## ETHIOPIA METEOROLOGICAL INISTITUTE Agrometeorological Bulletin

## MONTHLY AGROMETEOROLOGICAL BULLETIN

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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 Institute disseminates ten daily, monthly, sub-seasonal 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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### እ.ኤ.አ ኦንስት 2024

ባለፉት የኦንስት የመጀመሪያ አስር ቀናት በአብዛኛው የክረምት ዝናብ ተጠቃሚ በሆኑት የሀንሪቱ ክፍሎች ላይ በመጠን ሆነ በስርጭት የተስፋፋና ብዙ ቦታዎችን ያዳረሰ የእርጥበት ሁኔታ እንደነበራቸው ከተለያዩ የሀንሪቱ ክፍሎች የተሰበሰቡና የተተነተኑ የግብርና ሚቲዎሮሎጂ መረጃዎች ያመለክታሉ። ይህም ሁኔታ እንደ በቆሎና ማሽላ ለመሳሰሉት የረጅም ጊዜ የመኽር ሰብሎች፣ ለተለያዩ ቋሚ ተክሎችና ለጓሮ አትክልቶች የውኃ ፍላጎት መሟላት እንዲሁም የክረምት ወቅታቸውን ጠብቀው ተዘርተው በተለያየ የእድንት ደረጃ ላይ ለሚንኙ የአጭር እና የመካከለኛ ጊዜ የመኸር ሰብሎች እድንታቸውን በተሟላ ሁኔታ ለማከናወን ከፍተኛ ጠቀሜታ ነበረው። በሌላ በኩል የተንኘው እርጥበት የክርምት እርጠበት ተጠቃሚ በሆኑት የአርብቶ አደርና የከፊል አርበቶ አደር አካባቢዎች ላይ የመጠጥ ውሃ እና የማሎሽ ሳር አቅርበትን ከማሻሻል አንጻር አዎንታዊ ሚና ነበረው።

በአንፃሩ በአንዳንድ የሀንሪቱ አካባቢዎች ላይ ከነበረው ከባድና ተከታታይነት ካለው ዝናብ *ጋ*ር ተያይዞ የጎርፍ፣ የመሬት መንሸራተትና መሰንጠቅ እንዲሁም በሰብሎች ላይ የውሃ መተኛትና መጥለቅለቅ ሁኔታዎች ነበሩ።

በተለይም በከፋ ዞን በጠሎ ወረዳ፣ በድሬዳዋ ከተማ ዋሂል ወረዳ፣ በትማራይ ማዕከላዊ ዞን አድዋ ወረዳ፣ በሸበሌ ዞን ሙስታሂል ወረዳ፣ በወላይታ ዞን ካኦ ኮይሻና ክንደ ኮይሻ ወረዳ ከፍተኛና ተከታታይነት ካለው ዝናብ *ጋ*ር ተያይዞ በሰው ሀይወት፣ በንብረት፣ በእንስሳት እና በሰብሎች ላይ *ጉዳ*ት እንደደረሰ ከተለያዩ የሙስከ ሙረጃዎች ለማወቅ ተችሏል።

ባለፉት የኦንስት ሁለተኛ አስር ቀናት በአብዛኛው የክረምት ዝናብ ተጠቃሚ በሆኑት የሀንሪቱ ክፍሎች ላይ በመጠን ሆነ በስርጭት የተስፋፋና ብዙ ቦታዎችን ያዳረሰ የእርጥበት ሁኔታ ነበራቸው። ይህም ሁኔታ ቀደም ሲል በሚያዚያና ግንቦት ወራት ተዘርተው ፍሬ በመሙላት ላይ ለሚንኙት የረጅም ጊዜ ሰብሎች እንደ ማሽላና በቆሎ ለመሳሰሉት እንዲሁም በተለያየ የእድንት ደረጃ ላይ በሚንኙት የአጭር እና የመካከለኛ ጊዜ ሰብሎች እንደ ስንዴ፣ ንብስ፣ አጃ እና ጤፍ ለመሳሰሉት የብዕር ሰብሎች፣ የጥራጥሬና የቅባት እህሎች፣ ለቋሚ ተክሎች የዉሃ ፍላንት መሟላት ምቹ ሁኔታን የፈጠረ ነበር። በተጨማሪም በምስራቅና በሰሜን ምስራቅ ለሚንኙት አርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች የመጠጥ ውሃ እና የግጥሽ ሳር አቅርቦትን ከማሻሻል አንጻር አዎንታዊ ሚና ነበረው።

በአንፃሩ በአንዳንድ የሀንሪቱ አካባቢዎች ላይ ከነበረው ከባድና ተከታታይነት ካለው እርጥበት *ጋ*ር ተያይዞ የጎርፍ፣ የመሬት መንሸራተትና መሰንጠቅ እንዲሁም በሰብሎች ላይ የውሃ መተኛትና መጥለቅለቅ ሁኔታዎች ነበሩ። በተለይም በሀረር *ገ*ለምሶ ወረዳ ከነበረዉ ከባድ ዝናብ *ጋ*ር ተያይዞ በሰብሎች እና በንብረት ላይ ጉዳት እንደደረሰ ከተለያዩ የመስክ መረጃዎች ለማወቅ ተችሏል። ባለፉት የኦንስት የጦጨረሻ አስራ አንድ ቀናት የተንኘው እርጥበት በተለያየ ጊዜ ተዘርተው በተለያየ የእድንት ላይ ለሚንኙ የረጅም፣ የጦካከለኛ እና የአጭር ጊዜ ሰብሎችም ሆነ ለቋሚ ተክሎች፣ ለጓሮ አትክልቶችና ለፍራፍሬዎች የውሃ ፍላንታቸውን ከማሟላት አንጻር ከፍተኛ ጠቀሜታ ነበረው። ከዚህም በተጨማሪ በተለይም በምስራቅና በሰሜን ምስራቅ አካባቢዎች ለሚንኙት አርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች የጦጠጥ ውሃ እና የግጦሽ ሳር አቅርቦት በተሻለ ሁኔታ እንዲኖራቸው ያስቻለ ነበር።

በአንፃሩ በአንዳንድ የሀንሪቱ አካባቢዎች ላይ ከነበረው ከባድና ተከታታይነት ካለው እርጥበት *ጋ*ር ተያይዞ ለጎርፍ ተጋላጭ በሆኑ አካባቢዎች የጎርፍ ክስተቶች፣ የመሬት አቀማሙጣቸው ከፍተኛና ተዳፋታማ በሆኑ አካባቢዎች የመሬት ሙንሽራተት፣ መሰንጠቅና ናዳ እንዲሁም በሰብሎች ላይ የውሃ መተኛትና ሙጥለቅለቅ ሁኔታዎች ተከስተዋል። በተለይም በሰሜን ጎንደር ዞን በጠለምት፣ ጃናሞራ፣ አዲአርቃይ እና በየዳ ወረዳዎች፣ በምዕራብ አርሲ ዞን፣ በሥልጤ ዞን ምስራቅ ስልጢ እና ስልጢ ወረዳዎች፣ በትግራይ ደቡባዊና ምስራቃዊ ዞን ጉሎ መህዳ ወረዳዎች፣ እንዲሁም በሰሜን ሸዋ ዞን ደብረሲና ወረዳ እና በተለያዩ የሀንራችን አካባቢዎች ላይ በደረሰው የመሬት ሙንሽራተት እና በደቡብ ወሎ ዞን ወረባቦ ወረዳ በነበረው ከባድና በረዶ የቀላቀለ ዝናብ በሰብሎች፣ በንብረትና በሰው ህይወት ላይ ጉዳት እንዳደረሰ ከሙስክ የተሰበሰቡ መረጃዎች ያመለክታሉ።

ባሳለፍነው ኦንስት ወር በአብዛኛው የክረምት ዝናብ ተጠቃሚና የሞኸር ሰብል አብቃይ በሆኑት አካባቢዎች በሞጡን ከፍተኛ የሆነ እና ብዙ ቦታዎችን ያዳረሰ እርጥበት እንደነበራቸው የተሰበሰቡና የተተነተኑ የግብርና ሚቲዎሮሎጂ ሞረጃዎች ያሞላክታሉ። ይህም የተንኘው እርጥበት ከሚያዚያና ግንቦት ወራት ጀምሮ ለተዘሩ የረጅም ጊዜ ሰብሎችና የሞኸር ወቅታቸውን ጠብቀው ለተዘሩና በተለያዩ የእድንት ደረጃ ላይ በሚንኙ የአጭር እና የሞካከለኛ ጊዜ ሰብሎች የውሃ ፍላጎታቸውን በማሟላት ፍሬ ለሞሙላት የሚያስችል ከፍተኛ ጠቀሜታ ነበረው። ከዚህም በተጨማሪ የነበረው እርጥበት ለተለያዩ ቋሚ ተክሎች፣ ለዓሮ አትክልቶች፣ ለፍራፍሬዎች፣ ለጥራጥሬዎችና ለቅባት እህሎች የውሃ ፍላጎት በማሟላትና በተሟላ ሁኔታ እንዲያድን የሚያስችል የጎላ ጠቀሜታ ነበረው። በሌላ በኩል በአርብቶ አደርና ከፊል አርብቶ አደር በሆኑት አካባቢዎች የነበረው እርጥበት የተፈጥሮም ሆነ የሰው ሰራሽ ምንጮችን ከማጎልበቱም በላይ የተሻለ የሞጠጥ ውሃና የግጦሽ ሳር አቅርቦት እንዲኖር ከማስቻሉም በላይ የእንስሳት ሞኖና የሞጠጥ ውሃን ለመሰብሰብና ለማከማቸት የሚያስችል ከፍተኛ ሚና ነበረው። ይሁን እንጂ በአንዳንድ አከባቢዎች ላይ ከነበረው ከባድና ተደጋጋሚ ዝናብ ጋር ተያይዞ የአፈር ውስጥ እርጥበት በሙብዛቱ ውሃ በሰብሎች ላይ መተኛትና ሙጥለቅለቅ፣ በአንዳንድ ለጎርፍ ተጋላጭ በሆኑ አካባቢዎች ላይ የጎርፍ መከሰት፣ የወንዝ ሙላት፣ እንዲሁም በከፍተኛ እና የመሬት አቀማሙጣቸው ተዳፋታማ በሆኑ አካባቢዎች ደግሞ የሞሬት ሙንሽራተት፣ ሙሰንጠቅና ናዳ የተከሰተ ሲሆን በእንስሳት፣ በንብረት፣ በሰብሎችና በሰው ህይወት ላይም አሉታዊ ተጽዕኖ ነበረው። ከነዚሀ አካባቢዎቹ ለሙጥቀስም በከፋ ዞን ጡሎ ወረዳ፣ በወላይታ ዞን ካኦ ኮይሻና ክንደ ኮይሻ ወረዳ፣ እና በትግራይ ማዕከላዊ ዞን አድዋ ወረዳ፣ በሰሜን ጎንደር ዞን በጠለምት፣ ጃናሞራ፣ አዲአርቃይ እና በየዳ ወረዳዎች፣ እንዲሁም በሰሜን ሸዋ ዞን ደብረሲና ወረዳ እና በተለያዩ የሀንራችን አካባቢዎች ላይ በደረሰው የመሬት ሙንሽራተት፣ ሙሰንጠቅና ናዳ እንዲሁም በሀረር ገለምሶ ወረዳ፣ በድሬዳዋ ከተማ ዋሂል ወረዳ፣ በትግራይ ደቡባዊና ምስራቃዊ ዞን ጉሎ ሙህዳ ወረዳዎች፣ በሥልጤ ዞን ምስራቅ ስልጢ እና ስልጢ ወረዳዎች፣ በሸበሌ ዞን ሙስታሂል ወረዳ፣ በምዕራብ አርሲ ዞን፣ እንዲሁም በደቡብ ወሎ ዞን ወረባቦ ወረዳ በነበረው ከባድና በረዶ የቀላቀለ ዝናብ በሰብሎች ላይ የውሃ ሙተኛትና ሙጥለቅለቅ፣ በእንስሳት፣ በንብረትና በሰው ህይወት ላይ ጉዳት እንደደረሰ ከሙስክ የተሰበሰቡ ሙረጃዎች ያሙላክታሉ።

## SUMMARY AUGUST 2024

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, and 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 obtained moisture 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 of excess soil moisture which might lead to water logging and runoff, floods, landslides. The various field data indicated 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, it creates favourable conditions and had a positive impact by improving the supply of drinking water and grazing grass for pastoralists and semi-pastoralists in the Eastern and North-eastern 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.

During the third dekad of August 2024, rainfall both in amount and distribution was cover over most meher producing areas of the country. In line with this, in Western and central Oromia, East and West Amhara, Tigray, Afar, Benshangul Gumuz, Gambella, Central Ethiopia, South Ethiopia, South West Ethiopia and Sidama, Harar and Dredawa recorded light to heavy rains at many places. This situation might have positive impact on moisture requirement of Meher crops found at various phases of growth, perennial plants and general agricultural activities. In addition, it enabled the pastoral and semi-pastoral areas, especially in the east and northeast, to have better access to drinking water and grazing grass. On the other hand, heavy fall ranging from 30 - 84.6 mm in one rainy day observed over some areas of the country. In addition, in some areas of the country, due to the heavy and continuous moisture, there have been flood events in flood-prone areas, landslides and cracking in high and sloping areas, as well as waterlogging on the crops field. Especially in the Telemt, Janamora, Adiarkai, Yeda in the North Gondar Zone, Silti, Gulo Mehda Districts in the Southern and Eastern Zone of Tigray, as well as in the Debresina District in the North Showa Zone and, Werebbabo in South Wolo the data collected from the field indicates that the heavy rain caused damage to crops, property and human life.

During the month 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, Eastern, Central, Northeastern, Western, Northwestern and Southwestern, parts of the country 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 mMize, which were sown in late 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, Oil seeds, and for Perennial 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 heavy and 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, Kindo Koisha in Walayta zone, Belemt, Janamora, Adiarkai and Yeda woreda in northern Gondar zone, Gulo Mehda woreda in southern and eastern Tigray zone, Efratana Gidam woreda in northern Showa zone, and Debresina woreda in northern Showa zone, Silte woreda, Dodola, Gog, Lare, Jorna and Wantewa woreda in Gambella Region, Werebabo woreda in South Wolo Zone.

### **1. WEATHER ASSESSMENT**

#### 1.1. Rainfall amount (21 – 31) August 2024

During the third dekad of August 2024, Pocket areas of Metekele zone were received 200-300 mm of rainfall. Adjacent areas of Eastern Tigray and Northern Afar, North and South Gonder, adjacent areas of Metekel and Agew (Awi), North and South Wollo, East and West Gojam, most Shewa zones, pocket areas of Illubabore and West Wellega Zones were dominantly received 100-200 mm of rainfall. Most Kiremt moisture benefiting and meher crop growing areas of the country have dominantly received 25 - 100 mm of rainfall. However, the rest, some Eastern and pocket areas of Western parts of the country were received 5-25 mm of rainfall. Areas which is climatologically dry and not Meher rainfall benefiting areas of South and Southeast parts of the country were received little or below 5 mm of rainfall.



Fig 1. Rainfall distribution in mm (21 – 31) August 2024

<sup>1.2.</sup> Rainfall Anomaly (21 – 31 August 2024)

During the third dekad of August 2024, most parts of Kiremt rain benefiting and Meher crop producing areas of the country were exhibited Normal to Above Normal Rainfall condition. On the other hand, some parts of South-western and tip of Northern areas of country and climatologically dry areas of (South-eastern and Southern areas) were experienced below Normal to Much below Normal rainfall condition



Fig. 2 Percent of normal rainfall distribution (21 – 31) August 2024

#### **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 August 2024)**

During the third dekad of August 2024, rainfall both in amount and distribution was cover over most meher producing areas of the country. In line with this, in western and central Oromia, East and West Amhara, Tigray, Afar, Benshangul Gumuz, Gambella, Central Ethiopia, South Ethiopia, South West Ethiopia and Sidama, Harar and Dredawa recorded light to heavy rains at many places. This situation might have positive impact on moisture requirement of Meher crops found at various phases of growth, perennial plants and general agricultural activities. In addition, it enabled the pastoral and semi-pastoral areas, especially in the east and northeast, to have better access to drinking water and grazing grass. On the other hand, heavy fall ranging from 30-84.6 mm in one rainy day observed over some areas of the country. In addition, in some areas of the country, due to the heavy and continuous

moisture, there have been flood events in flood-prone areas, landslides and cracking in high and sloping areas, as well as waterlogging on the crops field. Especially in the Telemt, Janamora, Adiarkai, Yeda in the North Gondar Zone, Silti, Gulo Mehda Districts in the Southern and Eastern Zone of Tigray, as well as in the Debresina District in the North Showa Zone and, Werebbabo in South Wolo the data collected from the field indicates that the heavy rain caused damage to crops, property and human life.



Fig. 3. Moisture status (21 - 31) August 2024

#### 1.4. Rainfall amount on the month of August 2024

During the Month of August 2024, Most Kiremt rain benefiting areas of adjacent areas of Waghimira, North Wollo and South Gonder, South Wollo, pocket areas of Metekele, West and North Shewa zones were received above 400 mm of rainfall. Most parts of North and South Gonder, Some parts of South and North Wollo, East Gojam, Metekele, most parts of Shewa and pocket areas of Guraghe Zones were dominantly received 300-400 mm of rainfall. Most rainfall Benefiting and meher growing areas of the country were dominantly received 25-300 mm of rainfall. However, the rest parts of the country which does not get Kiremt rainfall (South and Southeast) parts of the country were received 0-5 mm of rainfall.



Fig 4.Rainfall amount in mm for the month of August 2024

### 1.5. Rainfall Anomaly on the month of August 2024

During the month of August 2024, most parts of Kiremt rainfall benefiting and Meher crop growing areas of the country were exhibited Normal to Above Normal Rainfall condition. On the other hand, some parts of the Southern, South-eastern (Climatologically dry or little rainfall) parts of the country were experienced below Normal to Much below Normal rainfall condition.



Fig. 5 Percent of Normal Rainfall for the month of August 2024

#### **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 August 2024

During the month of August 2024, large areas of Kiremt rain-benefiting and Meher cropgrowing regions continuously received enhanced moisture, ranging from moist to hyperhumid conditions. In line with this, eastern, central, northeastern, western, northwestern and southwestern, parts of the country 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 semipastoralists in the eastern and northeastern parts of the country.

On the other hand, areas that had received heavy and 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, Kindo Koisha in Walayta zone, Telemt, Janamora, Adiarkai and Yeda woreda in Northern Gondar zone, Gulo Mehda woreda in Southern and Eastern Tigray zone, Efratana Gidam and Debresina woreda in Northern Showa zone, Silte woreda, Dodola, Gog, Lare, Jorna and Wantewa woreda in Gambella Region, Werebabo woreda in South Wolo Zone.



Fig. 6. Moisture status for the month of August 2024

# 2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

## 2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE ON THE MONTH OF AUGUST 2024

During the month of August, due to relative strengthening of rain bearing weather systems, good moisture conditions has been experienced over Meher producing and rain benefiting areas of the country. According to this, the increment the vegetation condition across Western, Central, Eastern, Northern, and North-eastern parts of the country (Fig.7. NDVI) and the rangeland water requirement index for Pastoral and Agro pastoral areas of the Eastern and North Eastern parts of the country (Fig.8. Rangeland WRSI in %). This condition might have positive impact to perform planting for late sown Meher crops, the water requirement of long, medium and Short cycle crops as well as water needs of perennial plants and availability of pastors and drinking water over pastoral and agro-pastoral areas.





Fig.8. Rangeland WRSI in % and Compared to Normal - August 2024

## 2.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING MONTH OF SEPTEMBER 2024

In the coming month of September 2024, the meteorological forecast information indicates that the seasonal rainfall activity is expected to continue over much of Meher and Kiremt rainfall benefiting area of the country. In line with this much of West and Eastern half of Amhara, Benshangul-Gumuz, Gambella, Southwest Ethiopia, Central and Western half of Oromia and Tigray region, the kiremt rains will continue until the end of the month. This situation will favor ongoing meher agricultural activities which are at different phenological stages in terms of crop water requirement such as water availability of perennial plants, long cycle meher crops which found at grain filling and maturity stage, sowing of pulses crops like chickpeas and lentils which grow in the highland areas using residual moisture at the end of the season. In addition to the it is important to harvest the availability of pasture and drinking water over pastoral and agro pastoral areas of the aforementioned areas and the moisture also expected to expand to the south which will make a significant contribution to the Southern areas of the country, which are normally dry during the last kiremt months and have their second rainy season in the Bega season.

However, the expected heavy and continuous rainfall over aforementioned areas could have negative impact on the ongoing agricultural activities due to excessive moisture as water logging; flooding over steep slope areas and the over flow of rivers to the surrounding crop fields. In order to alleviate such adverse condition, prevention technique like channeling had better be strengthened over the flood prone areas and it is necessary to be careful by visiting the farm regularly, remove the weeds in time using herbicides and pesticides in time, and supporting the advice from the agricultural experts. Moreover, the continuous and widespread rainfall over some parts might create conducive condition for weed infestation which can be aggressive at the time of excess moisture condition. Therefore proper attention should be taken to minimize the risk due to the expected excesses moisture condition. In addition, there is a possibility of landslides and cracking in areas with sloping terrain and riverbanks, so it is necessary to move the community away from areas that are prone to landslides.

## 3. **DEFNITION 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.

**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.

**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 cover s 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.

**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		