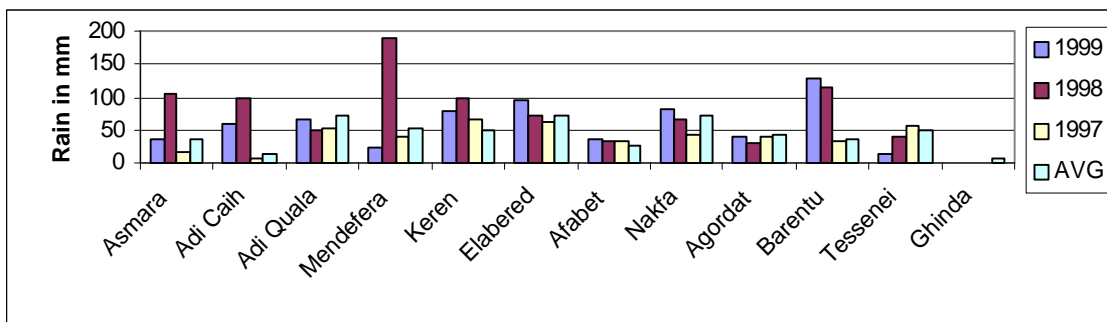


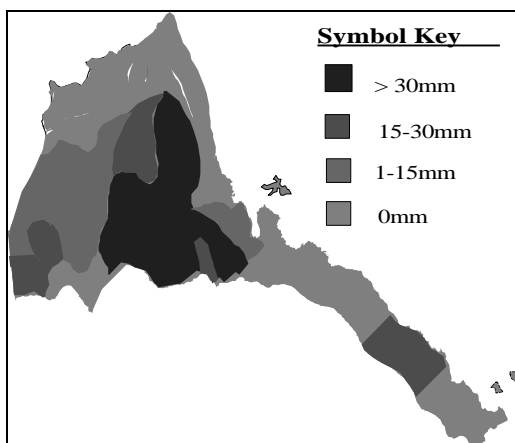
# - Highlights -

- ☺ **Most parts of the High-grounds, Western lowlands** and Central part of Southern Red Sea coast received isolated to scattered rain shower during this dekad.
- ☺ **The Spatial Distribution** of rainfall during this period was depicted in Fig.1. Highest rainfall during this dekad was recorded over Senafe (177mm), Barentu (127mm), Adineamn (102mm), Elabered (94mm), Aligidir (93mm), Molki (90mm), Serejeka (84mm), Nacfa (83mm), Keren (79mm) Aditekelezan (78mm), Afdeyu (77mm), Mekerka (74mm), Adiqaula (64mm), Decamare (63mm), Adikeih (58mm), Hal-hale (57mm), Keren (52.8) and Asmara (36 mm).
- ☺ **Most stations in Zoba Maakel, Debub and Zoba Anseba** reported good **Temporal Distribution** of rainfall during this dekad. Asmara, Adi-Caih, Adi-Quala, Debarewa, Decamare, Maimne, Senafe, Elabered, Keren and Barentu stations reported five and above rainy days.
- ☺ **Much Above Normal** rainfall was recorded over Adi-Caih, Debarewa, Decamare, Senafe, Keren, Aligidir and Barentu stations. While Adi Hawisha, Tsada Christian, Areza, Mendefera, Halhal, Ghinda and Tessenei stations received rainfall **Less than the long Year Average**. The rest stations received **Normal Rainfall** during this dekad.
- ☺ This year's cumulative rainfall since first June is **Normal to above Normal** over most stations as compared to the last Seven years.
- ☺ Comparison of Rainfall during Dekad 24 in 1999, 98, 97 & Long Year Average is shown in Fig 1. Rainfall amount during this dekad is greater than 1997 and the long year Average over most stations. However, some stations received rainfall less than 1998 during the same dekad.
- ☺ As per the ground / phenology report most field crops over Zoba Maakel, Debub and zoba Anseba were at their late vegetative and flowering stages. While early and late vegetative growth was dominant over zoba Gash-Barka.
- ☺ A significant increase in greenness of vegetation was observed over most summer rain receiving parts of the country. The greenness of vegetation, NDVI image for this dekad was depicted in ( Fig.3 ).
- ☺ Wet condition will persist over most summer rain benefiting parts of the country. Hence isolated to scattered rain shower is expected over the high-grounds and western lowlands of the country during the coming dekad 25 (01-10 September) 1999.

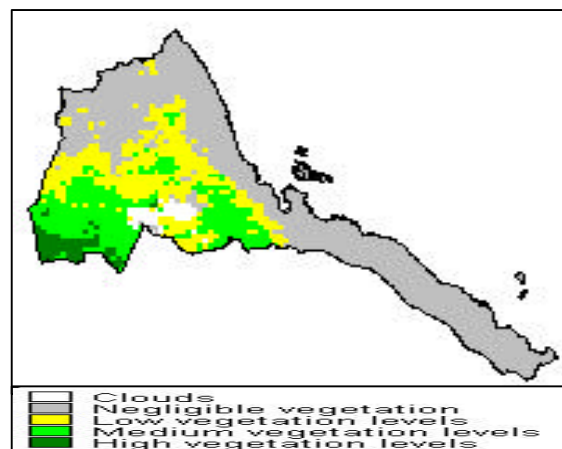
**Fig 1. Comparison of Rainfall during Dekad 24 in 1999, 98, 97 & Long Year Avg.**



**Fig. 2 Rainfall Map of Dekad 24 (21-31 August) 1999**



**Fig. 3 Vegetation Map of Dekad 24 (21-31 August) 1999**



Comments and suggestions for improvement of the Bulletin if any may kindly be mailed to either of the Agencies mentioned below.

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## Dekadal Rainfall and Vegetation Summary

Dekad 24

August 21-31,1999

Station	Rainfall & Vegetation Situation during current dekad					Cumulative Rainfall Since 1 <sup>st</sup> June							
	Actual	Normal	% of Normal	N R D	Ground Report (Phenology)	'99	'98	'97	'96	'95	'94	'93	'92
<b>Maakel</b>													
Adi Hawisha	0	32	0	0	LV/FW	215	313.4	264	261	310	481	272	258
Asmara Airport	35.8	37.2	96.24	8	.	323	409.9	385	187	276	255	245	
Paradizo	38.3	NA	NA	5	.	389	452	332					
Ghegeret	36.6	36	101.7	3	.	394	398.7	382	270	344	347	198	268
Tsada Christian	0	46	0	0	LV/FW	230	367	348	286	310	302		
<b>Dehub</b>													
Adi Caih (HQ)	57.7	26.5	217.7	5	LV/FW	256	340.2	363	165	317	485	187	0
Areza	17.5	34	51.47	1	LV/FW	225	345.8	258	160	187	383	157	266
Adi Quala	64	60.6	105.6	6	LV/FW	544	465.6	540	505	363	546	585	579
Debarewa	171	64	267.2	5	LV/FW	567	497	309	571	299	411	386	338
Decamare	62.5	33	189.4	5	LV/FW	477	345.2	258	317	244	464	272	313
Kudus Giorgis	23.3	53	43.96	3	LV/FW	554	607.6	357	456	319	441	311	394
Mai-aini	37.8	NA	NA	4	LV/FW	386	485.2	323	351				
Maimne	39.3	42	93.57	5	LV/FW	392	390.8	347	350	351	481		
Senafe	177.2	35.5	499.2	9	LV/FW	467	575.1	302	240	372	610	144	226
Tsorona	18.5	NA	NA	3	LV/FW	201	396.8	397					
<b>D. Keih Bahri</b>													
Assab	0	0.7	0	0	NCS	0	85.4	0	14	8	28	2	33
Afambo	0	NA	NA	0	NCS	24.5	227.8						
Thio	0	0	100	0	NCS	0	31	0	0				
<b>Anseba</b>													
Elabered (MOA )	94	72	130.6	5	LV/FW	428	409.4	307	197	480	575	471	609
Keren / Darit	78.8	41.5	189.9	5	LV/FW	417	479.4	475	400	310	221	254	353
Hagaz	21.5	30	71.67	2	LV/FW	260	359.3	204	300	200	281	0	0
Halhal	19.2	60	32	3	LV/FW	359	346.2	391	311	432	345	324	60
<b>S. Keih Bahri</b>													
Afabet	35.5	31.8	111.6	3	EV/LV	182	207.4	0	215	166	241	159	73
Badda	17.5	0	M.A	1	NCS	23.1	82.7	10	0				
Ghelalo	10	0.2	M.A	0	NCS	11	96	1	0	0	63	18	
Foro	0	0	100	0	NCS	0	0	0	0	2			
Ghinda	0	9.2	0	0	NCS	109	134.2	155	55	145	275	69	0
Mahmimet	0	0	100	0	NCS	8	105.5	126	0	88	216	4	
Massawa	0	1	0	0	NCS	0	42	0	0	10			
Menshib	0	0	100	0	NCS	32	29.6	87.9	15	93			
Nacfa MS	82.7	79	104.7	1	EV/LV	250	279.5	354	201	246	242	243	412
<b>Gash-Barka</b>													
Agordat	39	35.8	108.9	1	EV/LV	438	348.9	147	188	181	335	196	422
Aligidir	93	22.7	409.7	1	EV/LV	359	267.6	206	106				150
Barentu	127.4	52.4	243.1	5	EV/LV	439	391	359	251	292	344	368	418
Forto	15	NA	NA	1	EV/LV	248	305.8	182	99				
Gollige	14.5	NA	NA	2	EV/LV	339	338	446	253	274			
Omhajer	0	60.6	0	0	EV/LV	339	402.5	458	310	399	468	456	
Shambuoko R.	0	46.5	0	0	EV/LV	0	347	298	347	363	527		212
Tessenei	14.5	25.9	55.98	1	EV/LV	293	192.9	231	135	402	324	271	NA

### Legend

NCS: Not Rain-Fed Crop season  
 LP: Land preparation  
 SW: Sowing  
 \* : Rain gauge was not installed

GR: Germination  
 EV: Early vegetative  
 LV: Late Vegetative

FW: Flowering / Heading  
 SS: Seed Setting  
 MT: Maturity  
 Not Sig.: No significant change

HV: Harvesting  
 NA: Data not Available  
 NRD: No. of Rainy days  
 M.A: Much above Normal

Data Source:- Ministry of Agriculture; and Management of Asmara Int'l Airport - Meteorological Services

