



# EMERGENCY NUTRITION QUARTERLY BULLETIN

(First Quarter 2008)

Emergency Nutrition Coordination Unit

Early Warning Department

(Disaster Prevention and Preparedness Agency)

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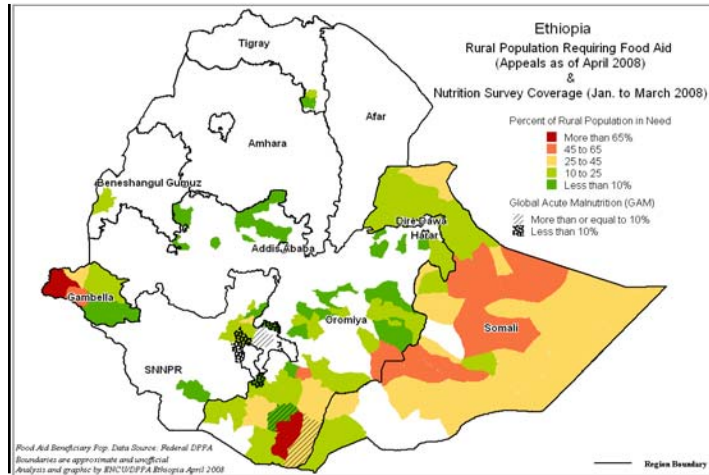
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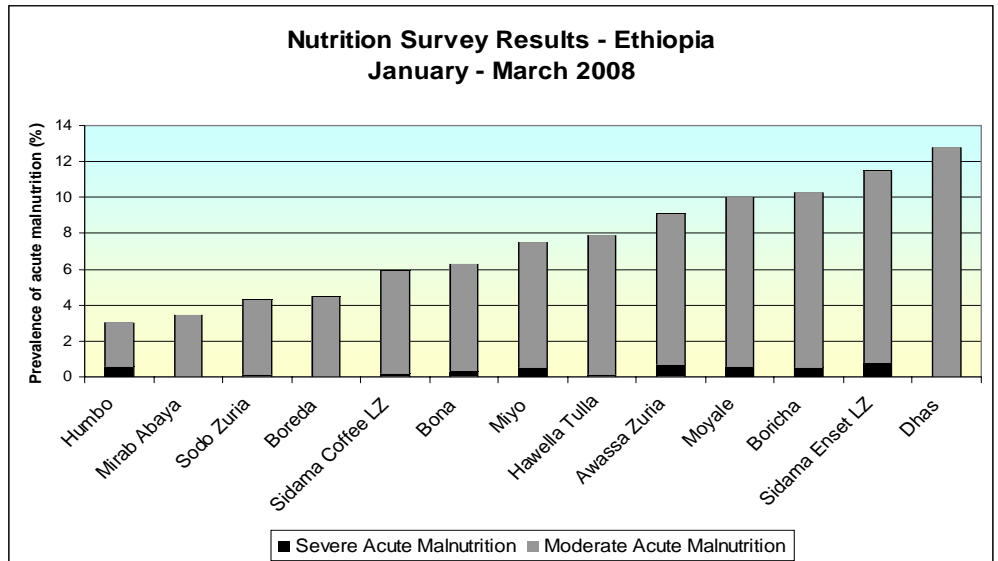
### NUTRITION SURVEY DATABASE

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This bulletin compiles findings from a total of thirteen surveys conducted in the first quarter of 2008. Ten surveys were conducted in SNNPR-Sidama, Wolayta and Gamo Gofa zones and three in Borena Zone of Oromia Region. While some of the surveys were part of ongoing monitoring of the nutrition situation in areas where NGOs are operational, the majority of the surveys were conducted to investigate the nutrition situation amid reports of rising food insecurity due to delayed and untimely rains and lower than average harvest yields particularly in parts of SNNPR in 2007. The ENCU in collaboration with DPPB collaborated with NGOs to support these surveys. The prevalence of global acute malnutrition ranged from a low of 3.0% (CI: 1.4-4.6%) to a high of 12.8% (CI: 9.2-16.3%). A summary of the results from all thirteen surveys is presented in graph 1 below. Full reports are available on request from the ENCU/EWD of DPPA.

Graph 1



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## OROMIA REGION

### BORENA ZONE

#### • Moyale and Mi'oo Woredas

**Baseline nutrition surveys:** The Oromia Regional ENCU (R-ENCU) and the Regional DPPB and Food Security Commission (DPPB/FSC) conducted two standard nutrition surveys in adjacent woredas, Moyale and Mi'oo of Borena Zone between the 1st and the 11th of January 2008. The surveys were requested by the DPPB to assess the nutritional status and observe food security issues in both woredas where water shortage and untimely population movement had been reported following poor *Ganna* and *Hageya* rains, increasing food prices and reports of low EPI coverage. Technical support for both surveys was provided by IMC and GOAL. Both Mi'oo and Moyale populations are largely pastoralist and the woredas are situated along the Ethiopia-Kenyan border in the south of Oromia.

**Methodology:** SMART was used to assess the anthropometric status of 833 children aged between 6-59 months in Moyale and 750 children in Mi'oo woredas using two-stage random cluster sampling with 21x39 clusters and 20x37 clusters respectively.

Mortality estimates were calculated using 90-day recall from 2,800 people in Moyale and 2,754 people in Mi'oo. Anthropometric and mortality data was analysed using ENA software and vaccination and morbidity information was analysed using Epi Info (6.04). One result was flagged in Moyale woreda.

In both surveys the younger age group aged between 6-29 months were slightly under represented estimated at 38.6% and 35.5% for Moyale and Mi'oo respectively. This falls below the distribution norm recommended by WHO (2000) of circa 49.4%. Otherwise the findings were found to be plausible and were endorsed by the F-ENCU.

**Nutrition:** In Moyale global acute malnutrition (GAM) was estimated at 10% (CI: 7.5-12.4%) and severe acute malnutrition (SAM) was 0.6% (CI: 0.1-1.1%). This was bordering 'serious' in a chronically food insecure area and in the presence of aggravating factors (DPPA, 2002). The observed aggravating factors were listed as deteriorating food security, insufficient rainfall, increasing market prices and low EPI coverage. In Mi'oo, GAM of 7.5% (CI: 5.6-9.3%) and SAM of 0.5% (CI: 0.0-1.0%) were presented. In the presence of the same aggravating factors, the nutrition status of children was considered as 'poor' (DPPA, 2002). Comparison with previous surveys conducted in January 2006 during a drought period, were similar with GAM of 10.9% (CI: 8.9-13.1%) in Moyale and 10% (CI: 8.1-12.2%) in adjacent Dire woreda (formerly part of Mi'oo) in January 2006.

**Health:** Mortality rates were below emergency thresholds, estimated at CMR 0.17 (CI: 0.0-0.33) deaths/10,000/day and U5MR 0.38 (CI: 0.1-0.86) deaths/10,000/day in Moyale and 0.11 (CI: 0.0-0.23) deaths/10,000/day and 0.59 (CI: 0.07-1.25) deaths/10,000/day in Mi'oo woreda. Major causes of U5 mortality were not recorded. Morbidity rates in children were relatively low at 12.7% in Moyale and 11.2% in Mi'oo. Major causes of morbidity were diarrhoea and ARI in both woredas. Measles coverage in children (9-59 months) by card only was 18.6% (CI: 12.0-25.2%) in Moyale and 10.2% (CI: 5.3-15.2%) in Mi'oo. Considering mother's recall as well as EPI card raised the measles coverage to 81.8% (CI: 71.1-89.5%) and 71.3% (CI: 63.1-79.5%) respectively. However, this is still low coverage. Immunisation against TB estimated by visible BCG scar was 73.9% (CI: 67.6-80.1%) in Moyale and 69.5% (CI: 62.7-76.4%) in Mi'oo. Vitamin A coverage distributed during the 6th round of EOS screening in October/November 2007 was reported as 86.5% in Moyale and 80.1% in Mi'oo (CI: not available). Access to safe drinking water and sanitation is extremely low.

**Livelihood / Food security:** In general these woredas are considered chronically food insecure. There is little opportunity to produce crops. The majority of the population are vulnerable to market price hikes especially when rainfall is insufficient, grazing pasture is depleted and livestock quality drops. While no human or animal disease outbreaks were observed during the survey, it was predicted that both human and animal health could be vulnerable in the months ahead if the dry period is prolonged.

#### Moyale and Mi'oo Woredas

It was concluded that these communities are vulnerable to worsening food and nutrition security in the months ahead as predicted *Ganna* rainfall in March/May is poor and availability of pasture and safe water is currently low.

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# ENCU

## Dhas Woredas

The prevalence of malnutrition estimated at 12.8% (9.2-16.3%) GAM, is serious in light of aggravating factors such as acute water shortage, deteriorating health in livestock, escalating reports of livestock death, depleted price of livestock and rising cost of basic staples in the area.

### Conclusions and recommendations:

It was concluded that these communities are vulnerable to worsening food and nutrition security in the months ahead as predicted *Ganna* rainfall in

March/May is poor and availability of pasture and safe water is currently low. Close monitoring of the situation was called for along with efforts to strengthen routine EPI services.

### • Dhas Woreda

GOAL conducted a standard nutrition survey in Dhas woreda between the 24th and 30th of March 2008 at the request of the Oromia DPPB. The rationale was to assess the current food security, health and nutrition situation in response to reports of increased livestock morbidity and death and acute water shortage due to the poor performance of the *Ganna* and *Hagaya* rains in 2007/8. The survey was conducted at the end of the long dry season typically between December and March. Dhas is a new woreda comprised of 12 kebeles largely from Dire and Aero woredas in the south east of Borena zone. Total population is estimated at 39,882. Currently GOAL is providing water tankering services and TSFP in all kebeles. SC-US, Action for Development and CARE also provide support for animal feeding and veterinary services to selected kebeles in the area.

**Methodology:** SMART methodology was used with two-stage random clustering with 15x35 clusters selected from the entire woreda. Anthropometric data was analysed for 525 children aged between 6 and 59 months. Mortality information was collected retrospectively using 90-day recall from 541 households (approximately 3,246 individuals). Anthropometric and mortality data was analysed using ENA software and vaccination and morbidity information was analysed using Epi Info 6.04).

**Nutrition:** The current nutritional status of children under 5 years of age and the household food security status is 'serious' in light of aggravating factors (DPPA, 2002). The prevalence of global acute malnutrition (GAM) estimated at 12.8% (CI: 9.2-16.3%). MUAC scores estimated moderate acute malnutrition (MAM) (MUAC 11.0-12.0cm) at 1.7% with 4.7% at risk (12.0-<12.5cm). It is unusual that no cases of severe acute malnutrition (SAM) were reported (presented either as MUAC<11cm or WHZ<-3sd +/- oedema) given the high level of moderate malnutrition recorded. GOAL has suggested that because of the high priority given to young child feeding in this area, even to the detriment of adult nutrition, that somehow the onset of severe malnutrition can be prevented at this level of food insecurity. While GOAL observed thinness in mothers and careers, MUAC for adults was not recorded. Based on WHM% it was estimated that 16 children would need TFP support (WHM<70% +/- oedema) and 422 would require SFP support (>70%<80% WHM).

**Health:** Mortality rates were below emergency thresholds cited in the DPPA guidelines (DPPA 2002). Crude mortality rate estimated as 0.15 (CI: 0.01-0.28) fell well below the emergency threshold of 1 death/10,000/day. Under-five mortality rate of 0.00 deaths/10,000/day, no deaths were recorded. Measles vaccination coverage verified by 'card only' was very low, estimated at 4.1% (CI: 1.9-6.7%). The estimated coverage using 'card and recall' was higher, reported at 36.7 % (CI: 32.5-40.9%) but still well below acceptable targets. BCG coverage (by observed scar) was low at 25.9% (CI: 19.4-32.4%). Coverage of Vitamin A supplementation delivered through the last EOS campaign in November 2007 was low, estimated at 59.1% (CI: 47.0-71.2%). No TSF was provided and it was reported that insufficient vaccines were provided (WMOH office). It was suggested that as a newly formed woreda, that the administrative support required to manage the last EOS campaign and to initiate effective routine EPI services was compromised at this time. Morbidity was high estimated at 17.8% with 95 children under-5 years reporting an episode of disease in the two weeks prior to the survey. The main illnesses were diarrhoea (42.1%), and cough (35.8%). Suspected AWD in two kebeles with 19 children needing clinic services due to vomiting and severe diarrhoea. This needs further investigation and confirmation.

Access to safe drinking water is low at only 12% (defined as spring or piped water). 44.5 % of households reported using ella and water rationing sources,



26% used rain water harvesting, 11% used hand pump and 12% used pond water.

**Livelihoods/ food security:** The majority of the community of low-lying Dhas woreda is pastoralist, relying heavily on livestock and livestock products as the main source of income. Livelihood diversity in terms of involvement in productive crop production remains limited. The poor performance of the *Hagaya* rains in 2007 (typically September-November) compounded with the delay in *Ganna* rains (typically March-May) has resulted in extreme arid conditions spreading throughout much of Boreza Zone, Dhas woreda included. Lack of water for human and animal consumption has resulted in reduced quality of livestock and death. As the situation is widespread, the usual migration response to neighbouring areas of better pasture is not a viable option. woreda officials reported as many as 6233 livestock deaths in February. School drop out was on the rise and some closure of schools was also reported. Among 175 households interviewed 83% were pastoralist. Almost all relied on maize as the main staple, purchased from local markets. Only 16% reported having income source from petty trade, daily labour or sale of charcoal/firewood. Source of income for the coming three months was livestock sales (68%) and relief food (28%). A total of 5,257 people have benefited from PSNP, receiving 30 ETB/month. However because of the alarming rise in the cost of grain (by 200% in many areas), recipients of PSNP had requested grain instead of cash to cope better with the rising cost of food and the depletion in value of livestock. DPPA had also distributed an additional 450 quintals to 12,000 beneficiaries targeted in need of relief support. Despite these efforts, coping mechanisms were being resorted to by some households such as the reduction in food consumption with 48% consuming

only one meal a day. Reports of unusual migration and sale of household assets were presented by 3% and 6% of the households interviewed.

**Conclusions and recommendations:**

The prevalence of malnutrition estimated at 12.8% (9.2-16.3%) GAM, is serious in light of aggravating factors such as acute water shortage, deteriorating health in livestock, escalating reports of livestock death, depleted price of livestock and rising cost of basic staples in the area. Reports of coping mechanisms and malnutrition observed in elderly and adults indicate extreme food shortage at this stage. Worryingly suspected AWD was observed in two kebeles as 19 children presenting AWD symptoms were transferred for medical services during the survey. PSNP coverage is low at 13% (5257 beneficiaries out of 39,882 total population). School closure due to dropping attendance was reported. Key recommendations were listed as:

- Provision of targeted supplementary feeding for U5, PLW and elderly.
- MOH to conduct a vaccination campaign for measles, BCG and supplement with vitamin A.
- Continue water rationing for animal and human consumption until rains are sufficient.
- Animal fodder distribution and improved veterinary services support for animals susceptible to disease when rains start.
- PSNP to distribute grain instead of cash at least for the next cycle.
- UNICEF to support more support for school feeding and water provision in targeted schools to prevent closures.
- Close monitoring of human and animal health and nutrition in the woreda.

**Table 1: Survey Results in Oromia Region Against Key Indicators**

| Key indicators                               | Borena zone                  |                             |                            |
|--|------------------------------|-----------------------------|----------------------------|
|  | Moyale 01-11<br>January 2008 | Mi'oo 01-11<br>January 2008 | Dhas , 24-30<br>March 2008 |
| % GAM in Z-scores (95% CI)                   | 10.0 (7.5-12.4)              | 7.5 (5.6-9.3)               | 12.8 (9.2-16.3)            |
| % SAM Z-scores (95% CI)                      | 0.6 (0.1-1.1)                | 0.5 (0.0-1.0)               | 0.0                        |
| % Kwashiorkor                                | 0.0                          | 0.0                         | 0.0                        |
| CMR Death/10,000/day (95% CI)                | 0.17 (0.0-0.33)              | 0.11 (0.0-0.23)             | 0.15 (0.01-0.28)           |
| U5MR Death//10,000/day (95% CI)              | 0.38 (0.10-0.86)             | 0.59 (0.07-1.25)            | 0.0                        |
| Major causes of U5MR                         | NR                           | NR                          | NA                         |
| % Morbidity                                  | 12.7                         | 11.2                        | 17.8                       |
| Major illnesses or symptoms                  | Diarrhoea & ARI              | Diarrhoea & ARI             | Diarrhea & Cough           |
| % Measles coverage by card (95% CI)          | 18.6 (12.0-25.2)             | 10.2 (5.3-15.2)             | 4.1 (1.9-6.7)              |
| % Measles coverage by card + recall (95% CI) | 81.8 (71.1-89.5)             | 71.3 (63.1-79.5)            | 36.7 (32.5-40.9)           |
| % BCG coverage (scar) (95% CI)               | 73.9 (67.7-80.1)             | 69.5 (62.7-76.4)            | 25.9 (19.4-32.4)           |
| % Vitamin A in past 6 months (95% CI)        | 86.5 (78.3-94.6)             | 80.1 (70.9-89.7)            | 59.1 (47.0-71.2)           |

**Table 2: Food and Nutrition Interventions in Surveyed Woredas of Oromia**

|  | Borena zone |         |           |
|--|-------------|---------|-----------|
|  | Moyale      | Mi'oo   | Dhas      |
| Estimated population size                      | 142,198     | 66,532  | 39,882    |
| Estimated Under Five population                | 28,440      | 13,306  | 7,976     |
| Productive Safety Net – No of beneficiaries    | No          | 14,865  | 5,257     |
| % of rural population                          |             | 23.3%   | 13.2%     |
| Food Aid April - Dec. 08 – No of beneficiaries | 22,000      | 10,000  | 3,000     |
| % of rural population                          | 15.5%       | 15%     | 7.5%      |
| EOS- 6th round screening                       | Nov. 07     | Nov. 07 |           |
| No of children acutely malnourished*           | 168         | 498     |           |
| As a percentage of screened children           | 0.7%        | 4.7%    |           |
| Therapeutic Feeding Unit                       |             |         | Borbor HC |
| Outreach Therapeutic Programme                 |             |         |           |

\* MUAC below 12.0 cm and/or oedema

## SNNP REGION

### SIDAMA ZONE

#### • Bona Woreda

SC-US conducted a standard nutrition survey in Bona woreda between the 27th December and the 3rd January 2008 which is typically the harvesting and coffee picking season. SC-US has been supporting the MOH to operate CTC in Bona woreda since June 2007. The survey was conducted to assess the current nutritional situation, estimate the likely contribution of the CTC intervention and identify additional / further health and nutrition support needs in the woreda.

**Methodology:** The survey used SMART methodology with two-stage random clustering with 20x36 clusters selected from Bona woreda. Anthropometric data was analysed for 720 children aged between 6 and 59 months. Mortality information was collected retrospectively using a 90-day recall period in 648 households (approximately 4,045 individuals). Anthropometric and mortality data was analysed using ENA software and vaccination and morbidity information was analysed using Epi Info.

**Nutrition:** The current nutritional status of children under 5 years of age and the household food security status are more or less 'typical' for this time of the year in a chronically food insecure area (DPPA, 2002). The prevalence of global acute malnutrition (GAM) estimated at 6.3% (CI: 4.1-8.5%) and severe acute malnutrition (SAM) estimated at 0.3% (CI: 0.0-0.7%) respectively. One case of oedema was observed (0.1%). MUAC scores estimated SAM at 1.2% (MUAC<11.0cm) and 9.0% moderate acute malnutrition (MAM) (MUAC between 11.0-12.0cm). Compared to findings from May 2007 survey, the nutrition situation (WHZ) had improved significantly since May which is typically mid-hunger season (GAM of 16.4% (12.2 - 20.6%) and SAM of 3.2% (1.3 - 5.1%), SC-US, May 2007).

**Health:** Mortality rates were below emergency thresholds cited in the DPPA guidelines (DPPA 2002). Crude mortality rate estimated as 0.08 (CI: 0.01-0.18) fell well below the emergency threshold of 1 death/10,000/day. Under-five mortality rate of 0.14 (CI: 0.0-1.15)

deaths/10,000/day was recorded. This is also well below the emergency threshold of 2 deaths/10,000/day (ref ibid). The main cause of death in children was unknown. Measles vaccination coverage verified by 'card only' was low in both woredas, estimated at 22.5% (CI: 18.2-27.4%). The estimated coverage using 'card and recall' was higher, reported at 75.3% (CI: 70.3 - 79.8%), but still below acceptable targets. BCG coverage (by observed scar) was 73.1% (CI: 68.2-77.5%). Coverage of Vitamin A supplementation delivered through recent 8th round EOS campaign in November 2007 was high, estimated at 92.0% (CI: 88.6-94.5%). Morbidity was estimated at 8.9% with 65 children under-5 years reporting an episode of disease in the two weeks prior to the survey. The main illnesses were diarrhoea (50.8%), and ARI (49.2%).

Access to safe drinking water is low (defined as spring or piped water). Adequate access was reported by only 43.5% of respondents in Bona woreda.

**Livelihood/Food Security:** Information from community questionnaires from approximately 216 households and focus group discussions was reported as follows. The *Belg* 2007 rains were above normal for 27.8%, normal 22.2% and below normal 33.3% of respondents. *Meher* 2007 rains were above normal 30.6% and 25.0% below normal. Pasture was reported to be good 36.1%, average for 30.6% for most respondents and 33.3% reported it below average. Water availability for livestock was reported as good by 61.1%. Livestock physical condition was reported to be good by 50.0%, poor 41.7% and very good by 8.3% of respondents.



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#### Bona Woreda

The prevalence of global acute malnutrition (GAM) estimated at 6.3% (C.I. 4.1-8.5%) and severe acute malnutrition (SAM) estimated at 0.3% (C.I. 0.0-0.7%) respectively. Mortality rates were below emergency thresholds cited in the DPPA guidelines (DPPA 2002).



# FOCUS

## Dale, Aleta Wondo and Wonsho Woredas

In the CLZ, the nutrition status of children was considered as 'Typical' for this chronically food insecure area with GAM rate estimated at 5.9 % (C.I. 4.2-7.7%) and SAM rate of 0.2 % (C.I. 0.0-0.5%).

### Conclusion and recommendations:

The prevalence of global acute malnutrition among the surveyed population was 6.3% (CI: 4.1-8.5%) and the prevalence of severe acute malnutrition was 0.3 % (CI: 0.0-0.7%). This malnutrition rate among children is considered as typical for this chronically malnourished population (DPPA, 2002) and significantly better than the May 2007 findings which is the hunger period. The reported coverage of measles immunization and vitamin A supplementation is relatively good

compared to the national average. However the measles vaccination coverage with card was very low. Key recommendations made by SC-US were to hand over CTC service operations to MOH but continue to monitor and provide 'minimum support', monitor the food security situation during the hunger season and repeat a nutrition assessment in May 2008. It was further recommended to support interventions to improve safe water access and livelihoods in the woreda.

### • Coffee Livelihood Zone (CLZ) and Enset Livelihood Zone (ELZ)- Dale, Aleta Wondo and Wonsho Woredas

ACF conducted two standard nutrition surveys in the Coffee Livelihood Zone (CLZ) of Dale, Aleta Wondo and Wonsho woredas between the 14th and 24th of January and in the Enset Livelihood Zone (ELZ) the same woredas between the 5th and 14th of February. Both these CLZ and ELZ are in Sidama Zone, SNNPR. ACF have been supporting the MOH to deliver CTC services in Dale since 2005, and Aleta since 2006. The survey was to assess the nutrition status of children post harvest season in both Livelihood Zones.

**Methodology:** Both surveys followed SMART methodology using two stage random cluster design. SMART-ENA software was used for analysis of anthropometric data and SPSS (version 11.5) was used for all other data analysis. In the CLZ survey anthropometric information was taken from 560 children (18x32 clusters). Mortality information was based on 90-day recall was taken from 524 households (approximately 2,825 individuals). The ELZ survey measured 590 children (14x42 clusters). Mortality information was collected from 646 households (approximately 3,596 individuals).

**Nutrition:** In the CLZ, the nutrition status of children was considered as 'Typical' for this chronically food insecure area with GAM rate estimated at 5.9 % (CI: 4.2-7.7%) and SAM rate of 0.2 % (CI: 0.0-0.5%). No cases of oedema were observed. This is slightly less, but not significantly, compared to findings of the December 2006 survey conducted by ACF estimating GAM at 5.6 % (CI: 4.1 - 7.1%) and SAM (0.3 % (CI: 0.0 - 0.7)). These relatively low rates of malnutrition are to be expected during this post-harvest period.

In the ELZ, the nutrition status was considerably worse with GAM estimated at 11.5% (CI: 8.4-14.6%) and SAM at 0.8% (CI: 0.0-1.7%). No cases of oedema were observed. This was considered 'serious' in light of aggravating factors such as poor vaccination coverage and deteriorating water supply. Comparing to the prevalence of malnutrition in July 2007 (13.7 % C.I: 10.2 - 17.1%) is showing a reduction although the difference is not statistically significant. However, the prevalence of SAM in February 2008 (0.8 % CI: 0.0 - 1.7%.) Comparing to the same figure in July 2007 (2.3 % CI: 1.0 - 3.6%) seems to be lower. There is a decrease of prevalence of SAM in February 2008 comparing to the same figure in July and this is not the case for MAM and GAM. As the rate of malnutrition did not vary greatly from the hunger season data collected in July 2007, it is suggested that chronic food insecurity prevails throughout the year in the ELZ areas and the nutrition situation plateaus at around 10-15% GAM. These communities can not benefit from opportunistic improved food access generated in cash crop areas at key times in the year.

<sup>1</sup>DPPA Emergency Nutrition Assessment guideline 2002 suggests that GAM estimates between 2% and 9% are typical for a chronically malnourished population. Where aggravating factors exist, the same situation is considered as 'poor'.

<sup>2</sup>Nutrition and retrospective mortality survey December 2007, CLZ, Dale, Aleta and Wonsho Woredas, Sidama Zone, SNNPR.



# CONSENSUS

**Health:** In the CLZ, mortality rates are well below emergency thresholds, with CMR of 0.1 (CI: 0.0-0.22) deaths /10,000/day, and the U5MR, 0.34 (CI: 0.0-0.80) deaths/10,000/day. ACF reports improved immunisation status comparing findings with the survey conducted in June 2007. BCG coverage (by observed scar) has increased from 49.0 % (CI: 45.2-56.9%) in June 2007 to 56.5% (CI: 53.0-61.0%) in January 2008. Similarly the coverage of measles vaccination based on card only increased from 10.4% (CI: 7.0-13.7%) to 36.6% (CI: 33.0-41.0%). Unfortunately mother's recall was not recorded during this survey. Vitamin A supplementation coverage increased from 79.6% (CI: 71.4-87.8%) to 88.9% (CI: 86.0-92.0%). It is suggested that improved EOS screening has contributed to this overall improvement along with ACF efforts to support MOH. Morbidity in children was estimated at 12.7%. Major causes of illness in the two weeks prior to the survey were respiratory illnesses, fever and diarrhoea.

EOS-TSFP approximate coverage estimated using MUAC data estimated that 26.3% of the children in the sample eligible for EOS-TSFP were correctly screened.

In the ELZ, mortality rates were also well below emergency thresholds. CMR was estimated at 0.09 deaths/10,000/day (CI: 0.00-0.25). No U5 mortality was recalled (URMR=0). BCG coverage was estimated at 57.6% (CI: 54.0-62.0%). Measles coverage estimated by card only was 22.9% (CI: 19.0-26.0%). Vitamin A supplementation coverage was 86.6% (CI: 84.0-89.0%). The last EOS round of screening was conducted in November 2007. Morbidity was also estimated at 12.7% with fever, respiratory illnesses and diarrhoeal diseases as the main causes reported.

Access to safe water and sanitation remains low with less than 12% accessing safe water (protected spring, piped) in the area.

**Livelihood/Food security:** In the CLZ, most of the respondents were engaged in own production, with little external employment opportunities reported. 56% of respondents reported that the recent harvest produced less food than the previous harvest.

In the ELZ, approximately 53% of respondents shared similar response, and were concerned with delayed *Belg*, that food would become short. Approximately 4% of the population are safety net beneficiaries. Poor pasture due to prolonged dry period was reported. Increased prices of staples and increasing water shortage were all concerns voiced by these communities.

### Conclusions and recommendations:

Comparing both livelihood zone survey results conducted in Jan and Feb 2008, the nature of hunger trends in two zones follows different patterns. In CLZ the rates of malnutrition are recovering due to impact of harvest of a strong cash crop like coffee (February and few months after). When the cash income of coffee is finished during July or June the rate of malnutrition rises sharply. In ELZ the rate of GAM appears to plateau, due to the absence of a strong cash crop all through the year.

In the Coffee Livelihood Zone, the GAM rate of 5.9 % and the SAM rate of 0.2% shows low risk of nutritional emergencies at this time of the year. The CMR of 0.1 death /10,000/day, and the U5MR, 0.34 deaths /10,000/day, are both below the alert level respectively of 1 death/10,000/day and 2 deaths/10,000/day. However, 56.3 % household interviewed reported that they are facing with general deficit of food supplies compared to the previous year.

In the Enset Livelihood Zone the GAM rate of 11.5 % and the SAM rate of 0.8 % in the presence of some aggravating factors like low level of measles vaccination and vitamin A supplementation and also possible inadequate water supply presents a serious nutrition situation. The CMR of 0.09 death /10,000/day, and the U5MR of zero, are both well below the cut- offs for alert level respectively of 1 death/10,000/day and 2 deaths/10,000/day. Some 52.5% of households interviewed reported having lower yield from the last harvest and concerns of food shortage were voiced.

Overall ACF recommends strengthening the links between TSFP and CTC, improving the performance of TSFP and EOS screening, increasing the PSNP quotas of beneficiaries especially during



# U C N E

## Boricha, Awassa Zuria, Hawella Tulla woredas

In all three woredas the current nutrition situation is considered as poor/serious in light of aggravating factors largely caused by the current dry spell and the delay or absence of *Belg* rains in what is normally a food insecure area.

the hunger gap, strengthening routine EPI services and suggested that these woredas are considered for inclusion in the MOH/UNICEF Community based Nutrition Programme in future. Additional FS interventions are needed in the area. ACF proposes to conduct causal analysis study to investigate the

### • Boricha, Awassa Zuria & Hawella Tulla Woredas

World Vision Ethiopia (WVE) in collaboration with the R-ENCU, DPPB conducted three standard nutrition surveys in Boricha, Awassa Zuria and Hawella Tulla woredas of Sidama Zone in response to reports of failed *Belg* rains, poor pasture and worsening livestock conditions and rising food insecurity. The surveys were conducted in March 2008, prior to the main hunger season to predict food security needs in the months ahead.

**Methodology:** Three standard nutrition surveys using SMART methodology were conducted between the 3rd and 8th of March. Two stage random sampling using 36 clusters in each woreda to measure 873 children aged between 6 and 59 months in Boricha, 868 in Awassa Zuria and 836 in Hawella Tulla woredas. Mortality information based on 90-day recall was collected from 828 households in Boricha, 648 households in Awassa Zuria and 648 households in Hawella Tulla. Anthropometric data was analysed in SMART-ENA software. Epi Info and excel were used to analyse all other data. No flagged records were found. All data was found to be plausible except for slight under representation of the 6-29 month age group (34.8%) in Hawella Tulla woreda.

**Nutrition:** Overall, the nutrition and health situation was similar in the three woredas and considered as 'poor/serious' in light of aggravating factors such as growing water shortage, lack of pasture and the deterioration of livestock condition observed by many communities, rising food prices together with the chronic food insecurity backdrop that most of these communities live under. In Boricha the prevalence of global acute malnutrition (GAM) among children under five years was estimated at 10.3% (CI: 8.1-12.5%) and the prevalence of severe acute malnutrition (SAM) was estimated at 0.5% (CI: 0.0-0.9%). Both GAM and SAM are slightly higher than findings from a survey con-

ducted in March 2007 which presented GAM of 8.3% (CI: 6.2-10.4%) and SAM of 0.3% (CI: 0.0-0.7%). The difference is not statistically significant. The nutrition situation is bordering serious in light of the aggravating actors mentioned above. Families reported reduced food supply at home and some reduction in meal consumption.

In Awassa Zuria, GAM was estimated at 9.1% (CI: 5.9-12.3%) and SAM was estimated at 0.7% (CI: 0.1-1.3%). This is considered as 'poor' if aggravating factors persist.

Hawella Tulla woreda findings estimated GAM at 7.9% (CI: 5.3-10.4%) and SAM at 0.1% (CI: 0.0-0.4%). Similarly, due to aggravating factors, the nutrition situation is considered as 'poor'.

**Health:** Mortality estimates were well below emergency thresholds in all three woredas as follows: CMR 0.1 deaths/10,000/day, 0.06 deaths/10,000/day and 0.15 deaths/10,000/day in Boricha, Awassa Zuria and Hawella Tulla respectively. Similarly, U5MR estimates of 0.13 deaths/10,000/day, 0.16 deaths/10,000/day, 0.17 deaths/10,000/day were low. Major causes of U5MR were diarrhoea and tetanus (1). Measles coverage in children (9-59 months) by card and recall varied from 81.2% (CI: 77.0-84.8%) in Boricha, 69.5% (CI: 64.8-73.8%) in Awassa Zuria and 77.6% (CI: 73.1-81.5%) in Hawella Tulla. Card retention was as low as 5.1% in Awassa Zuria and



# CON ZEN E

## Mirab-Abaya and Boreda Woredas

The food security indicators and the coping strategies of the community at the time of the survey indicated that the food security situation of the woreda is comparable to a "normal" year.

10.3% in Boricha. Immunisation against TB estimated by visible BCG scar was low in general at 58.1% (CI: 53.3-62.7%) in Boricha, very poor at 37.1% (CI: 32.6-41.9%) in Awassa Zuria and 63.8% (CI: 58.9-68.3%) in Hawella Tulla. Vitamin A coverage distributed during the last round of EOS screening in November 2007 was good reported at 85.5% (CI: 81.7-88.6%) in Boricha, 84.2% (CI: 80.4-87.4%) in Awassa Zuria and 81.3% (CI: 77.2-84.9%) in Hawella Tulla.

Morbidity in children was high in all three woredas with 18.1%, 12.6% and 15.8% of the children sampled reporting suffering from illness in the two weeks prior to the survey in Boricha, Awassa Zuria and Hawella Tulla woredas respectively. The main cause of illness was reportedly diarrhoea, malaria and ARI. Diarrhoeal disease was by far the most common illness. Access to safe water (piped/spring) was very poor in Boricha estimated at 31% but very good in Awassa Zuria, 86% and in Hawella Tulla, 94%.

The EOS has also begun operations and is currently preparing for the 2nd round of screening to provide supplementary food for moderately malnourished children and pregnant and lactating women. Estimates of coverage were not provided however absolute numbers extrapolated to estimate numbers of children in need of therapeutic feeding (WHM < 70% +/- oedema) were 46 in Boricha, 64 in Awassa Zuria and 23 in Hawella Tulla woredas. Estimates of children in need of targeted supplementary feeding (TSFP) ( $\geq 70\%$  WHM < 80%) are 2,068 in Boricha, 764 in Awassa Zuria and 705 in Hawella Tulla.

## GAMO GOFA ZONE

### • Mirab-Abaya and Boreda Woredas

World Vision Ethiopia in collaboration with the Zonal department of agriculture and rural development (MOARD), woreda (MOARD) and woreda ministry of health to conduct two standard nutrition surveys in Mirab Abaya and Boreda woredas. The surveys were requested to monitor the nutrition status in light of the current dry spell reported and increased food insecurity expected and provide information for early response as needed.

**Food Security / Livelihood:** In all three woredas the main livelihood is mixed subsistence farming with enset and maize as the main staple foods and sweet potatoes, haricot beans as additional staples. While no major emergency coping strategies were observed, communities reported that the current delay/lack of *Belg* rains was ominous and fears of food shortage were voiced. Additionally, the current dry season has affected the quality of pasture and subsequently livestock condition in all three woredas. The productive safety net programme (PSNP) operates throughout this area, supporting the most vulnerable with cash or food for work opportunities, but given the high density of the population in the area, the coverage is low.

### Conclusions and recommendations:

In all three woredas the current nutrition situation is considered as poor/serious in light of aggravating factors largely caused by the current dry spell and the delay or absence of *Belg* rains in what is normally a food insecure area. WVE recommended for the DPPB to continue to monitor the food security situation closely, to increase the PSNP beneficiaries and strengthen the EOS efforts especially the TSFP for malnourished children and women. It was also suggested to support the MOH to deliver CTC services (NGO supported), and to work with the MOH to strengthen the routine EPI programme and ITN distribution interventions.



# WV CON ZEN E

**Methodology:** Anthropometric information was collected from a total of 425 children (6-59 months) in Boreda and 456 in Mirab Abaya using 30 randomly selected clusters in each woreda. Mortality information based on 90-day recall was asked from 450 households in Boreda and 540 households in Mirab Abaya. Food security information was obtained using community questionnaires asked from 150 households in Boreda and 180 households in Mirab Abaya. SMART-ENA software was used to analyse the anthropometric data, Epi Info and excel software were used for all other information analysis.

**Nutrition:** Both woredas presented a nutrition status typical of this chronically food insecure area. In Boreda global acute malnutrition (GAM) was estimated as 4.5% (CI: 2.5 - 6.5%) and no cases of severe acute malnutrition were observed. This prevalence is higher than that of February 2007 estimated at 2.5% (CI: 1.2 - 3.8%) but the difference is not significant. In Mirab Abaya a GAM of 3.5% (CI: 1.4-5.6%) was estimated which again is slightly higher than that of February 2007 estimated at 2.5% (CI: 1.2-3.8%) but not statistically significant. As in Boreda, no cases of severe acute malnutrition were observed.

**Health:** In Boreda the Crude Mortality Rate (CMR) and U5 Mortality Rate (U5MR) were 0.08 and 0.21 deaths/10,000/day respectively. In Mirab Abaya the CMR and U5MR were 0.23 and 0.85 deaths/10,000/day respectively. Both the CMR and U5MR fall below the average for developing countries in these woredas. Malaria was reported as the cause of death in known cases. Therefore, the situation is normal.

Immunisation coverage in both woredas was very good. Measles coverage estimated by card +/- recall was 88.2% (CI: 80.4-96.5%) in Boreda and 93.3% (CI: 89.8-96.9%) in Mirab Abaya. BCG coverage was 88.2% (CI: 88.1-96.3%) in Boreda and 80.5% (CI: 74.2-86.8%) in Mirab Abaya. Coverage of Vitamin A supplementation delivered in the November 2007 EOS campaign round was 96.4% (CI: 94.3-98.7%) in Boreda and 94.1% (CI: 90.7-97.5%) in Mirab

Abaya. Morbidity rates were high in both woredas, estimated at 12.8% and 19.1% in Boreda and Mirab Abaya. Causes for reported illness were malaria and diarrhoea. Access to safe water (spring/piped) was only 32%.

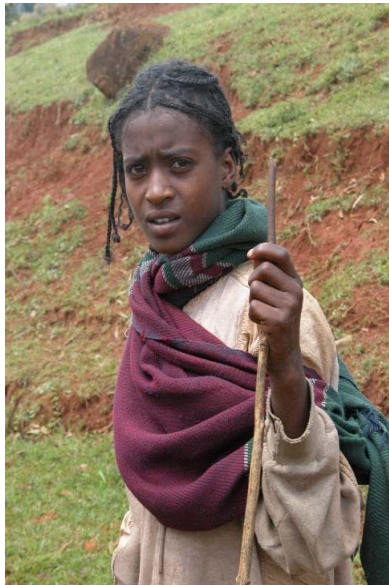
**Livelihood / food security:** In Boreda almost all of the population are dependent on agriculture for their livelihood. Whereas in Mirab Abaya opportunities for some diversity such as small trade were also reported. For those interviewed who own livestock, 60% in Mirab Abaya and 83% in Boreda reported that the condition of their livestock was very poor because of insufficient pasture caused by lack of rain and because of disease. Both woredas benefit from the PSNP with cash and food. Some 19,882 beneficiaries in Boreda and 27,369 in Mirab Abaya.

### **Conclusion and recommendations:**

The current surveys were conducted in the post harvest time of the *Meher* season when household food security is usually good. The food security indicators and the coping strategies of the community at the time of the survey indicated that the food security situation of the woreda is comparable to a "normal" year. The majority of households predicted they would rely on their own production as a source of food in the next three months. However, the nutritional status and food security of the area in the months ahead would be determined by onset, amount and distribution of *Belg* rain. It was suggested that the on going PSNP will pay a significant contribution in addressing the anticipated food shortage in the coming hunger period.

Some recommendations made by WVVE:

- World Vision Ethiopia and the woreda DPPD to closely monitor the nutrition and food security situation in the woreda.
- Agriculture and rural development office to continue and strengthen the immunization campaign against main livestock diseases. And strengthen the existing early warning system for early detection of deteriorating food security and nutritional situation of the woreda.



# ENCOUNTER

## Humbo & Soddo Zuria Woredas

Considering the existing food security status and the public health factors (morbidity, immunization coverage and vitamin A supplementation), the current prevalence of malnutrition is ranked to be normal for this time of the year (DPPC, 2002).

- The ongoing PSNP should continue in the coming hunger period to address the chronically food insecure population.
- The EOS programme also should continue in assisting the moderately malnourished children and in improving measles immunization, vitamin A supplementation and deworming coverage.
- Continue to support the malaria prevention and control activities by providing Impregnated Treated Nets (ITNs).
- Word Vision and respective government organizations should construct new water structures and maintain old structures in order to improve access to a safe water supply.
- A follow up nutrition survey using a comparable methodology should be conducted during the coming hunger period and /or next year at this time in order to assess and monitor the trend of the nutrition and the food security.

### WOLAITA ZONE

#### ● Humbo & Soddo Zuria Woredas

World Vision Ethiopia conducted nutrition and mortality surveys in Humbo and Soddo Zuria woreda, Wolayta Zone of SNNPR in collaboration with the zonal department of agriculture and rural development and woreda health office. The primary objective of the surveys was to monitor the nutritional and food security status of the community of the woreda for the purpose of early preparedness and timely response. The data collection was conducted from 14th to 18th of February, 2008.

**Methodology:** SMART methodology using two stage cluster sampling was used. In Humbo anthropometry was measured from 462 children (15x30 clusters) and 701 children (23 x 30) in Soddo Zuria. For mortality information, in Humbo 450 households (2,716 individuals) were sampled and 630 households in Soddo Zuria. Household questionnaires were completed for 150 households to assess the household food security and health situation of the households in each woreda. A community interview was also conducted in each cluster.

**Nutrition:** In both Woredas the prevalence of acute malnutrition was 'normal' for this area. In Humbo the prevalence of global acute malnutrition 3.0% (CI: 1.4-4.6%) and the prevalence of severe acute malnutrition was 0.6% (CI: 0.0-1.4) with 0.2% oedema. While the prevalence of both the global acute malnutrition and the severe acute malnutrition rates are slightly higher than the findings of the survey conducted in February 2007 with GAM of 2.4% (CI: 1.1-3.7 %) and SAM 0.3% (CI: 0.0-0.7 %). The difference is not statistically significant. In Soddo Zuria the prevalence of global acute malnutrition was higher

estimated at 4.3% (CI: 2.7-5.9%) and the prevalence of severe acute malnutrition was estimated at 0.1% (C.I 0-0.4%). The prevalence of oedema was 0.1%. The GAM is slightly higher than the GAM in February 2007 survey, estimated at 3.9% (CI: 2.2-5.6%) but the SAM is lower than in same survey at 0.4% (CI: 0.0-1.0%). However, the difference is not statistically significant.

**Health:** BCG vaccination against TB estimated at 64.9% (58.4-71.0%) in Humbo and 72.3% (66.4-78.3%) in Soddo Zuria, is higher than the national average of 46% (DHS 2005), but still not optimal. Measles coverage was also high at 84.5% (CI: 78.9-88.9%) in Humbo and 86.5% (CI: 80.7-92.3%) in Soddo Zuria. Both are still below the international benchmark of 90% (DPPC 2002). Card retention remains very low with only 5.2% in Humbo and 15.4% in Soddo Zuria. Coverage for vitamin A supplementation is high at 78.8% (CI: 72.8-83.8%) in Humbo and 90% (CI: 84.3-95.7%) in Soddo Zuria indicating good performance of the EOS campaigns in the area.

In Humbo, the overall morbidity rate of under five children two weeks prior to



# ENCU

the survey date was reported to be 16.2% (n=75) in Humbo. Malaria/fever, ARI/cough, scabies and other skin diseases, and diarrhoea were the leading causes of illness amongst the sample children. ARI was also the main cause of death of the sample population. Skin infections and diarrhoeal disease was also causes of child illness caused by poor hygiene and sanitation. Indicators of preventative behaviours are relatively poor with suboptimal health seeking behaviour, and utilization of potable water. In Soddo Zuria the overall retrospective mortality data showed 8 deaths: 6 in adults and 2 in under-fives. The crude mortality rate was 0.25 deaths/10000/day (CI: 0.05-0.45) and the under five mortality rate was 0.36 deaths/10000/day (CI: 0.00-0.87). Both rates are below emergency thresholds (DPPA, 2002). The main causes of death in both adults and children were malaria and acute respiratory tract infection (ARI) including pneumonia.

**Livelihood / food security:** In both woredas, agriculture and agro-pastoralism are the main livelihoods. The main livelihood for the remaining 1.3% of the households is salary/wage.

In Humbo maize and *enset* were reported as the main staple foods for 68.0 % (n=102) and 22.7% (n=34) of the sample households at this time of the year. Sweet potato and taro were also the staple foods for the remaining 8.7% (n=13) and 0.6% (n=1) of the sample households. In the past four weeks also maize and *enset* were the main foods for 65.3% (n=98) and 23.3% (n=35) of the sample households respectively. Sweet potato and taro were the main foods for 10.7% and 0.7% of the households.

In Humbo the proportions of households that reported eating three times per day decreased from 74% (2007) to 64%. However, unusual or wild foods were not being consumed.

Based on the traditional classification, Humbo has two agro-ecologies of *kola* and *woinadega* that comprises 70% and 30% of the woreda respectively. The woreda has two major rainy seasons (*Belg* and *Meher*) and short rainy season known as *Sape* that falls around November. The rainfall situation of 2007 was assessed using community interviews. Only 30% of the communities

rated the *Belg* rains as normal. About forty seven percent (46.7%) of the communities reported the *Meher* crop harvest was worse as compared to the 2006 harvest due to excessive rains at the mid of the rainy season and early cessation of the rainy season. The failure of the short rainy season (*Sape*) was also reported by community groups. This rain was very crucial for sweet potato production to be harvested in April and May.

In Soddo Zuria, sweet potato, *enset* and maize are normally the main staples at this time of year, accounting for 58.6%, 22.9 % and 15.2 % of the households' diet (WVE, February 2007 survey information). In the previous four weeks however, '*enset*' was the staple diet accounting for nearly 50 % of the households. This shift in the staple diet could be due to the poor recent *Meher* harvest. In contrast, sweet potato was the staple diet for 89.4 % of households this time last year (February 2007, WVE).

Fields of sweet potato observed during the survey were in poor condition and the prospect for the *Belg* harvest was bleak due to delayed *Belg* rain. It is likely that food security of the community may deteriorate over the next three months. There is high demand for improved, drought resistance, short maturing seeds of maize, haricot beans, root crops and commercial fertilizer for the *Belg* harvest. Among households owning livestock, more than 60 % rated the physical conditions of their livestock as poor, mainly due to lack of pasture according to significant majority (90.1%) of informants. This has resulted in 10 - 15% of livestock price reduction in the previous month. In addition significant increases in the price of staples was observed.

## Conclusions and Recommendations:

The prevalence of global acute malnutrition among the surveyed population was 3.0% (CI: 1.4-4.6%) and 4.3% (CI: 2.7-5.9%). Severe acute malnutrition was estimated at 0.6% (CI: 0.0-1.4%) with 0.2% oedema and 0.1% with 0.1% oedema in Humbo and Soddo Zuria respectively. Considering the existing food security status and the public health factors (morbidity, immunization coverage and vitamin A supplementation), the current prevalence of malnutri-



tion is ranked to be normal for this time of the year (DPPC, 2002). While this is typical for the post *Meher* harvest period, there is the possibility of increased malnutrition in the coming hunger period. Food security is expected to deteriorate due to the poor past *Meher* harvest the anticipated poor sweet potato harvest in the coming few months because of the failed *Sape* rain. In addition prices of staples in general have increased while selling price of livestock has decreased. Recommendations from WVE included:

- World Vision Ethiopia and the woreda DPP should monitor the nutrition and food security situation of the woreda.
- WVE and the woreda food security desk should continue the ongoing safety net program to address the seasonal food shortages in the coming months.

- The EOS-TSFP programme also should continue in assisting the moderately malnourished children and in improving measles immunization and vitamin A supplementation coverage.
- Effort should be made by the woreda health office to improve the BCG and measles coverage and retention of immunization cards.
- Efforts should be made by all development actors in improving the use and distribution of ITN to minimize the effects of malaria disease.
- NGO's and respective government organizations should give attention in construction of new water structures and maintenance of old structures in order to improve access to a safe water supply.
- A repeat survey should be conducted during the coming hunger period.

**Table 3: Survey Results for SNNPR Against Key Indicators**

| Key indicators                               | Sidama zone                                |   |                                       |                         |                              |                               | Gamogofa Zone                    |                           | Wolaita zone              |                                  |
|--|--|---|---------------------------------------|-------------------------|------------------------------|-------------------------------|----------------------------------|---------------------------|---------------------------|----------------------------------|
|  | Coffee Livelihood Zone, 14-24 January 2008 | Enset Livelihood Zone, 5-14 February 2008 | Bona, 27 December 2007-3 January 2008 | Boricha, 3-8 March 2008 | Awassa Zuria, 3-8 March 2008 | Hawella Tulla, 3-8 March 2008 | Mirab Abaya, 14-18 February 2008 | Boreda, 14-18 February 08 | Humbo 14-18 February 2008 | Soddo Zuria, 14-18 February 2008 |
| % GAM in Z-scores (95% CI)                   | 5.9 (4.2-7.7)                              | 11.5 (8.4-14.6)                           | 6.3 (4.1-8.5)                         | 10.3 (8.1-12.5)         | 9.1 (5.9-12.3)               | 7.9 (5.3-10.4)                | 3.5 (1.4-5.6)                    | 4.5 (2.5-6.5)             | 3.0 (1.4-4.6)             | 4.3 (2.7-5.9)                    |
| % SAM in Z-scores (95% CI)                   | 0.2 (0.0-0.5)                              | 0.8 (0.0-1.7)                             | 0.3 (0.0-0.7)                         | 0.5 (0.0-0.9)           | 0.7 (0.1-1.3)                | 0.1 (0.0-0.4)                 | 0.0 (0.0-0.0)                    | 0.0 (0.0-0.0)             | 0.6 (0.0-1.4)             | 0.1 (0.0-0.4)                    |
| % Kwashiorkor                                | 0.0  | 0.0                                       | 0.1                                   | 0.0                     | 0.0                          | 0.0                           | 0.0                              | 0.0                       | 0.2                       | 0.1                              |
| CMR Death/10,000/day (95% CI)                | 0.10 (0.0-0.22)                            | 0.09 (0.0-0.25)                           | 0.08 (0.01-0.18)                      | 0.10 (0.0-0.19)         | 0.06 (0.0-0.15)              | 0.15 (0.02-0.27)              | 0.23 (0.01-0.45)                 | 0.08 (0.2-0.19)           | 0.08 (0.0-0.21)           | 0.25 (0.05-0.45)                 |
| U5MR Death/10,000/day (95% CI)               | 0.34 (0.0-0.80)                            | 0.0                                       | 0.14 (0.0-1.15)                       | 0.13 (0.0-0.36)         | 0.16 (0.0-0.41)              | 0.17 (0.0-0.45)               | 0.85 (0.0-2.12)                  | 0.21 (0.48-0.91)          | 0.23 (0.0-0.67)           | 0.36 (0.0-0.87)                  |
| Major causes of U5MR                         | Diarrhoea                                  | No cases of U5 mortality                  | Unknown                               | Diarrhoea               | Diarrhoea                    | Tetanus                       | Malaria & unknown                | Unknown                   | ARI                       | Malaria & ARI                    |
| % Morbidity                                  | 31.2                                       | 28.7                                      | 8.9                                   | 18.1                    | 12.6                         | 15.8                          | 19.1                             | 12.8                      | 16.2                      | 15.4                             |
| Major illnesses or symptoms                  | Diarrhoea, fever & ARI                     | Diarrhoea & ARI                           | Diarrhia and ARI                      | Diarrhoea & malaria     | Diarrhoea, ARI & malaria     | Diarrhoea, ARI and malaria    | Diarrhoea & malaria              | Malaria & diarrhoea       | Malaria                   | Malaria & diarrhoea              |
| % Measles coverage by card (95% CI)          | 36.6 (33.0-41.0)                           | 22.9 (19.0-26.0)                          | 22.5 (18.2-27.4)                      | 10.3 (7.6-13.7)         | 5.7 (3.8-8.6)                | 20.0 (16.3-24.4)              | 39.7 (32.9-46.4)                 | 15.4 (11.3-20.7)          | 5.2 (2.8-9.2)             | 26.3 (19.3-33.4)                 |
| % Measles coverage by card + recall (95% CI) | NR   | 71.1 (CI: NR)                             | 75.3 (70.3-79.8)                      | 81.2 (77.0-84.8)        | 69.5 (64.8-73.8)             | 77.6 (73.1-81.5)              | 93.3 (89.8-96.9)                 | 87.2 (82.2-91.0)          | 84.5 (78.9-88.9)          | 86.5 (80.7-92.3)                 |
| % BCG coverage (scar) (95% CI)               | 56.5 (53.0-61.0)                           | 57.6 (54.0-62.0)                          | 73.1 (68.2-77.5)                      | 58.1 (53.3-62.7)        | 37.1 (32.6-41.9)             | 63.8 (58.9-68.3)              | 80.5 (74.2-86.8)                 | 72.7 (66.8-78.0)          | 64.9 (58.4-71.0)          | 72.3 (66.4-78.3)                 |
| % Vitamin A in past 6 months (95% CI)        | 88.9 (86.0-92.0)                           | 86.6 (84.0-89.0)                          | 92.0 (88.6-94.5)                      | 85.5 (81.7-88.6)        | 84.2 (80.4-87.4)             | 81.3 (77.2-84.9)              | 94.1 (90.7-97.5)                 | 86.8 (82.0-90.6)          | 78.8 (72.8-83.8)          | 90.0 (84.3-95.7)                 |

**Table 4: Food and Nutrition Interventions in Surveyed Woredas of SNNPR**

|  | Sidama zone                                    |  |                       |                       |                      |                 | Gamogofa Zone        |                       | Wolaita zone          |                       |
|--|--|--|-----------------------|-----------------------|----------------------|-----------------|----------------------|-----------------------|-----------------------|-----------------------|
|  | Coffee LZ                                      | Enset LZ                                       | Bona                  | Boricha               | Awassa Zuria         | Hawella Tulla   | Mirab Abaya          | Boreda                | Humbo                 | Soddo Zuria           |
| Estimated population size  | 306,820  | 152,804  | 111,495               | 229,777               | 106,163              | 113,770         | 69,306               | 73,606                | 130,999               | 193,644               |
| Estimated Under Five population  | 55,535   | 30,408   | 22,299                | 45,956                | 21,233               | 22,754          | 13,861               | 14,721                | 26,200                | 38,729                |
| Productive Safety Net – No of beneficiaries<br>% of rural population                                     | 47,040**<br>15.3%                              | No   | 9,361<br>8.4%         | 39,760<br>17.3%       | 20,700<br>19.5%      | 11,853<br>10.4% | 20,700<br>19.5%      | 16,569<br>22.5%       | 41,729<br>31.9%       | 29,536<br>15.3%       |
| Food Aid April - Dec. 08 – No of beneficiaries<br>% of rural population                                  | 780***<br>0.3%                                 | No   | No                    | No                    | No                   | No              | No                   | No                    | 22,788<br>17.4%       | 32,970<br>17.0%       |
| EOS- 8th round screening<br>No of children acutely malnourished*<br>As a percentage of screened children | Nov. 07<br>5,429****<br>9.2%                   | No   | Nov. 07<br>1271<br>7% | Nov. 07<br>1025<br>3% | Nov. 07<br>563<br>3% | No              | Nov. 07<br>337<br>3% | Nov. 07<br>1030<br>9% | Nov. 07<br>1574<br>6% | Nov. 07<br>1885<br>6% |
| Therapeutic Feeding Unit   | Bokaso HC<br>Mesenkela HC<br>Yirgalem Hospital | Bokaso HC<br>Mesenkela HC<br>Yirgalem Hospital |                       | Yirba HC<br>Darara HC | Bushulo HC           |                 |                      |                       |                       |                       |
| Outreach Therapeutic Programme   | ACF  | ACF  | SC-US                 | GOAL                  | GOAL                 | No              | No                   | No                    | No                    | No                    |

\* MUAC below 12.0 cm and/or oedema

\*\* Total PSNP in Aleta Wondo & Dale

\*\*\* Total affected population in Wonsho

\*\*\*\* Total acutely malnourished in Aleta Wondo and Dale woredas

## SURVEY DATA QUALITY CONTROL

The results of the quality check conducted by the ENCU on all surveys conducted in the first quarter of 2008 is presented below. The ENCU used ENA (October 2007) for the analysis. Overall the quality of all 13 surveys was good. All but one of the surveys had SD for WHZ falling within the accepted range of 0.8-1.2, indicating good survey quality and low measurement errors. The degree of skewness and kurtosis of WHZ scores was also within the accepted range between -1 and +1, indicating normal distribution around the mean. One survey (WVE, Boreda) exhibited kurtosis of WHZ (1.2). All other quality

checks on this data set were within the accepted plausibility range. Slight bias in terms of under-representation of the youngest aged between 6 and 29 months was exhibited by 4 surveys and falling well below the 49% estimate expected in a normally distributed sample (WHO, 2000). Therefore, as the older age group were more represented in these surveys, the overall prevalence of malnutrition could be underestimated as higher malnutrition prevalence is expected among the younger age group (6-29 months). NGOs were not able to give plausible reasons for this under-representation.

**Table 5: Results of Survey Quality Check**

| Agency                | Woreda/Livelihood Zone | Digit preference |        | SD of WHZ | Skewness of WHZ | Kurtosis of WHZ | No. Of WHZ flags (%) | Representativeness of the sample |                |           |
|-----------------------|------------------------|------------------|--------|-----------|-----------------|-----------------|----------------------|----------------------------------|----------------|-----------|
|                       |                        | Weight           | Height |           |                 |                 |                      | Age group (months)               | % Distribution | Sex Ratio |
| ACF                   | Coffee Livelihood Zone | No               | No     | 0.791**   | 0.207           | 0.001           | No                   | 6-29<br>30-59                    | 34.6*<br>65.4  | 1.0       |
| ACF                   | Enset Livelihood Zone  | No               | No     | 0.814     | 0.039           | -0.076          | No                   | 6-29<br>30-59                    | 35.3*<br>64.7  | 1.1       |
| SCUS                  | Bona                   | No               | No     | 0.831     | 0.170           | 0.082           | No                   | 6-29<br>30-59                    | 46.3<br>53.7   | 0.9       |
| WVE                   | Boricha                | No               | No     | 0.860     | 0.165           | -0.101          | No                   | 6-29<br>30-59                    | 43.4<br>56.6   | 1.0       |
| WVE                   | Awassa Zuria           | No               | No     | 0.891     | -0.072          | 0.296           | No                   | 6-29<br>30-59                    | 39.8<br>60.2   | 1.1       |
| WVE                   | Hawella Tulla          | No               | No     | 0.858     | 0.151           | 0.595           | 0.12                 | 6-29<br>30-59                    | 34.8*<br>65.2  | 1.0       |
| WVE                   | Merab Abaya            | No               | No     | 0.874     | 0.086           | 0.101           | No                   | 6-29<br>30-59                    | 43.6<br>56.4   | 1.1       |
| WVE                   | Boreda                 | No               | No     | 0.957     | 0.323           | 1.300 ***       | 0.71                 | 6-29<br>30-59                    | 39.5<br>60.5   | 1.0       |
| WVE                   | Humbo                  | No               | No     | 0.829     | 0.160           | 0.262           | No                   | 6-29<br>30-59                    | 43.5<br>56.5   | 0.9       |
| WVE                   | Soddo Zuria            | No               | No     | 0.812     | 0.167           | 0.009           | No                   | 6-29<br>30-59                    | 40.8<br>59.2   | 1.1       |
| RENCU/Oromia DPP& FSC | Moyale                 | No               | No     | 0.871     | 0.317           | 0.298           | 0.12                 | 6-29<br>30-59                    | 38.6*<br>61.4  | 1.0       |
| RENCU/Oromia DPP& FSC | Mi'oo                  | No               | No     | 0.845     | 0.200           | 0.650           | 0.4                  | 6-29<br>30-59                    | 35.5*<br>64.5  | 0.9       |
| GOAL                  | Dhas                   | No               | No     | 0.831     | 0.426           | 0.287           | No                   | 6-29<br>30-59                    | 42.0<br>58.0   | 1.2****   |

\* Age bias towards the older children  
 \*\* Low standard deviation of WHZ  
 \*\*\* Moderate kurtosis problem  
 \*\*\*\* Sex bias towards boys

Interpretation and classification of the nutrition situation in each of the areas where by the above surveys were conducted was made according to the benchmarks of nutrition status set by DPPA in 2002 and by looking at the information on aggravating factors which include:

- Poor household food availability and accessibility (due to a poor harvest, poor pasture conditions, high market prices of staple food crops,
- Epidemics of measles, AWD, malaria, etc.
- Low level of vaccination (BCG & measles) and vitamin A supplementation
- Inadequate safe water supplies and sanitation

Below are the bench marks/alert stages of population malnutrition rates as recommended by the DPPA guidelines of 2002, based on global acute malnutrition defined as <-2 z-scores and/or oedema, and severe acute malnutrition defined as < -3 z-scores and/or oedema.

| Indicators  | Stage of alert                                    |
|---|---|
| Global acute malnutrition prevalence > 20% and/or<br>Severe acute malnutrition prevalence >= 5% | Critical  |
| Global acute malnutrition prevalence 15-19% and<br>Aggravating factors                          |   |
| Global acute malnutrition prevalence 15-19%   | Serious   |
| Global acute malnutrition prevalence 10-14% and<br>Aggravating factors                          |   |
| Global acute malnutrition prevalence 10-14%   | Poor  |
| Global acute malnutrition prevalence 5-9% and<br>Aggravating factors                            |   |
| Global acute malnutrition prevalence 2-9%   | Typical for a chronically malnourished population |

### NUTRITION CLUSTER / MANTF news

In response to suggestions to review and revise the existing DPPA National Emergency Nutrition Assessment Guidelines 2002, the ENCU lead in a SWOT analysis with key organisations regularly conducting surveys (ACF, Concern, SC-UK). While overall the SMART approach was considered favourable to the 30x30 standard methodologies, several aspects of SMART version 1 require further development to best suit the assessment needs in Ethiopia. These aspects will be considered when the national guidelines are reviewed and subsequently updated. Key areas to strengthen were noted as guidance on methodology for surveys in pastoralist areas, agreement on methodology to collect and analyse food security information, information on

using livelihood intervention units as sample frames rather than administration units (woredas), guidance on non-emergency surveys for project monitoring, support to estimate mortality rates when previous survey estimates are not available. The ENCU will continue to work with the Emergency Nutrition Cluster Technical Group to support the updating of the National Guidelines to best address these and other key issues voiced by the nutrition partners.

We welcomed the visit of Peter Hailey, UNICEF Regional Nutrition Advisor during this period. Peter worked with UNICEF/ENCU to offer support in rolling out the emergency nutrition cluster approach in Ethiopia.

## NUTRITION SURVEY DATABASE

Table 6 presents the number of standardized nutrition surveys conducted in Ethiopia since 2000. It does not include surveys conducted in resettlement areas, IDP and refugee camps. Between

2000 and March 2008 a total of 468 standard nutrition surveys were conducted. All raw data and final and summary narrative reports are kept in the ENCU database.

**Table 6: Nutrition surveys conducted per region per year since 2000**

| Region           | Year      |           |           |           |           |           |           |           |           |            |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
|                  | 2000      | 2001      | 2002      | 2003      | 2004      | 2005      | 2006      | 2007      | 2008      | Total      |
| SNNPR            | 9         | 5         | 35        | 30        | 14        | 25        | 20        | 16        | 10        | 164        |
| Oromia           | 3         | 2         | 20        | 27        | 22        | 20        | 14        | 6         | 3         | 117        |
| Amhara           | 5         | 9         | 24        | 17        | 9         | 7         | 6         | 4         | 0         | 81         |
| Somali           | 8         | 5         | 5         | 5         | 8         | 11        | 12        | 2         | 0         | 56         |
| Tigray           | 0         | 0         | 6         | 7         | 3         | 3         | 0         | 8         | 0         | 27         |
| Afar             | 0         | 0         | 4         | 5         | 1         | 6         | 4         | 2         | 0         | 22         |
| Gambella         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0          |
| Benshangul Gumez | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0          |
| Harare           | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 1         | 0         | 1          |
| <b>Total</b>     | <b>25</b> | <b>21</b> | <b>94</b> | <b>91</b> | <b>57</b> | <b>72</b> | <b>56</b> | <b>39</b> | <b>13</b> | <b>468</b> |