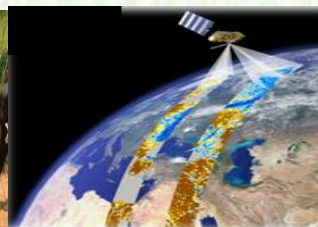


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FORE WARD

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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አህፅሮት እ.ኤ.አ ኤፕሪል 2024

ባሳለፍነው የኤፕሪል የመጀመሪያው አስር ቀናት የበልግ አብቃይና ዝናብ ተጠቃሚ በሆኑት የሀገሪቱ አካባቢዎች እርጥበታማ ሁኔታ እንደነበራቸው የተተነተኑ የግብርና ሚኒስቴር ሰብሎች መረጃዎች ያመለክታሉ። ይህም ሁኔታ አስቀድመው ለተዘሩ የበልግ ሰብሎች፣ ለቋሚ ተክሎች፣ የረጅም ጊዜ ሰብሎችን አስቀድመው ለሚዘሩ አካባቢዎች የማሳ ዝግጅት ለማካሄድና ዘር ለመዝራት አዎንታዊ ሚና ነበረው በተጨማሪም የተገኘው እርጥበት በአርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች ለመጠጥ ውሃና ለግጦሽ ሣር አቅርቦት መሻሻል የጎላ ጠቀሜታ ነበረው። በሌላም በኩል በአንዳንድ ሥፍራዎች ላይ የተገኘው ከፍተኛ መጠን ያለው እርጥበት ቅጽበታዊ ጎርፍና የወንዞች መውላት ሊያስከትል በመቻሉ በእንሰሳት፣ በሰዎችና በንብረት ላይ እንዲሁም ቀደም ብለው በተዘሩትና በተለያየ የእድገት ደረጃ ላይ በሚገኙት ሰብሎች ላይ በተወሰነ መልኩ አሉታዊ ተፅዕኖ የነበረው ቢሆንም ዝናብ አጠር ለሆኑት አካባቢዎች የዝናብ ውሃን ለማሰባሰብና ለማከማቸት መልካም አጋጣሚን የፈጠረ ነበር።

ባሳለፍነው የኤፕሪል ሁለተኛ አስር ቀናት የበልግ አብቃይና ዝናብ ተጠቃሚ በሆኑት የሀገሪቱ አካባቢዎች ላይ የተገኘው እርጥበት በመካሄድ ላይ ላለው የእርሻ እንቅስቃሴ አዎንታዊ ሚና የነበረው ሲሆን ቀደም ብለው ለተዘሩ የበልግ ሰብሎችና ለቋሚ ተክሎች የውሃ ፍላጎት መሟላት እንዲሁም ከኤፕሪል ጀምሮ ለሚዘሩ የመኸር ወቅት ሰብሎች ማሳን ለማዘጋጀትም ሆነ ዘር ለመዝራት ምቹ እንደነበረ የተተነተኑ የግብርና ሚኒስቴር ሰብሎች ያመለክታሉ። በተጨማሪም የተገኘው እርጥበት በአርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች ለመጠጥ ውሃና ለግጦሽ ሣር አቅርቦት መሻሻል የጎላ ጠቀሜታ ነበረው። በሌላም በኩል በአንዳንድ ሥፍራዎች ላይ የተገኘው ከፍተኛ መጠን ያለው እርጥበት የነበረ ሲሆን ይህም ሁኔታ እርጥበት አጠር ለሆኑት አካባቢዎች የዝናብ ውሃን ለማሰባሰብና ለማከማቸት መልካም አጋጣሚን የፈጠረ ነበር።

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SUMMARY

APRIL 2024

During the first dekad of April 2024 the analysed agro meteorological information indicated that the moisture condition had shown relative strength across Belg season rain benefiting areas. In line with this, north- eastern, central, southern, south-western, western and south-western parts of the country experienced rainfall in the range of 1 moderate to heavy in amount. This situation had positive role for early 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 earlier. 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 for the pastoralist and agro pastoralist community. Moreover, the obtained heavy rainfall could be favorable, 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 April 2024 the analyzed agro meteorological information indicated that the moisture condition had shown relative strength across Belg season rain benefiting areas. This situation had positive role for early 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 like Maize and Sorghum earlier. In like manner, the observed moisture in the south and southeastern low land parts of the country could be crucially important toward the availability of pasture and drinking water for the pastoralist and agro pastoralist community. Moreover, the obtained heavy rainfall could be favorable, for farmers who are in moisture stress areas, to collect and store rainwater where that can be used in time of deficit.

During the third dekad of April 2024, According to the analyzed agrometeorological information, most of Belg crop growing as well as Belg season rain benefiting areas 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 rain water 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 the country might result in crop damage, which were attaining at different phenological stages.

In general, during the month of April 2024, in the first dekad of the month the moisture condition prevailed only over eastern, south-eastern, central and western parts of the country. During the second and third dekad rain bearing meteorological phenomena was strengthening in amount and distribution over much of Belg rain benefiting area of the country. This situation might have positive impact on moisture requirement of different Belg and Meher long cycle crops found at various phases of growth, perennial plants, general agricultural activities, improve pasture and drinking water availability in pastoral and agro pastoral areas. Besides, the observed heavy rainfall over much of the country 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. On the other hand, the observed extreme heavy fall greater than 30mm in one rainy day may cause flood and water logging on crops field in low lying areas and soil erosion on sloppy areas as well as it could affect by washing away the crops found in different growth stages.

1. WEATHER ASSESSMENT

1.1. Rainfall amount (21 – 30) April 2024

During the Third dekad of April 2024, pocket areas of some parts of Konso, Gamo Goffa, Derashe, Pocket areas of Amaro, Guji, Sidama, Korahe, Gode and some parts of Bale Zone were dominated above 100 mm to 200 mm of rainfall. In addition to this some parts of Borena, Liben, Bale, Warder, Konso, Gamo Goffa, Derashe, Amaro, Guji, Sidama, Korahe, Gode, Basketo, BenchMaji, Keffa, Dawro, Wolyta, Alaba, Silite, Hadya, Addis Ababa, West Shewa, South west Shewa, Afar Zone 3 and 5 Oromia special Zone and Pocket areas of East Hararghe Zones were received 50-100mm of rainfall. On the other hand most parts of Korahe, Arsi, East Shewa, Godere, Sheka, Illuababora, Jimma, West wollega, South Ommo, Liben, Bench Maji Warder, East and west Hararghe, Godere, Keffa, Dawro, some parts of South and north Wollo, zones were exhibited 25-50 mm of rainfall. The rest parts of the country especially Western, Central half, Northern and North eastern parts of the country were received 5-25 mm of rainfall.

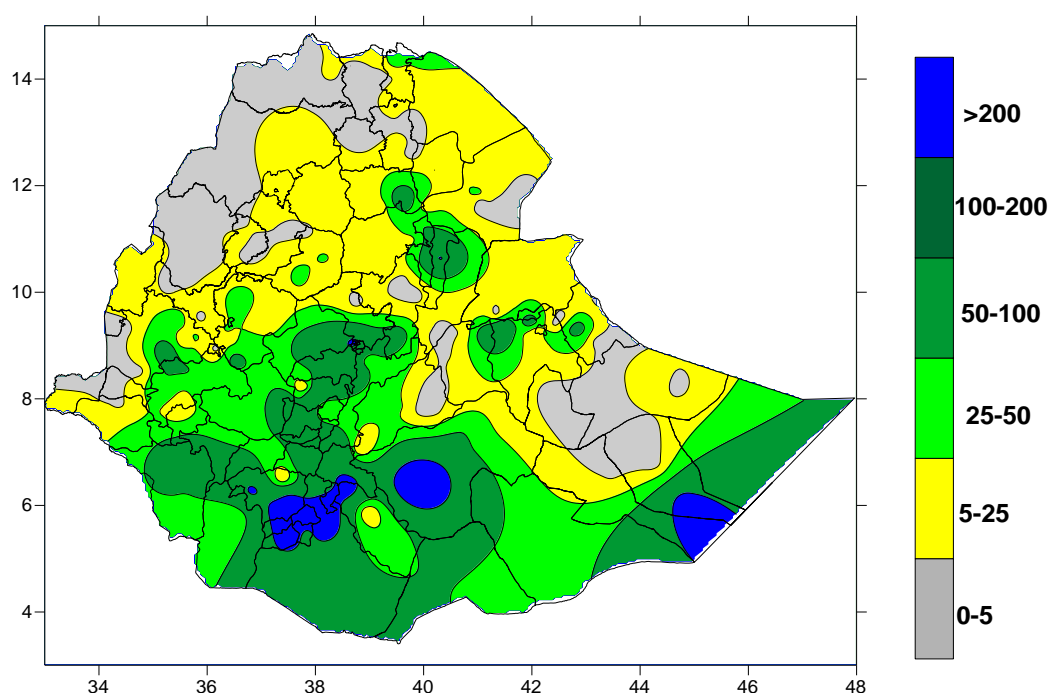


Fig 1. Rainfall distribution in mm (21 – 31) April 2024

1.2. Rainfall Anomaly (21 – 30 April 2024)

When we look at the rainfall anomaly map below, during the third decade of April 2024, North Eastern, Some Central, Southern and South Eastern part of the country are Exhibited Normal to Above Normal Rain fall condition. On the other hand, Western North Western, Some Northern and Eastern half of the country are exhibited much below Normal to Below Normal rain fall condition.

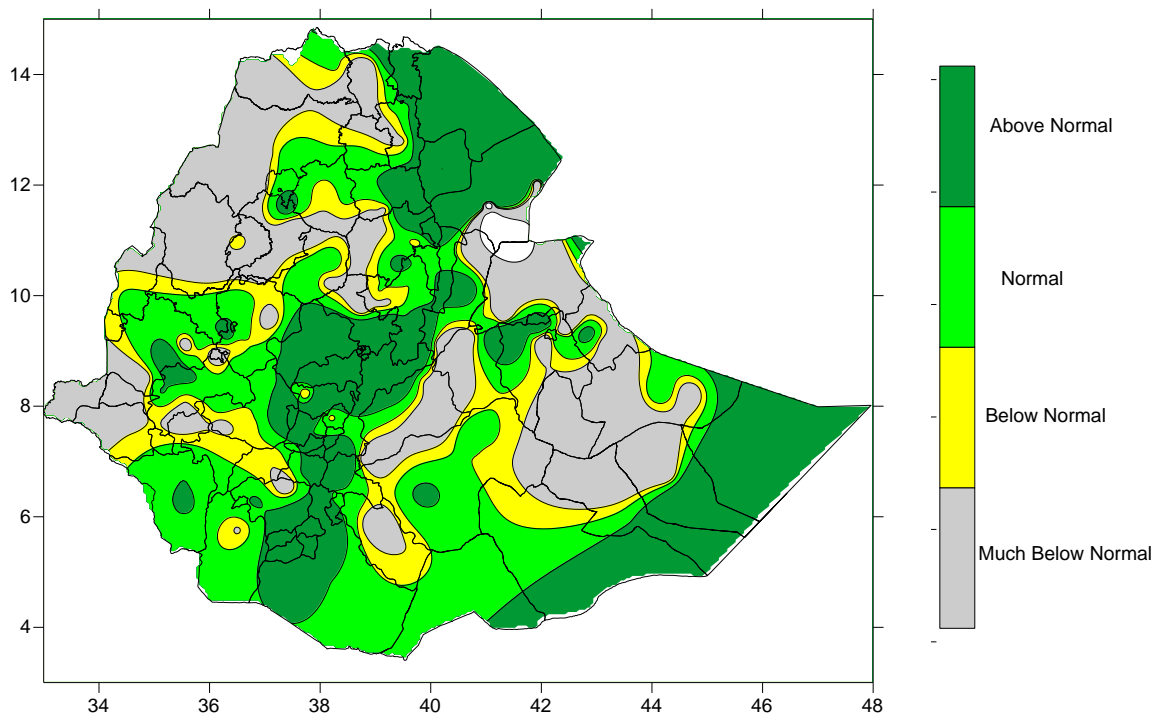


Fig. 2 Percent of normal rainfall distribution (21 – 30) April 2024

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 April 2024)

As indicated on the moisture status map below during third dekad of April 2024 most parts of Belg growing and 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.

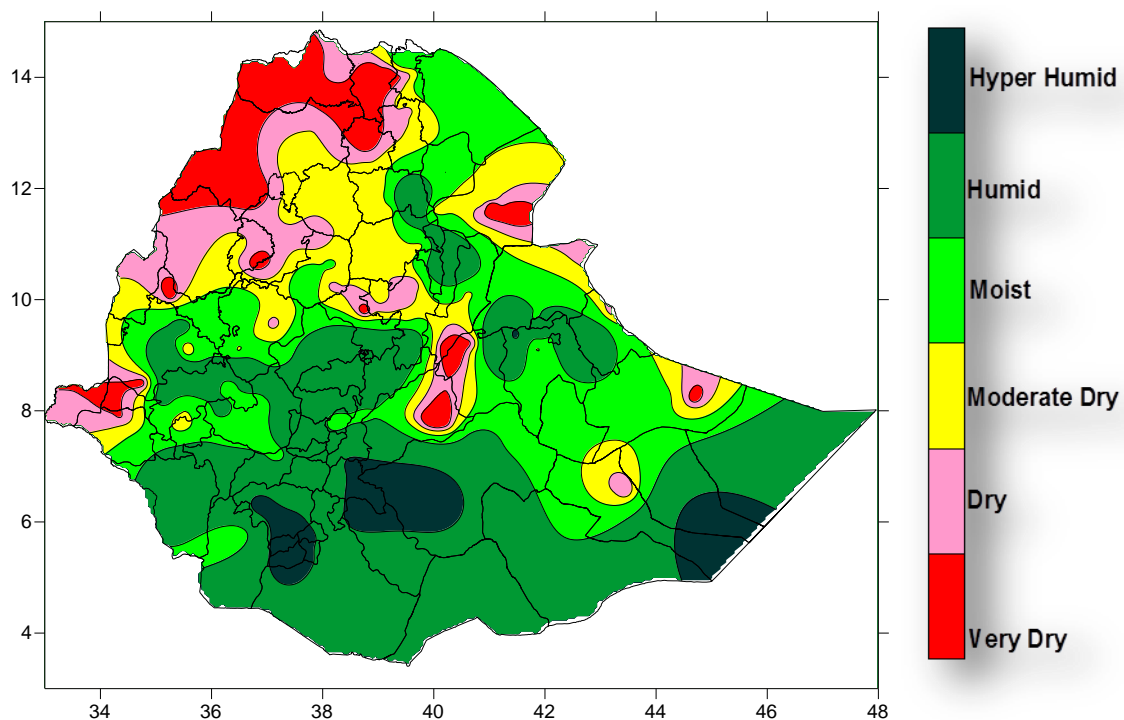


Fig. 3. Moisture status (21 – 30) April 2024

1.4. Rainfall amount on the month of April 2024

During April 2024, some pocket areas of the adjacent areas of Eastern and Western Hararghe, Konso, Gamo Goffa, Derashe, South Ommo, Bench Maji, Gedeo, Alaba, Hadya, Amaro, Guji, Sidama, Korahe, Gode, Liben, Borena, and some parts of Bale Zone were dominated above 200 mm to 300 mm of rainfall. In addition to this some parts of Borena, Liben, Bale, Warder, Afder, Gamo Goffa, Amaro, Guji, Sidama, Korahe, Gode, Basketo, Bench Maji, Keffa, Dawro, Wolyta, Alaba, Silite, Hadya, Jimma Guraghe, Arsi, Sheka, Godere, Addis Ababa, West Shewa, South west Shewa, Afar Zone 1, 3, 4 and 5 Oromia special Zone and Pocket areas of East Hararghe Zones as well as South and North Wollo Zones were received 100-200mm of rainfall. On the other hand Some parts of Korahe, Arsi, East Shewa, Godere, Sheka, Illuababora, Jimma, West wollega, Shinle, Warder, East and west Hararghe, Godere, Afar Zone 1, 3, 4 and 5, Oromia special Zone, Gambela Zone 1 and 2 and Pocket areas of East Hararghe Zones as well as South and North Wollo Zones were received 100-200mm of rainfall. However, some parts of Afar Zone 2 and 4, Waghimra, Some parts of Tigray, South Gonder, East Gojam, North Shewa, East and West Wollega, Gode and Degahabure, South and North Wollo, zones were exhibited 50-1000 mm of rainfall. The rest parts of the country especially Western, and North-western and parts of Eastern half of the country were received 5-50 mm of rainfall.

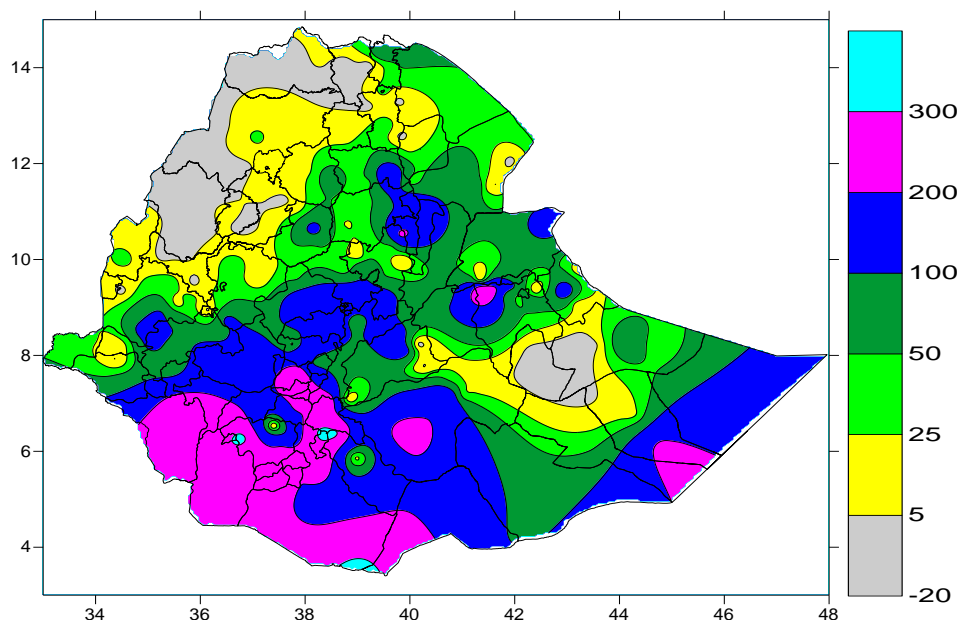


Fig 4. Rainfall amount in mm for the month of April 2024

1.5. Rainfall Anomaly on the month of April 2024

When we look at to the rainfall anomaly map below, during the month of April 2024, North Eastern, Central Southern, Southern and South Eastern part of the country are Exhibited Normal to Above Normal Rain fall condition. On the other hand, Western, North Western, Northern and part of Eastern half of the country are exhibited much below Normal to Below Normal rain fall condition.

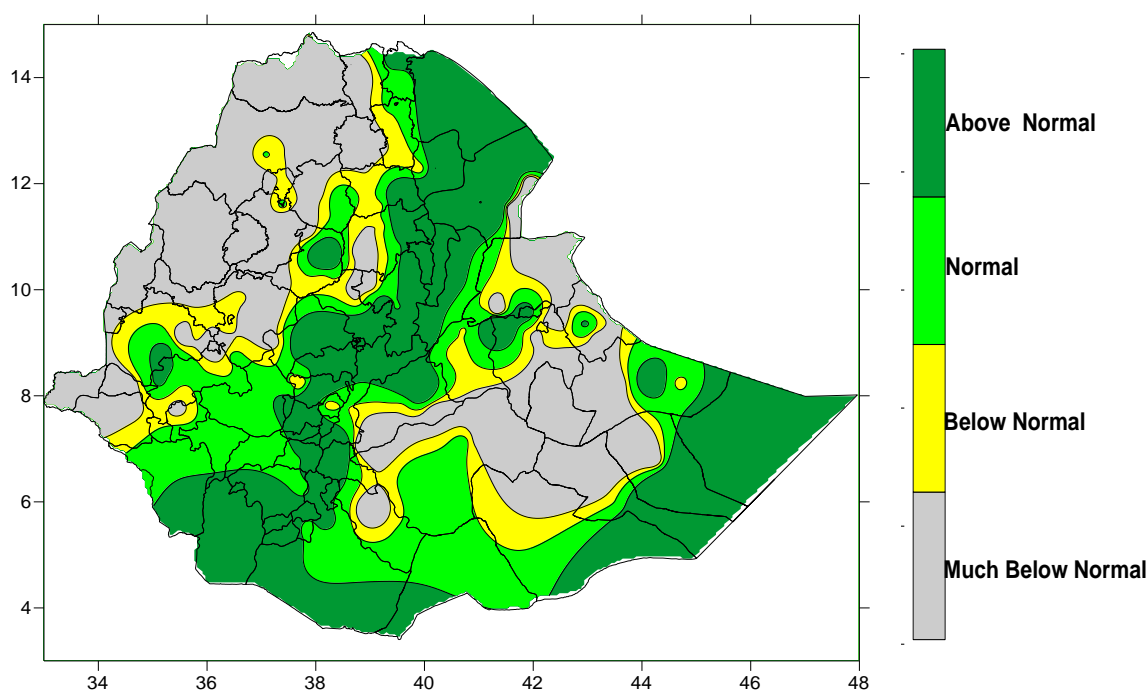


Fig. 5 Percent of Normal Rainfall for the month of April 2024

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 April 2024

In accordance with the moisture status map below except most parts of Tigray western Amhara and most parts of Benshangul-Gumuz all areas of the country exhibited Hyper humid to Moist moisture condition.

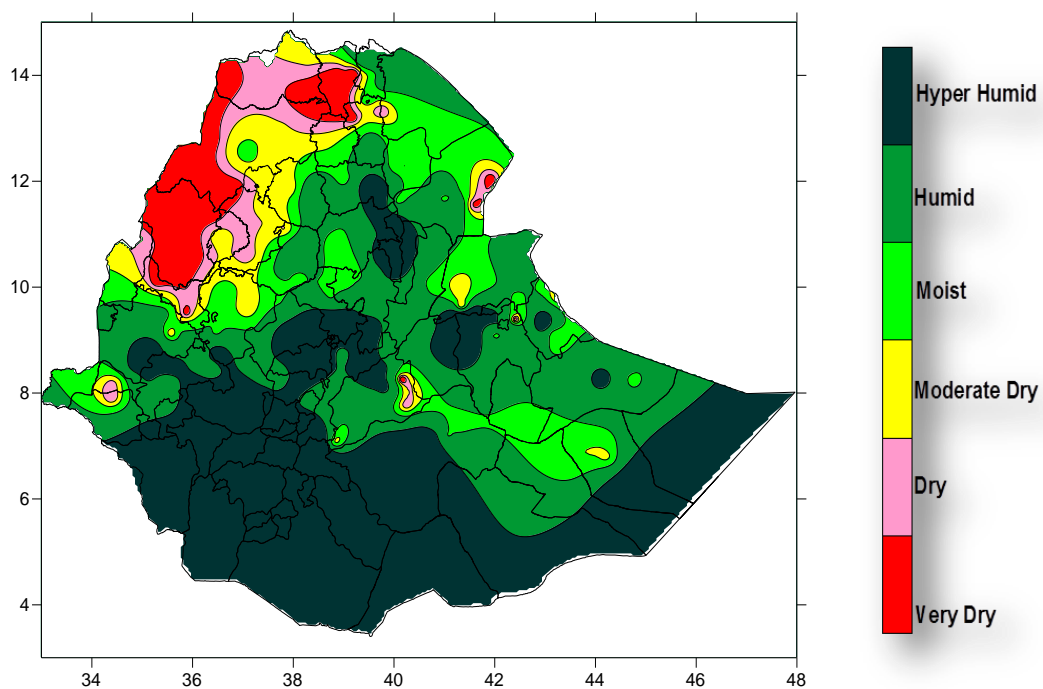


Fig. 6. Moisture status for the month of April 2024

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

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

Generally during the month of April, due to the relative strengthening of rain bearing meteorological systems better moisture has been steadily improving dekad by dekad, In line with this most of Belg rain receiving areas experienced good moisture and after the first dekad of the month relative increase in moisture was observed over southern and south-eastern pastoral and agro-pastoral areas. Due to increment of moisture the vegetation condition across the country indicated average and above average vegetation condition (Fig.7. NDVI and Fig.8.Rangeland WRSI in %) which condition was satisfy the water need of perennial plants and highly favourable the generation of pasture and the availability of drinking water.

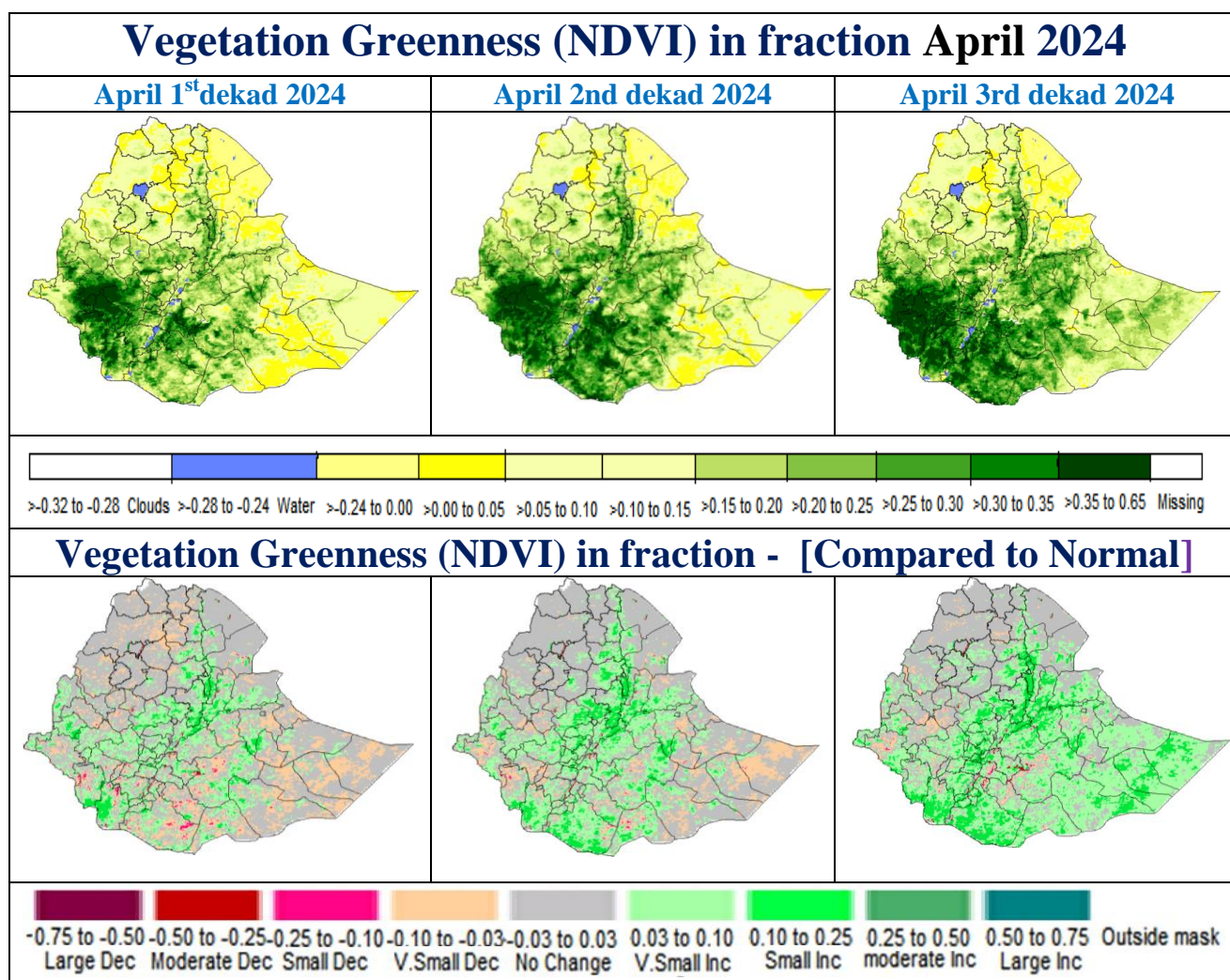


Fig. 7. Vegetation Greenness (NDVI) in fraction and Compared to Normal April 2024.

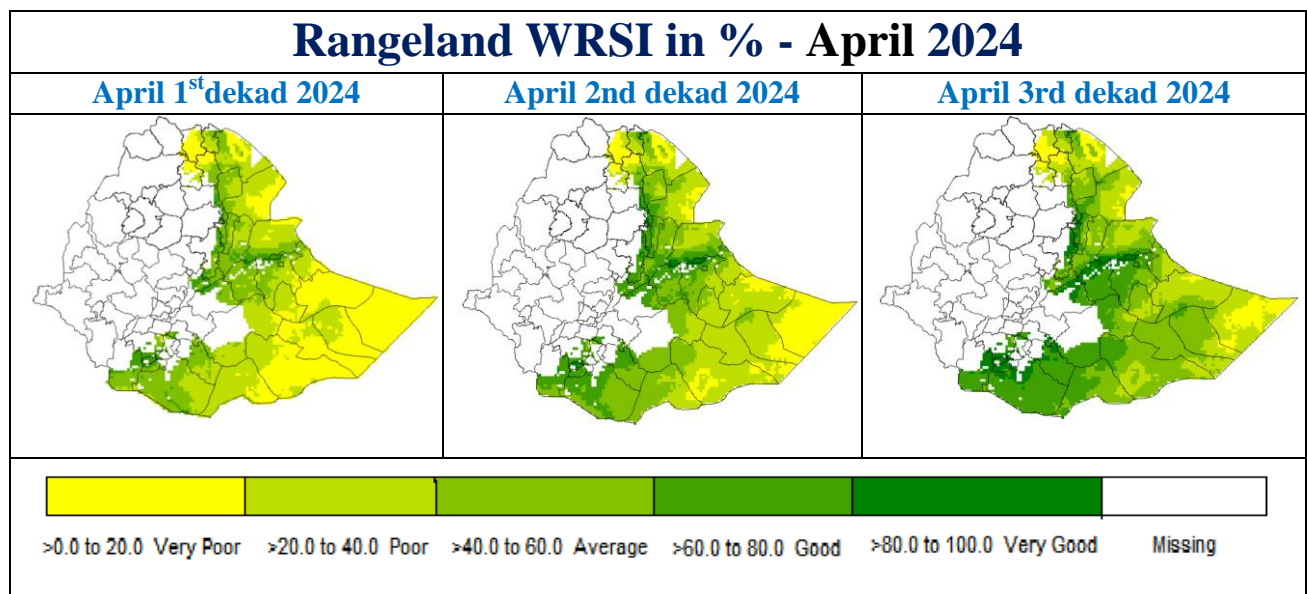


Fig.8. Rangeland WRSI in % and Compared to Normal - April 2024

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

In the coming month of May 2024, the meteorological forecast information indicates that the seasonal rainfall activity is expected to continue most parts of the country. In line with this, in most parts of Belg rain benefiting areas of the country expected good amount and distribution of Moisture. This situation expect to improve moisture requirement of Belg crops found at different phases of growth, perennial plants, pasture and drinking water availability in pastoral and agro pastoral areas and the anticipated better moisture distribution towards the western half of the country would favour sowing activities of cereal crops like maize and sorghum and land preparation for the coming Meher season as well. However, the expected heavy fall over some areas of the aforementioned areas would have a negative impact on crop fields' particularly over low-lying areas Thus, proper attention should be undertaken to minimize the risk in areas where there is no proper drainage system and low-lying areas making furrow and channel in order to reduce the effect of excess rain. Moreover, in areas where moist and warm condition with erratic rainfall is anticipated there would be a possibility of pest outbreak since the expected weather condition is favourable for the event. Thus, attention should be given for sensitive areas by continuous monitoring farm fields ahead of time to control the possible risk below economic threshold level.

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

