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.

Director General
NMA
P.O.Box 1090
Tel: 011661-57-79
FAX 00251-11-6625292
E-mail nmsa@ethionet.et
Addis Ababa

አህፅሮት

እ.ኤ.አ ኤፕሪል 2008

እ.ኤ.አ በኤፕሪል 2008 የመጀመሪያው አስርተ ቀናት የነበረው የአየር ሁኔታ በመጠንም ሆነ በስርጭት ረገድ ቀደም ካሉት ቀናት ጋር ሲነጻጸር ተስፋፍቶ ነበር የተስተዋለው። ከዚህ ጋር በተያያዘም የሀገሪቱ ምዕራብና ደቡብ ምዕራብ ክፍሎች፣ የመካከለኛውና የምሥራቅ የሀገሪቱ አካባቢዎች እንዲሁም ሰሜናዊ የሀገራችን ክፍል ጨምሮ የተስፋፋ ዝናብ መስተዋሉ የነበረውን ደረቅ ሰሞን ከማርገቡም ባሻገር የበልግ የእርሻ ስራ እንቅስቃሴን ለሚያካሂዱ አከባቢዎች ቀደም ብለው በእርጥበት እጥረት ምክንያት ዘር ሳይዘሩ ለቆዩ አካባቢዎች የጎላ ጠቀሜታ ይኖረዋል። በተጨማሪም በምሥራቅ ኢትዮጵያና ደቡብ ኦሮሚያ አካባቢ ለሚገኙ ቆላማ ስፍራዎች ለመጠጥ ውሃ አቅርቦትና ለግጦሽ ሳር ልምላሜ የጎላ ጠቀሜታ እንደሚኖረው እሙን ነው። በአንዳንድ በምዕራብ፣ በመካከለኛው፣ በደቡብ፣ በምሥራቅ የሀገራችን ክፍል በሚገኙ አካባቢዎች ላይ ከ30-80ሚ.ሜ የሚደርስ ከባድ ዝናብ በአንድ የዝናብ ቀናት ብቻ ተመዝግቧል። በአጠቃላይ ይህም የዝናብ ሁኔታ ለቋሚ ሰብሎችና ለበልግ የእርሻ እንቅስቃሴ ጠቀሜታ ነበረው። በመሆኑም አርሶ አደሩ ይህንን የእርጥበት ሁኔታ በመጠቀም የበልግ የእርሻ ስራ እንቅስቃሴን ማካሄድ እንዳለበት እንመክራለን።

እ.ኤ.አ በኤፕሪል 2008 በሁለተኛው አስርተ ቀናት በመጀመሪያዎቹ ጥቂት ቀናት አብዛኛውን የሀገሪቱ ክፍሎች ያዳረሰ ዝናብ ጥሎ ነበር። ከአስሩ ቀናት በኋላ ግን ዝናቡ በምዕራብ፣ በደቡብ ምዕራብ፣ በደቡብና በደቡብ ምስራቅ አካባቢዎች ላይ ተወስኖ ታይቷል። በተለይም በደቡብ ምስራቅ አካባቢዎች ላይ ለረጅም ጊዜ የነበረውን ደረቅ ሁኔታ አርግቧል። ይህም የእርጥበት ሁኔታ ለአጠቃላይ ለእርሻ ሥራ እንቅስቃሴ፣ ለመጠጥ ውሃ አቅርቦት፣ የአፈርን እርጥበት ለመሻሻል የውሃ ኩሪዎችን ለማጎልበት፣ የግጦሽ ሣር አቅርቦት ጠቀሜታ ይኖረዋል።

በተለይም አርብቶ አደርና ከፊል አርብቶ አደር ለሆኑት በደቡብና በደቡብ ምስራቅ የአገሪቱ ክፍሎች ላይ ለመጠጥ ውሃና ለግጦሽ ሳር አቅርቦት የጎላ ጠቀሜታ ይኖረዋል።

በአጠቃላይ 35 እስከ 65.9 ሚሊ ሜትር የሚደርስ ከባድ ዝናብ በአንዳንድ ጣቢዎች ላይ ጥሏል። ይህም ሁኔታ የመጠጥ ውሃን ለማጎልበት አወንታዊ ጠቀሜታ ይኖረዋል።

እ.ኤ.አ በኤፕሪል 2008 በሶስተኛ አስርተ ቀናት የነበረው የአየር ሁኔታ በአጠቃላይ የደቡብ ብሔር ብሔረሰቦች ህዝቦች ክልል፣ ቤንሻንጉል ጉሙዝ፣ ምዕራብና ደቡብ ኦሮሚያ የአርሲና ባሌ ደጋማ አከባቢዎችን ጨምሮ በብዙ ቦታዎቻቸው ላይ ከቀላል እስከ ከባድ መጠን ያለው ዝናብ ያገኙ ሲሆን ይህም ሁኔታ በነዚህ አከባቢዎች ለሚኖረው የበልግ እርሻ አንቅስቃሴና በደቡብ ኦሮሚያ ዝቅተኛ ቦታዎች ለሚኖሩ አርብቶ አደር እና ከፊል አርብቶ አደር ለግጦሽ ሳርና ለመጠጥ ውሃ አቅርቦት የጎላ ጠቀሜታ ነበረው። በሌላ በኩል ምስራቅ ኦሮሚያ የድሬደዋ እና የሀረሪ አከባቢዎችን ጨምሮ እንዲሁም ትግራይና የአማራ መካከለኛና ምዕራባዊ አከባቢዎች ለጥቂት ቀናት ከቀላል እስከ መካከለኛ መጠን ያለው ዝናብ በጥቂት ስፍራዎቻቸው ላይ ነበራቸው። ይህም ሁኔታ ለበልግ የእርሻ እንቅስቃሴ ማለትም ለዘር ጊዜና ለአጠቃላይ የእርሻ እንቅስቃሴ እንዲሁም ለአርብቶ አደሩ እና ከፊል አርብቶ አደሩ ለግጦሽ ሳር እና ለመጠጥ ውሃ አቅርቦት አዎንታዊ ተፅዕኖ ነበረው።

በአጠቃላይ እ.ኤ.አ በኤፕሪል 2008 በመጀመሪያው አስር ቀናት የዝናቡ መጠን በስርጭት መስፋፋት ወደ ምስራቅ፣ መካከለኛው፣ ደቡብ ምዕራብ አልፎ አልፎ ወደ ሰሜን ምዕራብ የሀገሪቱ ክፍል ተስፋፍቶ ተስተውሏል። ይህም ሁኔታ የበልግ ዝናብ ተጠቃሚ ለሆኑ አከባቢዎች ለወቅቱ የእርሻ ሥራ እንቅስቃሴ የጎላ ጠቀሜታ የሚኖረው ሲሆን እንዲሁም ቀደም ሲል ለተዘሩት የበልግ ሰብሎች እና በቀዳሚው ቀናት በነበረው የእርጥበት እጥረት ምክንያት ዘር ላልተዘራባቸው አከባቢዎችም ጥሩ አስተዋፅየ እንደነበረው ይታመናል። እንዲሁም በዚሁ የመጀመሪያው አስርተ ቀናት ከደቡብ ምስራቅ የሀገሪቱ ክፊሎች በስተቀር ከ30-85 ሚ.ሜ የደረሰ እጅግ ከባድ ዝናብ በአንድ የዝናብ ቀናት ብቻ ተመዝግቦ ነበር ይህም ሁኔታ ቀደም ብለው በእርጥበት እጥረት ሳቢያ የበልግ ሰብል መዝራት ላልቻሉትና ለዘር ጊዜና ለማሳ ዝግጅት እንዲሁም ጥምር ግብርና ለሚካሄድባቸው አከባቢዎች ለግጦሽ ሳርና ለመጠጥ ውሀ አቅርቦት የጎላ አስተዋፅየ ነበረው። በተጨማሪም ለቋሚ ሰብሎች እና በረጅም ጊዜ ለሚደርሱ ሰብሎች ጥሩ አስተዋፅየ እንደነበረው እሙን ነው።

በተጨማሪም ከሁለተኛው አስርተ ቀናት አጋማሽ ዝናቡ በመስፋፋት በምዕራብ" በደቡብ ምዕራብ" በምስራቅና በደቡብ ምስራቅ የሀገሪቱ ክፍሎች ላይ ተስፋፍቶ ተስተውሏል። በአጠቃላይ ከቀላል እስከ ከባድ መጠን ያለው ዝናብ በደቡብ ብሔር ሔረሰቦችና ህዝቦች

ክልል" ቤንሻንጉል ጉሙዝ" ምዕራብና ደቡብ ኦሮሚያ" የአርሲና የባሌ ደጋማ ሥፍራዎች ላይ ተስተውሎ ነበር። በአጠቃላይ ይህ ሁኔታ ቀደም ብለው ለተዘሩትም ሆነ በማደግ ላይ ላሉ ሰብሎች እንዲሁም ቀደም ሲል በነበረው የዝናብ እጥረት ሳቢያ የማሳ ዝግጅት ላልተካሄደባቸው አከባቢዎች ጠቀሜታ እንደነበረው ይታመናል። በተጨማሪም በደቡብ ምስራቅ ለሚገኙ አርብቶ አደሮች ለግጦሽ ሳርና ለመጠጥ ለውሀ አቅርቦት ጥሩ አስተዋፅየ እንደነበረው ይታመናል።

የእርጥበት ደረጃ ጠቋሚ ካርታ እንደሚያሳየው በአንዳንድ የደቡብ ትግራይ፣ ምስራቅና ደቡብ አማራ የመካከለኛውና ምዕራብ ኦሮሚያ እንዲሁም ምስራቅ ኦሮምያ አካባቢዎች በእርጥበት እስከ በጣም እርጥበት (Moist to Humid) ሁኔታ ነበራቸው" በተቀሩት የሀገሪቱ ክፍሎች ላይ ግን መጠነኛ እርጥበትና ደረቅ ሁኔታ እንደነበራቸው ከካርታ5 መረዳት ይቻላል።

SUMMARY

APRIL 2008

During the first dekad of April 2008, the observed rainfall amount and distribution over most parts of Belg benefiting areas of the country was increased comparing to the preceding dekad. Thus, this situation could decrease the exhibited dry weather situation during the preceding dekad. Moreover it could favor the ongoing Belg agricultural activities like land preparation and sowing activities in some areas of western, southwestern, central and eastern parts of the country. Moreover, the observed rainfall over some areas of eastern Ethiopia and southern Oromia could have a positive contribution for the availability of pasture and drinking water in lowlands of southern Oromia and eastern Ethiopia. With regard to heavy rainfall, some areas like Addis Ababa, Jinka, Nura Era, Debre Zeit, Hirna, Dire Dawa, Konso, Nazareth and Ankober received 30.8, 31.4, 38.0, 38.0, 51.2, 54.8, 70.3, 72.5 and 80 mm of heavy rainfall in one rainy day respectively. Generally this rainfall situation could have a positive impact for the ongoing Belg agricultural activities and long cycle crops. Thus farmers are advised to continue the ongoing Belg agricultural activities.

During the second dekad of April 2008, most parts of the country received better rainfall over the areas. But after half of the dekad, the rainfall was limited to western, southwestern, south and southeastern parts of the country. This situation might have created conducive condition to minimize the deficient moisture condition, which was observed during the preceding dekad. Besides, this situation could have a positive contribution for crops, which are sown, over Belg growing areas and for long cycle crops grown over western parts of the country. Moreover, the observed moisture over southern and southeastern parts of the country might have a significant contribution for the availability of pasture and drinking water over pastoral and agro pastoral areas of the country. In addition to this some areas of the country experienced heavy fall within the range of (35-65.9) mm in one rainy day. To mention some of them Adet, Nekemte, Dilla, Gode, Jinka, Chagni, Bahir Dar and Ginir exhibited 65.9, 55.3, 54.8, 45.5, 41.3, 36.3, 36.1 and 35.8 mm of rainfall respectively.

During the third dekad of April 2008, the observed light to heavy rainfall condition over SNNPR, Benshangul-Gumuz, western and southern Oromia including Arsi and Bale highlands might have a positive contribution for Belg agricultural activities and for the development of pasture and availability of water over lowlands of southern Oromia. On the other hand, some areas of eastern Oromia, Dire Dawa, Harari, Tigray, central and western Amhara has been received light to medium amount of rainfall. Thus, the condition might have favored general Belg agricultural activities over Belg growing areas and for the availability of pasture and drinking water over pastoral and agro pastoral areas.

Generally during the month of April in the first dekad widely distributed rainfall has been observed over eastern, central, south and northwestern parts of the country. This widely distribution of rainfall over the areas might have favored for the existing crops and lately sown crops over Belg growing areas. Besides, in this dekad of the month with the exception of southeastern parts of the country most parts of the country received 30-85mm of heavy fall in

one rainy day. Thus, this condition might have positive impact for long cycle crops, which are grown, over western parts of the country and perennial crops, bushes and also for the availability of pasture and drinking water over pastoral agro pastoral areas of southern Ethiopia. Moreover starting from in the mid of second dekad of the month the rainfall condition widely distributed over western, southwestern, eastern and southeastern parts of the country. Light to heavy amount of rainfall has been observed over SNNPR, Benshangul-Gumuz, western and south Oromia, Arsi and Bale highlands. Thus, the condition might have a significant contribution for the development and water requirement of the existing crops Belg crops and long cycle crops. Besides the situation might have positive impact over southeastern pastoral and agro pastoral areas. In addition to this the third dekad of April 2008, analysis of moisture status (the relationship between total dekadal rainfall and the dekadal total reference evapotranspiration) indicated that some areas of southern Tigray, eastern and south Amhara, central, eastern and western Oromia exhibited moist to humid moisture status condition (see Fig 5).

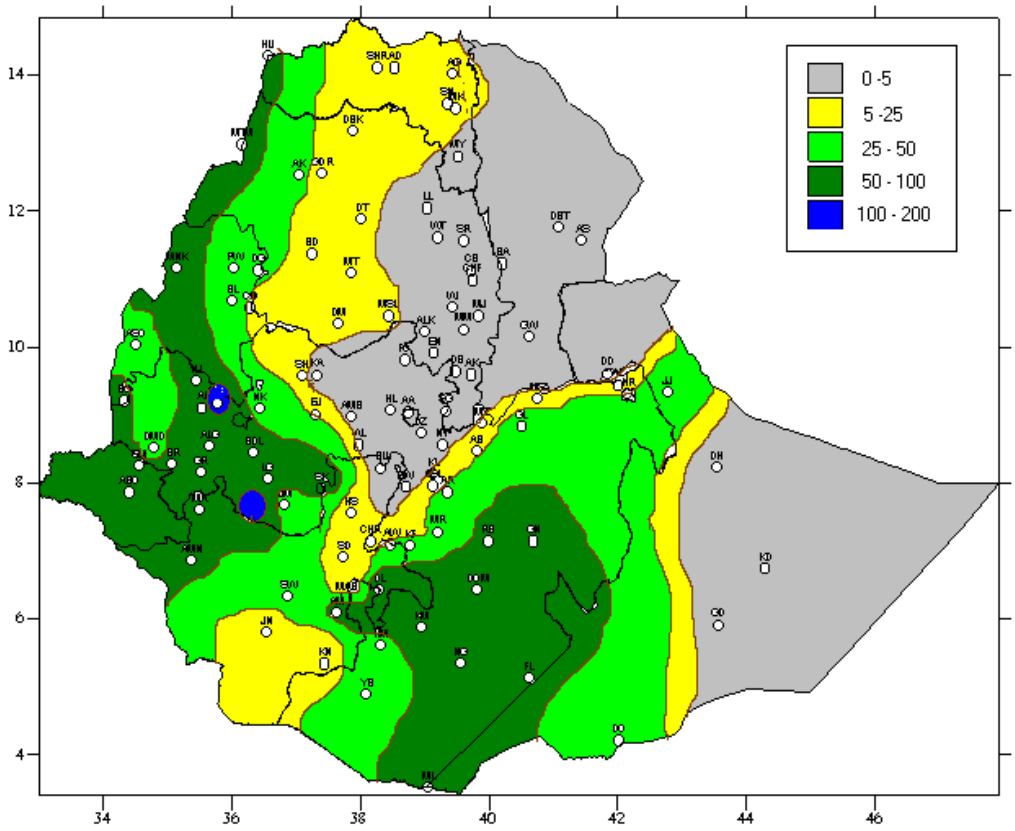


Fig 1. Rainfall distribution in mm (21 – 30 April, 2008)

1. WEATHER ASSESSMENT

1.1 (21- 30 April, 2008)

1.1.1 Rainfall amount (Fig.1)

Pocket areas of western Oromia received 100-200 mm rainfall. Gambela, parts of western, southern and eastern Oromia, parts of western and southern Benshangul-Gumuz, western and eastern SNNPR and margin of western Amhara and Tigray exhibited 50-100 mm rainfall. Parts of central, eastern, southern and western Oromia, southwestern and eastern SNNPR, southern and northwestern Somali and western and northeastern Benshangul-Gumuz and margin of western Amhara and Tigray experienced 25-50 mm rainfall. Most of Tigray, Parts of southern and northern SNNPR, central, eastern and west northern Oromia and parts of half of western Amhara received 5-25 mm rainfall. The rest parts of the country exhibited little or no rainfall.

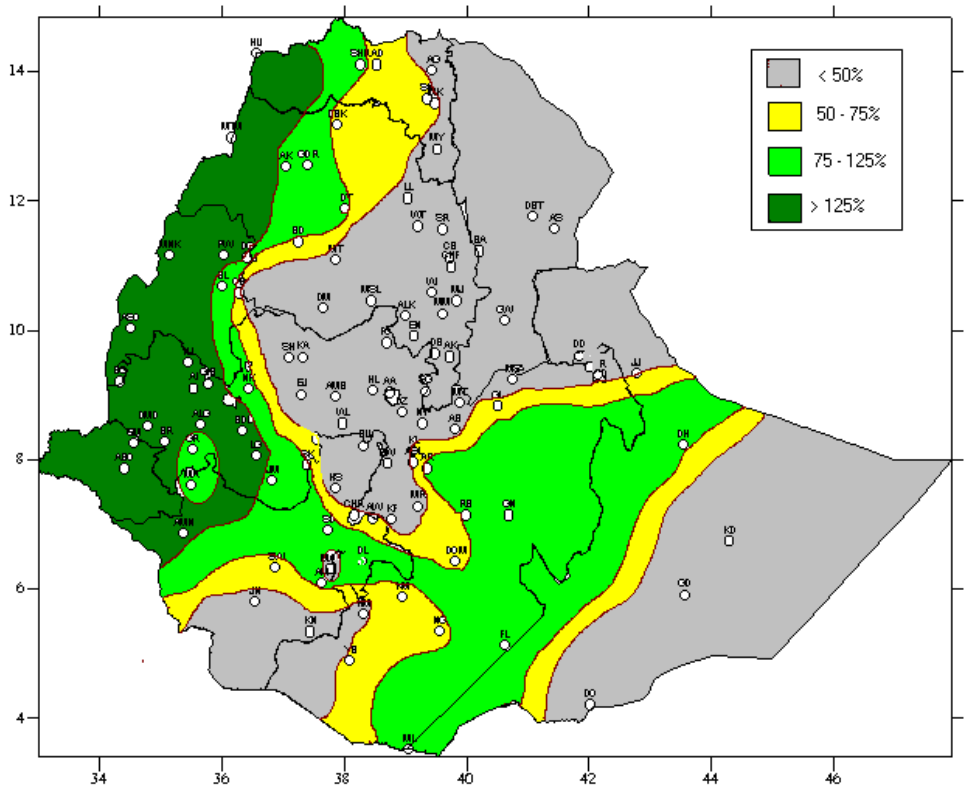


Fig. 2 Percent of normal rainfall distribution (21-30 April, 2008)

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. 2)

Afar, half of eastern Amhara, most of southeastern and part of northern Somali, parts of southern and northern SNNPR, southern and central Oromia and eastern Tigray received below normal to much below normal rainfall. The rest parts of the country experienced normal to above normal rainfall.

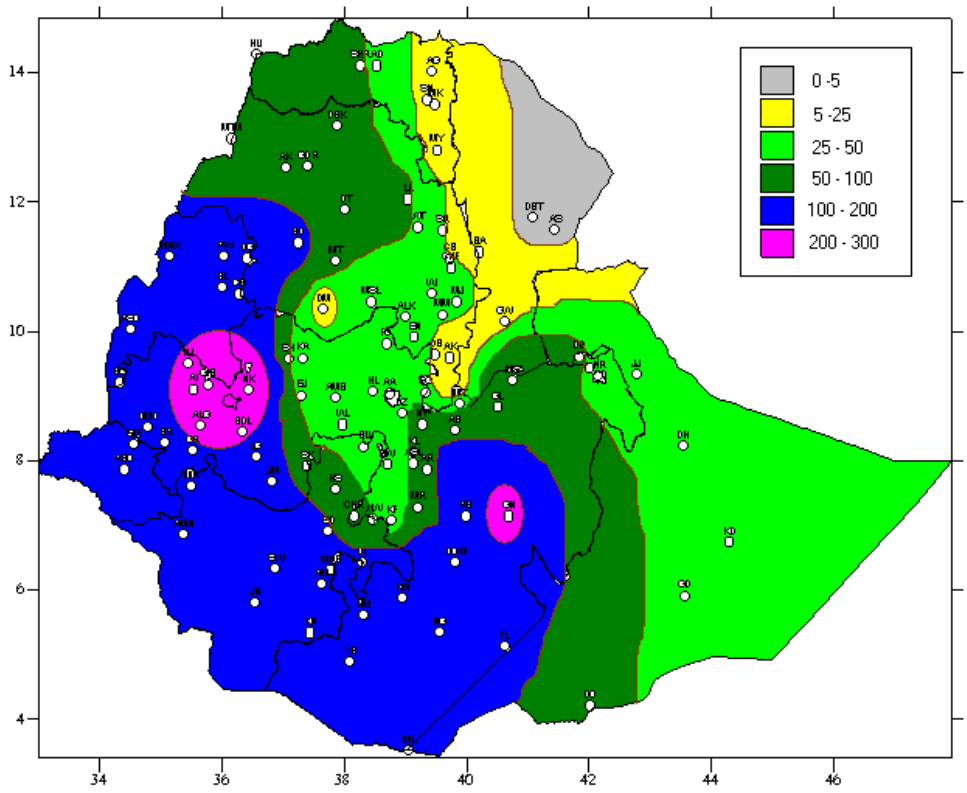


Fig. 3 Rainfall distribution in mm for the month of April, 2008

1.2 April 2008

1.2.1 Rainfall distribution (Fig.3)

Pocket areas of western and southern Oromia received 200-300 mm rainfall. Gambela, most of Benshangul-Gumuz and SNNPR, parts of southern, southeastern and western Oromia and southwestern Amhara experienced 100-200 mm rainfall. Western half of Amhara and Tigray, parts of eastern and western Oromia, southwestern Somali, and northern SNNPR exhibited 50-100 mm rainfall. Most of Somali, parts of central Oromia, southern and eastern Amhara, eastern Tigray and southern Afar received 25 –50 mm rainfall. Most part of Afar, parts of eastern Tigray, northern Somali and eastern Oromia and part of eastern and pocket area of southern Amhara experienced 5-25 mm rainfall. Part of eastern Afar exhibited little or no rainfall.

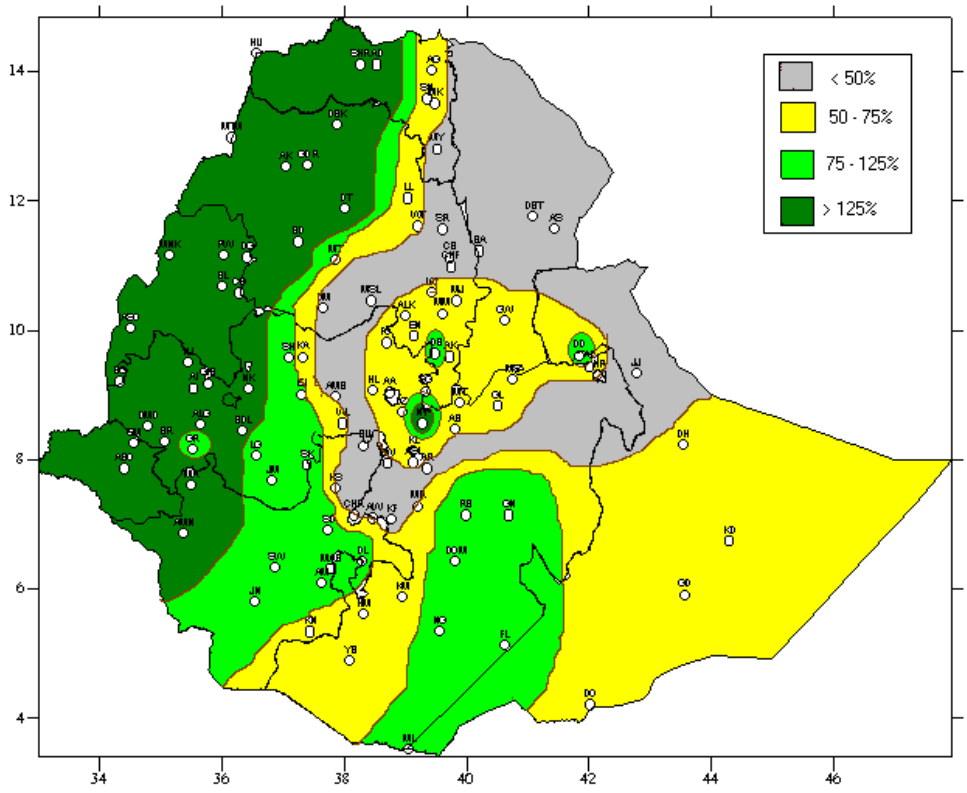


Fig. 4 Percent of Normal Rainfall distribution for the month of April, 2008

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

1.2.2 Rainfall Anomaly (Fig. 4)

Gambela, Benshangul-Gumuz, most of SNNPR and Tigray, half of western Amhara, part of western and southern and pocket area of central Oromia and southern Somali received normal to above normal rainfall. The rest parts of the country experienced below normal to much below normal rainfall.

1.3 TEMPERATURE ANOMALY

During the month under review some areas exhibited extreme maximum air temperature above 35 ^{0}C. Among the recording stations Sirba-Abay, Pawe, Maytsemrie, Dire Dawa, Gode, Metehara, Aisha, Sheraro, Asayita, Gambella, Mankush, Metema, Elidar, Semera, Dubti, Mille and Humera as high as 36.7, 36.8, 38.0, 38.4, 38.8, 39.5, 39.5, 40.0, 40.0, 40.5, 40.8, 41.6, 41.6, 42.3, 42.5, 42.5 and 44.0 respectively.

2. WEATHER OUTLOOK

2.1 For the first dekad of May 2008

For the coming ten days, the rain producing systems will have a better strength over the western half of the country. Besides, central, eastern, Northern as well as south and south eastern parts of the country will have a chance of getting rains at isolated places from the prevailing clouds.

In general Gambella, SNNPR, Benshangul Gumuz, western Amhara, Western Tigray as well as western and southern Oromia will have better rain with likely close to normal. In addition, eastern Tigray, eastern Amhara Central and eastern Oromia, southern Afar and Somali despite getting close to normal rain at many places, below normal rain is expected at some places. The remaining parts of Afar will be dominated by dry & sunny weather condition. In association with sunny weather condition hot and humid condition is expected at many places with a likely increase in daily maximum temperatures over low lands of the country.

2.2 For the month of May 2008

Western Tigray, Western Amhara, Benshangul-Gumuz, Gambella, SNNPR, Western and Southern Oromia will get near to normal rain where as eastern Tigray and Amhara including the adjoining areas of Afar, central and eastern Oromia and much of Somali in spite of getting close to normal rain some places are likely to have below normal rain. On the other hand most part of Afar will remain dry and hot.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

During the month of April in the first dekad widely distributed rainfall has been observed over eastern, central, south and northwestern parts of the country. This widely distribution of rainfall over the areas might favor for the existing crops and lately sown crops over Belg growing areas. Besides in this dekad of the month with the exception of southeastern parts of the country most parts of the country received 30-85mm of heavy fall in one rainy day. This condition might have positive impact for long cycle crops, which are grown, over western parts of the country and perennial crops, bushes and also for the availability of pasture and drinking water over pastoral agro pastoral areas of southern Ethiopia. Moreover starting from in the mid of second dekad of the month the rainfall condition widely distributed over western, southwestern, eastern and southeastern parts of the country. Light to heavy amount of rainfall has been observed over SNNPR, Benshangul-Gumuz, western and south Oromia, Arsi and Bale highlands. Thus this condition might have a significant contribution for the development and water requirement of the existing crops Belg crops and long cycle crops. Besides the situation might have positive impact over southeastern pastoral and agro pastoral areas. In addition to this the third dekad of April 2008, analysis of moisture status (the relationship between total dekadal rainfall and the dekadal total reference evapotranspiration) indicated that some areas of southern Tigray, eastern and south Amhara, central, eastern and western Oromia exhibited moist to humid moisture status condition (see Fig 5).

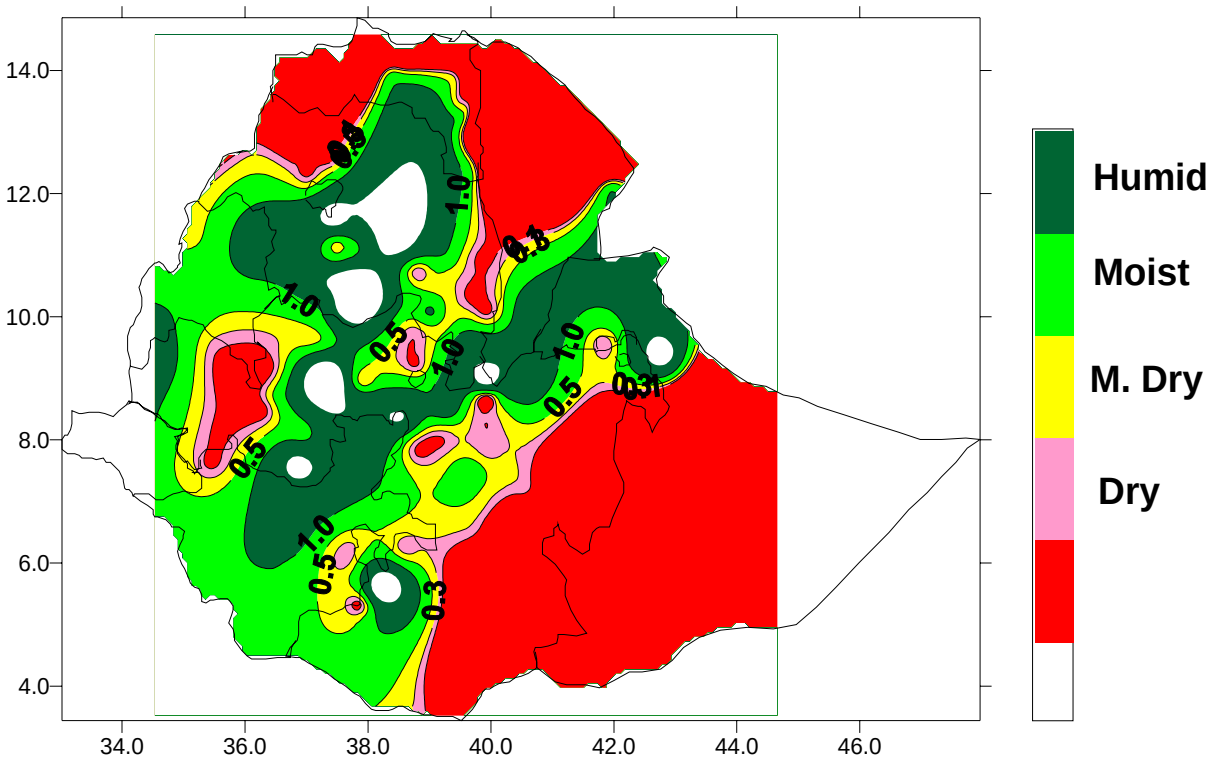


Fig. 5 Moisture status for (21-30 April, 2008)

Table 1. Crop Phenological Report for the third dekad of April 2008

Assosa	Benishagul	Assosa	Assosa	-	-	-	-	-	-
Ayehu	Amahara	Mirab Gojam	Ankosha	-	-	-	-	-	-
Bedelle	Oromia	Illubabor	Bedlle	-	-	-	-	-	-
Bullen	Benishagul	Metekel	Bullen	-	-	-	-	-	-
Bui	SNNPR	Guarage	Sodo	-	-	-	-	-	-
Chagni	Amahara	Awi	Guagnua	-	-	-	-	-	-
Chira	Oromia	Jimma	Gera	-	-	-	-	-	-
Dangila	Benishagul	Awi	Dangila	-	-	-	-	-	-
Debre Tabor	Amahara	Dabub Gonder	Debre Tabor	-	-	-	-	-	-
Dolomana	Oromia	Bale	Mena	Maize	Teff	-	Em	Em	-
Enewary	Amahara	Semen Shoa	Mortenajiru	-	-	-	-	-	-
Fitche	Oromia	Semen Shoa	Girarjarso	-	-	-	-	-	-
Gelemeso	Oromia	Mira Haraghe	Habro	-	-	-	-	-	-
Ghimbi	Oromia	West Wolega		Maize	-	-	Em	-	-
Hossaina	SNNPR	SNNPR	Lemu	-	-	-	-	-	-
Kachise	Oromia	Mirab Shoa	Gindeberet	-	-	-	-	-	-
Lalibela	Amahara	Semen Wollo	Lasta	-	-	-	-	-	-
Limugent	Oromia	Jimma	Limukosa	-	-	-	-	-	-
Majate	Amahara	Semen Shoa	Mizan antakiya	-	-	-	-	-	-
Mehal Meda	Amahara	Semen Shoa	Gira mider	-	-	-	-	-	-
Nedjo	Oromia	Mira Wollega	Nedjo	-	-	-	-	-	-
Pawe	Benishagul	Metekele	Pawe liyu	-	-	-	-	-	-
Shaura	Amahara	SemenGonder	alef.t	-	-	-	-	-	-
Shambu	Oromia	HoroWollega	Horo	-	-	-	-	-	-
Shire	Tigiray	Mirab Tigray	Endasilasie	-	-	-	-	-	-
Sirinka	Amahara	Semen Wollo	Habru	-	-	-	-	-	-
Sokoru	Oromia	Jimma	Sokoru	-	-	-	-	-	-
Shola gebeya	Amahara	Semen Shoa	Hagaramariam	-	-	-	-	-	-
Wagel Tena	Amahara	Semen Wollo	Delanta	-	-	-	-	-	-
Waliso	Oromia	D.Mirab Shoa	Waliso	-	-	-	-	-	-
Ziway	Oromia	Misrak Shoa	Jidocombolcha	-	-	-	-	-	-

Key :

P/S= Plant/Sow
Em=emerge
Tl=Third leaf
Fl=Fifth leaf
Sl=Seventh leaf
Yr=Yellow ripe
Nl= Ninth leaf
El= Elongation
Ta = Tassel
Ti=Tiller
Sh=shoot
Bs= Berry soft
Bh= Berry hard
Ph= Pin heading
Ea= Earing
He= Heading
Bu= budding
Fl=Flower
R = ripeness
Cr= Consumer ripeness
Gr= Green ripeness
Wr= Wax ripeness
Yg r= yellow green ripeness
Lgr =light green ripeness
Dr= dark ripeness
Fr= Full ripeness
H =Harvested
-Data not available

3.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING MONTH

Under normal condition the rainfall amount and distribution will decrease from Belg growing areas. However, the anticipated rainfall condition from mid of May would favor for the water requirement of the existing growing crops and for lately sown crops due to moisture stress in the previous months. On the other hand in relation to good Kiremt weather system western half of the country will receive better rainfall. Besides, in average western half of the country expected to have 150-250mm of rainfall and most parts of Somali, central Ethiopia, eastern Amhara and Afar will receive not less than 50mm. Therefore this condition would have a positive impact for Meher crops. Moreover the expected rainfall over western Tigray and Amhara, Benshangul-Gumuz, Gambela, SNNPR, western and southern Oromia would have favored for crops, which are found at different phonological phases, and lately sown Belg crops. Besides it would favor for the general Meher agricultural activities. Besides the anticipated near normal rainfall over eastern Tigray, most parts of Somali would have a significant contribution for the development of pasture and the availability of drinking water over pastoral and agro pastoral areas of Somali.

Table 2. Climatic and Agro-Climatic elements of different stations for the month of APRIL 2008

Stations	Region	A/ rainfall	Normal	%Of Normal	Eto mm/day	Monthly Eto	Moisture
Adigrat	TIGRAI	18	72.3	24.9	4.9	145.6	D
Mekele		12.7	34.5	36.8	6.2	186.2	VD
Senkata			84.5	0.0			
Shire		53.1	26.5	200.4	6	178.9	MD
Assayta	AFAR		17.5	0.0			
A. Ketema	AMHARA	58.9	61.2	96.2	5	149.6	MD
Aykel		57	57.3	99.5	5	150	MD
Bahirdar		187.5	24	781.3	4.6	137.5	H
Bati		19.1	89.9	21.2	4.4	131	D
Bullen		113.2	30.6	369.9	4.1	124.1	M
Combolcha		17.9	94.9	18.9	4.9	148.3	D
Chefa		38.6	252.6	15.3	5	151.1	MD
Dangila		151.9	25.2	602.8	3.9	118	H
D.Birhan		81.8	39.8	205.5	4.1	123.9	M
D.Markos		161.7	68.1	237.4	4.2	124.6	H
Enwary		32.7	20.7	158.0	5.1	154.3	D
Gondar		45.9	39.8	115.3	5.8	173.9	MD
M.Meda		99.6	50.8	196.1	4.6	138.9	M
Majete		49.4	84.9	58.2	4.5	136.4	MD
Lalibela		60.6	53.1	114.1	4.7	140	MD
S. Gebeya		42.2	62.3	67.7	5.1	153	MD
Sirinka		54.2	102.9	52.7	5	149.6	MD
Wereilu		9	59.4	15.2	5.5	164.8	VD
	OROMIYA						
Aira		118.2	36.4	324.7	4.6	138.9	M
Alemaya		44.6	93.5	47.7	4.2	125.5	MD
Alge		149.8	77.9	192.3	4.7	142.4	H
Ambo		26.6	68.2	39.0	6.3	189.7	D
Arjo		123..4	118.1		4.2	126.1	M
Bedelle		126.4	102.1	123.8	4.9	146.1	M
Begi		140.7	67	210.0	3.8	112.6	H
Bui		109.7	46.5	235.9	4.6	136.5	M
Chira		115.1	160.2	71.8	4.1	121.8	M
D.Mena		25.2	199.5	12.6	4.9	148	D
D.Zeit		79.9	57.7	138.5	5.3	157.9	M
Ejaji		181.5	75.1	241.7	3.9	117.8	H
Fitche		27	64.5	41.9	4.6	136.7	D
Gelemso		96.5	155.8	61.9	4.1	123.5	M

Gimbi		**93.9**	**68.4**	**137.3**	**5.1**	**153.3**	**M**
Ginir		**95**	**239.3**	**39.7**	**4.2**	**125.8**	**M**
H. Mariam		**186.7**	**73.8**	**253.0**	**3.6**	**106.8**	**H**
Jimma		**151.9**	**138.9**	**109.4**	**4**	**120.7**	**H**
K.Mengist		**74.2**	**219.4**	**33.8**	**3.9**	**116.4**	**M**
Kachisa		**58.9**	**83.6**	**70.5**	**4.6**	**137**	**MD**
Koffele		**54.4**	**153.8**	**35.4**	**3.9**	**117.1**	**MD**
Limugenet		**107.3**	**132.7**	**80.9**	**4**	**118.8**	**M**
Metehara		**104.7**	**46.8**	**223.7**	**4.9**	**147.7**	**M**
Mi'eso		**119.8**	**104**	**115.2**	**4.9**	**146**	**M**
Moyale		**52.9**	**158**	**33.5**	**5.4**	**162.3**	**MD**
Nazreth		**139.4**	**49.8**	**279.9**	**5**	**151.4**	**M**
Neghele		**88.1**	**194.5**	**45.3**	**4.2**	**127.3**	**M**
Nedjo		**121.5**	**66.5**	**182.7**	**4.7**	**140.1**	**M**
Nekemte		**184**	**85.4**	**215.5**	**4.8**	**142.8**	**H**
Robe(Bale)		**83.2**	**129.3**	**64.3**	**3.9**	**117.6**	**M**
Sekoru		**107**	**105.7**	**101.2**	**4**	**118.6**	**M**
Shambu		**37.3**	**90.5**	**41.2**	**5.5**	**163.9**	**D**
Yabello		**66.9**	**138.9**	**48.2**	**4.4**	**131.6**	**M**
Ziway		**2.2**	**70.3**	**3.1**	**5.4**	**161.3**	**VD**
Jijiga	**SOMALI**	**126.3**	**107**	**118.0**	**4.4**	**132.3**	**M**
A.Minch	**SNNPR**	**69.9**	**146.9**	**47.6**	**5**	**151.2**	**MD**
Awassa		**65.5**	**103.6**	**63.2**	**4**	**120.4**	**M**
Hosaina		**36.2**	**139**	**26.0**	**4.5**	**133.7**	**MD**
Jinka		**147.3**	**171**	**86.1**	**3.6**	**107.5**	**H**
Konso		**122.9**	**173.7**	**70.8**	**4.5**	**133.8**	**M**
M.Abay			**100.3**	**0.0**			
Masha		**116.6**	**158.2**	**73.7**	**3.9**	**115.6**	**H**
Sawla		**169.2**	**212**	**79.8**	**4.3**	**129.4**	**H**
Assosa	**B/GUMUZ**	**82.7**	**60**	**137.8**	**3.8**	**114.7**	**M**
Chagni		**158.9**	**30.1**	**527.9**	**4.3**	**129.3**	**H**
Pawe		**101.6**	**26.7**	**380.5**	**4.2**	**127.2**	**M**
Gambela	**Gambela**	**71.1**	**52.6**	**135.2**	**4.5**	**135**	**M**
A.A.Obs.	**A.A**	**101.1**	**88.8**	**113.9**	**5.7**	**171.3**	**M**
A.A. Bole		**68.4**	**88**	**77.7**	**4.6**	**138.6**	**MD**
Dire Dawa	**D.D**	**90.3**	**102.8**	**87.8**	**5.9**	**177**	**M**
Harar	**Harai**	**55.3**	**136.8**	**40.4**	**4.3**	**129.6**	**MD**

Legend

VD	Very Dry	< 0.1
D	Dry	0.1 - 0.25
MD	Moderately Dry	0.25 - 0.5
M	Moist	0.5 - 1

H	Humid	>1

Explanatory Note

ETo Reference Evapotranspiration (mm)

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 evapotranspiration of a disease free crop, growing under non-restricting soil conditions including soil water and fertility.

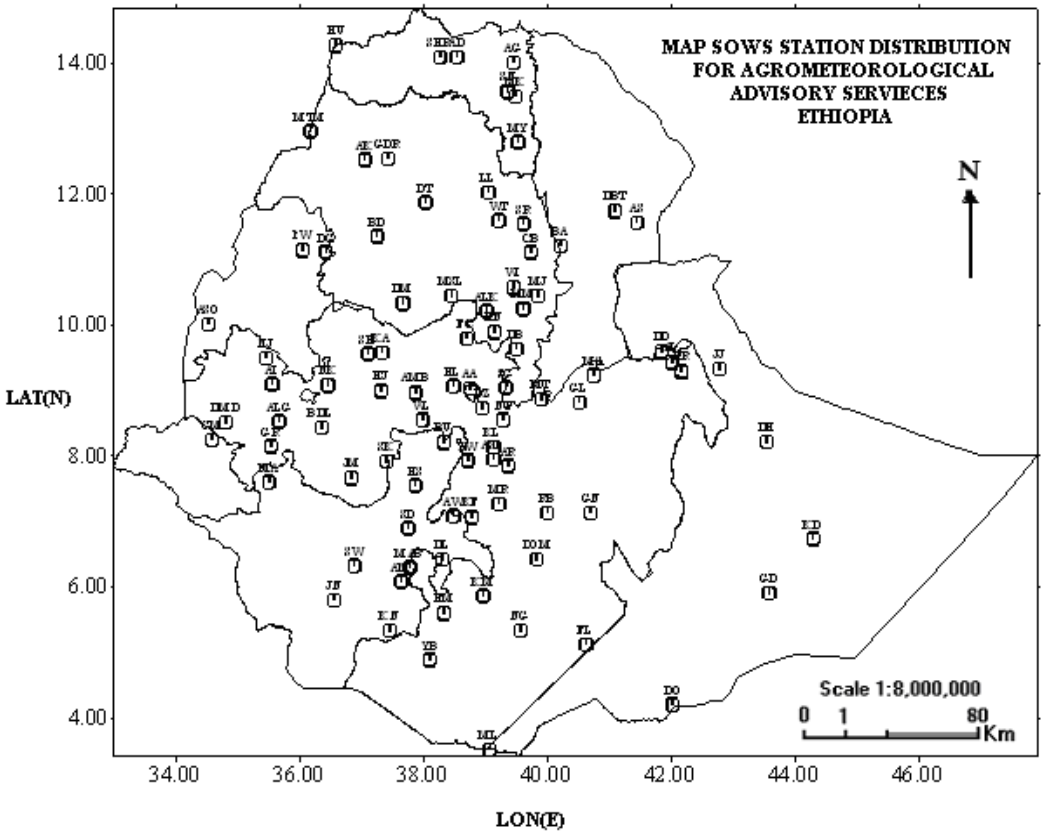
DEKAD: - First or second ten days or the remaining days of a month.

EXTREME TEMPERATURE: - The highest or the lowest temperature among the recorded maximum or minimum temperatures respectively.

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