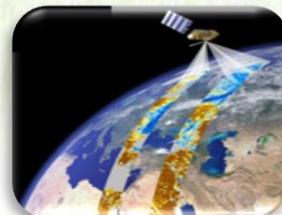


NATIONAL METEOROLOGY AGENCY

Agrometeorological Bulletin

TEN DAY AGROMETEOROLOGICAL BULLETIN

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FORE WARD

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.

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SUMMARY

During the third Dekade of February 2023, especially over eastern, northeastern, south, south-west, and central parts of the country received light to moderate rainfall and some places recorded heavy fall >30mm in one rainy day like Diredawa 33.0, Maji 35.0, Jinka 32.0, Limugenet 34.0 mm experinced rain fall. In relation to this the moisture condition was enhanced and have positive role for land preparation, sowing activity of Belg crops as well as satisfy the water need of perianal plants and for availability of pastors and drinking water and pastoral and agro-pastoral areas.

During the first dekad of March, due to the relative strengthening of rain bearing weather systems better moisture has been steadily improving day by day, particularly north eastern, central and eastern parts of the country experienced light to medium moisture. Heavy rainfall was also recorded in some places including Addis Ababa Bole 51.0mm, Addis Ababa head office 37.0mm, Dire dewa 47.0mm, Methara 39.1mm, Addele 33.6, Ambo 49.0, Bati 34.5, Bedele 43.2, Dembi delo 38.6, and Mehal meda 35.8mm. This condition might have positive impact to perform land preparation and planting for Belg season crops in areas where the rain onset was a bit delayed from its normal time of sowing as well as for perennial plants and early sowed crops. In addition, the condition had been favorable toward improving the availability of pasture and drinking water over the pastorals and agro-pastoral communities. Moreover, the obtained heavy rainfall could be favorable, for farmers who are in moisture stress areas, to collect and store rainwater where that can be used in time of deficit. On the other hand, daily extreme maximum temperature has shown a relative increase over northeast, southeast, southern margin areas recorded Temperatures above 35°C and some places experienced above 40°C. This, coupled with the lack of moisture in the sunny and hot weather, had a negative impact on the general agricultural activity as well as the provision of animal feed and drinking water for over most of the rang land.

1. WEATHER ASSESSMENT

1.1. Rainfall amount (1 – 10 March 2023)

During the first decade of March 2023, Addis Ababa Zone, pocket areas of Illibabur, and West Wellega Zones are exhibited 50-100mm Rainfall. Pocket areas of South Wello, Afar Zone 5, North, West and South West Shewa, Guragi, Siliti, pocket areas of Alaba, Hadiya, and Wolita, pocket areas of Illibabur and Jimma, Keffa, and West Wellega Zones are exhibited 25-50 mm Rainfall. North and South Gonder, North and South Wello, Oromi Zone, Afar Zone 1,3, &5, pocket Bahir Dar, West and East Gojjam, West and East Wellega, Gambella Zone 1&2, Illibabur Jimma, Gode, Sheka, Keffa, Bench Maji, Dawer, Basketo, South Omo, half of Konso, Sidama, pocket Bale and Arsi, West Hararghe, and pocket areas of East Hararghe, Shinili, Pocket areas of Jijiga Zones are exhibited 5-25mm Rainfall.

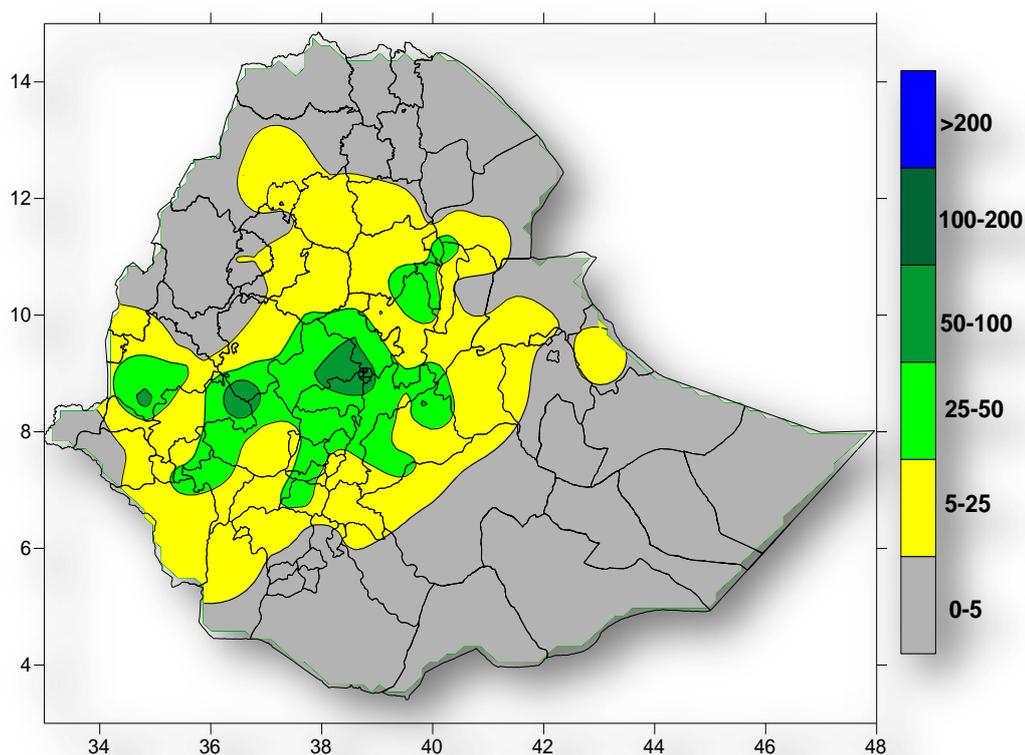


Fig 1. Rainfall distribution in mm (1 – 10) March 2023

1.2. Rainfall Anomaly (1 – 10 march, 2023)

During the first decade of march 2023, North and South Gonder, Waghimera, North and South Wello, Oromi Zone, Bahir Dar, West and East Gojjam , North, West and Sout west Shewa, West and East Wellega, Tango,pocket areas of Assosa, Gambella Zone1,2&3,Godere, Keffa, Illibaur, Jimma, Guragi, Siliti, Alaba, Hadiya, Wolita, pocket areas of Arsi and West Hararghe, Afar Zone 1&5 Zones was experienced Normal to Above Normal Rain fall conditio

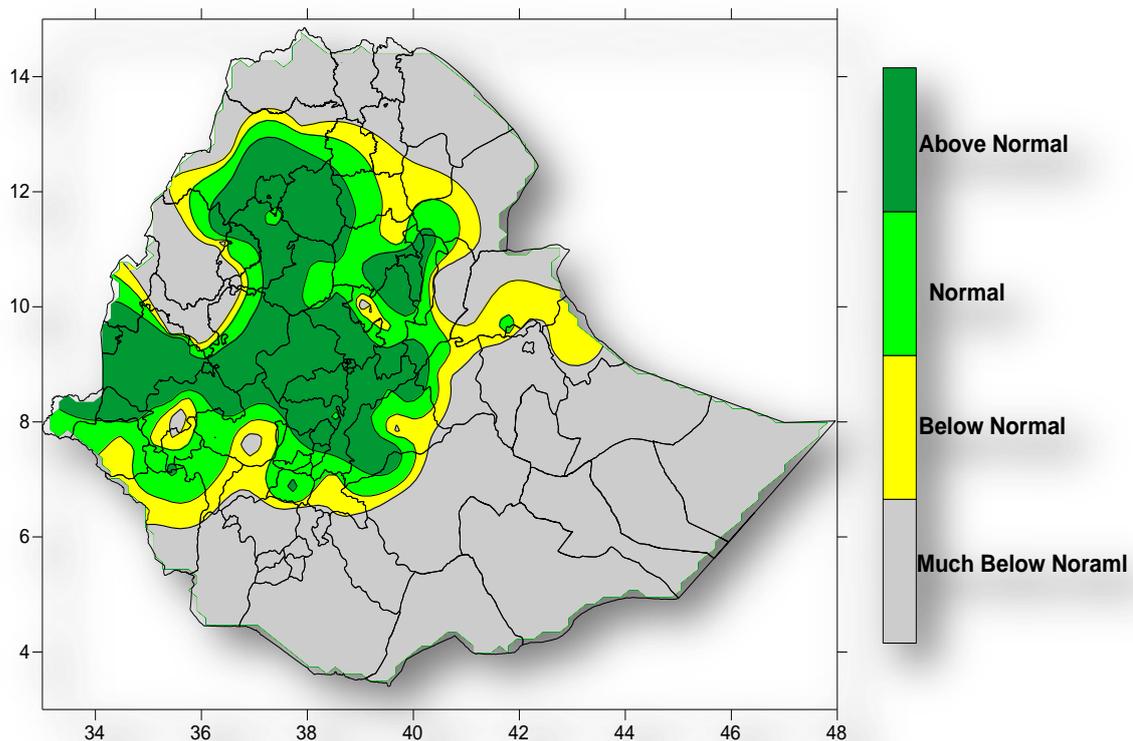


Fig.2 Percent of normal rainfall distribution (1 – 10 March, 2023)

Explanatory notes for the Legend

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

1.3. MOISTURE CONDITION (1 – 10 March 2023)

As indicated on the moisture status map above during second dekad of March 2022 north and south Gonder, north and south Wollo, east and west Gojam, Oromia especial zone, east, north, west and south west Shewa, Addis Ababa zone, Illubabur, YEM, Alaba, Hadiya, Selti, Arsi, Dawero, Sheka, Godere, Bench Maji, Keffa, Basketo, South Omo, Dirashe and Gamo gofa exhibited Hyper Moist to Moist. The rest parts of the countries exhibited moderately Dry too Very Dry.

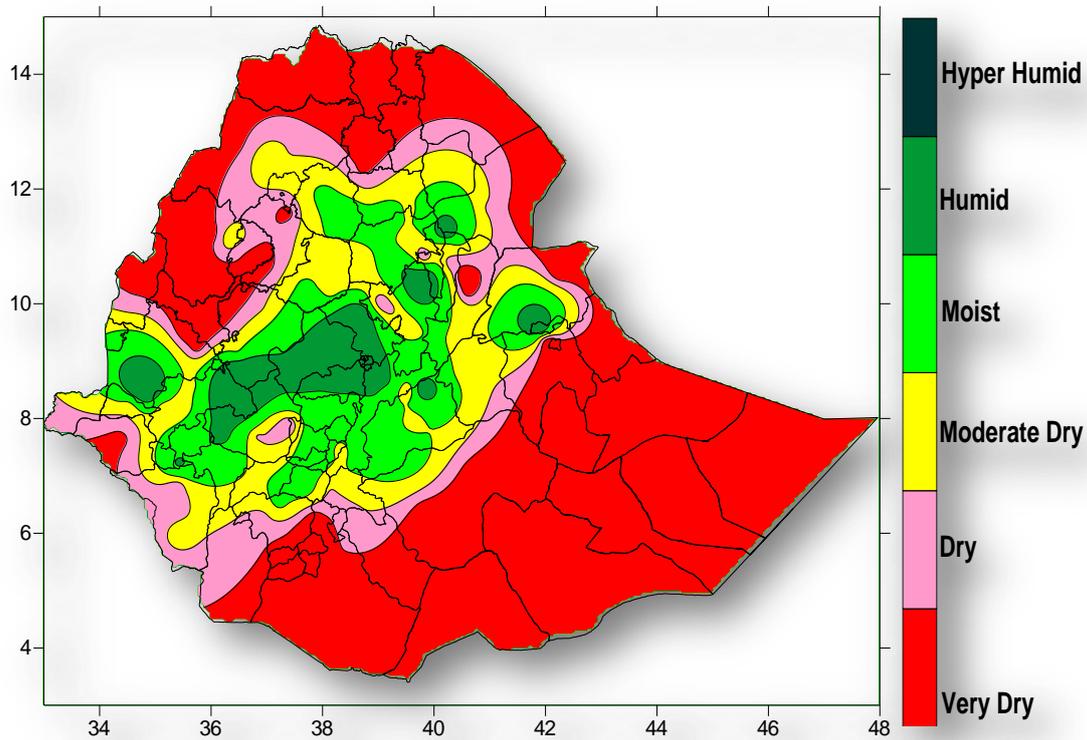


Fig. 3 moisture status for (1 – 10 March, 2023)

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE

During the first dekad of March, due to the relative strengthening of rain bearing weather systems better moisture has been steadily improving day by day, particularly north eastern, central and eastern parts of the country experienced light to medium moisture. The vegetation condition across the country indicated that western and north-eastern, central and some of southern parts exhibited average and above average vegetation condition (Fig.4. NDVI and Rangeland WRSI in %) while most of the southern and south-eastern part experienced large to small deterioration of greenness. This condition might have positive impact to perform land preparation and planting for Belg season crops in areas where the rain onset was a bit delayed from its normal time of sowing as well as for perennial plants and early sowed crops.

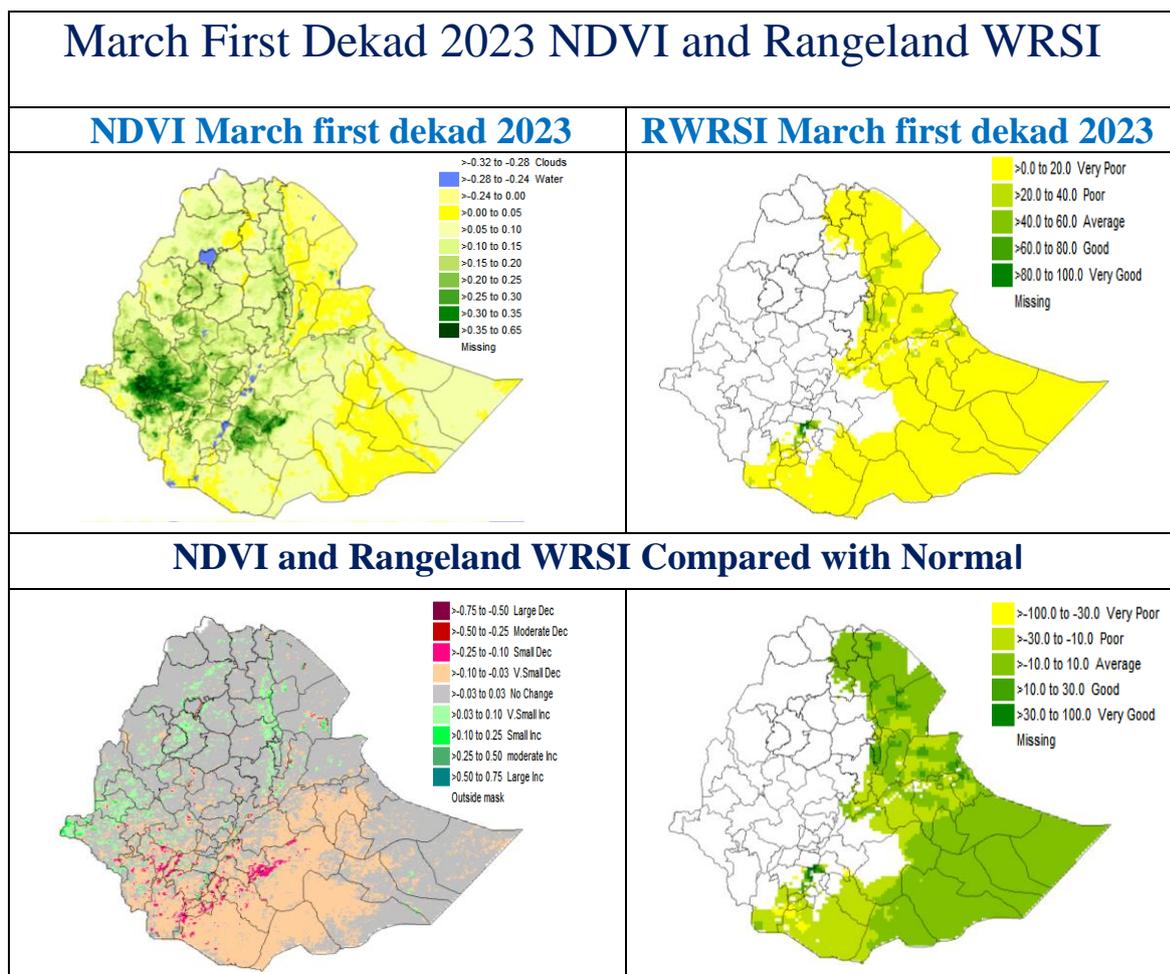


Fig.4. NDVI and Rangeland WRSI in % and Compared to Normal - March 1-10, 2023

2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING THIRD DEKAD of MARCH 2023

In normal condition, the second dekad of March is characterized by a gradual improvement in moisture both in time and space over the north east, east, south and south east of the country and this enables farmers to perform land preparation as well as sowing of Belg season crops.

According to the weather forecasts, , during the coming second dekad of March the moisture conditions are expected to enhance from day to day over Belg season crop growing and rain benefiting areas. In particular, the north-eastern, eastern, southern and south-eastern parts of the country are likely to get light to heavy amount of rainfall. Such moisture is expected to be favourable to perform land preparation and sowing of various Belg season crops as well as fulfilling the water need of previously planted crops and perennial plants. Thus, farmers, particularly these delayed in planting are advised to make their own plan so as to use this opportunity. Moreover the expected expanded moisture over south and south-eastern parts of the country ensuring the availability of pasture and drinking water for pastoral and agro pastoral communities. In addition, the forecast also indicates that some places across the country are expected to experience heavy rainfall. The expected improvement in moisture may also give good opportunity for collecting and storing of excessive rain water particularly for moisture stress areas and this may provide them a good chance to utilize it at a time of consecutive dry days. On the other hand, the expected daily maximum temperature above 35°C in low land parts of the country coupled with the lack of moisture in the sunny and hot weather enhance evapo-transpiration had a negative impact on the general agricultural activity as well as the provision of animal feed and drinking water. Thus, farmers and the concerned body's proper attention should be given proper moisture conservation and water harvesting.

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.

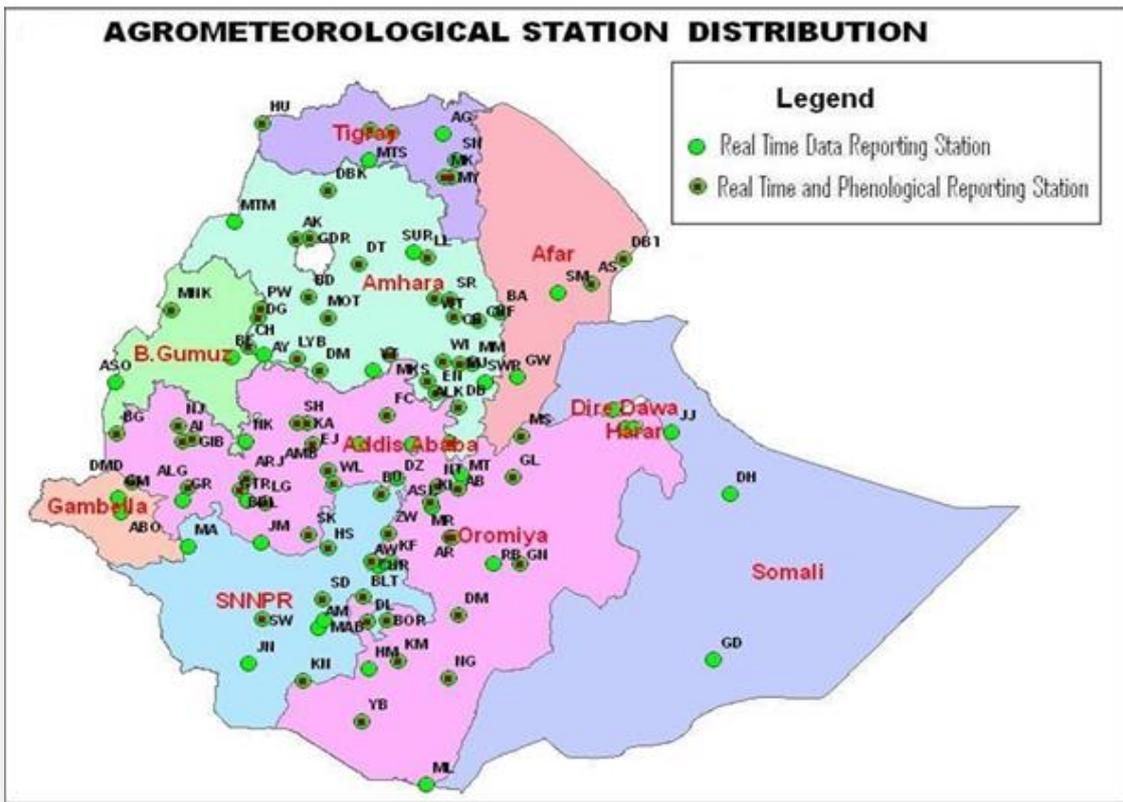
DEKAD: - First or second ten days or the remaining days of a month.

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	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	Harer	HR	Metema	MTM		
D. Habour	DH	Holleta	HL	Mieso	MS		
D. Markos	DM	Hossaina	HS	Moyale	ML		
				M/Selam	MSL		