

## Child Nutrition in Somalia: Summary of SMART Survey Findings

April 07, 2017\*

As part of responding to the prolonged drought and preparing for further deterioration of the situation caused by possible failure of *gu* rain in April-May, Save the Children has undertaken SMART surveys in seven districts to measure the extent of malnutrition. Sites were selected based on data gaps and expected severity of the effects of ongoing drought. This note present summary findings for six districts where data collection is complete and the survey is underway in Wajid.

### Data and methods:

Data collection took place between 16<sup>th</sup> and 22<sup>nd</sup> March in Badhan and Taleh districts, between 22<sup>nd</sup> and 29<sup>th</sup> March in Burco, and between 27<sup>th</sup> March and 4<sup>th</sup> April in Abuduwaq, Adado and Hudur. Number of households surveyed are 547, 503, 536, 407, 623 and 438 in Badhan, Burco, Teleh, Abuduwaq, Adado and Hudur respectively with anthropometric data collected from a total of 4,109 children (aged between 6 and 59 months). Population proportionate sampling was used to reach these households from 30 clusters in Burco, and between 35 and 39 clusters each in the other five districts. In estimating the Global Acute Malnutrition (GAM) and Severe Acute Malnutrition (SAM) rates, SMART flags was used (i.e. children with z-score of below -3 or above 3 from the mean score of the district are excluded from the analysis).<sup>1</sup> In addition to anthropometric and child morbidity data, information on households' participation in drought response programmes were also collected.

### Findings:

Table 1 shows the GAM and SAM rates for the three districts, and the 95% confidence intervals are shown in parenthesis. GAM rates is classified as *serious* in Burco, and *critical* in the other five districts. In terms of SAM rate, the situation in Badhan and Adado are above the *very critical* cut-off of 5.6%, Burco is in *alert*, and the rest are *critical*. Mean values of WHZ (not shown in table)

in Burco -0.71, which is just above the cut-off (-0.7) to classify as *serious*. In the other five districts, mean values are between -1.04 (Taleh) and -1.19 (Badhan), which are indicative of greater than usual and increasing trend of malnutrition. **Based on the GAM/SAM rates, Bahan and Adado are clearly showing the worst child nutrition condition among the six locations.**

Malnutrition rates are generally higher among boys than girls in all locations except in Hudur (Table 2). GAM rates based on MUAC are 11%-14% in Badhan, Taleh and Adado, which also fall within the *critical* classification for both boys and girls. In Burco, this rate is 3-4% falling within *acceptable* range. However, in Abuduwaq and Hudur the MUAC based GAM rates are exceptionally high, especially for girls, falling within *very critical* range. The rates of underweight and stunting are also correspondingly high with exceptionally high stunting rate in Hudur. Stunting and weight-for-height are often negatively correlated since high prevalence of low height can reduce GAM rates based on weight-for-height measure. **This suggests that the GAM rate is not revealing the actual chronic malnutrition in Hudur.** Morbidity rates are around 45% in Badhan, Taleh and Abuduwaq, and around 2% in the other three districts. Regression analysis shows strong correlation

**Table 1.** Malnutrition rates in surveyed districts

District	GAM	SAM			
Badhan (Sanaag)	26.4% (±3.2)	7.0% (±1.9)			
Burco (Togdheer)	13.2% (±3.0)	1.6% (±1.1)			
Taleh (Sool)	18.3% (±2.9)	4.5% (±1.5)			
Abuduwaq (Galgadud) <sup>a</sup>	23.0 (±3.8)	4.1 (±1.8)			
Adado (Galgadud) <sup>a</sup>	22.2 (±2.8)	7.0% (±1.7)			
Hudur (Bokool) <sup>a</sup>	19.6 (±3.7)	5.0 (±2.0)			
Wajid (Bakool)	Survey underway				
	Acceptable	Alert	Serious	Critical	Very critical

\* The data and estimates are not yet validated through AIM Working Group of Nutrition Cluster.

<sup>1</sup> This is one the exclusions standards used and different from the earlier note shared on March 26, 2017. Consequently, the SAM rate is higher in Badhan district from the earlier summary results. The classifications, however, are the same.

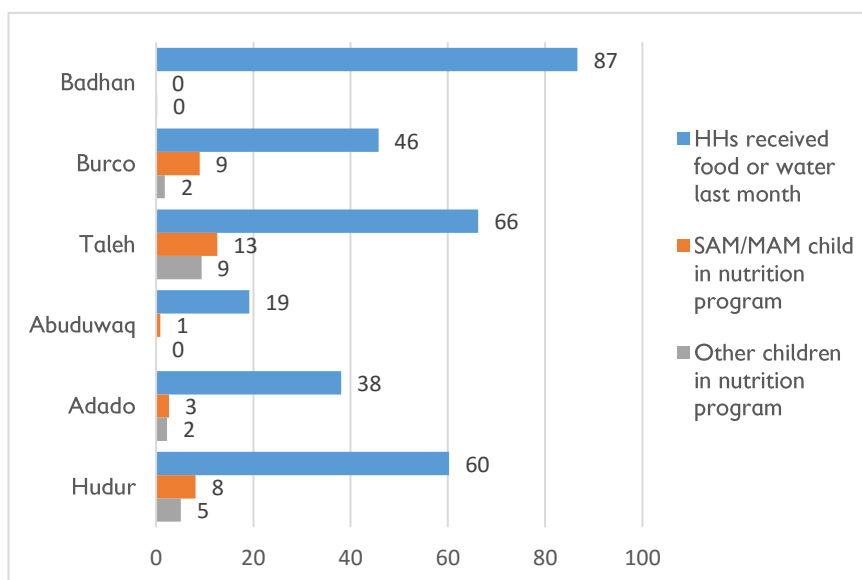
between the likelihoods of a child being malnourished and suffering from any illness, but the other household characteristics do not show strong association with malnutrition.

Table 2. Undernutrition and morbidity rates (in percentage) by sex of the children and district

Location	Group	GAM (WHZ<-2)	SAM (WHZ<-3)	GAM (MUAC< 125 mm)	Underweight (WAZ<-2)	Stunting (HAZ<-2)	Morbidity (any illnesses)
Badhan	Boys	29.8	7.6	13.1	24.3	16.0	40
	Girls	22.6	6.3	13.7	17.7	10.3	48
	Total	26.4	7.0	13.4	21.2	13.3	44
Burco	Boys	14.8	2.3	3.1	9.2	2.7	19
	Girls	11.6	0.8	3.5	5.2	1.2	20
	Total	13.2	1.6	3.3	7.2	2.0	20
Taleh	Boys	22.9	4.8	11.5	19.3	9.9	48
	Girls	13.3	4.1	12.7	10.5	6.8	47
	Total	18.3	4.5	12.1	15.0	8.4	48
Abuduwaq	Boys	24.7	4.4	14.7	27.7	22.3	45
	Girls	21.6	3.9	22.8	27.1	17.3	40
	Total	23.0	4.1	19.0	27.4	19.6	42
Adado	Boys	24.6	7.6	10.0	30.9	21.4	27
	Girls	19.5	6.3	12.3	24.7	17.9	24
	Total	22.2	7.0	10.8	28.1	19.8	26
Hudur	Boys	18.0	5.0	14.4	28.3	29.8	15
	Girls	21.2	5.1	19.1	27.3	24.0	16
	Total	19.6	5.0	16.7	27.8	26.9	15

The sample is not large enough to estimate mortality rates with acceptable precision. The number of deaths of under-five children recorded from these households are 6 in Adado, 4 each Badhan and Taleh, 2 each in Abuduwaq and Hudur in the last three months, no death reported in Burco. Based on this, corresponding **daily under-five death rates (per 10,000 children)** are **0.50 (Badhan), 0.53 (Taleh), 0.37 (Abuduwaq), 0.64 (Adado) and 0.43 (Hudur)**. Although under-five death rate of <1% is considered acceptable, the critical status of GAM and SAM rates, in all locations except Burco, indicate possible increase in death rates in near future unless immediate actions are taken in expanding nutrition programmes.

Emergency responses by various agencies seem to be somewhat aligned to the localized needs as 87% of the households in Badhan reported receiving food or water distribution from any agency in the last month. Majority of the households in Taleh and Hudur have also reported receiving such supports. However, the reach of such support in Adado and Abuduwaq seem to be much lower considering the extent of malnutrition in these districts.



There is a clear need of scaling up nutrition programme since less than 10% of the children are reported to be registered in any nutrition programme. Information from nutrition projects implemented by Save the Children across the country also show a deteriorating condition. According to programme database, only 11% of the children screened in February were SAM/MAM cases and admitted to OTP/TSFP and the rate has increased to 26% by third week of March.