

OVERVIEW

Following the late circulation of a very detailed Nutrition Update last month, this month's publication focuses mainly on the results of the recent nutrition survey in Gedo.

Detailed results of the Belet Hawa nutrition survey are presented which indicate a persistent poor nutritional status, though a dramatic improvement from the appallingly high malnutrition rates of less than one year ago. The immense humanitarian interventions provided, amidst major insecurity challenges significantly contributed to the remarkable improvement. Overall indications suggest that a substantial proportion of the population in Gedo remains both acutely and chronically food insecure and will continue to be heavily reliant on food aid for survival during the coming months. Insecurity in Gedo remains a major concern.

Due to wide readership of this publication and frequent requests for guidance on interpretation, this issue includes background and explanations for some of the frequently used terminology in Nutrition Update. A summary of surveys for 2001 and 2002 are also presented.

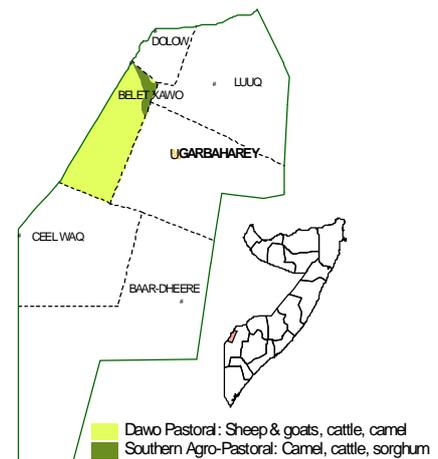
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BELET HAWA NUTRITION SURVEY

Gedo is the most chronically food insecure region in Somalia, partially explained by recurrent drought in the past three years which led to widespread livestock deaths and/or out migration of animals in search of pasture and water in Lower Juba Region and other parts of Southern Somalia. Four consecutive crop failures among the agro-pastoral and riverine groups in the region have also occurred. The result was severe depletion of household assets. In addition, recurrent insecurity incidences prevailing in the region have hampered humanitarian interventions leading to further loss of assets. Consequently, the acute food insecurity and human suffering was manifested by the unacceptably high total acute malnutrition rate of 37% (using <-2 Z-score cut-off) in the December 2001 Belet Hawa nutrition survey.

The preceding food security information and appalling malnutrition rates provoked significant humanitarian responses. Both food aid (general and selective feeding) and basic health care services in the district were supported by CARE and Gedo Health Consortium (GHC) amid serious insecurity. The 2002 GU season also witnessed a return of some livestock to the district. Thus, there was a general feeling that food security and nutritional status might have improved although the effect of recurrent insecurity and the diminished asset levels in households was not clear. Implementing organisations and the Humanitarian Response Group of the Somalia Aid Coordination Body (SACB) therefore, recommended a repeat survey in the district.



Indicator	No.	%
Children under five years screened during the survey	907	100
Global acute malnutrition – W/H <-2 Z-score or with oedema	195	21.5
Severe acute malnutrition– W/H <-3 Z-score or with oedema	20	2.2
Global acute malnutrition - W/H in Z-Score (<-2 Z-score) or presence of oedema in agro-pastoral villages	71	26.6
Global acute malnutrition – W/H in Z-Score (<-2 Z-score) or with oedema in Belet Hawa town including IDP village	77	21.0
% of children with diarrhoea in two weeks prior to the survey	234	25.9
% of children with ARI in two weeks prior to the survey.	186	20.6
% of children with malaria in two weeks prior to the survey	212	23.4
% of children that received Vitamin A within last six months	797	88.1
% of children immunised against Measles	621	72.0
% of children from displaced households	95	10.5

As had been reported in the October 2002 of this issue, FSAU in collaboration with GHC, CARE and local authorities conducted a nutrition survey in Belet Hawa District aimed at determining the level of malnutrition among under five children. The survey further aimed at understanding the likely impact of the emergency food-aid intervention, analysing and interpreting the results using the available contextual information and providing guidance on decision making related to future interventions. Using a two-stage cluster sampling methodology, a total of 907 children aged 6-59 months were examined.

The FSAU Nutrition Surveillance Project is funded by USAID/OFDA

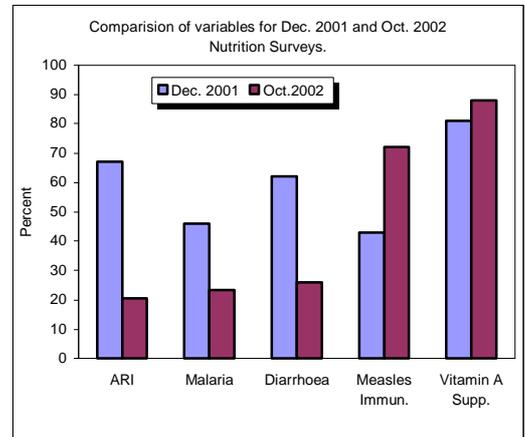
SURVEILLANCE PROJECT PARTNERS INCLUDE MOHL SOMALILAND, MOSA PUNTLAND, FAO, UNICEF, WHO, SRCS/ICRC, SCRS/IFRC, WVI, GEDO HEALTH CONSORTIUM, IMC, MSF-S, COSV, AAH, MUSLIM AID-UK, INTERSOS, CISP, ZAMZAM FOUNDATION, COMMUNITIES OF WABERI, HAMARWEIN AND HAMAR JABJAB, IRC, ACF, COOPI, MSF-H, MSF-B.

The prevalence of global/total acute malnutrition defined as W/H<-2 z-scores or oedema was 21.5% (95% CI 18.9% - 24.5%) severe acute malnutrition defined as W/H<-3 z-scores or oedema was 2.2% (95% CI 1.4% - 3.4%). The results suggest that malnutrition is more common among agro-pastoral children than those from other food economy zones. The survey results confirm a persistently poor nutritional status in the district though they represent significant improvement since the survey of December 2001.

About 88% of the children had received Vitamin A supplementation in the previous six months and 72% had been immunised against measles. About 11% of the children came from internally displaced households and returnee households with insecurity and food shortage being the main reasons for movement.

Improvement in nutritional situation of Belet Hawa District

Substantial food aid (i.e. both the CARE general distribution and GHC's/UNICEF selective feeding programme), relatively good 2002 Gu rains and accompanying in-migration of some livestock, more aggressive/improved health service provision (manifested by improved measles immunisation and vitamin supplementation), and relatively low incidences of common child illnesses (compared to 2001 as reflected on the figure) played a key role in explaining the significant improvement in nutritional status since the December 2001 nutrition survey. In addition, the use of bush products increasingly providing a significant income source to most households in the district. The survey reveals that with a population of about 65,000 residents (WHO 2002) in Belet Hawa, the relief food services distributed between December 2001 and October 2002 was capable of providing about 70% of the daily food requirements to all individuals assuming minimal losses and use of all the rations within the district. The graph below shows quantities and types of food distributed.



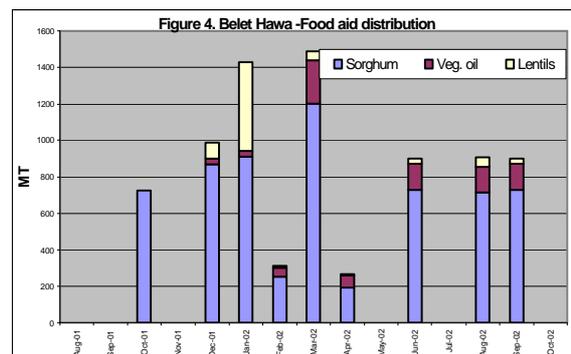
Persistent poor nutritional status of the Belet Hawa residents

Continued limited food availability and the almost constant insecurity; poor childcare/feeding practices and disease incidences, all contribute to the persistent poor nutritional status of the population in Belet Hawa District. The significant statistical association between the observed malnutrition and diseases like diarrhoea and malaria confirms that disease prevalence is still a major problem that calls for continued support to comprehensive health and nutrition intervention programmes.

About 27% of the children fed once or twice a day. The overwhelming majority of the children (99%) included in the survey were not exclusively breastfed in their first six months while nearly 98% received foods other than breast milk in their first three months of life. Mothers reported having to travel increasingly long distances in search of water (especially before the Gu 2002 rains). Some responses to limited food access like collecting bush products leads long separation from their young children further compromised childcare.

The survey was not designed specifically to collect data on mortality¹ but there was an indication of a high under-five mortality rate in the last one year. Data from the therapeutic feeding programme in Belet Hawa town as well as the one previously operated in Mandera hospital confirms high levels of mortality.

Both the survey and other FSAU food security information indicate significant shifts in people's livelihood patterns in recent years with many more households now categorised as 'urban' and fewer categorised as 'pastoralist'. Purchases and food aid were the main food sources while casual work and sale of bush products were the dominant income sources. Borrowing and food aid reliance ranked highly as coping strategies.



Further discussions with organisations in Gedo suggest that the enormous relief food supplies could mainly explain the improved nutritional status reported in the survey, as other food security indicators are still poor. Belet Hawa is one of the districts in northern Gedo that continued to receive relief food supplies amidst insecurity incidences. The neighbouring Luuq and Dolow Districts have experienced more severe disruptions in humanitarian operations due to insecurity. Food aid distributions in Luuq had not resumed until September 2002, although still facing massive insecurity challenges. With some similarities in the existing food security and the reduced interventions, it might therefore be assumed that the nutritional status of the populations in Luuq is likely to be currently worse than that in Belet Hawa.

¹ It is hoped that future nutrition surveys will include the collection of data on mortality without compromising the current standard methodology. During this survey, mortality data was collected only from households that contained children under the age of five. This methodology of course excludes households where all children might have died.

The organisations involved in the survey presented a range of recommendations, which emphasised the need to focus on both immediate and longer-term food security interventions. The overriding issue in Belet Hawa remains that of insecurity. The immediate emergency response will continue to essentially involve adequate general ration and selective feeding concurrent with continued support to the health, livestock and water sectors. Income generating activities are also key to revive the Belet Hawa economy. The necessity of enabling a more conducive and secure environment for improved access by humanitarian organisations throughout Gedo Region is emphasised.

NUTRITION SURVEYS 2001-2002

REGION	POPULATION COVERED	PARTICIPATING ORGANISATION	DATE OF SURVEY	SAMPLING METHODOLOGY	SEVERE ACUTE MALNUTRITION (<3 Z-SCORES/OEDEMA)	GLOBAL (TOTAL) ACUTE MALNUTRITION (<-2 Z-SCORES/OEDEMA)
MIDDLE JUBA	Buulle District	World Vision/ FSAU	January 2001	KPC Survey Methodology.	3% (CI: 1% - 5%)	8.4% (CI: 5.4% - 11.4%)
LOWER JUBA	Jamame District	UNICEF/FSAU/ SRCS/Muslim Aid-UK/Partners	April 2001	30 x 30 CHCL	1.9% (CI: 1.1% - 3.0%)	14.3% (CI: 12.1% - 16.8%)
HARGEISA	Hargeisa Resettlement Camps	UNICEF/FSAU/ MOHL	June 2001	30 x 30 HHCL	6.4% (CI: 4.2% - 8.6%)	16.3% (CI: 12.9% - 19.7%)
GALGADUD	Eldere - District	FSAU/CISP/ UNICEF	August 2001	30 x 30 CHCL	1.9% (CI: 0.8% - 2.5%)	9.3% (CI: 7.1% - 10.9%)
TOGDHEER	Burao Town	UNICEF/SRCS/ MOHL	October 2001	30 x 30 CHCL	3.1% (CI: 2.1% - 4.5%)	13.6% (CI: 11.5% - 16.1%)
AWDAL	Lughaya and Zeila Districts	UNICEF/MOHL/S RCS	November 2001	30 x 30 CHCL	3.2% (CI: 2.2% - 4.6%)	26.8% (CI: 23.9% - 29.8%)
BAKOOL	Rabdure District	UNICEF/IMC/ WFP	September October 2001	30 x 30 CHCL	2.6% (CI: 1.7% - 3.9%)	19.3% (CI: 16.0% - 23.2%)
BAY	Qansadhare District	UNICEF	October 2001	30 x 30 CHCL	3.0% (CI: 2.0% - 4.4%)	18.4% (CI: 15.2% - 22.4%)
GEDO	Belet Hawa-District	FSAU/UNICEF/ CARE/GHC	December 2001	30 x 30 CHCL	8.3% (CI: 6.5% - 10.1%)	37.1% (CI: 34% - 40.3%)
PUNTLAND	Galcayo	UNICEF	March 2002	30 x 30 CHCL	2.1% (CI: 3.0% - 3.2%)	8.2% (CI: 6.6% - 10.2%)
SAHIL	Sahil	FSAU/MOHL/ UNICEF	April/ May 2002	30 x 30 CHCL	2.0% (CI: 1.2% - 3.1%)	11.8% (CI: 9.8% - 14.1%)
BAY	Berdaale	IMC/FSAU/ UNICEF	May 2002	30 x 30 CHCL	3.5% (CI: 2.5% - 5.0%)	17.1% (CI: 14.8% - 19.8%)
SANAAG	Sanaag	UNICEF/MOHL/ FSAU	May 2002	30 x 30 CHCL	1.7% (CI: 1.0% - 2.8%)	10.4% (CI: 8.6% - 12.7%)
HIRAN	Beledweyne	UNICEF/IMC/ FSAU/SRCS	May/ June 2002	30 x 30 CHCL	2.7% (CI: 1.7% - 4.0%)	21% (CI: 18.4% - 23.8%)
NORTHWEST	Haud of Hargeisa	FSAU/MOHL/ UNICEF	May/ June 2002	30 x 30 CHCL	1.4% (CI: 0.6% - 2.2%)	8.8% (CI: 7.1% - 10.9%)
BAKOOL	Rabdure	UNICEF/IMC/ FSAU	September 2002	30 x 30 CHCL	1.9% (CI: 1.1% - 3.1%)	14.8% (CI: 11.9% - 18.4%)
PUNTLAND	Alulla, Kandala, Bargal & I'ban	UNICEF/FSAU/ MOSA	August/ September '02	30 x 30 CHCL	2.1% (CI: 1.3% - 3.3%)	12.6% (CI: 10.6% - 14.9%)
GEDO	Belet Hawa	FSAU/GHC/ CARE/WHO	October 2002	30 x 30 CHCL	2.2% (CI: 1.4% - 3.4%)	21.5% (CI: 18.9% - 24.5%)

30 x 30 CHCL – 30 Children by 30 Clusters

30 x 30 HHCL – 30 Households by 30 Clusters

KPC – Knowledge, Practice & Coverage

NUTRITION – INTERPRETING THE INFORMATION

Some basic facts on nutrition provided to allow readers develop their own opinions on the information presented.

Nutrition surveillance – the terms used in measuring and describing nutrition status²

Weight/Height (W/H) (or weight for length)

Expresses the weight of a child in relation to his height.

Weight for height measurement gives a reasonably accurate estimate of body wasting and is the preferred index of nutritional status in emergencies for several reasons:

- ? Body weight is sensitive to rapid changes in food supply (as muscle and fat are lost), while height remains relatively constant, changing only slowly if at all.
- ? In children under 5 years of age, the relationship of weight to height is nearly constant, regardless of sex or race, and follows a constant evolution as age increases.

- ? Weight for height is relatively independent of a child's age, which is often difficult to ascertain reliably.
- ? There are good internationally accepted and globally applicable reference values of weight-for-height for this age group.
- ? Along with an assessment of oedema, it is the most appropriate index to use to detect and measure the current or acute malnutrition – *wasting* – in a population at a given time.

² (1). The Management of Nutrition in Major Emergencies. UNHCR. WHO, ICRC. WFP. 2000

(2). MSF. Nutrition Guidelines. First Edition. MSF, Paris, 1995.

Weight/age index

Expresses the weight of a child in relation to his age. Mainly used during regular monitoring of a child's progress at MCH centres. Can be useful for detecting growth faltering.

Oedema

The presence of kwashiorkor in a population can be detected through screening for the presence of oedema. Oedema is detected as swelling of both legs of the child. All children with oedema are considered as having severe, acute malnutrition.

Arm circumference

Measurement of mid-upper-arm-circumference (MUAC) is a less accurate means of screening and is used when resources are limited, access to populations difficult, when weight/height measurements are not possible or as an initial screening tool in feeding programmes. Results provide indications of the nutrition status of the population. MUAC measurement is simple, fast and is a good predictor of immediate risk of death.

Classification of malnutrition

Children more than 3 standard deviations below the median reference weight for height are described as severely malnourished, while those between 2 and 3 standard deviations below the median are moderately malnourished.

Cut-off points in defining acute malnutrition for the different indicators.

Nutritional status	Weight/Height Z score	Weight/Height % of median	MUAC ³
Moderate acute malnutrition	Between -3 and < -2	Between 70% and <80%	Between 110mm and <125mm
Severe acute malnutrition	<-3 or oedema	<70% or oedema	<110mm or oedema
Global/Total acute malnutrition [Moderate plus severe malnutrition]	<-2 or oedema	<80% or oedema	<125mm or oedema

Interpretation of nutrition survey results⁴

Global acute malnutrition W/H Z score	Interpretation
Less than 5%	Acceptable
5 – 9.9%	Poor
10 - 14.9%	Serious
More than 15%	Critical

TRAINING COURSES & ANNOUNCEMENTS

The institute of Food, Nutrition & Family Sciences, University of Zimbabwe, is offering a course on "Nutrition care and support for people with HIV" at UZ/IAC, Zimbabwe from January 20 – 31, 2002. For more details contact the project coordinator, Strengthening of food and nutrition training in Southern Africa on Email: foodscience@science.uz.ac.zw

WEBSITES

This 'Nutrition Update', along with other relevant materials, is available on:

UN Somalia Website. http://www.unsomalia.org/FSAU/nutrition_updates

ReliefWeb. <http://www.reliefweb.int/w/Rwb.nsf/vLCE/Somalia?OpenDocument&StartKey=Somalia&Expandview>

SOMALIA RED CRESCENT SOCIETY (SRCS) IN SOMALIA LAUNCHES A NEW WEBSITE

The newly launched SRCS website has information on: the movement, mission statement, activities in Somalia, branches, sources of donations and information linkages. For more details, contact the website <http://WWW.BISHACAS.ORG>

RECENT REPORTS

- ✍ **Monthly Food Security Report for Somalia**, FSAU.
- ✍ **Greater Horn of Africa Food Security Bulletin**. Issue No. 6. October 31, 2002. FEWS NET/LEWS/RCMRD/USGS
- ✍ **Kenya Vulnerability Update**. November 11, 2002. FEWS NET and WFP.
- ✍ **Kenya Food Security Update**. November 8, 2002. FEWS NET and WFP.
- ✍ **Greater Horn of Africa Food Security Update**. November 11, 2002. FEWS NET/CARE
- ✍ **Ethiopia Network on Food Security**. Issue No. 10/02. October 18, 2002. FEWS/NET/EU-LFSU



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³ Use of MUAC and interpretation of MUAC results vary among organisations.

⁴ WHO. Field Guide on Rapid Nutritional Assessment in Emergencies. WHO, Alexandria, 1995.