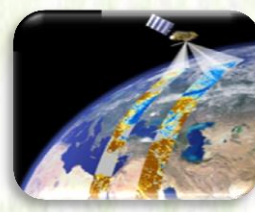


# ETHIOPIAN METEOROLOGY INSTITUTION

## Agrometeorological Bulletin

### TEN DAY AGROMETEOROLOGICAL BULLETIN

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

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

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## FOREWARD

This Agro met Bulletin is prepared and disseminated by the Ethiopia Meteorology Institute (EMI). 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

EMI

P.O. Box 1090

Tel: 011661-57-79

FAX 00251-11-6625292

E-mail [nmsa@ethionet.et](mailto:nmsa@ethionet.et)

Addis Ababa

## SUMMARY

During the third dekad of October 2024, the analyzed agro meteorological information's indicated that the moisture condition was enhanced over the southern and south-eastern Bega rain benefiting areas. The received moisture during the dekad could play very crucial role to perform different agricultural activities like fulfilling the water need of various Meher crops and perennial plants. Additionally, the condition had positive impact for improving the availability of pasture and drinking water and significantly important to regenerate natural and artificial ponds over both the pastoral and agro pastoral community. On the other hand the observed heavy fall over southern and south-western parts of the country had a good opportunity to collect rain water harvesting. Moreover the receiving moisture over western half of the country might have favourable for various Meher season crops which were under different phenological phases and lately planted and currently found at various growing stages which requiring additional moisture for their further development, perennial plants, fruits and vegetables as well as it would have significant contribution for the production of pulse crops (chickpea) which planted at the end of the season (September) with residual moisture. On the other hand, the observed unseasonal rainfall in the northern, north-eastern, central and eastern parts of the country might have a negative impact for harvest and post-harvest activities of crops and areas that had received heavy and continuous rainfall might experience landslides over some parts of the country. In particular, field report indicates that there has been death and property damage due to landslide over Wolita zone Kawa koish Woreda.

During the first dekad of November 2024 the observed dry, sunny and windy weather condition prevailed over most parts of Kiremt rain benefiting area of the country. Besides, the observed dry Bega weather condition could favour the on-going harvest and post-harvest activities. As the result harvest and post-harvest activities were under way in most parts of Meher growing areas. However, the observed enhanced moisture over central, north-eastern and eastern parts of the country had been favour the existing Meher crops, which were under different phenological phases and lately planted and currently found at various growing stages which requiring additional moisture for their further development, perennial plants, fruits and vegetables as well as it would have significant contribution for the production of pulse crops which planted at the end of the season with residual moisture. Similarly, since Bega is the second rainy season for the southern, south-eastern and south-western parts of the country. The observed enhanced moisture had positive implication for the water needs of Bega season crops particularly Borena and Guji highlands and also the observed improved

moisture might be positive implication for pasture and drinking water, significantly important to regenerate natural and artificial ponds over both the southern and south-eastern pastoral and agro pastoral community. On the other hand the observed better rainfall over southern and south-eastern parts of the country had a good opportunity to collect rain water harvesting.

## 1. WEATHER ASSESSMENT

### 1.1. Rainfall amount (01 – 10 November, 2024)

During the first dekad of November 2024 the rain fall distribution was pocket areas of Liben, Afder, Bale and, Guji Zones recived 50-100 mm rain fall. East Tigray, Afar Zone 2, North and South Gonder, North and South Wello, Metkel Bahir Dar, East Gojjam, Kamashi, South West Shewa, West Wellega, Gambella Zone1,2&3, Illibabur, Jimma, Sheka, Dawero, Guji, Liben, Afder, Bale, Godere, Bench Maji, Basketo, Konso, Amaro, Borena, Goffa, Sidama, Bale Arsi, West Haraghe, Fik ,Gode, pocket areas of Jijiga and Shinile Zones are 5-50mm rainfall. the rest part of the country was recived <5mm rain fall.

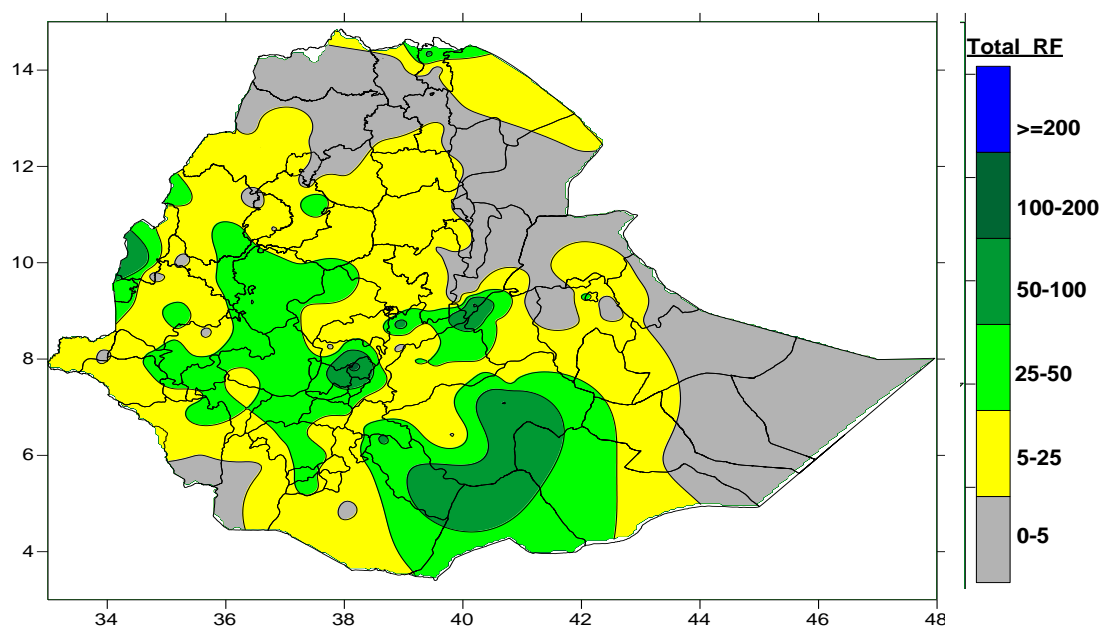


Figure 1. Rainfall distribution in mm (01- 10, November, 2024)



## 1.2. Rainfall Anomaly (01 – 10 November 2024)

During the first dekad of November 2024 the percent of normal rain fall was most part of the on Nrth Western, Western, Central, and Southern areas of the country was exhibited Normal to Above Normal Rain fall. The rest part of the country was exhibited below normal rain fall.

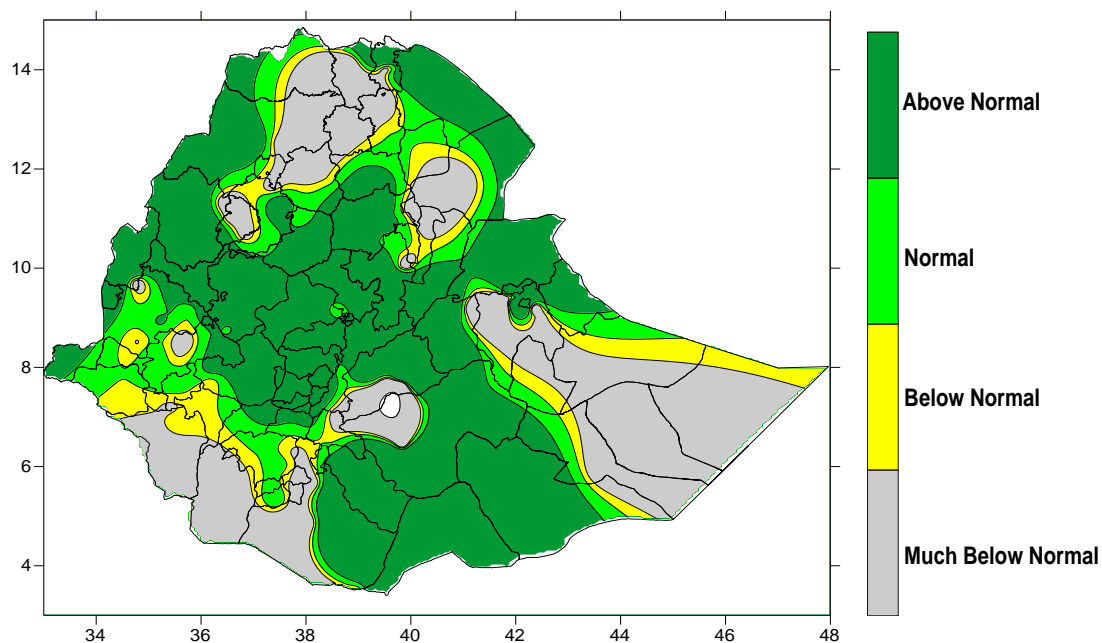


Figure 2: Percent of normal rainfall distribution (01 – 10 November 2024)

### Explanatory notes for the Legend

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

### 1.3. Moisture Condition (01 – 10 November, 2024)

During the first dekad of November 2024, most parts of western, central, eastern, south-western and southern parts of the country exhibited moist to hyper humid moisture conditions. The rest parts of the country experienced moderately dry to very dry moisture condition.

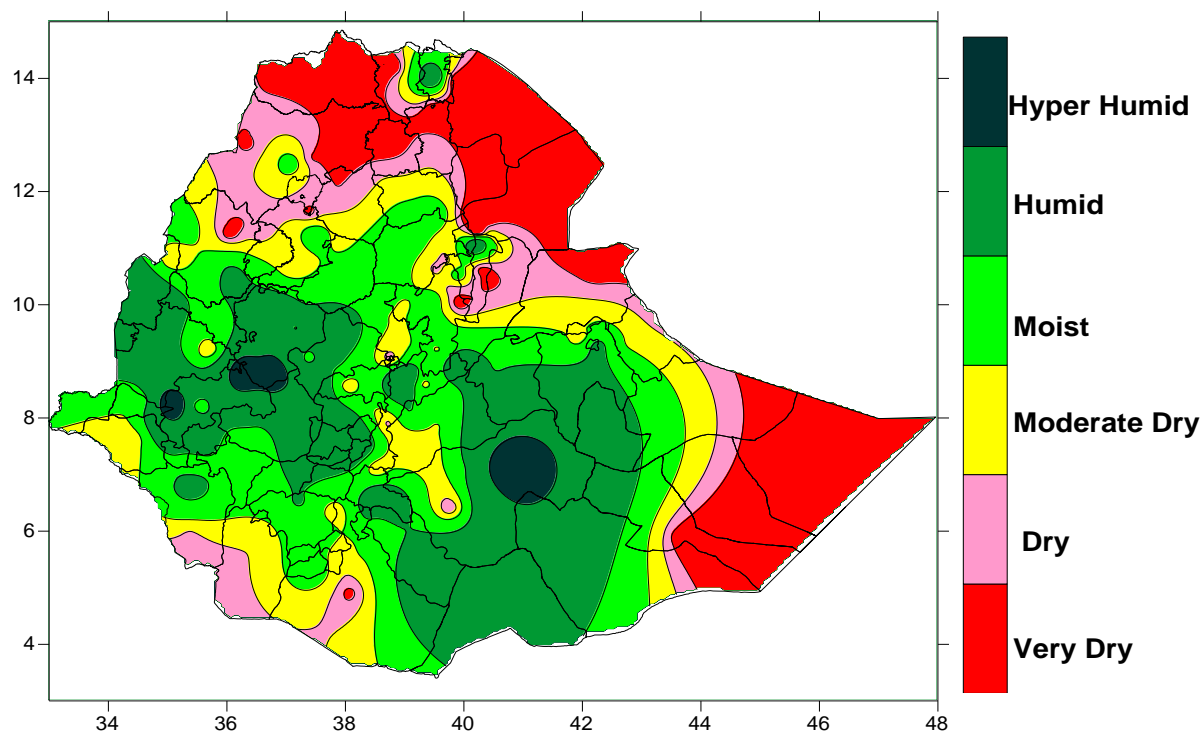


Figure.3. Moisture Status (01 – 10 December, 2024)

## 2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

### 2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE

During the first dekad of November 2024, the moisture condition was enhanced over the southern and south-eastern Bega rain benefiting areas including southern, south-eastern and south-western parts of the country. NDVI Fig.4 (the green plant coverage) and RLWRSI experienced better coverage. The situation might play crucial role toward improving the availability of pasture and drinking water and to regenerate natural and artificial ponds.

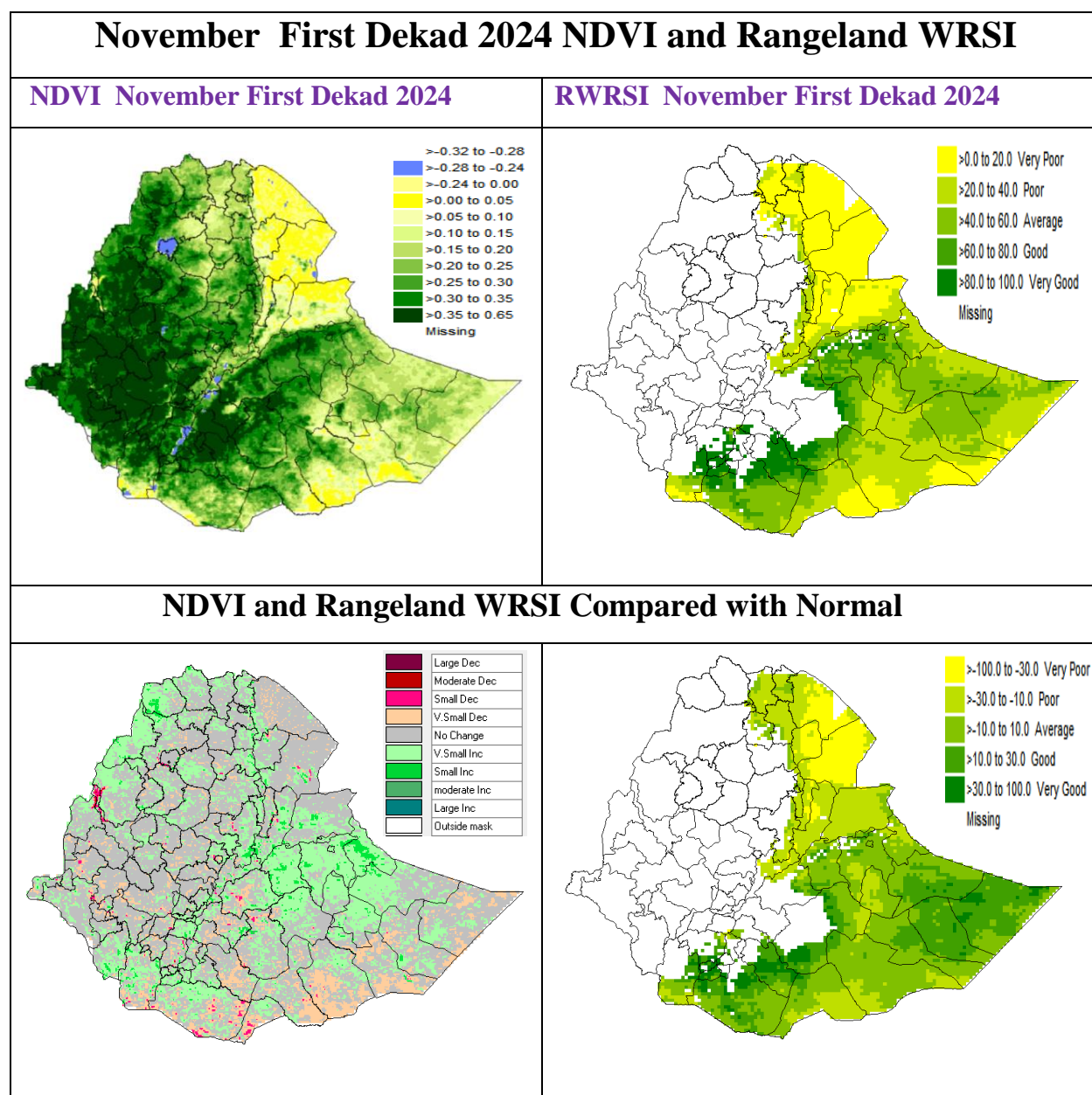


Fig.4. NDVI and Rangeland WRSI in % and Compared to Normal 01 – 10 November 2024



## **2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING SECONDE DEKADE OF NOVEMBER 2024**

In the coming second dekad of November, the expected enhanced moisture over western half, central, eastern and north-eastern Meher producing areas of the country might have positive contribution to satisfy the daily water need of some crops which are yet requiring additional moisture. Besides, it will have significant contribution for the production of pulse crops which planted at the end of the season with residual moisture that need complete growth, perennial plants, fruits and vegetables as well as the water need of trees which planted in the green legacy program. On the other hand, the expected occasional unseasonal rain may disrupt the on-going harvest and post-harvest activities over some places, including central, eastern and north-eastern parts of the country where crops like Sesame, Teff, Barly, Oat and Wheat as well as early planted long cycle crops such as Maize and Sorghum. Thus, harvest and post-harvest activities should be undertaken on time in order to avoid unnecessary harvest and post-harvest loses. Additionally, the expected moisture over the south and south-eastern parts of the country can favour to satisfy the water needs of Bega crops which are planted over Borena and Guji highlands and ensure the availability of pasture and drinking water to improve animals' feeds and fodder as well as will have a good opportunity to collect and store rainwater.

### **3. DEFINITION 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.

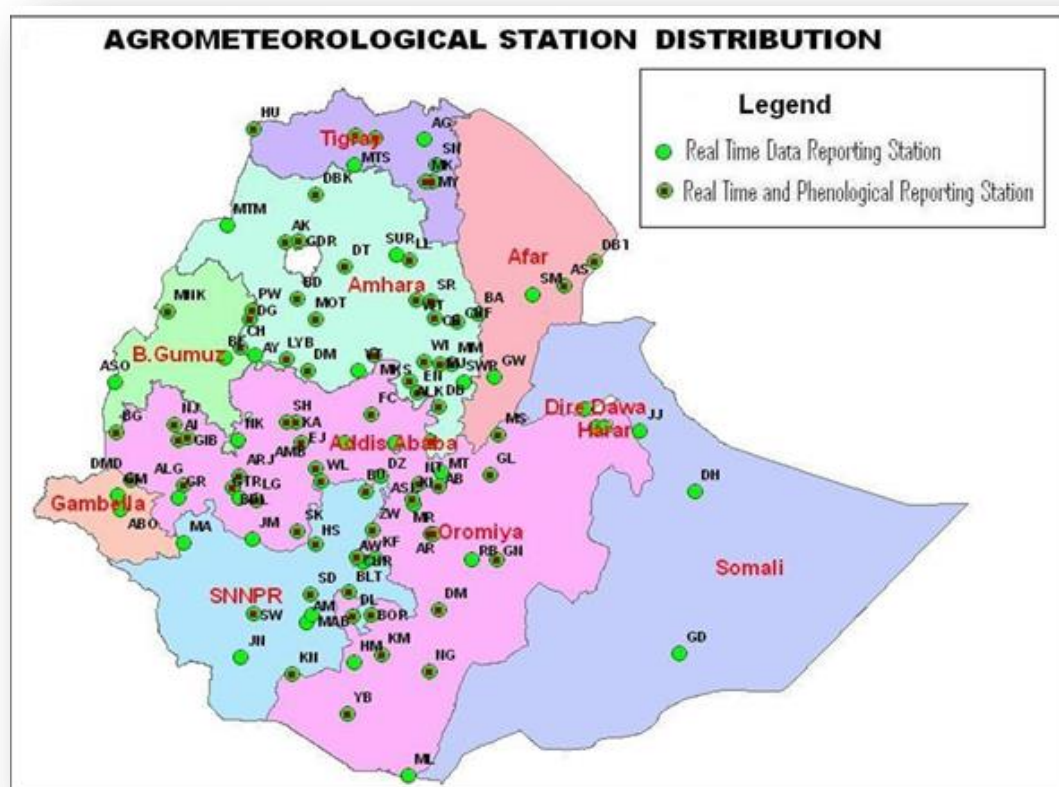
**DEKAD:** - First or second ten days or the remaining days of a month.

**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	SG
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	Mekele	MK	Woliso	WL
Bedelle	BDL	Gonder	GDR	Merraro	MR	Woreilu	WI
BUI	BU	Gore	GR	Metehara	MT	Yabello	YB
Combolcha	CB	H/Mariam	HM	Metema	MTM	Ziway	ZW
D. Berehan	DB	Harer	HR	Mieso	MS		
D. Habour	DH	Holleta	HL	Moyale	ML		
D. Markos	DM	Hossaina	HS	M/Selam	MSL		