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

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

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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
EMI
P.O.Box 1090
Tel: 011661-57-79
FAX 00251-11-6625292
E-mail nmsa@ethionet.et
Addis Ababa

አህፅሮት
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ባለፈው የጁን የመጀመሪያዉ አስር ቀናት ወደ ሀገራችን ይገባ የነበረዉ ዕርጥበት አዘል አየር በአብዛኛዎቹ ክረምት ተጠቃሚ የሀገሪቱ አካባቢዎች ላይ ተጠናክሮ የነበር ሲሆን በተለይም በምዕራብ አጋማሽ ላይ ይበልጥ ከመጠናከሩ ጋር በተያያዘ በአንዳንድ የምዕራብ አማራ እና በምዕራብ ኦሮሚያ አካባቢዎች ላይ ከባድ ዝናብ እንዲኖር ከፍተኛ ሚና ነበረዉ፡፡ ከዚህም ጋር ተያይዞ የነበረዉ ዝናብ የአፈር ውስጥ እርጥበትን ከማሻሻል አንፃር አስቀድመው የተዘሩና በተለያየ የዕድገት ደረጃ ላይ ለሚገኙ የበልግም ሆነ የረጅም ጊዜ የመኸር ሰብሎች ፤ለመኸር የእርሻ ስራ እንቅስቃሴ፣ ለማሳ ዝግጅት፣ ለዘር እንዲሁም ለተለያዩ የቋሚ ተክሎችና የጓሮ አትክልቶች የውሀ ፍላጎታቸውን ከማሟላት አንፃር ከፍተኛ ጠቀሜታ ነበረዉ፡፡ ከዚህ በተጨማሪ በምስራቅ የአርብቶ አደርና ከፊል የአርብቶ አደር አካባቢዎች የነበረው አንስተኛ የእርጥበት ሁኔታ ለግጦሽ ሳርና ለመጠጥ ውኃ አቅርቦት አዎንታዊ አስተዋፅየ ነበረው፡፡ እንዲሁም በአንዳንድ አካባቢዎች ላይ ከባድ ዝናብ በማግኘት ላይ በነበሩ ቦታዎች ላይ የአፈር ውስጥ እርጥበት መብዛት እና በአንዳንድ ቦታዎች ላይ ለወንዝ መሙላትና ለጎርፍ ተጋላጭ በሆኑ አካባቢዎች ላይ የጎርፍ መከሰት የነበረ ቢሆንም በግብርናዉ አንቅስቃሴ ላይ ያን ያህል ያደረሰዉ አሉታዊ ተፅዕኖ አልነበረም፡፡ በሌላ በኩል በበልግ አብቃይ አካባቢዎች የነበረዉ ደረቅ ሁኔታ የደረሱ የበልግ ሰብሎችን ለመሰብሰብ ጥሩ ጎን ነበረዉ ፡፡

ባለፈው የጁን የሁለተኛው አስር ቀናት በአብዛኛው የመኸር ሰብል አብቃይ በሆኑ አካባቢዎች ላይ የተመዘገበው የዝናብ መጠን የአፈር ውስጥ እርጥበትን ከማሻሻል አንፃር አዎንታዊ ሚና የነበረው ሲሆን አስቀድመው ለተዘሩና በተለያየ የዕድገት ደረጃ ላይ ለሚገኙ የበልግም ሆነ የረጅም ጊዜ የመኸር ሰብሎች እንዲሁም ለተለያዩ ቋሚ ተክሎችና የጓሮ አትክልቶች የውሀ ፍላጎታቸውን ከማሟላት አንፃር ጠቀሜታ ነበረው፡፡ በተጨማሪም በጁን ወር ለሚዘሩ የተለያዩ የመኸር ሰብሎች ለማሳ ዝግጅት ለማከናውንም ሆነ ዘር ለመዝራት በቂ የሆነ እርጥበት እንደነበራቸው የተተነተኑ የግብርና ሚቲዎሮሎጂ መረጃዎች ያመለክታሉ። በተጨማሪም የክረምት እርጥበት ተጠቃሚ በሆኑት በጥቂት በምስራቅ በሚገኙ የአርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች የተገኘው የእርጥበት ሁኔታ ለግጦሽ ሳርና ለመጠጥ ውኃ አቅርቦት አዎንታዊ አስተዋፅየ ነበረው፡፡ በሌላ በኩል ግን በጥቂት አካባቢዎች ላይ የታየው እጅግ በጣም ከፍተኛ የእርጥበት ሁኔታ የአፈር ውስጥ እርጥበት መብዛት ከማስከተል ጋር ተያይዞ በሰብሎች እድገትም ሆነ በእርሻ ስራ እንቅስቃሴ ላይ መጠነኛ አሉታዊ ተጸዕኖ ነበረው።

ባሳለፍነው የጁን ሶስተኛዉ አስር ቀናት በአብዛኛው የክረምት ዝናብ ተጠቃሚና የመኸር ሰብል አብቃይ አካባቢዎች ላይ ብዙ ቦታዎችን ያዳረሰ እርጥበት እንደነበራቸው የተሰበሰቡና የተተነተኑ የግብርና ሚቲዎሮሎጂ መረጃዎች ያመላክታሉ፡፡ ይህም የተገኘው እርጥበት ለመኸር የእርሻ ስራ እንቅስቃሴ አዎንታዊ ሚና የነበረው ሲሆን፤ አስቀድመው ለተዘሩም ሆነ በመዝራት ላይ ለነበሩ እንዲሁም በምዕራብና በደቡብ ምዕራብ የሀገሪቱ ክፍሎች ላይ ቀደም ብለው ለተዘሩ ለረጅም ጊዜ ሰብሎች የውሃ ፍላጎታቸውን ከማሟላት አንጻር አዎንታዊ ሚና ነበረው:: በተጨማሪም በምስራቃዊ የሀገሪቱ አካባቢዎች ለሚገኙ የአርብቶ አደሮችና ከፊል አርብቶ አደሮች የተገኘዉ እርጥበት ለሰው ሰራሽም ሆነ የተፈጥሮ ምንጮችን ከማጎልበቱም በላይ የተሻለ የመጠጥ ውሃና የግጦሽ ሳር አቅርቦት እንዲኖር አዎንታዊ ሚና ነበረው፡፡ በአንጻሩም በአንዳንድ አካባቢዎች ላይ የነበረው ከባድ የእርጥበት መጠን ባሳለፍናቸው ቀናት በተከታታይ ከነበረው እርጥበት ጋር ተዳምሮ በጥቂት አካባቢዎች ላይ የአፈር ውስጥ እርጥበት መብዛት ለማሰከተል የሚችል የነበረ ሲሆን ሆኖም በግብርናዉ እንቅስቃሴ ላይ ያደረሰዉ የጎላ አሉታዊ ተፅዕኖ አልነበረም፡፡

ባሳለፍነው የጁን ወር ለክረምት ዝናብ መኖር አመቺ ሁኔታን የሚፈጥሩ የአየር ሁኔታ ክስተቶች ከዕለት ወደ ዕለት ተጠናክረው የተስተዋሉ ሲሆን፤ በሂደትም ከደቡብ ምዕራብ ወደ ተለያዩ የክረምት ዝናብ ተጠቃሚ የሀገሪቱ አካባቢዎች በመስፋፋት አብዛኛውን የክረምት ተጠቃሚ አካባቢዎች ያዳረሰና በመጠንም ሆነ በስርጭት ረገድ የተሻለ የእርጥበት ሁኔታ እንደነበራቸው ከተለያዩ የሀገሪቱ ክፍሎች የተሰበሰቡና የተነተኑ የግብርና ሚቲዎሮሎጂ መረጃዎች ያመለክታሉ፡፡ ይህም የተገኘው ዝናብ የአፈር ውስጥ እርጥበትን በማሻሻል የማሳ ዝግጅትና የዘር ጊዜ በሚካሄድባቸው አካባቢዎች በወቅቱ ለመዝራት አመቺ ሁኔታ የፈጠረ ሲሆን፤ ቀደም ብለው ከኤፕሪል ጀምሮ ለተዘሩ እንደ በቆሎና ማሽላ ለመሳሰሉ የረጅም ጊዜ የመኸር ሰብሎች በተሟላ ሁኔታ እንዲያድጉ የጎላ አስተዋፅየ ነበረው፡፡ ከዚህ በተጨማሪ በአርብቶ አደርና በከፊል የአርብቶ አደር አካባቢዎች የነበረው አነስተኛ መጠን ያለዉ የእርጥበት ሁኔታ ለግጦሽ ሳርና ለመጠጥ ውኃ አቅርቦት አዎንታዊ አስተዋፅየ ነበረው፡፡ በሌላ በኩል በአንዳንድ አካባቢዎች ላይ የነበረው ከባድ የእርጥበት መጠን ባሳለፍናቸው ቀናት በተከታታይ ከነበረው እርጥበት ጋር ተዳምሮ በጥቂት አካባቢዎች ላይ የአፈር ውስጥ እርጥበት መብዛት ለማሰከተል የሚችል የነበረ ሲሆን ሆኖም በግብርናዉ እንቅስቃሴ ላይ ያደረሰዉ የጎላ አሉታዊ ተፅዕኖ አልነበረም፡፡

SUMMARY
JUNE 2024

During the first dekad of June 2024 the analyzed agro meteorological information indicated that the moisture condition had shown relative strength across western and south-western parts of the country. In line with this, south- western, western and some parts of north- western and central parts of the country experienced moisture in the range of moderate to heavy in amount. This situation had positive role for late sown of Belg crops which found in different growing stages as well as satisfy the water need of perianal plants and for availability of pastors and drinking water across the pastoral and agro-pastoral areas. In addition, the received moisture during the dekad under review might have positive impact for land preparation for areas which supposed to plant long cycle crops in Meher season. In like manner, the observed moisture in the southern low land parts of the country could be crucially important toward the availability of pasture and drinking water. Moreover, the obtained heavy rainfall could be favourable for farmers who are in moisture stress areas, to collect and store rainwater where that can be used in time of deficit.

During the second dekad of June 2024 the analyzed agro meteorological information indicated that the moisture condition had shown relative strength across western and southwestern parts of the country. In line with this, Western, Northwestern and central parts of the country experienced moisture in the range of Moist to Hyper moist, and this situation had a positive role in terms of improving soil moisture. Therefore, it was important in terms of satisfy their water needs for Belg and long-cycle Meher crops that have already been sown and are at different stages of growth, as well as for various perianal plants and garden vegetables. In addition, analyzed agricultural meteorological data indicate that there was sufficient moisture for land preparation and sowing of various meher crops in June. On the other hand, the moisture observed in a few pastoral and semi-pastoral areas in the eastern parts of the country, which benefited from Kiremt moisture, contributed positively to the supply of pasture grass and drinking water.

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During the third dekad of June 2024, agricultural meteorology data collected and analysed indicated that most areas that benefited from Kiremt rains and Meher crops had moisture that reached many places. The rain-bearing meteorological phenomena were

strengthening in amount and distribution, especially in the western and central parts, and mostly in many parts of the Kiremt rainfall benefiting areas of the country. This situation was favourable for satisfying the water needs of various long-term crops that had already been sown or were in the process of being sown, as well as vegetables and permanent plants in various stages of growth. Additionally, for pastoralists and semi-pastoralists located in the eastern parts of the country, the moisture obtained played a positive role in improving both man-made and natural sources, providing better drinking water and grazing grass. On the other hand, the heavy rainfall in some areas, combined with the continuous moisture of the past few days, could cause excess moisture in the soil in a few areas, but it did not have a significant negative impact on agricultural activity.

In general, during the last month of June, due to the intensification of weather events that create favourable conditions for the ongoing Meher agricultural activities, especially in the southwest, west, and central areas of the country, the amount of moisture has been spreading across kiremt benefiting areas of the country. Agricultural meteorology data collected and analyzed from different parts of the country indicate that it expand from the southwest to various parts of the country that benefit from kiremt rains, improving in terms of quantity and distribution. This condition was favourable for timely sowing in the areas where seeding time and land preparation have been held since June. In addition to having a significant role in satisfying the water needs of Meher crops that are sown late and at different stages of development, it also had a significant contribution to long-term crops such as maize and sorghum that were sown early, from April to continue their growth under appropriate conditions as well as satisfy the water need of perianal plants and availability of pastors and drinking water across the pastoral and agro-pastoral areas. On the other hand, the heavy rains, especially in the western parts of the country and in areas that have been receiving continuous rain for the previous consecutives dekad, exhibited excesses moisture in the soil and caused flooding. However, it did not cause significant damage to agricultural development.

1. WEATHER ASSESSMENT

1.1. Rainfall amount (21 – 30) June 2024

During the third dekad of June 2024, pocket areas of North Gonder were received above 200mm rainfall and most parts of North Gonder, South Gonder, Bahirdar, pocket areas of East Gojam, dividend areas of East Wellega, Jimma, and Illubabor, West and Northwest Shewa, South Wollo zones were received 100-200mm rainfall. In addition to this, most parts of East and West Wellega, Assossa, Illubabor, Jimma, Sheka, Keffa, Godere, Guraghe, Silite, all Shewa Zones, North, South, West and Central Gonder zones, Bahirdar, Waghimira, Agew Awi, West Tigray, East Gojam, and South Wollo Zones and some parts of Arsi Zones were received 50-100mm rainfall. In addition to this North Wollo, East Tigray and West Tigray, Oromia Special Zones, parts of Gamogofa, Alaba, Keffa, Dawro, Godere, Gambela 1 and 2 Zones were prevailed 25-50mm rainfall. However, South and Central Tigray, parts of North Wollo, Afar 2, 3 and 5 Zones, Shinle, East and West Hararghe, Jigjiga, Hadiya, Wolayta, Sidama, Bench Maji, Basketo and Gedeo Zones were experienced 5-25mm of rainfall. However, the rest part of the country especially Southern and Southeastern and half of Northeastern parts of the country was received 0-5 mm of rain fall.

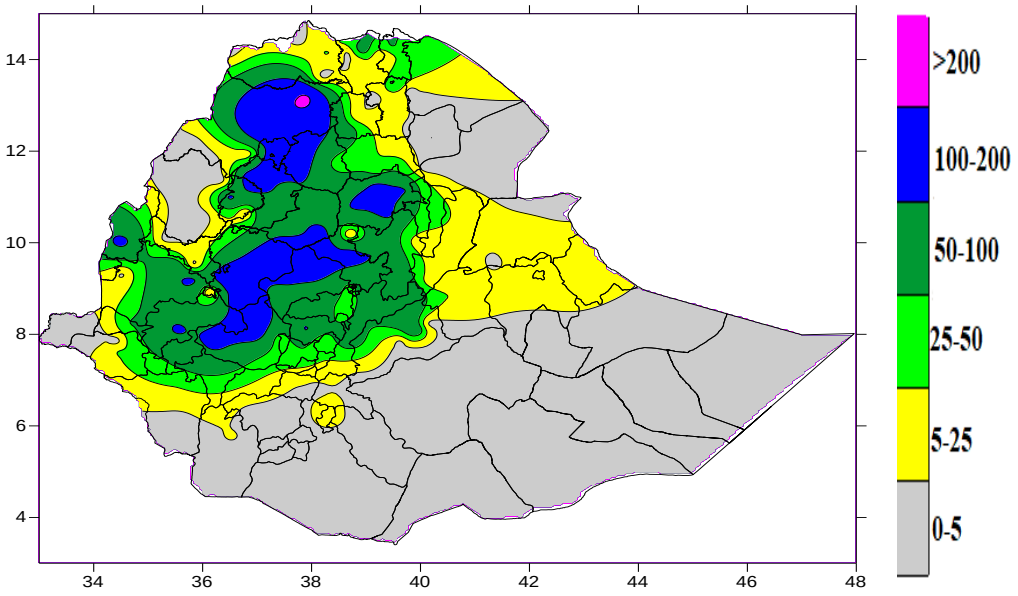

Fig 1. Rainfall distribution in mm (21 – 30) June 2024

1.2. Rainfall Anomaly (21 – 30 June 2024)

During the third dekad of June 2024 the rain fall anomaly map below most parts Central, parts of Western, Northern and Northeastern parts of the country were dominantly received from Normal to Above Normal Rainfall. However the rest parts of the country especially Northwestern Southwestern and Southern parts were exhibited Below Normal to Much below Normal rainfall condition

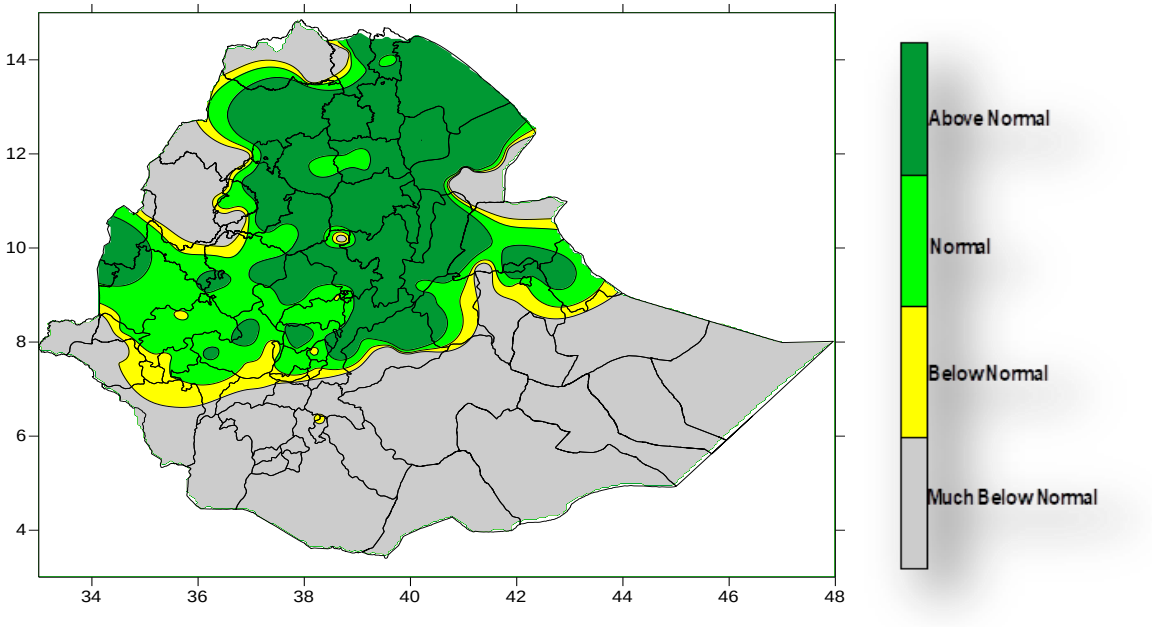

Fig. 2 Percent of normal rainfall distribution (21 – 30) June 2024

Explanatory notes for the Legend

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

1.3. Moisture Condition (21 – 30 June 2024)

As indicated on the moisture status map below during third dekad of June 2024 most parts 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.

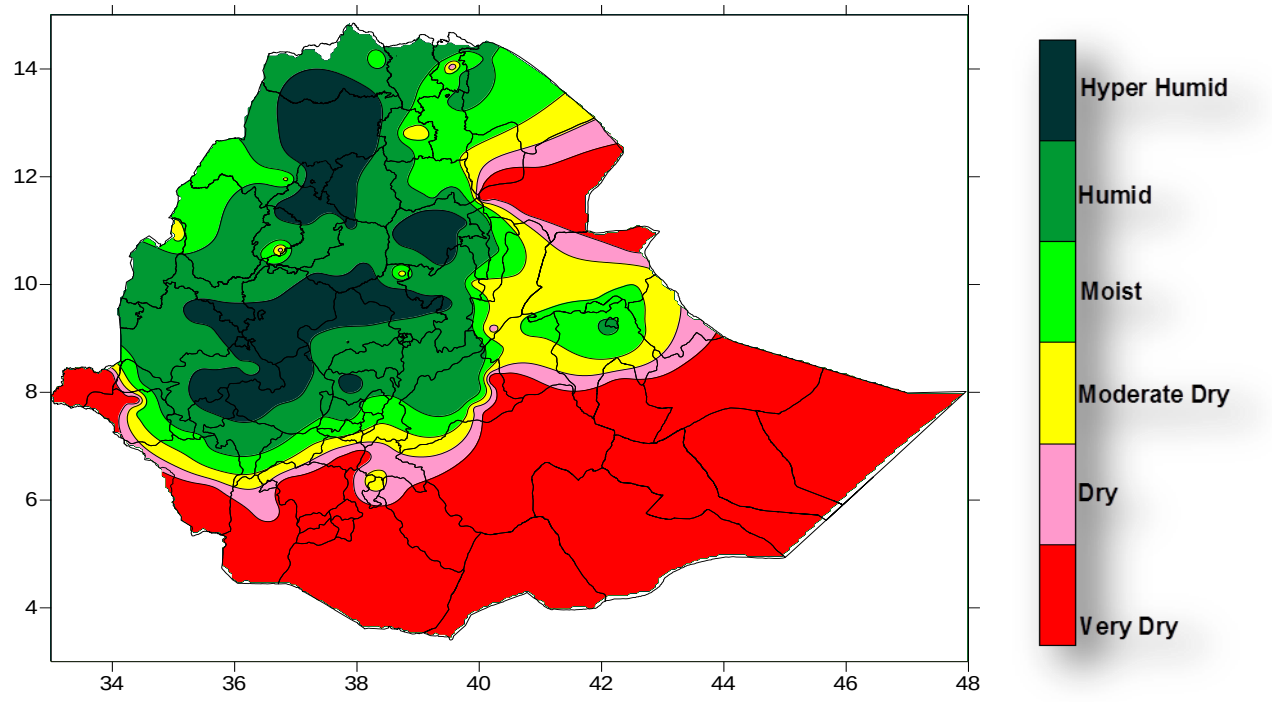

Fig. 3. Moisture status (21 – 30) June 2024

1.4. Rainfall amount on the month of June 2024

During the Month of June 2024, pocket areas of West Wellega, Devidend areas of East Wellega, Jimma, and Illubabor Zones were received above 300mm rainfall and most parts of North and South Gonder, Bahirdar, pocket areas of East Gojam, dividend areas of East and West Wellega, Jimma, and Illubabor, Guraghe, Sheka, Keffa, Assossa, West and North West Shewa Zones were received 200-300mm rainfall. In addition to this, most parts of East and West Wellega, all Shewa Zones, Assossa, Kemashe, Illubabor, Sheka, Godere, Keffa, Dawro, Parts of Benchmaji, Guraghe, Silite, South Wollo, West Tigray, North, South,West and Central Gonder zones, Bahirdar, Waghimira, Agew Awi, East Gojam, Jimma, and some parts of Arsi Zones were received 100-200mm rain fall. Additionally North Wollo, East, West and Central Tigray, Oromia Special Zones, parts of Arsi, Alaba, Keffa, Dawuro, Hadiya, Basketo, Gamogofa, Benchmaji, Godere, Gedeo, Gambela 1 and 2 Zones were prevailed 50-100mm rainfall. However, South and Central Tigray, Parts of North Wollo, parts of East and West Hararghe, Harar, Jigjiga, Bale, Arsi, Derashe, Sidama, South Omo zones were prevailed 25-50mm of rainfall. On the other hand, South Tigray, Waghimira, Afar 2 and 3 Zones, Shinle, Fik, Dehgahabour, Jigjiga, Konso and Amaro, Sidama Zones were experienced 5-25mm of rainfall. But, the rest part of the country especially, Southern and Southeastern and half of Northeastern parts of the country were received 0-5 mm of rain fall.

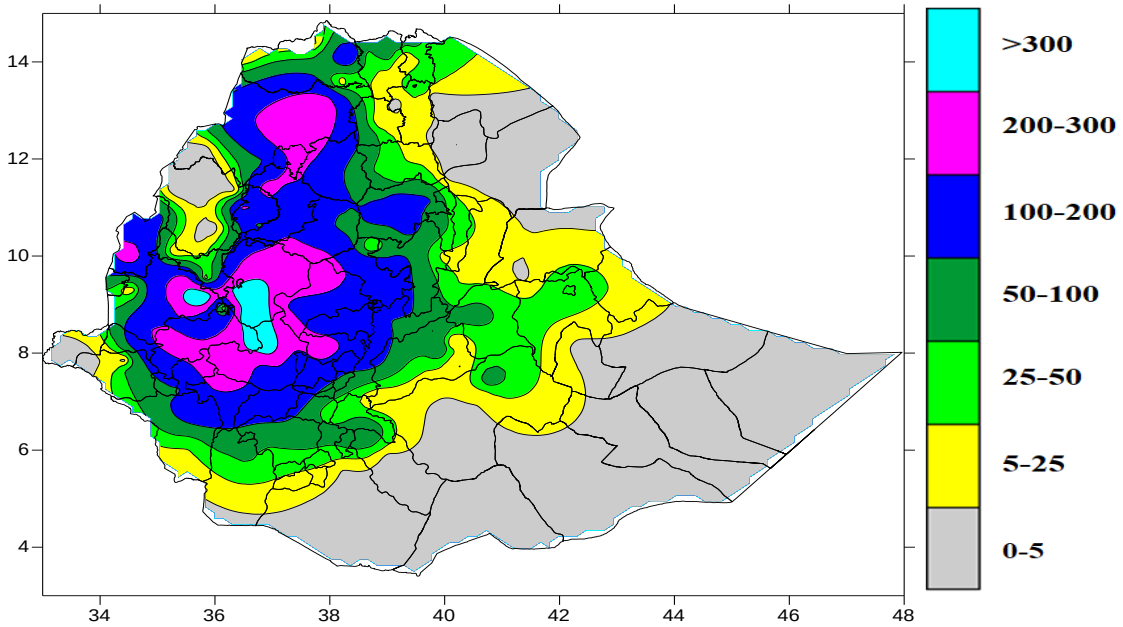

Fig 4.Rainfall amount in mm for the month of June 2024

1.5. Rainfall Anomaly on the month of June 2024

During June 2024, most parts of Central, Northern, Northeastern, and parts of Western half of the country were dominantly received Normal to above Normal Rainfall condition. However Northwestern, Southern and Southeastern as well as Eastern parts of the country were exhibited below Normal to much below Normal Rain fall condition.

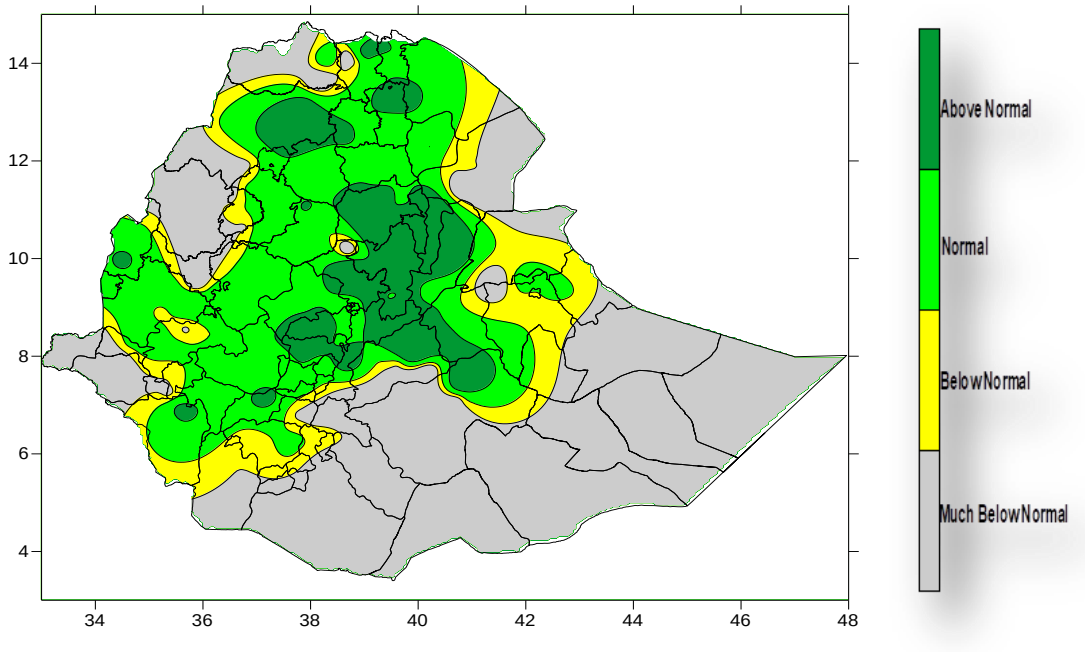

Fig. 5 Percent of Normal Rainfall for the month of June 2024

Explanatory notes for the Legend

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

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1.6. Moisture status on the month of June 2024

In accordance with the moisture status map below during June 2024 most parts 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.

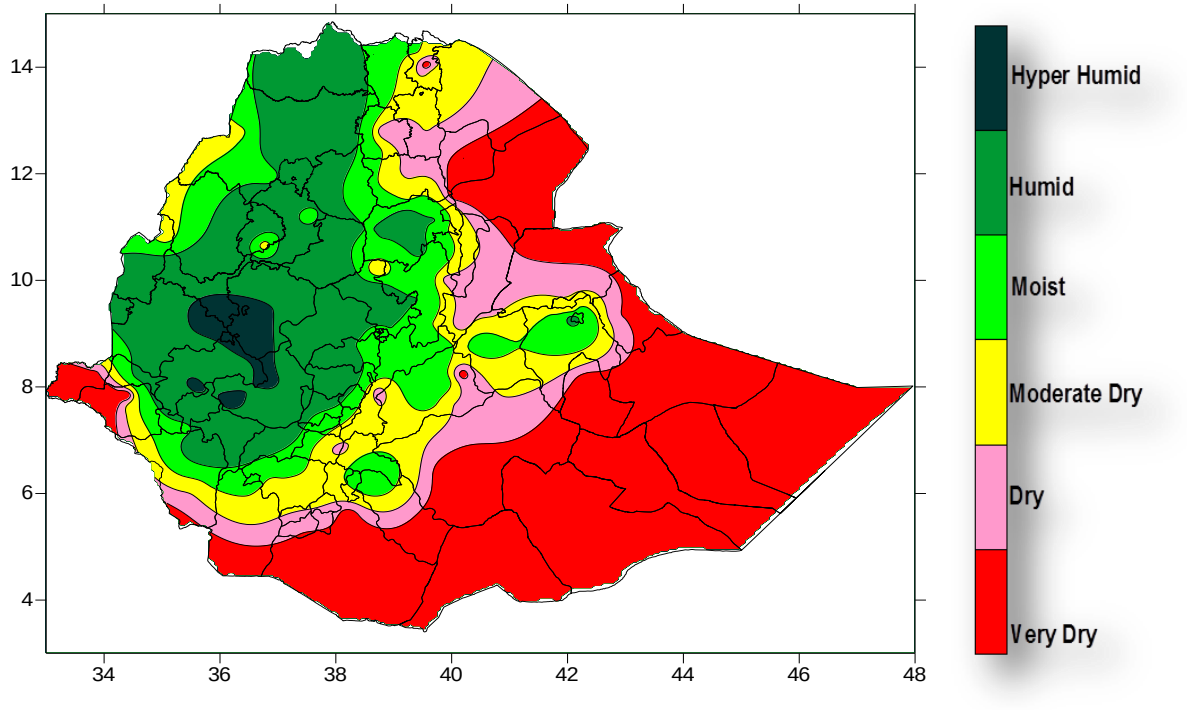


Fig. 6. Moisture status for the month of June 2024

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

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

During the the month under review, due to dekad to dekad relative strengthening of rain bearing weather systems, good moisture conditions has been experienced over Meher producing and rain benefiting areas of the country, according to this, the increment the vegetation condition across western half, central, eastern and north-eastern parts of the country (Fig.7. NDVI and Fig.8. Rangeland WRSI in %). This condition might have positive impact to perform land preparation and planting for Meher crops as well as water needs of perennial plants and availability of pastors and drinking water over pastoral and agro-pastoral areas.

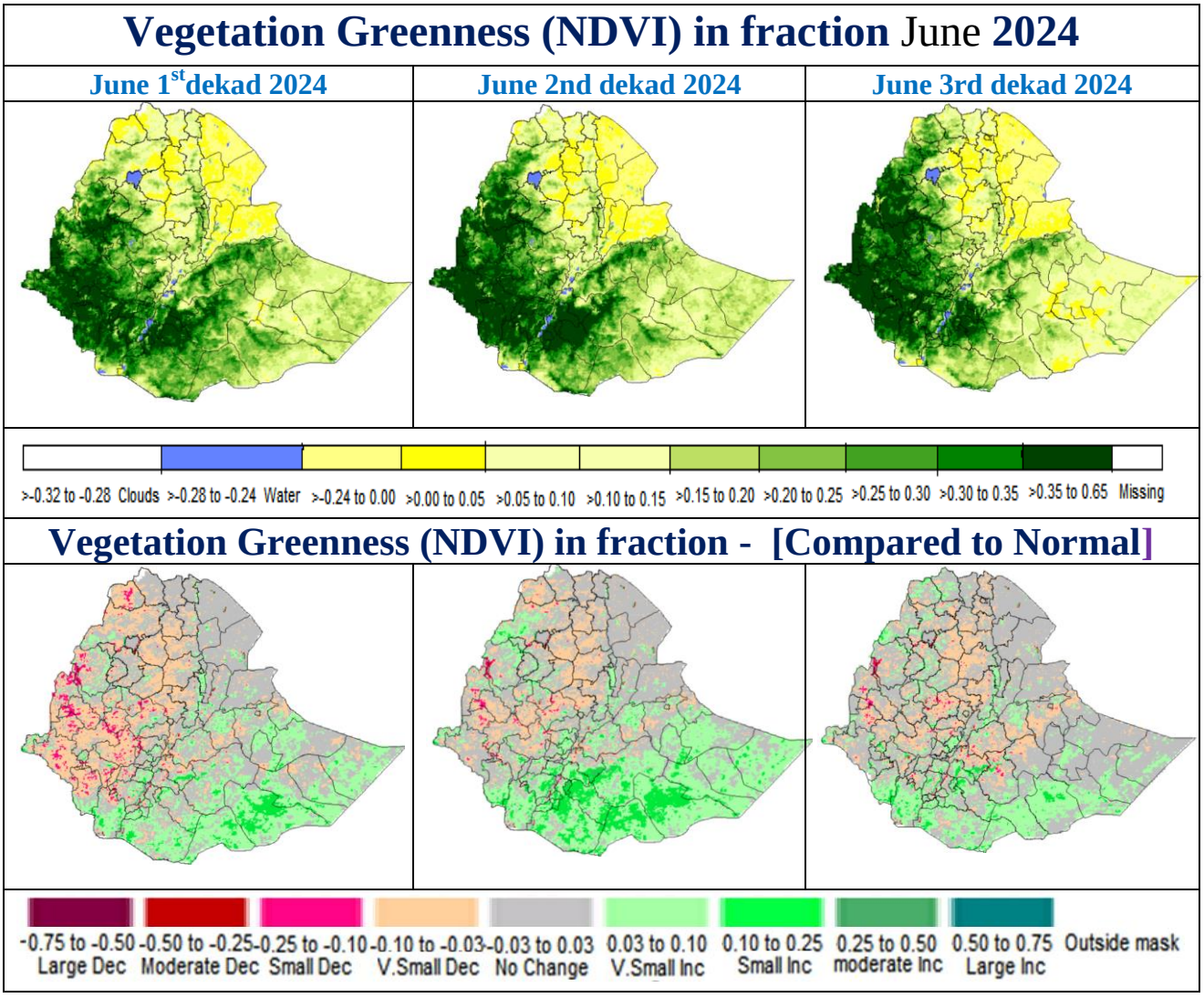


Fig. 7. Vegetation Greenness (NDVI) in fraction and Compared to Normal June 2024.

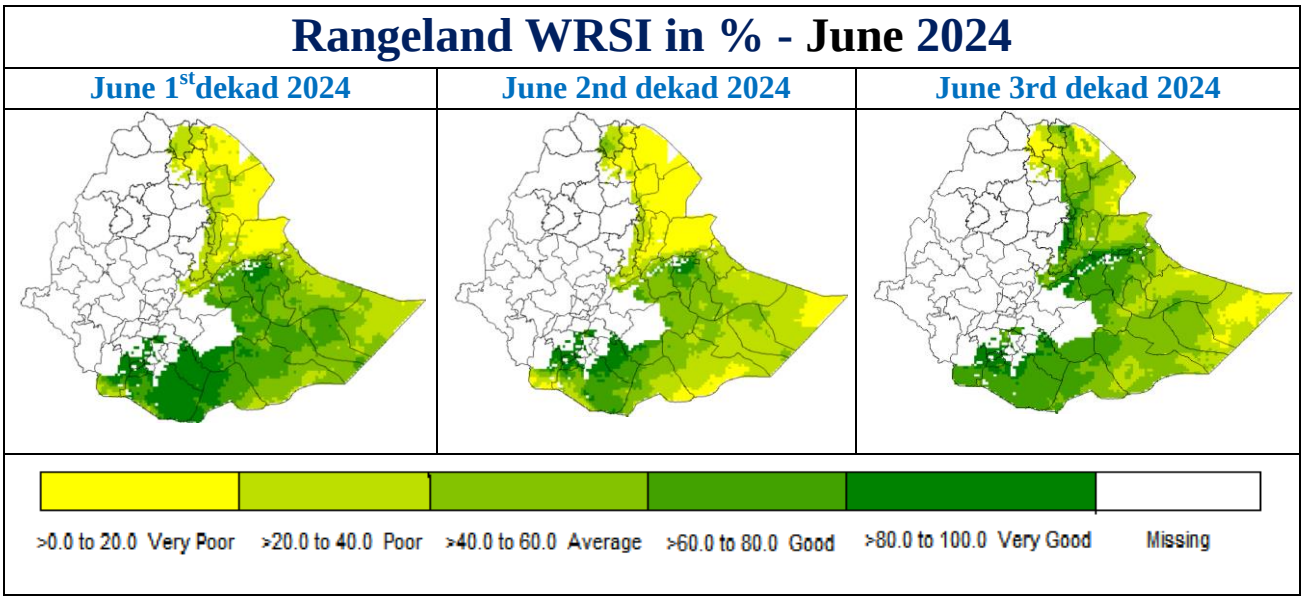


Fig.8. Rangeland WRSI in % and Compared to Normal - **June** 2024

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

Normally, July is the time when most of the areas that benefit from kiremt rains get enough soil moisture for early sowing crops and for late sowing mid-season crops, forage grass and drinking water supply.

The expected rains in the next month of July will improve soil moisture in terms of meeting the water needs of various permanent plants and for meher crops that have already been sown andfound at different stages of growth, and will contribute to the improvement of plant growth and drinking water supply in the pastoral and agro-pastoral areas in the east and northeast. On the other hand, in areas where heavy rains are expected with the strengthening of kiremt rains and whose normal characteristics are characterized by excess moisture, the moisture may be excessive, as a result of which, by making canals so that water does not lie on the field, by doing prevention work, and in some areas with the excess of moisture, there may be the occurrence of weeds and the creation of crop pesticides from agriculture. In addition to being careful with the advice of experts, it is necessary to use insecticides and pesticides in a way that takes into account the rain conditions.

3. 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.

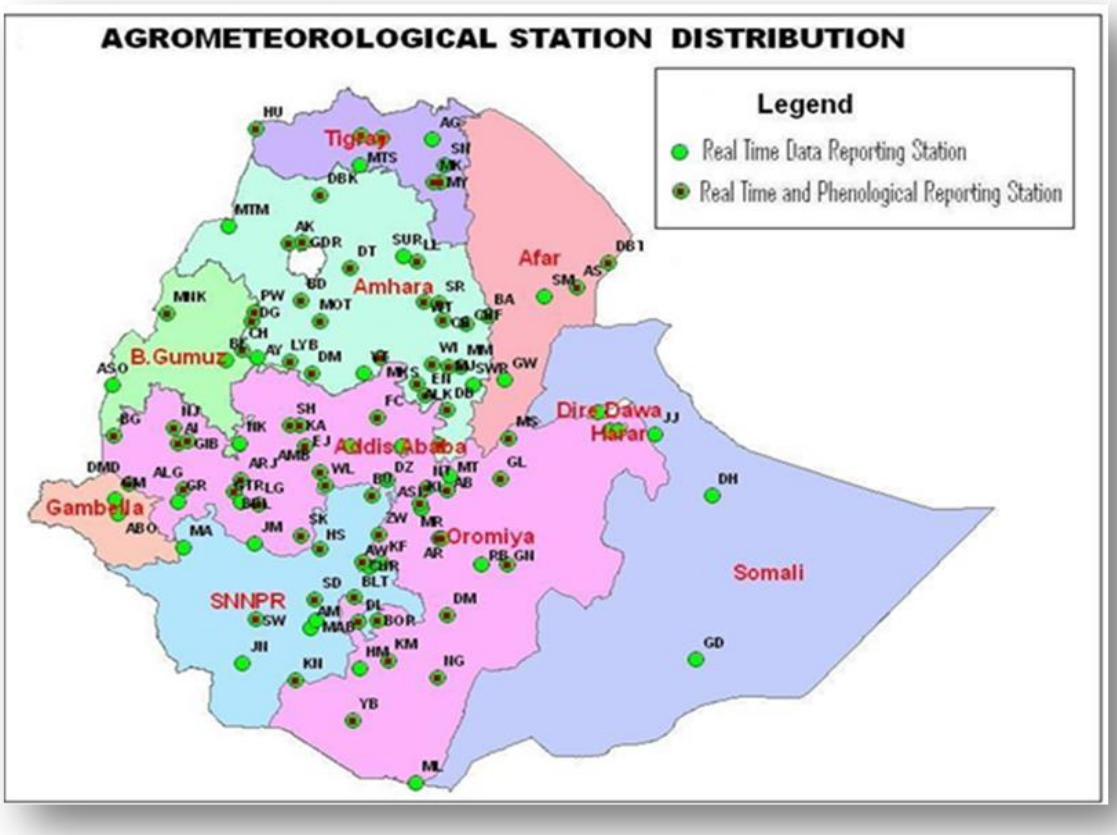
DEKAD: - First or second ten days or the remaining days of a month.

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 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		