EMERGENCY NUTRITION QUARTERLY BULLETIN

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1. NUTRITION ASSESSMENT

1.1 STANDARD NUTRITION SURVEYS

Figure 1: Nutrition Survey Results Ethiopia, Jan - Mar 2009

Survey Methodology: In the first quarter of 2009, a total of 29 surveys were conducted in five regions; SNPPR (13), Amhara (4), Tigray (4), Oromia (7) and Beneshangul Gumuz (1). All the 29 surveys were conducted

based on revised interim national guideline on emergency nutrition assessment for Ethiopia revised recently based on the SMART methodology. Eight of the 29 were emergency nutrition surveys aiming at providing baseline information for future monitoring of nutrition interventions. These included surveys conducted in Amhara (3), all surveys in Tigray and B/Gumuz. The remaining were monitoring or end line surveys conducted in SNNPR and Oromia regions following nutrition interventions most of which were initiated in 3rd and 4th quarters as part of the emergency response in the 2008 nutrition crisis. As part of quality control and standardize the undertaking of nutrition surveys in the country, all the surveys proposals were technically reviewed by the Emergency Nutrition Coordination Unit (ENCU). A formal approval was provided for those proposals that met the

requirements.

Sample sizes for the under-five study population ranged from 524 in Soro to 878 in Bure woredas in SNNPR. 25 surveys were conducted within the administrative boundaries and two were conducted in coffee and *Enset* livelihood zones both in SNNPR. Anthropometric and mortality analyses were conducted using Emergency Nutrition Assessments (ENA) for SMART software (October 2007; June 2008 versions). WHO anthropometric standard definitions were used to define case of malnutrition among under-five children. Point prevalence estimates were reported using NCHS references. Vitamin A supplementation, measles coverage, morbidity, MUAC measurements and food security information was analyzed by partners using other software like EPI Info, Excel and SPSS.

1.2 QUALITY CHECK

One of the 29 survey reports was not timely submitted to the ENCU. Thus, quality check was not complete. The remaining 28 surveys were checked by ENCU applying agreed quality check criteria on the surveys' raw data submitted by partners along with respective preliminary reports. Preliminary reports were also reviewed to see if they were prepared following the recommended reporting format, and whether conclusions, recommendations and classification of the nutrition situation were coherent and consistent with the anthropometric and contextual factors. 25 of the 28 surveys were accepted and 3 were rejected because of poor data quality. Two of the three rejected surveys were

conducted in Oromia and one in SNNPR. The 25 data sets were normally distributed, with a degree of kurtosis and skewness fell within acceptable levels of ± 1 - indicating normal distribution around the mean. Standard deviations of the seven surveys were well below 1.2 SD units, implying that the quality was good. The summary results of the three surveys with poor data quality are not presented. Table 1 summarises data quality check results of the 25 surveys.

Other criteria used for quality checks (digit preference, sex ratio, age distribution among the study sample) were within acceptable limits. All the results were endorsed by the ENCU/EWRD.

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[1] *Emergency Nutrition Assessment for Ethiopia, September 2008.*

[2] *Physical status: The use and interpretation of anthropometry. Report of a WHO Expert Committee. Geneva, World Health Organization (WHO Technical Report Series, No. 854). 1995.*

Table 1: Survey data Quality Check Results

Agency	Woreda/ Livelihood Zone	Digit preference		SD of WHZ	Skewness of WHZ	Kurtosis of WHZ	No. 0f WHZ flags (%)	Representativeness of the sample		
		Weight	Height					Age group (months)	% Distribu-tion	Sex Ratio
WVE	Kilte Awulalo	NO	No	0.809	0.090	0.074	0.0	6-29 30-59	47.4 52.6	1.0
WVE	Sasi Tsaeda Amba	NO	No	0.776	0.163	0.079	0.0	6-29 30-59	42.7 57.3	1.2**
WVE	Atsbi Wonberta	NO	No	0.806	0.240	0.103	0.0	6-29 30-59	41.6 58.4	1.1
WVE	Alamata	NO	No	0.842	-0.015	0.217	0.0	6-29 30-59	41.6 58.4	0.9
WVE	Eferata	NO	No	0.888	0.049	0.285	0.0	6-29 30-59	31.0* 69.0	1.1
WVE	Menz Gera	NO	No	0.807	0.065	0.304	0.0	6-29 30-59	36.7* 63.3	0.9
WVE	Tenta	NO	No	0.861	-0.045	0.178	0.0	6-29 30-59	38.0* 62.0	1.0
CONCERN	Ambassel	NO	No	0.816	-0.033	-0.180	0.0	6-29 30-59	44.2 55.8	1.0
GOAL	Kuni	NO	No	0.845	-0.110	-0.236	0.0	6-29 30-59	51.0 49.0	1.0
GOAL	Kombolcha	NO	No	0.811	0.039	-0.372	0.0	6-29 30-59	50.5 49.5	1.0
GOAL	Kersa	NO	No	0.867	0.103	0.076	0.0	6-29 30-59	48.1 51.9	1.0
SCUK	Kumruk	NO	No	0.861	-0.136	0.378	0.0	6-29 30-59	47.4 52.6	1.2**
ACF	ELZ	NO	No	0.804	0.153	0.114	0.0	6-29 30-59	46.0 54.0	1.1
ACF	CLZ	NO	No	0.831	0.155	0.011	0.0	6-29 30-59	42.3 57.7	1.0
GOAL	Shebedino	NO	No	0.832	0.130	0.213	0.16	6-29 30-59	39.3 * 60.7	1.1
GOAL	Arbaminch zuria	NO	No	0.800	0.053	0.226	0.0	6-29 30-59	45.8 54.2	1.0
Samaritan's Purse	K/Gamella	NO	No	0.835	0.159	0.275	0.0	6-29 30-59	44.7 55.3	1.1
Samaritan's Purse	Alaba Special Woreda	NO	No	0.832	-0.022	0.005	0.0	6-29 30-59	48.5 51.5	1.1
Samaritan's Purse	Sankura	NO	No	0.897	0.138	0.030	0.0	6-29 30-59	48.2 51.8	1.0
CONCERN	Shashego	NO	No	0.847	0.349	0.216	0.0	6-29 30-59	44.5 55.5	1.0
CONCERN	Soro	NO	No	0.845	0.233	0.770	0.19	6-29 30-59	47.9 52.1	0.9
GOAL	Damote Gale	NO	No	0.823	0.080	-0.024	0.0	6-29 30-59	43.2 56.8	0.8
GOAL	Damote Pulasa	NO	No	0.854	-0.022	0.361	0.0	6-29 30-59	46.4 53.6	1.0
GOAL	Bule	NO	No	0.828	-0.097	-0.133	0.0	6-29 30-59	45.8 54.2	0.9
GOAL	Gedeb	NO	No	0.939	-0.293	0.042	0.0	6-29 30-59	50.0 50.0	1.0

Age bias
**Sex bias*.

Key survey findings

Nutritional status: Since there was no discernible differences in the results in terms of Global Acute Malnutrition (GAM), Severe Acute Malnutrition (SAM), as well as crude and under-five death rates between emergency and monitoring surveys, a general summary of the findings will be presented.

The levels of malnutrition differed significantly across the 25 woredas in the five regions with GAM ranging from 2.7 percent in Arbaminch to 16.4 percent in Shededino woredas of SNNPR. SAM prevalence was generally low. 16 (64.0%) out of the 25 surveys had SAM levels below 1 percent. The remaining 9 surveys had SAM prevalence ranging from 1.0 to 2.1 percent.

Classification of the severity of the nutrition situation in the 25 woredas was done according to the Ethiopian national guideline for emergency nutrition assessment[3]. About one third (36%) of the 25 surveys were classified as serious; 40 percent as poor and 24 percent as typical in the Ethiopian context. Regional wise, two of the three monitoring surveys conducted in Oromia were classified as serious and recommendations were to continue with emergency nutrition interventions in the woredas. In SNNPR, the situation was a bit mixed with, typical, poor and serious situations (see Table 2) Three of the four surveys conducted in Tigray were classified as poor (see Table 3) indicating a need for close monitoring of how the situation was evolving.

It is important to note that 5 of the 7 surveys conducted in SNNPR and Oromia regions in March 2009, were classified as serious. These results may signal two situations. First, the improvement in nutrition situation observed in the 4th quarter 2008 and the first two months of the first quarter of 2009 was reaching a turning point in the surveyed woredas and others with similar characteristics. Second, close monitoring (April and May) is needed as we move toward the peak of the hunger gap (June-September) in *Belg* and *Meher* dependent areas. Emergency nutrition interventions (general food distribution, blanket supplementary feeding, TSF and TFP) have to be planned and implemented in timely manner whenever appropriate to mitigate the likely risk of nutrition crisis and avoid the 2008 experience.

Due to lack of nutrition surveillance in Ethiopia and the fact that rarely surveys are conducted in the same area at the same period of the year, it was difficult to compare the 2008 and 2009 nutrition situation during the first quarter of 2009. Of the 54 surveys conducted in 2008, ENCU identified two surveys only conducted by ACF in Coffee and *Enset* Livelihoold zones in Sidama Zone in SNNPR, that were conducted in the same areas and period of the year in 2008 and 2009. The results were mixed. The coffee livelihood zone situation had deteriorated from typical to poor and the *Enset* situation had improved from serious to typical situation.

Death Rates: Crude Death Rate (CDR) from 25 surveys were below the emergency cut off points of 1/10000 population/day. Similarly, Under-Five Death Rates were also below national and sphere standard emergency threshold level of 2/10000/day. Good performance of the emergency and routine Therapeutic Feeding Programmes (TFP) in Ethiopia, partly explains the low death rate reported in the nutrition surveys. These results are consistent with generally low death rate reported in TFP during the same period (See Table 8).

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[3]*Guideline for Emergency Nutrition Surveys for Ethiopia, September 2008 or DPPC 2002.*

Morbidity and immunization coverage: Malaria, Diarrhoea and ARI were the main causes of morbidity in all the 25 surveys with variation from one woreda to another ranging from 11.2 in Ambasel in Amhara to 41.2 percent in Damot Pulassa woreda in SNNPR. Unlike the other four regions, malaria was as the major cause of morbidity in SNNPR where it reached an outbreak levels. Reports from nutrition cluster partners indicated that malaria outbreak in the region contributed considerably to the increased TFP admissions reported in the first quarter. In Damot Pulassa for example, malaria, diarrhoea and cough altogether accounted for over 41 percent of the total morbidity in the woreda. Measles, BCG and Vitamin A coverage varied significantly across the 25 surveyed woredas in the five regions. Vitamin A and measles coverage (card and recall) in Tigray was impressive; where all four surveys (Table 2-3) had levels well above the 95 percent sphere standard cut off points in emergency situation.

Majority of the woredas in the remaining regions had levels below the sphere standards. Details of the survey results are summarised in Table 2-3.

Table 2a: Survey results in SNNPR against key indicators

Key indicators	SIDAMA ZONE			GAMOGOFA ZONE	K/T ZONE	Alaba Special Woreda	SILTE ZONE	HADYA ZONE
	ELZ 18-25 Jan	CLZ 27 Jan.-01 Feb	Shebedino woreda 13-21 Mar	Arbaminch zuria woreda 20-31 Jan	K/Gamella woreda 6-11 Feb	Alaba Special Woreda 6-13 Feb	Sankura woreda 6-12 Feb	Shashego woreda 30 Jan-5 Feb
Survey design	50 clusters, 808 children	38 clusters, 696 children	36 clusters, 637 children	34 clusters, 702 children	35 clusters 702 children	43 clusters 738 children	39 clusters 755 children	41 clusters, 591 children
% GAM in Z-scores (95% CI)	6.3 (4.4 -8.2)	8.9 (6.7-11.1)	16.4 (12.5-20.2)	2.7 (1.5-3.9)	4.0 (2.3-5.6)	7.3 (5.0-9.6)	7.7 (5.7-9.7)	6.8 (4.5-9.1)
% SAM Z-scores (95% CI)	0.4 (0.0-0.8)	0.6 (0.0-1.1)	1.6 (0.7-2.4)	0.3 (0.0-0.7)	0.4 (0.0-0.9)	0.4 (0.0-0.9)	0.4 (0.0-0.8)	0
% Kwashiorkor	0	0.4	0.3	0	0	0	0	0
CDR Death/10,000/day (95% CI)	0.04 (0.0-0.11)	0.19 (0.04-0.33)	0.15 (0.00-0.29)	0.08 (0.00-0.21)	0.17 (0.02-0.32)	0.38 (0.15-0.61)	0.33 (0.14-0.53)	0.18 (0.00-0.36)
U5DR Death//10,000/day (95% CI)	0	0.35 (0.00-0.91)	0.49 (0.01-0.99)	0.15 (0.00-0.36)	0.23 (0.00-0.63)	1.00 (0.11-1.90)	0.79 (0.15-1.42)	0.20 (0.00-0.57)
Major causes of U5DR	NA	NR	NR	Unknown	NR	Malaria	Neonatal death & Diarrhoea	Malaria
% Morbidity	21.8	17.1	33.1	15.5	23.5	36.3	37.7	14.9
Major illnesses or symptoms	Cough & Diarrhoea	Cough & Diarrhoea	Diarrhoea & Cough	Cough & Diarrhoea	Malaria, ARI & Diarrhoea	Malaria, ARI & Diarrhoea	Malaria, ARI & Diarrhoea	Malaria, ARI & Diarrhoea
% Measles coverage by card (95% CI)	16.1 (12.7-20.3)	19.1 (15.1-23.8)	7.1 (4.7-10.5)	51.8 (44.2-59.5)	39.2 (34.0-44.7)	20.6 (16.6-25.3)	2.7 (1.3-5.1)	11.0 (5.7-17.0)
% Measles coverage by card + recall (95% CI)	85.3 (81.3-88.6)	92.7 (89.2-95.2)	68.9 (57.9-78.1)	92.8 (90.3-95.3)	95.1 (92.1-97.1)	90.3 (86.6-93.1)	87.2 (83.2-90.4)	70.2 (61.4-79.0)
% BCG coverage (scar) (95% CI)	56.8 (51.8-61.7)	59.1 (53.8-64.3)	45.4 (38.1-52.9)	65.8 (59.5-72.2)	75.8 (70.9-80.1)	74.8 (70.0-79.1)	66.1 (61.0-70.8)	46.1 (CI: NR)
% Vitamin A in past 6 months (95% CI)	82.7 (78.5-86.2)	85.5 (81.2-88.9)	68.6 (57.8-77.8)	93.4 (88.5-98.4)	94.0 (90.9-96.2)	88.6 (85.0-91.7)	83.6 (79.4-87.1)	68.8 (61.6-75.9)
classification of the situation	The situation was normal	poor with aggravating factors of poor coffee harvest	Serious with very late onset & poor amount of *belg* rain	The situation was normal	The situation was normal	poor	poor and food security deterioration remained a concern	Typical for a chronically food in secured community

Table 2b: Survey results in SNNPR, Oromia & Beneshangul Gumuz against key indicators

Key indicators	SNNPR HADIYA ZONE — Soro woreda 9-14 Feb	SNNPR WOLAYTA ZONE — Damot Gale woreda 23-29 Mar	SNNPR WOLAYTA ZONE — Damot Pulasa woreda 7-17 Apr	SNNPR GEDIO ZONE — Bule woreda 18-28 Feb	SNNPR GEDIO ZONE — Gedeb woreda 16-28 Feb	OROMIA WEST HARARGHE ZONE — Kuni woreda 22-30 Mar	OROMIA EAST HARARGHE ZONE — Kombolcha woreda, 11-21 March	OROMIA EAST HARARGHE ZONE — Kersa woreda, 27 March	B/GUMUZ ASSOSSA ZONE — Kumruk woreda, 23 Jan-03 Feb.
Survey design	131 clusters, 524 children	37 clusters, 688 children	35 clusters, 680 children	40 clusters, 878 children	35 clusters, 772 children	36 clusters, 641 children	34 clusters, 685 children	36 clusters, 678 children	39 clusters, 676 children
% GAM in Z-scores (95% CI)	12.4 (8.9-16.0)	9.6 (6.9-12.3)	11.0 (8.5-13.5)	7.1 (4.9-9.2)	10.5 (7.8-13.2)	11.2 (8.2-14.3)	10.8 (8.3-13.3)	12.8 (9.7-15.9)	13.2 (10.2-16.1)
% SAM Z-scores (95% CI)	1.0 (0.2-1.7)	0.7 (0.2-1.3)	2.1 (0.8-3.3)	0.3 (0.0-0.7)	2.1 (1.1-3.1)	1.6 (0.7-2.4)	1.0 (0.0-2.0)	1.5 (0.6-2.3)	1.9 (1.0-2.9)
% Kwashiorkor	0	0.1	0.9	0.1	0	0.2	0.6	0.6	0.4
CDR Death/10,000/day (95% CI)	0.28 (0.11-0.46)	0.23 (0.05-0.41)	0.08 (0.00-0.18)	0.22 (0.12-0.58)	0.24 (0.01-0.46)	0.24 (0.06-0.42)	0.15 (0.00-0.33)	0.13 (0.01-0.25)	0.30 (0.07-0.54)
U5DR Death//10,00/day (95% CI)	0.75 (0.00-1.52)	1.22 (0.26-2.18)	0.77 (0.06-1.47)	0.23 (0.09-0.35)	0.13 (0.00-0.35)	0.47 (0.00-1.09)	0.59 (0.00-1.39)	0.31 (0.00-0.70)	1.13 (0.12-2.14)
Major causes of U5 deaths	Malaria & typhoid	NR	Diarrhoea and body swelling	NR	Unknown	Unknown	Accident	ARI	NR
% Morbidity	18.9	36.5	41.2	18.0	13.6	21.7	27.4	19.8	24.7
Major illnesses or symptoms	Malaria, ARI & Diarrhoea	Malaria, ARI & Diarrhoea	Malaria, ARI & Diarrhoea	Diarrhoea & Cough	Diarrhoea & Cough	Diarrhoea & Cough	Diarrhoea & Cough	Diarrhoea & Cough	Diarrhoea & Cough
% Measles coverage by card (95% CI)	16.5 (9.8-23.2)	14.8 (11.3-19.2)	12.4 (9.1-15.8)	5.0 (2.8-8.5)	6.0 (3.8-8.2)	6.0 (3.0-9.1)	7.7 (4.1-11.3)	12.9 (9.3-16.7)	7.4 (2.1-12.7)
% Measles coverage by card + recall (95% CI)	64.3 (54.5-74.0)	64.2 (57.3-70.6)	87.8 (76.2-89.4)	62.1 (54.1-69.4)	31.9 (22.6-41.2)	59.3 (50.4-68.2)	72.2 (65.9-78.4)	64.2 (55.3-79.2)	86.7 (79.4-94.0)
% BCG coverage (scar) (95% CI)	46.0 (38.7-53.3)	64.8 (58.8-70.4)	62.8 (57.8-67.8)	41.1 (35.2-47.3)	31.5 (24.6-38.4)	38.8 (32.0-45.5)	53.3 (49.0-57.6)	49.7 (42.5-56.9)	51.0 (43.1-59.0)
% Vitamin A in past 6 months (95% CI)	71.2 (63.1-79.2)	92.0 (88.3-94.7)	93.9 (90.2-97.7)	76.9 (69.4-83.0)	60.2 (51.5-69.0)	54.0 (43.8-64.2)	60.2 (50.6-69.7)	83.6 (75.3-91.9)	92.5 (89.2-95.8)
Classification of the situation	**Serious** with aggravating factor of poor *meher* harvest	**Poor** with aggravating factor of high incidence of malaria	**Serious** with poor prospect of sweet potato harvest due to failure of sape rain and poor performance of *belg* rain	**Poor** with aggravating factor of poor food availability due to coffee production failure	**Serious** with aggravating factor of poor food availability due to coffee production failure	**Serious** with aggravating factor of food shortage in lowland areas	**Poor**, food security was okay but needs close monitoring as hunger period was approaching	**Serious** with poor *meher* harvest	**Serious** The food security was okay but some communities needed food assistance due to internal conflict displacement

Table 3: Survey results in Amhara & Tigray regions against key indicators

| Key indicators | AMHARA | | | | TIGRAY | | | |
| | NORTH SHEWA ZONE | | SOUTH WOLLO | NORTH WOLLO | | | | |
	Eferata woreda 22 Jan 02 Feb	Menz Gera woreda 23-29 Jan	Tenta woreda 22-27 Jan	Ambassel woreda 14-22 Mar	Kilte Awulalo woreda 26-31 January	SasiTsaeda Amba woreda 27 Jan.-01 Feb	Atsbi Wonberta woreda 26-31 Jan	Alamata woreda 26-30 Jan
Survey design	36 clusters, 764 children	36 clusters, 779 children	32 clusters, 644 children	40 clusters, 437 children	36 clusters, 674 children	34 clusters, 697 children	36 clusters, 690 children	30 clusters, 573 children
% GAM in Z-scores (95% CI)	5.1 (3.3-6.9)	8.1 (6.0-10.2)	12.7 (9.6-15.8)	11.4 (8.5-14.4)	5.0 (3.3-6.8)	6.3 (4.4-8.3)	2.8 (1.6-3.9)	5.0 (3.3-6.6)
% SAM Z-scores (95% CI)	0.4 (0.0-0.8)	0.6 (0.0-1.3)	1.2 (0.3-2.2)	0.9 (0.1-1.7)	0.6 (0.1-1.1)	0.3 (0.0-0.7)	0.1 (0.0-0.3)	0.5 (0.0-1.1)
% Kwashiorkor	0	0	0	0	0.1	0	0.1	0
CDR Death/10,000/day (95% CI)	0.34 (0.17-0.52)	0.27 (0.07-0.47)	0.05 (0.00-0.15)	0.22 (0.03-0.41)	0.18 (0.05-0.31)	0.11 (0.01-0.22)	0.22 (0.07-0.36)	0.19 (0.06-0.63)
U5DR Death//10,000/day (95% CI)	0.45 (0.00-0.97)	0.42 (0.00-0.91)	0.27 (0.00-0.63)	0.78 (0.00-2.57)	0.30 (0.00-0.63)	0.60 (0.45-1.66)	0.99 (0.24-1.14)	0.44 (0.11-1.78)
Major causes of U5MR	Ari & Diarrhoea	Pneumonia & Diarrhoea	Unknown	Diarrhoea	Unknown	Unknown	Unknown	Unknown
% Morbidity	16.6	27	11.8	11.2	27.6	1.9	21.3	26.5
Major illnesses or symptoms	Ari & Diarrhoea	ARI & Diarrhoea	Diarrhoea & ARI	Diarrhoea & ARI	Cough	No major illness	Cough	Diarrhoea
% Measles coverage by card (95% CI)	60.7 (55.1-65.3)	82.5 (78.2-86.1)	26.9 (22.2-32.3)	18.9 (14.7-23.1)	82.4 (76.2-88.7)	95.7 (92.7-97.5)	83.7 (76.6-90.9)	39.6 (29.2-50.0)
% Measles coverage by card + recall (95% CI)	97.9 (95.3-98.8)	92.4 (89.2-94.2)	89.4 (85.3-92.5)	87.5 (82.2-92.7)	97.3 (95.5-99.2)	100 (98.6-100.0)	98.8 (97.5-100.1)	96.4 (94.5-98.2)
% BCG coverage (scar) (95% CI)	96.2 (93.6-97.8)	86.8 (82.9-89.9)	50.6 (45.0-56.2)	47.4 (41.5-53.3)	97.8 (96.2-99.3)	99.7 (97.9-99.9)	84.9 (78.3-91.5)	71.4 (64.8-78.0)
% Vitamin A in past 6 months (95% CI)	97.8 (95.6-98.9)	98.3 (96.3-99.3)	96.7 (94.0-98.3)	93.1 (89.8-96.5)	94.1 (90.9-97.2)	99.9 (98.4-100.0)	98.6 (97.8-99.5)	94.7 (90.2-99.1)
Classification of the situation	Typical with poor harvest due to untimely rainfall	Poor with aggravating factors of poor harvest to frost attack	Serious with aggravating factors of poor harvest	Serious with aggravating factors of poor harvest, insufficient *belg* rain followed by hunger gap period (March May	poor with aggravating factors of poor harvest, pasture and livestock	poor with aggravating factors of poor harvest, pasture and livestock	Typical for a chronically food insecure community with aggravating factors of poor harvest, pasture/ livestock	poor with aggravating factors of poor harvest, pasture and livestock

Somali Standard Nutrition Surveys: In February 2008, the government in collaboration with partners agreed to conduct standard nutrition assessments in the Somali region under the coordination and leadership of the Ethiopian Health and Nutrition Research Institute (EHNRI). A national steering committee co-chaired by EHNRI and UNICEF was formed as well as a technical team spearheaded by the ENCU. Similar technical team was formed at Somali region level.

The federal technical team visited Somali region twice during the planning stage and discussed with regional counterparts on the planning and preparations of the surveys. In order to have a fair representation of the nutrition situation in the region, it was agreed to conduct the surveys based on livelihood zones. There were 17 livelihoods in the region which in turn were consolidated into 11 mega livelihoods. Seven surveys representing seven different livelihood zones were proposed by the regional authorities and agreed by the federal steering committee. The selection of the livelihoods zones and woredas to be surveyed considered the following factors: accessibility, security, logistics, availability of human and financial resources etc. The federal technical teams prepared the survey proposal, manual, tools, equipments and logistics. All these were discussed and agreed with the regional technical team.

Because of the number of surveys

involved, considerable resources in terms of human, financial, logistics and equipments were needed. In monetary terms the seven surveys were estimated to cost about US$458,337. Nutrition cluster partners[4] contributed either in kind and/ or financial. Large part of the assessment budget (71.2%) was funded by DFID through the HRF fund managed by UN OCHA. The actual implementation of the survey was planned to commence from 3rd week of April to 2nd week of May 2009. Preliminary results were expected by 3rd-4th week of May 2009.

Hotspot woredas: ENCU in collaboration with partners reviewed the list of the hotspot woredas by updating the 2008 fourth quarter hotspot list. By mid March 2009 revised list of 151 hotspot woredas was shared with nutrition cluster partners and other stakeholders. Compared to the fourth quarter of 2008, the number of hotspot woredas had decreased by 30 percent from 216 in 2008 to 151 March 2009. Distribution of the number of hotspot woredas across the country is presented in Table 4 below.

Table 4: Distribution of the hotspot woredas by mid March 2009 in Ethiopia

Region	Priority 1	Priority 2	Priority 3	Total
Tigray	12	11	8	31
Afar	11	5	7	23
Amhara	35	11	3	49
Oromia	44	23	3	70
Somali	14	13	26	53
Beneshangul Gumuz	2	3	0	5
SNNPR	33	29	2	64
Gambella	0	9	0	9
Dire Dawa	0	1	0	1
Total	**151**	**105**	**49**	**305**

Criteria used during the hotspot classification process included: levels of malnutrition, food security situation, TFP admissions, stress condition, migration etc. The classification process was done at two levels, at regional and federal. The regional level classification was reviewed at federal level and where necessary was considered during the overall prioritization of the woredas. It has to be noted, however, that classification used at both regional and federal was a bit subjective and DMFSS and partners stressed for the finalization of the IPC[5]

classification system so as to standardize the process and criteria across the country. A special task force composed of members from ENCU, WFP, DMFSS, FAO, SC UK, CARE started working on the IPC system/approach. Meaningful comparison of the 2008 and 2009 situation using changes in number of hotspot woredas could not be made because prioritization was not done in three regions (Tigray, Amhara and Afar), that experienced nutrition emergency in 2008.

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[4]*Partners that contributed to the Somali survey included: SC UK, ACF, SC US, Merlin, Mercy Corps, Samaritan Purse, MSF Belgium, MSF Holland, UNICEF, WFP, WHO.*
[5]*Integrated Phase Classification.*

Surveys whose quality has been checked, accepted and reports endorsed by the EWRD are stored in the ENCU nutrition survey data base. The data base is posted on the ENCU web page of the DPPC website: www.dppc.gov.et/pages/ENCU.htm and can be accessible by interested users in and outside the country. By the end of the first quarter 2009, the data base had a total of 534 records. Most of the surveys are either emergency surveys conducted to ascertain nutrition situation and plan for emergency response or monitoring surveys following nutrition interventions. These surveys were conducted at different period of the year. They were not conducted for surveillance purposes as such though some could provide useful trends. Table 5 summarises the distribution of the surveys conducted in the various regions in Ethiopia in the last 10 years.

For the first time in the last 10 years an emergency survey was conducted in Beneshangul Gumuz region (Table 5) and a formal request for conducting standard nutrition assessment in the area was submitted to the DMFSS/ENCU by the Gambella regional authorities. If conducted, that would be the first standard nutrition assessment in the region. Gambella and Beneshangul regions are usually not prone to emergency nutrition crisis experienced in other regions in Ethiopia. This could partly explain lack of standard nutrition assessments in the two regions.

Other nutrition information that is updated regularly include: TFP, Enhanced Outreach Strategy (EOS) Productive Safety Net Programme (PSNP), Targeted Supplementary Feeding Programme (TSFP) and Emergency Food Relief. This information are not posted on the ENCU webpage and can only be accessible with permission from the EWRD/DMFSS.

Table 5: Number of nutrition surveys conducted per region per year since 2000.

Region	Year										Total
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
SNNPR	9	5	35	30	14	25	20	16	36	13	203
Oromia	3	2	20	27	22	20	14	6	9	3	126
Amhara	5	9	24	17	9	7	6	4	8	4	93
Somali	8	5	5	5	8	11	12	2	0	0	56
Tigray	0	0	6	7	3	3	0	8	0	4	31
Afar	0	0	4	5	1	6	4	2	1	0	23
Gambella	0	0	0	0	0	0	0	0	0	0	0
B/Gumuz	0	0	0	0	0	0	0	0	0	1	1
Harare	0	0	0	0	0	0	0	1	0	0	1
Total	25	21	94	91	57	72	56	39	54	25	534

2. EMERGENCY NUTRITION INTERVENTIONS

This section provides brief account of the emergency nutrition interventions focusing on new admissions, coverage and performance of Therapeutic Feeding Programme (TFP).

2.1 NEW ADMISSIONS IN TFP (THERAPEUTIC FEEDING PROGRAMME)

The TFP admissions is influenced by food access and intake, access to and utilization of health care, personal and environmental hygiene, infant and young child practices, coverage of TFP and supplementary feeding programmes (classic and TSF), quality of TFP services. Overall a total of 23,749 severely malnourished children were admitted in 550 (40.1 percent of the 1372 TFP sites) TFP sites from January to March 2009 from the six regions (SNNPR, Oromia, Tigray, Amhara, Somali and Afar) vulnerable to nutrition emergencies in the Ethiopia. It should be noted, however, that the below trend represents only the sites whose monthly TFP reports were obtained during the reporting period and not the entire country. There was a considerable increase in TFP admissions from February to March as shown in Figure 2 below.

Figure 2: Trends in TFP admissions and report completion rate (40% reporting sites) in Ethiopia, Jan - Mar 2009[6]

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However, there was a clear increasing trend in TFP admission in several woredas in SNNPR. Such woredas included: Boricha, Damboya, Damot Gale, Damot Sorie East Badawacho, Loka Abaya etc. with reporting rate of 80 percent and above. SNNPR with over 38 percent of the TFP sites in the country as of March 2009 had about 52.6 percent reporting rate. Similarly, TFP admissions were increasing in some woredas in Somali region, particularly in Degahbur and Kelafo with 80 percent and above reporting rate.

The increasing admissions trends in SNNPR (Fig 3) was partly because coffee dependant woredas of Sidama and Gedeo zones could not recover from the 2008 nutrition crisis due to about 60 percent coffee production failure. These areas continued experiencing increased admissions in TFP throughout the first quarter of 2009. Household food insecurity in other zones like Wolayita also contributed to the overall increasing TFP admission

trend at regional level. Because of low reporting rate in Oromia region, it was difficult to deduce a meaningful trend. However, the total number of TFP admissions were likely to be higher given that West Arsi , East and West Hararghe zones, despite reports of increased admissions in TFP sites, their Jan - Mar reports were not submitted to the ENCU. Admissions in other regions (Amhara and Tigray) were relatively stable with some few areas reporting increased admissions.

Direct comparison of new admissions between 2008 and 2009 was not meaningful because of one major reason. The number of TFP sites in the first quarter of 2009 is about four times the number that existed in the same period in 2008. Thus, direct comparison could be misleading in the sense that numerical increase in 2009 may not imply that the situation is worse than 2008 but rather may reflect increased TFP service coverage.

Figure 3: Increasing TFP admissions in SNNPR's TFP reporting sites (52.6 % reporting rate), Jan - Mar 2009

Despite the decrease in the number of the hotspot woredas compared to the fourth quarter, coverage of the emergency nutrition interventions remained relatively the same. This was partly because, there were new woredas that were defined as a hotspot for the first time which by then were not covered by nutrition interventions.   There was a slight increase in the coverage of the woredas with comprehensive interventions (TFP+TSF/SFP) from 46 (fourth quarter) percent to 49.0 percent by the end of the first quarter. Overall, about 80 percent of the hotspot woredas had at least one emergency nutrition intervention. Coverage of nutrition interventions in the hotspot woredas is shown in Table 6.

ENCU as the nutrition cluster coordinating unit continued advocating for expanding emergency nutrition in priority number one woredas through MANTF/ cluster meetings and the HRF meetings. As it was in 2008, HRF continued supporting nutrition related interventions in the country. During the first quarter, a total of 7 related nutrition projects were funded by HRF. Before the nutrition projects were funded by the HRF, the proposals for emergency nutrition interventions were reviewed by the nutrition cluster and recommendations were made to the HRF to either fund or not depending on the quality of the proposal and technical capacities of the applying partners.

Table 6: Coverage of emergency nutrition interventions in hotspot woredas in Ethiopia Jan - Mar 2009

Region	# hotspot woredas	TFP + EOS/TSF and/ or SFP (%)*	TFP but No SFP or EOS/TS (%)	EOS/TSF but No TFP (%)	No TFP No EOS/ TSF No SFP (%)
SNNPR	33	21 (63.6)	4 (12.1)	-	8 (24.4)-
Tigray	12	12 (100)	-	-	-
Oromia	44	8 (18.2)	18 (40.9)	3 (6.8)	15 (34.1)
Amhara	35	19 (54.3)	5 (14.3)	10 (28.6)	1 (2.8)
Somali	14	11 (78.6)	2 (14.4)	1 (7.1)	-
Afar	11	3 (18.2)	1 (9.1)	3 (27.3)	4 (45.5)
B/Gumuz	2	-	1 (50.0)	-	1 (50.0)
Overall	151	74 (49.0)	31 (20.5)	17 (11.3)	29 (19.2)

2.3   SUPPLIES

A total of 456 RUTF metric tons were distributed by UNICEF to different parts in the country for both routine and emergency nutrition interventions. The amount distributed was part of the RUTF procured in the 2008. Meanwhile, a total of 775 metric tons of RUTF were in the pipeline.

In brackets are percentages.

2.4 PERFORMANCE OF THERAPEUTIC FEEDING PROGRAMMES (TFP) IN ETHIOPIA, JAN - MAR 2009

The quality of the emergency and non-emergency nutrition interventions is partly determined by the level of performance indicators compared against the national and sphere standards. Based on the received reports in the reporting period, performance indicators of the emergency nutrition interventions were well above the national and Sphere Standard cut off points compared to the last two quarters of 2008. Recovery rate increased by 6.5 percent from 77 to 81.8 percent in the fourth and first quarters of 2008 and 2009, respectively. Defaulter rate, one of the notorious indicators suspected to have been affecting the overall recovery rate in the previous quarters of 2008 decreased as well from 5 to 3.6 percent. Selected performance indicators as recommended by the national guideline and Sphere Standards is shown in Table 7.

The challenge is if the first quarter attained performance levels will be maintained and improved in the coming quarters of 2009.

Despite that, the overall performance indicators were above the National and Sphere Standards, recovery rates were still below the recommended cut off points in Tigray and Somali regions. Accessibility challenges in some part of Somali region could partly explain considerable proportions in "other rates" and therefore low recovery rate. For Tigray, the reason is likely to be due to higher medical transfers, non-respondent and transfer outs. Follow up will be made in collaboration with Tigray regional Health Bureau to find out the reasons behind consistent relatively higher defaulter and other rates.

Table 7: Performance of emergency and non-emergency TFP interventions in Ethiopia based on monthly reports Jan- March 2009

Region	Total admissions (n)	Reporting Rate (%)*	Total discharge (n)	Recovery/ Cure Rate (NS>75%)	Death Rate (NS<5%)	Defaulter Rate NS<15%)	Other Rates ** (%)
Amhara	1610	48.6%	1406	81.2%	1.8%	5.5%	11.5
Oromia	4027	21.6%	3551	87.1%	0.3%	1.1%	11.5
SNNPR	10470	52.6%	9795	85.1%	0.5%	1.8%	12.6
Somali	4330	31.3%	3688	72.2%	0.3%	7.7%	19.8
Tigray	2221	63.6%	2048	68.8%	0.5%	9.1%	21.6
Afar	1091	66.7%	775	96.8%	3.2%	0.0%	100
Total	23,749	40.1%	21,263	81.8%	0.6%	3.6%	14.0

*In brackets are percentages.
**Other rates refer to medical transfers, non-respondent and transfer out.

2.5 TARGETED SUPPLEMENTARY FOOD (TSF)

During the first quarter, WFP in collaboration with the government distributed Targeted Supplementary Food (TSF) to 293,557 under-five children, pregnant and lactating women in six regions as part of the EOS/TSF programme implemented by Government of Ethiopia. It was not possible to have distributions in Afar in this quarter due to food resource constraints. Table 8 summarizes the amount of food distributed and respective beneficiaries in the six regions. Currently WFP is supporting 166 TSF woredas. Of 151 March 2009 hotspot list Priority one, 124 (82%) were covered by TSF programme during this quarter.

Table 8: Regular TSF distributions Jan - Mar 2009 in six regions

Region	Dispatched food (MT)	Total beneficiaries	Beneficiaries	
			Under-five	Pregnant and Lactating women
Amhara	997.332	35,803	24,346	11,457
Gambella	86.440	3,103	2,110	993
Oromiya	1,313.110	47,139	32,055	15,084
SNNPR	2,543.598	91,312	62,092	29,220
Somali	2,361.828	84,787	57,655	27,132
Tigray	875.049	31,413	21,361	10,052
Total	8,177.357	293,557	199,619	93,938

Meanwhile, results from the first three months of data collection under the TSF 2008 outcome evaluation study conducted by WFP were presented to a various stakeholders. The main conclusion as regards to TSF effectiveness was that TSF had a statistically significant nutritional benefits for the children enrolled into the programme. However, the effectiveness of TSF was hampered by two main factors: 1) EOS[7] screening inclusion errors were found to be 46 percent (by MUAC) or 63 percent (by W/H z-score). The report also indicated that acutely moderately malnourished children responded well to TSF provided than well nourished children wrongly enrolled into the TSF programme.

2) Widely spread food sharing in the households of the enrolled children in the TSF. This was evident even during the study period where several other family members shared TSF food that was meant for the moderately malnourished children. This practice slows down the recovery and other intended effect on the malnourished child.

The report recommended that 1) EOS screening should be improved to ensure appropriate targeting into TSF and 2) Food sharing needs to be studied further and addressed by programme design. The final report reflecting 6-months data collection and analysis would be available in June 2009.

2.6 EMERGENCY NUTRITION INTERVENTION CHALLENGES

1) Low TFP monthly reporting rate especially from TFP sites under the direct management of the local authorities across the country except in Tigray region. TFP data base at ENCU show that 85 percent of the monthly TFP reports received during the first quarter were submitted by NGOs implementing nutrition interventions. Despite the current low reporting rate (40%), is two times higher, compared to 2008 where it was below 20% at this time of the year. 2) Low coverage of TFP interventions within hotspot woredas and hence not reaching all the vulnerable children. Through the Heath Extension Programme (HEP) the FMOH with support from UNICEF and other partners, significantly expanded provision of TFP

services in the country. The number of TFP sites has increased almost four times compared to same period in 2008. However, more TFP (both OTP and TFU) sites are still needed so as to bring the services closer to the beneficiaries and reach many more eligible children and other vulnerable groups. 3) Limited partners' capacities to expand to emerging new hotspot woredas. 4) Limited accessibility to intervention areas due to security challenges especially in some parts of Somali region that impaired monitoring and follow up of children admitted in TFP sites. 5) Lack of supplementary feeding programme in some of hotspot woredas with TFP interventions (see Table 6 above).

[7] *The Enhanced Outreach Strategy (EOS) is implemented by the Government supported by UNICEF.*

3. ESTIMATED TFP BENEFICIARIES AS PART OF THE JAN -JUN 2009 HUMANITARIAN APPEAL

The projected number of children to be admitted in TFP is the basis for planning and allocation of resources by the Government and partners. Since, nutrition assessments were not conducted along with the needs assessments, secondary data analysis was conducted using the year 2000 (provided by the Ethiopian Meteorological Department) as analogous for the 2009. The Jan-Jun TFP beneficiaries were estimated based on the 2008 *Meher* Needs Assessments. According the final report[8] , estimated beneficiaries in PSNP and the emergency needy population was 11.8 million. A maximum of 2.0 percent SAM prevalence (analogous to 2000) and under-five population was estimated at 14.5 percent of the total rural population in the affected woredas was used to estimate total beneficiaries in TFP.

Putting the above factors into the equation, the total TFP beneficiaries from Jan - Jun 2009 were estimated at 34, 379.

This estimate is likely to have underestimated the total TFP beneficiaries in the 309 woredas that needed humanitarian food assistance during the reference period. This is because during the first three months (Jan -Mar) of 2009, a total of 23, 749 (69.1% of 34,379) (Table 7) had already been admitted in TFP sites in six regions; SNNPR, Amhara, Tigray, Oromia, Somali and Afar. ENCU estimated that if the TFP estimate would have been based on the overall total rural population covered by the needs assessment using similar assumptions explained above, the plausible estimated of the TFP beneficiaries Jan-Jun 2009, would have been around 87,696.

4. RETROSPECTIVE STUDY ON NON-ANTHROPOMETRIC DATA BASED ON NUTRITION SURVEYS CONDUCTED IN ETHIOPIA. (2000-2008)

As briefly explained in the 2008 4th quarterly emergency nutrition bulletin, the above mentioned study is conducted by Nutrition Works a partnership of international nutritionist based in London. The study is conducted in collaboration with the ENCU, UNICEF and GOAL Ethiopia. The objectives of the study were explained in the 2008 ENCU fourth quarterly bulletin[9] , however, for a quick reference, they are recited below 1) To evaluate the methods, data and indicators of non-anthropometric variables collected in nutrition surveys conducted in Ethiopia. 2) To evaluate the quality of the methods and data reported in relation to ENCU (government) guidelines. 3) To evaluate the conclusions and recommendations made from the data. 4) To examine the use made by agencies or programmes of the survey data collected.

In order to address the fourth objective above, two staff from the Nutrition Works

conducted a key informant interview with nutrition cluster partners responsible for designing and conducting nutrition assessments and decision makers, donors, representatives of government departments in Addis Ababa and in two regions, SNNPR and Amhara in early to mid February, 2009. Findings of the study will be shared to all partners and stakeholders in a feedback workshop that will be organized by the ENCU in collaboration with GOAL and Nutrition Works in June or early July 2009. Partners would be informed of the date and venue later. Recommendation and consensus on collection and use of contextual data will be shared with the EWRD for approval after which will be incorporated in the interim guideline for emergency nutrition surveys in Ethiopia (September 2008). The study is funded by Global Nutrition Cluster and the UN OCHA Ethiopia Humanitarian Relief Fund (HRF).

[8]*Needs Assessment report   January to June, 2009.*
[9]**Fourth Quarterly Emergency Nutrition Bulletin, December 2008.**

5. WORKSHOP ON NUTRITION ASSESSMENT METHODOLOGY IN PASTORALIST COMMUNITIES IN ETHIOPIA

ACF France in Ethiopia, in collaboration with the ENCU organized a workshop on Pastoralist Nutrition Survey in Ethiopia from 5-6th March 2009 and officiated by the Director for Early Warning and Response Directorate of the DMFSS. The objective of the workshop was to share experiences of the findings of the pilot study in Mali and explores the possibility of conducting similar pilot studies in the Ethiopian context.

Several technical issues around the proposed Pastoralist Survey Methodology were discussed. These included: validation of the qualitative and quantitative data; sampling unit; training requirements; scope of the assessment (collecting non-anthropometric data); case definition of acute malnutrition (use of MUAC versus Weight for Height); sample size etc. Further discussions on these issues were still needed. There was general consensus, however, on the need for piloting the Pastoralist Survey Methods in Ethiopia using a Development Surveys approach of See one, Do one and Teach one. A Technical Implementation Group for Ethiopia Roll out (TIGER) comprising ACF, ENCU, SC-US/SC-UK, EHNRI and the EWRD would be formed. TIGER would be responsible for conducting the developmental surveys.

The need for the developing survey methods for pastoralist communities is grounded on the fact that over the years there have been challenges in using the standard nutrition assessment methods in pastoralist areas as well as interpretation of the survey findings. The development surveys findings will enrich and improve chapter 8 of the national interim guideline on emergency nutrition assessments for Ethiopia (September 2008 edition). The workshop was attended by participants from nutrition cluster partners both national and international NGOs, UN agencies, EWRD and FMOH/EHNRI and facilitated by Mark Myatt, Anne-Marie and ACF France (Ethiopia).

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