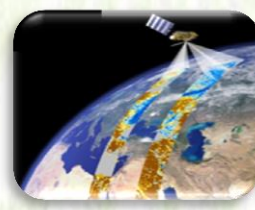


ETHIOPIAN METEOROLOGY INSTITUTION

Agrometeorological Bulletin

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 Ethiopia Meteorology Institute disseminates Ten day, 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 dekad of December, dry moisture conditions was prevailed in most parts of the country. The dry moisture condition had create favourable conditions for harvesting and post-harvesting activities in Meher crop growing areas of North, Northeast, central and Southern highlands of the country. On the other hand, the observed cold temperatures during night and morning was increased relatively, especially in the north, northeast, east, central and southern highlands of the country, which condition had a negative impact on the growth of irrigated crops, fruit, vegetables and perennial plants. In the same way, it may cause minor effect to the health of animals, especially calves.

During the second dekad of December 2024, according to meteorological information collected from all over the country in the first half of the dekad it was observed that the Bega season dry, sunny and windy weather conditions have prevailed in most part of the country. This condition might have a positive impact for harvest and post-harvest activities in Meher growing areas, where crops were fully matured. However, in relation to the prevailing dry weather condition, some high land areas like northern, north-eastern, eastern and central parts of the country experienced extreme minimum temperature below 5⁰C. This condition might have negative implication on the development of Bega season irrigated crops as well as on fruit, vegetables and perennial plants. Whereas, since Bega is the second rainy season for the southern and south-eastern low land parts of the country, the dry condition during the dekad negatively affected different agricultural activities over pastoral and agro pastoral areas.

WEATHER ASSESSMENT

1.1. Rainfall amount (11 – 20 December, 2024)

During the first dekad of December 2024, except pocket areas of west Showa most parts of the country were dominantly dry or less than 5 mm of rainfall conditions.

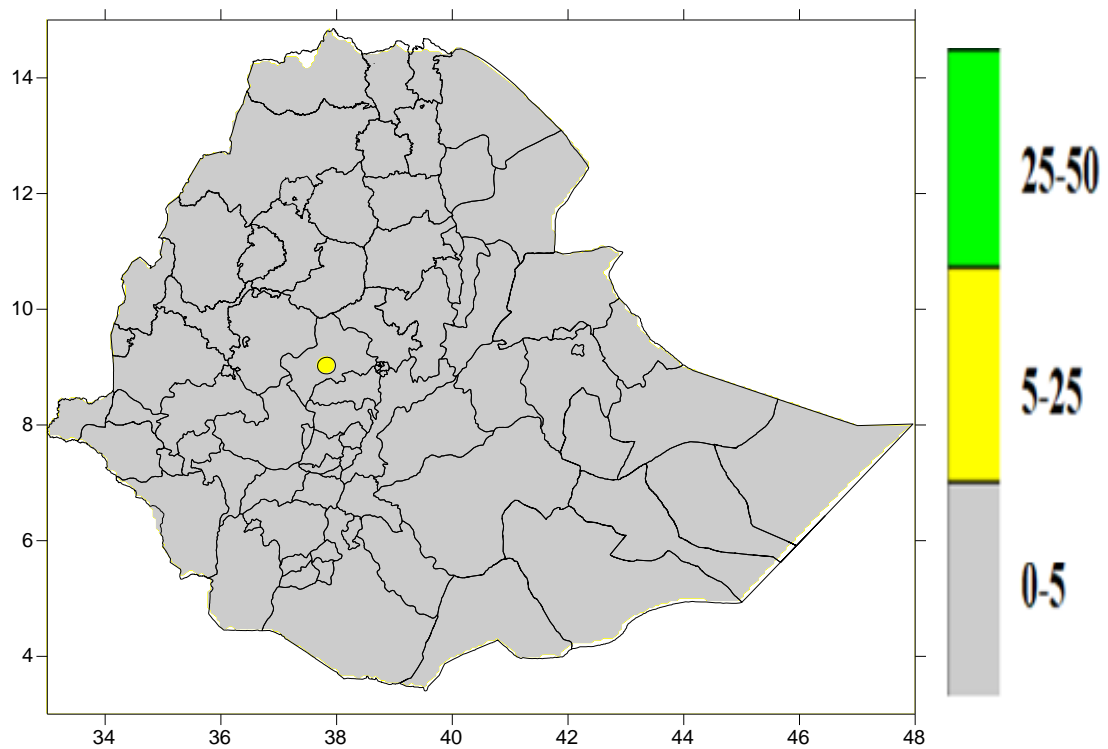


Figure 1. Rainfall distribution in mm (11- 20, December, 2024)

1.2. Rainfall Anomaly (11 – 20 December, 2024)

During the second dekad of December 2024, except parts of western show zone all over the country were experienced below Normal too Much below Normal rainfall condition.

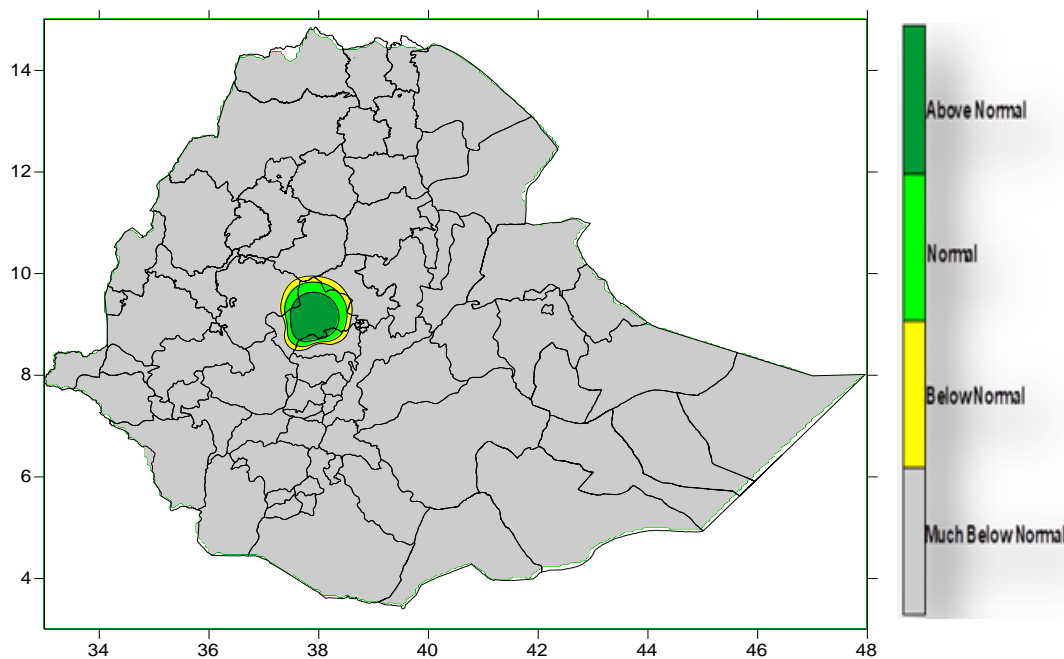


Figure 2: Percent of normal rainfall distribution (11 – 20 December, 2024)

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, 2024)

During the second dekad of December 2024, all over the country the dry moisture conditions were dominated. During this dekad the moisture condition is not significantly good for agricultural activities as a whole.

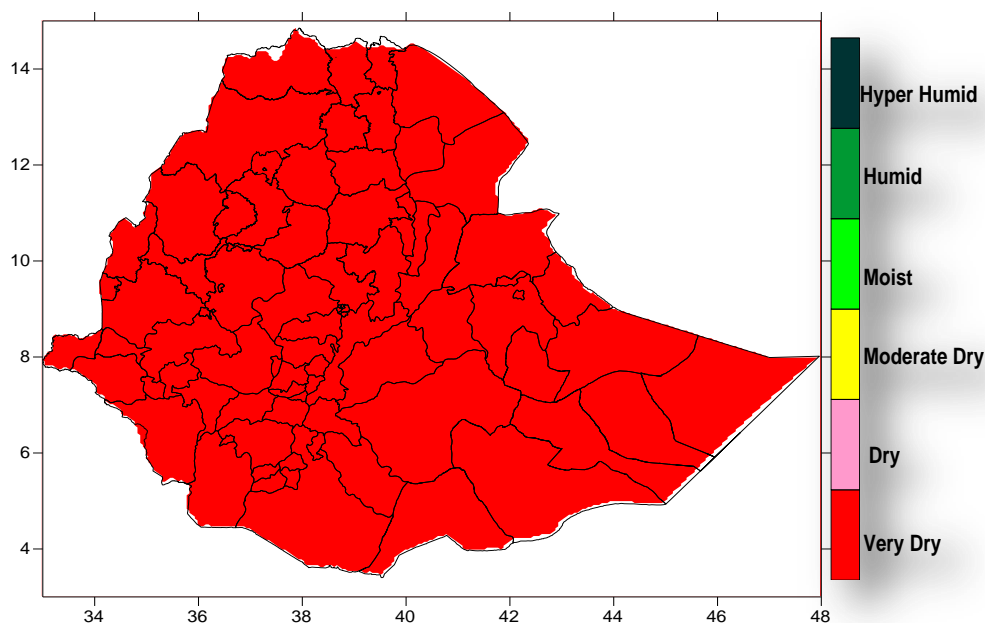


Figure.3. Moisture Status (11 – 20 December, 2024)

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE

During the second dekad of December 2024, the moisture condition was decreased all over the country particularly Bega rain benefiting areas including south-western, western and south-eastern parts of the country. Due to this the NDVI Fig.4 (the green plant coverage) and RLWRSI is slightly decreased over Bega rainfall benefiting areas from dekad to dekad. The decreased in the green plant coverage and Rangeland indicated over Bega rain benefiting pastoral and agro pastoral community that might impacts the availability of pasture and drinking water.

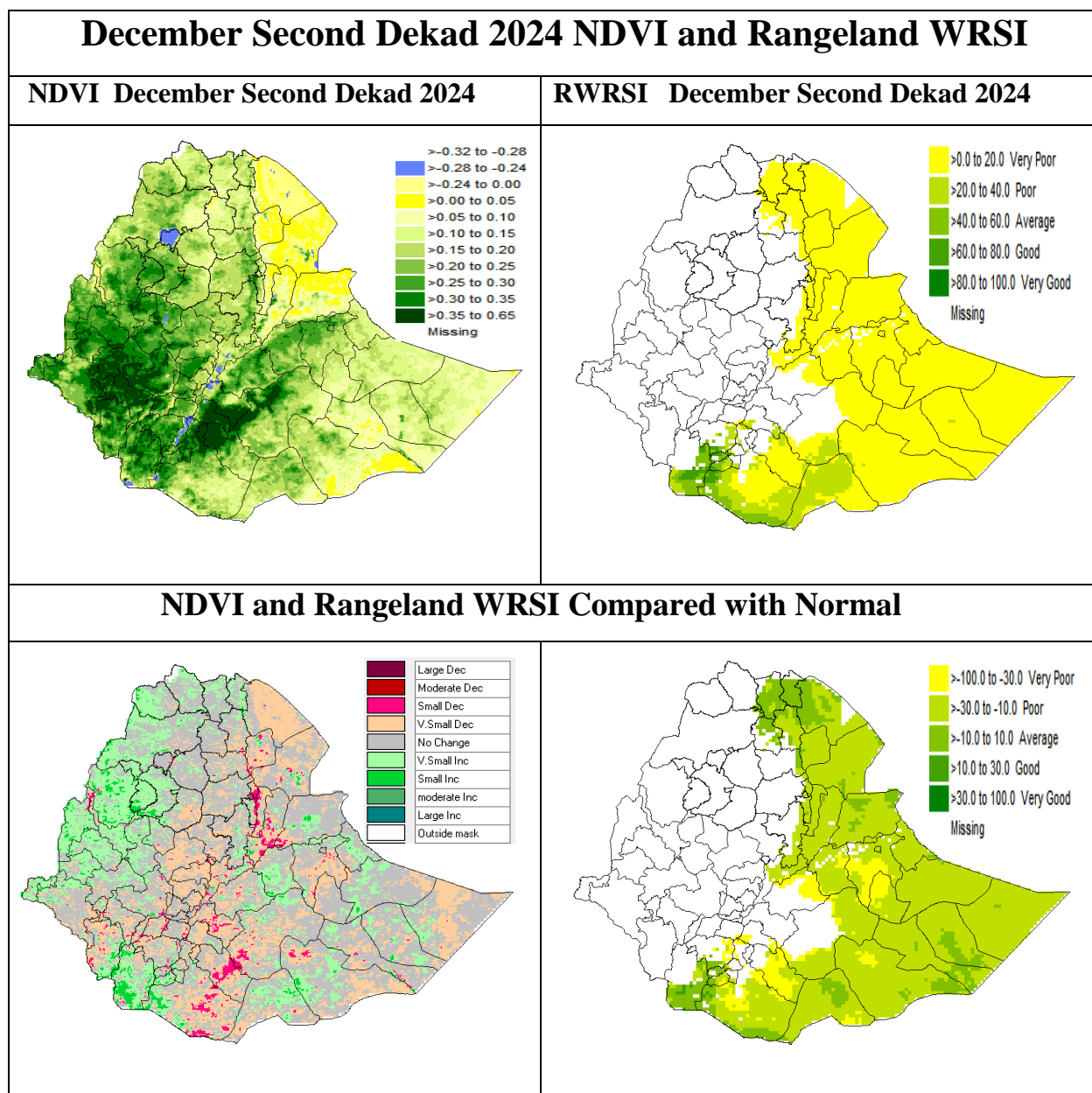


Fig.4. NDVI and Rangeland WRSI (%) and Compared to Normal 11 – 20 **December** 2024

2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING THIRD DEKADE OF DECEMBER 2024

In the coming third dekad of December 2024, the Bega season dry, sunny and wind weather condition couple with cold night and morning is likely to be continued in the coming dekad. The probable dry weather condition up to the end of the month is likely to favour for completing the on-going post-harvest activities. However related with the dry, windy and cloud free condition might encourage cold weather at night and morning time during the dekad over north, northeast, east, central and southern highland areas of the country. This condition is likely to be detrimental negative effect on the overall performance of vegetables, fruits and perennial plants. Therefore, farmers are advised to be ready to take the necessary measures so as to maintain the plant environment as warm as possible. Moreover, the expected some amount of moisture in the west and southwest will positively favour for the availability of water and pasture for pastoral and agro pastoral areas.

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

