

**Early Warning Response and Food Security Sector (EWRFS)**  
**Emergency Nutrition Coordination Unit (ENCU)**  
**Quarterly Bulletin**

**Bureau of Agriculture and Rural Development  
(BoARD)**

**Tigray Regional State**

**Mekelle**

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**Volume 3 Number 2**

**1. Bi annual nutrition survey:** Bi Annual Nutrition Survey (BANS) was conducted in three hotspot and food insecure Woredas, namely Raya Azebo, Saesi Tsaeda Emba and Tanqua Abergele between 04 and 29 December 2013.

The main objective of this survey is to assess the nutrition, health, food security situation in the three survey Woredas and determine determinants of the existing nutrition and food security status of the rural population. The overall objective has the following specific objectives:

- To estimate the current prevalence of acute malnutrition in children aged 6-59 months
- To estimate the retrospective Crude (CDR) and Under five death rates (U5DR)
- To estimate morbidity among under five children
- To assess the food security and WASH situation of the surveyed population
- To estimate vaccination and Vitamin A supplementation for children under five
- To make recommendations based on survey findings
- To serve as nutrition information systems, determine trend analysis, for monitoring and early warning (surveillance tool) when conducted bi annually for long period of time and initiate timely responses

The survey was a cross sectional in nature where data and information is collected at particular point in time. A two-stage random cluster sampling method using ENA SMART methodology was employed. The sample sizes were calculated using ENA for SMART software (November 2011 version).

As depicted in Table below, the Global Acute Malnutrition (GAM) level for Raya, Saesi and Tanqua Woredas were 4.2, 8.7 and 13.8 percent

respectively (for more information please see summary report attached herewith).

*Nutrition Survey Report based on Z-Score*

Indicators		Raya	Saesi	Tanqua
Wasting	Global	4.2	8.7	13.8
	Severe	0.3	0.0	1.4
Stunting	Global	26.1	46.4	44.1
	Severe	5.4	12.0	13.7
Under weight	Global	23.1	41.8	47.8
	Severe	3.0	7.8	11.1
Stage of Alert		Acceptable	Acceptable	Serious

**3. Meher Assessment:** Meher assessment was carried out by a multi-agency team in 17 *woredas* of Tigray regional state between 26 November and 11 December 2013. The selection of the Woredas was based on severity of crop production prospects and unusual shortage of potable water.

Overall rating of Meher rainfall was below normal for Azmera and normal for Tsedia rains except in South East, Eastern and part of Central Zone which was below normal. Onset of Azmera rain was late by one to four weeks in most Weredas of the region except Saesi Tsaeda Emba, Hawzen and Ganta Afeshum. There was limited amount of rainfall in most lowland areas of the Region. There was no Azmera rainfall in Tahtay Adiyabo, Mereb Leke, Tanqua Abergele, Emba Alaje and some peasant associations of Raya Azebo Woredas, hence, farmers were forced to shift from long to short cycle crops. Similarly, the onset of Tsedia rain in most Woredas was late by two to three weeks as compared to normal year. In normal times, Tsediya rainfall onsets around mid of June. In most Woredas, there was prolonged dry spell between 2<sup>nd</sup> decade of June and 1<sup>st</sup> decade of July.

The major shift from long to short cycle crops and moisture deficits resulted in low utilization of improved agricultural inputs as compared to what had been planned. Despite the late onset and uneven

distribution of the seasonal rainfall, the overall plantation coverage in five zones were less by only 2 % when compared to plan and same to last year. Out of 788,992 hectare planned about 98% (or 776,985ha) was planted this year.

The food security prospect for the year 2006 is expected to be stable and moderate with exception of people residing in 71 pocket areas from 14 Woredas of Tigray regional state which are highly affected by different adversities such as hailstorm and moisture stress.

In summary, about 4,086,758 people from 31 Woredas are expected to be food in secured, out of which 508,463 are in need of food assistance for 9-12 months. The figure includes 14,546 internally displaced people from Gulomekeda, Ahferom and Mereb Leke and 5,464 affected by unknown liver disease from six Woredas of north western zone.

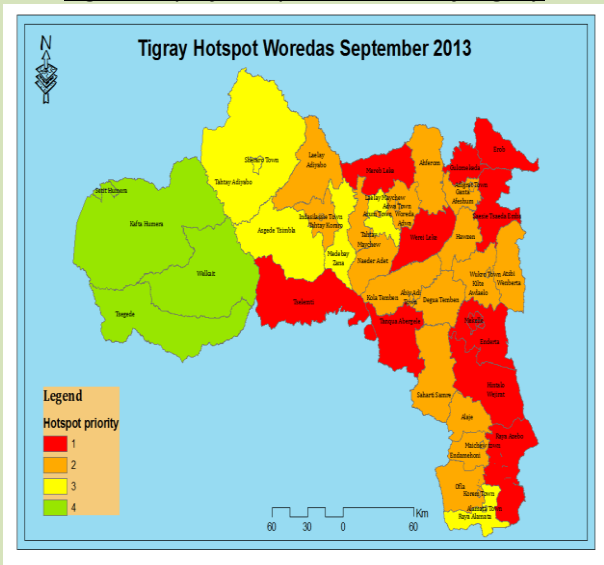
**3. Interventions:** A number of emergency and developmental projects/ programs have been implemented by the government and key stakeholders (CBOs, NGOs & the UN) to support target beneficiaries in need of food assistance, health and nutrition services. The major interventions or programmes being implemented during this quarter (October through Ddecember 2013) include among others;

- ❖ Therapeutics Feeding Program (TFP): either (Outpatient Therapeutic Feeding Program (OTP) or Therapeutic Feeding Unit (TFU) and/or Stabilization Centre (SC)
- ❖ Targeted Supplementary Feeding (TSF) programme (Both the New Generation TSF programme and the regular (previous) one.
- ❖ Community Health Days (CHD) : Screening of children under five and PLM using MUAC and Vitamin A supplementation and Deworming

- ❖ Community Based Nutrition (CBN) and other interventions such as Social Protection
- ❖ Productive Safety Net Program (PSNP)
- ❖ Emergency or relief food / General Food Distribution (GFD)

**4. Hotspot Classification:** Based on the hotspot classification criteria developed by the government, the total number of Woredas classified and determined as hotspot priority number one, two and three are 10, 16 and 5 respectively (see Fig 1: map of hotspot below). Three Woredas were identified as surplus food producing Woredas, hence classified as non-hotspot.

*Fig 1: Map of hotspot Woredas of Tigray*



*Table 1: Program or Intervention Coverage*

Intervention	Hotspot P. # 1	Hotspot P. # 2	Hotspot P. # 3	Non Hotspots	Total	Coverage %
Woreda	10	16	5	3	34	100
TFU/SC	7	11	3	1	22	64.7
OTP	10	16	5	3	34	100
TSF	10	5	0	0	15	44.1
CBN	10	16	5	3	34	100
CHD	10	16	5	3	34	100
GFD	10	16	5	0	31	91.2

As reflected in the table 1 above, the coverage of the OTP, CBN and CHD programme or interventions in the region scored 100 percent. GFD coverage in the region was 91.2 percent. All (10) Woredas classified as hotspot priority number one are receiving complete service of OTP, CBN and GFD interventions. Therapeutics Feeding Unit (TFU) and Targeted Supplementary Program (TSF) programmes in the region scored 64.7 and 44.1 percent respectively.

**5. PSNP and Relief Food Beneficiaries:** Currently, there are a total of 1,238,677 PSNP and 321,427 Relief) beneficiaries in the region (see table below for details).

Beneficiary Type		Male	Female	Total
PSNP	Public Work	497,694	548,041	1,045,735
	Direct Support	70,373	122,569	192,942
	Sub -total	568,067	670,610	1,238,677
Relief Food		163,499	163,928	321,427
Grand Total				1,560,104

**6. CHD Screening Result:** A total of 646,664 children aged 6-59 months were screened between 21 and 25 December 2006 E.C from 786 Kebeles (Tabias) of 34 rural Woredas and 12 towns of Tigray regional state. The screen coverage was 97.9 percent with moderate and severe wasting rate of 3.01 and 0.45 per cent respectively. A total of 68 (0.02%) cases of bilateral edema were detected. During this exercise, the highest top three proxy Global Acute Malnutrition (GAM) rate was recorded in Tselemti (9.41%) followed by Endamehoni (7.58%) and Adi Haki (6.39%). The highest oedematic case was recorded in Kola Tembien and Asgede Tsimbela with 10 and 9 oedematic cases respectively. (See Annex I and II for more details).

The CHD screening exercises for pregnant and lactating mothers were also carried out to determine their nutritional status. A total of 97,622 Pregnant and Lactating Mothers (PLM) were screened using MUAC tape. The screening coverage was 56% that showed a low screening coverage which calls for an action in the area of coordination, community mobilization and sensitization/ awareness creation activities to improve screening coverage, identify malnourished ones and provide the necessary services.

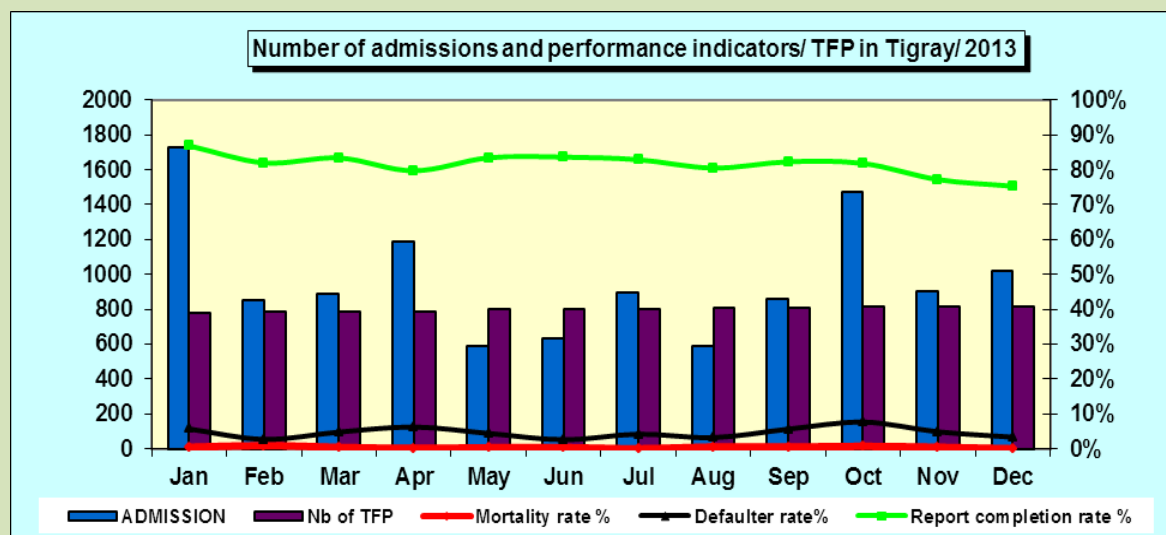
The prevalence of malnutrition (both moderate and severe cases) for PLM was 13%. As far as the PLM malnutrition (MUAC value of < 21) level is concerned, Tanqua Abergele scored the highest with a 100% followed by Quiha 42.9% and Ahferom (35.4%).

Vitamin A and Deworming coverage was 97.8 and 88.1 per cent respectively.

**7. Outpatient Therapeutic Program (OTP):** The monthly TFP monitoring reports collected for three months (October – December 2013) from the six zones of Tigray regional state (Southern, South eastern, Eastern, Central, North western and Western) have indicated that a total of 3,397 children from 817 TFP sites were admitted to the

program during the quarter. On average, the reporting rate for this quarter was 78 per cent (ranging from 75 – 82%). On average, the cure, death and defaulter rate of this quarter was 78, 0.4 and 5.1 per cent respectively which is in an

acceptable range. There were 75 non respondent and 119 medical transfer cases reported. The total number of children discharged from the service this quarter reached 2489 (73%).



The admission rate for October (1470) were higher than November (904) and December (1023), this could be due to mass mobilization and CHD screening exercise conducted in September and December 2013. The reporting rate for the month of October, November and December were 82, 77 and 75 per cent respectively.

Looking at the one year chart above (January – December 2013) a total of 11,613 children were admitted and 8,591 cured. The admission rate in January, October and April scored the highest with a value of 1728, 1470 and 1184 admitted cases respectively. The death rate were relatively higher in February (0.9%) and October (0.7%) while default rates in October (7.7%) and April (6.2%). TFP sites have also increased from 806 to 817 in a year.

In a year, there were a total of 43 deaths and 481 defaulters reported with an average of 81.3% cure, 0.4% death and 4.5% default rate. The reporting rate for the year was 81.6 per cent.

## 8. Targeted Supplementary Feeding (TSF)

**Program:** There were a total of 15 Woredas receiving TSF supplies or foods during the month of October through December 2013. The new generation TSF is fully implemented in 12 Woredas (T/Maichew, WerieLeke, Ahferom, Ganta Afeshum, Degua Tembien, Enderta, Atsbi Wenberta, Gulomekeda, T/Abergele, H/wejirat, Raya Azebo and Irob) at the moment. Tselemti, Mereb lehe and Saesi Tsaeda Emba Woredas has been treated using the old way (quarterly distribution of TSF supply) modalities. Currently, there are Ten Woredas of Tigray regional state classified as hotspot priority number one which are automatically entitled to the New Generation TSF (NG TSF) program receiving TSF foods on monthly basis.

The total number of children aged 6 to 59 months and pregnant & lactating mothers supported by TSF program during this quarter reached 13,166 and 15,226 respectively bringing to a total of 28,392 target beneficiaries. A total of 553.7 MT of

food (492.05 MT of Corn Soybean Blend (CSB) and 61.65 MT of vegetable oil) were distributed and reached the above stipulated target beneficiaries during this quarter.

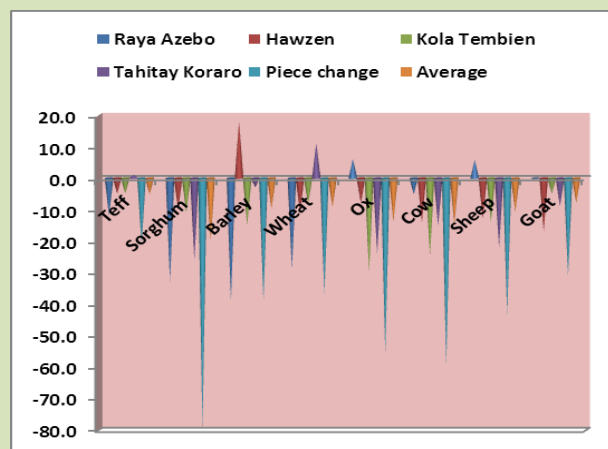
A total of 961 (96 male and 865 female) front-line workers (Woreda Officials, Health Extension Workers and Food Distribution Agents) form ten new generation Woredas (except G/Mekeda and Erob) directly and indirectly involved in the implementation of the TSF programme were trained on screening of children under five and pregnant & lactating mothers and reporting system.

Due attention by Woreda health officials and supervisors, problem of quality reporting and delay in delivery and distribution of the TSF supply were the main challenge encountered during this quarter.

**9. Market Assessment:** Market price during the past quarter (October to december 2013) from four big and well known market sites (Raya, Hawzen, Kola Tembien and Tahetay Koraro), representing South, North, Central, East and West Zones of Tigray regional state, were collected and analysed. Key parameters (crops and livestock) of each livelihood zone were selected for market price and trend analysis. The market price and trend analysis have shown that market price of crops and livestock have shown a decreaseing trend .

As shown in Fig 2, the average market prce for Teff, Sorghum, Barley, Wheat in four market places has decreased by 5.3, 20, 9.8 and 9.2 per cent respectively. The average price for Ox, Cow, Sheep and Goat has decreased by 14, 14.9, 10.8 and 7.8 per cent respectively. Relatively, the price change (-ve) of Sorghum, Cow and Ox were higher than the rest. The price change for crops and livestock in each market for the month of October through December 2013 is reflected in Annex V.

*Fig 2: Average price increment of crop & livestock*



## 10. Capacity Building

### Training:

**Nutrition Survey:** Emergency Nutrition Assessment based on SMART methodology were conducted in the three survey Woredas, namely Raya Azebo, Tanqua Abergele and Saesit Tsaeda Emba to build capacity (knowledge and skills) of front-line workers to conduct the bi-annual nutrition survey. A total of 90 survey teams (around 30 from each Woreda) were trained for three consecutive days. The survey teams were selected from Woreda health, agriculture, sanitation and administration offices. The training covered both theoretical and practical sessions. Following the practical session, the survey team had an opportunity to conduct field test and actual filed work.

**10. Upcoming Events:** Some of the major activities planned for January through March 2014 include among others;

### A. Training and Workshop

- Five days of training on SMART methodology
- Five days of training on Epi-Info software.
- Two days of Workshop on Disaster Risk Reduction / Management

## Annexes

Annex I: CHD Screening Summary Result for Children U5 (October – December 2013)									
Month	Number of Kebeles	Total Screened	Coverage %	Normal $\geq 12.00$	Moderate 11 – 11.99	Severe $< 11$	Oedema Cases	Oedema %	Vit A Cov.
March 2013	786	545,190	84.30	46.17	4.50	0.40	35	0.006	
June 2013	786	597,380	91.64	92.68	3.90	0.34	46	0.010	91.66
September 2013	786	634,264	94.00	94.90	4.50	0.53	74	0.010	
December 2013	786	646,664	97.90	96.54	3.01	0.45	68	0.020	97.80

Annex II: Ranking of CHD Result in Woredas (Oct – Dec 2013)									
Month	Wasting						Oedema		
	Rank	Woreda	Moderate 11 -11.99	Severe $<11.0$	Proxy GAM $<12$	Rank	Woreda	# of Oedema Cases	
Mrch 2013	1	Alage	10.2	0.9	11.1	1	K/ Tembien	9	
	2	Erob	10.8	0.1	10.9	2	T/Abergele	9	
	3	D/Tembien	10.2	0.5	10.7	3	Wolkait	7	
June 2013	1	Ofla	12.2	0.7	12.9	1	L/Maychew	10	
	2	Alaje	10.6	0.8	11.4	2	Alaje	9	
	3	D/Tembien	8.5	0.4	8.9	3	M/Zana	4	
September 2013	1	Wolkait	17.0	1.0	18.0	1	A/Tsembla	9	
	2	Tselemti	8.0	1.0	9.0	2	K/Tembien	9	
	3	E/Mehoni & Ofla	8.0	1.0	9.0	3	T/Abergele	9	
December 2013	1	Tselemti	7.82	1.59	9.41	1	K/Tmebien	10	
	2	Endamehoni	6.92	0.66	7.58	2	A/Tsembla	9	
	3	Adi Haki	6.30	0.09	6.39	3			



**Table III: CHD Summary Result & Ranking for PLM  
(October – December 2013)**

Month	MUAC <21	Percentage	Rank
March 2013	Erob	82.3	1
	D/Tembien	52.7	2
	Enderta	37.8	3
June 2013	T/Maychew	45.3	1
	D/Tembien	43.4	2
	Maychew Town	35.5	3
September 2013	Enderta	34.0	1
	Tselemti	29.0	2
	Alaje	29.0	3
December 2013	T/Abergele	100.0	1
	Quiha	42.0	2
	Ahferom	35.4	3

**Annex IV: OTP Admission, Cure, Death and Defaulter Trends (January - December 2013)**

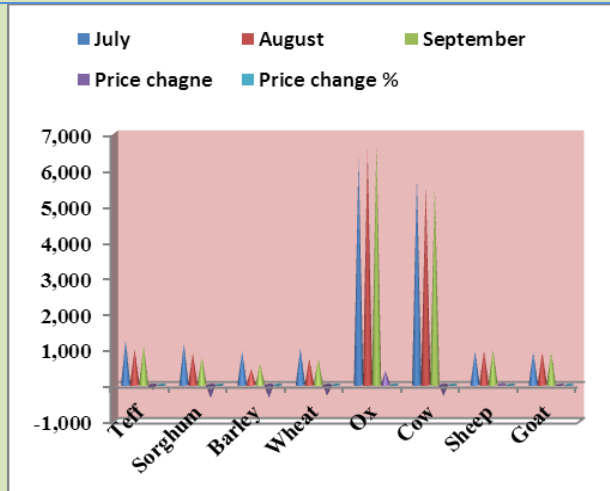
Months	Cases							Percentage						
	Quarter	Admission	Cure	Death	Defaulter	Non responder	Medical Transfer	Discharge	Cure	Death	Defaulter	Non responder	Medical transfer	Report rate
<b>2012</b>														
January 13	3 <sup>rd</sup>	1728	887	5	65	31	30	1142	77.7	0.4	5.7	2.7	2.6	86.9
February		850	987	11	32	44	24	1179	83.7	0.9	2.7	3.7	2.0	82.3
March		890	867	4	49	38	14	1022	84.8	0.4	4.8	3.7	1.4	83.7
April	4 <sup>th</sup>	1184	643	1	54	37	23	866	74.2	0.1	6.2	4.3	2.7	79.7
May		589	829	3	43	38	23	973	85.2	0.3	4.4	3.9	2.4	83.5
June		636	720	3	22	10	26	845	81.7	0.3	4.4	3.2	2.7	83.6
July	1 <sup>st</sup>	893	582	0	29	12	13	690	84.3	0.0	4.2	1.7	1.9	82.9
August		585	638	4	24	18	20	746	85.5	0.5	3.2	2.4	2.7	80.5
September		870	672	3	18	11	13	697	96.4	0.3	2.6	1.6	1.9	76.6
October	2 <sup>nd</sup>	1470	496	5	55	12	53	718	69.1	0.7	7.7	1.7	7.4	81.8
November		812	581	2	45	34	41	778	74.7	0.3	5.8	4.4	5.3	69.4
December		1023	748	0	29	24	29	869	86.1	0.0	3.3	2.8	2.4	75.3
<b>Total</b>		<b>11613</b>	<b>8591</b>	<b>43</b>	<b>481</b>	<b>323</b>	<b>313</b>	<b>10572</b>	<b>81.3</b>	<b>0.4</b>	<b>4.5</b>	<b>3.1</b>	<b>3.0</b>	<b>81.6</b>



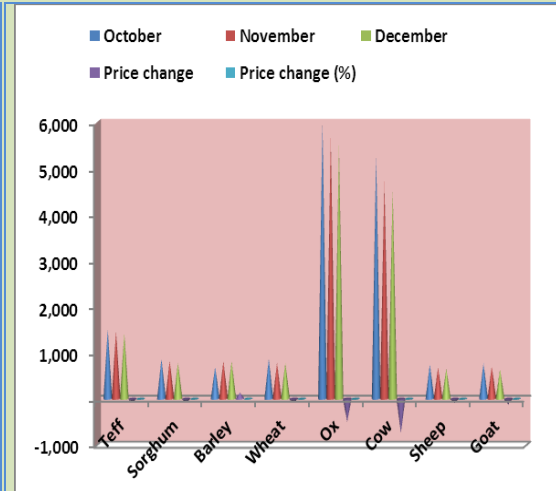
## Annex V: Regional Representative Market Samples and Trends for 3 months

(October – December 2013)

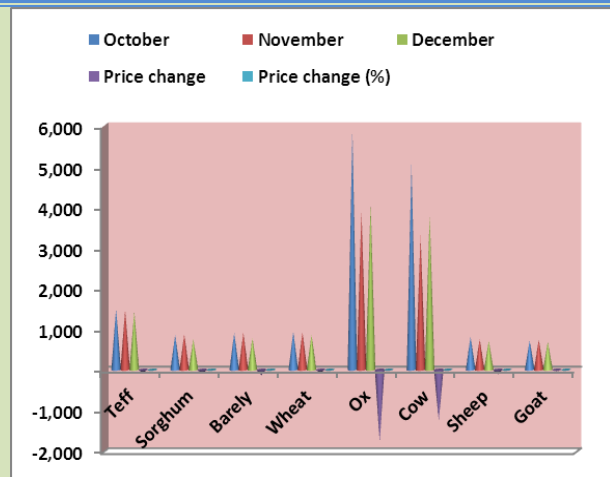
### A. Raya Market



### B. Hawzen Market



### B. Kola Tembien Market



### C. T/Koraro Market

