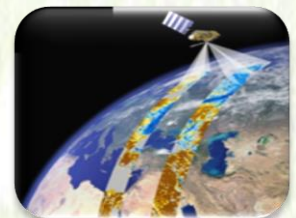


ETHIOPIA METEOROLOGY INSTITUTE

Agrometeorological Bulletin

TEN DAY AGROMETEOROLOGICAL BULLETIN

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FOREWARD

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.

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SUMMARY

During the third dekad of April 2023, According to the analyzed agro-meteorological information, most of Belg crop growing as well as Belg season rain benefiting areas comparing to the last dekads experienced enhanced moisture situation in amount and distribution. In relation with the enhanced moisture condition heavy rainfall 30mm and above during 24hrs period were reported at several agro-meteorological stations. This situation might have positive impact on moisture requirement of Belg crops found at various phases of growth and water need of perennial plants, the observed condition was positive to conduct land preparation and sowing of long cycle crops that could be performed during April, it could also gave good opportunity to perform rainwater harvesting and storing. Moreover the situation might have positive impact on the ongoing Belg agricultural activities normally moisture deficit areas and water harvesting where that can be used in time of deficit, the observed widespread moisture distribution could also have indispensable contribution on the availability of pasture and drinking water for pastoral areas. However, due to the pronounced widespread and intensified rainfall over some places of the aforementioned areas might result in crop damage, which were attaining at different phenological stages. On the other hand, daily extreme maximum temperature has shown a relative increase over western, south-western, northeast, southeast, southern margin areas recorded Temperatures above 35°C. This, coupled with the lack of moisture in the sunny and hot weather, had a negative impact on the general agricultural activity as well as the provision of animal feed and drinking water for over most of the rang land.

During the first Dekade of May, regions of the country that benefited from the Belg rains experienced extensive rainfall in terms of amount and distribution due to the conditions of rain-making meteorological events were relatively reinforced. According to this, the majority of the regions that benefit from Belg rains received light to moderate widespread rain over the course of ten days. This situation was crucial for the country's Belg-growing areas, which were sown, produced fruit, and for the continued growth of Belg crops that are at various stages of development. Furthermore, it improved the conditions for long-term agricultural seed farming, perennial crop water needs, and pasture and drinking water needs in pastoral and Agro-pastoral areas. On the other hand, while in certain locations the occasional heavy rains sometimes generated favorable conditions for most agricultural

activities, particularly for the efficient collection and storage of water, in other locations the resulting floods and landslides had a negative impact on life and agriculture.

1. WEATHER ASSESSMENT

1.1. Rainfall amount (1 – 10 May, 2023)

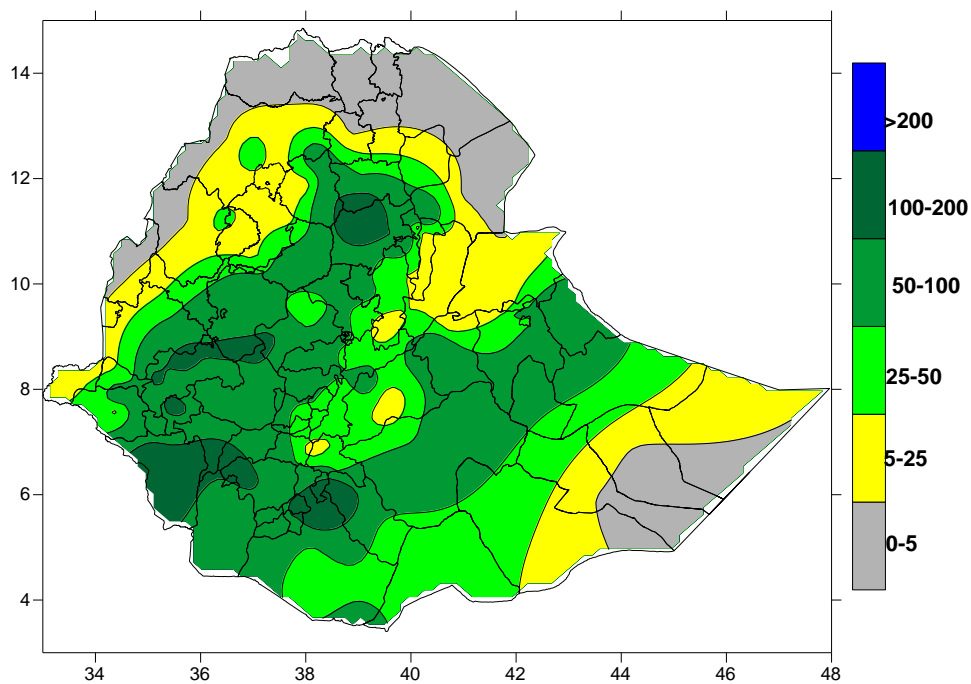


Figure 1. Rainfall distribution in mm (1– 10) May 2023

1.2. Rainfall Anomaly (1 – 10 May, 2023)

During First Dekad of May 2023 the rain fall anomaly was some areas of Northern, North Western and Eastern (West Tigray, pocket areas of Central and East Tigray, Half of North Gonder, Metkel and Assosa) FROM South Eastern Somali Region (Wardar, Korahe, Gode and Afer Zones are exhibited Much Below Normal to Below Normal Rain fall. Most of the rest part of the country was received Normal to Above Normal rain fall,

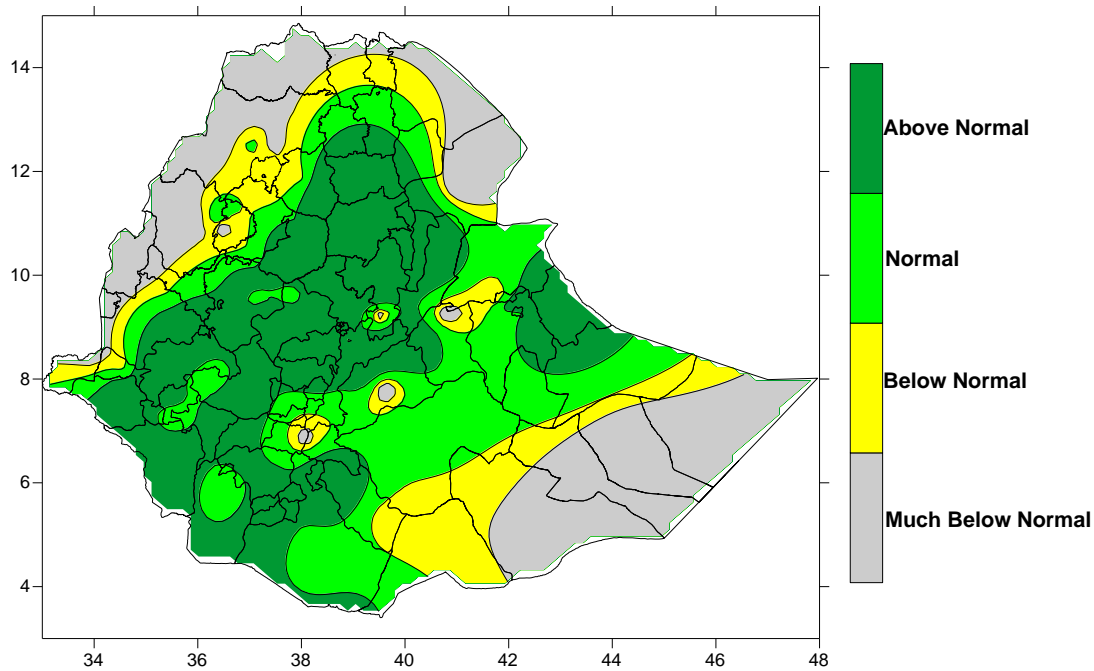


Figure 2: Percent of normal rainfall distribution (1-10 May 2023)

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 May 2023)

During the first Dekad of May 2023, the most parts of the countries North Eastern, Central, South Western, Southern parts of the country was experienced Humid to. the rest part of the country the moisture condition was dry to Very Dry condition

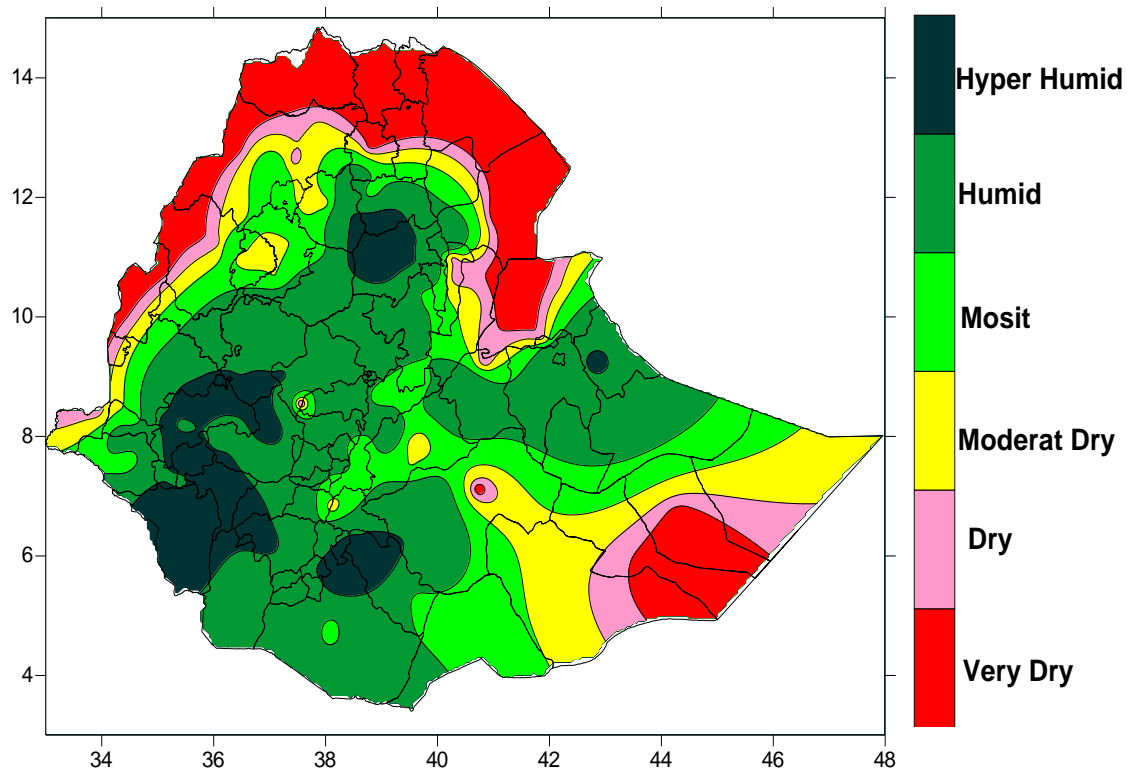


Figure.3. Moisture Status (1-10 May, 2023)

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. Vegetation Condition and Impact on Agriculture

Generally During the first dekad of May 2023, related to Moisture condition, the NDVI was Good in Most part of Belg, Growing areas of central South, South Western and South Eastern parts of the country. The Rang-land WRSI in these Dekade also good in Pastural and Agro-Pastural areas of the country

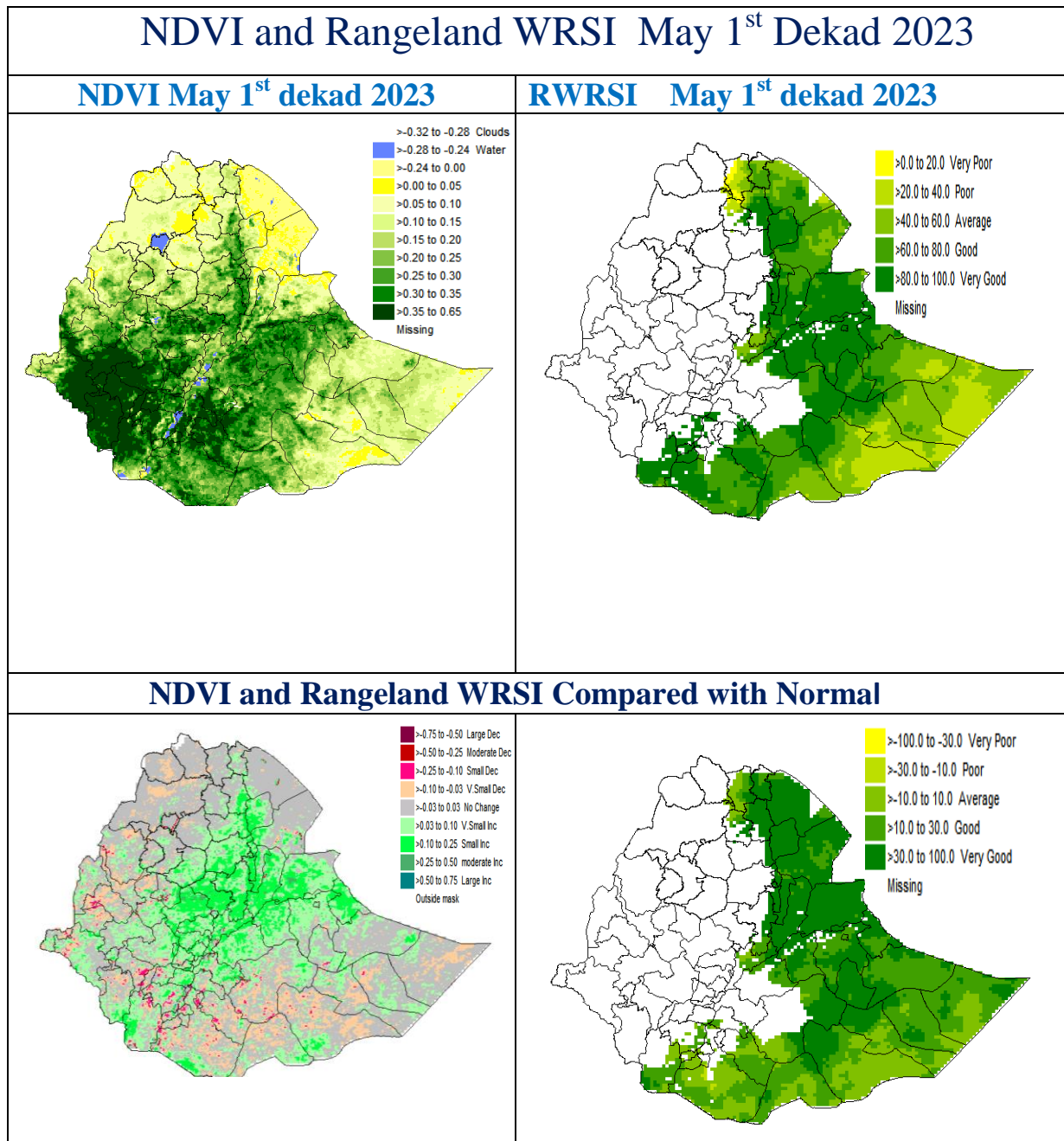


Fig.4. NDVI and Rangeland WRSI in % and Compared to Normal May 1-10, 2023

2.2. Expected Weather Impact on Agriculture during the Coming May 2nd Dekad, 2023

In Normal condition, the moisture situation of the second dekad of May decreases in the northern and eastern parts of the country, while it tends to continue in the southern areas and it is time for extended d in the western and northwestern parts of the country. Meteorological events that may contribute to the formation of rain in the second dekad of May will continue in the southern half and strengthen day to day in the western and northwestern parts of the country. In this situation, the moisture found in the areas mentioned in the above forecast will be great importance for the fulfillment of the water needs of Belg crops in different growth stages, for perennial plants and for the improvement of collecting and drinking water supply for the pastoral and Agro-pastoral areas. Moreover, the moisture is expected to spread over the western and northwestern areas of the country, especially in the long cycle crops growing areas. It is expected that time will create a good opportunity to land preparation and plant crops. On the other hand, heavy rain may have in a few places mentioned above, it will be possible to carry out water controlling activities in addition to preventing flash floods; the concerned personal are advised to make advance arrangements.

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.

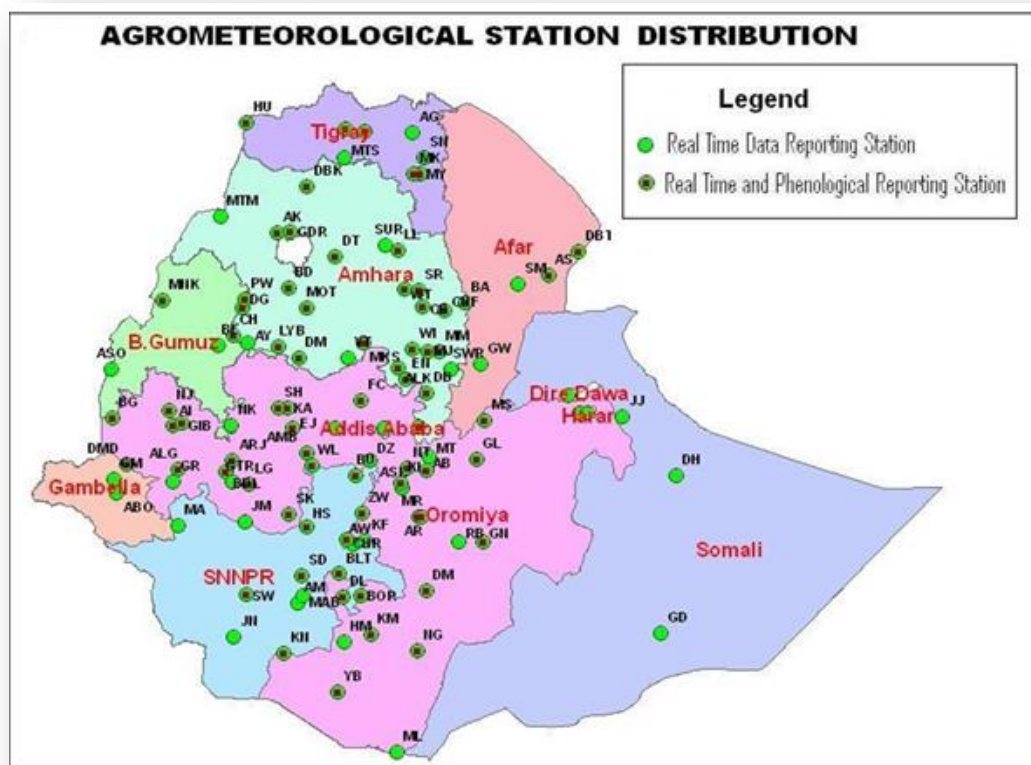
DEKAD: - First or second ten days or the remaining days of a month.

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	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	Harer	HR	Metema	MTM		
D. Harbour	DH	Holler	HL	Mieso	MS		
D. Markos	DM	Hossaina	HS	Moyale	ML		
				M/Selam	MSL		