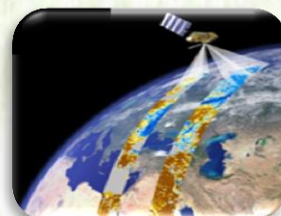


ETHIOPIA METEOROLOGY INSTITUTE

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TEN DAY AGROMETEOROLOGICAL BULLETIN

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

Website: [http:// www.ethiomet.gov.et](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

SUMMARY

During the first dekad of August 2024, over large areas of Kiremt rain benefiting as well as Meher crop growing areas were continuously receiving enhanced moisture within the range of Moist to Hyper humid condition. In line with this, Gambella, West and Central Oromia, Benshangul Gumuz, East and West Amhara, Tigray, Central region of Ethiopia, Sidama, Afar and Southwest Ethiopia region recorded moderate to heavy rainfall in many places. According to the weather report, many places across the country exhibited heavy fall in the range between (30.0 to 84.4mm) within 24hrs interval. This situation was of great importance for the water needs of long-term crops such as Maize and sorghum, for various permanent plants fruit and vegetables, as well as for short- and medium-term crops that are in different stages of growth. In addition, the moisture obtained had a positive role in terms of improving the supply of pasture and drinking water in pastoral and Agro-pastoral areas that benefited from kiremt rains. On the other hand, areas which have been receiving rainfall in continuous manner might experience floods, landslides, excess soil moisture which might lead to water logging and runoff. To find out from various field data that there has been damage to human life, property, animals and crops in connection with heavy and continuous rains in Kefa zone Telo woreda , Dredawa city Wahil woreda , Adwa woreda in Tigray region, Mustahil woreda in Shebele zone, Khao Koishana and Kanda Kodesha woreda in Wolayita zone.

During the second dekad of August 2024, large areas of Kiremt rain-benefiting and Meher crop-growing regions continuously received enhanced moisture, ranging from moist to hyper-humid conditions. In line with this, East, Central, and West Oromia, Addis Ababa, East and West Amhara, Tigray, Afar, Benshangul Gumuz, Gambella, Central Ethiopia, South Ethiopia, South West Ethiopia, Sidama, Harar, Dire Dawa, and some parts of the Somali region recorded light to heavy rainfall in many areas. According to the weather report, many places across the country experienced heavy rainfall ranging from 30.0 to 137.4 mm within a 24-hour period. This situation was of great importance for the water needs of long-cycle crops such as sorghum and maize, which were sown in April and May and are now in the middle and fruiting stages, as well as for recently planted crops at different stages of growth, such as wheat, barley, oat, teff, pulses, oilseeds, and for permanent plants. In addition to creating favorable conditions, it had a positive impact by improving the supply of drinking

water and grazing grass for pastoralists and semi-pastoralists in the eastern and northeastern parts of the country.

On the other hand, areas that had received continuous rainfall might experience floods, landslides, and excess moisture. In particular, field data indicates that there has been damage to crops and property due to the heavy rain in Harar Gelemso woreda.

1. WEATHER ASSESSMENT

1.1. Rainfall amount (11 – 20 August 2024)

During the Second dekad of August 2024, Pocket areas of Waghimra, adjacent areas of North Shawa and Oromia Special Zones and West Shewa zone were received above 200 mm of rainfall. Adjacent areas of Northern Tigray, and Afar, North Gonder, Waghimira, North and South Wollo, South Gonder, Bahirdar Zuria, East and West Gojam, most Shewa zones, pocket areas of Illuababora, Jimma, Benchi Maji Zones were dominantly received 100-200 mm of rainfall. Most rain benefiting areas have dominantly received 25 mm to 100 mm of rainfall. However, some Easter and tip areas of Northern parts of the country received 5-25 mm of rainfall. The rest parts of the country which does not get Meher rainfall (South and Southeast) parts of the country were climatologically dry.

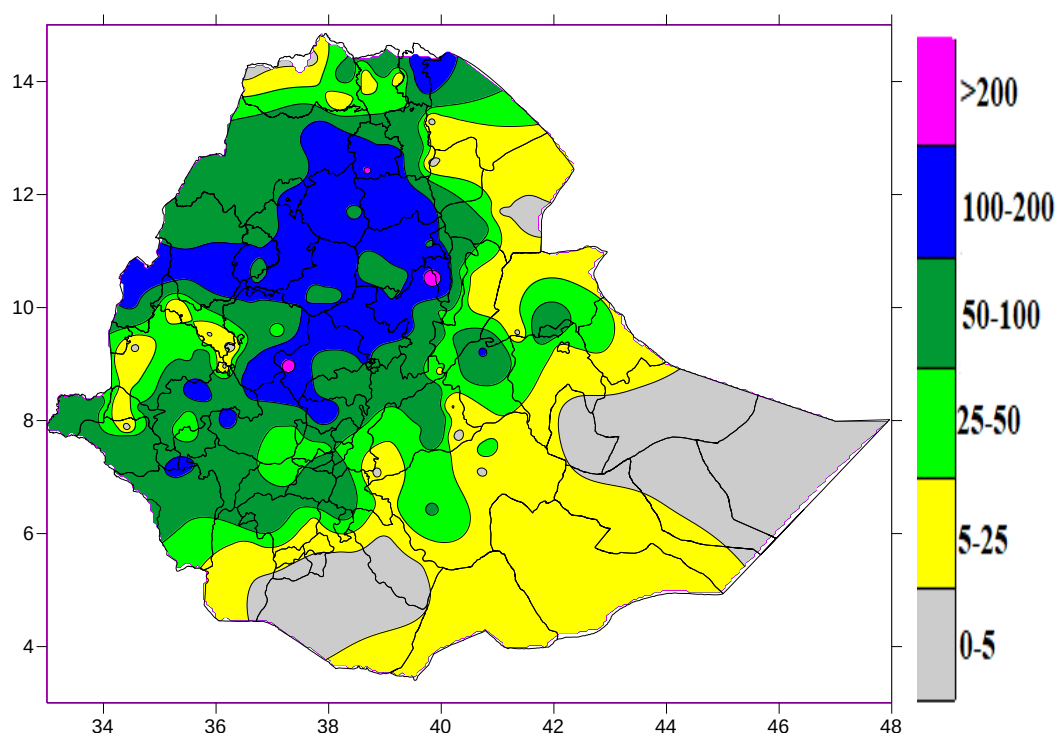


Fig 1. Rainfall distribution in mm (11 – 20) August 2024

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

During the Second dekad of August 2024, most Kiremt rainfall benefiting areas of the country especially Northern, Northwestern and Central half were exhibited Normal to Above Normal Rainfall condition. On the other hand, some parts of Northeastern and central half parts of the country were experienced below Normal too Much below Normal rainfall condition.

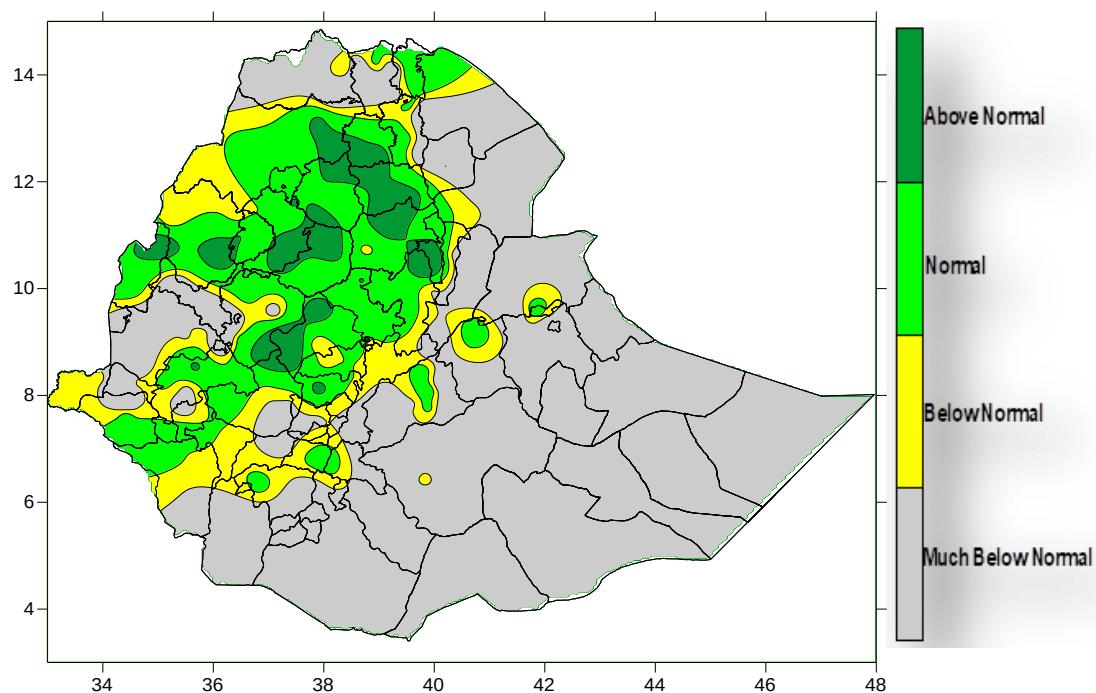


Fig.2 Percent of normal rainfall distribution (11 – 20 August, 2024)

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 August 2024)

As indicated on the moisture status map below during the Second dekad of August 2024 most parts of Meher growing and Kiremt rain benefiting areas of the country exhibited Moist to Hyper Moist moisture condition. The rest parts of the countries exhibited moderately Dry to Very Dry.

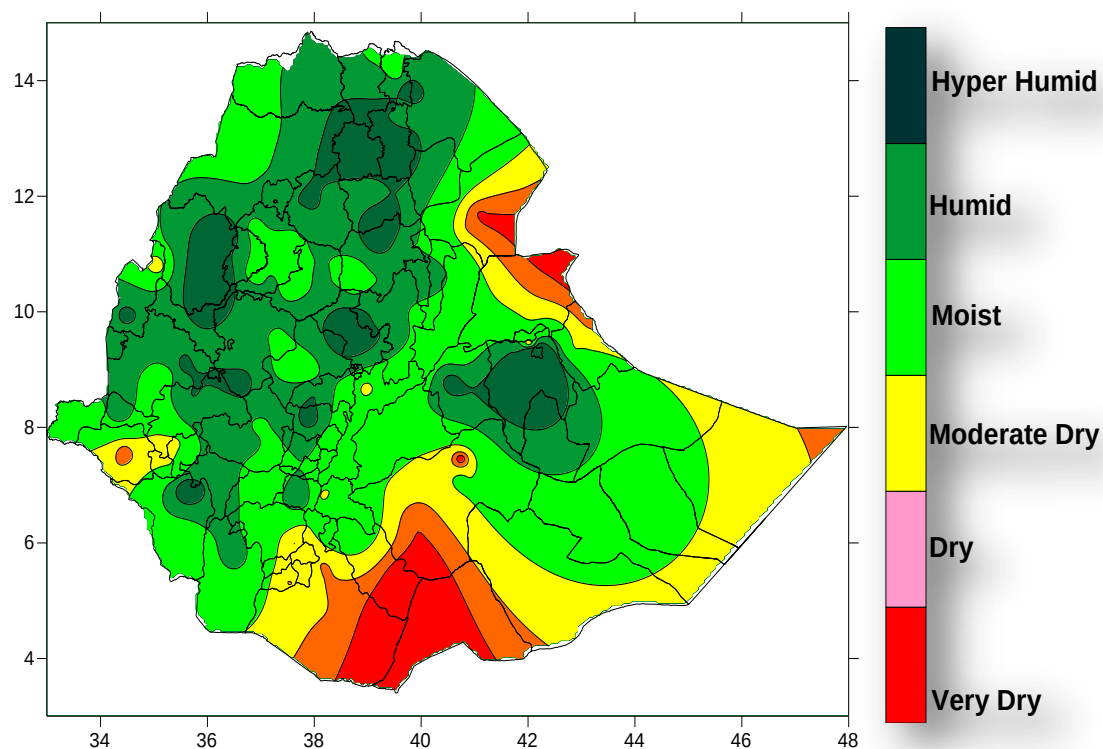


Fig. 3 moisture status for (11 – 20 August, 2024)

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE

During the second dekad of August 2024, due to the relative strengthening of rain bearing meteorological systems better moisture has been experienced over Meher producing as well as Kiremt rain benefiting areas of the country, due to this enhancing moisture the vegetation condition across the country exhibited good coverage over Meher producing and eastern and north eastern pastoral areas (Fig.4. NDVI and Rangeland WRSI in %) This condition might have positive implication for the water need of Meher crops as well as perennial plants, availability of pastors and drinking water over north eastern pastoral and agro-pastoral areas.

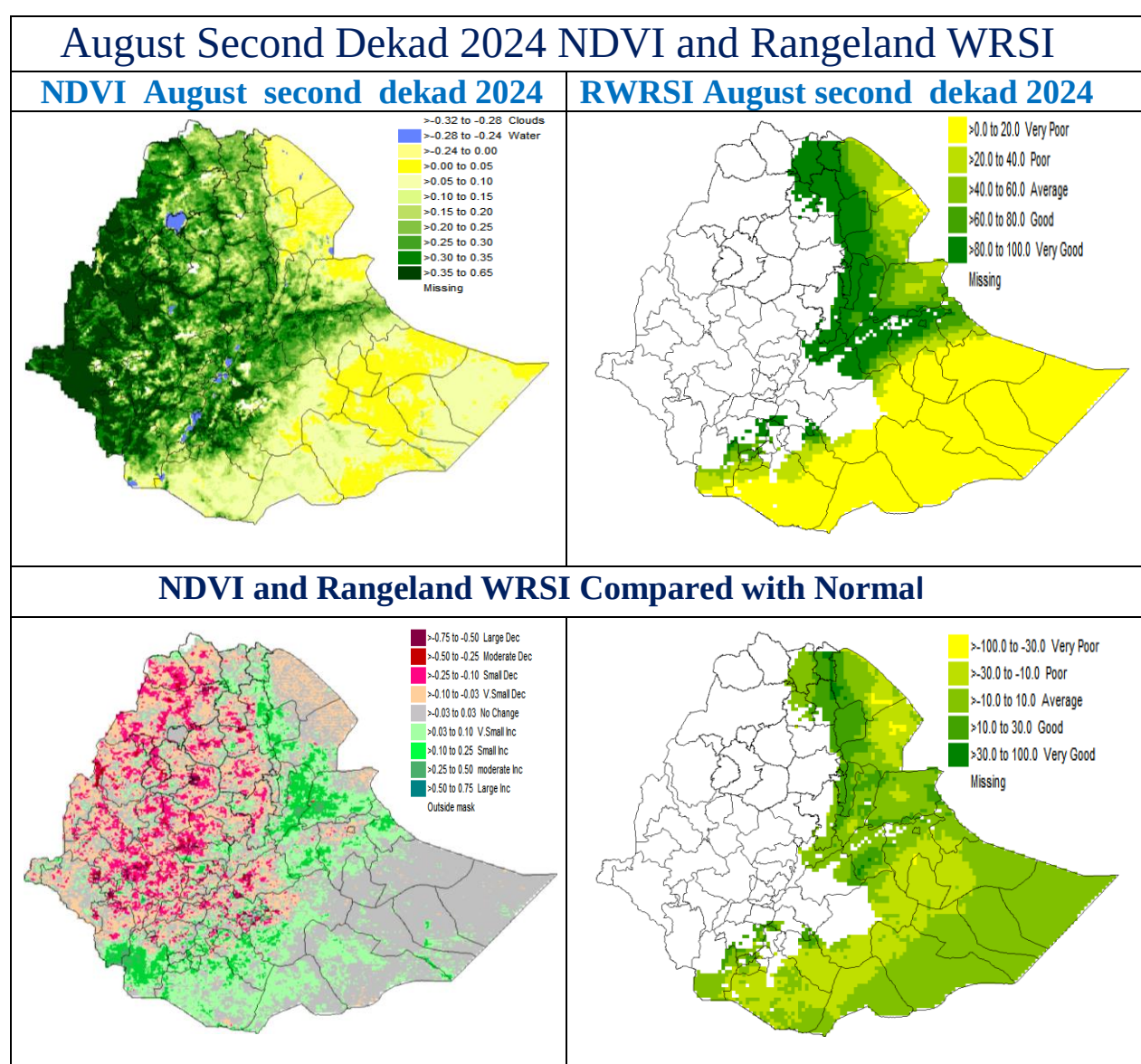


Fig.4. NDVI and Rangeland WRSI in % and Compared to Normal - August 11-20, 2024

2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING THIRD DEKAD OF AUGUST 2024

` In the upcoming third dekad of August 2024, meteorological forecasts indicate that seasonal rainfall activity is expected to continue over various Kiremt rain-benefiting and Meher-producing areas of the country. The moisture condition indicates especially in the west, northwest, north, northeast, and central areas of the country, there will be high moisture and widespread distribution of rainfall. This situation will benefit the water needs of various Meher crops and permanent plants at different stages of development, improve the supply of pasture and drinking water for pastoral and semi-pastoral areas in the east and northeast, and create favourable conditions for collecting and harvesting rainwater.

On the other hand, in the west, southwest, northeast, and central parts of the country, where above-normal rainfall is expected and repeated wet conditions are observed, crops at different stages of growth may be negatively affected by the occurrence of flash floods. In areas where heavy rain is expected, which are vulnerable to flooding and prone to waterlogging, farmers and relevant bodies should work together to remove excess water from crop fields. They should prepare canals to divert floodwater and take proper precautions to prevent damage to crops and livestock.

Additionally, there is a possibility of landslides and cracks in sloping areas, so it is necessary to move communities away from the areas prone to landslides. In terms of crop protection, the increased moisture and warmth may create favorable conditions for the growth of weeds and crop pests. Therefore, relevant bodies should regularly inspect farms, remove weeds in a timely manner, and apply herbicides and pesticides as advised by agricultural experts.

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

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