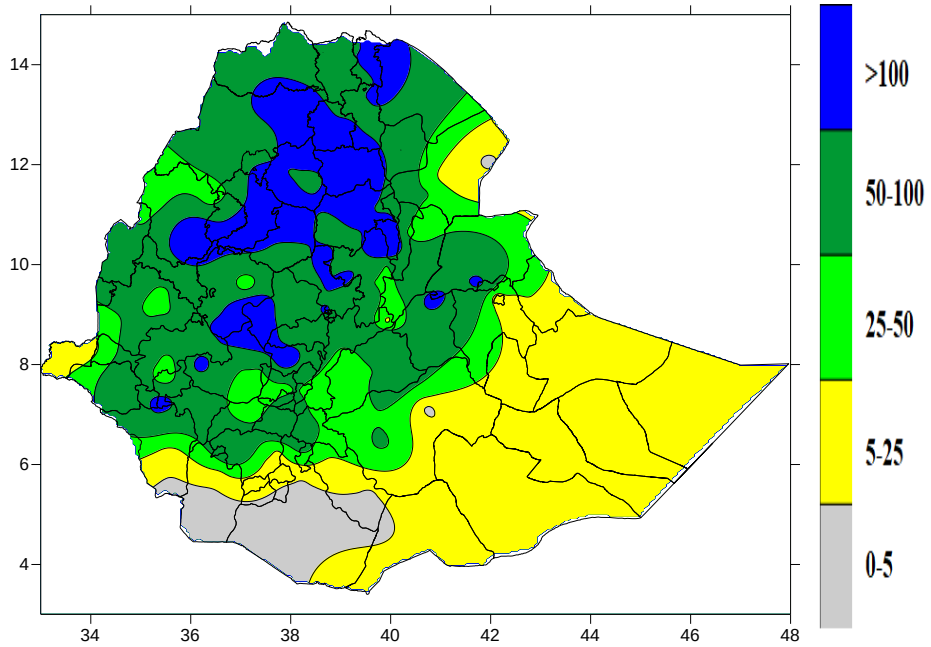


Fig 1. Rainfall distribution in mm (1 – 10) August 2024

1.2. Rainfall Anomaly (1 – 10 August, 2024)

During the First dekad of August 2024, most Kiremt rain benefiting areas of the country were exhibited Normal to Above Normal rainfall condition. On the other hand, pocket areas of Northwestern, Western and Easter rain benefiting areas of the country were experienced below Normal too Much below Normal rainfall condition.

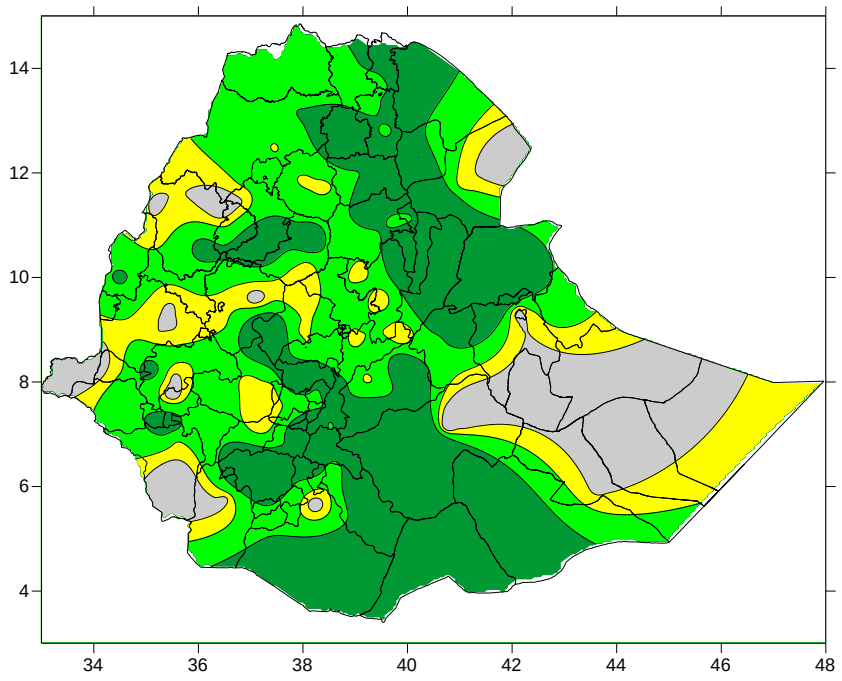


Fig.2 Percent of normal rainfall distribution (1 – 10 August, 2024)

Explanatory notes for the Legend

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

1.3. Moisture Condition (1 – 10 August 2024)

As indicated on the moisture status map below during first dekad of August 2024 most parts of Meher growing and Kiremt rain benefiting areas of the country exhibited Moist to Hyper Moist moisture condition. The rest parts of the countries exhibited moderately Dry too Very Dry.

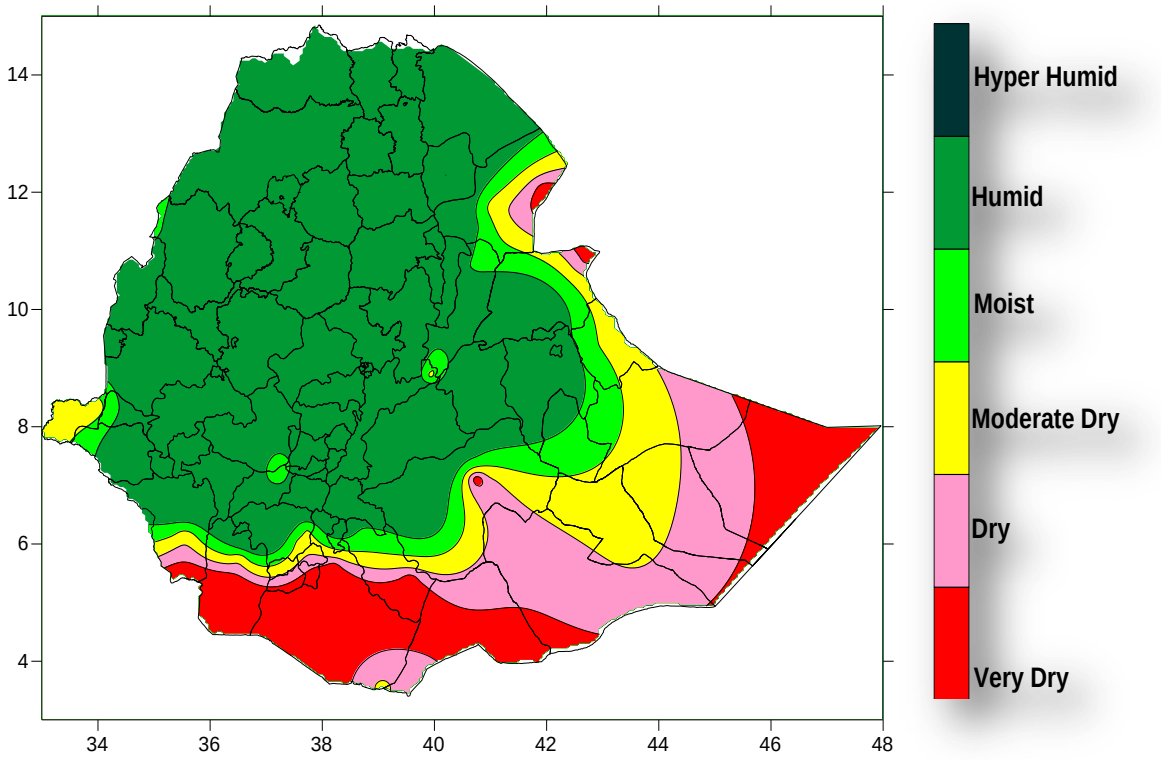


Fig. 3 moisture status for (1 – 10 August, 2024)

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE

During the First dekad of August 2024, due to the relative strengthening of rain bearing weather systems better moisture has been experienced over Meher producing and Kiremt rain benefiting areas of the country. According to this increment the vegetation condition across the country exhibited good vegetation condition (Fig.4. NDVI and Rangeland WRSI in %). This condition might have positive implication for the water need of Meher crops as well as perennial plants, availability of pastors and drinking water over pastoral and agro-pastoral areas.

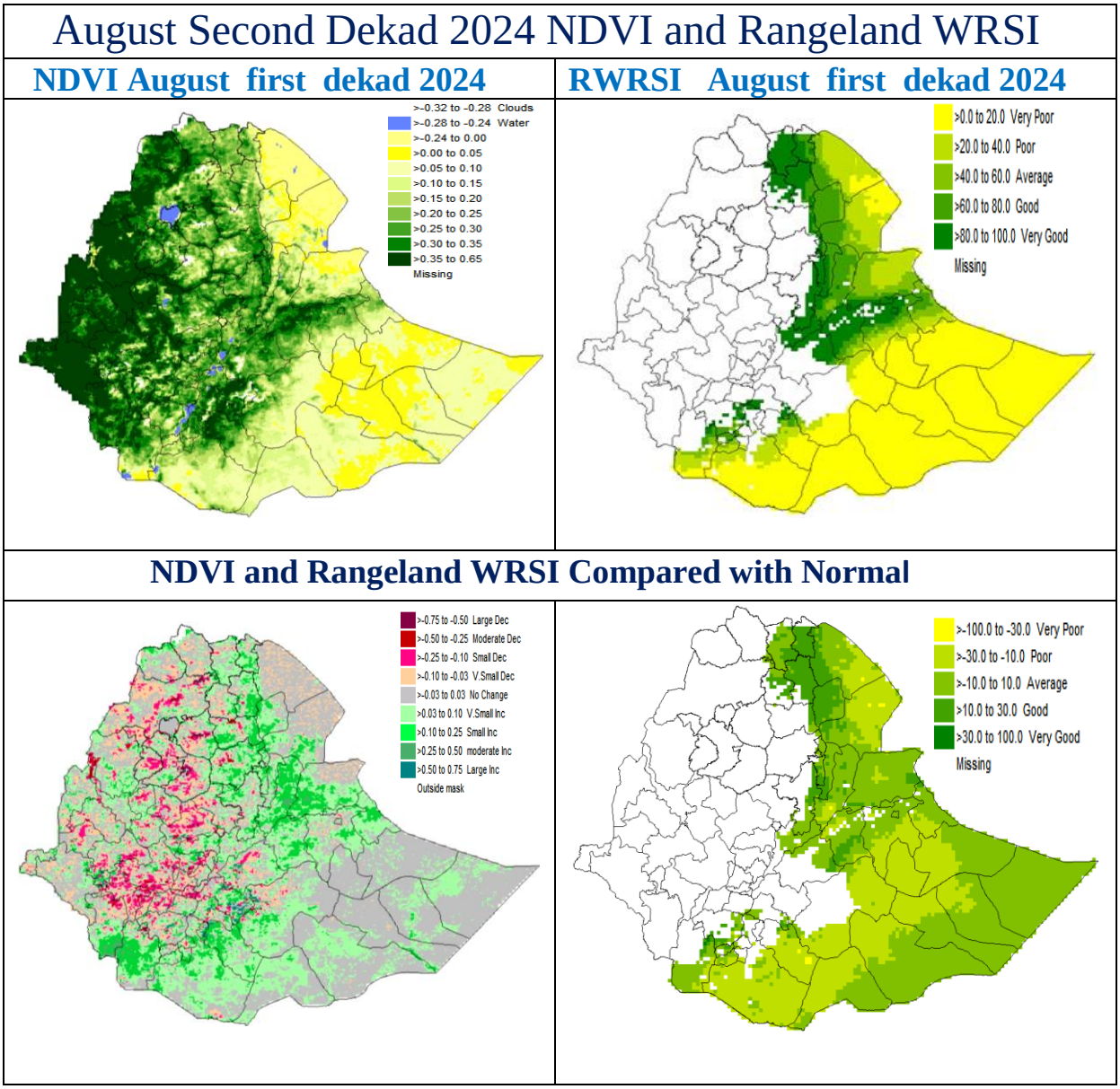


Fig.4. NDVI and Rangeland WRSI in % and Compared to Normal - August 1-10, 2024

2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING SECOND DEKAD OF AUGUST 2024

In the coming second dekad of August 2024, the meteorological forecasted information indicates that the seasonal rainfall activity is expected to continue over various Kiremt rain benefiting and Meher producing area of the country. The expected moisture over Kiremt rains benefiting areas will be important to the water needs of perennial plants, vegetables and fruits, the water requirement of the existing meher crops, which are at different phenological phases, as well as to improve the supply of pasture and drinking water over the pastoral and semi-pastoral areas in the east and northeast parts of the country.

On the other hand, the predicted forecast indicates that there will be expect heavy rain in the west, north-west, north, and north-east and central parts of the country occasionally causing flash floods in some places of flood prone areas. Thus it might lead to water logging and landslides in the sloping areas, and crop damage on crop fields found in low-lying areas and near riverbanks including in areas where the soil type is clay. It can also cause crop disease and weed growth conditions in humid areas. Therefore, the farmers and the concerned bodies should prepare flood reversal and drainage canals; work on drainage and prevention, so that crops are not washed away by floods. It is necessary to regularly monitor the crop fields, to spray the necessary inputs for crops with the help of agricultural experts, and to apply herbicides and pesticides according to the weather conditions, and also to keep the community away from areas that are prone to landslides.

3. DEFNITION OF TERMS

ABOVE NORMAL RAINFALL: - Rainfall in excess of 125% of the long termmean

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.

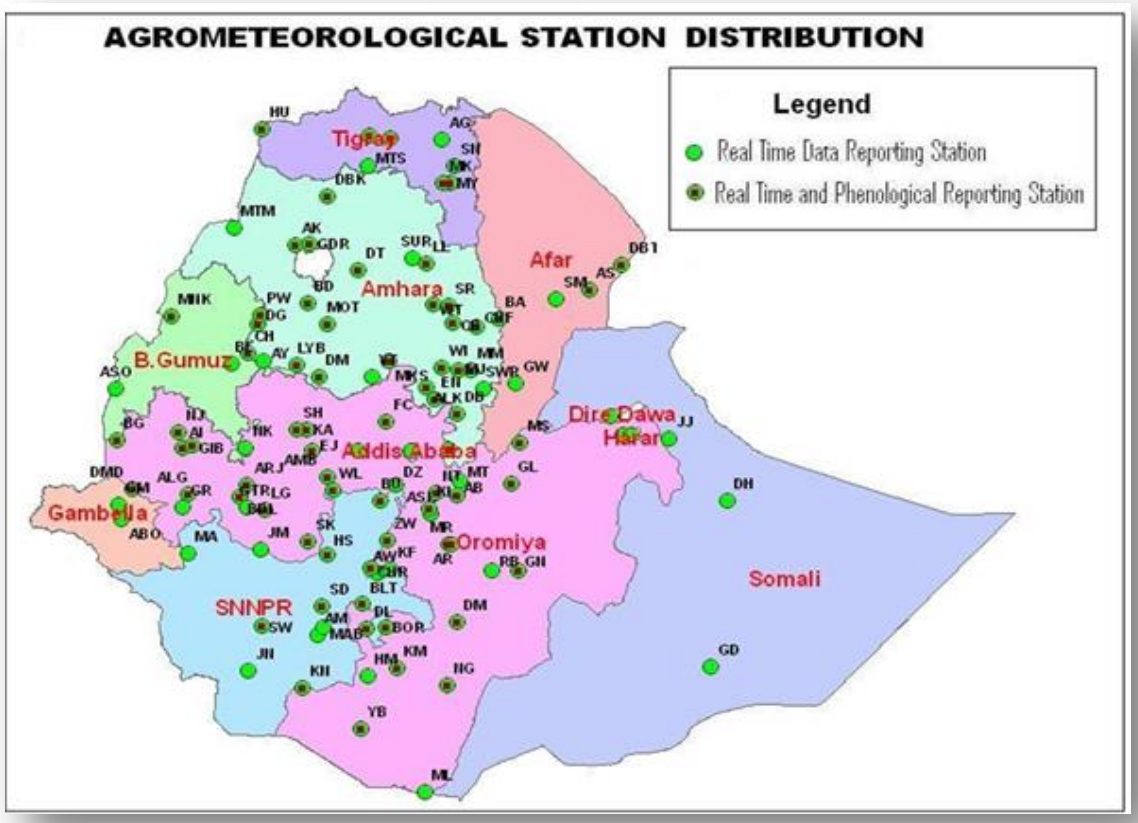
DEKAD: - First or second ten days or the remaining days of a month.

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		