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FORE WARD

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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አህፅሮት

እ.ኤ.አ በልግ 2014

የበልግ ወቅት ዝናብ በሚያዚያና በግንቦት ወር ለሚዘሩት የረዥም ጊዜ ሰብሎች እንደ በቆሎና ማሽላ ላሉት የውሃ ፍላጎት መሞላት እንዲሁም ለመኸር እርሻ የማሳ ዝግጅት የሚኖረው ጠቀሚታ ከፍተኛ ነው። በተጨማሪ ከክረምቱ ዝናብ ባሻገር የበልግ ወቅት ዝናብ በተለይም በሚያዚያና በግንቦት ወር የሚኖረው የዝናብ በመጠንም ሆነ በስርጭት ረገድ ለረዥም ጊዜ ለሚደርሱ አዝርዕቶች የዕድገት ሁኔታ አስተዋፅያ የጎላ ነው።።

እ.ኤ.አ ፌብርዋሪ 2014 የበልግ ዝናብ በመደበኛ ሁኔታ ከፌብርዋሪ አጋማሽ ጀምሮ በበልግ አብቃይ አካባቢዎች ላይ የሚጀምርበት ጊዜ ነው። ፌብርዋሪ የመጀመሪያ አሥር ቀናት ለዝናብ መኖር አመቺ ሁኔታ የሚፈጥሩ የአየር ሁኔታ ክስተቶች በመጠናከራቸው ምክንያት የዝናቡ ሁኔታ በሥርጭትም ሆነ በመጠንም ረገድ የተጠናከረ ነበር ሆኖም ግን በሁለተኛውና በመጨረሻው አሥር ቀናት ግን የዝናቡ ስርጭትም ሆነ መጠን አንጻራዊ በሆነ መልኩ ቀንሶ ተስተውሏል። ይሁን እንጂ በደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል፣ በአብዛኛው ኦሮሚያና አማራ፣ በደቡብና በምሥራቅ ትግራይ፣ በቤንሻንጉል ጉሙዝ፣ በአፋር እና በምሥራቅ ኢትዮጵያ ከ 36.8-78.3 ከበድ ያለ ዝናብ በሚ.ሜ. በአንድ ቀን ውስጥ አግኝተዋል። ይህም ሁኔታ የበልግ እርሻን ቀደም ብለው ለሚጀምሩ አካባቢዎች የማሳ ዝግጅትና የዘር እርሻ እንዲሁም ከላይ በተጠቀሱት አካባቢዎች ለሚገኙ አርብቶ አደሮችና ከፊል አርብቶ አደሮችለመጠጥ ውሀና ለግጦሽ ሳር አቅርቦት እንዲሁም ለቋሚ ሰብሎች የውሃ ፍላጎት መሟላት የጎላ ጠቀሜታ ነበረው።

እ.ኤ.አ በማርች 2014 በመጀመሪያው አሥር ቀናት የዝናቡ ስርጭትና መጠን በምዕራብ የሀገሪቱ አጋማሽ የተሻለ ጥንካሬ የነበረው ሲሆን በሁለተኛውና በሶስተኛው አሥር ቀናት በአብዛኛው የበልግ ዝናብ ተጠቃሚ በሆኑት የሀገሪቱ አካባቢዎች ከቀላል እስከ ከባድ መጠን ያለው ዝናብ ነበራቸው። ከዚህም ጋር ተያይዞ በላይበር 30.1፣ በደብረታቦር 66.2፣ በአሶሳ 22.0፣ በደባርቅ 38.5፣ በሴሩ 55.7፣ በጎሎልቻ 45.3፣ በአዳማ 39.1፣ በሚኤሶ 40.2፣ በገዋኔ 84.2፣ በድሬዳዋ 42.0 እና በጂማ 36.2 በሚ.ሜ. የሚደርስ ከባድ ዝናብ በወሩ ውስጥ አግኝተዋል።

ይህም በአብዛኛው የበልግ ዝናብ ተጠቃሚ አካባቢዎችን ያዳረሰው ዝናብ በተለያዩ የእድገት ደረጃ ላይ ላሉ የበልግ ሰብሎች፣ ለቋሚ ተክሎችና በሃገሪቱ ዝቅተኛ ቦታዎች ላይ ለሚገኙ አርብቶ አደሮችና ከፊል አርብቶ አደሮች ለግጦሽ ሣርና ለመጠጥ ውሃ አቅርቦት ከፍተኛ ጠቀሜታ እንደነበረው እሙን ነው። በሌላም በኩል በአንዳንድ የሃገሪቱ ክፍሎች በአንድ ቀን የጣለው በረዶ የቀላቀለ ከባድ ዝናብ በአንዳንድ አካባቢዎች ላይ በበልግ ሰብሎችና በእንሰሳት ላይ አሉታዊ ተጽእኖ አሳድሯል ።

በኤፕሪል ወር 2014 የበልግ ዝናቡ በስርጭትም ሆነ በመጠን ረገድ በአብዛኛው የበልግ ዝናብ ተጠቃሚ አካባቢዎችን ያዳረሰ ከመሆኑ ጋር ተየይዞ በትግራይ፣ በደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል፡ በአፋር፣ በድሬደዋ፣ በሀራሬ እና በሰሜን ሶማሌ አካባቢዎች ከ 50-498.0 ሚ.ሜ መጠን ያለው ዝናብ ለ6-26 ተከታታይ ቀናት አግኝተዋል። ይህም ሁኔታ ለበልግ የእርሻን ስራ እንቅስቃሴ፣ ለረዝም ጊዜ ሰብሎች የማሳ ዝግጅት፣ ለቋሚ ስብሎች የው፣ሃ ፍላጐት መሞላት እንዲሁም ከላይ በተጠቀሱት አካባቢዎች ለሚገኙ አርብቶ አደሮችና ከፊል አርብቶ አደሮችለመጠጥ ውሀና ለግጦሽ ሳር አቅርቦት የጎላ ጠቀሜታ ነበረው። ሆኖም ግን በሻውራ፣ በጉንዶ መስቀል፣ በካችሴ፣ በዶሎመ፣ በማጀቴ፣ በበደሌ፣ በሊሙ ገነትና አርጆ 52.4-97.5 በሚ.ሜ. በአንድ ቀን የጣለው ከባድ ዝናብ በአንዳንድ አካባቢዎች ላይ ቅጽበታዊ ጎርፍ በማስከተሉ ምክንያት በሰብሎችና በእንሰሳት ላይ አሉታዊ ተጽዕኖ ማሳደሩን ከመረጃ ክፍላችን ለማወቅ ተችሏል ።

በሜይ ወር 2014 ምንም እንኳን የበልግ የመጨረሻ ወርና የበልግ ዝናብ ተጠቃሚ በሆኑተ አካባቢዎቸ ላይ ተዳክሞ የሚታይበት ወር ነው። ሆኖም ግን የዘንድሮ በልግ የዝናብ ሰጪ የሚቲዎሮሎጂ ክስተቶች በመጠናከራቸውና ምቹ ሁኔታን በመፈጠራቸው ምክንያት አብዛኛውን የሀገሪቱን ክፍል ያዳረሰ ዝናብ እንዲኖር ምክንያት በመሆኑም በትግራይ፣ በአማራ፣ በደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል፡በቤንሻንጉል ጉሙዝ፣ በጋንቤላ፣ በአፋር፣ በድሬደዋ፣ በሀራሬ እና በሰሜን ሶማሌ አካባቢዎች ከ ቀላል እስከ ከባድ መጠን ያለው ዝናብ ነበራቸው ከዚህም ጋር ተየያይዞ በአብዘዛኛው አማራ፣ በደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል፡ ቤንሻንጉል ጉሙዝ፣ ጋምቤላ 31.3-421.3ሚ.ሜ መጠን ያለው ዝናብ ከ7-22 ተከታታይ ቀናት አግኝተዋል።

ይህም ሁኔታ ለበልግ የእርሻን ስራ እንቅስቃሴ፣ ለረዝም ጊዜ ሰብሎች የማሳ ዝግጅት፣ ለቋሚ ሰብሎች የውሃ ፍላጐት መሞላት እንዲሁም ከላይ በተጠቀሱት አካባቢዎች ለሚገኙ አርብቶ አደሮችና ከፊል አርብቶ አደሮችለመጠጥ ውሀና ለግጦሽ ሳር አቅርቦት የጎላ ጠቀሜታ ነበረው። ሆኖም ግን በአንዳንድ አካባቢዎች ላይ ከባድ ዝናብ ከመዘገቡ ጋር ተያይዞ በቀብሪደሀር፣ በአቦምሳ፣ በጋቲራ፣ በአዋሽ አርባና በትር 44.1-88.4 ሚሜ ዝናብ በአንድ ቀን ይገኝበታል ከዚሁም ጋር ተያይዞ ቅጽበታዊ ጎርፍ በሰብሎችና በእንሰሳት ላይ አሉታዊ ተጽዕኖ ማሳደሩን ከመረጃ ክፍላችን ለማወቅ ተችሏል ።

በአጠቃላይ በልግ 2014 የነበረው የእርጥበት ሁኔታ በመጠንም ሆነ በስርጭት ረገድ የበልግ ዝናብ ተጠቃሚ በሆኑ አካባቢዎች ላይ የተስፋፋ ከመሆኑ ጋር ተያይዞ የአዝርእትን የውሀ መጠን ፍላጎት በማሟላት በኩል ምቹ ሁኔታ የፈጠረ ነበር። ሆኖም የእርጥበት መቀነስና ረጅም ደረቅ ቀናተ በፈብሪዎሪና በአፕሪል ወር ከመከሰቱና በአንዳንድ አካባቢዎችና ዝናቡ ዘግይቶ በጀመረባቸው አካባቢዎች የሰሜን ምስራቅ የደቡብ ምስራቅ ዝቅተኛ ቦታዎች እንዲሁም ምስራቅና ምእራብ ሐረርጌ የሰብሎች የእድገት ጊዜ እንደሚያጓትት ቢገመትም የበልግ ዝናቡ አወጣጥ የመዘግየት አዝማሚያ ስለነበረው አሉታዊ ተጽእኖው ቀንሶ ታይቷል። ሆኖም አልፎ አልፎ በአንዳንድ የበልግ አብቃይ አካባቢዎች ከባድ ንፋስ የቀላቀለ ዝናብ ተስተውሏል ። ከከባድ ዝናብ ጋር በተያያዘ በአንዳንድ ስፍራዎች በሰብሎችና በእንሰሳት ላይ ጥፋት አስከትሏል። እንዲሁም ከአየር ፀባይ መለዋወጥ ጋር ተያይዞ በአንዳንድ ስፍራዎች ላይ የሰብሎች ተባይ የሆነው የበረሃ አንበጣ እንደ ተከሰተ ከሥፍራው የደረሰን መረጃ ይጠቁሟል። የበልግ ወቅት የዝናብ ለአብዛኛው የበልግ የእርሻ ሥራ እንቅስቃሴ፣ ለቋሚ ሰብሎች የውሃ ፍላጎት መሞላትና ለአርብቶ አገሩና ከፊል አርብቶ አደሩ ለመጠጥ ውሃና ለግጦሽ ሳር አቅርቦት እንዲሁም ለረጅም ጊዜ የመኸር ሰብሎች እንደ ማሽላና በቆሎ ለመሳሰሉት የማሳ ዝግጅትና የዘር የእርሻ ስራ እንቅስቃሴ በቂና አመቺ እንደነበር ከየቦታው ከሚደርሱን መረጃዎች ለማወቅ ተችሏል።

SUMMARY

BELG 2014

Normally central parts of northern highlands, eastern highlands, parts of central, southwestern and southern Ethiopia are known as Belg growing areas. The contribution of Belg rainfall is ranging from 5-30% over north, northeastern, and eastern highlands, where as 30-60% over south and southwestern parts of the country from annual total crop production of the areas. North Shewa, East and West Hararge, Arsi, Bale, north and south Wello, Borena and SNNPR (Kembata, Hadiya and Wolaita, Gurage, Keffa and Bench) start their land preparation and sowing activities during December to February. It is the time for water harvesting over pastoral and agro pastoral areas of southern and southeastern Ethiopia.

During the month February, 2014, SNNPR, most parts of Oromia and Amhara, south and eastern Tigray, Benshangul Gumuz, Afar and eastern Ethiopia received light to heavy rainfall. This situation has a positive impact for the ongoing Belg agricultural activities such as land preparation and sowing of Belg crop, water requirement for perennial plants and availability of dirking water and pasture over pastoral and agro pastoral areas of the country. More over stations Shire, Awash Arba, Mekanaselam, Konso, Hosahna, Majate and Nurera reported heavy fall raging from 30.5-78.3 mm of rainfall in one rainy day. This situation might have a negative contribution of Belg crops and animals in the area.

During the month of March 2014, in the first dekad of month the rainfall activity was not covered much of Belg rain benefiting areas of the country, while in the second and third dekad of the month, the seasonal rainfall bearing meteorological phenomena was strengthened over most Belg rain benefiting areas of the country. SNNPR, most parts of Oromia, eastern Tigray, eastern Amhara, Afar and Somali received light to heavy rainfall. The situation might have favored Belg crops that were found at emergence and early vegetative stages, the water supply of perennial plants, land preparation and sowing of long cycle Meher crops. With regard to heavy rainfall, Liyber, Debre Tbour, Assosa, Debark, Sire, Gololcha, Adama, Meiso, Gewan, Dire Dawa and Jimma experienced heavy fall within the range of 30 -84.2 mm in one rainy day. This situation might cause negative impact on Belg crops and animals.

On the other hand, the observed extreme maximum temperature over lowland parts of the country particularly over southeastern and northeastern portion might have increased the evapo-transpiration and cause stress on perennial pants of the areas.

During April 2014, Belg rain bearing meteorological phenomena was strengthened in amount and distribution over all Belg rain benefiting areas of the country. In line to this the first and the third decade of April 2014 all Belg growing areas of the country will gain better rainfall in amount and distribution. Tigray, Amhara, much of Oromia, Beshangul-Gumuz, Gambela, SNNPR, Afar, Dire Dawa, Harari and northern Somali received light to heavy rainfall ranging from 30.0 – 376.0 mm of rainfall for 6-25 consecutive days. This might have favored ongoing Belg agricultural activities, land preparation and sowing of long cycle crops such as sorghum and maize, water requirement for perennial plants and availability of drinking water and pastor for pastoral and agro-pastoral areas. While Shaura, Gudo Meskal, Kachise, Dolo Mena, Majeti, Bedele, Limu Genet and Arjo experienced 52.4-97.5 mm in one rainy day. This situation might have a negative contribution of Belg crops and animals in the area.

During the month of May 2014, under normal circumstance the rainfall activity was slightly decreasing from Belg growing areas of the country. However, due to the strength of rain bearing meteorological phenomena western parts of the country received better rainfall in amount and distribution. In line to this Tigray, Amhara, Oromia, Benishangul-Gumuz, SNNPR, Gambela, Afar, Dire Dawa, Harrari and Somalia exhibited light to heavy rainfall. This might have favored ongoing Belg agricultural activities, land preparation and sowing of long cycle crops such as sorghum and maize, water requirement for perennial plants and availability of drinking water and pastor over pastoral and agro-pastoral areas. Some reporting station like Kebridahar, Abomsa, Gatira, Awash Arba and Tepi experienced 44.1 to 88.4 mm in one rainy day. This situation might have a negative contribution for Belg crops and animals in the area.

Generally Belg 2014 the analyzed moisture status except the month of February all the selected analogue years agree with Belg 2014 moisture condition over most of Belg growing areas particularly in the southern portion of SNNPR the expected good moisture has paramount importance in the areas where their Belg production contribution ranges from 40-70 % from annual production. Total crops water requirement in both analog year 1997 & 2002 said to be Poor for northeastern, eastern Tigray and Amhara. Whiel good WRSI condition is confined over southern and some parts of eastern Oromia, Bale & Arsi zones of Belg growing areas of the country. The expected owing to the intra-seasonal variability, prolonged dry spells in the month of February and mid April 2014 across Belg growing areas may influence the seasonal agricultural activities.

Moisture index for Belg 2014 Season

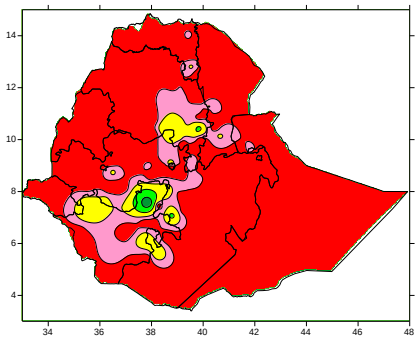
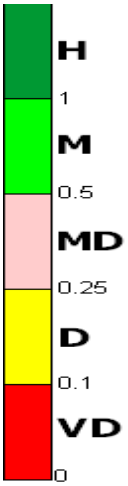


Fig 1. Moisture status for the month of February 2014



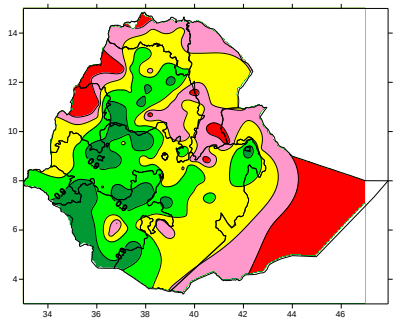


Fig 2. Moisture status for the month of March 2 014

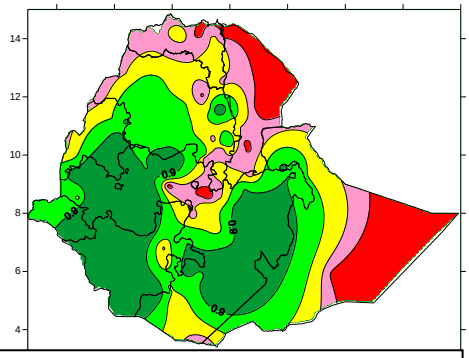


Fig 3. Moisture status for the month of April 2014

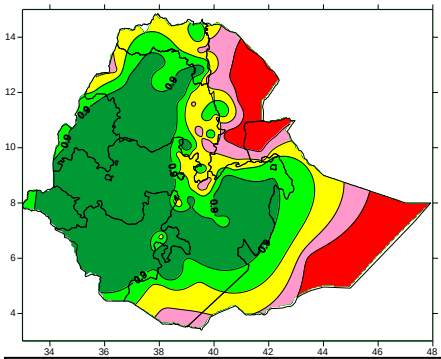


Fig 4. Moisture status for the month of May 2014

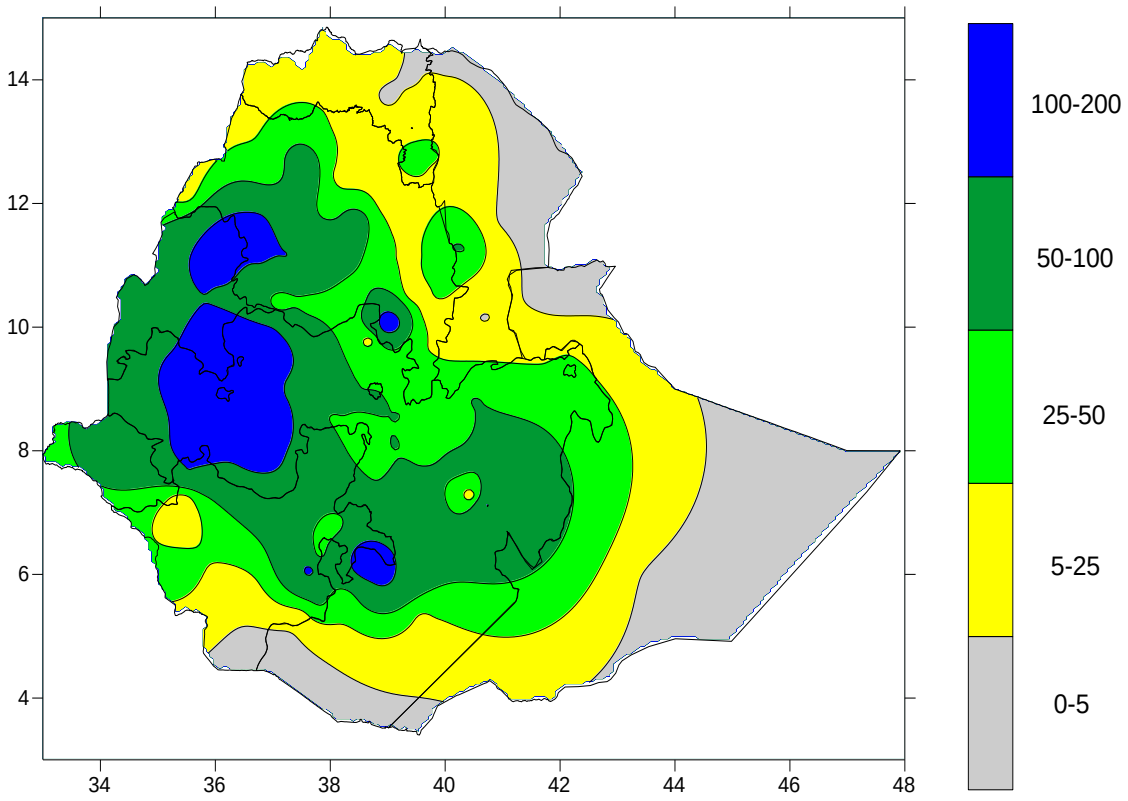


Fig. 5 Rainfall distribution in mm (21-31 May 2014)

1. WEATHER ASSESSMENT

1.1 21-31 May 2014

1.1.1 RAINFALL AMOUNT (Fig.5)

Pocket areas of south western and western Oromia and Benshangul- Gum pocket areas of southern and southwestern Amhara experienced 100-200 mm of rainfall. Southwestern and southern Amhara, Gambela, Benhangul-Gumuz, Oromia and northern SNNPR, experienced 50-100mm of rainfall. Much of central and eastern Oromia, SNNPR, parts of the western and eastern Amhara, western Gambella western SNNPR and pocket areas of southwestern souther n Tigray and southwestern Afar received 25 -50 mm of rainfall. Much of eastern and western Amhara, Tigray, Oromia, Afar, SNNPR and southwestern Somali exhibited 5-25 mm of rainfall .While the rest parts of the country prevailed little or no rainfall.

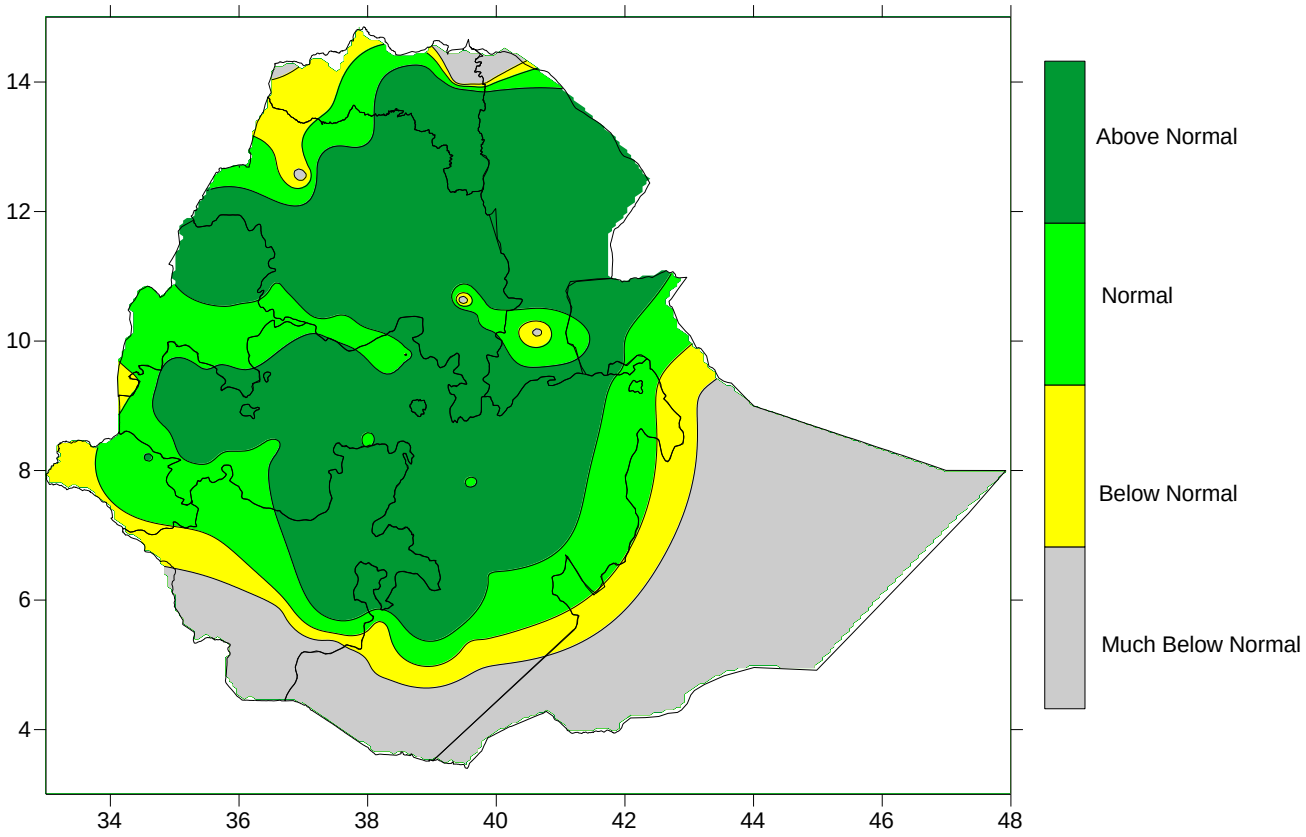


Fig. 6 Percent of normal rainfall (21-31May2014)

Explanatory notes for the Legend:

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

1.1.2 RAINFALL ANOMALY (Fig. 6)

Much of Oromia, Tigray, Amhara, Benshangul–Gumuz, eastern Gambela and pocket areas of western Somali experienced normal to above normal rainfall, while the rest parts of the country exhibited below to much below normal rainfall.

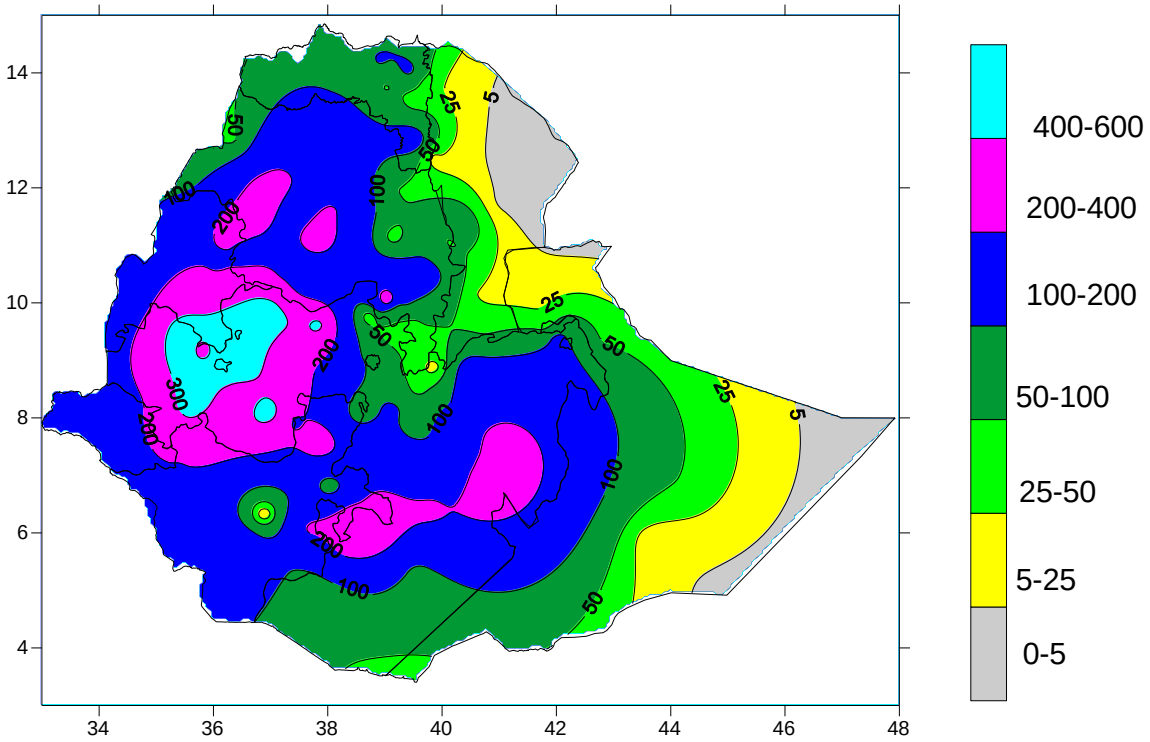


Fig. 7 Rainfall Distribution in mm for the month of May 2014

1.2 May 2014

1.2.1 Rainfall Amount (Fig.7)

Pocket areas of western Oromia and eastern Benishangul–Gumuz received 400-600 mm of rainfall. Parts of southeastern, western Oromia, pocket areas of eastern Gambela, eastern Benishangul Gumuz, and western SNNPR and pocket areas of southwestern Amhara experience 400-200 mm of rainfall. Most of SNNPR, Oromia including Arsi and Bale zone, Amhara, Gambela, southwestern Somali, and Benshangul-Gumuz exhibited 100-200 mm of rainfall. Much of southwestern Somali, much of Oromia, Amhara and Tigray, central SNNPR and pocket areas of southern Afar received 50-100 mm of rainfall. While pocket areas of eastern and southern Amhara and Tigray, much of Afar and Somali received 25-50 mm of rainfall. Most part of Afar and Somalia exhibited 5-25 mm of rainfall. The rest parts of the country exhibited little and no rainfall.

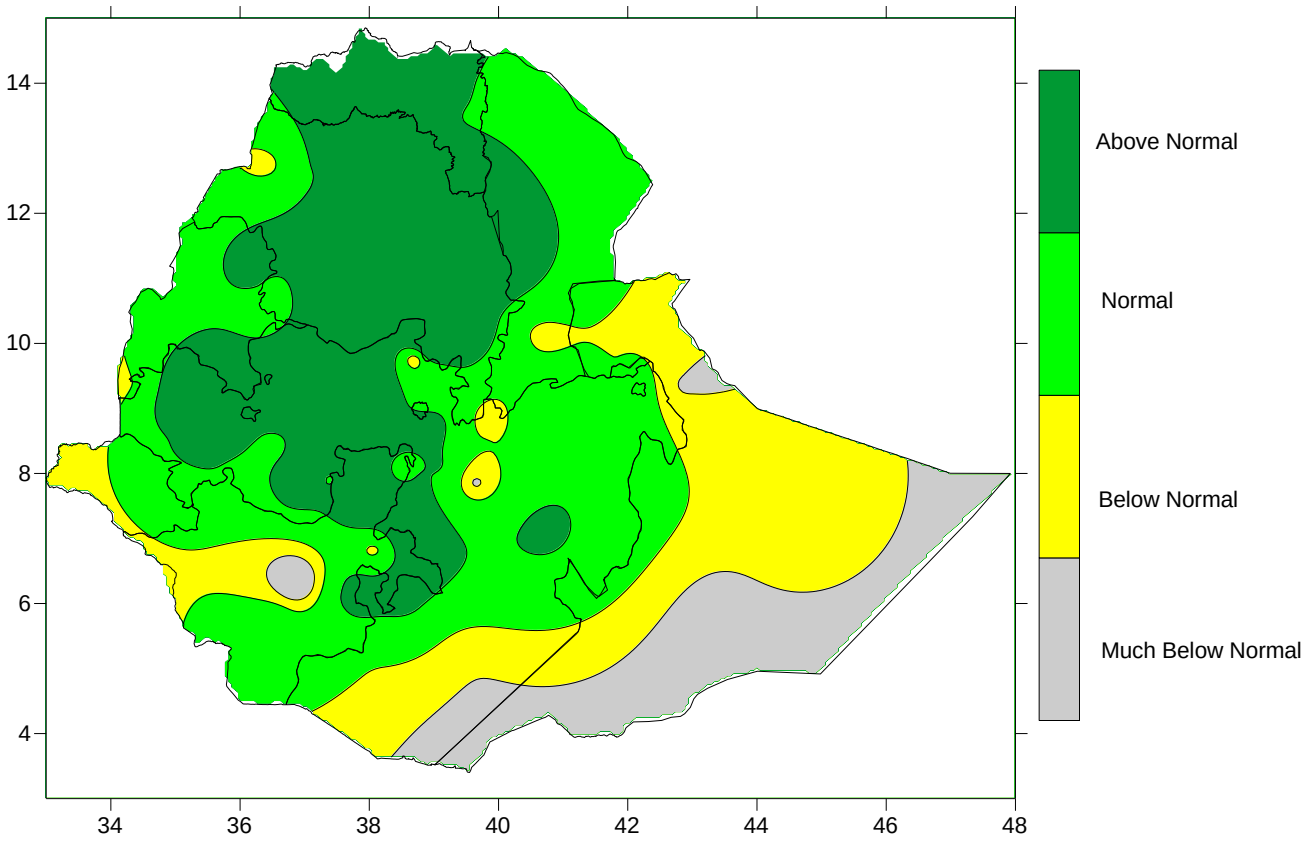


Fig. 8 Percent of Normal Rainfall for the month of May 2014

Explanatory notes for the Legend:

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

1.2.2 Rainfall Anomaly for the month of May 2014 (Fig. 8)

Much of Tigray, Amhara, Afar, eastern Gambela, Benshangul Gumuz, Oromia, SNNPR, northern tip of Somalia, exhibited normal to above normal rainfall. The rest parts of the country experienced below to much below normal.

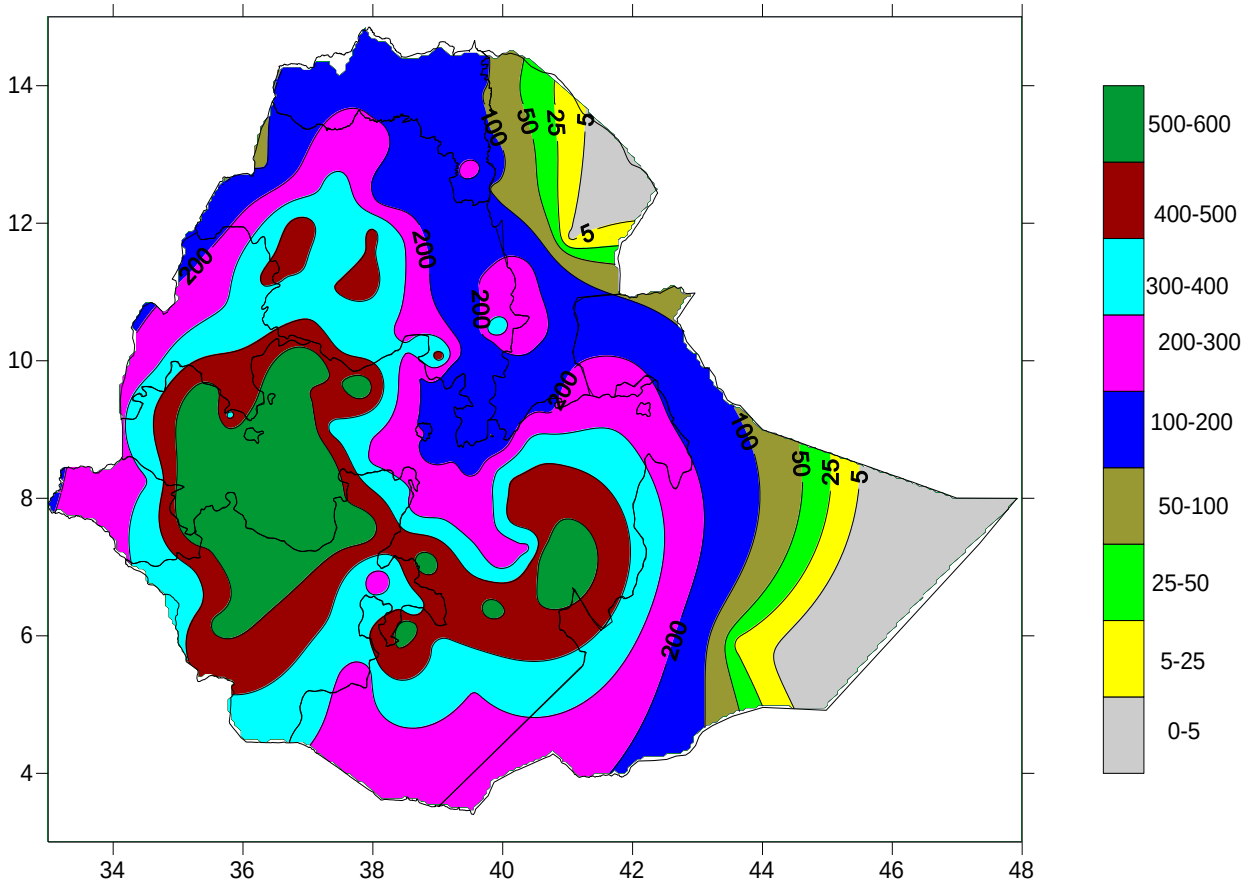


Fig. 9 Rainfall Distribution in mm for Belg 2014

1.3 BELG 2014

1.3.1 RAINFALL AMOUNT FOR BELG 2014 (Fig. 9)

Much of western and southeastern Oromia and western SNNPR received 500-600 mm of rainfall. Some places of central and southern Amhara, southern Benishangul-Gumuz, southwestern and southeastern Oromia, southeastern SNNPR and eastern Gambela. parts of received 400-500 mm of rainfall. Much of Amhara, Benshangul-Gumuz, westrn, southern and southeastern Oromia, southwestern and southeastern SNNPR and southwestern Somalia received 300-400 mm of rainfall. Most of eastern and southeastern Oromia, western Gambela, western and southern Amhara, pocket areas of southern Tigray, eastern Amhara, and eastern SNNPR experienced 200-300 mm of rainfall. Most of Tigray, Amhara, southern Afar, and parts of western Benishangul-Gumuz, northern Oromia and Somali exhibited 100-200 mm of

rainfall. Much of Afar and southeastern Somalia received 50-100 mm of rainfall. Below 50 mm of rainfall was prevailed over Afar and Somalia during the season.

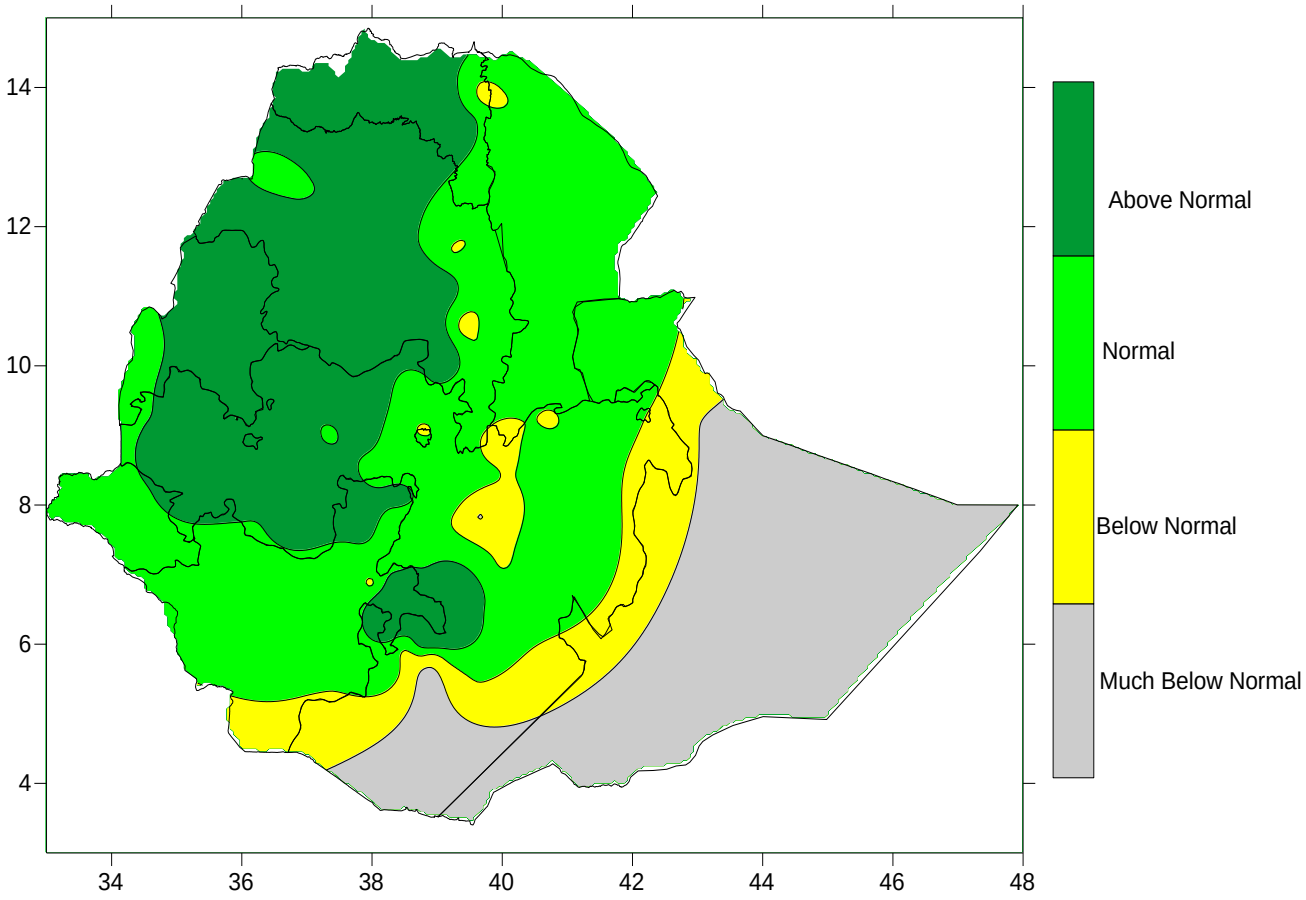


Fig. 10 Percent of normal rainfall for Belg 2014

Explanatory notes for the Legend:
< 50 -Much below normal
50-75%-Below normal
75-125%- Normal
> 125% - Above normal

1.3.2 RAINFALL ANOMALY FOR BELG 2014(Fig. 10)

Gambela, Benishangul-Gumuz, Amhara, Tigray, Afar, Gambela, SNNPR, most parts of Oromia and northern Somali experienced normal to above normal rainfall. The rest parts of the country experienced below normal to much below normal rainfall.

1.4 TEMPERATURE ANOMALY

During the month under review some areas exhibited extreme maximum temperature greater than 35^{o}C. Dire Dawa, Gode, Metehara,Awash arba, Dubti, Elidar, Gambela, Mankush, millr, Mytsebrie, Metema, Nura era, Quara and Semera with magnitude of 36.8, 38.0, 38.5, 39.0, 42.5, 42.0, 40.0, 39.6, 41.5, 37.6, 41.5, 36.4, 42.0 and 44.0^{o}C respectively. The situation might have a negative impact on the normal growth and development of plants and livestock.

2. AGROMETEOROLOGICAL CONDTIONS AND IMPACT ON AGRICULTURE

2.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE DURING BELG 2014

Generally Belg rain had significantly contributed pastoral and agro pastoral areas of southern, southeastern and parts of northeastern low lands for the availability of pasture and drinking water. Besides, it might have favored sowing activities of crops like Maize, Haricot bean, Teff, Sorghum and Wheat.

The analyzed moisture status except the month of February all the selected analogue years agree with Belg 2014 moisture condition over most of Belg growing areas particularly in the southern portion of SNNPR the expected good moisture has paramount importance in the areas where their Belg production contribution ranges from 40-70 % from annual production.

Total crops water requirement in both analog year 1997 & 2002 said to be Poor for northeastern, eastern Tigray and Amhara. While good WRSI condition is confined over southern and some parts of eastern Oromia , Bale & Arsi zones of Belg growing areas of the country.

The expected owing to the intra-seasonal variability, prolonged dry spells specially in the month of February and mid April 2014 across Belg growing areas may influence the seasonal agricultural activities.

2.2 EXPECTED WEATHER IMPACTS ON AGRICULTURE DURING THE COMING KIREMT SEASON

The analyzed moisture status for all selected analogue years except 2009 and some of 2002 analogue year expected to favor Meher agricultural activities particularly over western half and most of Meher growing areas of the country.

The computed WRSI values for Maize, Sorghum, Wheat and Teff crops for most analog year of western half of Meher producing areas indicate good performance. Deficit was observed over parts of eastern Half of the country

The range land index based on **WRSI** and the **NDVI** vegetation cover shows good coverage on the analogue year 2006 and 1997 and after July month to month increase over all analogue years . The situation will promising for seasons agricultural activities and availability of pasture and water over eastern and north eastern low lands of pastoral and agro-pastoral areas.

Near normal to above normal rainfall amount is anticipated across the western half of the country and most portions of central Ethiopia, including southern highlands are expected to receive **normal tending to above normal** rainfall that enable get good moisture which is conducive for Meher agricultural activities, for the Anticipated Positive impacts will be good preparation is needed in the case of agricultural inputs such as seeds, fertilizers before the rainfall season sets in.

Northeast, east and the adjoining Rift Valley escarpments are highly likely to receive **near normal, with the possibility of below normal** rainfall at some places. The probability of below normal rainfall condition would affect the water requirements of the crops particularly over the lowland areas, which are classified under drought prone areas. Thus, proper water harvesting techniques would be advisable over those areas.

Generally, overall seasonal rainfall of the country is expected to be within the near normal category, with enhanced probability for prolonged dry spells over some places of northeastern and eastern Ethiopia. The expected to receive below normal rainfall (erratic) condition areas attention should be given for those areas in order to mitigate the effect of adverse situation. In these areas we advice that carry out water conservation practices should be practiced and moisture deficit tolerant crops types and varieties should be preferred than those need more moisture.

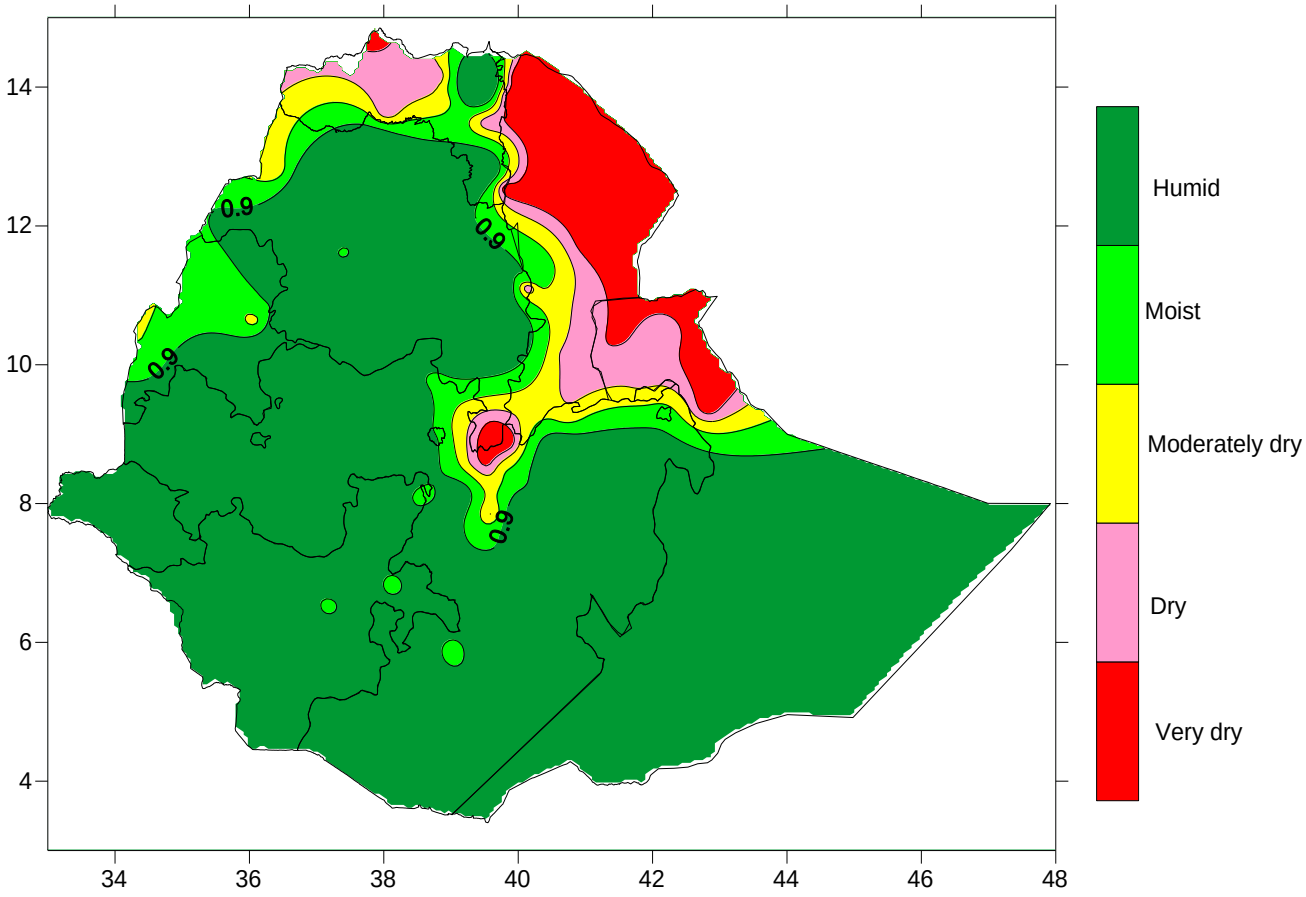


Fig.11 Moisture Status for May 2014

As indicated the moisture status map above, most parts of Gambela, Benishagul –Gumuz, SNNPR, Oromia, Amhara and eastern and southern Tigray including southern and southeastern Somali experienced moist to humid moisture condition. While, some parts of eastern and central Tigray, eastern, western and southern Amhara, northern tip of Oromia and southern Afar and central and southwestern Somali exhibited moderately dry condition. The rest parts of the country prevailed under dry and very dry condition. Thus might have favored ongoing agricultural activities, water availability of perennial plants and drinking water and pasture over pastoral and agro pastoral areas of the country. While the rest parts of the country prevailed dry to very dry moisture condition.

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.

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, 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 northeastern parts of the country.

CROP WATER REQUIREMENTS: - The amount of water needed to meet the water loss through evapo-transpiration of a disease free crop, growing under non-restricting soil conditions including soil water and fertility.

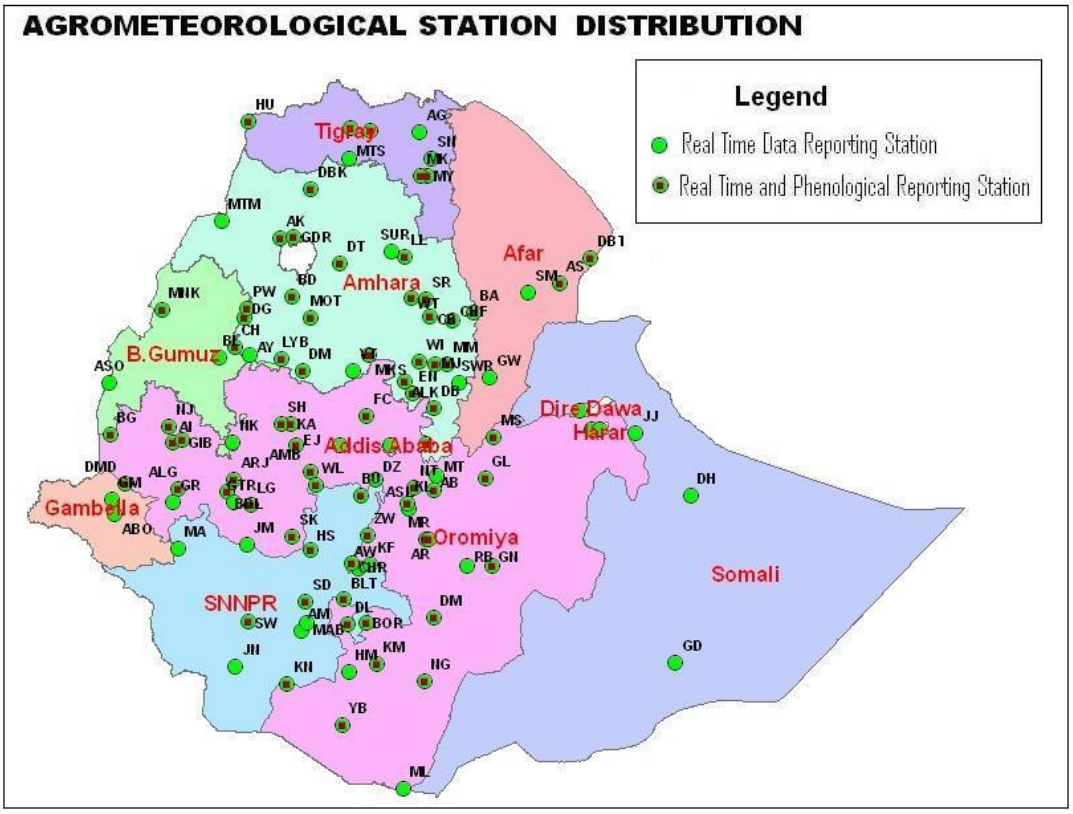
DEKAD: - First or second ten days or the remaining days of a month.

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 southeastern lowlands of the country.

RAINY DAY: - A day with 1 or more mm of rainfall amount.



Station	CODE	Combolcha	CB	Gonder	GDR	Metema	MTM
A. Robe	AR	Chagni	CH	Gore	GR	Mieso	MS
A.A. Bole	AA	Cheffa	CHF	H/Mariam	HM	Moyale	ML
Abomsa	AB	Chira	CHR	Harar	HR	Motta	MT
Abobo	ABO	D.Berehan	DB	Holleta	HL	M/Selam	MSL
Adigrat	AG	D.Habour	DH	Hossaina	HS	Nazereth	NT
Adwa	AD	D.Markos	DM	Humera	HU	Nedjo	NJ
Aira	AI	D.Zeit	DZ	Jijiga	JJ	Negelle	NG
Alemaya	AL	Debark	DBK	Jimma	JM	Nekemte	NK
Alem Ketema	ALK	D/Dawa	DD	Jinka	JN	Pawe	PW
Alge	ALG	D/Mena	DOM	K.Dehar	KD	Robe	RB
Ambo	AMB	D/Odo	DO	K/Mingist	KM	Sawla	SW
Aman	AMN	D/Tabor	DT	Kachise	KA	Sekoru	SK
Ankober	AK	Dangla	DG	Koffele	KF	Senkata	SN
Arbaminch	AM	Dilla	DL	Konso	KN	Shambu	SH
Asaita	AS	Dm.Dolo	DMD	Kulumsa	KL	Shire	SHR
Asela	ASL	Dubti	DBT	Lalibela	LL	Shola Gebeya	SG
Assosa	ASO	Ejaji	EJ	Limugent	LG	Sirinka	SR
Awassa	AW	Enwary	EN	M.Meda	MM	Sodo	SD
Aykel	AK	Fiche	FC	M/Abaya	MAB	Wegel Tena	WT
B. Dar	BD	Filtu	FL	Maichew	MY	Woliso	WL
Bati	BA	Gambela	GM	Majete	MJ	Woreilu	WI
Bedelle	BDL	Gelemso	GL	Masha	MA	Yabello	YB
Begi	BG	Gewane	GW	Mankush	MNK	Ziway	ZW
BUI	BU	Ginir	GN	Mekele	MK		
Bullen	BL	Gimbi	GIB	Merraro	MR		
Bure	BR	Gode	GD	Metehara	MT		