

*NUTRITION SURVEY REPORT
BURHAKABA DISTRICT
BAY REGION
SOMALIA*



*UNICEF SOUTH/CENTRAL ZONE OF
SOMALIA*

BAIDOA OFFICE

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1. INTRODUCTION

This nutrition survey is the ninth 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 World Vision and Burhakaba Health Authority who facilitated the work in Burhakaba District.

1.2 SURVEY JUSTIFICATION

UNICEF supported a supplementary feeding programme in Burhakaba town in the last quarter of 1999 through Burhakaba Health Authority. UNICEF's supplementary feeding support to Burhakaba was stopped in December 1999 due to misappropriation of supplies.

Burhakaba district is situated on the frontline between RRA and SNA factions, is mainly dependent on agriculture and livestock and has suffered continuously from drought, security problems and lack of access to the main markets in Baidoa and Mogadishu during the past five years. Results from the Burhakaba town nutrition survey in September 1999 depicted the highest malnutrition rates in Bay region, with 28% global malnutrition.

Although few humanitarian interventions have been possible in Burhakaba district that could improve the level of malnutrition, CARE International managed to continue to deliver food to all the main rural villages in the district, despite insecurity. The decision to conduct another nutrition survey in Burhakaba was made in order not only to compare the results with the previous data, but to obtain baseline data to assist in planning interventions by World Vision, which plans to start working in the district in July 2000. Unlike the 1999 survey, this one was conducted throughout the district and included samples from the displaced population, returnees and residents.

1.3 SURVEY OBJECTIVES

- To determine the level of malnutrition and oedema in Burhakaba District by screening the Weight for Height measurement of children between 6-59 months or 65-110cm.
- To measure the determinant factors 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 Burhakaba District and monitor performance in the past 6 months.
- To measure the extent of household movements during the changes in Burhakaba 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 Burhakaba 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 176, 000 people, Burhakaba District is one of the largest and most populated in Bay region, containing more than 350 small rural settlements. It is located between Baidoa to the west, Wanlaweyn to the east, Dinsor to the southwest, Jalalaqsi to the northeast and Qoryoley to the south.

Political environment: Burhakaba district has experienced periodic unrest since 1991, with regular inter-clan fighting exacerbated by 1997-1998 floods and the recent changes of control between the SNA and RRA. A significant number of people originally from Burhakaba district are amongst the long term displaced in camps in Mogadishu or villages and towns in Lower Shabelle region.

Recent history of humanitarian assistance: During the first half of 2000, UNICEF has supported the rehabilitation of 10 hand-dug wells in the district through InterSos. World Vision International is currently planning to start a PHC programme in Burhakaba district with support from UNICEF. CARE International delivered 396.25mts of relief food in March 2000 as part of its general food distribution programme through three local NGOs. In addition, 200mts of seeds and 5,000 farming tools contributed by FAO were distributed by InterSos and World Vision in the district.

2.2 Food Security Context:

Around 15% of the population of Burhakaba District are urban and 85% agro-pastoral. 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.

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. The eastern part of Burhakaba suffers from a scarcity of clean water.

Food stock: Food aid continued to be delivered to Bay region and in the first half of the year two food convoys were able to travel on the main tarmac road between Baidoa and Mogadishu, which passes through Burhakaba.

Cereal prices: Cereal prices remained high and supplies were limited in spite of relief food distribution, caused by failure of the previous harvest.

Coping mechanism: Major coping strategies that poor groups resort to include agricultural employment and sale of water and bush products.

March	No rainfall was received. Water scarcity is the major problem this month because of the dried up water catchments. There is concentration of livestock around Boreholes and shallow wells. This has very much affected cattle production in terms of milk, cheese and meat. Availability of food is normal, as a result of food aid distributions from CARE in Burhakaba and Kansadere. However the purchasing power of the population is low, particularly in Burhakaba and Dinsor. Farmers began land preparation and clearing the fields although some of them started planting sorghum to take advantage of the early rains. Pasture grazing areas are very limited, because it's the end of the dry season. Over all security situation in the region is calm although there is still tension in Burhakabba and Dinsor districts between rival groups.
April	Scattered rains were received in the region, which is normal at this time of year. Districts like Baidoa; Dinsor, Berdale and eastern part of Qansahdere now have relief from the water scarcity, although Burhakaba is still suffering. Pasture condition has generally improved due to the rains, particularly for camels and shoats. Pre-planted crops are germinating, but late planting and replanting is also taking place. Free seed distribution by FAO, World Vision and InterSOS has taken place in the region. Prices of staple food (sorghum and maize) have increased slightly, but food aid distributions may have impact on them for the coming weeks as food aid arrived from Merca through the main Mogadishu tarmac road on 23 rd of April. Prices of livestock also increased, due to higher demand from Mogadishu livestock market (camel, shoats) and Kenya market for (cattle). The security situation in the region is very good with no tension between clans and rival groups
May	Compared to last Gu' season, this one seems to be normal. Good rains have been received with high intensity and uniformity in all the districts. As a result of this, water availability and accessibility, pasture and grazing have improved substantially. Livestock condition has become normal in terms of body weight and milk production. Land area cultivated increased due to the good rains. Agricultural employment opportunity increased dramatically. Staple foods such as sorghum and maize are scarce and highly expensive compared to last months. This is due to the crop failure in last season. Imported food is equally expensive and unaffordable for poor families. Supplies of fuel, wheat flour, rice and sugar have arrived through the main Mogadishu tarmac road. Prices of camel are very high, where as Cattle and Shoats are at a reasonable price. The price of one goat against a bag of sorghum is a ratio of one to one (1-1) due to the inaccessible roads. Security situation over the entire region is very calm and stable for the time being.

2.3 External assistance related to food security:

General food distribution: CARE International delivered 396.25mts of relief food through three local NGOs in Burhakaba district in March.

2.4 Health context:

UNICEFs support to Burhakaba MCH ceased in January 2000. WVI is due to initiate an extensive PHC programme in Burhakaba District in July 2000 with UNICEFs assistance.

2.5 Water and environmental sanitation:

During the survey no major water problems were seen in Burhakaba District. The main Gu season rains had filled all water ponds and around 30 shallow wells were also being used, ten of which were rehabilitated recently by UNICEF through InterSOS.

3. METHODOLOGY

Cluster sampling methodology was used to select 30 clusters randomly from four sectors in

Burhakaba town and rural villages in Burhakaba districts. A total of 3 clusters were from Burhakaba town and 27 clusters from rural villages in Burhakaba district. A total of 904 children between the heights of 65 – 110cm were screened during the survey.

3.1 STUDY POPULATION AND SURVEY DESIGN

Burhakaba District is one of the most populated in Bay regions and contains more than 350 villages. 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 Burhakaba are long term residents.

3.2 DATA COLLECTION

The nutrition survey was conducted between 5 and 13 June 2000. A total of 904 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 fieldwork assisted by one of the MICS survey regional supervisors. 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 Bay region. Burhakaba Health Authority assisted in the identification of qualified persons.

4. SURVEY RESULTS

The attached table shows the names of the areas of Burhakaba 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 Burhakaba Health Authority PHC Co-ordinator.

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 and agro-pastoral populations.

Characteristics	Urban	Agro-pastoral	Total	%
Female headed households	3	37	40	7
Male headed households	50	467	517	93
Resident households	40	440	480	86
Returnees	12	56	68	12
Displaced	1	8	9	2
Total households	53	504	557	100

Characteristics	Urban	Agro-pastoral	Total	%
Global malnutrition	22	180	202	22.4
Moderate malnutrition	18	147	165	18.3
Severe malnutrition with Oedema	4	33	37	4.1
Assessed children with ARI in past two weeks	13	200	213	24
Assessed children with diarrhoea in past two weeks	15	195	210	23
Vitamin A supplementation in past 6 months	0	4	4	2
Measles immunisation coverage	32	112	144	16
Measles immunisation in past 6 months	0	3	3	0.3

The table below indicates that 35% of children measured were aged between 6 – 23 months while 65% were aged between 24 – 59 months. Some 10% were urban residents and 90% from agro-pastoral families.

Age group	Urban	%	Agro-pastoral	%	Total	%
6 – 23 months	30	3	285	32	315	35
24– 59 months	60	7	529	58	589	65
Total	90	10	814	90	904	100

The table below indicates that 3% 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 slightly between the different groups in Burhakaba district. Children of urban families are the worst off, with global rates of 24% including 4% severe malnutrition. The agro-pastoral children follow, with 22% including 4% severe malnutrition.

Characteristics	≥ -2 Z-Score	-3 Z-Score & < -2 Z-Score	< -3 Z-Score	Oedema	Total
Urban	68 (76%)	18 (20%)	3 (3%)	1 (1%)	90
Agro-pastoral	634 (78%)	147 (18%)	26 (3%)	7 (1%)	814
Total	702 (78%)	165 (18%)	29 (3%)	8 (1%)	904 (100%)

The table below indicates that 28% of assessed children less than 2 years of age were malnourished, including 5% with severe malnutrition, while 19% 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	≥ -2 Z-Score	-3 Z-Score &	< -3 Z-Score	Oedema	Total
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<-2 Z-Score					
6-23 months	227 (72%)	72 (23%)	14 (4%)	2 (1%)	315 (35%)
24-59 months	475 (81%)	93 (16%)	15 (2%)	6 (1%)	589 (65%)
Total	702 (78%)	165 (18%)	29 (3%)	8 (1%)	904 (100%)

The table below indicates that 57% of the malnourished children were female and 43% male. As in the other surveys conducted to date, there is evidence that more care is provided to boys than to girls.

Characteristics	Male	Female	Total	%
>=-2 Z-Score	339 (48%)	363 (52%)	702	77.7
-3z-Score &< -2z Score	73 (44%)	92 (56%)	165	18.3
<-3 Z-Score	9 (31%)	20 (69%)	29	3
Oedema	4 (50%)	4 (50%)	8	1
Total	425 (47%)	479 (53%)	904	100

The table below indicates that out of 423 children measured in the villages near the frontline 24% were malnourished, with 4% severe, while the clusters identified in villages away from the frontline indicate that 21% of children measured were malnourished with 4% severe.

Characteristics	>=-2 Z-Score	-3 Z-Score & <-2 Z-Score	<-3 Z-Score	Oedema	Total
Near the frontline	322 (76%)	83 (20%)	14 (3%)	4 (1%)	423
Away from the frontline	380 (79%)	82 (17%)	15 (3%)	4 (1%)	481
Total	702 (78%)	165 (18%)	29 (3%)	8 (1%)	904 (100%)

Comparison between UNICEF nutrition surveys in Burhakaba

Indicator	Burhakaba Town	Burhakaba District	Comments
Date of Survey	August 1999	June 2000	One survey per month planned for 2000
Estimated population	21,000	176,000	Rough estimates, prone to rapid fluctuations depending on security and season. Burhakaba District population estimate is based on the 1999 NID data.
Number of children screened	905	904	Aged 6-59 months (height 65-110cm). In June 2000 survey only 3 clusters were identified in Burhakaba town and 17 in rural villages.
% Severely malnourished (plus oedema)	6%	4%	It appears that in 2000 severe malnutrition has reduced by 2%. This may reflect improved access to main market areas and improved security in Burhakaba District.
Global Malnutrition rates	28%	24%	4% less compared to last nutrition survey in 1999. This may reflect improved access to main market areas and improved security in Burhakaba District.
% with diarrhoeal episode in last 2	24%	16%	Higher figure in 1999 may reflect poor quality water and lack of alternative sources. UNICEF has recently

<i>Indicator</i>	<i>Burhakaba Town</i>	<i>Burhakaba District</i>	<i>Comments</i>
weeks			rehabilitated 10 hand-dug wells and heavy rains in the Gu season have improved water quality.
% with ARI in last 2 weeks	40%	24%	
% who received measles vaccination (last 6 months & total)	47% & 71%	0% & 36%	Very low coverage after UNICEF ceased its support to Burhakaba Health Authority in December 1999. Measles campaign and routine EPI service deliveries now required.
% who received Vitamin A supplements in last 6 months	69%	0%	No children received Vitamin A in the last 6 months. This will effect the nutritional situation of malnourished children, who will lose resistance to infectious diseases.

7. CONCLUSION

The result of this nutrition survey undertaken in Burhakaba District is that 22% out of 904 assessed children were moderately or severely malnourished with Oedema.

The result of measles immunisation indicated that 0.3% of assessed children were vaccinated against measles in the past 6 months, 15.6% were vaccinated against measles before 6 months and 84.1% were not vaccinated against measles. The results vary between the different groups (agro-pastoral with 14% and urban with 36%). The results indicate very low EPI coverage in Burhakaba district. To improve this coverage level there is a need for resumption of static immunisation as well as accelerated EPI campaigns.

The result of vitamin A supplementation indicates that 2% of the children were provided with Vitamin A during the past six months. Plans for three rounds of the Polio NID between August and October 2000 should remedy this situation.

Diarrhoea and ARI continue to be two of the main contributory factors to the existence of malnutrition in Burhakaba District, with 23% of children suffering from diarrhoea and 24% ARI in the two weeks prior to the survey. The survey results also indicate that 7% of the 557 households visited were female headed, 2% were displaced from other parts of Burhakaba district, 12% were returnees and 88% were original residents.

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 Immediate resumption of the supplementary food distribution through WVI and expansion of targeted nutritional supplements (UNIMIX) to malnourished children through organised teams in villages that cannot be covered from the MCH centre.

- 4 Immediate resumption of immunisation services in the MCH centre and mobile teams managed by WVI and undertake acceleration campaigns in Burhakaba town and rural villages.
- 4 Integrate Vitamin A supplementation and in particular concentrate on providing Vitamin A to measles affected and dehydrated children and those suffering from nutritional anaemia.
- 4 Immediate resumption of the health service delivery in Burhakaba 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 Undertake follow up of water projects in Burhakaba District to further reduce diarrhoeal diseases through improved household and public water sources.
- 4 Support effective chlorination in Burhakaba District and increase community awareness on control, prevention and home management of diarrhoeal diseases, focusing on rural villages.