FSNAU
Food Security and Nutrition Analysis Unit - Somalia

NUTRITION UPDATE

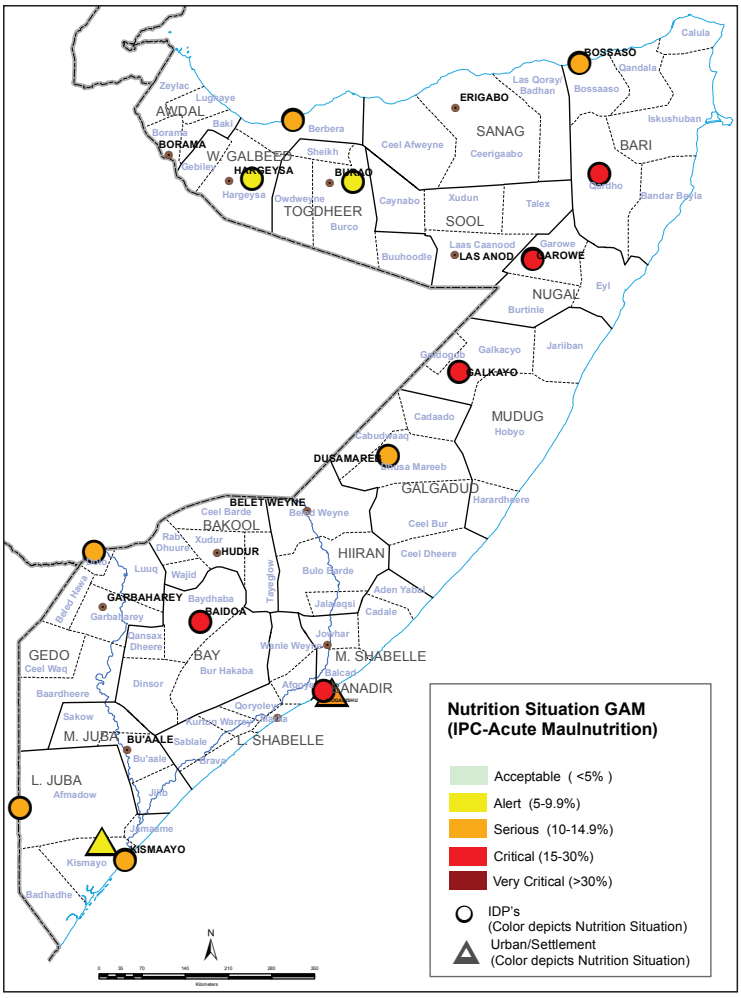
November 2017

Highlights

The 2017 Deyr season nutrition assessment among Internally Displaced Persons (IDPs) in the main settlements and two urban areas shows Critical prevalence of acute malnutrition (Global Acute Malnutrition-GAM ≥ 15%) in 5 out of 15 population groups surveyed in November: Qardho IDPs, Galkacyo IDPs, Garowe, Mogadishu IDPs and Baidoa IDPs - see Map 1 and Table 2.

However, the nutrition situation among IDPs in Baidoa, Dhusmareeb Hargeisa and Berbera has shown statistically significant improvement since June 2017 (Gu season). The 2017 Deyr assessment results for IDPs in Mogadishu, Dolow and Bossaso also reflect decreases in GAM and Severe Acute Malnutrition (SAM) prevalence since 2017 Gu although these changes are not statistically significant.

Map 1. Acute Malnutrition Prevalence (GAM) among IDPs and Urban Populations Covered in the 2017 Deyr Assessment



Assessment Overview

FSNAU and partners conducted joint Nutrition and Food security assessment among 15 population groups (13 IDP and two urban) across Somalia in November 2017 (Table 1). The objective of the assessments was to monitor the nutrition situation of IDPs in the 13 main IDP settlements and in selected urban areas (Mogadishu and Kismayo) as part of FSNAU's biannual surveillance activities.

A two-stage probability proportionate to size (PPS) cluster sampling protocol, based on SMART Methodology[1] was used, with the exception of Qardho, Berbera and Dhusamareb IDP settlements where sampling was exhaustive. Retrospective mortality data for 136 days prior to the assessments was also collected among all sampled households. Mortality, food security and nutritional data was collected concurrently from the same households. Variables (anthropometric and all other contextual indicators) and mortality were entered using EPI info soft 3.5.4 and ENA SMART software (July 9th, 2015 version), respectively. For quality assurance, enumerators and supervisors received five days of training prior to data collection. During the field work, anthropometric dataset were checked on a daily basis using ENA SMART software plausibility parameters.

GAM was estimated using World Health Organization growth standards, while Crude Death Rates (CDRs) and Under-Five Death Rates (U5DR) for children less than 5 years of age were calculated using the most recent population estimates available (UNDP PESS, 2014; CCCM DSA in Baidoa). The event used to calculate the recall period for the 2017 Deyr mortality assessment among IDP/urban populations was the beginning of Eidul Fitir religious holiday (i.e. 25 June 2017). Nutrition status of a total of 10 271 children (6-59 months) drawn from 7 412 households was assessed among 13 IDPs and two urban settlements covered in the 2017 Deyr assessment.

1 Standardized Monitoring and Assessment of Relief and Transitions (http://smartmethodology.org)

Technical Partners
Food and Agriculture Organization of the United Nations
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Assessment Results

Acute malnutrition in children aged 6-59 months is a direct outcome indicator of recent changes in nutritional status. The 2017 Deyr season nutrition assessment among Internally Displaced Persons (IDPs) in the main settlements and two urban areas shows Critical GAM prevalence in 5 out of 15 population groups surveyed in November: Qardho IDPs (21.9%), Galkacyo IDPs (21.8%), Garowe (17.6%), Mogadishu IDPs (16.1%) and Baidoa IDPs (15.1%) [See Figure 1 and Table 2].

Table 1. Sampling Details of Deyr 2017 IDP/Urban Nutrition Assessments

Population Groups	Number of Clusters	Number of Households	Number of Children
Northwest			
Hargeisa IDPs	28	560	687
Burao IDPs	28	501	528
Berbera IDPs	Exhaustive	399	487
Northeast and Central			
Bossaso IDPs	27	477	654
Qardho IDPs	Exhaustive	397	630
Garowe IDPs	27	463	723
Galkacyo IDPs	28	531	866
Dhusamareb IDPs	Exhaustive	362	562
Southern			
Mogadishu IDPs	37	675	789
Mogadishu Urban	35	447	537
Baidoa IDPs	36	648	1,072
Dolow IDPs	28	504	562
Dhobley IDPs	28	494	706
Kismayo IDPs	27	460	718
Kismayo Urban	28	494	750
Total	**357***	**7 412**	**10 271**

*Excluding the three exhaustive surveys

Serious GAM levels (10-14.9%) were recorded among IDPs in Dolow, Kismayo, Dhusamreeb, Bosaaso, Berbera, Dhobley and in urban Mogadishu. Alert levels of GAM (≥5 % to <10 %) were seen in among IDPs in Burao and Hargeisa and in urban Kismayo.

Deyr 2017 assessment recorded Critical levels of SAM prevalence (≥4-5.6) among IDPs in Mogadishu and Galkacyo. Serious levels of SAM prevalence were recorded among IDPs in Baidoa, Kismayo, Dhusamareeb, Qardho and Garowe. Alert SAM levels were noted among IDPs in Dolow, Bosaaso, Hargeisa, Burao, and Berbera and in urban Kismayo and urban Mogadishu.

Despite the persistence of high prevalence of acute malnutrition, there has been a statistically significant improvement in nutrition situation among IDPs in Baidoa, Dhusmareeb, Hargeisa and Berbera since June 2017 (Gu season). The assessment results for IDPs in Mogadishu, Dolow and Bosasso also reflect decreases in GAM and SAM prevalence since June 2017 although these changes are not statistically significant. The decreases in GAM in GAM Critical to Serious (17.6 % to 13.9 %) in Dolow and (18.6 % to 14.7 %) in Bossaso IDPs respectively.

However, it is concerning that **Critical** prevalence of acute malnutrition has persisted among some displaced populations: Garowe and Galkacyo IDPs since 2012 Gu and among Qardho and Mogadishu IDPs since 2016 Deyr (November).

The decrease in acute malnutrition prevalence among IDPs in Baidoa (GAM from 29.4 % to 15.1% and SAM from 10.4 % to 3.5 % since June 2017) reflect a statistically significant improvement (*P*=0.000). Crude Death Rate (CDR) and Under-Five Death Rate (U5DR) have also declined from >1/10 000/day and >2/10 000/day reported in June 2017 (Gu) to <1/10 000/day and <2/10 000/day, respectively, in 2017 Deyr (November). This is mainly attributed declined morbidity and Acute Watery Diarrhea (AWD) outbreaks and the impact of sustained humanitarian interventions. However, GAM prevalence among Baidoa IDPs remains Critical. Potential contributing factors include a high proportion of household with poor food consumption, experiencing hunger and trying to cope with food shortage. Immunization and vitamin A supplementation status are also low among children in Baidoa IDP settlement.

Table 2. 2017 Deyr Nutrition Situation Among IDP/Urban Population in Somalia

Population Groups	GAM (%)	SAM (%)	CDR (per 10 000 per day)	U5DR (per 10 000 per day)	Morbidity (%)
NORTHWEST					
Hargeisa IDPs	8.6	1.7	0.62	0.6	27.6
Burao IDPs	8.5	1.7	0.94	0.0	6.8
Berbera IDP	10.9	2.3	0.79	0.4	31.1
NORTHEAST AND CENTRAL					
Bossaso IDPs	14.7	2.3	0.06	0.11	20.0
Qardho IDPs	21.9	2.7	0.34	1.06	43.7
Garowe IDPs	17.6	2.9	0.27	0.29	18.8
Galkacyo IDPs	21.8	4.8	0.21	0.4	48.9
Dhusamreeb IDPs	14.8	3.6	0.73	1.04	45.0
SOUTHERN					
Mogadishu IDPs	16.1	4.1	0.79	1.77	44.1
Mogadishu Urban	11.2	1.3	0.26	0.25	37.0
Baidoa IDPs	15.1	3.5	0.58	1.01	11.1
Dolow IDPs	13.9	2	0.30	0.86	10.2
Dobley IDPs	13.3	1.8	0.41	0.83	29.6
Kismayo IDPs	13.5	3.6	0.32	0.72	13.6
Kismayo Urban	8.8	1.2	0.36	0.62	12.4

CDR 0.5-<1/10 000/day are seen among IDPs in Hargeisa, Buarao, Dhusamareb, Mogadishu and Baidoa while U5DR 1-<2/10 000/day are seen in Qardho, Dhusamareb, Mogadishu and Baidoa.

The AWD outbreak reported earlier this year has sharply declined compared to six months ago. However morbidity incidences in the two weeks prior to the assessments were high in Galkacyo (48.9%), Dhusmareeb (45%), Mogadishu (44.1%) and Qardho (43.7%).

High morbidity levels (childhood illness) are attributed to seasonal infections that have been reported in the last couple of months coupled with limited support interventions to some IDP populations.

Table 3. 2017 Deyr IDP/Urban Nutrition Assessment in Somalia – Potential Contributing Factors

Population Group Assessed	Global Acute Malnutrition-GAM Prevalence (%)	Severe Acute Malnutrition-SAM Prevalence (%)	Potential Contributing Factors of Acute Malnutrition (Highlighted Cells)						Summary of Factors	
			Childhood Illness (Morbidity) ≥ 20% of children 6-59 months	Measles vaccination <50% of children 6-59 months	VIT A Supplementation < 50% children 6-59 months	Poor/ Borderline food consumption in ≥ 20% of HHs	≥ 15% of HHs experienced Moderate to Severe Hunger	≥ 20% of HHs using Moderate to Severe Coping Strategies	Morbidity, vaccination and Vitamin A supplementation are important	Food Security related factors are important
NORTHWEST										
Hargeisa IDPs	8.6	1.7	27.6	36.4	31.6	55.0	13.0	50.0	**Yes**	**Yes**
Burao IDPs	8.5	1.7	6.8	87.8	92.6	23.0	28.0	37.0		**Yes**
Berbera IDP	10.9	2.3	31.1	50.2	60.6	42.0	9.0	48.0	**Yes**	**Yes**
NORTHEAST AND CENTRAL										
Bossaso IDPs	14.7	2.3	20.0	76.3	57.0	16.0	18.0	34.0	Yes	**Yes**
Qardho IDPs	21.9	2.7	43.7	21.4	20.2	9.0	3.0	13.0	**Yes**	
Garowe IDPs	17.6	2.9	18.8	64.5	64.1	12.0	8.0	25.0		Yes
Galkacyo IDPs	21.8	4.8	48.9	83.4	86.4	39.0	35.0	82.0	**Yes**	**Yes**
Dhusamreeb IDPs	14.8	3.6	45.0	63.6	63.8	35.0	47.0	29.0	**Yes**	**Yes**
SOUTHERN										
Mogadishu IDPs	16.1	4.1	44.1	45.8	47.9	17.0	41.0	52.0	**Yes**	**Yes**
Mogadishu Urban	11.2	1.3	37.0	52.5	59.7	0.0	2.0	9.0	**Yes**	
Baidoa IDPs	15.1	3.5	11.1	23.7	23.7	93.0	32.0	48.0	**Yes**	**Yes**
Dolow IDPs	13.9	2	10.2	15.6	34.1	30.0	17.0	52.0	**Yes**	**Yes**
Dobley IDPs	13.3	1.8	29.6	59.7	47.4	21.0	17.0	24.0	Yes	**Yes**
Kismayo IDPs	13.5	3.6	13.6	45.8	54.6	3.0	67.0	64.0	Yes	**Yes**
Kismayo Urban	8.8	1.2	12.4	77.3	77.3	0.0	19.0	34.0		**Yes**

Note: Highlighted cells are those that exceed thresholds stated in the headings of each column

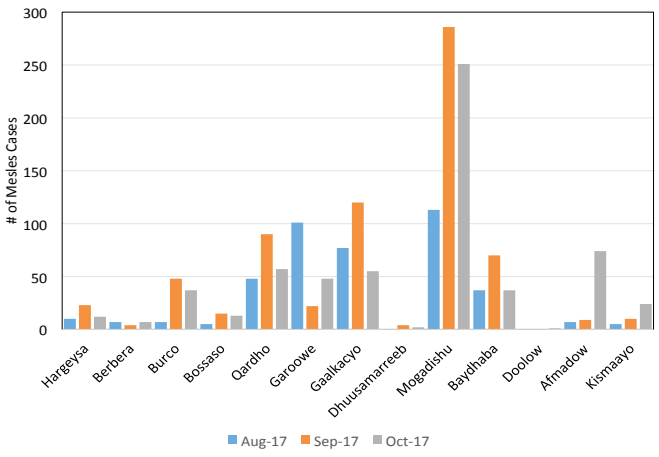
Even though mortality rates found during the 2017 Deyr assessment are relatively low, most of the already malnourished children are susceptible to diseases. Therefore, nutrition and health support interventions should to these areas should be complemented with sustained efforts to reduce morbidity by educating households on proper care and hygiene practices and improving health seeking behaviour.

The acute malnutrition, high morbidity and high mortality situation among IDPs in Mogadishu, Baidoa, Dhusamareb and Qardho call for integrated support interventions in order to improve the protracted situation that has persisted in these population groups.

Public health indicators such as immunization status for measles and Vitamin A supplementation were assessed based on a six-month recall period (single dose). Low measles immunization and vitamin A supplementation status were reported among IDPs in Dolow, Baidoa, Qardho IDPs and Hargeisa (Table 3). Data from WHO indicates increased measles outbreak in September and October in districts such as Mogadishu, Galkacyo, Qardho and Baidoa (Figure 1) which highlights the increased risk of further outbreak in the absence of adequate immunization.

Results from the 2017 Deyr nutrition assessment indicate an estimated total of 22 149 children under-five who are acutely malnourished across the 13 main IDP settlements (prevalence estimate). This represents a nearly 30 percent decrease compared to June (2017 Gu). The estimated number of children under five suffering from severe acute malnutrition is 5 200, a decrease of 46 percent from June 2017 (Table 4).

Figure 1. Measles Outbreak Cases Reported in , Aug-Oct 2017



Data Source: WHO

Table 4. 2017 Deyr Estimated Number of Acutely Malnourished Children Among IDPs

IDP Settlements	GAM Prevalence (# of children)			SAM Prevalence (# of children)		
	2017 Deyr	2017 Gu	2016 Deyr	2017 Deyr	2017 Gu	2016 Deyr
Mogadishu	11 000	13 940	11 350	2 810	4 510	2 750
Baidoa	5 110	9 950	550	1 190	3 520	120
Dhobley	140	150	150	20	30	20
Kismayo	270	230	250	80	50	20
Dolow	220	280	250	40	50	50
Dhusamareeb	110	240	1850	30	80	420
Bossaso	1 450	1 830	1 700	230	450	350
Qardho	210	190	150	30	30	50
Garowe	340	380	350	60	100	50
Galkayo	2 020	2010	-	450	380	-
Hargeisa	760	1 530	1 250	150	270	300
Burao	440	480	500	90	80	50
Berbera	80	130	100	20	30	20
Total	**22 149**	**31 340**	**18 450**	**5 200**	**9 580**	**4 200**

Overall, the nutrition assessments among the IDPs in Somalia indicate a modest improvement of the nutrition situation when compared with results form 2017 Gu season. This is with the exception of Qardho, Garowe, Galkacyo and Mogadishu IDPs which show sustained Critical nutrition situation. The overall median GAM prevalence among IDPs across Somalia in 2017 Deyr season (November) is 14.3 percent, compared to 18.1 percent in June 2017 and 14.4 percent in November 2016.

The Critical nutrition situation among IDPs in Mogadishu, Qardho, Garowe and Galkacyo is partly linked to high morbidity, measles outbreak, low immunization coverage, continuous arrival of new IDPs who are destitute, limited access to humanitarian interventions, and on-going Government evictions particularly among Mogadishu IDPs.

The situation in most of the IDP settlements calls for sustained humanitarian interventions in the form of integrated nutrition and health services and cash/food assistance.

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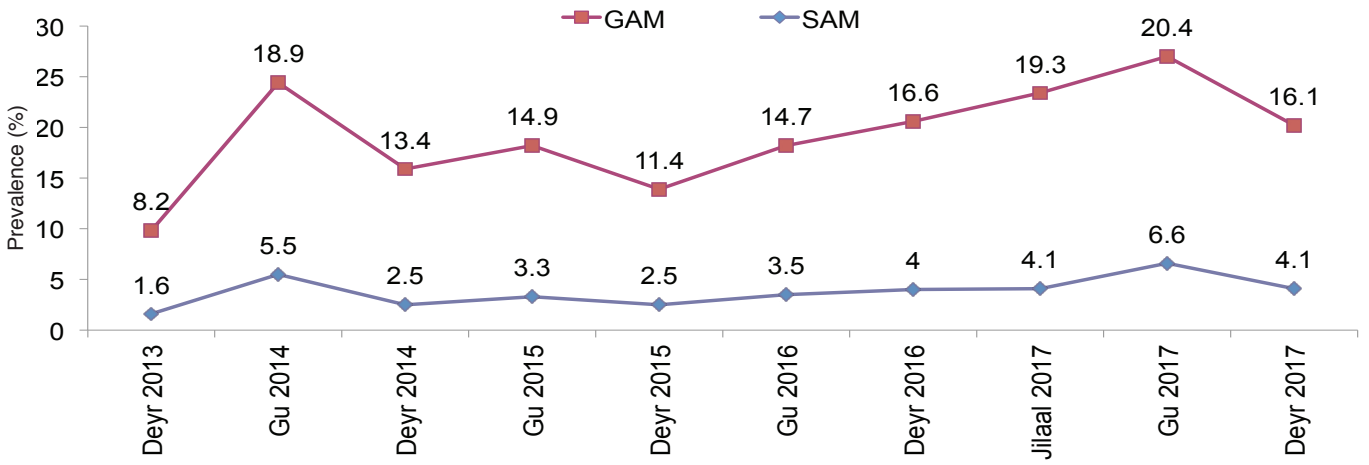
NUTRITION SITUATION AMONG IDPs IN SOUTH SOMALIA

Mogadishu IDPs: Mogadishu IDP settlement recorded a GAM prevalence of 16.1 percent and SAM rate of 4.1 percent which indicate sustained Critical nutrition situation compared to 2016 Deyr 2016 (November), 2017 Jilaal (April) and 2017 Gu. SAM prevalence also declined from Extreme Critical (6.6%) to Critical (4.1%).

CDR and U5DR among IDPs in Mogadishu during 2017 Deyr are 0.79/10 000/day and 1.77/10 000/day, respectively. These reflect improvement from levels seen during 2017 Gu (1.55/10 000/day and 4.61/10 000/day, respectively). The decrease in U5DR in November 2017 compared to June 2017 is statistically significant and is mainly associated with decreased AWD and measles outbreak since August.

However, morbidity, which is one of the contributing factors for acute malnutrition, remains high among IDPs in Mogadishu (44.1%), a slight decrease from morbidity levels reported in June 2017 (45.7%) [Figure 2].

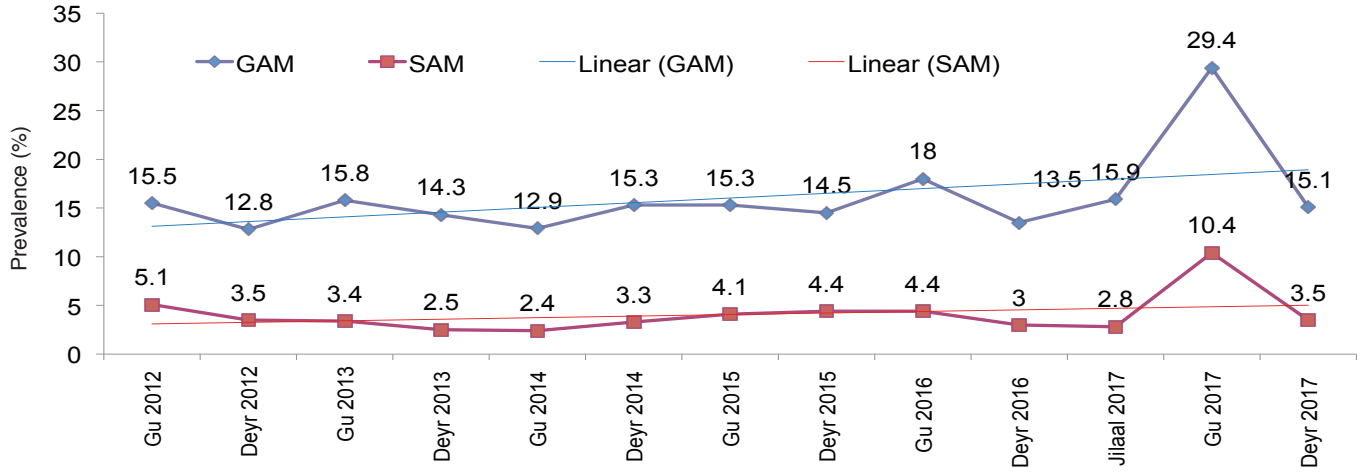
Figure 2: Trends in GAM and SAM prevalence among Mogadishu IDPs



Mogadishu Urban: assessment results during 2017 Deyr indicate a GAM prevalence of 11.2 percent and a SAM prevalence of 1.3 percent. These figures represent a slight improvement from those reported during 2017 Gu (13.8% GAM, 2.8% SAM). However, morbidity rates have increased from 24.7 percent in June 2017 to 37.0 percent in November 2017.

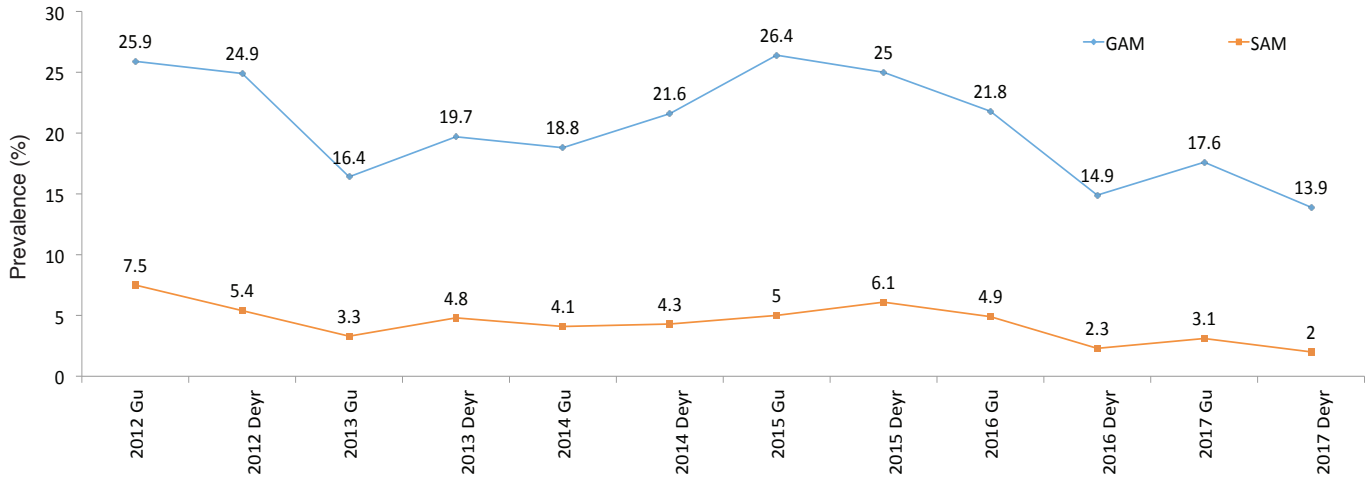
Baidoa IDP: There has been a sharp increase in GAM since November 2016, reaching a peak of of 29.4 percent during In June 2017 before declining to 15.1 percent in November 2017. The decrease in acute malnutrition prevalence among IDPs in Baidoa (GAM from 29.4 % to 15.1% and SAM from 10.4 % to 3.5 % since June 2017) reflect a statistically significant improvement (*P*=0.000). Crude Death Rate (CDR) and Under-Five Death Rate (U5DR) have also declined from >1/10 000/day and >2/10 000/day reported in June 2017 (Gu) to <1/10 000/day and <2/10 000/day, respectively, in 2017 Deyr (November). This is mainly attributed to reduced morbidity and Acute Watery Diarrhea (AWD) outbreaks and the positive impact of sustained humanitarian interventions. However, GAM prevalence among Baidoa IDPs remains Critical. Potential contributing factors include a high proportion of household with poor food consumption, experiencing hunger and trying to cope with food shortage. Immunization and vitamin A supplementation status are also low among children in Baidoa IDP settlement (Figure 3).

Figure 3: Trends in GAM and SAM Prevalence among Baidoa IDPs



Dolow IDPs: 2017 Deyr assessment recorded GAM and SAM prevalence of 13.9 percent (Serious) and 2.0 percent (Alert), respectively. GAM prevalence in November 2017 (Deyr) decreased from 17.6 reported in June 2017 (Gu). Morbidity and mortality rates were low among IDPs in Dollow during 2017 Deyr (Figure 4).

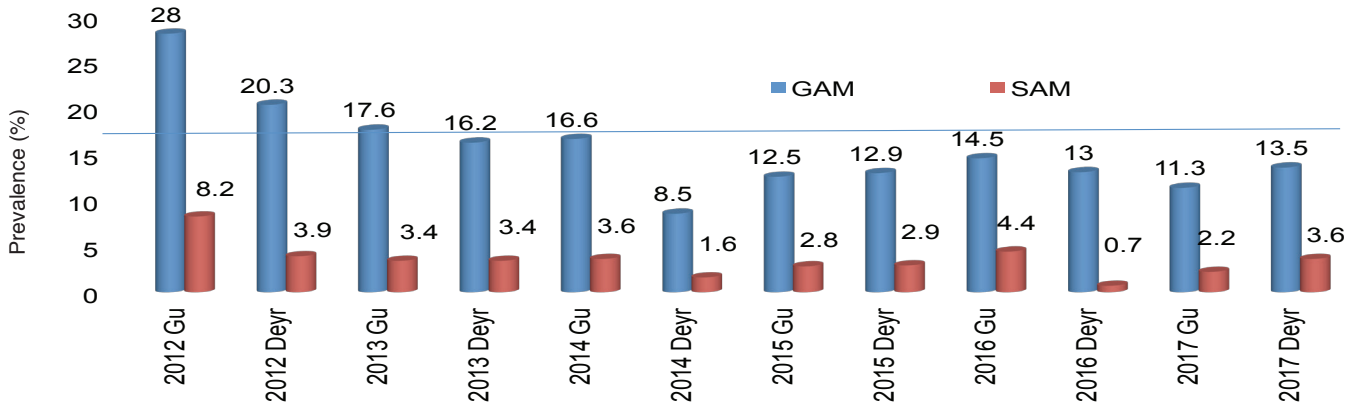
Figure 4: Trends in GAM and SAM prevalence among Dolow IDPs



Kismayo IDPs: GAM and SAM prevalence were 13.5 percent (Serious) and 3.6 percent (Serious), respectively, among IDPs in Kismayo, during 2017 Deyr. These results are not significantly different from assessment figures reported for June 2017 (11.3% and 2.2%, respectively).

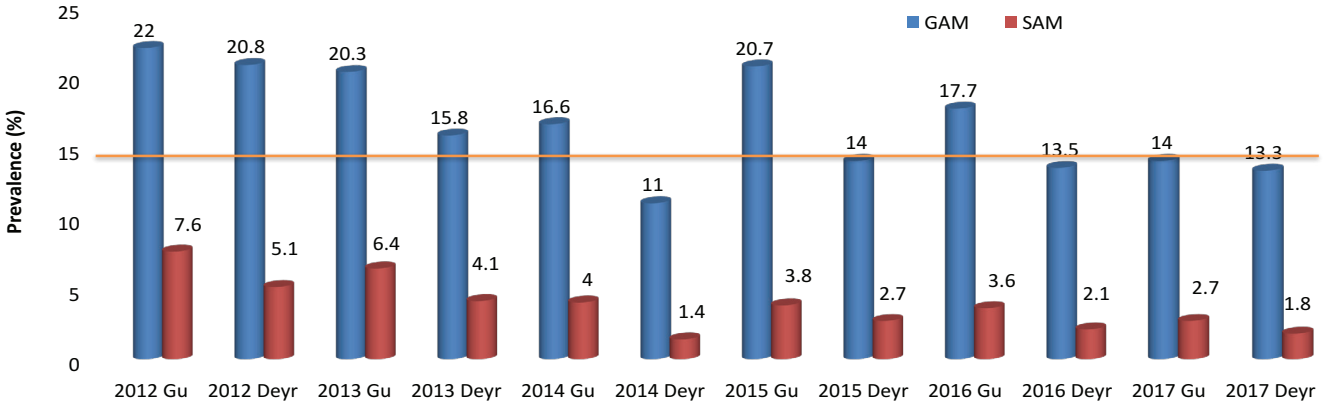
Kismayo Urban: recorded GAM prevalence of 8.8 percent and SAM prevalence of 1.2 percent indicating an Alert nutrition situation. These results represent an improvement from assessment figures reported for June 2017 (13.1% and 2.3%, respectively). However, the improvements are not statistically significant (Figure 5).

Figure 5: Trends in GAM and SAM among Kismayo IDPs



Dhobley IDPs: GAM and SAM prevalence were 13.3 percent (Serious) and 1.8 percent (Alert), respectively, among IDPs in Dhobley, during 2017 Deyr. These results are similar to assessment figures reported for June 2017 (14.0 % and 2.7%, respectively). However, morbidity rates have increased from 17.2 percent in June 2017 to 29.6 percent in November 2017 (Figure 6).

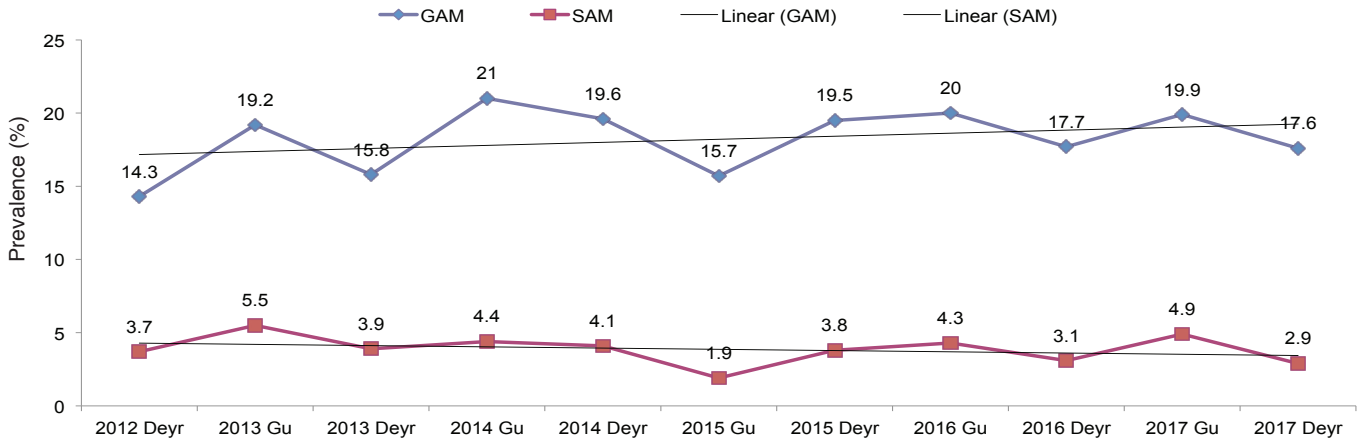
Figure 6: Trends in GAM and SAM prevalence among Dhobley IDPs



NUTRITION SITUATION AMONG IDPS IN NORTHEAST AND CENTRAL REGIONS

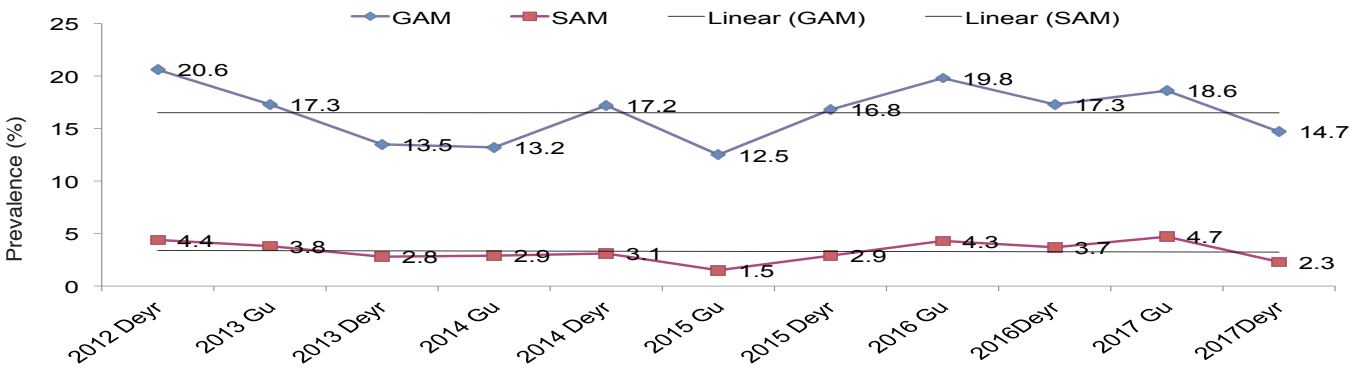
Garowe IDPs: Results from the 2017 Deyr nutrition assessment show a GAM prevalence of 17.6 percent (Critical) and a SAM prevalence of 2.9 percent (Serious). The results show sustained Critical level of GAM compared to results reported in June 2017 (19.9% GAM) and but a slight decrease from the 4.9 percent SAM reported in June 2017. Morbidity rates have decreased from 33.4 percent in June 2017 to 18.8 percent in November 2017. Relatively high rates of immunization and Vitamin A supplementation status were recorded among IDPs in Garowe in November 2017 (Figure 7).

Figure 7: Trends in GAM and SAM among Garowe IDPs



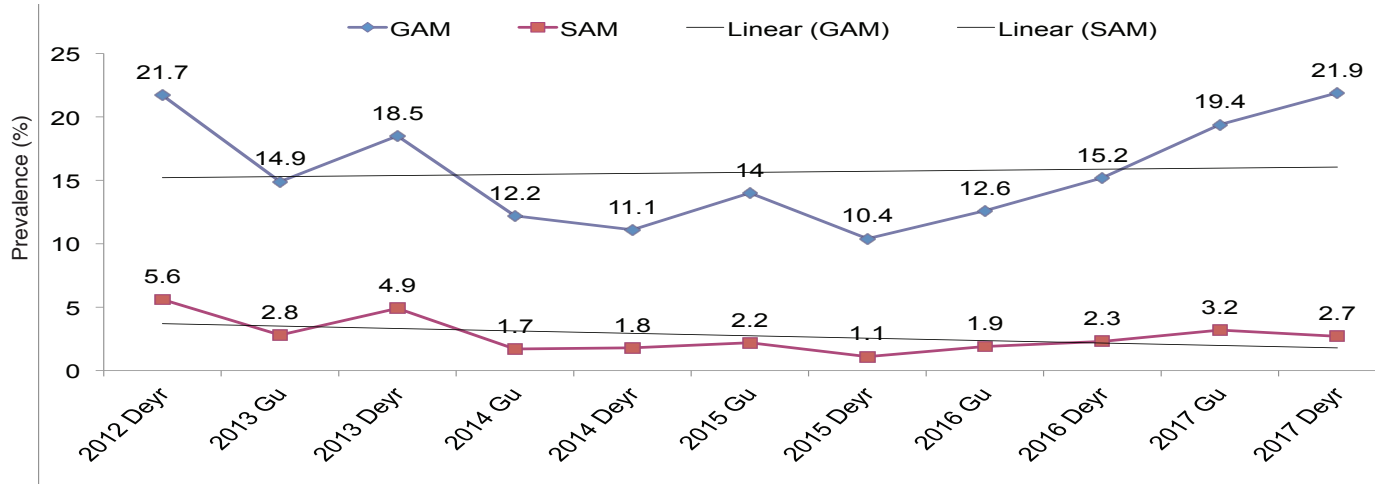
Bossaso IDPs: The 2017 Deyr assessment result shows a GAM prevalence of 14.7 percent (Serious) and a SAM prevalence of 2.3 percent (Alert). This indicates improvement of the nutrition situation since June 2017 but the changes are not statistically significant (p> 0.05) when compared to 2017 Gu (18.6%). Low morbidity results were seen in 2017 Deyr (20%), down from the high morbidity rates recorded in June 2017 (35.0%) [Figure 8].

Figure 8: Trends in GAM and SAM among Bossaso IDPs



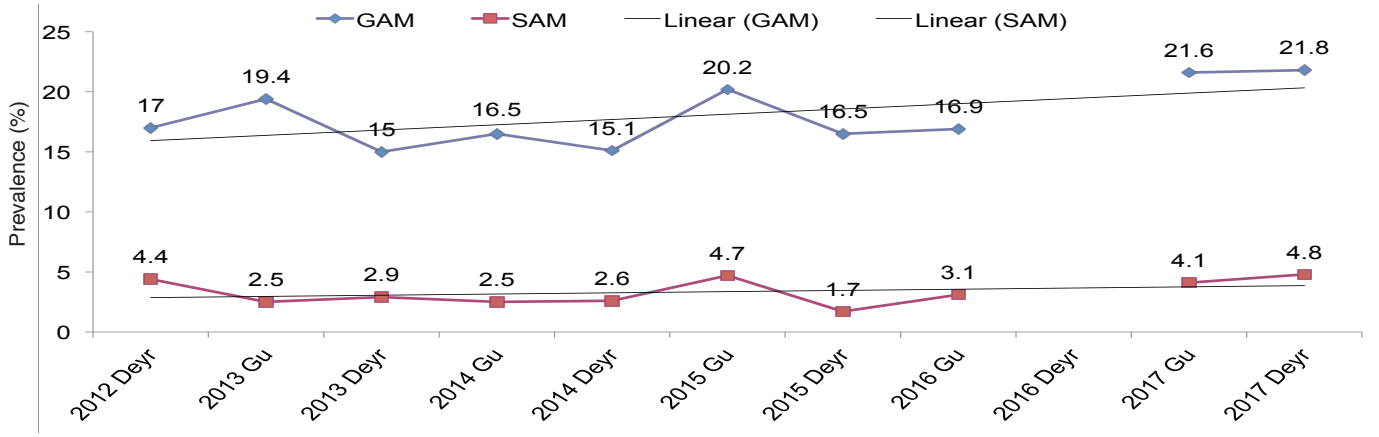
Qardho IDPs: Critical level of GAM (21.9 %) and Serious level of SAM (2.7%) were recorded in 2017 Deyr. these show sustained Critical nutrition situation since Deyr 2016 (15.2%) and Gu 2017 (19.4%). The GAM prevalence represents an increase from 19.4 percent reported in June 2017 although the increases are not statistically significant. Morbidity remains high among IDP children in Qardho (43.7% in November 2017 compared to 55.3% in June 2017) [Figure 9].

Figure 9: Trends in GAM and SAM among Qardho IDPs



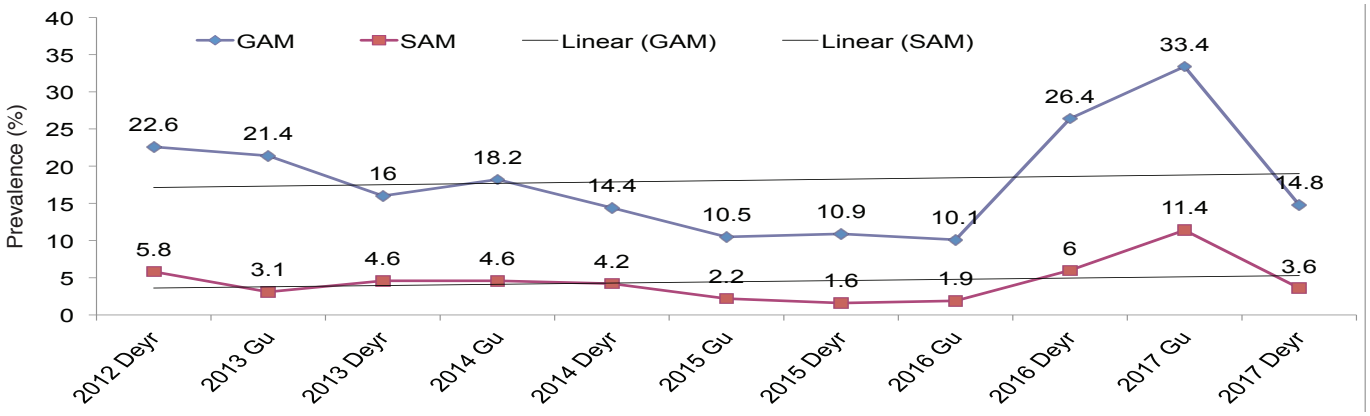
Galkacyo: Result of 2017 Deyr assessment of IDPs in Galkacyo recorded a 21.8 percent GAM and 4.8 percent SAM of which indicate a sustained Critical nutrition compared to June 2017 (Gu) when GAM and SAM prevalence were 21.6 percent and 4.1 percent, respectively. At 48.9 percent, morbidity rates in Galkacyo IDP settlement during November 2017 was among the highest among IDPs across in Somalia (Figure 10).

Figure 10: Trends in GAM and SAM among Galkayo IDPs



Dhusamreeb: The nutrition situation in 2017 Deyr is Serious (14.8% GAM and 3.6% SAM). This represents a statistically significant improvement from Critical prevalence of GAM (33.4%) seen in June 2017. Morbidity remains high among IDPs in Dhusamareeb (45.0% in November 2017 compared to 58.9% in June 2017). The 2017 Deyr CDR (0.73/10 000/day) is sustained Serious compared to 0.671.06/10 000/day in June 2017. However, U5Dr has improved significantly from 2.19/10 000/day in June 2017 (Gu) to 1.04/10 000/day in November 2017 (Deyr) [Figure 11].

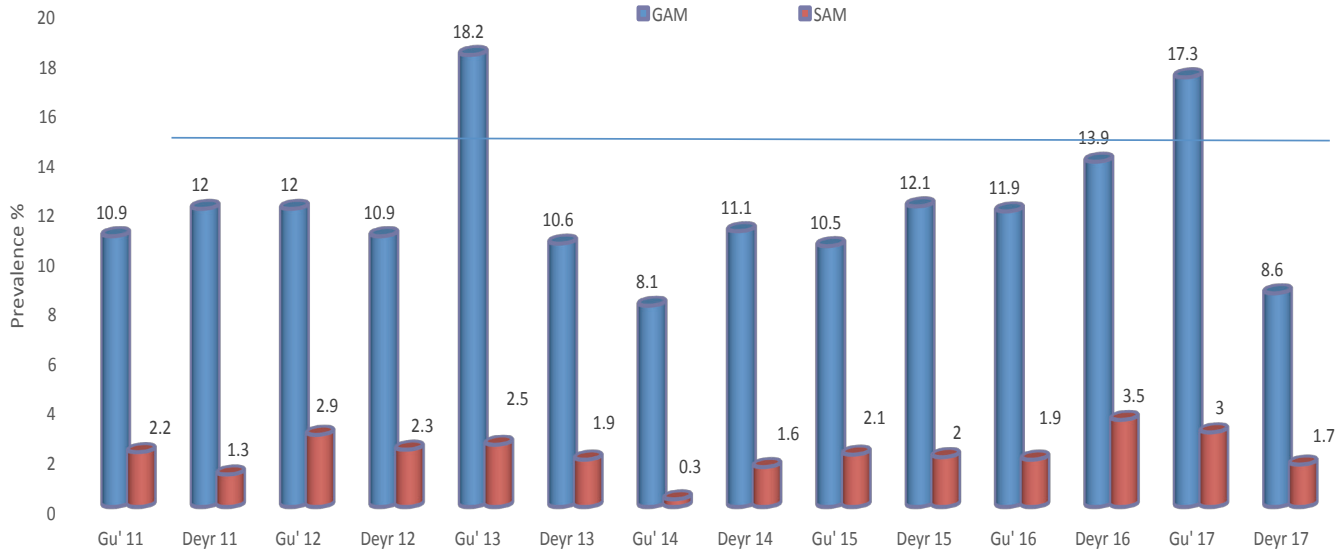
Figure 11: Trends in GAM and SAM among Dhusamareeb IDPs



NUTRITION SITUATION AMONG IDPS IN NORTHWEST REGIONS

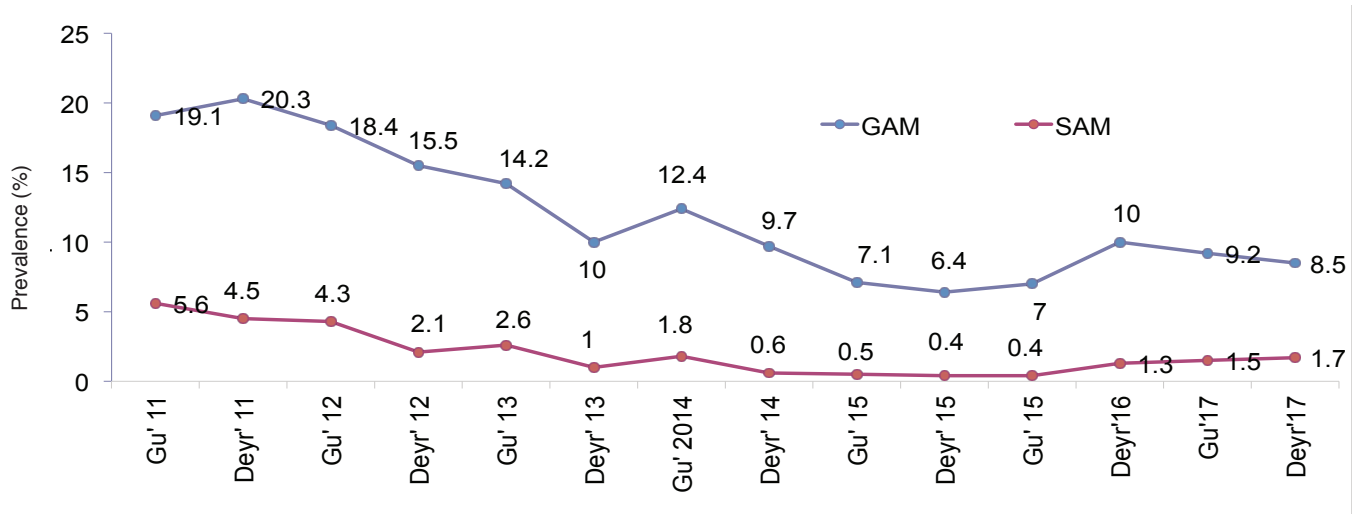
Hargeisa IDPs recorded a GAM prevalence of 8.6 percent (Alert) during 2017 Deyr which indicates a statistically significant improvement of the nutrition situation from the Critical prevalence of GAM (17.3%) reported in June 2017. SAM prevalence has also improved from Serious (3.0%) to Alert (1.7%). Morbidity rates remain fairly low: 27.6 percent in November 2017 compared to 17.7 percent in June 2017 (Figure 12).

Figure 12: Trends in GAM and SAM prevalence among Hargeisa IDPs



Burao IDPs recorded a GAM prevalence of 8.5 percent (Alert) during 2017 Deyr which indicates a slight improvement of the nutrition situation from a GAM prevalence of 9.2 percent (Alert) reported in June 2017. SAM prevalence indicates a sustained Alert nutrition situation (1.7% in November 2017 compared to 1.5% in June 2017). At 6.8 percent, morbidity rate in November 2017 is among the lowest across IDP settlements in Somalia and represents a decline from the 25.2 percent reported for June 2017 (Figure 13).

Figure 13: Trends in GAM and SAM prevalence among Burao IDPs



Berbera IDPs registered a GAM prevalence of 10.9 percent (Serious) and a SAM prevalence of 2.3 percent (Alert). These figures represent a statistically significant improvement compared to the Critical nutrition situation reported in June 2017 (18.7% GAM and 4.3% SAM). The morbidity rate in 2017 Deyr (November) was 15.5 percent, a decrease from the 31.1 percent reported for June 2017 (Figure 14).

Figure 14: Trends in GAM and SAM prevalence among Barbera IDPs

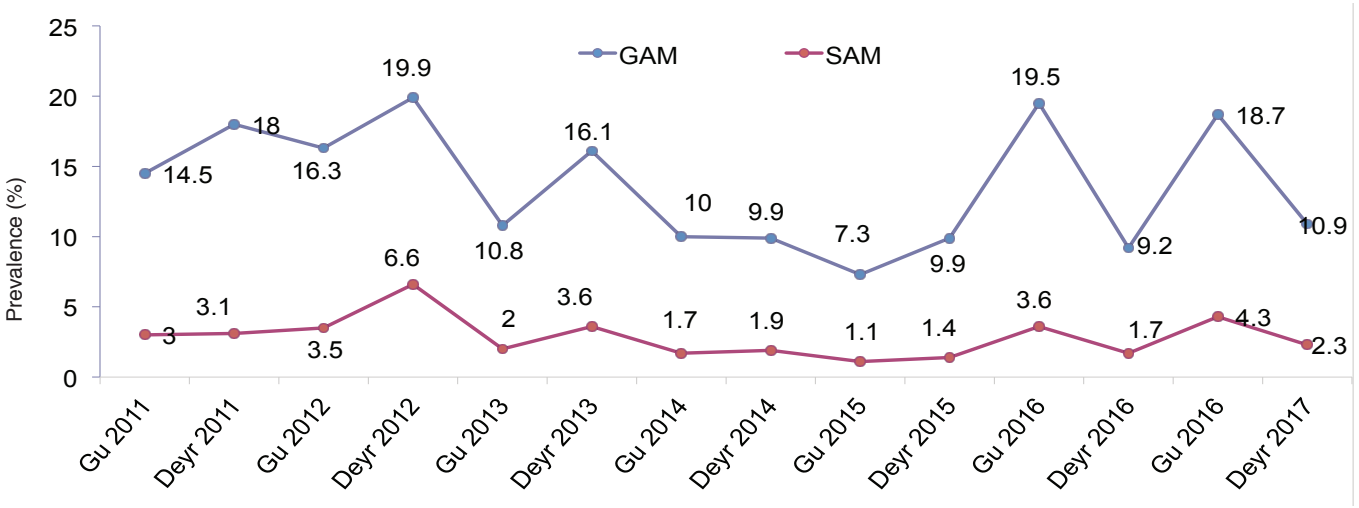


Table 5: Nutrition Indicators used for interpretation of Acute Malnutrition

Nutrition Indicators	Acceptable	Alert	Serious	Critical	Very critical
GAM:WHO/UNICEF	<5 %	5-9.9 %	10-14.9 %	15-30 %	>30
SAM:FSNAU	<1%	1.1-2.4%	2.5-4	4-5.6	>5.6
CDR:IPC	<0.5	0.5- <1	1- <2	2-4.9 %	>5%
U5DR: IPC	<1	1-1.99	2-3.9	4-9.9 %	>10%
MUAC <12.5:FSNAU	<2%	2-5.5%	5.6-8%	8.1-11%	>11%
MUAC <11.5:FSNAU	<1%	<1%	1-2%	2.1-3%	>3.1
HIS Trends	< 5% - Very Low	5-10% - Low	10-<15% - Moderate and Stable or Low	> 15% Highand Stable	> High and Increasing proportion
Underweight: WHO/ UNICEF	<10 %-low	10-19.9%-medium	20-29.9%-high	> 30% -v high	
Stunting: WHO/UNICEF	<20 %-low	20-29.9%-medium	30-39.9%-high	>40% -v high	

Table 6: Plausibility Checks

	Missing/ Flagged data	Overall sex ratio	Age Ratio (6-29 vs 30-59)	Digit Preference score-weight	Digit Preference score-Height	Digit Preference score-MUAC	SD WHZ	Skewness WHZ	Kurtosis WHZ	Poisson Distribution	Overall Score
RATING											
Excellent	0-2.5(0)	>0.1(0)	>0.1(0)	0-7(0)	0-7(0)	0-7(0)	<1.1 (0)	<±0.2(0)	<±0.2(0)	>0.05(0)	0-9
Good	>2.5-5.0 (5)	>0.05(2)	>0.05(2)	8--12(2)	8--12(2)	8--12(2)	<1.15(2)	<±0.4(1)	<±0.4(1)	>0.01 (1)	10--14
Acceptable	>5.0-7.5(10)	>0.001 (4)	>0.001 (4)	13-20(4)	13-20(4)	13-20(4)	<1.20 (6)	<±0.6(3)	<±0.6(3)	>0.001(3)	15-24
Problematic	>7.5 (20)	<=0.001(10)	<=0.001(10)	> 20 (10)	> 20 (10)	> 20 (10)	>=1.20(20) &<= 0.8 (20)	>=±0.6 (5)	>=±0.6 (5)	<=0.001(5)	>25
NORTH EAST AND CENTRAL											
Bosasso IDPs	0 (1.5%)	0 (p=0.698)	10 (p=0.000)	0 (4)	2 (10)	0 (7)	0 (0.99)	0 (-0.18)	0 (-0.15)	0 (p=0.685)	12%
Garowe IDPs	0 (0.7%)	0 (p=0.824)	4 (p=0.034)	0 (6)	0 (5)	0 (3)	0 (1.01)	0 (-0.07)	0 (0.02)	5 (p=0.000)	9%
QardhoIDPs	0 (1.7%)	0 (p=0.167)	0 (p=0.906)	0 (2)	0 (3)	0 (1)	0 (0.97)	0 (0.06)	0 (-0.09)	0 (p=)	0%
Galkayo IDPs	0 (2.3%)	0 (p=0.122)	4 (p=0.004)	0 (4)	0 (5)	0 (5)	5 (1.10)	0 (0.07)	1 (-0.21)	1 (P=0.019)	11%
Dhusamareb IDPs	5 (3.1%)	4 (p=0.038)	0 (p=0.196)	0 (6)	0 (5)	2 (8)	0 (1.08)	0 (-0.09)	0 (-0.08)	0 (p=)	11%
NORTH WEST											
Hargeisa IDPs	0 (1.2%)	0 (p=0.569)	4 (p=0.001)	0 (5)	2 (8)	2 (8)	0 (1.02)	0 (-0.13)	0 (0.00)	5 (p=0.000)	13%
Burao IDPs	0 (2.4%)	0 (p=0.763)	0 (p=0.112)	0 (4)	0 (7)	2 (8)	0 (1.03)	1 (-0.21)	0 (-0.06)	0 (p=0.082)	3%
Berbera IDPs	5 (3.0%)	0 (p=0.475)	10 (p=0.000)	0 (6)	0 (5)	2 (9)	5 (1.15)	0 (0.07)	0 (-0.18)	0 (p=)	22%
SOUTH											
Mogadishu IDPs	0 (1.4%)	0 (p=0.944)	4 (p=0.018)	0 (2)	0 (4)	0 (4)	5 (1.14)	0 (-0.15)	0 (-0.16)	3 (p=0.005)	12%
Mogadishu Urban	5 (3.1%)	0 (p=0.419)	0 (p=0.665)	0 (4)	0 (5)	0 (5)	0 (1.08)	0 (0.06)	1(-0.23)	0 (p=0.444)	6%
Baidoa IDPs	0 (2.2%)	0 (p=0.833)	4 (p=0.025)	0 (3)	0 (5)	0 (4)	0 (1.07)	0 (-0.13)	0 (-0.02)	0 (p=0.109)	4%
Dolow IDPs	5 (2.8%)	0 (p=0.803)	0 (p=0.124)	0 (4)	0 (7)	2 (8)	0 (1.09)	0 (0.17)	1 (-0.20)	1 (p=0.017)	9%
Kismayu IDPs	0 (1.5%)	0 (p=0.437)	0 (p=0.549)	0 (4)	0 (6)	0 (4)	5 (1.14)	0 (-0.13)	0 (-0.15)	5 (p=0.000)	10%
Kismayo Urban	0 (1.8%)	0 (p=0.613)	0 (p=0.382)	0 (4)	0 (4)	0 (3)	0 (1.05)	0 (-0.06)	1 (-0.27)	0 (p=0.280)	1%
Dobley IDPs	5(3.4)	0 (p=0.318)	0 (p=0.759	0 (3)	0 (5)	0 (6)	5 (1.15)	1 (0.23)	0 (-0.16)	0 (p=0.058	11%

Recent publications and releases

- *FSNAU Food Security and Nutrition Special Brief, September 2017*
- *FSNAU-FEWS NET Somalia Food Security Outlook October 2017*
- *Climate Data Update, October 2017*
- *Market Data Update, October 2017*

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