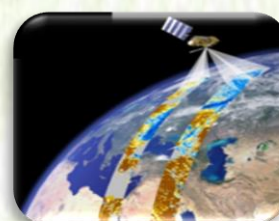


ETHIOPIA METEOROLOGY INSTITUTION

Agrometeorological Bulletin

TEN DAY AGROMETEOROLOGICAL BULLETIN

11-20 NOVEMBER 2022 VOLUME: - 39 No. 32 DATE OF ISSUE: - November 23, 2022



Ethiopia Meteorological Institute P.O.BOX 1090, ADDIS ABABA, ETHIOPIA

Website: [http:// www.ethiomet.gov.et](http://www.ethiomet.gov.et) E-mail nmsa@ethionet.et Fax 251-1-517066, Tel. 251-1-512299

TABLE OF CONTENTS

FOREWARD	2
SUMMARY	3
1. WEATHER ASSESSMENT	5
1.1. Rainfall amount (11 – 20) November 2022	5
1.2. Rainfall Anomaly (11 – 20) November 2022	6
1.1. Moisture Condition (11 – 20) November 2022.....	7
2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE	8
2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE	8
2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING THIRD DEKADE OF NOVEMBER 2022.....	9

FOREWARD

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

SUMMARY

During the first dekad of November 2022, the observed dry Bega weather condition could favor the ongoing harvest and post-harvest activities in most parts of Meher growing areas. As the result harvest and post-harvest activities were under way in most parts of Meher growing areas. On the other hand enhanced moisture condition was observed over Bega season rainfall benefiting areas like southern, south-western and western parts of the country. This condition might have favorable to satisfy the water need of various early planted Meher season crops which found different phenological stages, late sown cereal and pulse crops, as well as perennial plants. Moreover Bega is the second rainy season for the southern and south-eastern parts of the country, the received moisture during the dekad could play very crucial role to perform different agricultural activities. Additionally, the condition had positive impact for improving the availability of pasture and drinking water. However due to the observed occasional unseasonal rainfall particularly the last few days of the dekad experienced over eastern, central and north-western parts of the country could have negative impact in areas where they are normally supposed to get dry moisture condition at this time of the year. Besides, the situation might have negative impact for areas which are under harvest and post-harvest activities. In relation to the dry condition, the night and morning time coldness was observed over some parts of northern, north-eastern and eastern high lands and some station recorded below 5 degree centigrade. This condition might be slightly negative impact for crops which were lately planted and currently found at various growing stages as well as fruits and vegetables which grow under irrigation.

During the second dekad of November 2022, the analysed agro meteorological information's indicated that dry, Sunny and windy weather condition was favour the on-going harvest and post-harvest activities in most parts of Meher growing areas. However in relation to the dry condition, the night and morning time coldness was observed over some parts of southern, central, north-eastern and eastern high lands and some station recorded below 5 degree centigrade. This condition might be slightly negative impact for crops which were lately planted and currently found at various growing stages as well as fruits and vegetables which grow under irrigation. On the other hand enhanced moisture condition was observed particularly at the beginning of the dekad over Bega season rainfall benefiting areas like southern, south-western and western parts of the country. In addition to this southern Somali, southern Oromia and Arsi exhibited some rainfall. This condition might have favourable to

satisfy the water need of various early planted Meher season crops which found different phonological stages, late sown cereal and pulse crops, as well as perennial plants. Moreover Bega is the second rainy season for the southern and south-eastern parts of the country, the received moisture during the dekad could play very crucial role to perform different agricultural activities. Additionally, the condition had positive impact for improving the availability of pasture and drinking water. However due to the observed occasional unseasonal heavy fall particularly at the beginning of the dekad could have negative impact in areas where they are normally supposed to get dry moisture condition at this time of the year. Besides, the situation might have negative impact for areas which are under harvest and post-harvest activities. However the observed moisture over south and south-eastern pastoral and agro-pastoral areas had been positive impacts for improvement of pasture and drinking water.

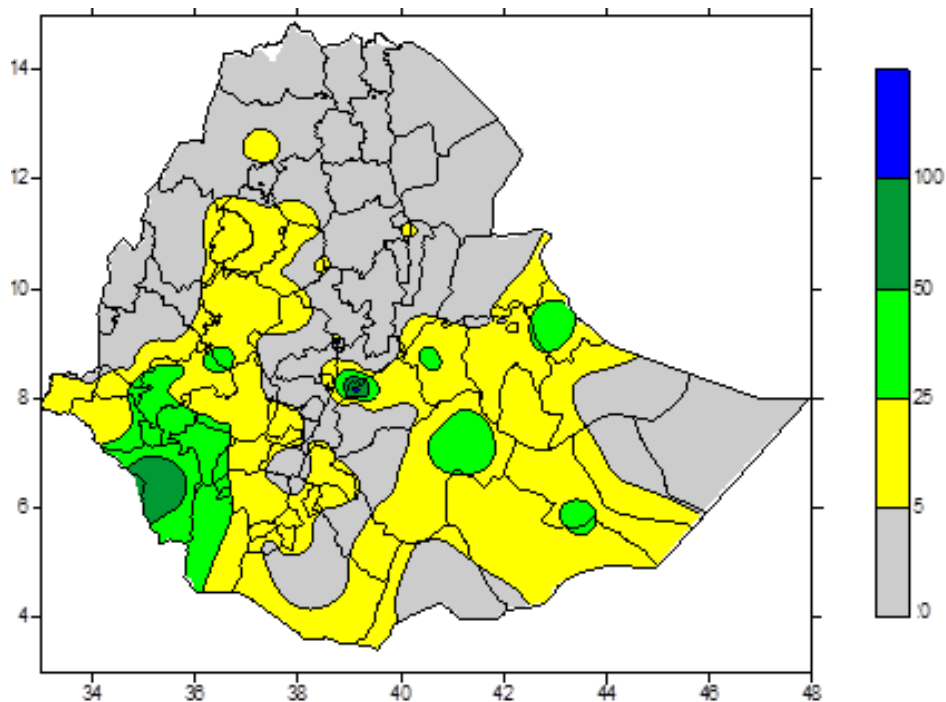


Fig 1. Rainfall distribution in mm (11 – 20) November 2022

1. WEATHER ASSESSMENT

1.1. Rainfall amount (11 – 20) November 2022

During the 2nd dekad of November 2022, most parts of Bench maji zone, pocket areas of Arsi zone experienced 50-100mm of rainfall. Northern tip of Ilubabur, parts of Sheka, Godere, Keffa, Maji and south Omo zone, eastern parts of Bale, pocket area of Gode, northern half of Jijiga and pocket area of west Harerge received 25-50mm of rainfall. central parts of north Gonder, Awi zone, eastern and western Gojam, all Gambela zones, most parts of Jimma, Alaba, Gedeo, Sidama zones, segen people, Guji, southern margin of Borena, most parts of Bale, Arsi and Somali, east and western Harerge experienced 5-25mm of rainfall. The rest parts of the country experienced less than 5mm of rainfall.

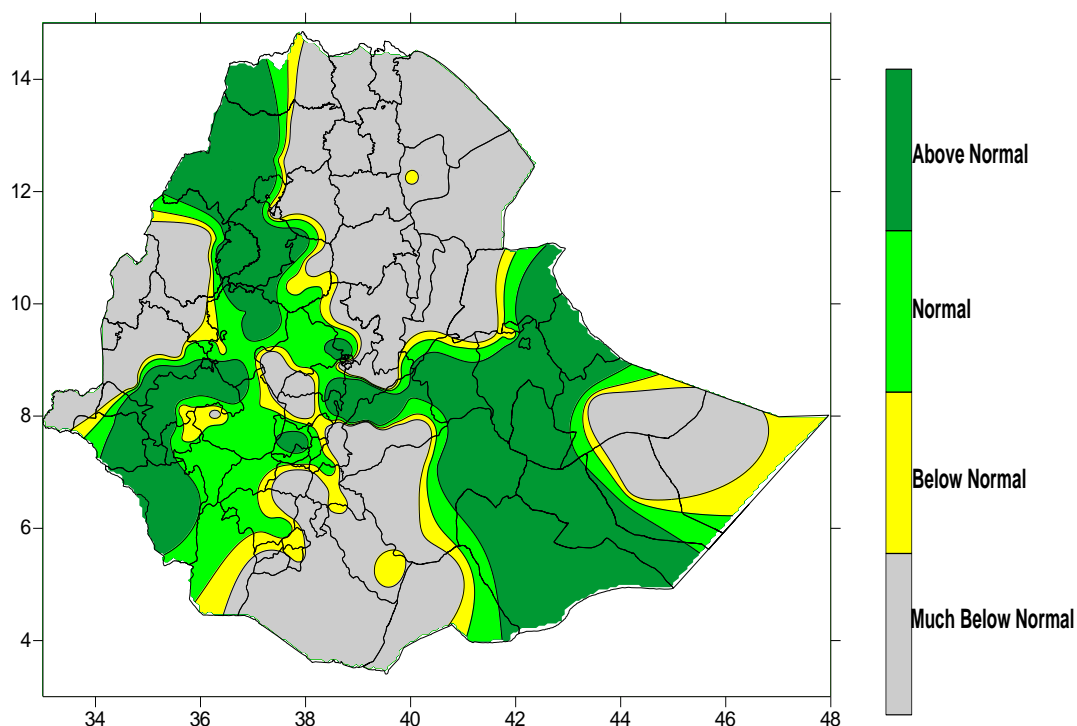


Fig. 2 Percent of normal rainfall distribution (11 – 20) November 2022

Explanatory notes for the Legend

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

1.2. Rainfall Anomaly (11 – 20) November 2022

During the second dekad of November 2022 the rain falls anomaly, Western half of Gonder, Most of south-western region zones, most zones of wollega, Illuababora, Eastern Arsi and Arsi zones, northern and western Shewa zones, eastern Bale zones and easter and westearn Harerge, Diredewa and Harari, SNNPR regions of welaita and Hdya zones and Somali regions of siti, Fafen, Afder, Gode and Korahe zones experienced normal to aove normal rainfall. The rest parts of country experienced below to much below normal rainfall.

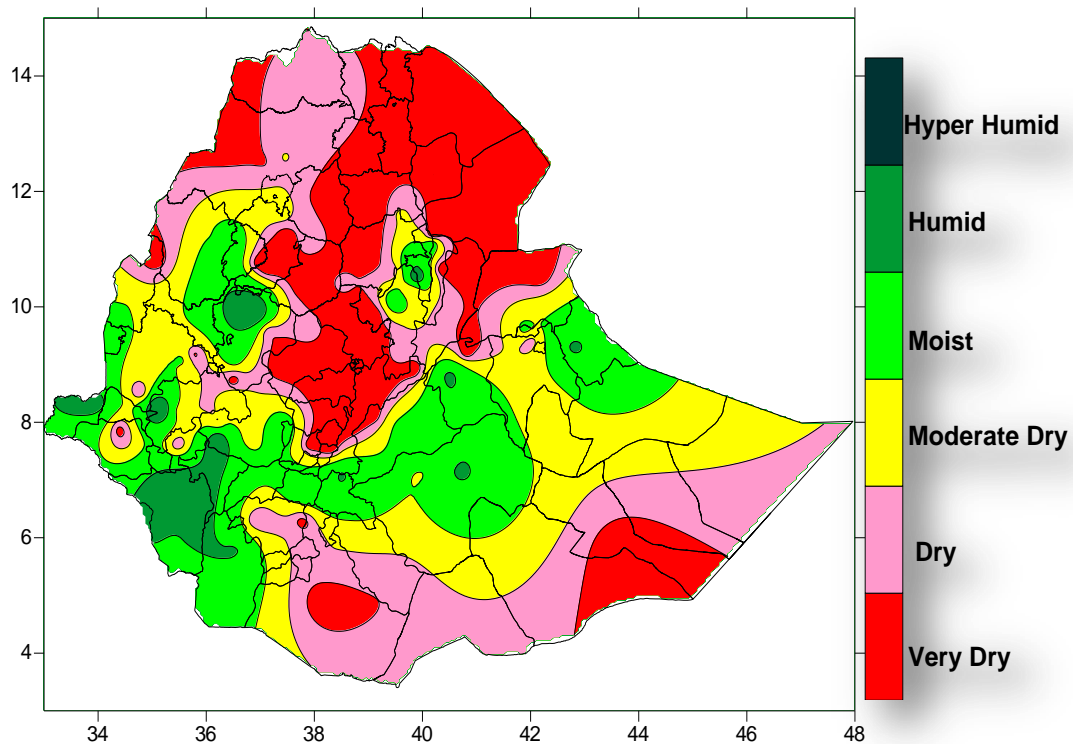


Figure.3. Moisture Status (11 – 20 November 2022)

1.1. Moisture Condition (11 – 20 November 2022)

During the second dekad of November 2022 Most parts of western and south-western and Bale, Arsi and weste Arsi, some parts of central, north-eastern and eastern parts of the country experienced Moist to Hyper Humid moisture condition. The rest parts of the countries exhibited moderately dry to very dry soil moisture

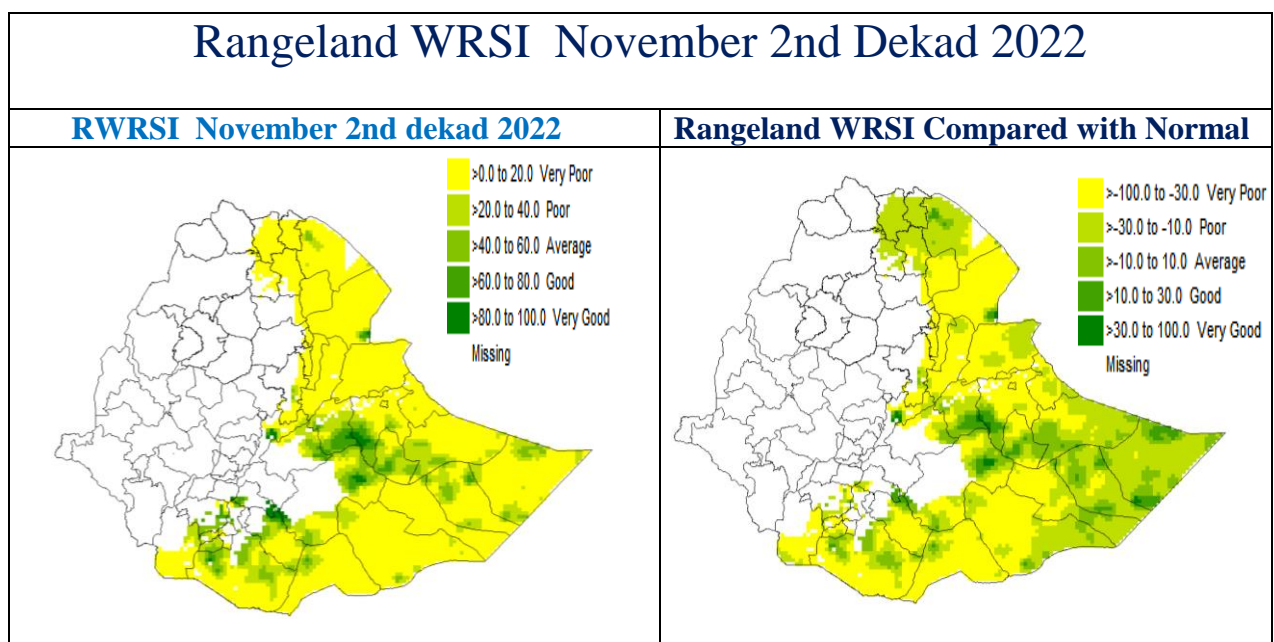


Fig.4. NDVI and Rangeland WRSI in % and Compared to Normal November 11-20, 202

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE

Generally during the second dekad of November 2022, the analysed agro meteorological information's indicated that dry, Sunny and windy weather condition was favour the on-going harvest and post-harvest activities in most parts of Meher growing areas. However in relation to the dry condition, the night and morning time coldness was observed over some parts of southern, central, north-eastern and eastern high lands and some station recorded below 5 degree centigrade. This condition might be slightly negative impact for crops which were lately planted and currently found at various growing stages as well as fruits and vegetables which grow under irrigation. On the other hand enhanced moisture condition was observed particularly at the beginning of the dekad over Bega season rainfall benefiting areas like southern, south-western and western parts of the country. In addition to this southern Somali, southern Oromia and Arsi exhibited some rainfall. This condition might have favourable to satisfy the water need of various early planted Meher season crops which found different phonological stages, late sown cereal and pulse crops, as well as perennial plants. Moreover Bega is the second rainy season for the southern and south-eastern parts of the country, the received moisture during the dekad could play very crucial role to perform different agricultural activities. Additionally, the condition had positive impact for improving the availability of pasture and drinking water. However due to the observed occasional unseasonal heavy fall particularly at the beginning of the dekad could have negative impact in areas where they are normally supposed to get dry moisture condition at this time of the year. Besides, the situation might have negative impact for areas which are under harvest and post-harvest activities. However the observed moisture over south and south-eastern pastoral and agro-pastoral areas had been positive impacts for improvement of pasture and drinking water.

2.2 EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING THIRD DEKADE OF NOVEMBER 2022

In normal condition in third dekad of November dry, sunny and windy Bega weather is experienced and the time of harvest and post-harvest activities over most part of Meher producing areas of the country. On the other hand Southern, south-eastern, south-western and central parts of the country receive little rainfall.

According to the weather forecast, in the coming third dekad of November 2022, the Bega season dry moisture condition is expected to prevail across Kiremet rain benefiting areas of the country. The forecasted dry and sunny condition should be taken as good opportunity to perform harvest and post-harvest activities over the place where Meher season crops are fully matured. Thus, farmers are strongly advised to use this opportunity to collect fully matured crops in the meanwhile. However, in line with the expected dry weather condition, along with the night and early morning cold weather may gradually increases over the highland of the country and it may lead to the formation of frost that in turn may have slight negative impact on fruit, vegetables and other horticulture plants as well as crops which are not fully matured and ready to harvest. We recommended that farmers and agricultural experts provide close monitoring and take appropriate action to save crops can be damaged. On the other hand, over Oromia regions of Jimma, Ilubababora, Western Arsi and Bale, Western and Eastern Harerge in some parts and Borena and Guji zones, Gambela region of Angewak zone, SNNPR region of Gedeo, Gamo, Gofa and segon peoples zones, Sidama region, south-wester Ethiopia region and Somali regions of Afder, Liben and Gode zones expected rainfall and this may be favourable for Bega season crops and perennial plants as well as to ensure the availability of pasture and drinking water for the pastoral and agro pastoral community. In addition to this, the expected rainfall in different places would have a positive impact on water requirement of crops which have not completed their growth and perennial plants as well. Also availability of water and pasture will expect for pastoral and agro pastoral areas of southern parts of the country. However, the enhanced moisture condition might have negative impact on some places for areas which are currently conducting harvest and post-harvest activities, so communities are too aware this information to collect fully matured crops.

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 south eastern 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 covers 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.

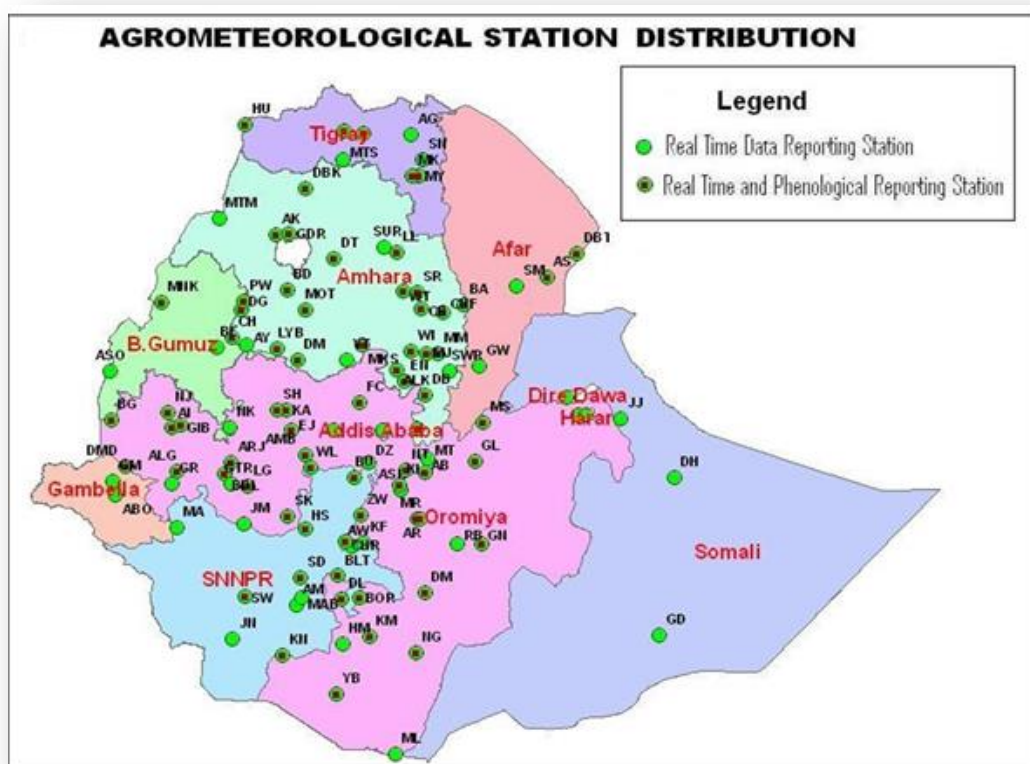
DEKAD: - First or second ten days or the remaining days of a month.

EXTREME TEMPERATURE:- The highest or the lowest temperature among the 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 south-eastern lowlands of the country.

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



Station	Code	Station	Code	Station	Code	Station	Code
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
Arba Minch	AM	Ejaji	EJ	Kulumsa	KL	Shambu	SH
Asaita	AS	Enwary	EN	Lalibela	LL	Shire	SHR
Asela	ASL	Fiche	FC	M.Meda	MM	Shola	SG
Assosa	ASO	Filtu	FL	M/Abaya	MAB	Gebeya	SR
Awassa	AW	Gambela	GM	Maichew	MY	Sirinka	SR
Aykel	AK	Gelemso	GL	Majete	MJ	Sodo	SD
B. Dar	BD	Ginir	GN	Masha	MA	WegelTena	WT
Bati	BA	Gode	GD	Masha	MA	Woliso	WL
Bedelle	BDL	Gonder	GDR	Mekele	MK	Woreilu	WI
BUI	BU	Gore	GR	Merraro	MR	Yabello	YB
Combolcha	CB	H/Mariam	HM	Metehara	MT	Ziway	ZW
D. Berehan	DB	Harar	HR	Metema	MTM		
D. Habour	DH	Holleta	HL	Mieso	MS		
D. Markos	DM	Hossaina	HS	Moyale	ML		
				M/Selam	MSL		