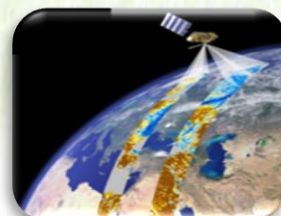


NATIONAL METEOROLOGY AGENCY

Agrometeorological Bulletin

TEN DAY AGROMETEOROLOGICAL BULLETIN

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FOREWARD

This Agro met Bulletin is prepared and disseminated by the National Meteorological Agency (NMA). 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 third decade of August 2022, the weather events that create favourable conditions for Kiremt rain fall benefiting and Meher harvest crops parts of the country had better strength in amount and distribution, especially in the central, north eastern and eastern areas of the countries, This situation had a good contribution to meet the water needs of crops at different stages of growth. In addition to this, there was a significant contribution to the supply of drinking water and grazing grass for gardens, plant growth, pastoral and semi-pastoral areas. On the other hand, there was heavy rain in some areas of central, eastern & southern parts. As a result, the observed continuous and high humid moisture condition might have cause soil erosion particularly where land is sloppy and in areas where normally affected by excess moisture and might result crop damage and livestock losses in some places of the affirmations areas. And also over some place of Afar, Jigjiga and south Gonder it occurred flood and land slide cause of heavy fall, it affected crops, life and property.

During the first dekad of September the rainfall performance day to day decreasing from the north eastern and eastern parts of the country and more experienced over most of Meher crop growing and rain benefiting areas of the country and had received enhanced moisture in amount and distribution. In line with this Amhara, Benishangule Gumuze, West and Central Oromia, Gambela, SNNRP, Sidima, Southern highlands, southern Afar, Addis Ababa, Eastern parts of the country including Harari and Dere dawa slight to heavy rain fall were experienced. The received enhanced moisture had positive impact toward fulfilling the daily water need of crops particularly at flowering and grain filling stage and for perennial plants. In addition, the condition was favourable for vegetation as well as the expanded moisture over southern parts of the country improves the availability of pasture and drinking water. On the other hand, with strength of Kiremt rain bearing systems particularly over some parts of Amhara, Benshangul-Gumuz, wester and central Oromia, Gambela, SNNPR and some parts of southern high lands recorded more than 40 mm rainfall in 24 hours. Regarding of recording stations Abobo 40.0, Bedala 42.5, Bui 52.4, Bure 42.0 and 48.9, Chagni 42.9, Derediwa 40.0, Ginir 80.0, Kachise 45.4, Lumugenet 88.2, Nanzeret 45.4, Aman 54.0, Tercha 47.4, Lare 88.0, Gund Meskele 90.6, Fungudi 76.0 and in Emdiber 65.5 mm received. This condition had been good enough to satisfy daily crop water requirement for various early

planted Meher season crops including the long cycle crops such as maize and Sorghums. In general the wide distribution of rainfall across Kiremt rain benefiting areas could have a positive contribution toward enhancing the water need of early planted various crops as well as perennial plants. The enhanced moisture over the southern pastoral and agro pastoral community might play crucial role toward improving the availability of pasture and drinking water as well as to regenerate natural and artificial ponds. On the other hand, areas which have been receiving rainfall in continuous manner might experience soil erosion and water logging particularly where land is sloppy and in areas where normally affected by excess moisture. The received heavy rainfall particularly over north western, central and eastern parts of the country it occurred flood and land slide cause of heavy fall, it affected crops, life and property.

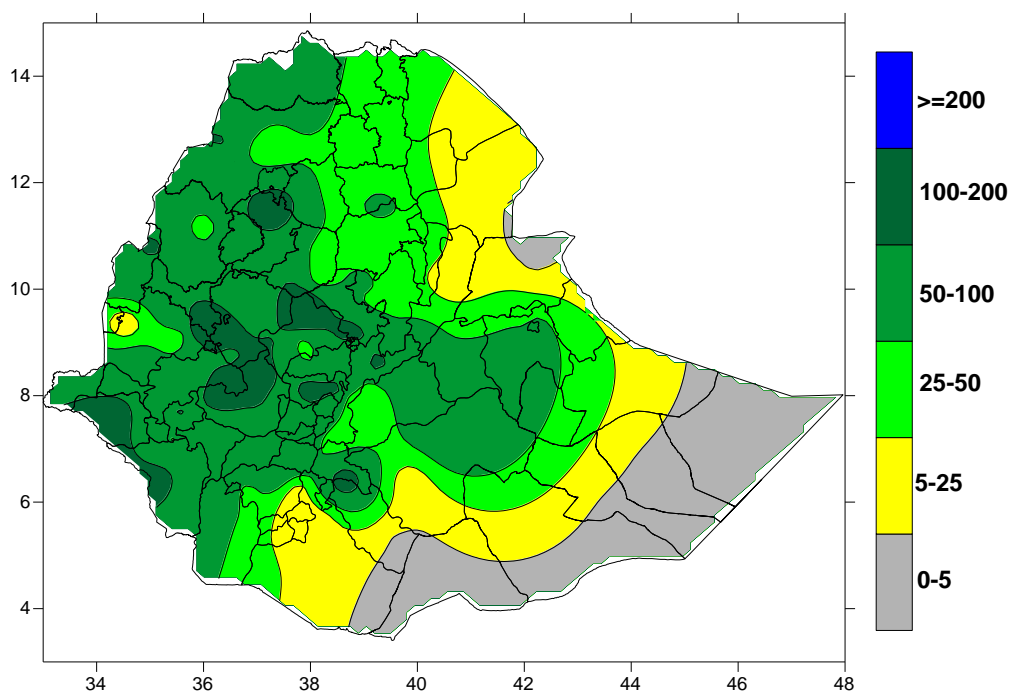


Figure 1. Rainfall distribution in mm (1 – 10) September 2022

1. WEATHER ASSESSMENT

1.1. Rainfall amount (1 – 10 September, 2022)

During first dekad of september 2022 from amehara region pocket areas of Bahir Dar, West Gojam, and N Wello zone, from Oromia region (N Shewa, pocket area of Jimma and Illibabur zone), from SNNRP (pocket area of Gurage and Bench Maji zone) and pocket areas of gambella region are received 100 up to 200mm rain fall. Western and Central Tigray, E Wellega, Illibabur, Jimma, East, West Shewa, and North Shewa, Addis Ababa, Yem, West and

East Hararghe, Arsi, Sheka, Keffa, Basketo, Dawero, WolitaSodo, Sidamo, Hadiya, Alaba, Silti, pocket areas os Bench maji and South Omo,from Gambella region (zone 1,zone3 and Godre zone),Metkel Assosa,Kamashi and from Somali region pocket areas of Fik Zone are recived 50 up to 100 mm rain fall. East and south Tigray, Central Tigray,Mekele,North Gonder, Waghimra,North and South Wello,oromia zone,pocket areas of East Gojjam,from Afar region pocket areas of zone 4,5,3, pocket areas of East Hararghe, Bale, Guji, pocket areas of West Wellega,Gedo,Goffa,Dirsha,Konso,South Omo,Tango zones are recived 25 up to 50 mm rain fall. Afar zone 1,2,3,4,5,Shinlie, Jijiga,Degahabur, Gode, Afder, Liben, Amaro and Borena are received 5-25mm Rain fall. The rest parts of the countries received 0-5mm Rainfall.

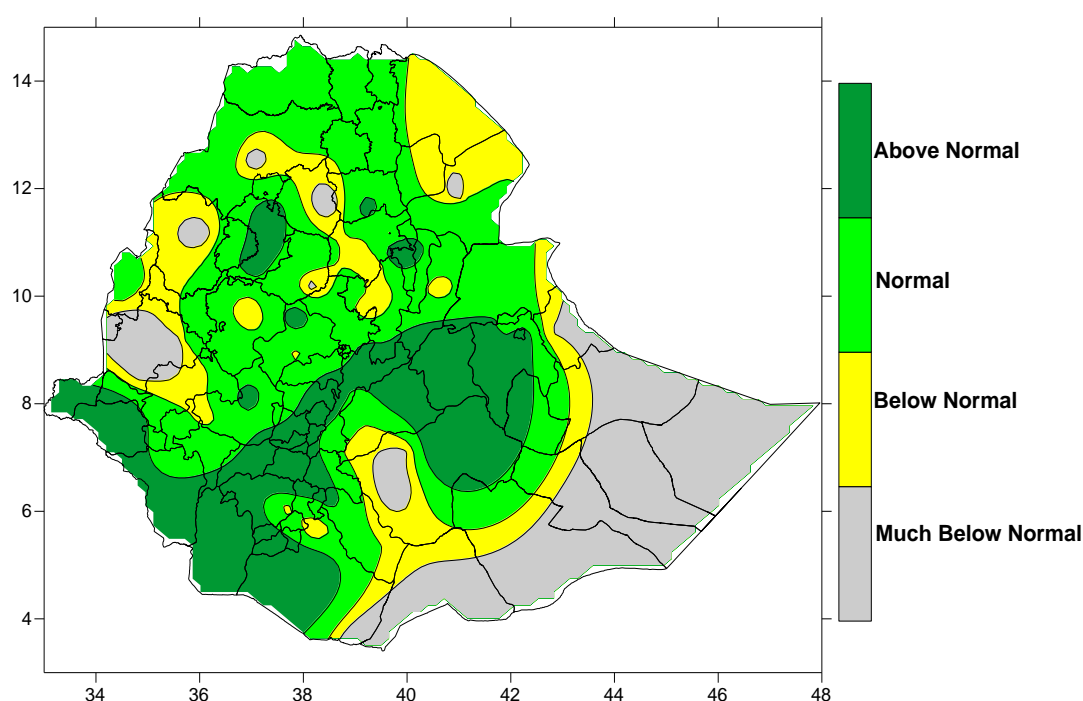


Figure 2: Percent of normal rainfall distribution (1-10 September 2022)

Explanatory notes for the Legend

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

1.2. Rainfall Anomaly (1 – 10 September, 2022)

During first dekad of september 2022 Metekel, Kamshi, Tango, pocket areas of West and East Wellega, Illibabur, Bale, afar zone 2,3,4 and from Somali region (pocket areas of

Shinlie, Jijiga, Dagahabur, Gode, Afder, Liben, Korahi, Wardar) are exhibited Below Normal too Much Below Normal. The rest parts of the countries exhibited Normal to Above Normal.

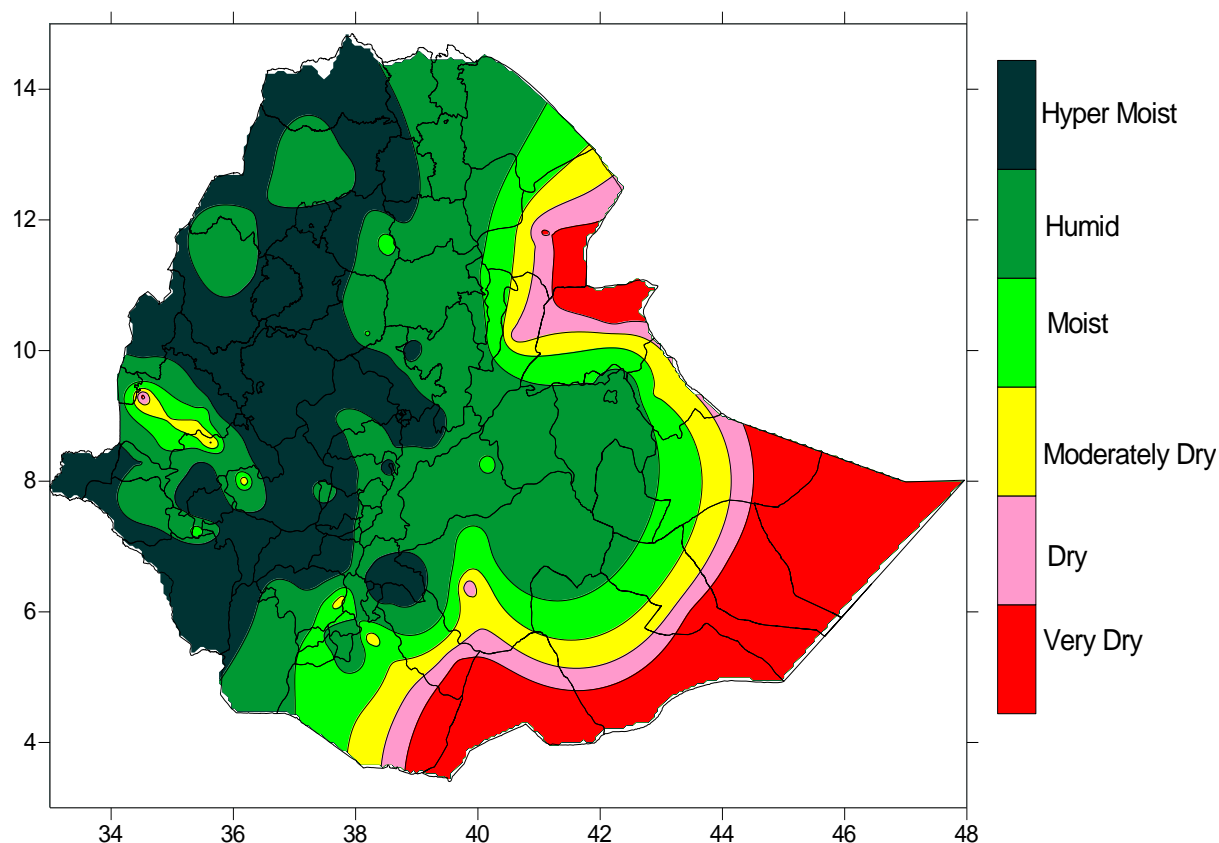


Figure.3. Moisture Status (1-10 September 2022)

1.3. Moisture Condition (1 – 10 September 2022)

During the first dekad of September 2022, much of Kirmt and Meher rain fall benefiting areas exhibited hyper moist to moist moisture conditions. The rest parts of the country moderately dry to very dry moisture conditions.

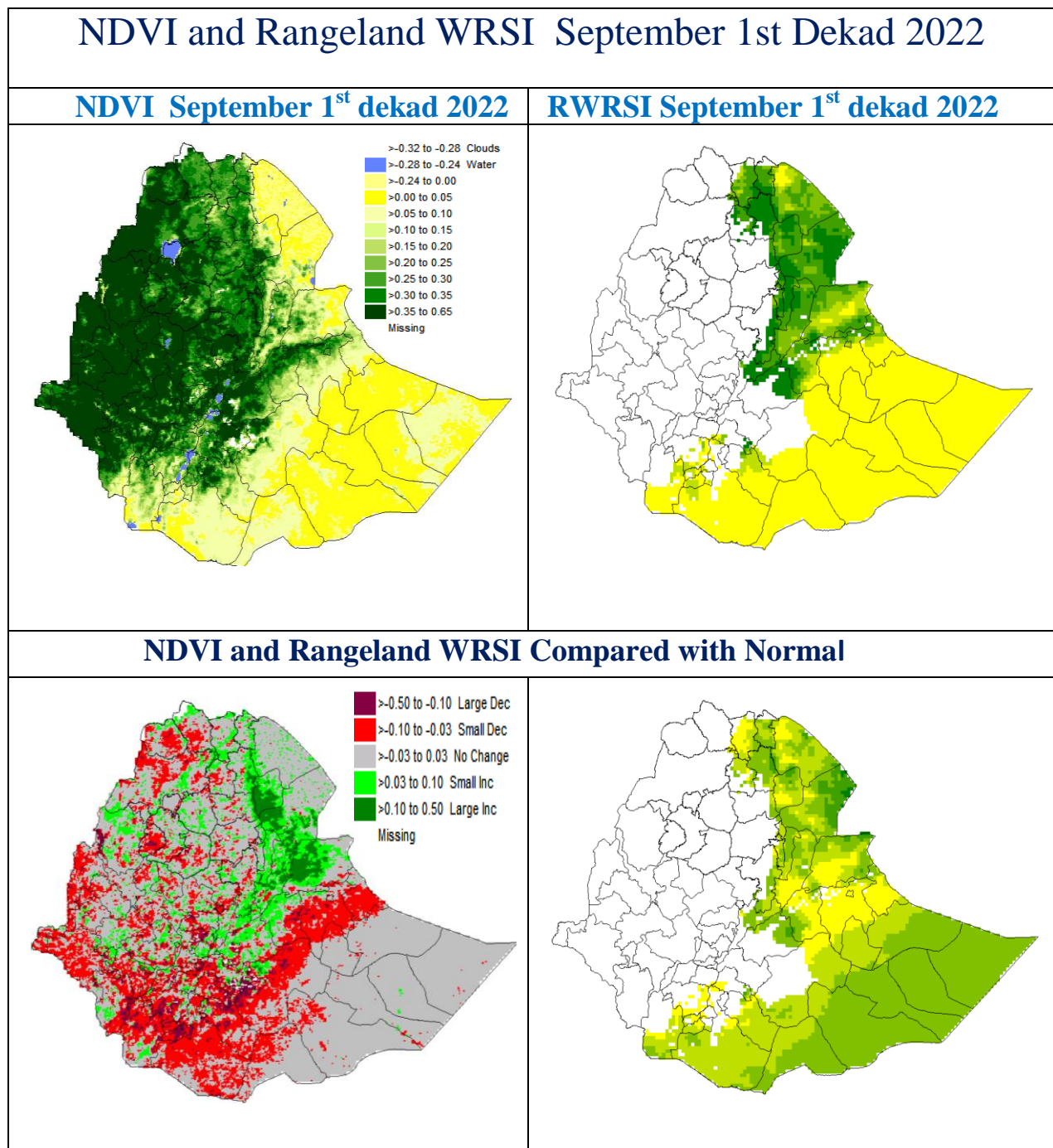


Fig.4. NDVI and Rangeland WRSI in % and Compared to Normal September 1-10, 2022

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE

Generally during the first dekad of September 2022, over large areas of Kiremt rain benefiting as well as Meher crop growing areas were continuously receiving enhanced moisture particularly over some parts of Amhara, Benshangul-Gumuze, wester and central Oromia, Gambela, SNNPR and some parts of southern high lands recorded more than 40 mm rainfall in 24 hours. Due to this the NDVI Fig.4 (the green plant coverage) increased most of Kiremt rainfall benefiting areas. This condition had been good enough to satisfy daily crop water requirement for various early planted Meher season crops including the long cycle crops such as maize and Sorghums and the expanded green plant coverage and Rangeland WRSI Fig.4 indicated over the north eastern, eastern and the expanded moisture over southern pastoral and agro pastoral community might play crucial role toward improving the availability of pasture and drinking water as well as to regenerate natural and artificial ponds.

2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING SECOND DEKADE OF SEPTEMBER 2022

According to the weather forecast, in the coming 2nd dekad of September the moisture condition is expected to be continued in same strength with previous dekad across most parts of Meher crop growing as well as Kiremt rain benefiting areas in the country. As it is indicated in the forecast, the moisture condition is likely to have more strength over the western half and in some central parts of the country. In line with this, all zones of Wellega, Jima, Illubabor, Buno Beddele, Arsi, Addis Ababa, Amhara region of western and eastern Gonder, Bahir dar zuria, Awi zone, north shewa, Tigray region of western and north western zones, Benshangul zones, south western zones, Snnpr regions of except South Omo, Konso and Gedeo expected normal to above normal rainfall. In addition to this Sidama and Gambela zones South Gonder north and south Wello, Wag hemera, Southern, Central and Eastern Tigray zones, Afar regions of zone 3 and 5, western and eastern Harerge, Bale, Guji, Dire dewa, Harari, South Omo, Segen people, Meirab Omo and Fafen zones expected slight to moderate rainfall. The expected enhanced moisture will have positive contribution to satisfy the daily water need have lately planted Meher crops, those which are found at flowering and grain filling stage and for perennial plants as well. Similarly, the expected moisture is expected to ensure the availability of pasture and drinking water and will enable them to harvest and store rain water for the pastoralist community. On the other hand, some places may experience heavy fall and this in turn can trigger floods which may negatively affect different crops, vegetables and perennial plants. Therefore, farmers and concerned bodies are advised to make the required preparation in advance to minimize the possible impact of flood, excess water and hail storms on crops, livestock's and properties through developing drainage structure, farmers are advised to take the required preparation in the head of time to control the possible weed infestation the expected prevailing wet condition during the coming dekad.

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

AGROMETEOROLOGICAL STATION DISTRIBUTION

Legend

- Real Time Data Reporting Station
- Real Time and Phenological Reporting Station

NMA Agro meteorology Ten day bulletin