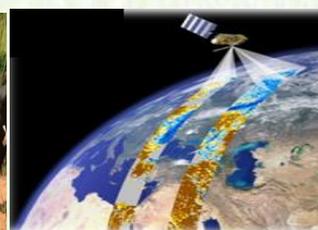


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FORE WARD

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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አህዕጅት እ.ኤ.አ ማርች 2023

ባሳለፍነው የማርች ወር የመጀመሪያው አስር ቀናት ከተለያዩ የሀገሪቱ አካባቢዎች ላይ የተጠናቀሩ የግብርና ሚኒስቴር ሚኒስቴር መረጃዎች እንደሚያመለክቱት በአብዛኛው የበልግ ዝናብ ተጠቃሚ አካባቢዎች ላይ ከዕለት ወደ ዕለት የተሻለ የእርጥበት ሁኔታ ነበራቸው። በተለይም በሰሜን ምስራቅ፣ በመካከለኛው እና በምስራቅ የሀገሪቱ ሥፍራዎች ላይ አልፎ አልፎ ባሉት ቀናት ከቀላል እስከ መካከለኛ መጠን ያለው ዝናብ የተስተዋለባቸው ሲሆን በአንዳንድ ሥፍራዎች ላይ ደግሞ ከባድ ዝናብ ተመዝግቧል። ይህም ሁኔታ በተለይም የበልግ ሰብል አብቃይ በሆኑት የሀገሪቱ አካባቢዎች ላይ የተሻለ የአፈር ውስጥ እርጥበት እንዲኖራቸው ያስቻለ ከመሆኑ ጋር ተያይዞ የማሳ ዝግጅት ለማድረግ እና የተለያዩ ሰብሎችን ለመዝራት አዎንታዊ ሚና የነበረው ሲሆን አስቀድመው ለተዘሩ የበልግ ወቅት ሰብሎችም ሆነ በአካባቢዎቹ ለሚበቅሉ ቋሚ ተክሎች እንዲሁም ለግጦሽ ሳርና ለመጠጥ ውኃ አቅርቦት በጎ ጎን ነበረው። በተጨማሪም የረጅም ጊዜ ሰብሎችን ቀድመው ለሚዘሩ አካባቢዎች የማሳ ዝግጅት ለማድረግ አዎንታዊ አስተዋፅኦ ነበረው። በተጨማሪም በአንዳንድ ሥፍራዎች ላይ ከባድ ዝናብ ተመዝግቧል። ከባድ ዝናብ ከተመዘገበባቸው ሥፍራዎች ለመጥቀስ ያህል አዲስ አበባ ቦሌ 51.0፣ አዲስ አበባ ጥቁር አንበሳ 37.0፣ ድሬዳዋ 47.0፣ መተሃራ 39.1፣ አደሌ 33.6፣ አምቦ 49.0፣ ባቲ 34.5፣ በደሌ 43.2፣ ደምቤ ዶሎ 38.6 እና መሃል ሜዳ 35.8 በሚ.ሜ ይገኙበታል። አዲስ አበባ ቦሌ 51 .0፣ አዲስ አበባ ጥቁር አንበሳ 37.0፣ ድሬዳዋ 47.0፣ መተሃራ 39.1፣ አደሌ 33.6፣ አምቦ 49.0፣ ባቲ 34.5፣ በደሌ 43.2፣ ደምቤ ዶሎ 38.6 እና መሃል ሜዳ 35.8 በሚ.ሜ ይገኙበታል ከዚህም ጋር ተያይዞ የተገኘው ከፍተኛ መጠን ያለው እርጥበት በተለይም ውኃ አጠር ለሆኑት አካባቢዎች የዝናብ ውኃን ለማሰባሰብና ለማከማቸት መልካም አጋጣሚን የፈጠረ ነበር። በሌላ በኩል ደግሞ በምዕራብ እና በደቡብ ምዕራብ፣ በሰሜን ምስራቅ፣ በደቡብ ምስራቅ የሀገሪቱ ዳርቻዎች ላይ በአብዛኛዎቹ ቀናት ላይ ከ35 ዲ.ሴ በላይ ሆኖ የተመዘገበ ሲሆን፣ በጥቂት አካባቢዎች ላይ ደግሞ ከ40 ዲ.ሴ በላይ ሆኖ ተመዝግቧል። ይህም የነበረው ፀሐይ ምቹ ምቹ የአየር ሁኔታ ከነበረው የእርጥበት እጥረት ጋር ተዳምሮ በወቅቱ አጠቃላይ የግብርና ሥራ እንቅስቃሴ እንዲሁም በአርብቶ አደሩ አካባቢ የእንሰሳት መኖር ውኃ አቅርቦት ላይ አሉታዊ ተፅዕኖ ነበረው።

ባሳለፍነው የማርች ሁለተኛው አስር ቀናት የተሻለ ዕርጥበት አዘል አየር ወደ ሀገራችን በመግባቱ ከባለፈው አስር ቀናት አንፃር የተሻለ የእርጥበት መጠንና ስርጭት በአብዛኛው የሀገሪቱ የበልግ ዝናብ ተጠቃሚዎች ላይ ተስፋፋቶ ታይቷል በተለይም በመካከለኛው፣ በምስራቅ፣ በሰሜን ምስራቅ፣ በደቡብና በደቡብ ምስራቅ የሀገሪቱ አካባቢዎች ላይ በአመዛኙ ከቀላል እስከ ከፍተኛ መጠን ያለው እርጥበት የነበራቸው ሲሆን ። ይህም ሁኔታ በተለይም የበልግ ሰብል አብቃይ በሆኑት የሀገሪቱ አካባቢዎች

ላይ የተሻለ የአፈር ውስጥ እርጥበት እንደነበረና ከዚህም ጋር ተያይዞ የማሳ ዝግጅት ለማድረግ እና የተለያዩ ሰብሎችን ለመዝራት አዎንታዊ ሚና የነበረው ሲሆን አስቀድመው ለተዘሩ የበልግ ወቅት ሰብሎችም ሆነ ለቋሚ ተክሎች እንዲሁም ለግጦሽ ሳርና ለመጠጥ ውሃ አቅርቦት በጎ ጎን ነበረው። እንዲሁም በብዙ የሃገሪቱ አካባቢዎች በ24 ሰዓት የተመዘገበው ከባድ ዝናብ በተለይም ውሃ አጠር ለሆኑት አካባቢዎች የዝናብ ውኃን ለማሰባሰብና ለማከማቸት ጥሩ አጋጣሚን የፈጠረ ቢሆንም በአንዳንድ ቦታዎቻቸው ላይ ቅጽበታዊ ጎርፍና የወንዞች መሙላት ሊያስከትል በመቻሉ በእንሰሳት፣ በሰዎችና በንብረት ላይ እንዲሁም ቀደም ብለው በተዘሩትና በተለያዩ የእድገት ደረጃ ላይ በሚገኙት ሰብሎች ላይ አሉታዊ ተፅዕኖ ነበረው። በሌላ በኩል በሰሜን ምዕራብ፣ በምዕራብና በደቡብ ምዕራብ የሀገሪቱ ዳርቻዎች በሚገኙ ቆላማ አካባቢዎች ከ40 ዲግሪ ሲልሽየስ በላይ የቀኑ ከፍተኛ የሙቀት መጠን የተመዘገበ ሲሆን ከዚህ የሙቀት መጠን መጨመር ጋር ተያይዞ በእነዚህ አካባቢዎች ደረቅ ሁኔታ የተስተዋለ ሲሆን በወቅቱ አጠቃላይ የግብርና ሥራ እንቅስቃሴ እንዲሁም በአርብቶ አደሩ አካባቢ የእንሰሳት መኖርና ውሃ አቅርቦት ላይ አሉታዊ ተፅዕኖ ነበረው።

ባላላፍነው የማርች ወር ሶስተኛው አስራ አንድ ቀናት ከተለያዩ የሀገሪቱ አካባቢዎች ላይ የተሰበሰቡ የግብርና ሚቲዎሮሎጂ መረጃዎች እንደሚያመለክቱት በአብዛኛው የበልግ ዝናብ ተጠቃሚ አካባቢዎች ላይ ከቀላል እስከ መካከለኛ መጠን ያለው የእርጥበት ሁኔታ ነበራቸው ። በተለይም በመጀመሪያዎቹ አምስት ቀናት በደቡብ፣ በደቡብ ምስራቅና በምስራቅ አካባቢዎች ከቀላል እስከ መካከለኛ መጠን ያለው ዝናብ የተስተዋለባቸው ሲሆን በመቀጠልም ከአስሩ ቀን አጋማሽ በኋላ ወደ መካከለኛው፣ የደቡብ ምዕራብና የሰሜን ምስራቅ አካባቢዎች በመጠንም ሆነ በስርጭት ረገድ የተስተካከለ እርጥበት አግኝተዋል። ይህም ሁኔታ በተለይም የበልግ ሰብል አብቃይ በሆኑት የሀገሪቱ አካባቢዎች ላይ የተሻለ የአፈር ውስጥ እርጥበት እንዲኖራቸው ያስቻለ ከመሆኑ ጋር ተያይዞ አስቀድመው ለተዘሩ የበልግ ወቅት ሰብሎችም ሆነ በአካባቢዎቹ ለሚበቅሉ ቋሚ ተክሎች እንዲሁም ለግጦሽ ሳርና ለመጠጥ ውኃ አቅርቦት በጎ ጎን ነበረው። በተጨማሪም የረጅም ጊዜ ሰብሎችን ለሚዘሩ አካባቢዎች አዎንታዊ አስተዋፅዖ ነበረው። በተጨማሪም በአንዳንድ ሥፍራዎች ላይ በ24 ሰዓት ውስጥ መጠኑ ከ30 ሚ.ሜ የበለጠ ከባድ ዝናብ ነበራቸው። ከዚህም ጋር ተያይዞ የተገኘው ከፍተኛ መጠን ያለው እርጥበት በተለይም ውኃ አጠር ለሆኑት አካባቢዎች የዝናብ ውኃን ለማሰባሰብና ለማከማቸት መልካም አጋጣሚን የፈጠረ ቢሆንም በአንዳንድ ቦታዎቻቸው ላይ ቅጽበታዊ ጎርፍና የወንዞች መሙላት ሊያስከትል በመቻሉ በእንሰሳት፣ በሰዎችና በንብረት ላይ እንዲሁም ቀደም ብለው በተዘሩትና በተለያዩ የእድገት ደረጃ ላይ በሚገኙት ሰብሎች ላይ በተወሰነ መልኩ አሉታዊ ተፅዕኖ ነበረው። በሌላ በኩል በምዕራብ እና በደቡብ ምዕራብ፣ በሰሜን ምስራቅ፣ በደቡብ ምሥራቅ እና በደቡብ የሀገሪቱ ዳርቻዎች ላይ በአብዛኛዎቹ ቀናት ላይ ከ35 ዲ.ሴ በላይ ሆኖ የተመዘገበ ሲሆን ይህም

የነበረው ፀሐይምና ሞቃታማ የአየር ሁኔታ በአካባቢው ከነበረው የእርጥበት እጥረት ጋር ተዳምሮ በወቅቱ አጠቃላይ የግብርና ሥራ እንቅስቃሴ እንዲሁም በአርብቶ አደሩ አካባቢ የእንሰሳት መኖርና ውኃ አቅርቦት ላይ አሉታዊ ተፅዕኖ ነበረው።

ባሳለፍነው የማርች ወር አብዛኛዎቹ የምሥራቃዊ አጋማሽ የበልግ ዝናብ ተጠቃሚ የሀገሪቱ አካባቢዎች የተስፋፋ እርጥበት አግኝተዋል። ይህም ሁኔታ በተለይም የበልግ ሰብል አብቃይ በሆኑት የሀገሪቱ አካባቢዎች ላይ የተሻለ የአፈር ውስጥ እርጥበት እንዲኖራቸው ያስቻለ ከመሆኑ ጋር ተያይዞ የማሳ ዝግጅት ለማድረግ እና የተለያዩ ሰብሎችን ለመዝራት አዎንታዊ ሚና የነበረው ሲሆን አስቀድመው ለተዘሩ የበልግ ወቅት ሰብሎችም ሆነ በአካባቢዎቹ ለሚበቅሉ ቋሚ ተክሎች በጎ ጎን ነበረው። በተጨማሪም ከመጀመሪያው አስር ቀን በኋላ ወደ ደቡብና ደቡብ ምስራቅ የሀገሪቱ ስፍራዎች ተስፋፍቶ የነበረው እርጥበት ለአርብቶ አደሮችና ከፊል አርብቶ አደር አካባቢዎች ለመጠጥ ውኃና ለግጦሽ ሳር አቅርቦት በጎ ጎን ነበረው። በአንጻሩም በብዙ ሥፍራዎች ላይ በ24 ሰዓት ውስጥ መጠኑ ከ30 ሚ.ሜ የበለጠ ከባድ ዝናብ ነበራቸው። ከዚሁም ጋር ተያይዞ የተገኘው ከፍተኛ መጠን ያለው እርጥበት በተለይም ውሃ አጠር ለሆኑት አካባቢዎች የዝናብ ውሃን ለማሰባሰብና ለማከማቸት መልካም አጋጣሚን የፈጠረ ቢሆንም በአንዳንድ ቦታዎቻቸው ላይ ቅጽበታዊ ጎርፍና የወንዞች መሙላት ሊያስከትል በመቻሉ በእንሰሳት፣ በሰዎችና በንብረት ላይ እንዲሁም ቀደም ብለው በተዘሩትና በተለያዩ የእድገት ደረጃ ላይ በሚገኙት ሰብሎች ላይ አሉታዊ ተፅዕኖ ነበረው። በሌላ በኩል በምዕራብ እና በደቡብ ምዕራብ፣ በሰሜን ምስራቅ፣ በደቡብ ምሥራቅ እና በደቡብ የሀገሪቱ ዳርቻዎች ላይ በአብዛኛዎቹ ቀናት ላይ ከ40 ዲ.ሴ በላይ ሆኖ የተመዘገበ ሲሆን ይህም የነበረው ፀሐይምና ሞቃታማ የአየር ሁኔታ በአካባቢው ከነበረው የእርጥበት እጥረት ጋር ተዳምሮ በወቅቱ አጠቃላይ የግብርና ሥራ እንቅስቃሴ እንዲሁም በአርብቶ አደሩ አካባቢ የእንሰሳት መኖርና ውኃ አቅርቦት ላይ አሉታዊ ተፅዕኖ ነበረው።

SUMMARY MARCH 2023

During the first dekad of March, due to the relative strengthening of rain bearing weather systems better moisture has been steadily improving day by day, particularly north eastern, central and eastern parts of the country experienced light to medium moisture. Heavy rainfall was also recorded in some places including Addis Ababa Bole 51.0mm, Addis Ababa head office 37.0mm, Dire dewa 47.0mm, Methara 39.1mm, Addele 33.6, Ambo 49.0, Bati 34.5, Bedele 43.2, Dembi delo 38.6, and Mehal meda 35.8mm. This condition might have positive impact to perform land preparation and planting for Belg season crops in areas where the rain onset was a bit delayed from its normal time of sowing as well as for perennial plants and early sowed crops. In addition, the condition had been favorable toward improving the availability of pasture and drinking water over the pastorals and agro-pastoral communities. 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. On the other hand, daily extreme maximum temperature has shown a relative increase over northeast, southeast, southern margin areas recorded Temperatures above 35°C and some places experienced above 40°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 second dekad of March, the amount and distribution of moisture over Belg growing areas was better compared to the previous dekad. Due to the relative strengthening of weather systems that bring rain particularly in the northeast, east, central, southern and south eastern regions of the country's had moderate to high moisture condition. This situation had positive role for land preparation, sowing of Belg crops 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. Heavy rainfall was also recorded in 24 hours in most part of the country including chifera 104.0, 51.0, 42.0mm and 30.4mm, Addis Ababa 41.4mm, 31.0, 51, Dalifagi 88.0mm, Burji 34.8mm, Aman 62.6mm, Mega 35mm, Wolita Sodo 40.3, 45.5 and 49.3mm, Woliso 35.6mm, Semera 46.0mm, Dubti 71mm, Shambu 35.5mm, Sawela 71.1mm, Nekemt 56.2mm, Milli 50.0mm, Moyale 43.5 and 32.8mm, Meisso 50.0mm, Metehara, 33.0, 37.6mm, Mirab Abaya 44.0mm, Kebridehar 30.0 and 44.8mm, Gewane 30.4and 30.4mm, Fik 94.3mm, Gelemso 36.2mm, Elidar 30.7mm, Enewary 36.0mm, Dilla 30.8mm, Dolomena

30.5mm, Diredawa 33.4mm, Bore 82.0,32.1 and 33.0mm, Bilate 45.1mm, Bui 45.5mm, Bati 32.0 and 35.0mm, Awash Arba 55.0mm, Adele 39.2mm, Hromaya 36.6mm, Abomsa 48.4mm and Yabello 66.5mm rain fall. This situation also created a good opportunity to collect and store rainwater, especially for the areas that have shortage of water. However the recorded heavy fall might have a negative impact on animals, people and property, as well as on the crops that were sown earlier and at different stages of development. On the other hand, in the low-land areas of the north-west, west and south-west of the country, the highest temperature of the day was recorded above 40 degrees Celsius. It had negative impact on the overall agricultural activity and the supply of animal fodder and water in the pastoral area.

During the third dekad of March 2023, according to the data collected from various agro meteorological stations, light to medium amount of moisture was observed particularly during the first half of the dekad over south-eastern and eastern parts of the country and after the mid of the dekad extended over central, south-western and north-eastern parts. In line with this, the received moisture combination with the moisture obtained in the previous dekads had positive impact to perform large scale land preparation, planting of Belg season crops and crop that found in different growth stages. The observed moisture was also positive to sustain for the provision of pasture and drinking water as well. Occasional received Heavy rainfall was also recorded greater than 30mm in 24 hours in most part of the country. This situation has significant contribution to collect and store rainwater, especially for moisture stress areas. However the observed heavy fall might have created flood and river flow which has negative impact on animals, people and property, as well as on the crops that were sown earlier and at different stages of development. On the other hand, in the low-land areas of the western, north-western,north-eastern and southern parts of the country, the highest temperature of the day was recorded above 35 degrees Celsius. It had negative impact on the overall agricultural activity and the supply of animal fodder and water in the pastoral area.

During the month of March 2023, most of eastern half Belg rain benefiting areas of the country was prevailed good moisture condition in amount and distribution. This situation had positive contribution for land preparation, sowing of Belg crops as well as satisfies the water need of perianal plants and availability of pastors and drinking water across the pastoral and agro-pastoral areas. Moreover especially, after the first dekad of the month relative increase in moisture was observed over southern and south-eastern pastoral and agro-pastoral areas including, the south-western, north-eastern and central parts of the country which condition was sustain sowing of long cycle crops as well as satisfy the water need of

perennial plants. In addition, the situation was also favourable the generation of pasture and the availability of drinking water over pastoral and agro pastoral areas. Heavy rainfall was also recorded in 24 hours over most part of belg rain benefiting areas of the country, the obtained heavy fall 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. However the observed heavy fall might have created flood and river flow which has negative impact on animals, people and property, as well as on the crops that were sown earlier and at different stages of development. In general, the observed moisture during the month played a significant role toward alleviating the dry moisture observed due to the slight late onset of Belg rainfall as well as improves the soil moisture content and replenishes the water points. On the other hand, in the low-land areas of the western, north-western, north-eastern and southern parts of the country, the highest temperature of the day was recorded above 40 degrees Celsius. It had negative impact on the overall agricultural activity and the supply of animal fodder and water in the pastoral area.

1. WEATHER ASSESSMENT

1.1. Rainfall amount (21 – 31) March 2023

During the third decade of march 2023, Pocket areas of North Wello and East Hararaghe, half of Bench Maji and South Omo, Basketo, Dawero, Gofa, pocket areas of Sidama, Guji, Borena and Liben Zones are received 100-200 mm rain fall. Half of North Wello, Afar Zone 3,4&5 and Oromia Zone, West and Esat Hararghe, Pocket areas of Arsi, Sinili and Jijiga, Blae, Fik, Afder, Liben,Jimma, Gurage, Silti, Alaba,Hadiya, Woliyta, Sidama, Keffa, Dawero, Bench maji, Basketo,South Omo, Koneo, Borena, Gedo, Guji,Zones are exhibited 50-100mm rain fall. Pocket areas of North and South Wello, Oromi Zone, Afar Zone 1,3&4, pocket areas of East Gojjam, North Shewa, pocket areas of Bench maji, Keffa, Jimma, Soth West Shewa, ARSI, Amaro, Shinili,Jijaga, Degahabur, Gode, Korahe, Afder Zones are received 25-50mm rain fall. South Tigray, North and South Wello, Aafr Zone 2,2, &5, East Gojjam, Half of East Wellega, Nort and West Shewa, Addis Ababa Zone, pocket areas of Gambella Zone 2&3, Godere, Sheka, half of Shinili and Degahabur, pocket areas of Jijiga, Wardar,pocket areas of Korahe and Gode Zones are received 5-25 mm rain fall. The rest part of the country is received 0-5 mm rain fall.

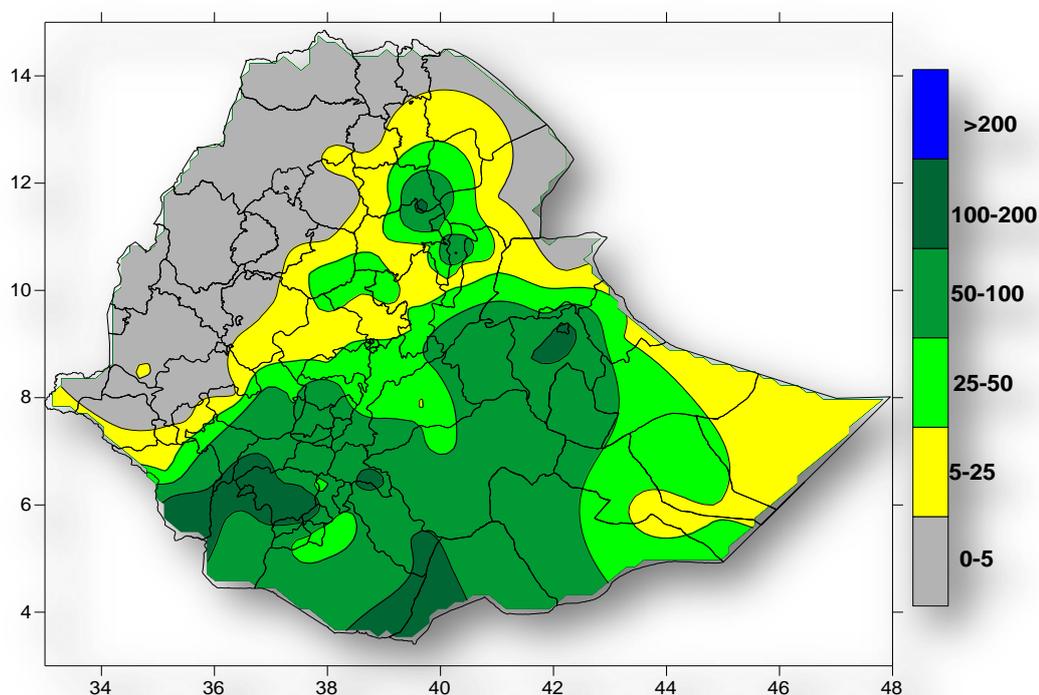


Fig 1. Rainfall distribution in mm (21 – 31) March 2023

1.2. Rainfall Anomaly (21 – 31 March 2023)

When we look at to the rainfall anomaly map below, during the third dekade of march 2023, Nort Eastern, Eastern, Central Southern, South Western 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 half of North Eastern part of the country are exhibited Much Below Normal to Below Normal rain fall condition.

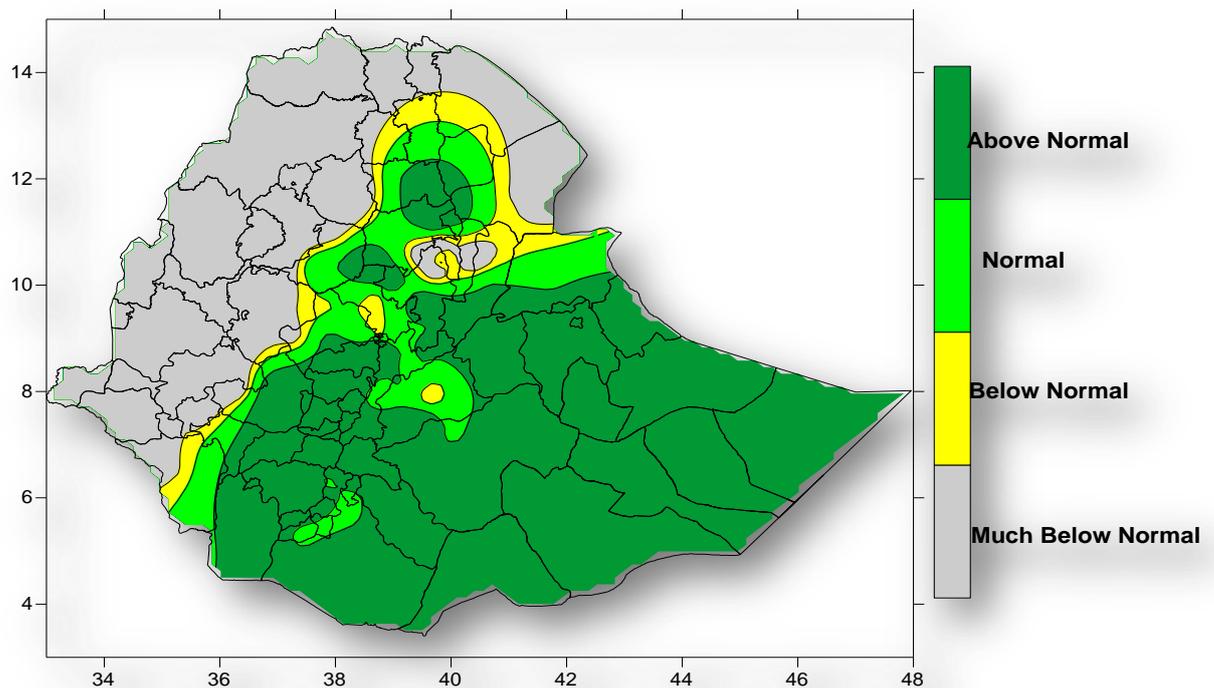


Fig. 2 Percent of normal rainfall distribution (21 – 31 March 2023)

Explanatory notes for the Legend

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

1.3. Moisture status (21 – 31 March 2023)

During third dekad 2023 in most of eastern half including south-western parts of the country experienced Moist to Hyper Moist moisture condition. The rest parts of the countries exhibited moderately Dry too Very Dry.

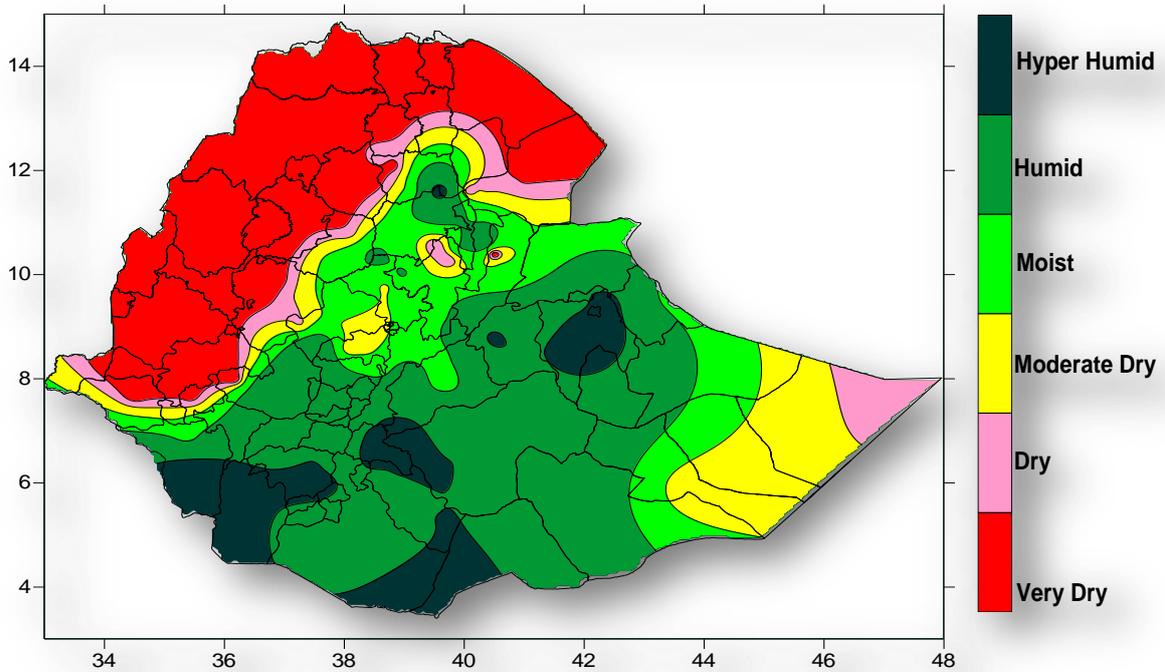


Fig. 3 Moisture Status (21-31 March 2023)

1.4. Rainfall amount on the month of March 2023

During the Month of March 2023, the rain fall distribution on, Pocket areas of North, Oromia Zone, Afar Zone 1,4&5, Pocket areas of West Hararghe, Half of East Hararghe, Fik, pocket areas of Gurahi, Siliti, Alaba, Hadiya and Woliyta, Dawero, Basketo, Sidama, pocket areas of Bale and Guji, Liben and Borena Zones are Exhibited >200 mm rain fall. North and South Wello, Afar Zone 1,3,4&5, Half of Shinili, North and West Shewa, Addis Ababa Zone, Jimma, Keffa, Bench maji, South Omo, Konso, Dirsha, Amaro, Borena, Gedo, Guji, Liben, Bale, Arsi, West and East Hararghe, Fik, Gode and Korahe Zones are recived 100-200 mm rain fall. South Tigray, pocket areas of North and South Wello,Afar Zone 2and half of Zone 1, Est Gojjam, East Wellega, North and West Shewa, Illibabur, Sheka, Godere, Amaro, Borena, Bale, Afder, Gode, Korahe, Wardar and Degahabur Zones area received 50-100mm rain fall. South TIGRAY, Afar Zone 1&2, pocket areas of North Wello, and East Gojja, West and East Wellega, Illibabur, Sheka and Godere, pocket area of Afder, Wardar, Degahabur , Jijiga and Shinily Zones are received 25-50mm rain fall. Pocket areas of Central, East and South Tigray, Waghimera, North and South Gonder, pocket areas of West Gojjam, Agew Awi, Kamashi, Pocket areas of West Wellega and Tango, Gambella Zone 1,2&3, pocket areas of Shinili, Degahabur and Wardar Zones area received 5-25mm rain fall. The rest part of the country received 0-5mm rain fall.

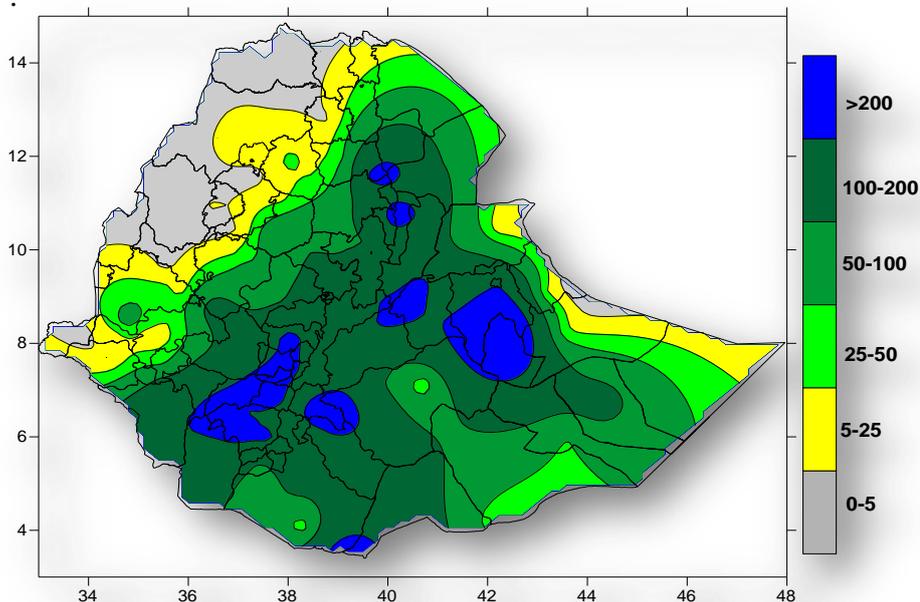


Fig. 4 Rainfall amount in mm for the month of March 2023

1.5. Rainfall Anomaly on the month of March 2023

During the month of March 2023, the rain fall anomaly most part of the country particularly Nort Eastern, Eastern, Central Southern, South Western and South Eastern part of the country are Exhibited Normal to Above Normal Rain fall condition. On the other hand, some part of Western and North Western part of the country are exhibited Much Below Normal to Below Normal rain fall condition.

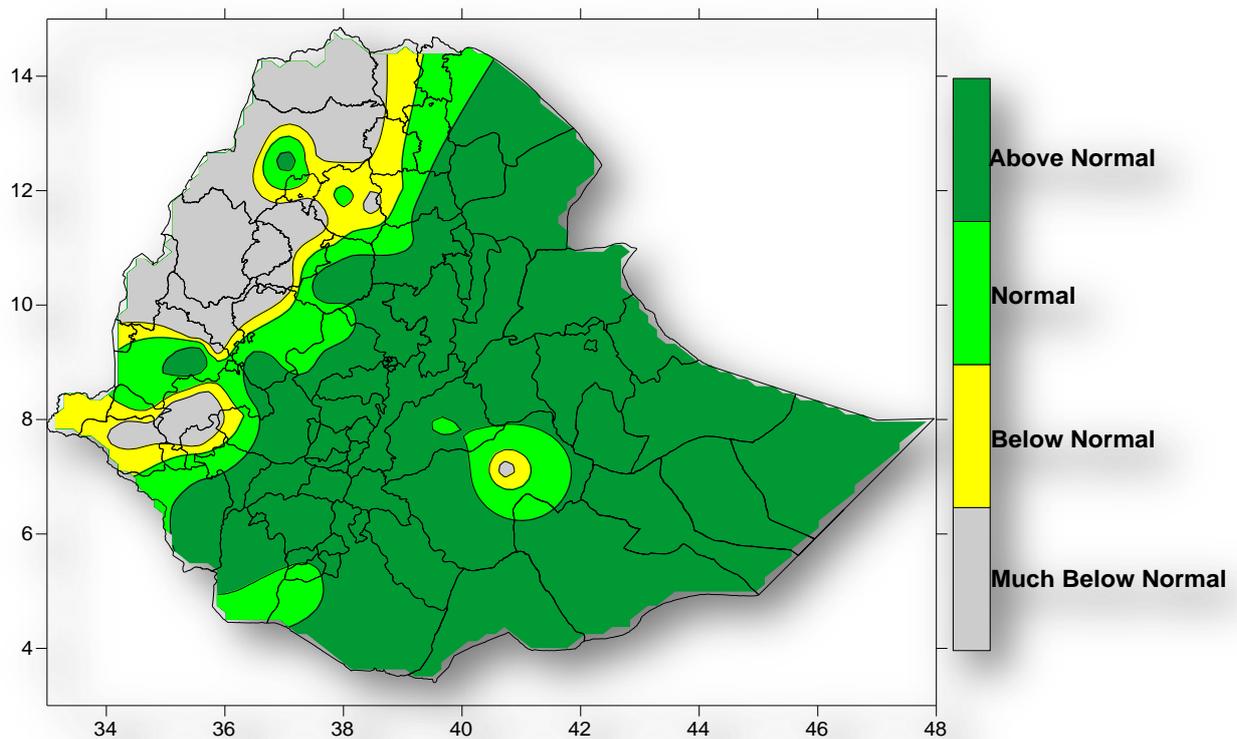


Fig. 5 Percent of Normal Rainfall for the month of March 2023

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 March 2023

In accordance with the moisture status map indicated below, during the month of March 2023 in most parts of eastern half including south-western parts of the country experienced Moist to Hyper Moist moisture condition. The rest parts of the countries exhibited moderately Dry too Very Dry

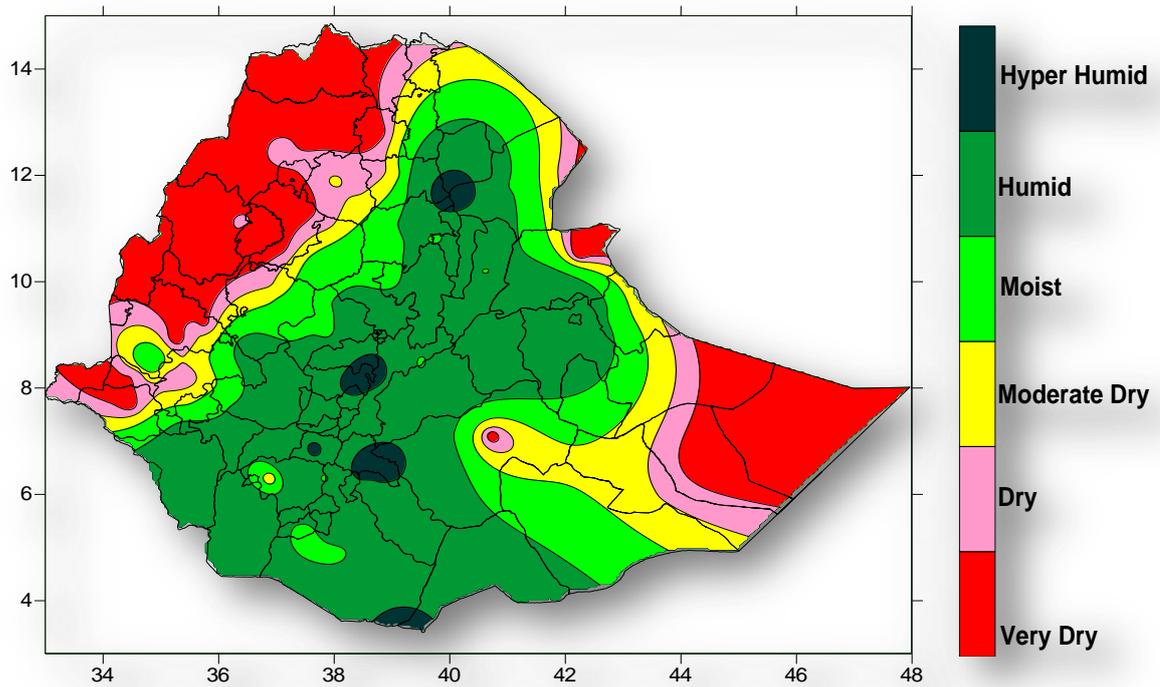
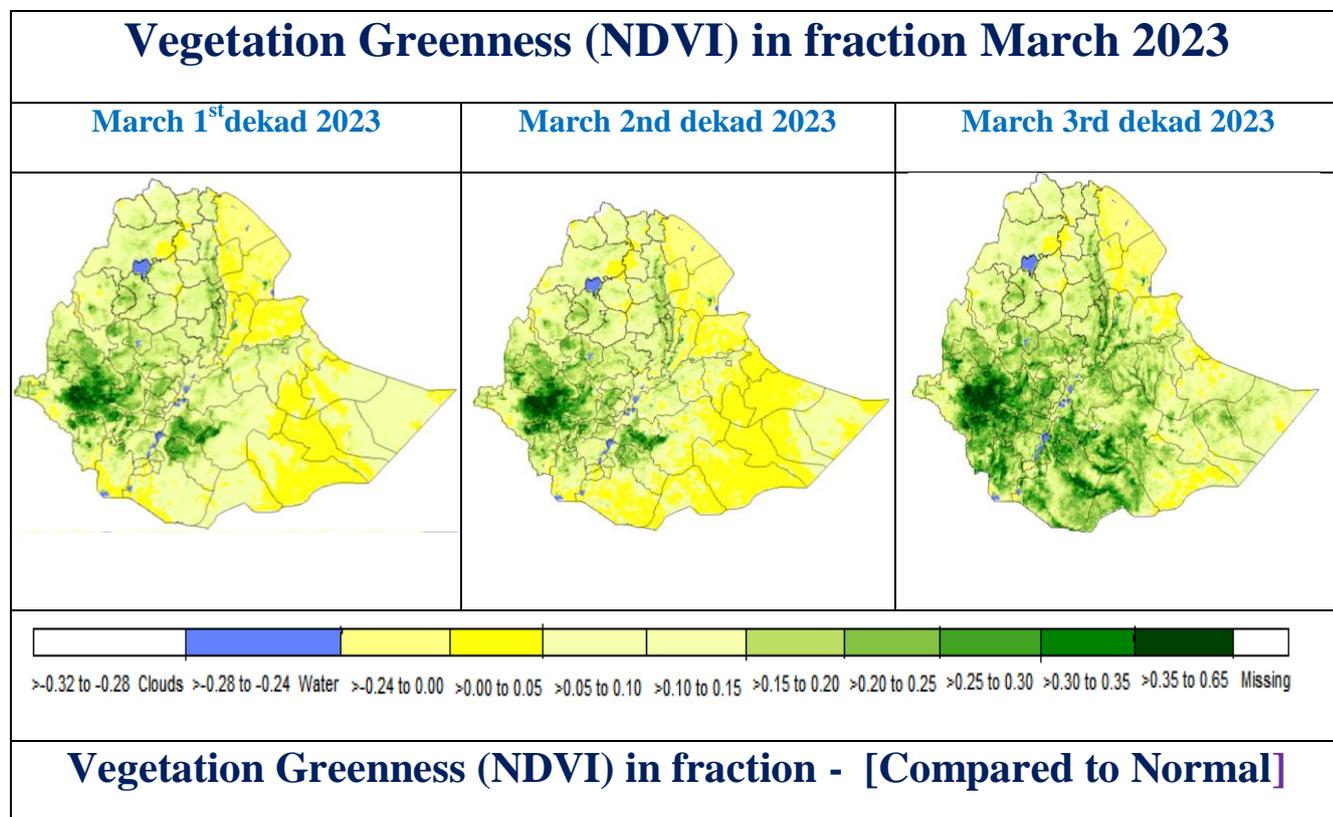


Fig. 6 moisture status for the month of March 2023

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE ON THE MONTH OF MARCH 2023

During the month of March, due to the relative strengthening of rain bearing meteorological systems better moisture has been steadily improving day by day, particularly north eastern, central and eastern parts of the country experienced light to medium moisture. Also after the first dekad of the month relative increase in moisture was observed over southern and south-eastern pastoral and agro-pastoral areas including, the south-western, north-eastern and central parts of the country 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. In addition, the extended moisture over south and south-eastern parts highly favourable the generation of pasture and the availability of drinking water as well as improves the soil moisture content and replenishes the water points. over pastoral and agro pastoral areas.



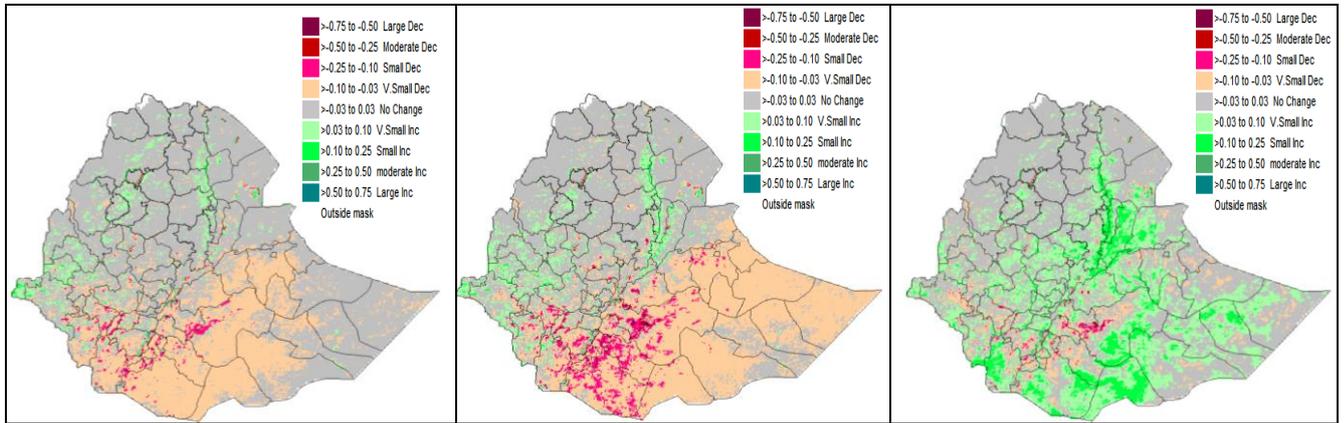


Fig. 7 Vegetation Greenness (NDVI) in fraction and Compared to Normal March 2023

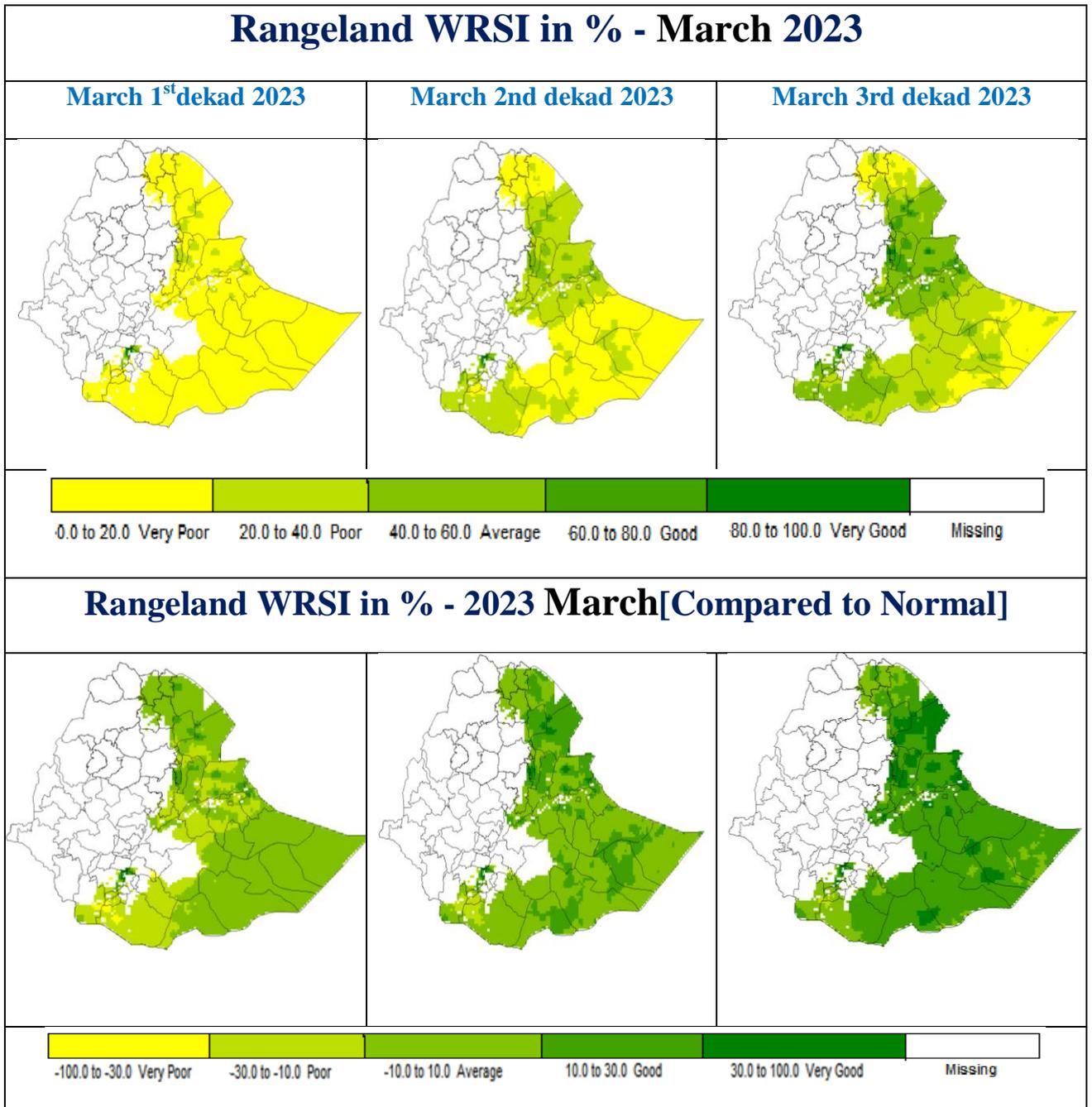


Fig.8. Rangeland WRSI in % and Compared to Normal - March 2023

2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING MONTH OF APRIL 2023

In the normal situation, in the month of April rain producing systems are expected to be strength over Belg rain producing and growing areas of the country. Hence, the situation are very important for moisture requirement of different Belg and sowing of long cycle Meher crops, perennial plants, improve pasture and drinking water availability over pastoral and agro pastoral areas. However, the expected heavy fall over some areas of the country cause flash flood on crops field in low lying areas and it affect Belg crops and washing away the newly sown seeds in the areas.

As of the monthly weather forecast, during the coming month of April, rain bearing meteorological systems is expected to be strength over most places of the country are likely to get better moisture comparing with the previous two Belg months. This situation will improve moisture availability for seasonal agricultural activities, particularly water requirement of early sown Belg crops found at emergency and different growing stages, perennial plants, land preparation of long cycle crops which normally sown from the month of April. Moreover the expected expanded moisture over south and south-eastern parts of the country ensuring the availability of pasture and drinking water for pastoral and agro pastoral communities. Therefore, concerned bodies and farmers are advised to use the expected moisture wisely and efficiently. However, the expected heavy fall particularly north-eastern, eastern, central and southern places across the country would have cause flash flood and water logging on crops field in 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 channel in order to reduce the effect of excess water. On the contrary the excess moisture might have positive impact on normally water deficit areas and water harvesting where that can be used in time of deficit.

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.

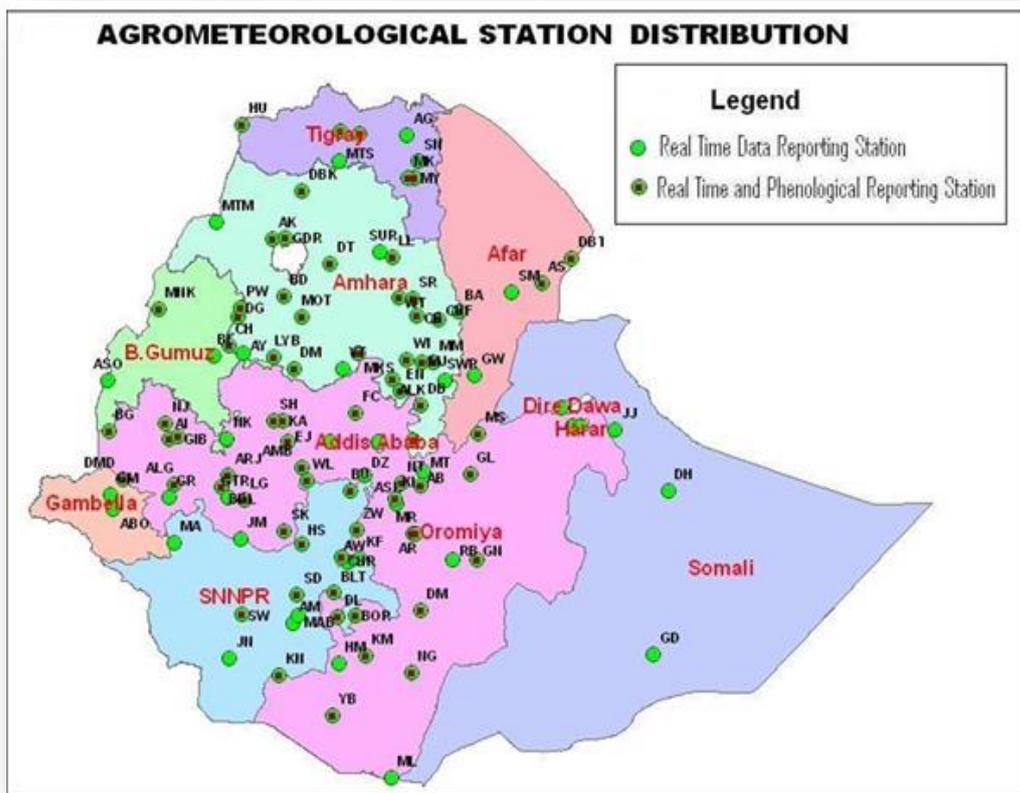
DEKAD: - First or second ten days or the remaining days of a month.

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 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		