# ETHIOPIA METEOROLOGY INSTITUTE 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 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** 

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#### **SUMMARY**

During the Second dekad of February 2024, as of the collected and analyzed agro meteorological information, during the dekad, dry moisture condition was prevailing over most parts of the country. This condition could favor to complete the ongoing post-harvest activities. On the other hand, at beginning and end of the dekad over central and southern Rift Valley and adjacent areas of the country was experiencing slight to moderate amount of rainfall. This situation could be taken as crucial toward the enhancement of soil moisture and creating conductive condition for land preparation, sowing of crops, the water need of perennial plants and the regeneration of pasture and the availability of drinking water for the pastoral and agro pastoral community.

During the Second dekad of February 2024, According to the Agro-meteorology information collected from different part of the country dry weather condition has observed across much parts of the country. This situation might favor areas where harvest and post-harvest agricultural activities are not fully completed. However, after the first half of the dekad the moisture condition was improving over southern, south-western, central, northern and north-eastern Ethiopia had been experiencing better moisture. This condition could be taken as crucial toward the enhancement of soil moisture and creating conductive condition for land preparation, sowing of crops, the fulfillment of perennial plants of water need. In addition, it was also positive for the regeneration of pasture and the availability of drinking water for the pastoral and agro pastoral community.

#### 1. WEATHER ASSESSMENT

#### **1.1. Rainfall amount (11 – 20 February, 2024)**

During the Second dekad of February 2024, Pocket area of Bench Maji zone experienced 50-100mm of rainfall. Parts of Sawla, Jinka, Hosana and Bench-Maji, Dawuro, Basketo and tip of South Wolo zone received 25-50mm of rainfall. Pocket area of south Wello, North Shewa Some parts of east wellega, west Shewa Dawro, Konta, Derash and Konso exhibited 5-25mm of rainfall. The rest parts of the country experienced little or no rainfall.

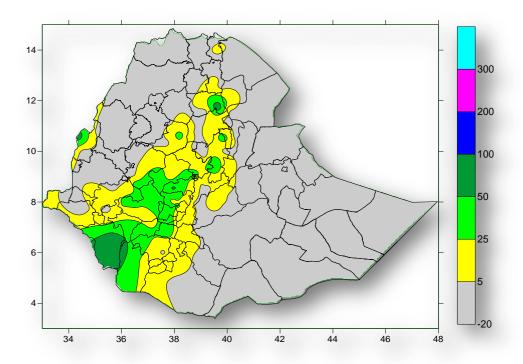


Figure 1. Rainfall distribution in mm (11–20) February 2024

#### **1.2. Rainfall Anomaly (1 1– 20 February 2024)**

During the Second dekad of February 2024, most parts of southern, Southwestern, Central and Northeastern parts of the country exhibited normal to above normal rainfall. The rest parts experienced Below Normal too Much Below Normal rain fall.

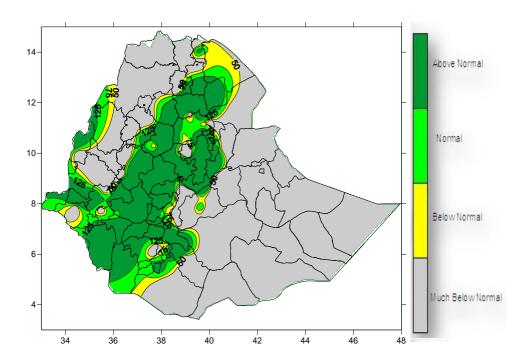


Figure 2: Percent of normal rainfall distribution (11-20 February 2024)

#### **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 February 2024)

During the Second dekad of February 2024, Bench Maji and adjacent areas of Jinka Zone and Pocket areas of Noth Wollo and Noth Showa and South Omo, Gamo, Gofa, Basketo and Gdeo, Some parts of east wellega, west Shewa, Dawro, Konta, Derash and Konso exhibited Humid to moist condition. The rest parts of the countries experienced moderately dry too very dry.

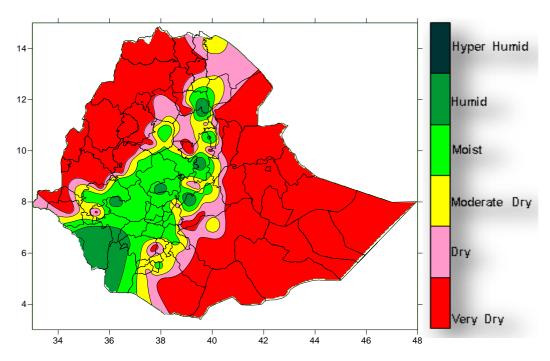


Figure.3. Moisture Status (11-20 February 2024)

### 2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

#### 2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE

During the 2nd dekad after the first half of the dekad the moisture condition was improving over southern, south-western, central, northern and north-eastern parts Ethiopia had been experiencing better moisture and improve the vegetation coverage (Fig.4. NDVI and Rangeland WRSI) this condition could be taken as crucial toward the enhancement of vegetation and creating conductive condition for the wildlife as well as for animal husbandries, the nearly sufficient fulfillment of perennial plants of water requirements. In addition, it was also positive for the regeneration of pasture and the availability of drinking water.

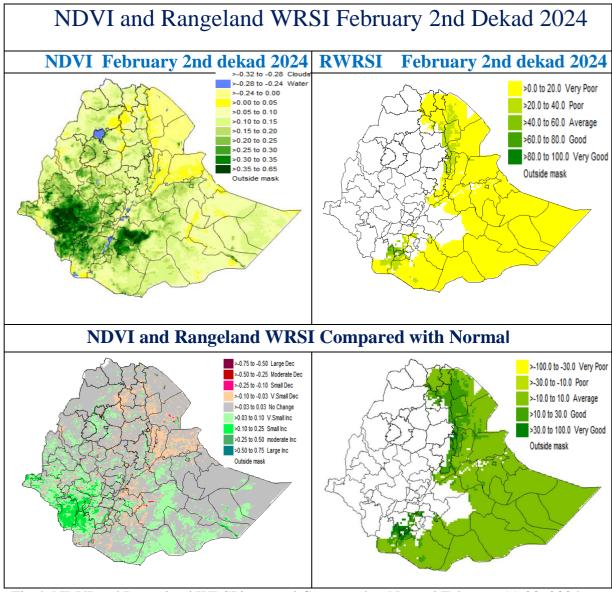


Fig.4. NDVI and Rangeland WRSI in % and Compared to Normal February 11-20, 2024

## 2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING FEBRUARY THIRED DEKAD, 2024

In normal condition, after the second half of the February most part of the Belg growing areas starts to receive the seasonal moisture and in relation to this most farmers are involved in land preparation and early sowing of Belg season crops.

According to the weather forecast for the upcoming February 21-29, 2024, Belg's season, the rain bearing weather systems relatively strength particularly over Belg growing areas of the country. In line with this at the end of the dekad northeastern, central, and southwestern and Rift Valley and adjacent areas of the country expected better moisture. The situation will favorable for the improvement of soil moisture hence for land preparation and planting of the Belg crops. In addition, it will have positive contribution for the regeneration of pasture and the availability of drinking water over pastoral and agro pastoral community and the water need of perennial plants.

#### 3. <u>DEFNITION OF TERMS</u>

**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 southeastern lowlands under normal condition. During the season, morningand 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.

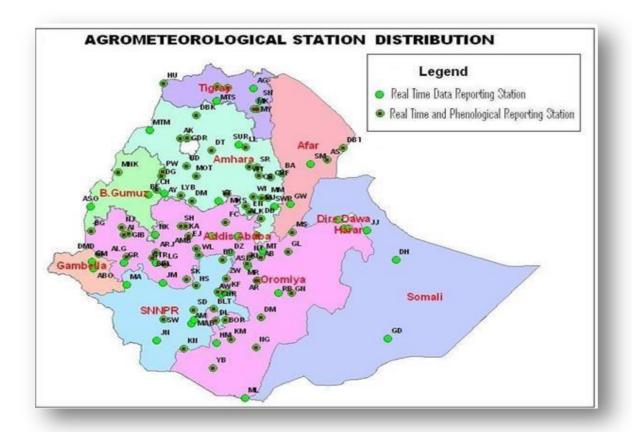
**DEKAD:** - First or second ten days or the remaining days of a month.

**EXTREME TEMPERATURE:** - The highest or the lowest temperature among the recordedmaximum 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



| 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 | Station    | Code | Station  | Code | Station   | Code | Station   | Code |
|--|------------|------|----------|------|-----------|------|-----------|------|
| 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   | A. Robe    | AR   | D. Zeit  | DZ   | Humera    | HU   | Nazereth  | NT   |
| 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   | A.A. Bole  | AA   | D/Dawa   | DD   | Jijiga    | JJ   | Nedjo     | NJ   |
| 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  | Adigrat    | AG   | D/Mena   | DOM  | Jimma     | JM   | Negelle   | NG   |
| AlemayaALDanglaDGK/MingistKMRobeRBAlemKetemaALKDillaDLKachiseKASawlaSWAlgeALGDm.DoloDMDKoffeleKFSekoruSK   | Adwa       | AD   | D/Odo    | DO   | Jinka     | JN   | Nekemte   | NK   |
| AlemKetema ALK Dilla DL Kachise KA Sawla SW Alge ALG Dm.Dolo DMD Koffele KF Sekoru SK  | Aira       | AI   | D/Tabor  | DT   | K.Dehar   | KD   | Pawe      | PW   |
| Alge ALG Dm.Dolo DMD Koffele KF Sekoru SK  | Alemaya    | AL   | Dangla   | DG   | K/Mingist | KM   | Robe      | RB   |
|  | AlemKetema | ALK  | Dilla    | DL   | Kachise   | KA   | Sawla     | SW   |
| Ambo AMB Dubti DBT Konso KN Senkata SN   | 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  | Arba Minch | AM   | Ejaji    | EJ   | Kulumsa   | KL   | Shambu    | SH   |
| Asaita AS Enwary EN Lalibela LL Shire SHR  | Asaita     | AS   | Enwary   | EN   | Lalibela  | LL   | Shire     | SHR  |
| Asela ASL Fiche FC M.Meda MM Shola Gebeya SG   | Asela      | ASL  | Fiche    | FC   | M.Meda    | MM   |           | SG   |
| Assosa ASO Filtu FL M/Abaya MAB Sirinka SR   | Assosa     | ASO  | Filtu    | FL   | M/Abaya   | MAB  | Sirinka   | SR   |
| Awassa AW Gambela GM Maichew MY Sodo SD  | Awassa     | AW   | Gambela  | GM   | Maichew   | MY   | Sodo      | SD   |
| Aykel AK Gelemso GL Majete MJ WegelTena WT   | Aykel      | AK   | Gelemso  | GL   | Majete    | MJ   | WegelTena | WT   |
| B. Dar BD Ginir GN Masha MA Woliso WL  | B. Dar     | BD   | Ginir    | GN   | Masha     | MA   | Woliso    | WL   |
| Bati BA Gode GD Mekele MK Woreilu WI   | Bati       | BA   | Gode     | GD   | Mekele    | MK   | Woreilu   | WI   |
| Bedelle BDL Gonder GDR Merraro MR Yabello YB   | Bedelle    | BDL  | Gonder   | GDR  | Merraro   | MR   | Yabello   | YB   |
| BUI BU Gore GR Metehara MT Ziway ZW  | BUI        | BU   | Gore     | GR   | Metehara  | MT   | Ziway     | ZW   |
| Combolcha CB H/Mariam HM Metema MTM  | Combolcha  | СВ   | H/Mariam | HM   | Metema    | MTM  |           |      |
| D. Berehan DB Harer HR Mieso MS  | D. Berehan | DB   | Harer    | HR   | Mieso     | MS   |           |      |
| D. Habour DH Holleta HL Moyale ML  | D. Habour  | DH   | Holleta  | HL   | Moyale    | ML   |           |      |
| D. Markos DM Hossaina HS M/Selam MSL   | D. Markos  | DM   | Hossaina | HS   | M/Selam   | MSL  |           |      |