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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እ.ኤ.አ ጁን 2008

እ.ኤ.አ በጁን 2008 በመጀመሪያው አስርተ ቀናት ትግራይ፣ አማራ፣ ቤንሻንጉል ጉሙዝ፣ ጋምቤላ፣ አብዛኛው ኦሮሚያ፣ ድሬደዋና ሐረሪን ጨምሮ እንዲሁም የደቡብ ብሔር ብሔረሰቦች ህዝቦች ክልል ዝናብ አግኝተው ነበር። በተለይም በምዕራብና በደቡብ ምዕራብ በአንዳንድ የሀገሪቱ ክፍሎች ላይ ከበድ ያለ ዝናብ ጥሎ ነበር። የዝናቡም ሁኔታ በተለይ ለጤፍ፣ ለስንዴ፣ ለገብስ፣ ለጥራጥሬና ለአትክልቶች የማሳ ዝግጅት ከፍተኛ አስተዋፅዖ ከማድረጉም ባሻገር የመኸርን የእርሻ እንቅስቃሴ ቀደም ብለው ለጀመሩት የሀገሪቱ ምዕራባዊ አጋማሽ ባሉት አካባቢዎች በማሣ ላይ ተዘርተው በተለያየ የዕድገት ደረጃ ላይ ለሚገኙ የመኸር አዝርዕቶች የውሃ ፍላጎት እና ለቀጣዩ የዕድገት ደረጃቸው የሚኖረው ድርሻ የጎላ ነው። በአንፃሩ ደግሞ ባለፉት አሥር ቀናት አብዛኛዎቹ የሰሜን ምስራቅ፣ የደቡብ ምሥራቅና የደቡብ ቆላማ ሥፍራዎች እምብዛም ዝናብ ያልነበራቸው ሲሆን ሁኔታውም እንደየአካባቢው የዕድገት ደረጃቸውን ላልጨረሱ የበልግ አዝርዕቶች እንዲሁም በበልግ የዝናብ ወቅት ሰአት በበልግ ዝናብ እጥረት ምክንያት ዘግይተው ለዘሩ አካባቢዎች አሉታዊ ጎን እንደሚኖረው ይታመናል። በተጨማሪም የደቡብ ምስራቅና የደቡብ ቆላማ የሀገሪቱ አከባቢዎች ለሚኖሩ የአርብቶ አደሩና ከፊል አርብቶ አደሩ ለከብቶቻቸው የግጦሽ ሣር ልምላሜና እና የውሃ አቅርቦት ላይ ተፅዕኖ እንደሚኖረው እሙን ነው።

በሌላ በኩል በምዕራብና በደቡብ ምዕራብ አንዳንድ የሀገሪቱ ክፍሎች ላይ ከበድ ያለ ዝናብ የጣለ ቢሆንም በአዝርዕትና በእንሰሳት ላይ የደረሰ ጉዳት እንደሌለ ከአዝርዕት መረጃ ክፍላችን በደረሰን ሪፖርት ለማወቅ ተችሏል።

እ.ኤ.አ በጁን 2008 በሁለተኛው አስርተ ቀናት ዝናብ ሰጪ ክስተቶች በሀገሪቱ ምዕራባዊ አጋማሽ ላይ ከመጠናከራቸው ጋር በተያያዘ አብዛኛው ኦሮሚያ ቤንሻንጉል ጉሙዝ አማራ ትግራይ እንዲሁም መካከለኛውና ምስራቅ የሀገሪቱ ክፍሎች ዝናብ አግኝተዋል። ይህም የዝናብ ሁኔታ በአብዛኛው የመኸር አብቃይ አካባቢዎች እየተካሄደ ላለው የእርሻ እንቅስቃሴ የማሳ ዝግጅትና የዘር ጊዜ የጎላ ጠቀሜታ እንደነበረው ይታመናል። ከላይ በተጠቀሱት በአንዳንድ ጣቢያዎችም ላይ ከ30-52.7 ሚ.ሜ የሚደርስ ከባድ ዝናብ በአንድ የዝናብ ቀን ብቻ ላይ ተመዝግቦ ነበር። ከዚሁ ጋር በተያያዘም ከመረጃ ክፍላችን ባገኘነው መሠረት በሻውላ ጣቢያ ላይ በረዶ ቀላቅሎ የጣለው ዝናብ በተዘሩ ቡቃያዎች ላይ ጉዳት ያደረሰ ሲሆን እንዲሁም በትግራይ (ሰንቃጣ) ላይ በረዶ

ቀላቅሎ የጣለው ዝናብ በቲማቲም አዝርዕት ላይ ጉዳት አድርሷል። በዚሁ ባለፈው አስር ቀናት አብዛኛው ኦሮሚያና የደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል ኪስ ቦታዎች መደበኛና ከመደበኛ በላይ ዝናብ አግኝተዋል። ይህም ሁኔታ ለተጠቀሱት አከባቢዎች በተለያየ የዕድገት ደረጃ ላይ ላሉና ለቋሚ ሰብሎች የውሀ ፍላጎት የጎላ ጠቀሜታ እንደነበረው ይታመናል። በአንፃሩ ደግሞ አብዛኛው አፋርና ሶማሌ ምስራቅ ኦሮሚያ አካባቢዎች ጋምቤላና የደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል ከመደበኛው ያነሰ ዝናብ አግኝተዋል። በመሆኑም በተጠቀሱት በሶማሌ አካባቢ ጥምር ግብርና ለሚካሄድባቸው ቆላማ ሥፍራዎች ለመጠጥ ውሀ አቅርቦትና ለግጦሽ ሳር አለታዊ ተፅዕኖ የሚያሳድር ስለሆነ በነዚህ አከባቢ የሚገኙ አርብቶ አደሮች ተገቢውን የውሀ አጠቃቀም ዘዴ (water harvesting technique) ቢጠቀሙ ጥሩ እንደሆነ ይመከራል።

እ.ኤ.አ በጁን 2008 በሶስተኛው አስርተ ቀናት 2008 እ.ኤ.አ የክረምቱ ዝናብ በሀገሪቱ አብዛኛው የምዕራብ አጋማሽ ላይ ዝናብ የነበረ ቢሆንም በብዙ የሀገሪቱ ክፍሎች ላይ የወቅቱ ዝናብ ተዳክሞ ተስተውሏል። በዚህም መሠረት ትግራይ፣ ምዕራብና መካከለኛው ኦሮሚያ፣ ቤንሻንጉል ጉሙዝ ጋምቤላ፣ ምዕራብና መካከለኛው አማራ እንዲሁም የደበብ ብሔር ብሔረሶችና ህዝቦች ክልል ሰሜናዊ ክፍል ዝናብ አግኝተዋል። ይህም ሁኔታ በነዚህ አካባቢዎች ለሚኖረው የመኸር እርሻ እንቅስቃሴ እንደ ማሳ ዝግጅት፣ የዘር ጊዜ አልፎም በተለያዩ የእድገት ደረጃ ላይ ላሉ የመኸር ሰብሎች እንዲሁም ለቋሚ ሰብሎች የጎላ ጠቀሜታ እንደነበር ይታመናል። በተጨማሪም አንዳንድ የምዕራብና የሰሜን ምዕራብ አከባቢዎች ከባድ ዝናብ መዝግበዋል። ከዚህ ጋር በተያያዘም ከመረጃ ክፍላችን ባገኘነው መረጃ መሠረት በሰንቃጣ በረዶ ቀላቅሎ የዘነበው ዝናብ በቲማቲም አዝርዕት ላይ ጉዳት ሲያደርስ፣ በሻምቡ በረዶ ቀላቅሎ የዘነበው ዝናብ የባህር ዛፎችን ከነስራቸው ገንጥሎ ሲጥል እንዲሁም በሽንኩርትና ድንች አዝርዕቶች ላይ ከፍተኛ ጉዳት አድርሷል በቻግኒ በረዶ በጣለው ከባድ ዝናብ በበቆሎ ቡቃያ ላይ ጉዳት አድርሷል።

ጠቅለል ባለ መልኩ በጁን ወር 2008 በመጀመሪያው አስርተ ቀናት የዝናቡ ሁኔታ አብዛኛዎቹን የሀገሪቱን ክፍሎች ያዳረሰ ሲሆን ትግራይ፣ አማራ ቤንሻንጉል ጉሙዝ አብዛኛው ኦሮሚያ፣ ጋምቤላ እንዲሁም የደቡብ ብሔር ብሔረሰቦችና ህዝቦች ክልል የተስፋፋ ዝናብ ነበራቸው። በወሩ ሁለተኛው አስርተ ቀናትም የዝናቡ ሁኔታ ወደ መካከለኛው ምስራቅና ሰሜን ምስራቅ የሀገሪቱ ክፍሎች ተስፋፍቶ የታየ ሲሆን በሶስተኛው አስርተ ቀናት ደግሞ አብዛኛው የሀገሪቱ ምዕራባዊ አጋማሽ አካባቢዎች ላይ ቀጣይነት እንደነበረው ተስተውሏል። በመሆኑም በወሩ ውስጥ የታየው ዝናብ ለሰብሎች እድገትና ልምላሜ አመቺ ሁኔታን ፈጥሮ እንደነበር ይጠቁማል። በተጨማሪ የሀገሪቱ ምዕራብ፣ ሰሜንና ደቡብ ምዕራብ እንዲሁም መካከለኛው ክፍሎች ላይ ከባድ

ዝናብ መጠኑም ከ44-106 ሚ.ሜ የሚደርስ በአንድ የዝናብ ቀን ተመዝግቦባቸዋል። በተለይ በወሩ በሁለተኛውና በሶስተኛው አስርተ ቀናት ውስጥ በረዶ ቀላቅሎ የዘነበው ከባድ ዝናብ በሻሁላ በቡቃያ ላይ በሠንቃጣ በቲማቲም አዝርዕት ላይ ጉዳት ያደረሰ ሲሆን በሻምቡ በረዶና ንፋስ ቀላቅሎ የጣለው ዝናብ ባህር ዘርፎችን ከነስራቸው ገንጥሎ ከመጣሉም ባሻገር የሽንኩርትና የድንች አዝርዕቶች ላይ ከፍተኛ ጉዳት አድርሷል። በተጨማሪም በቻግኒ በረዶ ቀላቅሎ የጣለው ከባድ ዝናብ በበቆሎ ቡቃያ ላይ ጉዳት ማድረሱን ከአዝርዕት መረጃ ክፍላችን በደረሰን ሪፖርት ለማወቅ ተችሏል።

SUMMARY

JUNE 2008

During the first dekad of June 2008, the observed rainfall distribution over Tigray, Amhara, Benshangul-Gumuz, much of Oromiya, Dire Dawa including Harari as well as SNNPR favored the ongoing seasons agricultural activities like land preparation and sowing of teff, wheat, barely, cereals and vegetations. Besides, the observed rainfall condition over western half of the country, where started their Meher agricultural activities earlier, had an indispensable contribution for crops, which attained at different phenological stage to fulfill their crop water requirements. On the other hand, dry situation prevailed over eastern, south eastern, southern and southwestern low lands, Hence, the situation might have negatively affected the water requirements of lately sown Belg crops. Moreover, it had negative impact on the availability of pasture and drinking water over pastoral and agro pastoral areas. On the other hand, observed heavy fall over western and southwestern parts of the country might have result in crop and livestock damage.

During the second dekad of June 2008, much of Oromiya, Benshangul-Gumuz, Amhara, Tigray, central and eastern parts of the country observed rainfall due to the intensification of rain bearing system over the country. This rainfall situation had a positive contribution for the ongoing Meher agricultural activities. Some stations observed heavy fall within the range of (30-58.5) mm in one rainy day. According to crop phenological report, Senkata reported damage on tomato and Shawra reported damage on crops, which were at early vegetative stage due to the observed heavy fall. The exhibited normal to above normal rainfall over much of Oromiya and pocket areas of SNNPR would have a positive impact for crops which were at different phenological stage and perennial crops in terms of fulfilling their water requirements. On the other hand, much of Afar, and Somali, some areas of eastern Oromiya, Gambela and SNNPR exhibited below normal rainfall. The situation might have a negative impact on the availability of pasture and drinking water over pastoral and agro pastoral areas of Somali lowlands. Thus proper attention should be taken by the concerned personnel to take proper water harvesting technique.

During the third dekad of June 2008, normal Kiremt rainfall activities observed over western half of country, the eastern parts of Meher growing areas of the country faced moisture deficiency. Normal to above normal dekadal rainfall was observed over western Tigray, western and central Oromia, Benshangul-Gumuz, Gambela, western and central Amhara and northern SNNPR. The situation could have a positive impact for Meher agricultural activities, for crop at different phonological stages. In addition, western and northwestern parts of the country experienced heavy rainfall that caused damage on crops in line with this Senkata reported damage on Tomato, Shambu on Onion and Potato crops and Chagni on Maize at emergence stage.

Generally, during the month of June 2008, particularly in the first dekad of the month the rainfall condition covered most parts of the country and Tigray, Amhara, Benshangul Gumuz, most parts of Oromia, Gambella and SNNPR. Where as, in the second dekad of the month the rain shifted to fall over central, eastern and northeastern parts of the country. In the third dekad most parts of the western half of the country experienced better rainfall condition. Hence, the observed rainfall in the month of June might have favored, for the growth and development of crops over Meher growing areas. Besides, western, northern and southwestern and central parts of the country received heavy fall ranging from 44 -106 mm in one rainy day. Some stations reported crop damage due to heavy fall. For instance Shahura reports damage on crops, which are found on vegetative stage, Senkata reports damage on tomato, Shambu reported damage on Vegetables (onion and potato) and perennial crops (trees). Moreover, Chagni reported damage on maize crop due to heavy fall accompanied with hailstorm.

The analysis of moisture status (the relationship between total decadal rainfall and the dekadal total reference evapo transpiration) of the month indicated that most parts of western half of the country exhibited moist to humid moisture status condition. This good moisture condition might have a significant contribution for Meher agricultural activity, so that it was good for water requirement of Meher crops.

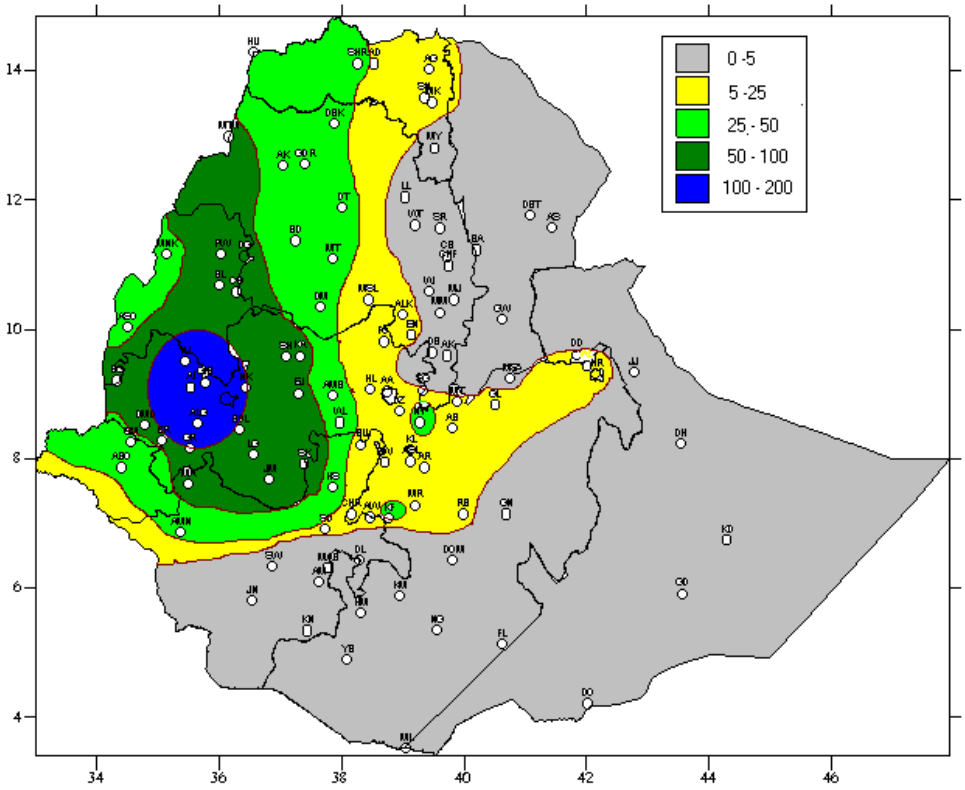


Fig 1. Rainfall distribution in mm (21 – 30 June, 2008)

1. WEATHER ASSESSMENT

1.1 (21- 30 June, 2008)

1.1.1 Rainfall amount (Fig.1)

Western Oromia and parts of southern Benshangul-Gumuz received 100-200 mm rainfall. Most of Benshangul-Gumuz, parts of western Oromia, southwestern Amhara and pocket areas of northern

SNNPR, experienced 50-100 mm rainfall. Most of Gambela, parts of northern SNNPR and western Benshangul-Gumuz, most of western half of Amhara and Tigray and pocket areas of western and central Oromia exhibited 25-50mm rainfall. Eastern half of Tigray, central, southern and northern parts of Amhara, parts of central and eastern Oromia, southern Gambela and northern and northwestern SNNPR received 5-25 mm rainfall. The rest parts of the country exhibited little or no rainfall.

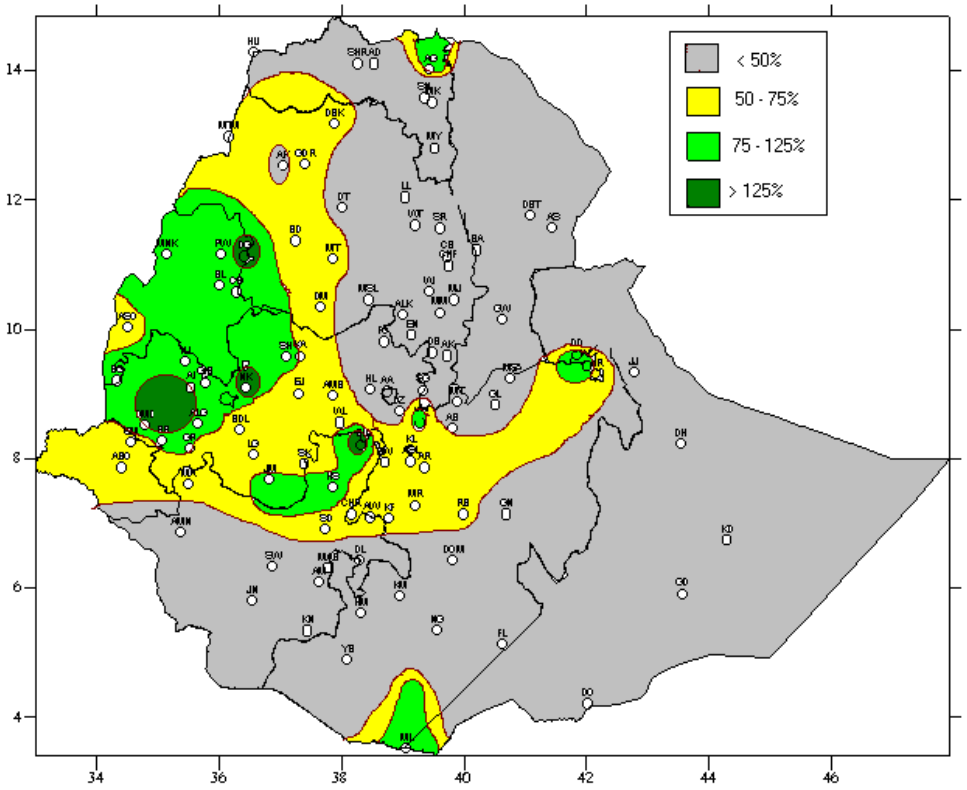


Fig. 2 Percent of normal rainfall distribution (21-30 June, 2008)

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)

Most of Benshangul-Gumuz, parts of western Oromiya, pocket areas of central, southern and eastern Oromia and pocket areas of northern Tigray received normal to above normal rainfall. The rest parts of the country experienced below normal to much below normal rainfall.

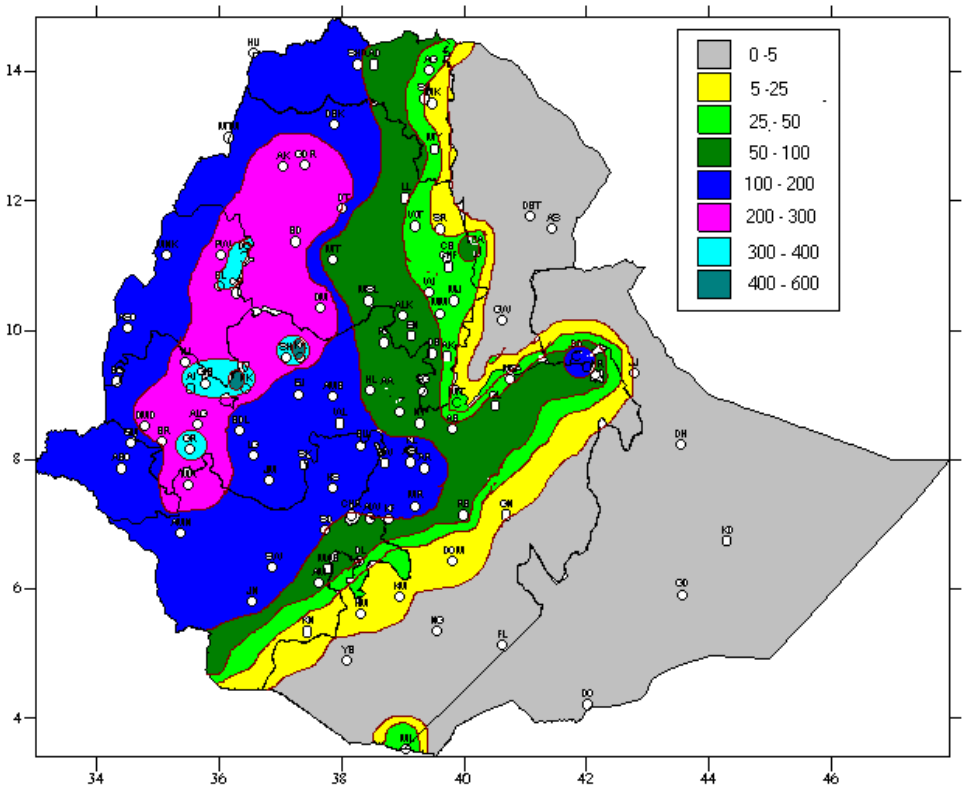


Fig. 3 Rainfall distribution in mm for the month of June 2008

1.2 June, 2008

1.2.1 Rainfall distribution (Fig.3)

Pocket areas of western Oromia received 400-600 mm rainfalls. Pocket areas of western Oromia and eastern Benshangul-Gumuz experienced 300-400 mm rainfalls. Parts of central and southern Amhara, western Oromia, eastern Benshangul-Gumuz and pocket areas of northwestern SNNPR exhibited 200-300 mm rainfall. Gambela, most of SNNPR, western half of Benshangul-Gumuz and western half of Tigray, parts of northwestern Amhara and parts of western, central and pocket area of eastern Oromia received 100-200mm rainfall. Parts of southeastern SNNPR, central and eastern Oromia, and eastern parts of Amhara and Tigray exhibited 50-100 mm rainfalls. Eastern margins of Tigray and Amhara, eastern and southern Oromia and southeastern SNNPR experienced 5-50mm rainfall. The rest parts of the country exhibited little or no rainfall.

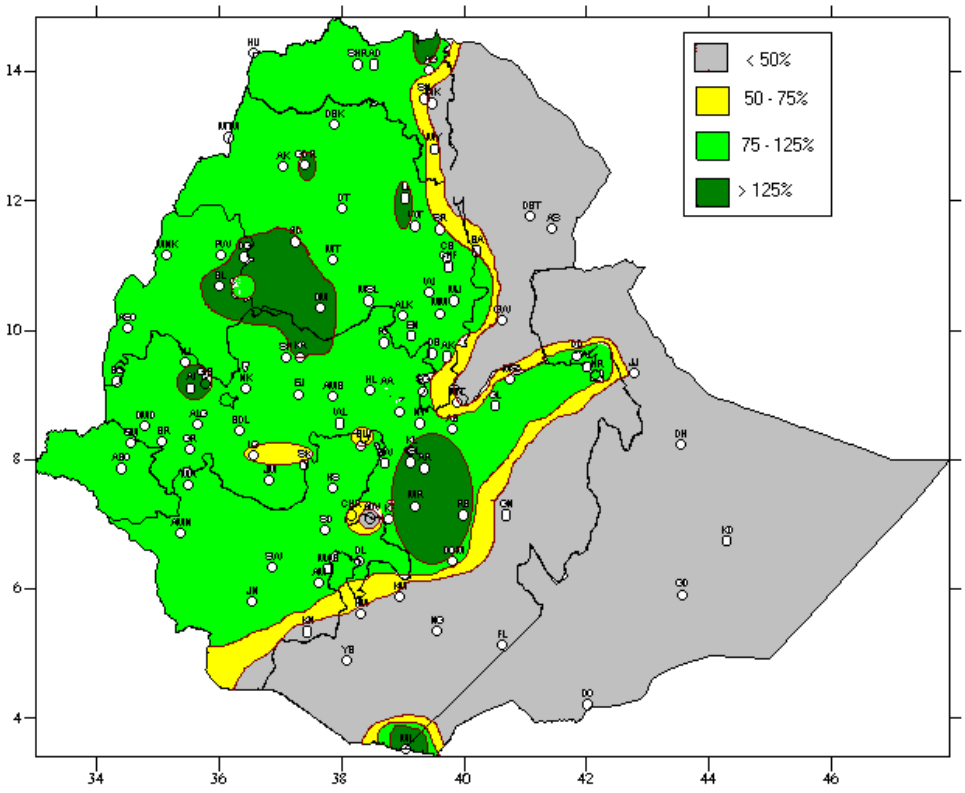


Fig. 4 Percent of Normal Rainfall distribution for the month of June, 2008

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)

Except few pocket areas of western and southern Oromia, eastern and northern SNNPR the rest of Meher growing areas of the country received normal to above normal monthly rainfall.

1.3 TEMPERATURE ANOMALY

During the month under review Gode, Gambella, Sheiraro, Cheffa, Miesso, Methara, Shewa Robit, Metema, Dire Dawa, Aysha, Humera, Elidar, Mille, Assayta, Semera and Dubti recorded extreme Maximum temperature as high as 35.5, 35.5, 36.4, 37.0, 37.2, 38.0, 38.0, 38.0, 38.0, 40.5, 41.0, 44.0, 44.0, 44.0, 45.0 and 45.0 ^{o}C above 35^{o}C for 2-10 consecutive days.

2. WEATHER OUTLOOK

2.1 For the first dekad of July 2008

For the up coming ten days, the seasonal rain- bearing systems are reorganized over the seasonal rain benefiting areas. As a result, western Tigray, western Amhara, Benshangul-Gumuz, Gambela, western and central Oromia and northern portion of SNNPR are likely to have normal to above normal rainfall. Afar, eastern Tigray, eastern Amhara, eastern Oromia, northern Somali and southern Oromia high lands will to get near normal rainfall. However, some pocket place of the above mentioned areas will be below normal rainfall. On the other hand, southern and southeastern low land will experienced dry weather condition.

2.2 For the month of July 2008

The coming month, meteorological system are anticipated to have better strength and favorable over much of the country. In particular, the western and northwestern portion of the country will have better spatial and temporal rainfall distribution. In general, western Tigray, western and central Amhara, central and western Oromia, Gambela, northern half of SNNPR and Benshangul-Gumuz will get normal to above normal rainfall. Besides, eastern Oromia, southern Oromia high land, eastern Amhara, eastern Tigray, southern portion of SNNPR, Afar and northern Somali are likely to get near normal rainfall. While, some pocket places will receive below normal rainfall. Nevertheless, southern border of SNNPR, Borena and southern half of Somali mostly will experience dry weather condition.

3. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

3.1 VEGETATION CONDITION AND IMPACT ON AGRICULTURE

Generally, during the month of June 2008, particularly in the first dekad of the month the rainfall condition covered most parts of the country and Tigray, Amhara, Benshangul Gumuz, most parts of Oromia, Gambella and SNNPR. Where as, in the second dekad of the month the rain shifted to fall over central, eastern and northeastern parts of the country. In the third dekad most parts of the western half of the country experienced better rainfall condition. Hence, the observed rainfall in the month of June might have favored, for the growth and development of crops over Meher growing areas. Besides, western, northern and southwestern and central parts of the country received heavy fall ranging from 44 -106 mm in one rainy day. Some stations reported crop damage due to heavy fall. For instance Shahura reports damage on crops, which are found on vegetative stage, Senkata reports damage on tomato, Shambu reported damage on Vegetables (onion and potato) and perennial crops (trees). Moreover, Chagni reported damage on maize crop due to heavy fall accompanied with hailstorm.

The analysis of moisture status (the relationship between total decadal rainfall and the dekadal total reference evapo transpiration) of the month indicated that most parts of western half of the country exhibited moist to humid moisture status condition. This good moisture condition might have a significant contribution for Meher agricultural activity, so that it was good for water requirement of Meher crops.

In addition, during the third decade of June 2008, the analysis of moisture status (the relation between total decadal rainfall and total dekedal evapotranspiration) as indicated in fig 5 humid to moist moisture

condition observed over western Amhara, western Oromia, Benshangul-Gumuz and Gambela. This moisture condition might have favored Meher agricultural activities. On other hand the rest parts of the country observed moderately dry to very dry moisture condition.

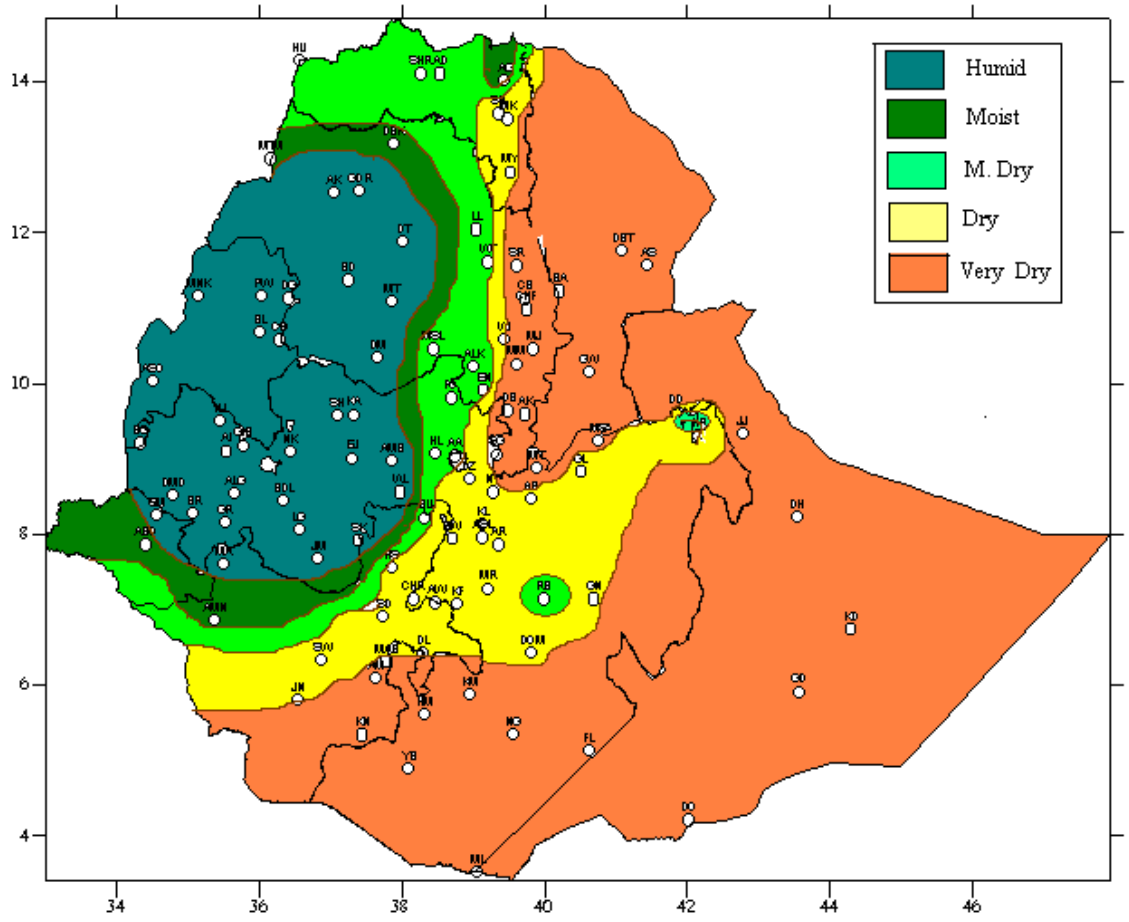


Fig.5. Moisture status for 21-30 June 2008

Table 1. Crop Phenological Report for the Third dekad of June 2008

Station name	Region	Zone	Woreda	Major Crops			Phases		
				1	2	3	1	2	3
Aira	Oromia	Wellega		Maize	-	-	-	-	-
Aris Robe	Oromia	Mirab Arsi	Robe	-	-	-	-	-	-
Alemkema	Amahara	Semen Shoa	Alemkema	-	-	-	-	-	-
Assosa	Benishagul	Assosa	Assosa	-	-	-	-	-	-
Ayehu	Amahara	Mirab Gojam	Ankosha	Maize	-	-	Nl	-	-
Bedelle	Oromia	Illubabor	Bedlle	Maize	-	-	-	-	-
Bullen	Benishagul	Metekel	Bullen	Maize	Millet	-	Em	Em	-
Bui	SNNPR	Guarage	Sodo	-	-	-	-	-	-
Chagni	Amahara	Awi	Guagnua	Maize	Millet	Nug	-	P/S	-
Chira	Oromia	Jimma	Gera	Maize	-	-	-	-	-
Dangila	Benishagul	Awi	Dangila	Maize	-	-	Em	-	-
Debre Tabor	Amahara	Dabub Gonder	Debre Tabor	-	-	-	-	-	-
Dolomana	Oromia	Bale	Mena	Maize	Teff	-	Fl	Fl	-
Dilla	SNNPR			Coffee	-	-	Bs	-	-
Enewary	Amahara	Semen Shoa	Mortenajiru	-	-	-	-	-	-
Fitche	Oromia	Semen Shoa	Girarjarso	Teff	-	-	-	-	-
Gelemeso	Oromia	Mira Haraghe	Habro	Maize	-	-	Ta	-	-
Ghion				Maize	-	-	NL	-	-
Gimbi	Oromia			Maize	-	-	Ta	-	-
Hossaina	SNNPR	SNNPR	Lemu	-	-	-	-	-	-
Kachise	Oromia	Mirab Shoa	Gindeberet	-	Teff	-	-	-	-
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	Maize	Sorghum	Millet	Nl	Ti	Em
Pawe	Benishagul	Metekele	Pawe liyu	-	Sorghum	-	-	-	-
Shaura	Amahara	SemenGonder	ALEF.T	Maize	-	-	Em	-	-
Shambu	Oromia	HoroWollega	Horo	-	-	-	-	-	-
Shire	Tigiray	Mirab Tigray	Endasilasie	-	-	-	-	-	-
Sirinka	Amahara	Semen Wollo	Habru	-	-	-	-	-	-
Sokoru	Oromia	Jimma	Sokoru	Maize	-	-	Em	-	-
Shola gebeya	Amahara	Semen Shoa	Hagaramariam	-	-	-	-	-	-
Wagel Tena	Amahara	Semen Wollo	Delanta	Wheat	-	-	-	-	-
Waliso	Oromia	D.Mirab Shoa	Waliso	-	-	-	-	-	-
Ziway	Oromia	Misrak Shoa	Jidocombolcha	Maize	-	-	-	-	-

Key :

P/S= Plant/Sow
Em=emerge
Tl=Third 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

Kiremt rain producing systems are anticipated to take their normal position accordingly; the seasonal rains will progress following the normal trend across seasonal rain benefiting areas. In this context, western Tigray, western and central Amhara, western and central Oromia, Gambella, northern half of SNNPR and Benshangul Gumuz are anticipated to have normal rainfall, over some areas they have expected to have above normal rainfall. Thus, the condition will have a positive impact over areas where started sowing activities of cereals: teff, wheat, barley over central, western and eastern Oromia, northeastern parts of SNNPR including eastern and southeastern Amhara. Besides, eastern Oromia, high lands of southern Oromia, eastern Amhara, eastern Tigray, southern parts of SNNPR, Afar and northern parts of Somali anticipated to have near normal rainfall, below normal rains will prevail at some pocket areas of these regions. On the other hand, southern tip of SNNPR, Borena and southern half of Somali will get below normal rainfall. Hence, the condition will have a negative impact on the availability of water and the development of pasture particularly over pastoral and agro pastoral areas of northern Somali and Afar. However, the expected near normal over the aforementioned areas would have a positive impact for crops, which are grown over mid land and highland areas. Moreover, some Kiremt benefiting areas are expected to receive heavy fall greater than 30mm in one rainy day. Therefore, the expected heavy fall could result in water logging as a result damage on crops that are at their different stages of development. Thus, proper precautious measures should be taken a head of the event to minimize the risk.

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

	Stations	Region	A/ rainfall	Normal	%of Normal	Eto mm/day	Monthly Eto	Moisture status
1	**Adigrat**	**TIGRAI**	51.4	32	160.6	4.85	145.5	MD
2	**Mekele**		13	29.1	44.7	4.48	134.4	VD
3	**Senkata**		19.2	115.5	16.6	7.87	236.1	VD
4	**Shire**		125.1	145.9	85.7	5.74	172.2	M
1	**Assayta**	**AFAR**	NA	NA	NA	NA	NA	NA
1	**A. Ketema**	**AMHARA**	96.5	72.3	133.5	2.8	84	H
2	**Aykel**		202.3	253.5	79.8	5.01	150.3	H
3	**Bahirdar**		144.7	192.4	75.2	2.72	81.6	H
4	**Bati**		51.9	15.4	337.0	3.78	113.4	MD
5	**Bullen**		343.2	264.8	129.6	3.44	103.2	H
6	**Combolcha**		30.4	32.2	94.4	2.84	85.2	MD
7	**Chefa**		28.2	33.2	84.9	2.93	87.9	MD
8	**Dangila**		326.6	153.9	212.2	4.13	123.9	H
9	**D.Birhan**		67.8	47.4	143.0	5.39	161.7	MD
10	**D.Markos**		275.9	161.3	171.0	2.8	84	H
12	**Enwary**		97.1	54.2	179.2	3.35	100.5	M
13	**Gondar**		229.5	172.6	133.0	6.75	202.5	H
14	**M.Meda**		40.2	38.4	104.7	3.72	111.6	MD
15	**Majete**		27.7	28.2	98.2	3.88	116.4	D
16	**Lalibela**		74.6	42.6	175.1	3.16	94.8	M
17	**S. Gebeya**		52.1	62.6	83.2	5	150	MD
18	**Sirinka**		18.7	29.3	63.8	5.04	151.2	D
19	**Wereilu**		6.8	47	14.5	5	150	VD
3	**Aira**	**OROMIYA**	316.4	191	165.7	7.04	211.2	H
4	**Alemaya**		106.8	57.7	185.1	6.54	196.2	M
5	**Alge**		255.9	292	87.6	2.6	78	H
6	**Ambo**		153.2	155.6	98.5	4.22	126.6	H
7	**Arjo**		382.8	309.7	123.6	3.23	96.9	H
8	**Bedelle**		230.4	290.7	79.3	3.64	109.2	H
9	**Begi**		190.6	255	74.7	2.69	80.7	H
10	**Bui**		165	34.1	483.9	2.93	87.9	H
11	**Chira**		136.2	253.8	53.7	2.88	86.4	H
13	**D.Mena**		38.9	27.5	141.5	6.08	182.4	D
14	**D.Zeit**		47.3	92.7	51.0	3.11	93.3	M
15	**Ejaji**		117.1	178.1	65.7	2.81	84.3	H
17	**Gelemso**		79.2	85.5	92.6	2.89	86.7	M
18	**Gimbi**		356.7	330.2	108.0	2.74	82.2	H
19	**Ginir**		4.4	31.7	13.9	3.09	92.7	H
20	**H. Mariam**		34.5	63.7	54.2	3.93	117.9	MD
21	**Jimma**		174.6	215.9	80.9	2.91	87.3	H
22	**K.Mengist**		18	62.6	28.8	3.66	109.8	D
23	**Kachisa**		404.9	249.1	162.5	2.59	77.7	H
24	**Koffele**		152.7	110.9	137.7	3.13	93.9	H
26	**Limugenet**		135.7	260.5	52.1	2.4	72	H

27	**Metehara**		12.4	24.1	51.5	2.22	66.6	D
28	**Mi'eso**		44.2	48.1	91.9	3.47	104.1	MD
29	**Moyale**		50.8	16.6	306.0	4.39	131.7	MD
30	**Nazreth**		58.7	65.6	89.5	2.78	83.4	M
31	**Neghele**		3.6	12	30.0	2.34	70.2	VD
32	**Nedjo**		292.2	303.6	96.2	3.45	103.5	H
33	**Nekemte**		402.5	388	103.7	5.17	155.1	H
34	**Robe(Bale)**		71.7	54	132.8	2.63	78.9	M
35	**Sekoru**		151.1	225.2	67.1	3.47	104.1	H
36	**Shambu**		266.4	244.8	108.8	4.54	136.2	H
37	**Wolliso**		163.4	178	91.8			
38	**Yabello**		3.4	21.7	15.7	3.21	96.3	VD
39	**Ziway**		103.9	84.7	122.7	4.16	124.8	M
1	**Jijiga**	**SOMALI**	NA	NA	NA	NA	NA	NA
1	**A.Minch**	**SNNPR**	74.6	61.4	121.5	6.32	189.6	MD
2	**Awassa**		33.7	101.3	33.3	3.25	97.5	MD
3	**Dilla**		86.7	106.1	81.7	2.77	83.1	H
4	**Hosaina**		116.6	124.1	94.0	3.84	115.2	H
5	**Jinka**		126.4	94	134.5	3.73	111.9	H
6	**Konso**		10.1	40.5	24.9	6.49	194.7	VD
8	**Masha**		275.7	304.1	90.7	3.3	99	H
9	**Sawla**		120	101.8	117.9	3.21	96.3	H
1	**Assosa**	**B/GUMUZ**	180.5	194.5	92.8	3.79	113.7	H
2	**Chagni**		291.4	263.6	110.5	5	150	H
3	**Pawe**		35.2	295.5	11.9	5.6	168	D
1	**Gambela**	**Gambela**	111.3	145.4	76.5	3.3	990	H
1	**A.A.Obs.**	**A.A**	74.6	123.5	60.4	3.77	113.1	M
2	**A.A. Bole**		73.5	118.4	62.1	3.55	106.50	M
1	**Diredawa**	**D.D**	9.8	22.8	43.0	5.8	1740	VD
	Harar	**Harai**	57.7	68.2	84.6	3.57	107.1	M

Legend

VD	Very Dry	< 0.1
D	Dry	0.1 - 0.25
MD	Moderatly Dry	0.25 - 0.5
M	Moist	0.5 - 1
H	Humid	>1

Explanatory Note

	Reference
ETo	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.

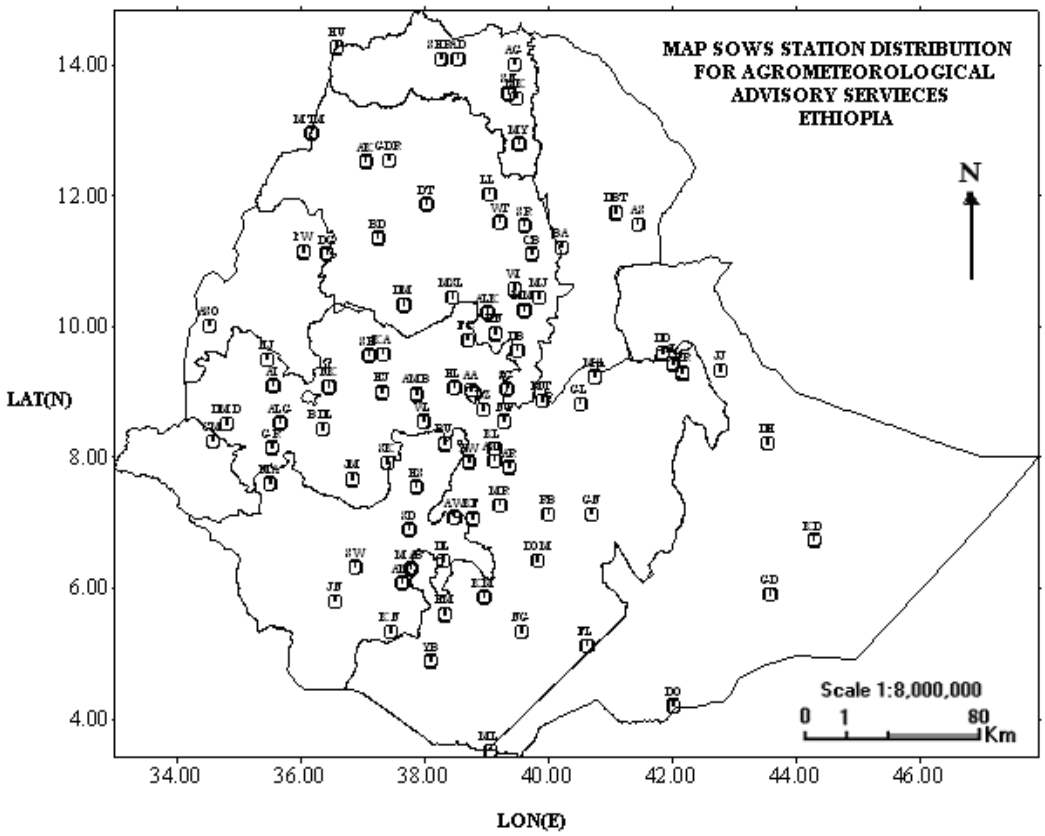
DEKAD: - First or second ten days or the remaining days of a month.

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