

SPECIAL ISSUE

RAPID NUTRITION ASSESSMENT (MUAC) IN BULO BURTE URBAN, HIRAN REGION, SOMALIA

BACKGROUND

In March 2014, Somalia National Army supported by AMISOM troops recovered Bulu Burte town of Hiran Region from insurgents. The town was subsequently subjected to a siege by the insurgents who prevented trade and population movement to and from Bulu Burte town. This siege has cut all means of transport and population movement in the area and worsened the already precarious food insecurity in the area. As a result, staple food prices increased sharply by the June 2014, which severely compromised the food security of most residents of Bulu Burte town¹. Consequently, FSNAU and partners projected that 8 950 people will be in an acute food security Emergency (IPC 4) in Bulu Burte for the period August to December 2014. There has been a decline in staple cereal prices between July and December 2014. However, cereal prices remained significantly higher compared to prices at the beginning of 2014. In the absence of significant expected improvements, FSNAU and partners classified 8 950 people in Bulu Burte to remain in acute food security Emergency (IPC Phase 4) through June 2015.

This Special Update is intended to provide an update on the food security and nutrition situation in Bulu Burte based on cereal prices, labor-wage to cereals terms of trade and results of a rapid nutrition assessment conducted in Bulu Burte town in April 2015.

MARKET PRICES AND TERMS OF TRADE

Availability of imported commodities and local cereal in Bulu Burte district remained very scarce. Prices increased for most commodities since January 2015 despite a modest decline in early April for some commodities (Table 1).

Table 1: Commodity prices (SoSh), wage rates (SoSh) and Terms of Trade (daily labour wage/ cereal prices) in Bulu Burte

Item	Jan 2015	Feb 2015	Mar 2015	First week of Apr 2015	Second week of Apr 2015
White sorghum	11 000	12 000	14 000	14 000	14 000
White maize	11 000	12 000	14 000	14 000	14 000
Wheat flour	18 000	24 000	28 000	24 000	24 000
Rice	18 000	24 000	28 000	24 000	24 000
Sugar	19 000	22 000	30 000	26 000	26 000
Vegetable oil (litre)	35 000	43 000	45 000	40 000	40 000
Diesel (litre)	28 000	37 000	38 000	40 000	40 000
Casual labour wage	20 000	18 000	25 000	20 000	30 000
Labor wage to cereals Terms of Trade-TOT (kg)	1.8	1.5	1.8	1.4	2.1

The increase in market prices and weak purchasing power (expressed in terms of terms of trade between daily labour wage and cereals) is expected to adversely impact not only the food security of the population but also the nutrition situation in Bulu Burte. To monitor the nutrition situation, FSNAU has initiated nutrition surveillance of 6-59 month old children in Bulu Burte (based on Mid Upper Arm Circumference-MUAC) on a monthly basis. The purpose of surveillance is to detect the magnitude of the problem so that timely and actionable warning can be given to stakeholders in the event of deterioration in the nutrition situation of the population..

¹ Other urban areas in southern parts of Somalia similarly affected by disruption of trade and movement of people include Xudur and Wajid in Bakool Region and Qoryole in Lower Shabelle Region.

SURVEILLANCE OBJECTIVE²

Objectives of the FSNAU nutrition surveillance in Bulo Burte are:

- To assess the nutrition situation among 6-59 month old children
- Provide timely warning through monthly reports to prevent deterioration in nutrition situation

METHODOLOGY

Based on the village demarcations made after the government and AMISOM troops and administration reached the town, Bulo Burte town was divided into seven villages and twenty eight sub-villages (four in each village). Ten sub-villages were selected using ENA cluster sampling table. From each of the selected clusters, ten children were selected using simple random sampling and subsequently examined for prevalence of oedema and their MUAC measurements were recorded. The household head was also interviewed for prevalence of morbidity. The data was entered and analysed using ENA software.

RESULTS AND DISCUSSION

MUAC is an independent criterion for acute malnutrition. There is now a large body of evidence from the field that MUAC is the most appropriate indicator for use in admission into emergency feeding programmes in terms of achieving SPHERE minimum standards for coverage. It is also considered a better predictor of mortality than Weight for Height Z-Scores³. The individual cut-offs commonly used for MUAC are less than 11.5 cm for Severe Acute Malnutrition and between 11.5 to less than 12.5 cm for Moderate Acute Malnutrition. For population surveys, there are no population based thresholds. However, FSNAU has developed and currently uses MUAC cut-off points as shown in Table 2 below.

Table 2: FSNAU Cut-Off Points for MUAC Based on Proportion of Children (%) That Fall Under Each Category

MUAC	Acceptable	Alert	Serious	Critical	Very Critical
Less than 12.5% (Global Acute Malnutrition-GAM MUAC)	<5.0%	5.0-7.4%	7.5-10%	10.7-16.7%	>16.7%
Less than 11.5% (Severe Acute Malnutrition-SAM MUAC)	<1.0%	1.0-1.6%	1.7-2.4%	2.5-4.0%	>4.0%

Results of the rapid MUAC assessment conducted in Bulo Burte in early April 2015 show prevalence of Very Critical levels of acute malnutrition: one out of three children the age of five are acutely malnourished (33% GAM-MUAC) and one out of five children under the age of five are severely malnourished (19 % SAM-MUAC) (Table 3).

Table 3: Summary of Nutrition Situation (Children 6-59 Months)

Indicator-MUAC	All n = 100	Boys n = 53	Girls n = 47
Prevalence of Global Acute Malnutrition (< 12.5 cm and/or oedema)	n=33 33.0% (25.3-41.8 95% CI)	n=16 30.2% (20.2-42.4 95% CI)	n=17 36.2% (21.5-54.0 95% CI)
Prevalence of Severe Acute Malnutrition (< 11.5 cm and/or oedema)	n=19 19.0% (8.4-22.4 95% CI)	n=8 15.1% (8.6-25.1 95% CI)	n=11 23.4% (11.3-42.3 95% CI)

It was noted that prevalence of acute malnutrition is higher in girls (36.2%) compared to boys (30.2%). Similar trends were noted for prevalence of Oedema which was higher in girls (6.4%) compared to boys (5.7%).

OEDEMA / KWASHIROKAR PREVALENCE

The prevalence of oedematous malnutrition (Kwashiorkor) is being reported separately. It is most common among children living in deprived circumstances who are exposed to infections and eat a monotonous diet deficient in protein, vitamins and minerals. Current rapid assessment shows six cases of bilateral oedema (Table 4).

Table 4: Prevalence of Oedema (Kwashiorkar) in 6-59 month old children in Bulo Burte

Indicator	Number	Percentage
Overall (n=100)	6	6.0%
Boys (n = 53)	3	5.7%
Girls (n = 47)	3	6.4%

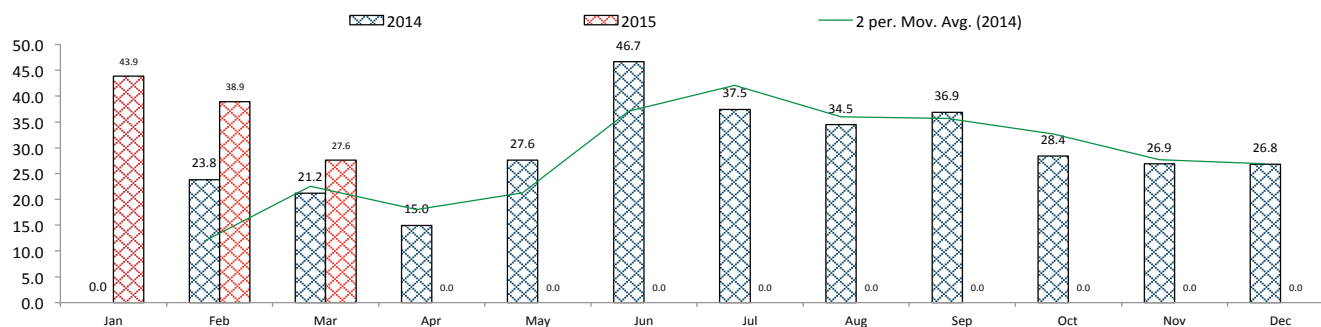
² The purpose of surveillance here is NOT to provide an accurate or reliable prevalence estimate but to detect a potential problem which once detected will lead to further actions which might include a full-blown cross-sectional survey

³ Weight-for-height and MUAC for estimating the prevalence of acute undernutrition? A review of survey data collected between September 1992 and October 2006 .Mark Myatt Arabella Duffield. University College London Save the Children UK. 22nd October 2007

The factors contributing to the observed high rates of acute malnutrition include the disruption of trade and population movement in the area which caused high inflation of foodstuff and lack of job opportunities in the area. Operational health facilities also do exist in the area. Organizations that are willing to open facilities could not convey supplies to Bulo Burte.

Data from health facilities in Bulo Burte also show sustained high level of acute malnutrition (>20%). The levels were much higher (36.8%) this quarter (Jan-March 2015) compared to the first quarter of 2014 (22.5%) [Figure 1].

Figure 1: Bulo Burte Urban Health Facilities Data (2014-2015)



There are currently increasing diarrhoea cases according to health professional there but no outbreaks reported in the area. The results of this assessment also show high morbidity (34%) among children under five. Majority (22%) of the children examined reported an episode of diarrhoea during the 14 days before the assessment while suspected measles was reported among four percent of the children (Table 5).

Table 5: Prevalence of Morbidity in 6-59 month children in the two weeks prior to interview (n=100)

	Number	Percentage
Diarrhoea	22	22 %
Pneumonia	3	3 %
Fever	5	5 %
Suspected Measles	4	4 %
Total	34	34 %

CONCLUSION AND RECOMMENDATIONS

The siege imposed by insurgents around Bulo Burte town since March 2013 has prevented trade and population movements resulting in unimaginable security risk to civilians, inflation, lack of job opportunities and lack of access to humanitarian assistance. FSNAU and partners have already projected that 8 950 people in Bulo Burte will remain in acute food security Emergency (IPC Phase 4) through June 2015 due to the disruption of trade and population movement which severely affected food security of the population. The Very Critical nutrition situation in Bulo Burte town indicates further deterioration of the situation and call for an urgent and sustained delivery of humanitarian assistance to the affected population. The most important aspect is the siege established around the town which prevented the trade and population movement which resulted into unimaginable security risk to civilians, inflation, lack of job opportunities and lack of access to any humanitarian assistance.

- ✓ There is urgent need for food assistance especially for those living in Bulo Burte town and populations living within 10 km radius from the town.
- ✓ There is need for sustained nutrition assistance to treat the malnourished and supplement those at risk of malnutrition.
- ✓ Health service provision is lacking in the area and the high morbidity found in this assessment and the rate of suspected measles call for urgent establishment of health facilities in the town.
- ✓ In tandem with provision of urgent humanitarian assistance to the affected population, security conditions permitting, there is need to carryout other assessments and collect more information that enable comprehensive humanitarian planning

Recent publications and releases

- *FSNAU Post Deyr 2014/15 Food Security and Nutrition Technical Report, March, 2015*
- *FSNAU Post Deyr 2014 Nutrition Technical Report, March 2015*
- *FSNAU Post-Deyr 2014 Food Security and Nutrition Outlook (February to June 2015), February 2015*
- *FSNAU Climate Update, March 2015*
- *FSNAU Market Data Update, March 2015*
- *FSNAU Presentation of the key findings from the 2014/15 post-Deyr Seasonal Food Security and Nutrition Assessment in somalia, January 2015*
- *FSNAU Technical Release, January 2015*

NOTE: The above publications and releases are available on the FSNAU website: www.fsnau.org