

Introduction

This month's Nutrition Update presents results of three nutrition surveys, in Rabdure District, Wajid District and Internally Displaced Persons in Wajid town. While the district level survey results show levels of malnutrition that are consistent with the extremely high levels typically seen in the districts, those among the internally displaced persons are significantly higher. Full survey reports are being prepared. Indications of high malnutrition levels in some drought affected areas of Juba Valley and Gedo are reflected in the sentinel sites. Humanitarian responses to the worsening food security situation are increasing.

Intro & overview	1
Wajid IDP assessment	1
Wajid District assessment	2
Rabdure district assessment	3
Bay Region	4
Juba Valley	4
Gedo Region	5
Middle Shabelle Region	5
Northeast Region	6

High levels of malnutrition among displaced persons in Wajid

Southern Somalia has experienced food insecurity and civil insecurity resulting in the loss of assets and livelihoods and increasing levels of displacement. About 120 IDPs households existed in Wajid in late 2005 and received humanitarian assistance from some agencies. The impact of the drought in the recent past has led to concentration of IDPs in Wajid and at present there are three IDP camps within Wajid town.

In early February 2006, FSAU, ACF, UNICEF and WFP conducted a nutrition assessment in two IDP camps in Wajid town. A third camp rejected the survey. The assessment mission visited every occupied structure (111 households) and surveyed all 142 children aged 6-59 months or with length/height of 65.0-109.9 cm and women aged 15-49 years.

A global acute malnutrition (W/H<-2 Z score or oedema) of 27.1% and severe acute malnutrition (W/H<-3 Z score or oedema) of 8.6% was recorded. About 3.5% of the children had oedema. All the severely malnourished and sick children were referred to the nearest health facility in Wajid town. Other results are shown on the table. The relatively high measles vaccination (76%) and vitamin A supplementation (76%) coverage was associated with the recently conducted measles campaign. There was a statistically significant relationship between malnutrition and diarrhoea prevalence ($p=0.001$), acute respiratory infection ($p=0.024$) and frequency of feeding ($p=0.0001$).

Out of eight pregnant women seen, two were severely malnourished (MUAC<20.7cm) and three were moderately malnourished (20.7<MUAC<23.0cm). Dietary diversity was very poor with almost all (99.1%) households consuming three or fewer food groups¹. Cereals and sugar were the main foods consumed. Sanitation in the IDP camps is very poor with water for domestic use taken from unprotected wells within Wajid town.

Indicator	No.	%
Children surveyed	142	100
Global acute malnutrition (W/H<-2 score or oedema) (N=140)	38	27.1
Severe acute malnutrition (W/H<-3 z score or oedema) (N=140)	12	8.6
Oedema	5	3.5
Children with diarrhoea, 2 weeks prior to the survey (N=139)	23	16.5
Children with ARI, 2 weeks prior to the survey (N=139)	35	25.2
Children with malaria, 2 weeks prior to survey (N=138)	5	3.6
Children with measles, 1 month prior to the survey (N=139)	6	4.3
Measles immunisation coverage (N=126, aged 9-59 months)	96	76.2
Vitamin A supplementation, last 6 months (N=134)	102	76.1

The IDPs reported to have come from Wajid District (50.5%), Belet Hawa (18%), Rabdure (12.6%), Elberde (9.9%) and Luuq (3.6%). Other areas of origin were Huddur, Baidoa, Tayeglow, Berdaale and Bardera². The main reasons for movement were reported as lack of food (51.8%), water shortage (18.2%), civil insecurity (9.1), seeking employment (9.1%), lack of food and water (7.3%) or lack of food and insecurity (4.5%).

The high level of malnutrition in this small group is a cause for concern. In addition to assisting these groups directly, it is clearly necessary to target the areas of origin of these populations.

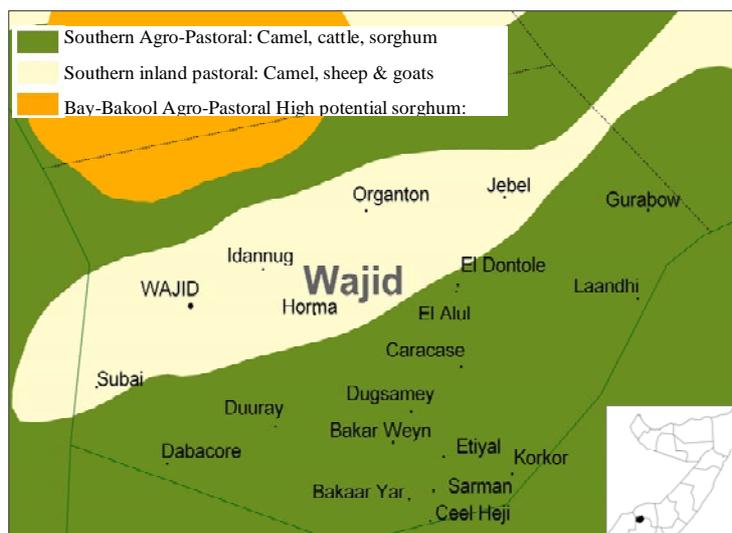
¹ According to FAO classification, foods consumed fall within twelve main food groups namely: 1) Cereals and cereal products, 2) Meat, poultry, Offal 3) Eggs 4) Roots and tubers, 5) Vegetables, 6) Fruits, 7) Pulses/Legumes, 8) Milk and milk products, 9) Fats and oil, 10) Sugars and honey, 11) Fish and sea foods, 12) Miscellaneous e.g. spices.

² Specific villages of origin in the respective districts are available in the report at FSAU.

Malnutrition levels in Wajid consistent with typical levels in the district

About 80% of the population of Wajid District (Bakool Region) and its satellite villages are pastoralists, while 15% rely on rain fed farms and 5% on small scale business. Before the war in 1991, Wajid District hosted around 60-80,000 people. During the past six years, much of Wajid town, Burduhule and satellite villages in Wajid District were destroyed and many houses were burnt in inter-clan fighting. Three years of insufficient rainfall in Bakool region worsened an already precarious nutrition situation in Wajid District. Today the population residing in the District is around 32,050 of whom around 6,700 live in Wajid town (revised from WHO figures, November 2005).

Between 23rd and 30th January 2006 an interagency nutrition and mortality survey was conducted by FSAU, ACF and UNICEF in Wajid District, excluding IDPs³ in Wajid town. Using a two-stage (30x30) cluster sampling methodology, a total of 906 children, aged 6-59 months and/or measuring 65-109.9 cm in height/length were surveyed. A total of 904 households were surveyed for mortality and child data collected from 476 of these.



The global acute malnutrition (GAM) rate (weight for height <-2 Z score or oedema) was 14.7% (95%CI: 12.5 – 17.2) and severe acute malnutrition (weight for height <-3 or oedema) was 2.2% (95%CI: 1.4 – 3.5). Six cases of oedema were recorded. Children under the age of two years appeared more vulnerable to malnutrition than their older counterparts (RR=0.73 (CI: 0.55-0.97); p=0.03). Only diarrhoea showed significant association with acute malnutrition. Compared to a previous district survey in February 2000, which indicated a GAM rate of 21% (CI: 18.4 – 23.8) among the 909 children less than five years assessed (UNICEF), the current nutrition situation is better and the difference is statistically significant.

Using MUAC, 0.8% of the 361 non pregnant women were malnourished (MUAC<18.5 cm) and 0.3% were severely malnourished (MUAC<16.0 cm). About 40% of the 84 pregnant women were malnourished (MUAC<23.0 cm) while 7.1% were severely malnourished (MUAC< 20.7cm).

Indicator	No	% (95% CI)
Total Households interviewed during the survey	476	100
Children under five years screened during the survey	906	100
Global acute malnutrition – W/H <-2 Z score or oedema	133	14.7 (CI: 12.5-17.2)
Severe acute malnutrition – W/H <-3 Z score or oedema	20	2.2 (CI: 1.4-3.5)
Oedema	6	0.7 (0.3 -1.5)
Proportion with diarrhoea in two weeks prior to survey	150	16.6 (CI: 14.2-19.2)
Proportion with ARI in two weeks prior to survey	219	24.2 (CI: 21.4-27.1)
Proportion with suspected malaria in the prior two weeks	50	5.5 (CI: 4.2-7.3)
Suspected measles in 1 month prior to survey (N=861)	49	5.7 (CI: 4.3-7.5)
Under five death rate (deaths/10,000/day)		1.24 (CI: 0.32-2.16)
Crude death rate (deaths/10,000/day)		0.57 (CI: 0.26-0.89)

The under-five death rate was 1.24 (CI: 0.32-2.16) per 10,000/day and the crude mortality rate was 0.57 (CI: 0.26-0.89/10,000/day). Diarrhoeal diseases, ARI and birth related complications were the main reported causes of under-five deaths while ARI and anaemia were the main causes of death among adults and children over five years.

Qualitative information indicates that food security (better milk access and food stocks) and water availability was better

for the residents in the southern part of Wajid District (neighbouring Baidoa District) than for those in the northern part of the region (neighbouring Rabdure District. Sanitary conditions for the population are generally suboptimal.

The survey results indicate a serious malnutrition situation according to international standards but consistent with the long term tendencies for Wajid District. Residents have just begun to experience the impact of the drought. Food stocks have been depleted in most households, especially the northern part, and households are coping with less diversified (sorghum-based) diets with mean household consumption of only 2.6 food groups. Water catchments have dried up and livestock movements for pasture towards the Southern part of the district and Bay region were reported, while the very poor households are moving towards Wajid town and IDP camps (located in the Wajid town). Animal deaths were observed in some areas and milk production, and hence accessibility has declined.

³ A separate assessment and analysis of the Wajid IDP situation was undertaken.

Malnutrition levels in Rabdure consistent with typical levels in the district

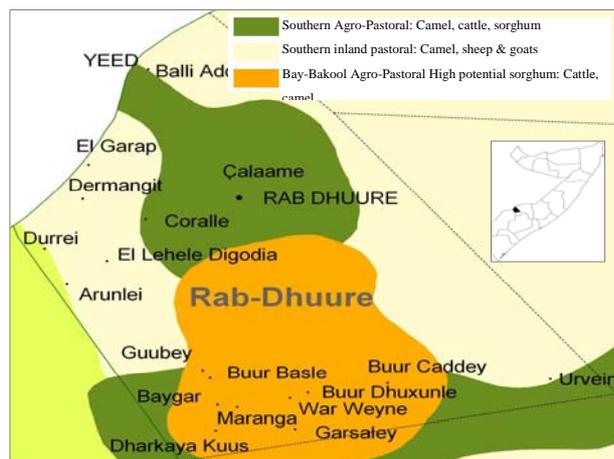
Rabdure District has experienced the cumulative effect of poor harvest, reduced pastures, population movement and disruption of livelihoods leading to threats to both nutrition and food security. Humanitarian assistance has experienced frequent disruptions due to insecurity. An inter-agency nutrition survey was conducted by FSAU, IMC and UNICEF from 19th to 23rd January 2006.

Using a 30 by 30 cluster sampling methodology, a total of 910 children aged 6-59 months, from 424 households were assessed. The results showed a global acute malnutrition (W/H<-2 Z score or oedema) rate of 15.9% (CI: 13.6 - 18.5) and a severe acute malnutrition (W/H<-3 Z score or oedema) of 1.4% (CI 0.8 - 2.5). No oedema case was identified.

Over half (53.7%) of the 67 pregnant women were malnourished (MUAC<23.0cm) while about 9% were severely malnourished (MUAC<20.7cm). None of the non-pregnant women was malnourished (MUAC<18.5cm). The crude mortality rate in the district was 0.89 per 10,000 per day while the under-five mortality rate was 1.53 per 10,000 per day. Both crude and under-five mortality rates are within acceptable levels, based on WHO categorization.

Relatively high vitamin A supplementation coverage, measles vaccination and polio immunization were attributed to recent immunization campaigns in the district. About 3% (n=31) of the households reported cases of night blindness (difficult seeing at night) among children aged 2-6 years while 2% (n=17) reported night blindness among people aged more than six years.

Almost 90% of the children were introduced to foods other than milk before four months of age. The majority of the households surveyed (85.3%) rely on purchasing their food. There is low dietary diversity with 91% of the households



consuming three or fewer food groups in a day and the commonly consumed food items include sorghum, tea, milk, sugar, oil and beans.

Most water points in the district have dried up forcing the people to travel long distances – up to 23 km in search of water which is often in small quantity and of poor quality.

Diseases, limited access to quality water, food and poor child-feeding practices are contributing substantially to malnutrition in Rabdure District. Child feeding frequencies and dietary diversity were significantly associated with children malnutrition ($p < 0.05$)

Past surveys in Rabdure District have shown GAM levels of 19.3% (CI: 16.0-23.2) in October 2001 and 14.8% (CI: 11.9-18.4) in August 2002. Even though all surveys were not undertaken in the same season, the results are not statistically different.

Summary of the survey findings		
Indicator	No	%
Under- five children screened during the survey.	910	100
Number of households assessed	424	100
Global acute malnutrition (WHZ<-2 Z score/ oedema)	145	15.9 (CI:13.6-18.5)
Severe acute malnutrition (WHZ<-3 Z score/ oedema)	13	1.4 (CI: 0.8-2.5)
Children with diarrhoea in two weeks prior to survey.	209	23.0 (CI: 20.3-25.9)
Children with ARI in two weeks prior to the survey.	347	38.0 (CI:35-41.4)
Children with Malaria in 2 weeks prior to the survey.	157	17.3 (CI:14.9-19.9)
Children with measles in 1 month prior to the survey.	45	4.9
Children supplemented with Vitamin A 6 months prior to the survey.	734	80.7
Children vaccinated against Measles. N=872	716	81.0
Children immunized against Polio N=872	823	96.9
Children breastfeeding	198	21.8
Crude Mortality Rate CDR(deaths/10,000/day	34	0.898
Under-five Mortality Rate U5MR (deaths/10,000/day	15	1.534

In the light of these factors and the negative impact of the prevailing drought condition which is expected to continue until the benefits of the next rains are felt (June/July 2006), a range of interventions have been recommended to prevent a further deterioration in the nutritional status of the population.

Summary of surveys conducted in Rabdure District					
Date	Agency	Surveyed population	Methodology	GAM (Z-scores or oed)	SAM
Feb00	UNICEF	Rabdure town	Exhaustive	30%	6%
Aug 00	IMC	Rabdure/Elberde districts	30X03 cluster	13.7% CI:10.5-16.4	3.8% CI:1.3-6.3
Sept/Oct 01	UNICEF/IMC /FSAU/WFP	Rabdure district	30x30 cluster	19.3% CI: 16.0-23.2	2.6 CI:1.7-3.9
Sept 02	UNICEF/IMC /FSAU	Rabdure district	30x30 cluster	14.8% CI: 11.9-18.4	1.9% CI: 1.1-3.1
Jan 06	FSAU/IMC/UNICEF	Rabdure district	30x30 cluster	15.9% CI: 13.6-18.5	1.4% CI: 0.8- 2.5

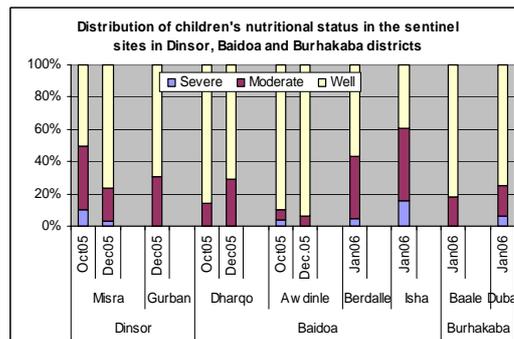
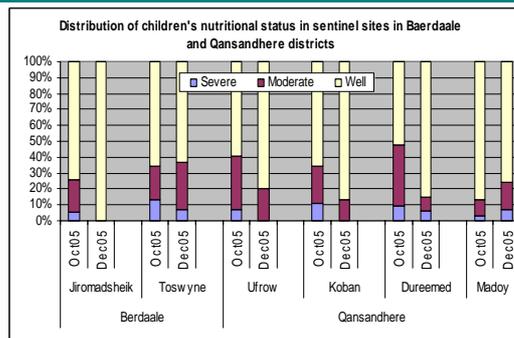
Bay Region

Additional sentinel sites have been established to strengthen monitoring of the nutrition situation in Bay region. Site selection was guided by geographical representation of livelihood zones and population groups, presence of high risk groups, population's vulnerability to crisis and evidence of direct impact of the crisis.

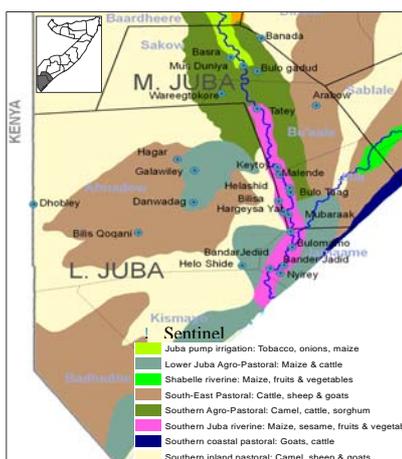
A second round of sentinel sites surveillance was carried out in ten⁴ sites in December 2005. Dietary diversity is deteriorating in most sites with data showing that around 70% of households from the ten sites had consumed foods from three or fewer food groups in the previous twenty four hours.

Out-migration of malnourished children and strong social support networks partly accounted for the apparent decrease in malnutrition in some sites. Two of the new sites in Baidoa district indicate high proportions of malnourished children among those measured.

The most common diseases reported from both the sentinel sites and MCHs in the region include ARI, diarrhoea and malaria. Overall, the nutrition situation in Bay Region is deteriorating and FSAU will continue to monitoring the situation. **Further rounds of surveillance will enable better interpretation of trends.**



Juba Valley



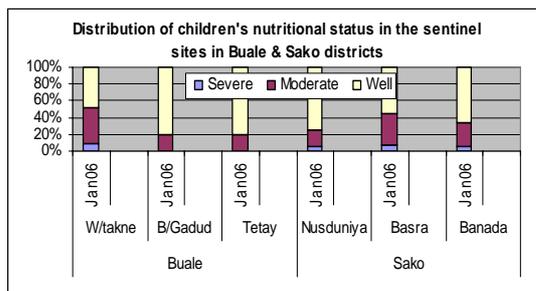
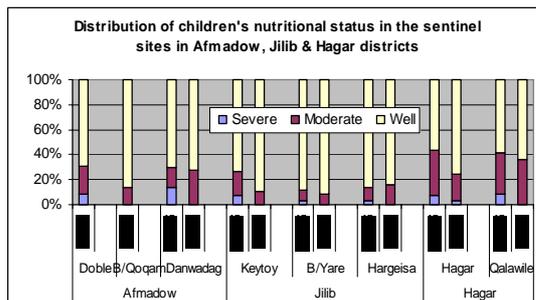
In January 2006, FSAU conducted the second round of sentinel sites surveillance in six selected sites in Middle and Lower Juba Regions and the first round in some newly identified sites. Site selection was based on livelihood zones with about seven sites being selected from each of the pastoral, agro-pastoral and riverine livelihoods.

High malnutrition levels were recorded in most sites with little variation noted. The slight decline observed in the levels of malnutrition in Keytoy and Hagar (riverine) sentinel sites is attributed to the improved access to milk and milk products following in-migration of livestock from the pastoral and agro-pastoral into the riverine areas as well as the interventions of MSF-Holland. This improvement might be short-lived due to current overgrazing in the riverine areas. In seven of the sites, over 40% of the assessed children had suffered from at least one illness during the preceding two weeks.

The worrying nutrition situation in Juba valley is mainly attributed to consumption of a diet of limited diversity, comprising of three or fewer food groups, and high morbidity levels in the majority of the households.

The poor livestock condition arising from lack of pasture and water in the pastoral and agro-pastoral zones has generally impacted negatively on the availability of milk and milk products. Milk availability has just slightly improved in the few localised areas hosting the livestock and still having some pastures. The high concentration of humans and livestock in the riverine areas has led to an increased demand and subsequently increased price of food, thus limiting access for some.

Admissions to the MSF Holland managed therapeutic feeding centre increased from 39 in November to 65 in December 2005; and from 93 in November to 145 in December 2005 in the supplementary feeding program. The beneficiaries come from both the riverine and agro-pastoral communities in the Juba Valley.



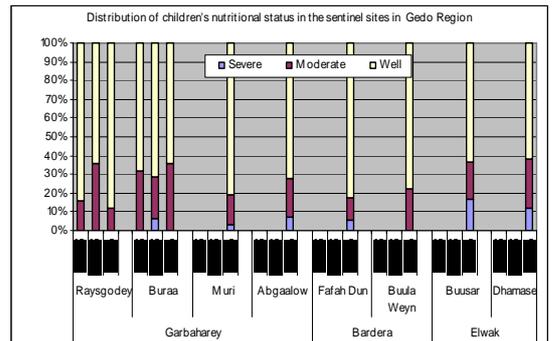
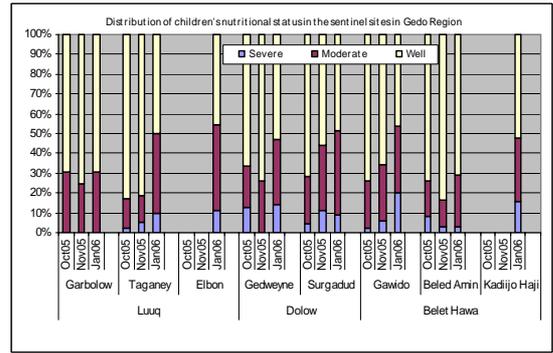
⁴ Jiromadsheik, Toswyne, Ufurow, Koban, Dureemed, Madoy, Misra, Dharqo, Gurban and Awdinte

Gedo

In January 2006, FSAU conducted the third round of sentinel sites surveillance in eight sites in Gedo Region, and commenced surveillance in a further eight sites.

Malnutrition levels are high in all the sites. An increasing trend in levels of malnutrition appears to be emerging in Tagarey, Surgudud and Gawido villages. In almost all other sites, increased levels were reported in January. A decrease in the diversity of foods consumed was reported by the populations in these villages with most households in all the sites consuming foods from only two food groups. CARE distributed food in December 2005 and in collaboration with other partners plans to resume food distribution in the northern region. WFP and ICRC are also planning food distributions in southern Gedo. Water and pasture scarcity has affected livestock production and thus the cost and consumption of milk in the villages assessed.

Increased diarrhoea and ARI incidences were recorded in 50% of the eight old sites and were high in most of the new sentinel sites. There was also a general increase in suspected malaria in most of the sites.



Middle Shabelle

Middle Shabelle has generally experienced a relatively stable food security and nutrition situation in the past. Health facilities have not indicated a notable trend in the proportions of malnourished children screened on a monthly basis. However, the region now faces an unstable food security situation following three seasons of below normal rainfall including an inadequate Gu 2005, a failed Deyr 2005/6 and localized flooding.

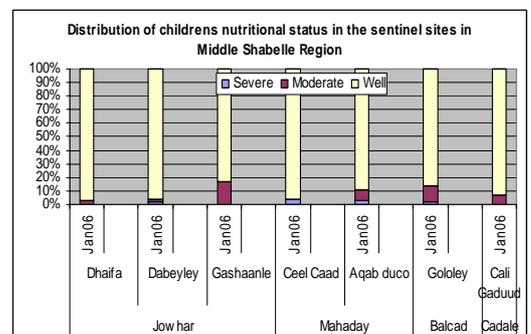
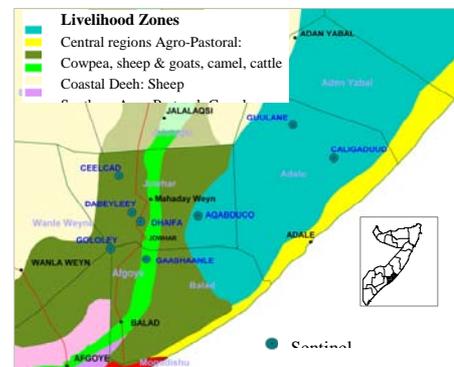
Between 17th and 25th January 2005, FSAU undertook the first round of sentinel sites surveillance in Middle Shabelle. A total of eight⁵ sites that were either affected by floods or were defined as highly vulnerable following two seasons of crop failure were selected and assessed. The sites are located within the Central Somalia regions' agro-pastoral, Southern agro-pastoral and Shabelle riverine livelihood zones.

Gashaanle, Gololey and Aqabduco sites reported slightly higher malnutrition levels than the other sites. In Gashaanle, (a riverine village), frequency of meals consumed per day had declined to two from the usual three. In Ceel Caad, there is some population movement to other riverine villages in search of food, with some highly vulnerable households being left behind and a possible explanation of the higher levels of severe malnutrition seen there.

Dietary diversity⁶ was generally good. Cereals/cereal products, sugars/honey, milk/milk products, pulses and fats/oil were the commonly consumed food groups. Eggs were not consumed at all while fish was consumed by only a minority (4.2%) in Ceel Caad.

The sites with the highest levels of malnutrition also reported the highest incidences of ARI, diarrhoea and malaria and were the only ones with cases of malnourished women.

While close monitoring will continue, the surveillance system is clearly suggesting that this area is currently significantly better off than the other areas on which reports are presented in this report.



⁵ The sites are Dhaifa, Dabeyley, Gashaanle, Ceel Caad, Aqabduco, Gololey and Cali Gaduud.

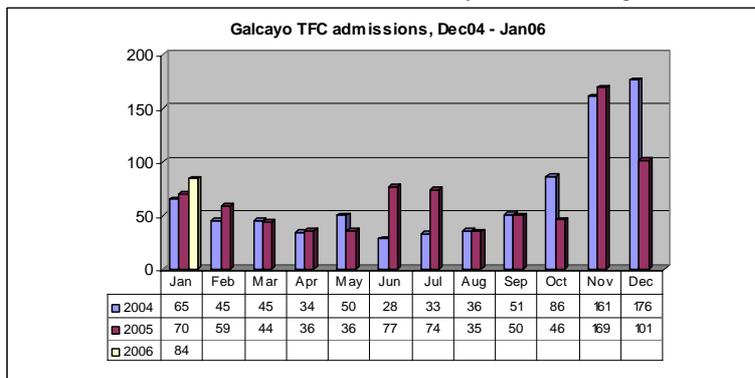
⁶ A household was considered to have consumed a diversified diet if 4 or more food groups were consumed.

Northeast

The nutrition situation in most of the NEZ is within the typical rates for the area although the estimated levels are extremely high in some areas. No abnormal disease outbreak has been reported in recent months. Humanitarian assistance and general strengthening of livelihoods have improved access to food (including milk and milk products), non-food items and income. A good fishing season has increased access to fish for consumption and sale of lobsters for income.

Unfortunately, IDPs and families seriously affected by the previous drought continue to face levels of acute malnutrition that are above typical levels – estimated at over 15% due to limited dietary diversity (attributed to their limited access to food and income opportunities) and poor access to health care services. At the Galcayo (MSF Holland) therapeutic feeding program a decline in monthly admissions was recorded (from 169 to 84) between November 2005 and January 2006, although the number remains high.

The nutrition situation in the NEZ was worrying in December 04 following a weakening of pastoral livelihoods. Intensive humanitarian assistance provided thereafter stabilized the situation and reduced admissions to the TFC. Following the improving food security situation⁷ in the resident population of the NEZ, humanitarian interventions have scaled down. Unfortunately, this has minimized access of the IDPs and poorer populations to food and non-food items, and contributed to deterioration in their nutrition situation, increasing admissions to the TFC. The referral of severely malnourished children from Bossasso IDP camps to Galcayo TFC since November 2005 has also contributed to the current high number of admissions.



Interventions geared to increasing access to food, income and the recovery of livelihoods remain crucial to addressing the typically high levels of acute malnutrition in the Northeast Somalia, with the IDPs and very poor families being a priority.

Training and courses announcements

- As part of its short courses in improving quality of health care, the Regional Centre for Quality of Health Care will be offering courses in i) Improving the quality of care of malaria control services, 5th to 16th June 2006 ii) Improving the quality of care of tuberculosis control services, 10th to 21st July 2006. Both course target operational personnel with 31st March, 2006 being the deadline for submitting applications. For more details contact rnauma@rcqhc.org or mail@rcqhc.org or visit www.rcqhc.org.
- Public Health in Complex Emergencies Training Program to be held at Makerere University Institute of Public Health (MUIPH) in Kampala November 6-18, 2006 (Email: pnalubega@iph.ac.ug).

Other related publications

- FSAU Food Security and Nutrition Monthly Brief, January 2006
- FSAU/FEWSNET Market Data Update, January 2006.
- FSAU/FEWSNET Climate Data Update, January 2006.
- FEWSNET/FSAU Somalia: Food Security Emergency, Pre-famine conditions are observed in parts of Southern Somalia, January 22, 2006.
- FEWSNET Special Report: Somalia – The impact of piracy on livelihoods and food security in Somalia. December 2005



Physical address: Kalson Towers, Parklands, Nairobi.
 Postal address: PO Box 1230, Village Market, Nairobi, Kenya
 Telephone: +254-20-3741299, 3745734, 3748297. Fax: 3740598
 General email: fsauinfo@fsau.or.ke
 Comments and information related to nutrition: Noreen.Prendiville@fsau.or.ke
 Website: <http://www.fsauosomali.org>



⁷ Post Deyr 05-06 Technical Series IV