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Agrometeorological Bulletin

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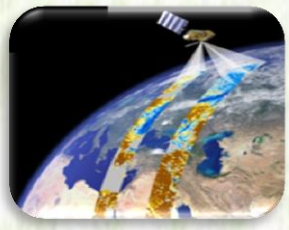

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FORE WARD

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 dekad of April 2024, According to the analyzed agro-meteorological information, most of Belg crop growing as well as Belg season rain benefiting areas experienced enhanced moisture situation in amount and distribution. In relation with the enhanced moisture condition heavy rainfall 30mm and above during 24hrs period were reported at several agro-meteorological stations. This situation might have positive impact on moisture requirement of Belg crops found at various phases of growth and water need of perennial plants, the observed condition was positive to conduct land preparation and sowing of long cycle crops that could be performed during April, it could also gave good opportunity to perform rain water harvesting and storing. Moreover the situation might have positive impact on the ongoing Belg agricultural activities normally moisture deficit areas and water harvesting where that can be used in time of deficit, the observed widespread moisture distribution could also have indispensable contribution on the availability of pasture and drinking water for pastoral areas. However, due to the pronounced widespread and intensified rainfall over some places of the country might result in crop damage, which were attaining at different phenological stages.

During the first dekad of May 2024 the analysed agro meteorological information indicated that the moisture condition had shown relative strength across Belg season rain benefiting and growing areas. In line with this, north- eastern, central, southern, south-western, southe-eastern, western and south-western parts of the country experienced moisture in the range of moderate to heavy in amount. This situation had positive role for early sown of Belg crops which found in different growing stages as well as satisfy the water need of perianal plants and for availability of pastors and drinking water across the pastoral and agro-pastoral areas. In addition, the received moisture during the dekad under review might have positive impact for land preparation for areas which supposed to plant long cycle crops earlier. In like manner, the observed moisture in the southern low land parts of the country could be crucially important toward the availability of pasture and drinking water for the pastoralist and agro pastoralist community. 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.

1. WEATHER ASSESSMENT

1.1. Rainfall amount (1 – 10 May 2024)

During the First dekad of May 2024, some of the adjacent areas of Liben and Afder, Bale, Guji, pocket areas of Borena, Gedeo, Sidama and Wolaita and Gamo Goffa Zones were dominated 100 mm to 200 mm of rainfall. In addition to this some parts of Borena, Liben, Bale, Afder, Gamo Goffa, Amaro, Guji, Sidama, Basketo, Bench Maji, Keffa, Dawro, Wolaita, Alaba, Silite, Hadya, Tsome parts of Oromia Special Zone and Southwest Shewa Zones were received 50-100mm of rainfall. On the other hand some parts of Gode, Arsi, Southwest Shewa, Tip of Shinle and Jigjiga, Tip of East and West Hararghe, Afar Zone 3 and 5, Oromia special Zone, Pocket areas of Jimma, Guraghe, Bench Maji and Keffa Zones as well as Tip of South and North Wollo Zones were received 25-50mm of rainfall. However, Central and Northeastern parts of the country were exhibited 5-25 mm of rainfall and the rest parts of the country especially Western half, Northwestern and parts of Eastern half of the country were received 0-5 mm of rainfall.

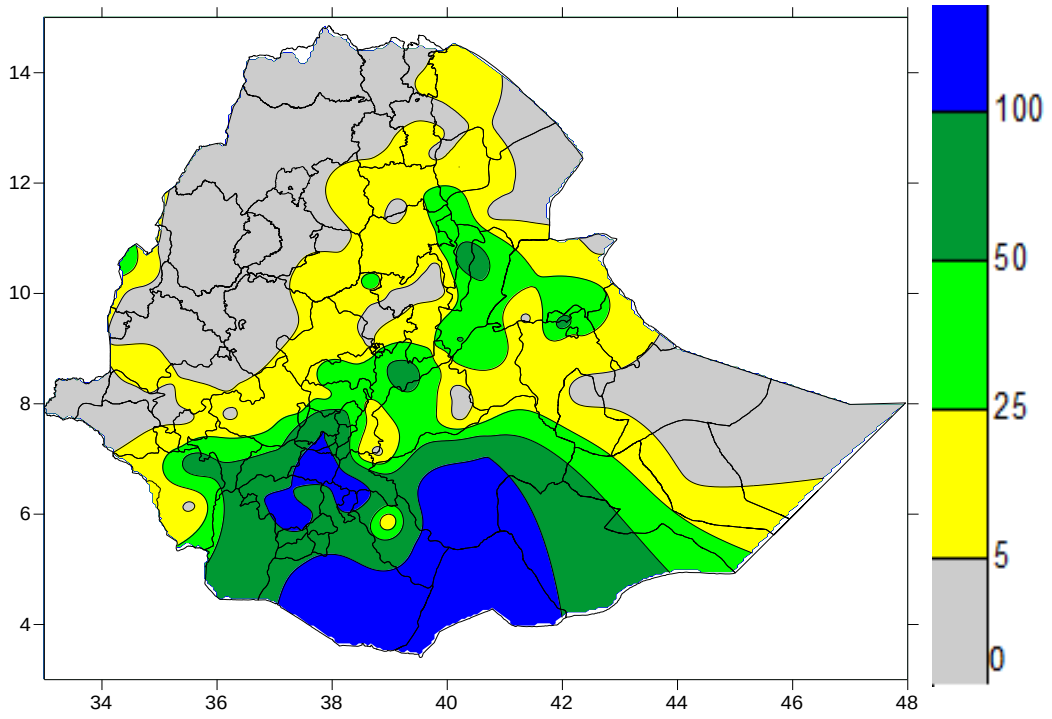


Fig 1. Rainfall distribution in mm (1 – 10) May 2024

1.2. Rainfall Anomaly (1 – 10 May, 2024)

When we look at to the rainfall anomaly map below, during the First dekad of May 2024, some parts of Central, Southern and half of southeastern parts of the country were exhibited Normal to Above Normal Rain fall condition. On the other hand, Most of the Western and Northern half as well as Eastern and South Eastern parts of the country were experienced much below Normal to Much Below Normal rain fall condition

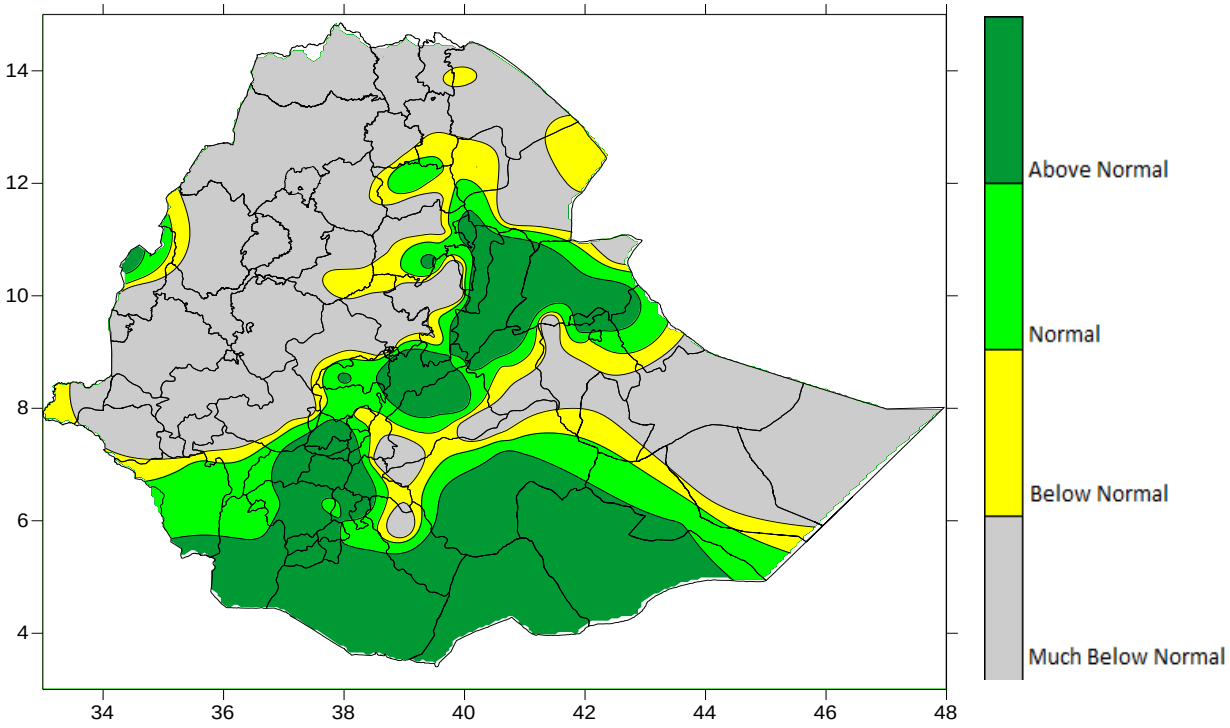


Fig.2 Percent of normal rainfall distribution (1 – 10 May, 2024)

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 May 2024)

As indicated on the moisture status map below during first dekad of March 2024 most parts of Belg growing and rain benefiting areas of the country exhibited Moist to Hyper Moist moisture condition. The rest parts of the countries exhibited moderately Dry too Very Dry.

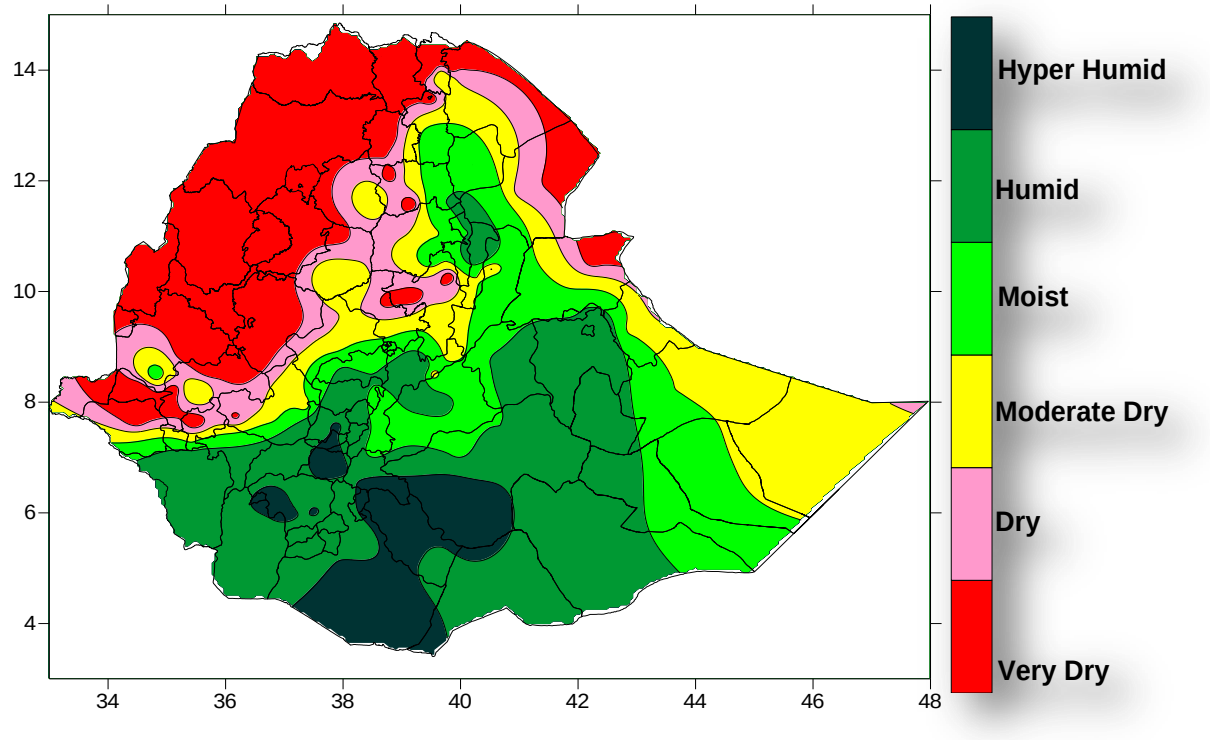


Fig. 3 moisture status for (1 – 10 May, 2024)

2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE

2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE

During the second dekad of April, due to the relative strengthening of rain bearing weather systems better moisture has been experienced over Belg producing and rain benefiting areas of the country, according to this increment the vegetation condition across the country exhibited good vegetation condition (Fig.4. NDVI and Rangeland WRSI in %) This condition might have positive impact to perform land preparation and planting for Meher long cycle crops as well as for perennial plants, early sowed crops and availability of pastors and drinking water over pastoral and agro-pastoral areas.

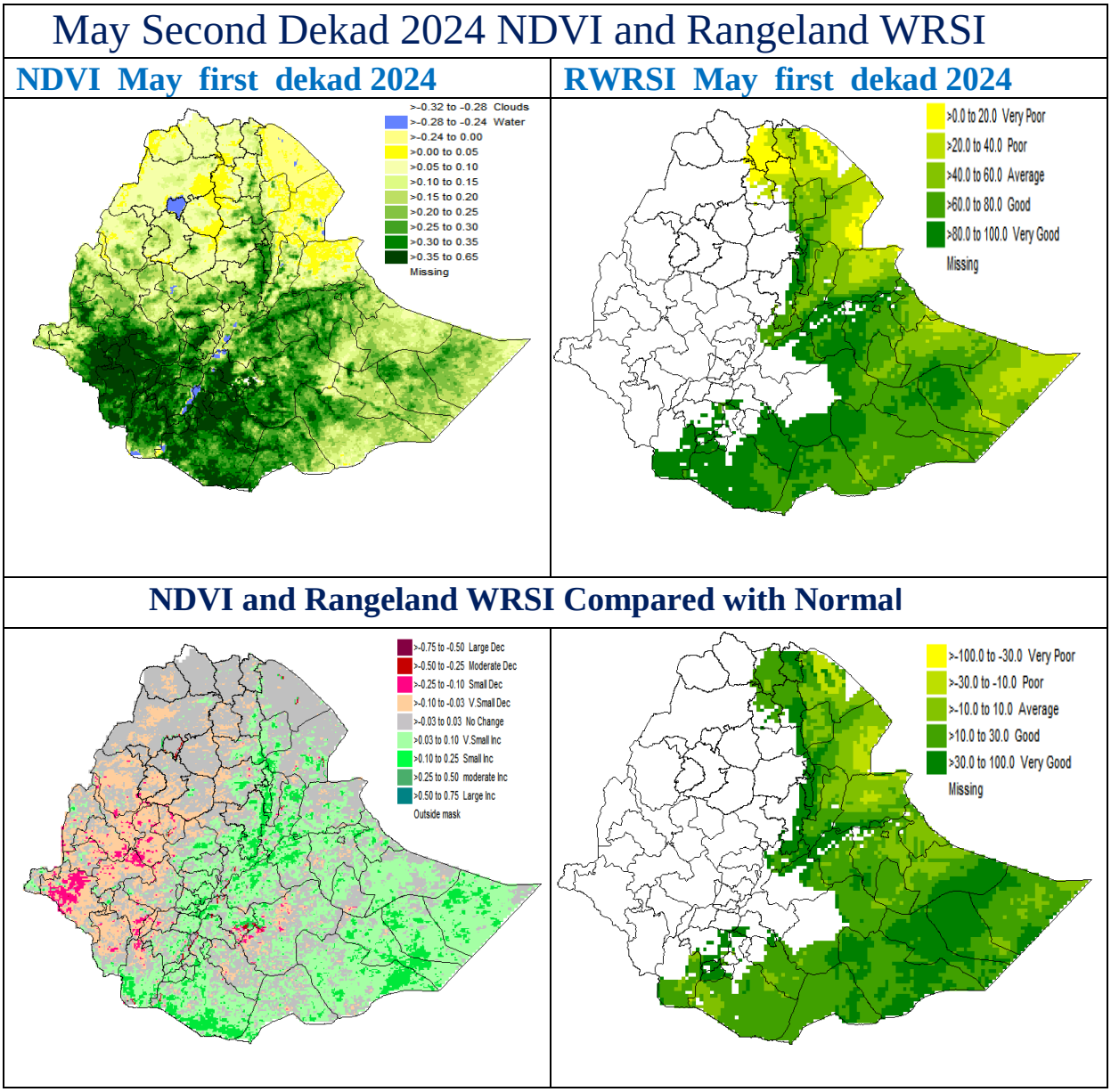


Fig.4. NDVI and Rangeland WRSI in % and Compared to Normal - May 1-10, 2024

2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING SECOND DEKAD of MAY 2024

In the coming second dekad of May 2024, the meteorological forecast information indicates that the seasonal rainfall activity is expected to continue over Belg growing and rainfall benefiting area of the country. This situation expect to improve moisture requirement of Belg and long cycle Meher crops found at different phases of growth, perennial plants, pasture and drinking water availability in pastoral and agro pastoral areas. Therefore, farmers and concerned bodies are advice to conserve available water efficiently and wisely use of moisture that will expect. However, the expected heavy fall on some places across the country would have cause flash flood and water logging on crops field in low lying areas. Thus, proper attention should be undertaken to minimize the risk in areas where there is no proper drainage system and low-lying areas making channel in order to reduce the effect of excess water. On the contrary the excess moisture might have positive impact on normally water deficit areas and water harvesting where that can be used in time of deficit.

3. DEFNITION OF TERMS

ABOVE NORMAL RAINFALL: - Rainfall in excess of 125% of the long termmean

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 cover s 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.

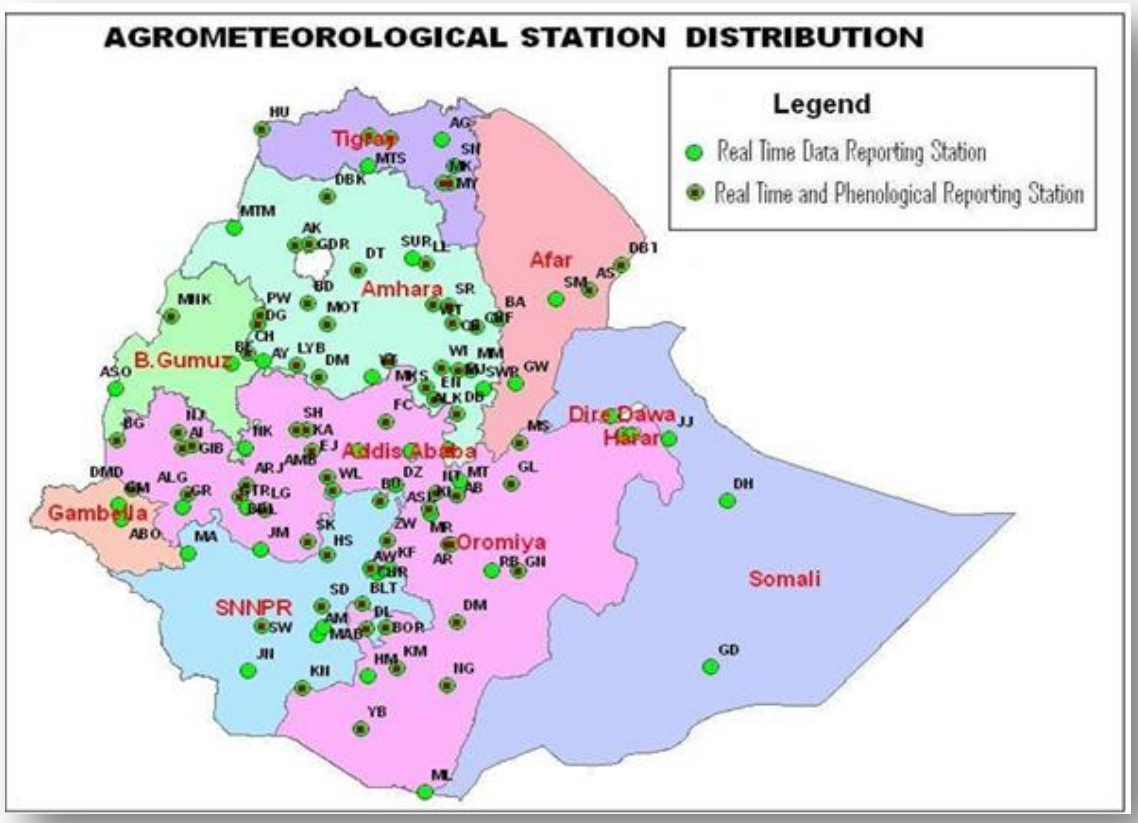
DEKAD: - First or second ten days or the remaining days of a month.

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 Gebeya	SG
Assosa	ASO	Filtu	FL	M/Abaya	MAB	Sirinka	SR
Awassa	AW	Gambela	GM	Maichew	MY	Sodo	SD
Aykel	AK	Gelemso	GL	Majete	MJ	WegelTena	WT
B. Dar	BD	Ginir	GN	Masha	MA	Woliso	WL
Bati	BA	Gode	GD	Mekele	MK	Woreilu	WI
Bedelle	BDL	Gonder	GDR	Merraro	MR	Yabello	YB
BUI	BU	Gore	GR	Metehara	MT	Ziway	ZW
Combolcha	CB	H/Mariam	HM	Metema	MTM		
D. Berehan	DB	Harer	HR	Mieso	MS		
D. Habour	DH	Holleta	HL	Moyale	ML		
D. Markos	DM	Hossaina	HS	M/Selam	MSL		