#### **SUMMARY**

During 1st dekad of October rainfall indicators over north and north eastern parts of the country and over center of the country decrease from day to day. Over some parts of the country due to cloud coverage for some days gained rainfall but in most parts of the country dominated dry spell. Beside to this situation western and Bega second rainy season areas like south and south eastern parts of the country have a good rainfall amount and performance. Within 24 hours there was heavy rain fall over Arjo 36.4mm, Ayikel 30.1mm, Bore 30.0mm, and Dilla 34.7mm observed. Generally the first dekad of October poor moisture condition has persisted in most part of Meher crop growing areas and has gradually extended to the second rain benefiting areas of the south and southeast part of the country. In most cases, such amount of received rain water might positive impact both long cycle crops which were planted at earlier time and short cycle Meher crops, such as Cereal, Pulses, and Oil crops, and favor were planted or re-planted lately and now found at different growing stages. In addition, the southward advancement of the weather system might be positive particularly for the second rain benefiting areas for the overall Bega season agricultural activities, like for land preparation, collecting and storing of water, planting crops and seedling etc. Moreover, the received normal to above normal amount of moisture in the pastoral and agro pastoral areas might play significant role in improving pasture and drinking water.

During 2<sup>nd</sup> dekad of October rainfall indicators over north and north eastern parts of the country and over center of the country decrease from day to day. Over some parts of the country due to cloud coverage for some days gained rainfall but in most parts of the country dominated dry spell. This dry spell dominated was important for some Meher crop growing places harvest and post harvest activities. Beside to this situation western and Bega second rainy season areas like south and south eastern parts of the country have a good rainfall amount and performance. Generally the 2<sup>nd</sup> dekad of October poor moisture condition has persisted in most part of Meher crop growing areas and has gradually extended to the second rain benefiting areas of the south and southeast part of the country. In most cases, such amount of received rain water might positive impact both long cycle crops which were planted at earlier time and short cycle Meher crops, such as Cereal, Pulses, and Oil crops, and favor were planted or re-planted lately and now found at different growing stages. In addition, the south ward advancement of the weather system might be positive particularly for the second rain benefiting areas for the overall Bega season agricultural activities, like for land preparation, collecting and storing of water, planting crops and seedling etc. Moreover, the received normal to above normal amount of moisture in the pastoral and agro pastoral areas might play significant role in improving pasture and drinking water.

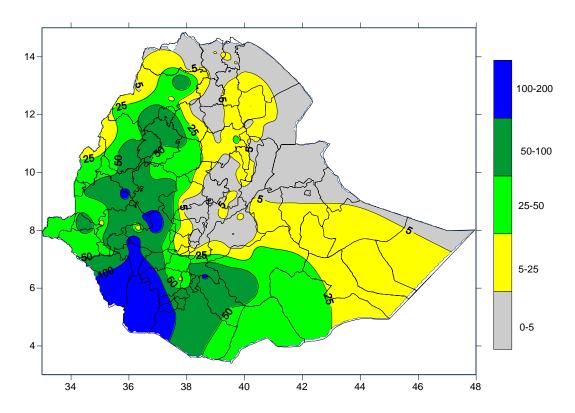


Fig 1. Rainfall distribution in mm (11 – 20 September 2017)
1. WEATHER ASSESSMENT

# 1.1. Rainfall amount (Fig.1)

Pocket area of Wellega, Jimma, Maji, Basketo, south Omo, Dirashe, Konso, Amaro, Keffa and east Illubabur have received 50-100 mm of rainfall. Pocket area of north Gonder, Bahir dar, west Gojam, Agew Awi, Kamashi, east Wellega, Illubabur, Sheka, Jimma, Dawro, Gedeo, Guji, Borena and Bale exhibited 25-50 mm of rainfall. north Gonder, west Tigray, east Gojam Oromia special zone, west Harergie, Metekel, Assosa, Tongo, Gambela zone 1 and 2, Liben, Afder, north Shewa, Gode, Korahe, Warder Fik and Degehabur exhibited 5-25 mm of rainfall.

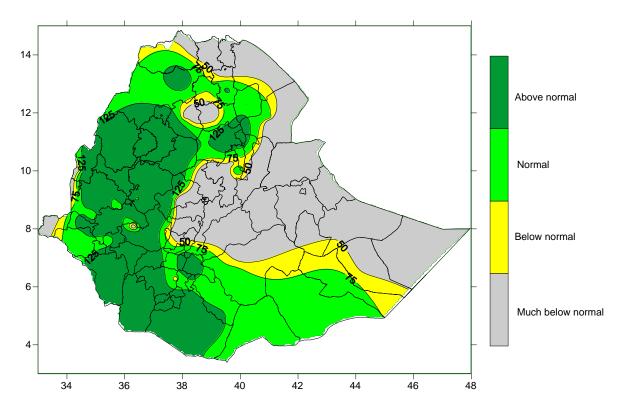


Fig. 2 Percent of normal rainfall distribution (11 – 20 September 2017)

Explanatory notes for the Legend

< 50-Much below normal

50-75%-Below normal

75-125%- Normal

. 4050/ 11

> 125% - Above normal

1.1.2 Rainfall Anomaly (Fig. 2)

Most parts of the country exhibited normal to above normal rainfall over Pocket area of east Tigray, central Tigray, Mekele, Afar zone 2 and 3, Shinile, Harar, Jijiga, east and west Harega, east Shewa, Arsi, Fik, Degehabur, Gode, Bale, Korahe and warder . The rest part of the country has received from much below normal to below normal rainfall.

#### 1.3. TEMPERATURE ANOMALY

Some stations recorded extreme maximum temperature greater than 35 °C. Among reporting stations: Gode, Methara, Abobo, Awash Arba, Aysha, Chifra, Dalifagi, Dubti, Elidar, Fiq, Fugnudo, Gewane, Mile, Gembela, Kebridehar, Lare, Metema, Quara, Sawula, Semera and Shiraro recorded. The situation might have caused a negative impact on the normal growth and development of plants and water and pasture for livestock.

## 2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

### 2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE

During the second dekad of October poor moisture condition has persisted in most part of Meher crop growing areas and has gradually extended to the second rain benefiting areas of the south and southeast part of the country. In most cases, such amount of received rain water might positive impact both long cycle crops which were planted at earlier time and short cycle Meher crops, such as Cereal, Pulses, and Oil crops, and favor were planted or re-planted lately and now found at different growing stages. In addition, the south ward advancement of the weather system might be positive particularly for the second rain benefiting areas for the overall Bega season agricultural activities, like for land preparation, collecting and storing of water, planting crops and seedling etc. Moreover, the received normal to above normal amount of moisture in the pastoral and agro pastoral areas might play significant role in improving pasture and drinking water.

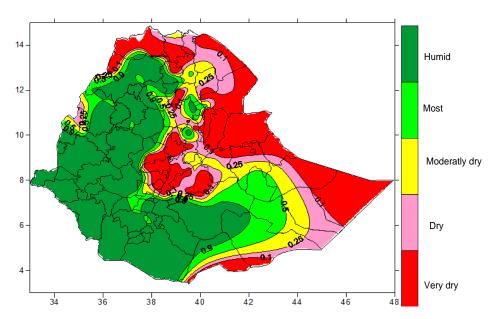


Fig.3 Moisture Status for (11-20 October, 2017)

As moisture status map above during the second dekad of October 2017 indicated that (see Fig 3). Southern, some part of south eastern and western part of the country received moist to humid moisture condition. This condition favors the ongoing Meher agricultural activities and improves pasture and drinking water availability in postural and agro pastoral areas of the country as well.

# EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING DECKED

In normal conditions, during the third dekad of October moisture is gradually withdrawn from the northern and northeastern part of the country. Early planting long and short cycle crops mostly reaches at grain filling and maturity stages and even in some Meher crop growing places harvest and post harvest activities may conduct. On the other hand, it is the time for second rain benefiting areas to start agricultural activities, such as sowing and seedling. Given the ten day forecast for the third dekad of October 2017, the moisture condition is likely to prevail mostly over the western half and to the southern and southeastern part of the country. These conditions are favorable to satisfy crops water need particularly those which are found at early and vegetative stages as well as for perennial plants. Moreover, it has a significant implication for the supply of drinking water and pasture over pastoral and agro pastoral areas. Conversely, frost is likely to happen particularly at matured crop fields, thus it should be noted that the coming situation may be unfavorable for crops at maturity stage and for those under harvest and post harvest activities. So farmers are advised to give priority to harvest matured corps as soon as possible. In addition, in relation to convective cloud formation there may be a possibility of unseasonal fall with cool temperature and it may cause some damage on different crops, vegetables, fruits and other perennial plants. Thus, in order to minimize the level of the possible damage, farmers are advised to remove hailstones from croplands as much as possible.