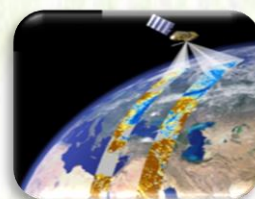


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TEN DAY AGROMETEOROLOGICAL BULLETIN

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FOREWARD

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 first decade of November 2023, the moisture condition was enhanced over the southern and south-eastern Bega rain benefiting. The observed moisture might have positive implication for fulfilling the water need of various Meher crops and perennial plants. Similarly, since Bega is the second rainy season for the southern and south-eastern parts of the country, the received good moisture during the dekad could play very crucial role to improving the availability of pasture and drinking water and significantly important to regenerate natural and artificial ponds over both the pastoral and agro pastoral community. On the other hand the observed heavy fall over southern and south-western parts of the country had a good opportunity to collect rain water harvesting. On the other hand the observed heavy fall over southern, south-eastern and eastern parts of the country might experience water logging, runoff, soil erosion and landslide due to continuous and heavy fall. Moreover the receiving unseasonal moisture over some areas negatively affected harvest and post-harvest activities of matured crops and the observed enhanced moisture might have positive implication for fulfilling the water need of various Meher crops, perennial plants.

During the second decade of December 2023, Bega season dry moisture condition was experienced across the Meher season producing parts of the country. The dry and sunny condition was taken as good opportunity to perform harvest and post-harvest activities over the place where Meher season crops are fully matured. On the other hand, the moisture condition was enhanced over the southern and south-western Bega rain benefiting areas. The observed moisture might have positive implication for fulfilling the water need of various Meher crops and perennial plants. Similarly, since Bega is the second rainy season for the southern parts of the country, the received moisture during the dekad could play very crucial role to improving the availability of pasture and drinking over both the pastoral and agro pastoral community.

1. WEATHER ASSESSMENT

1.1. Rainfall amount (11 – 20 December, 2023)

During the first Dekad of December 2023, most parts of Konso and Deerash received 25-50mm of rainfall. Pocket areas of North wello, Awi, Arsi, Mirab Omo including Amaro, Konso and Deerash experienced 5-25mm of rainfall. The rest parts of the country experienced little or no rainfall.

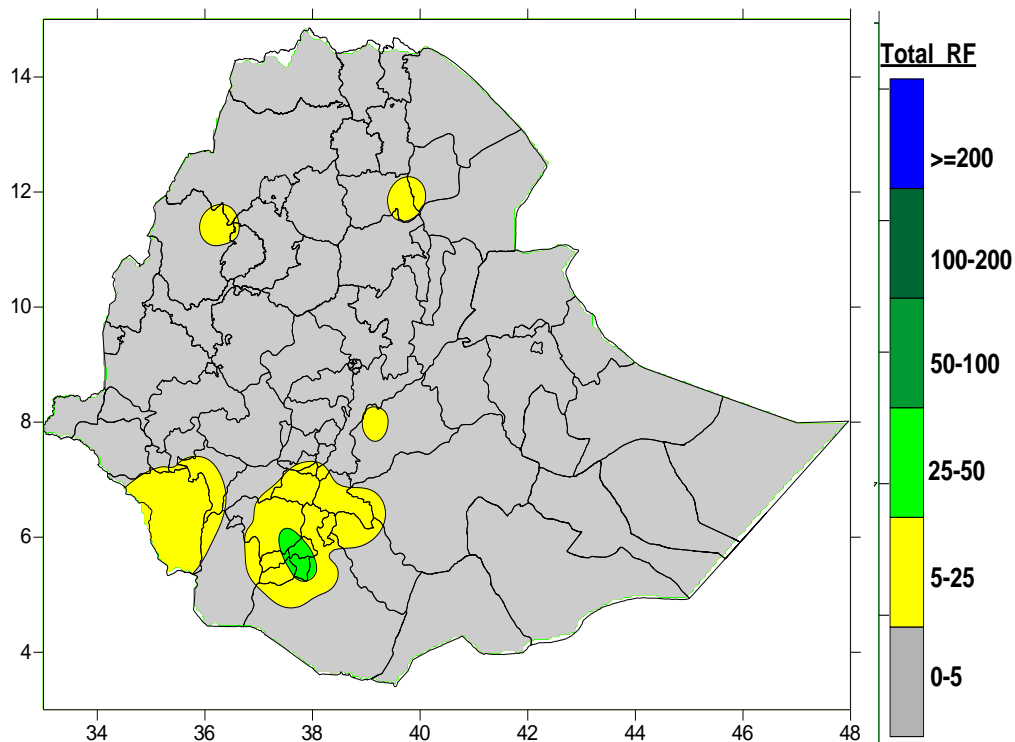


Figure 1. Rainfall distribution in mm (11- 20, December, 2023)

1.2. Rainfall Anomaly (11 – 20 December 2023)

During the month of December 2023, Metekel, West Gonder, east Wollega, Parts of Arsi and Bale, Hamer, Amaro, Konso and Deerash exhibited Normal to above normal rainfall. The rest parts of the country exhibited Normal too Much Below Normal rain fall condition.

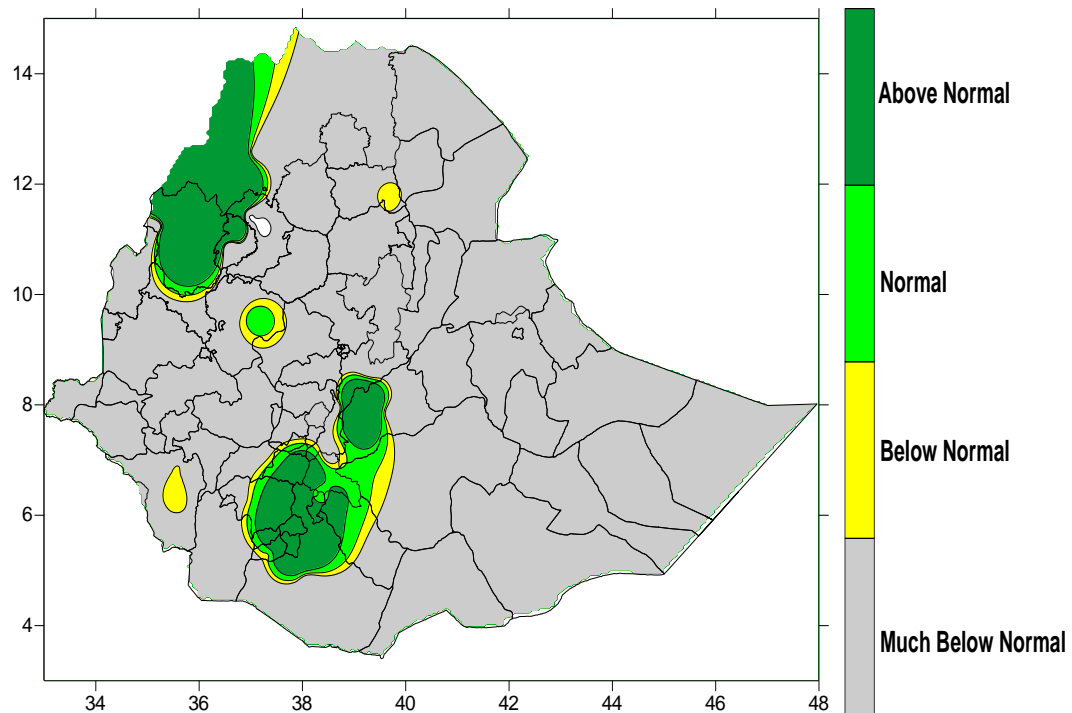


Figure 2: Percent of normal rainfall distribution (11 – 20 December 2023)

Explanatory notes for the Legend

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

1.3. Moisture Condition (11 – 20 December, 2023)

During the first dekad of December 2023, Debub Omo, Mirab Omo and Gofa and Most parts of Sheka, Bench, Maji, Agnewak, Borena, Mirab Wollega of the country exhibited moist to humid moisture conditions. The rest parts of the country experienced moderately dry to very dry moisture condition.

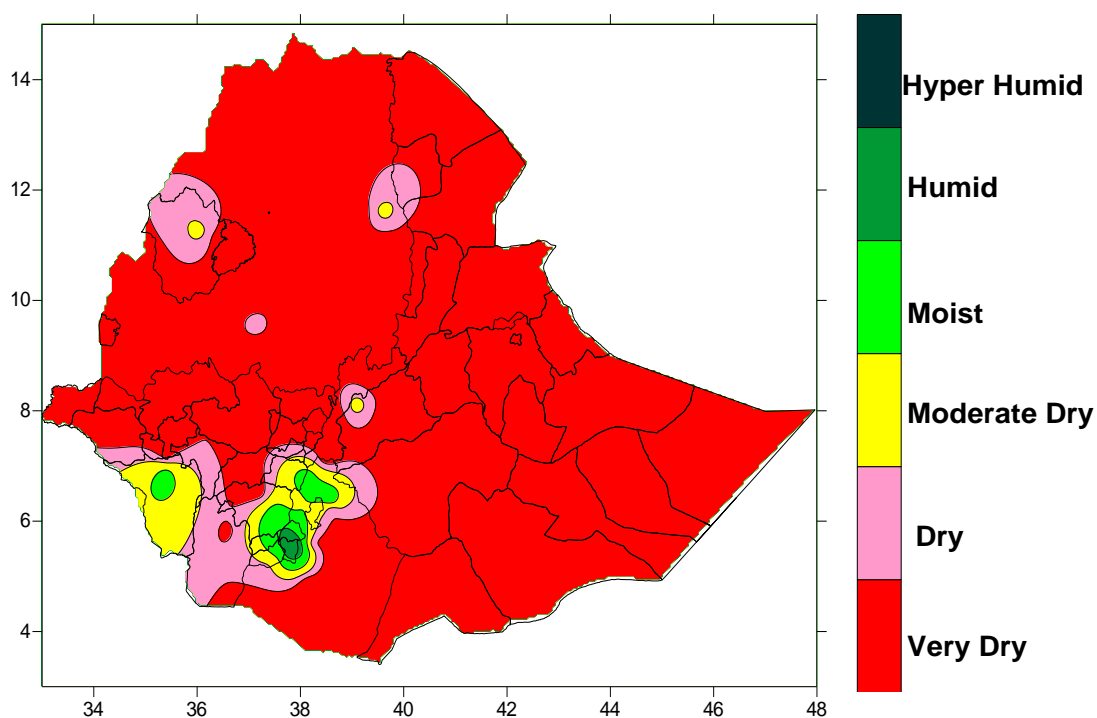


Figure.3. Moisture Status (11 – 20 December, 2023)

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE

During second dekad of December 2023, the moisture condition was enhanced over the southern and south-western n parts of the country.. Due to this the NDVI Fig.4 (the green plant coverage) and RLWRSI increased. The situation might play crucial role toward improving the availability of pasture and drinking water.

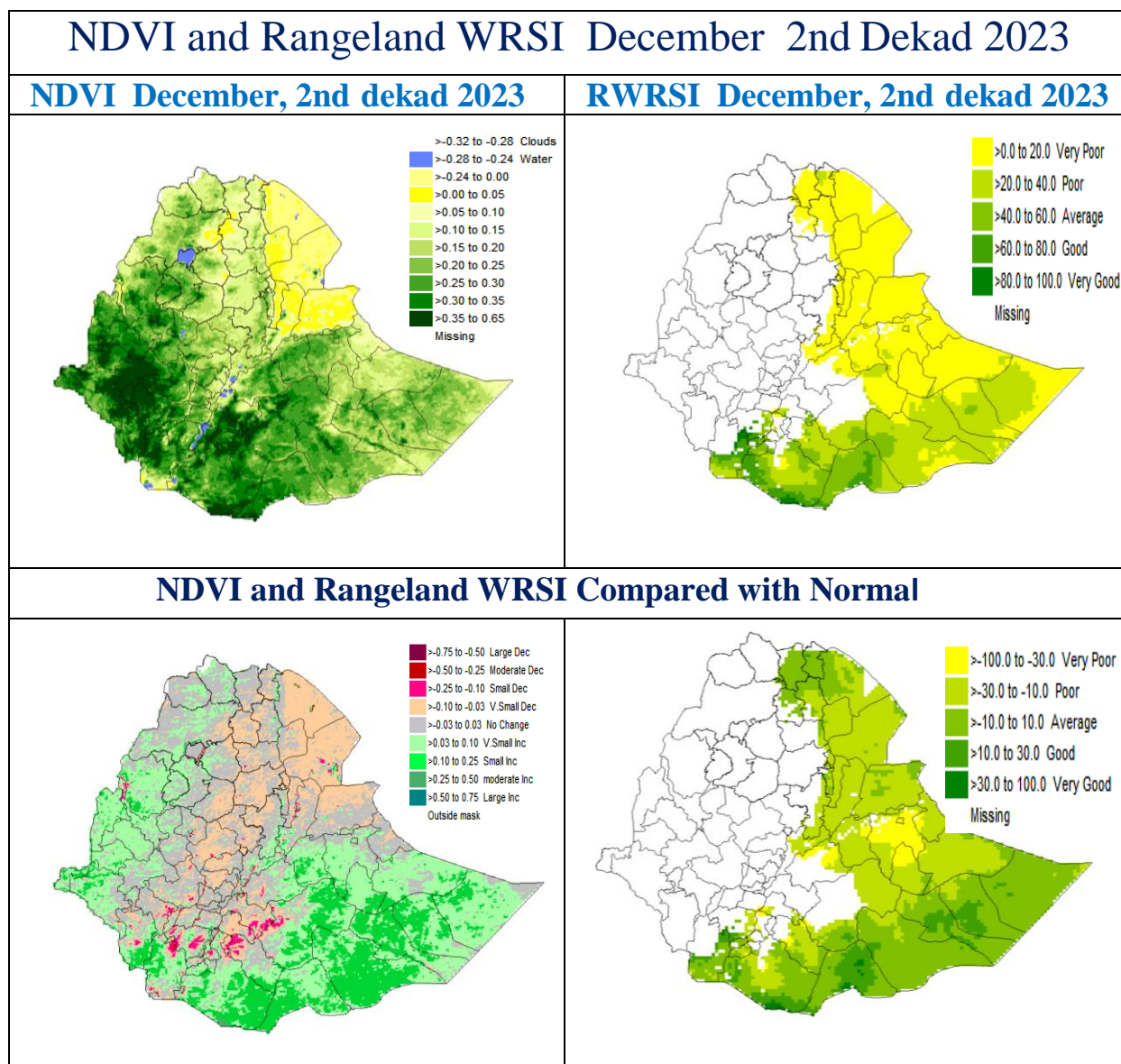


Fig.4. NDVI and Rangeland WRSI in % and Compared to Normal 11 – 20 December 2023

2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING THIRD DEKADE OF DECEMBER 2023

According to the weather forecast, in the coming third dekad of December 2023, during the beginning days of the dekad Bega season dry moisture condition is expected to across the Meher season producing parts of the country. The dry and sunny condition should be taken as good opportunity to perform harvest and post-harvest activities over the place where Meher season crops are fully matured. Moreover, the night and morning time cold condition over n northeaster, central, eastern and southern frost prawn high land parts may have slightly negative impact on fruit and other horticulture plants. On the other hand, southern, south eastern and south-western parts of the country will experience slight to heavy rainfall. The situation may be favourable for Bega season crops and perennial plants as well as to ensure the availability of pasture and drinking water for the pastoral and agro pastoral community. In addition to this, the expected occasional unseasonal rain over northeastern, north-western, central and eastern Meher producing areas of the country over seasonally dry sectors in areas where crops are ready to harvest of the country would have negative impact on harvest and post-harvest activities. Thus, harvest and post-harvest activities should be undertaken on time in order to avoid unnecessary harvest and post-harvest loses.

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

