

*NUTRITION SURVEY REPORT  
BELED-HAWO DISTRICT  
GEDO REGION  
SOMALIA*



*UNICEF SOUTH/CENTRAL ZONE OF  
SOMALIA*

*BAIDOA OFFICE*

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## **1. INTRODUCTION**

This nutrition survey is the eighth in a series of surveys agreed between UNICEF and FSAU throughout South and Central Somalia. UNICEF planned the surveys, conducted the fieldwork of data collection, trained enumerators, monitored survey activities, carried out data analysis and interpretation and paid the survey cost. UNICEF is grateful to the INGO Trocaire who facilitated the work in Beled-Hawo District.

### **1.2. SURVEY JUSTIFICATION**

UNICEF has supported an irregular supplementary feeding programme in Beled-Hawo town during the past eight years through Trocaire. There continues to be evidence of high malnutrition rates amongst the population in Beled-Hawo District, although the level of malnutrition is not well documented. There have been alarming reports of food insecurity and displacement throughout Gedo region, as was recently identified by the inter-agency mission in February 2000. This resulted in the decision to conduct a nutrition survey in Beled-Hawo District, including the displaced population, returnees and residents.

### **1.3 SURVEY OBJECTIVES**

- To determine the level of malnutrition and oedema in Beled-Hawo District by screening the Weight for Height measurement of children between 6-59 months or 65-110cm.
- To measure the determinant factors causing/contributing to existence of malnutrition by recording the occurrence of diarrhoea and ARI diseases in the two weeks prior to the survey.
- To measure measles vaccination and Vitamin A supplementation coverage in Beled-Hawo District and monitor performance in the past 6 months.
- To measure the extent of household movements during the changes in Beled-Hawo District, which has impacted on aid service deliveries.
- To record and document the number of female-headed households to know the extent of families with no support and care to children from fathers.
- To make comparison between families living in Beled Hawo town, those living adjacent to the river and others who are mainly pastoralists.

## **2. BACKGROUND**

### **2.1 General background:**

With an estimated population of around 60,000, Beled-Hawo District is one of the most populated in Gedo region. It is located along the border of Kenya to the West, Ethiopia to the Northwest, Dolo to the Northeast, El-Wak to the Southwest, Luuq to the East and Garboharey to the Southeast.

**Political environment:** Beled-Hawo district has experienced periodic unrest during the past

two years, with regular inter-clan fighting exacerbated by recent changes of control between the Al-Itihad, Massale and Burale groups of the SNF, with Ethiopian involvement.

The 1997 floods hit Gedo region, and Beled-Hawo town in particular, very hard, resulting in a collapse of the fledgling economic infrastructure and destruction of the productive capacity in Beled-Hawo district. Furthermore, two years of consecutive drought and lack of sufficient rains deteriorated the already fragile situation in the district. However, recently there have been signs of improvement in the security situation with negotiations among the two sides of SNF in spite of lack of recognised local administration.

**Recent history of humanitarian assistance:** Since 1992 UNICEF has supported TROCAIRE in delivery of health services in Beled-Hawo District and integrated a supplementary feeding programme in the MCH centre since mid-1999. Approximately 80mts of UNIMIX was provided to Beled Hawo between June 1999 and April 2000. UNICEF also supports 7 HPs and 10 TBAs in the district, as well as static and outreach EPI activities.

CARE delivered 105.6 MT of relief food in February 2000 as part of its food-for-work programme through three local NGOs. During the survey plans were being made for a further distribution at the end of May.

## **2.2 Food Security Context:**

Around 15% of the population of Beled-Hawo District are urban, 80% are pastoral and agro-pastoral and 5% riverine. Agro-pastoralists and pastoralists are considered the most vulnerable, primarily due to the poor condition of much of the livestock, especially cattle, allied to continuing water shortage and failure of the Deyr harvest. The riverine and urban population is less effected.

**Rainfall:** The Gu rains were very late this year and were reported to be inadequate in much of the district. The rains were smaller in quantity and more localised than in normal years. However, it did rain heavily for several days during the survey, and by the time the survey was completed the river level had risen significantly.

**Cereal stock:** Rain-fed farms were sown early to benefit from the first rains, but insignificant amounts of rain had been received at the time of the survey. Along the Juba river, the few farmers with adequate river water had already planted maize in their fields, while the majority were beginning to sow as the river level began to rise. Both ICRC and InterSos were reported to have distributed seeds in the area.

**Cereal prices:** Cereal prices remained high and supplies were limited in spite of some recent relief food distribution.

**Coping mechanism:** Major coping strategies that poor groups resort to include the sale of animals and/or their remaining assets. Virtually no employment activities exist in the region and self-employment is still vital for poor households.

**Extracts from the regular FSAU Monthly Highlights, February – April 2000**

<b>February</b>	No rainfall was received. Pasture and grazing conditions remained poor. The water quality deteriorated. Livestock condition remained poor particularly cattle, which show signs of stress. Production has declined and reproduction has also decreased. Maize has been harvested in riverine areas of Gedo region. Cereal supplies, especially maize have increased during harvest time and prices have been slightly above normal. Security situation in the region was good.
<b>March</b>	No rainfall was received. Water was available along the Jubba river and nearby areas, whereas water is scarce in the remote areas. Pasture was generally poor and the availability of fodder remained limited. Livestock condition was poor/weak especially that of goats in Beled Hawo areas due to poor grazing conditions. Livestock milk yield decreased, consequently, milk prices increased in many parts of Gedo region. Rain-fed farmers started preparing their field for the coming <i>Gu</i> season. The availability of seeds is extremely low, due to higher seed prices. Irrigated farmers along the Jubba river are currently busy preparing and sowing maize fields before the onset of the rains. Security situation has improved.
<b>April</b>	No Gu rains were received which is abnormal. Sporadic and very localised rains were received in parts of Gedo region. Juba river water in Gedo region became drastically lower than normal level, salty and dense. Shallow wells were empty and mostly not functioning. Pasture and grazing conditions are extreme-not available and dried up. Fodder was somehow available in Dirharra areas. Livestock body condition has weakened especially that of goats and cattle. Livestock production declined and milk yield decreased. The majority of farmers still await the river's level to rise. Major coping strategies that poor groups resorted to include; selling pack animals and/or their remaining assets. Security in the region was good.

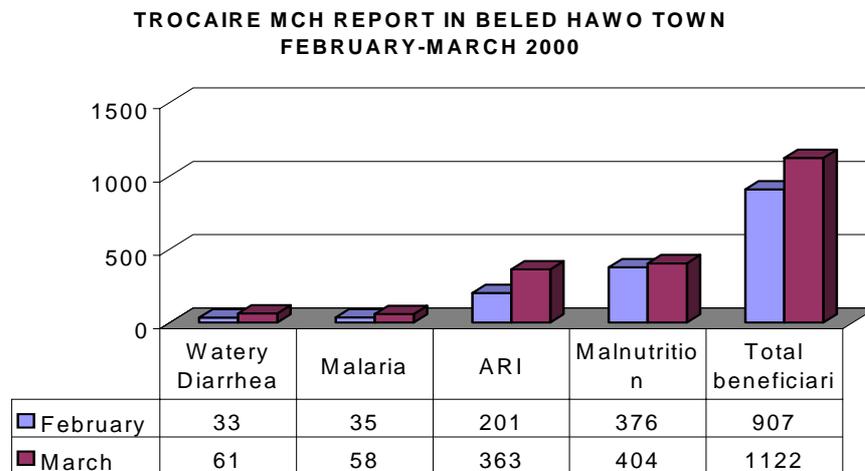
**2.3 External assistance related to food security:**

**General food distribution:** In February CARE International delivered 105.6 MT of food for work through three Local NGOs in Beled-Hawo district.

**2.4 Health context:**

UNICEF supports one MCH with static EPI in Beled-Hawo and outreach EPI activities undertaken by Trocaire to boost the level of EPI coverage, as well as 7 HPs and 10 TBAs in rural villages of the district.

The graph below indicates that in February, out of 907 children seen in Trocaire Beled-Hawo MCH, 4% suffered from diarrhoea, 4% suffered from Malaria, 22% from ARI and 41% were malnourished.



In March out of 1,122 under five children seen in the MCH, 5% suffered from Watery Diarrhoea, 5% from Malaria, 32% from ARI and 36% suffered from malnutrition. The trend of morbidity in

Trocaire MCH indicates an increase of diseases that contribute to malnutrition by 1, 1, and 10 percent respectively while malnourished children decreased from 41 to 36 percent of the total number of children seen.

## **2.5 Water and environmental sanitation:**

The river level remained drastically lower than is normal at this time of year and the water was very thick and salty. Shallow wells had largely dried up and were not functioning and there were reported to be no functioning boreholes in Beled-Hawo district. The price of one drum of water was sold at 15,000 So.Sh. in Beled Hawo town from Mandera boreholes in Kenya. Trocaire continued to undertake water chlorination. Sanitation in Beled-Hawo town is very poor.

## **3. METHODOLOGY**

Cluster sampling methodology was used to select 30 clusters randomly from four sectors in Beled-Hawo town and rural villages in Beled-Hawo districts. A total of 13 clusters were from Beled-Hawo town and 17 clusters were from rural villages in Beled-Hawo district. A total of 905 children between the heights of 65 – 110cm were screened during the survey.

### **3.1 STUDY POPULATION AND SURVEY DESIGN**

Beled-Hawo District is one of the most populated in Gedo regions. It is located along the border of Kenya to the West, Ethiopia to the Northwest, Dolo to the Northeast, EI-Wak to the Southwest, Luuq to the East and Garboharey to the Southeast. An accurate census could not be undertaken prior to the survey due to the time limit and lack of resources. Most of the population currently residing in Beled-Hawo are long term residents.

### **3.2 DATA COLLECTION**

The nutrition survey was conducted between 9 and 17 May 2000. A total of 905 children were interviewed and screened for weight for height. Their caretakers were interviewed as to whether children had received Vitamin A or Measles vaccination in the past 6 months, or had suffered from diarrhoea or ARI diseases in the two weeks prior to the survey.

### **3.3 ACTIVITIES**

The survey was carried out by ten enumerators and five supervisors assisted by survey guides. UNICEF Programme Survey Consultants who participated in previous nutrition surveys conducted three days training for enumerators and co-ordinated the field work. The SCZ M&E Officer made the data analysis of the nutrition survey results. Interviewers were selected based on their experience with previous nutrition surveys and recent multi-indicator cluster surveys in Gedo region. Trocaire assisted in the identification of qualified persons.

## **4. SURVEY RESULTS**

The table below shows the names of the areas of Beled-Hawo town as well as the rural villages in the district, the estimated populations and total clusters identified. This was based on the

population estimate used during the 1999 NID campaign and was provided by the Trocaire PHC Co-ordinator.

### **Beled Hawo Town and Villages** **Estimated and cumulative population, number of identified clusters**

<b>Name</b>	<b>Population</b>	<b>Cumulative</b>	<b>Clusters</b>
Beled Hawo town	25000	25000	1-13
Malmalley	3725	28725	14-15
Loleys	1100	29825	0
Laan Abeer	1200	31025	16
malkahariyey	9900	40925	17-21
Gaawiido	3875	44800	22-23
Carro case	3125	47925	24
Gaddon dhawe	3200	51125	25-26
Beled Amin/IDP	3900	55025	27-28
Hareeri Hoosle	2150	57125	29
Khadiijo Haji	2800	59975	30
<b>Total</b>	<b>59975</b>		

**Random selection** 283  
**Sampling interval** 1999

The table below indicates some of the different characteristics of those interviewed, as well as the number and the percentage of children assessed who had suffered diarrhoea or ARI in the previous two weeks and the percentage of malnutrition amongst urban, riverine and pastoral/agro-pastoral populations.

<b>Characteristics</b>	<b>Urban</b>	<b>Riverine</b>	<b>Agro-pastoral</b>	<b>Total</b>	<b>%</b>
Female headed households	25	13	13	51	9
Male headed households	197	154	142	493	91
Resident households	193	142	153	488	90
Returnees	24	24	2	50	9
Displaced	5	1	0	6	1
<b>Total households</b>	<b>222</b>	<b>167</b>	<b>155</b>	<b>544</b>	<b>100</b>
Global malnutrition	84	57	54	195	21.5
Moderate malnutrition	72	46	45	163	18
Severe malnutrition with Oedema	12	11	9	32	3.5
Assessed children with ARI in past two weeks	87	46	54	187	21
Assessed children with diarrhoea in past two weeks	105	81	62	248	27

Characteristics	Urban	Riverine	Agro-pastoral	Total	%
Vitamin A supplementation in past 6 months	285	212	188	685	76
Measles immunisation coverage	297	173	152	622	69
Measles immunisation in past 6 months	31	56	107	194	21

The table below indicates that 26% of children measured were aged between 6 – 23 months while 74% were aged between 24 – 59 months. Some 43% were urban residents, 30% from riverine areas and 27% from pastoral and agro-pastoral families.

Age group	Urban	%	Riverine	%	Agro-pastoral	%	Total	%
6 – 23 months	103	44	69	29	63	27	235	26
24– 59 months	288	43	202	30	180	27	670	74
Total	391	43	271	30	243	27	905	100

The table below indicates that 2.6% of the children assessed were severely malnourished, 18% were moderately malnourished and 1% were with Oedema. Seventy Eight percent were not malnourished. The global malnutrition rate varies amongst the different groups in Beled-Hawo district. Children of pastoral and agro-pastoral families are the worst off, with global rates of 22.3% including 3.8% severe malnutrition. The riverine children follow this, with 21% including 4% severe malnutrition and then the urban with 21% including 3% severely malnourished children.

Characteristics	$\geq -2$ Z-Score	-3 Z-Score & $< -2$ Z-Score	$< -3$ Z-Score	Oedema	Total
Urban	307 (79%)	72 (18%)	10 (2.5%)	2 (0.5%)	391
Riverine	214 (79%)	46 (17%)	7 (2.6%)	4 (1.4%)	271
Agro-pastoral	189 (77.7%)	45 (18.5%)	7 (2.8%)	2 (1%)	243
Total	710 (78%)	163 (18%)	24 (3%)	8 (1%)	905 (100%)

The table below indicates that 21.8% of assessed children less than 2 years of age were malnourished including 4.4% with severe malnutrition while 21% of the children age 24-59 months were malnourished with 3% severe malnutrition. This could be related to poor feeding practices to children under two years of age.

Characteristics	$\geq -2$ Z-Score	-3 Z-Score & $< -2$ Z-Score	$< -3$ Z-Score	Oedema	Total
6-23 months	184 (78.2%)	41 (17.4%)	8 (3.4%)	2 (1%)	235
24-59 months	526 (79%)	122 (18%)	16 (2%)	6 (1%)	670
Total	710 (78%)	163 (18%)	24 (3%)	8 (1%)	905 (100%)

The table below indicates that 52% of the malnourished children were female and 48% male.

Characteristics	Male	Female	Total	%
>=-2 Z-Score	361	349	710	78
-3 Z-Score & <-2 Z-Score	75	88	163	18
<-3 Z-Score	13	11	24	3
Oedema	6	2	8	1
Total	455	450	905	100

## 7. CONCLUSION

The result of this nutrition survey undertaken in Beled-Hawo District depicts that 21.5% out of 905 assessed children were moderately or severely malnourished with Oedema.

The result of measles immunisation indicated that 22% of assessed children were vaccinated against measles in the past 6 months, 47% were vaccinated against measles before 6 months and 31% were not vaccinated against measles. The results also vary between different groups: Riverine with 64%, Agro-pastoral with 63% and Urban with 76%. The results of the immunisation indicate good EPI coverage in Beled-Hawo district. However, to improve this coverage level there is a need for continuation of static immunisation as well as accelerated EPI campaigns.

The result of vitamin A supplementation indicates that 76% of the children were provided with Vitamin A during the past six months. This was largely the result of the second round of the NID campaign conducted in Beled Hawo district in January 2000. The coverage in the different groups indicated: Riverine with 78%, Agro-pastoral with 77% and 73% in Urban.

Diarrhoea and ARI continue to be two of the main contributory factors to the existence of malnutrition in Beled-Hawo District, with 27% of children suffering from diarrhoea and 21% ARI in the two weeks prior to the survey. The survey results also indicate that 9% of the 544 households visited were female headed, 9% were displaced from other parts of Beled-Hawo district and 90% were original residents.

Trocaire Beled-Hawo MCH morbidity report indicated that in February 2000, out of 907 children seen in Beled-Hawo MCH, 4% suffered from watery diarrhoea, 4% suffered from Malaria, 22% from ARI and 41% were malnourished. In March, out of 1,122 under five children seen in the MCH, 5% suffered from Watery diarrhoea, 5% from Malaria, 32% from ARI, and 36% suffered from malnutrition.

## 8. RECOMMENDATIONS

To reduce the infant and maternal morbidity and mortality caused by malnutrition and diseases, it is recommended that UNICEF and other humanitarian agencies focus on the following:

- 4 Continuation of general food distribution until the Gu harvest.
- 4 Continuation of the current supplementary food distribution through Trocaire and expansion of targeted nutritional supplements (UNIMIX) to malnourished children

through organised teams in villages that cannot be covered from the MCH centre with emphasis on drought affected pastoral and agro-pastoral areas.

- 4 Continuation of immunisation services in the MCH centre and mobile teams managed by Trocaire and undertake acceleration campaigns in Beled-Hawo town.
- 4 Maintain the current level of Vitamin A coverage and in particular concentrate on providing Vitamin A to measles effected and dehydrated children and those suffering from nutritional anaemia.
- 4 Improve the health service delivery in the MCH centre through timely provision of supplies and routine EPI service deliveries.
- 4 Increase iron supplementation programme to improve disease resistance. Improve the system of testing pre-pregnancy nutritional status; provide supplementation during pregnancy and lactation to lead to higher birth-weight and better-nourished children through production of breast milk.
- 4 Initiate water projects in Beled-Hawo District focusing on pastoral villages to reduce diarrhoeal diseases through improved household and public water sources. Continue effective chlorination in Beled-Hawo District and increase community awareness on control, prevention and home management of diarrhoeal diseases focusing on rural villages.