

**Nutrition Information in Crisis Situations – Report Number I, February  
2004**



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# Nutrition Information in Crisis Situations – Report Number I, February 2004

February 2004



United Nations System  
Standing Committee on Nutrition

## HIGHLIGHTS

### ETHIOPIA – BETTER PROSPECT FOR 2004

The 2003/2004 *Meher* cereal harvest is estimated at 13–05 million MTs, which is 46% higher than the 2002/2003 season and 11 % above the last five–year average. The pastoral areas, such as Somali region, lowland Bale in Oromya and South Omo, are however, facing a severe drought. At country level, the estimated number of food aid beneficiaries has dropped by 50% in 2004, compared to 2003; at regional level, the number of people in need of food aid has sharply decreased in all regions except Gambella and Somali regions. Nevertheless, 7.2 million people will still be in need of food aid in 2004. Among the needy people, 5 million are considered chronically food insecure, as a result of asset erosion due to successive bad years.

**SUDAN – WORSENING SITUATION IN DARFUR** – Fighting has intensified in Darfur over the last months. Targeting of civilians, such as air attacks, killings, beatings, burning and destruction of villages, has been widely reported. Furthermore, access to the population and provision of humanitarian assistance have been repeatedly denied. About 600,000 IDPs were estimated to be displaced in greater Darfur. On the other hand, there is a better prospect for food security in southern Sudan in the months to come. The improvement of the security situation, which allowed and encouraged people to cultivate larger areas, and above average rainfalls led to a bumper harvest in October 2003– Populations are, however, chronically food insecure and only peace and long–term development will ensure a sustainable improvement of the situation.

**WESTERN IVORY COAST – AVERAGE NUTRITION AND FOOD SECURITY SITUATION** – Although the situation is still volatile in western Ivory Coast and people's living conditions have changed since the beginning of the crisis, it seems that the communities are able to cope and that the nutrition situation is not critical. Strengthening of coping mechanisms is, however, necessary.

**SIERRA LEONE – MIXED NUTRITION SITUATION IN REFUGEE CAMPS** – As of first January 2004, Sierra Leone hosted an estimated 70,000 Liberian refugees, of whom, 55,000 were settled in camps, 7,000 in urban centres and 7,500 at the border area. According to nutrition surveys conducted in eight camps, the nutrition situation was contrasted depending on the camps. It was average in five camps, whilst it was of concern in two camps and serious in one camp. When compared to the prevalence of malnutrition recorded in August 2002 in six camps, the nutrition situation was better in October 2003 in all the camps, except two.

















































**CHAD – CONTRASTED NUTRITION SITUATION AMONG SUDANESE REFUGEES** – There are an estimated 100,000 refugees from Darfur scattered in 20 locations over 600 kms along the Sudan–Chad border. The area is unsafe, with reported incursions of raiders from Sudan. Delivery of assistance to the refugees has been slow to start and refugees, settled among host populations, have been living in hardship conditions. The nutrition situation of the Sudanese refugees in Eastern Chad seems to differ depending on the location. Proper humanitarian assistance and funding are needed to strengthen livelihoods of both refugees and the host population.

**BANGLADESH – NUTRITION SITUATION OF CONCERN AMONG ROHINGYA REFUGEES** – In 1992, approximately 250,000 people of the Rohingya minority fled persecution in Myanmar. The remaining

caseload of refugees was consolidated in three camps in 1997. As of August 2003, an estimated 19,804 refugees were settled in the camps. The nutrition situation is of concern. Refugees are not allowed to move freely from the camps or to access work or land. They are highly dependent on external aid, which is insufficient for them being food secure.

## RISK FACTORS AFFECTING NUTRITION IN SELECTED SITUATIONS

Situations in the table below are classed into five categories relating to prevalence and or risk of malnutrition (I – very high risk/prevalence, II – high risk/prevalence, III – moderate risk/prevalence, IV – not at elevated risk/prevalence, V–unknown risk/prevalence; for further explanation see section “Indicators and classification” at the end of the report). The prevalence/risk is indirectly affected by both the underlying causes of malnutrition, relating to food security, public health environment and social environment, and the constraints limiting humanitarian response. These categories are summations of the causes of malnutrition and the humanitarian response, but should not be used in isolation to prescribe the necessary response.

	<b>SOMALIA Settlements of displaced people in Burao, Togdheer</b>	<b>WESTERN IVORY COAST</b>	<b>SIERRA LEONE Liberian refugee camps</b>	<b>CHAD Sudanese refugees</b>	<b>ZAMBIA Nangweshi refugee camp</b>	<b>BANGLADESH Refugee camps</b>
Nutritional risk category	II	III	II/III	II/III	IV	II
FOOD SECURITY						
Households' livelihoods						
External assistance						
PUBLIC HEALTH ENVIRONMENT						
Availability of water and access to potable drinking water					?	
Health care						
Sanitation					?	
SOCIAL AND CARE ENVIRONMENT						
Social environment	?	?	?			
Child feeding practices			?	?	?	
DELIVERY OF ASSISTANCE						
Accessibility to population						?
Resources for humanitarian intervention	?		?		?	
						

Availability of information						
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Adequate 😊 Problem 😞

Mixed 😐 Don't know ?

## GREATER HORN OF AFRICA

### ERITREA

The food security situation will still be very uncertain in 2004.

Cereal production was poor in 2003; it was only 56.6% of the average 1992–2002 production, but was 25% higher than in 2002 (see table 1; FAO/WFP, 27/11/03).

TABLE 1 CEREAL PRODUCTION, ERITREA, 2003 (FAO/WFP, 27/11/03)

Regions	Cereal production 2003 ('000 MTs)
Northern Red Sea	6.81
Southern Red Sea	0
Anseba	6.79
Maekel	3.56
Debub	27.57
Gash Barka	61.21
Total	105.94

The limited cereal production was due, among other factors, to erratic rainfalls, lack of labour force (most men are enrolled in National Service) and lack of farm power (most oxen were sold during the drought in 2002). On the other hand, livestock seemed to be in a better condition than in 2002. Cereal prices rose sharply in 2002 and 2003, and the terms of trade for livestock owners have been unfavourable since early 2002. The nutrition situation seemed not to have improved in 2003 compared to 2002 (see RNIS 43).

The FAO/WFP crop and food supply assessment has estimated that 1.4 m vulnerable people will require 219,000 MTs of food aid in 2004 (FAO/WFP, 27/11/03). The vulnerable population includes severely drought-affected households who will be in need of food aid throughout the year, moderately drought-affected households, who will benefit from food aid until June 2004 and war-affected people (see table 2). It is also anticipated that seed distribution will be necessary. Food distribution, however, is already facing challenges; because of constraints on resources, WFP's food rations were reduced to a 60% level for drought-affected people and to a 85% level for the war-affected population in January 2004 (Reuters, 21/01/04).



TABLE 2 ESTIMATED VULNERABLE POPULATION, ERITREA, 2004 (FAO/WFP, 27/11/03)

Category	Nb of people
Drought-affected	
Severely	859,192
Moderately	335,775
War-affected	
IDPs	69,200
Returnees	119,000
Expellees	1,000
Refugees in Eritrea	4,000
Total	1,388,167

### Recommendations

*Medium and long-term policy directions, from the FAO/WFP crop assessment*

- Adopt better farming practices, including using improved seed and more suitable crop varieties, improved water-harvesting techniques
- Develop appropriate policies and programmes for land access and tenure
- Improve management of livestock, such as better provision of water, feed, forage and veterinary services
- Create rural finance and marketing facilities
- Improve the macro-economic management

### ETHIOPIA

**Better prospects for 2004**



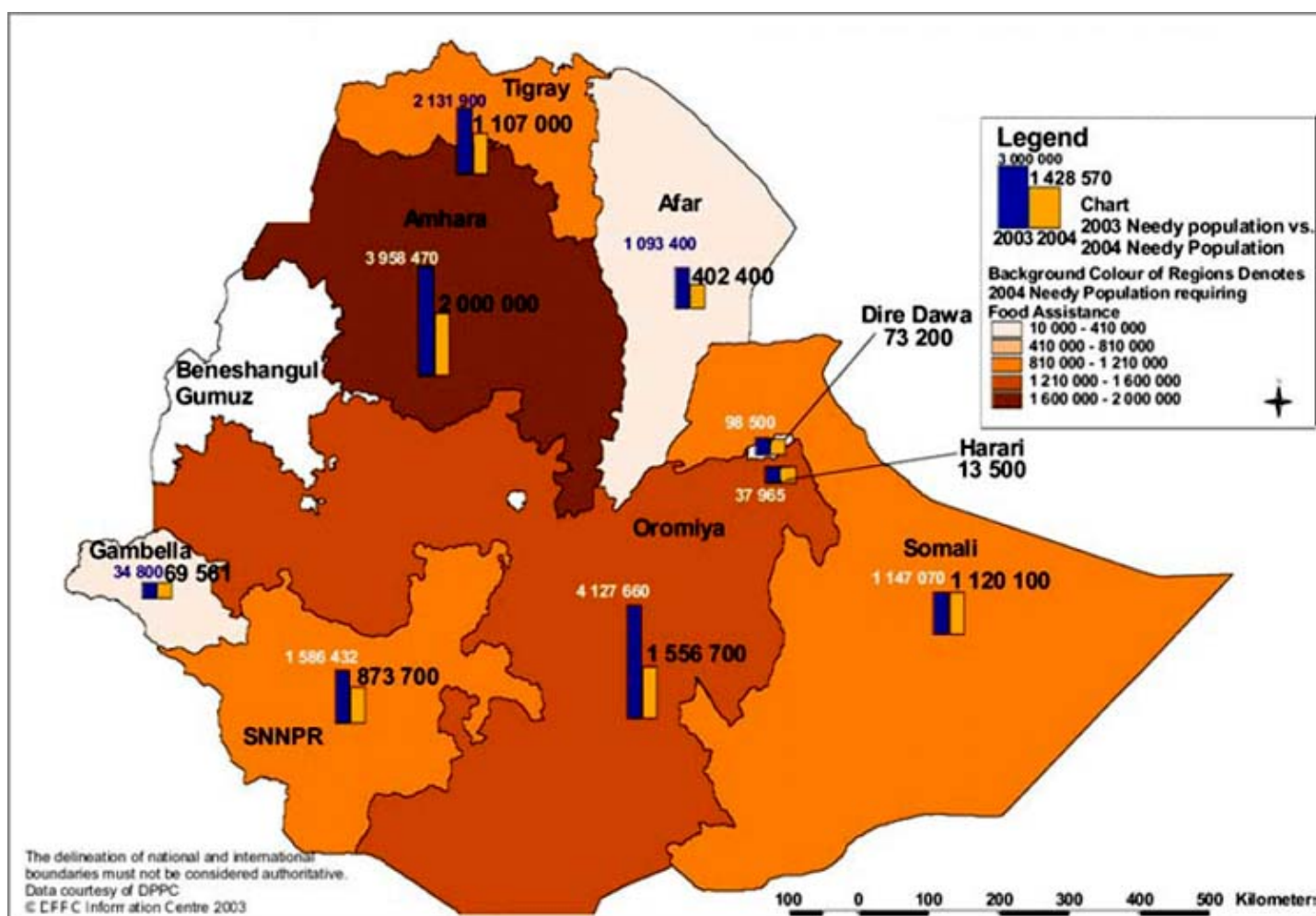
The 2003/2004 *Meher cereal* harvest (the main crop season) is estimated at 13.05 million MTs, which is 46% higher than the 2002/2003 season and 11% above the last five-year average (FAO/WFP, 12/01/04). This good crop performance may partly be attributed to good rainfalls during both crop seasons (the *Belg* season, from January/February to April/May and the *Meher* season from June/July to September/October) and higher incentives to invest, because of the rise in cereal prices. Livestock condition has also improved. The pastoral areas, such as Somali region, lowland Bale in Oromya and South Omo, are however, facing a severe drought (see below). At country level, the estimated number of food aid beneficiaries has dropped by 50% in 2004, compared to 2003; at regional level, the number of people in need of food aid has sharply decreased in all regions except Gambella and Somali regions (see map).

Nevertheless, 7.2 million people will still be in need of food aid in 2004; relief food requirements are estimated at about 980,000 MTs. Among the needy people, 5 million are considered chronically food insecure, as a result of asset erosion due to successive bad years. Among the 300 woreda requiring food assistance, 45% have been receiving food assistance for the past seven – ten years consecutively.

### Improvement in the situation in SSPR

Following the harvest, the situation seemed to have improved in the Southern Nation and Nationalities People's Region (SNPPR). The number of children admitted to TFCs is reported as decreasing in most of the TFCs (OCHA, 09/01/04) and some TFCs have been closed (OCHA, 04/11/03).

**Two random –sampled nutrition surveys were carried out in Boricha woreda and Dale woreda, Sidama zone, in October 2003 (ACF–F/ADRA, 10/03; GOAL, 10/03). The surveys showed under control to average nutrition situations and mortality rates (see table 3). The main cause of deaths in both woreda was fever/malaria.**



ESTIMATED NEEDY POPULATION REQUIRING FOOD ASSISTANCE 2004 BY REGION COMPARED TO 2003 BENEFICIARIES (OCHA, 15/01/04)

TABLE 3 RESULTS OF NUTRITION SURVEYS, SIDAMA ZONE, SNNPR, ETHIOPIA, OCTOBER 2003  
(ACF-F/ADRA, 10/03; GOAL, 10/03)

% Acute Malnutrition (95% CI)	% Severe Acute Malnutrition (95% CI)	Crude Mortality (/10,000/day)	Under 5 Mortality (/10,000/day)	Measles immunisation coverage (%) <sup>*</sup>
BORICHA WOREDA				
4.1 (2.5–6.4)	0.1 (0.0–1.2)	0.7	2.2	65.0
DALE WOREDA				
7.9(6.3–9.9)	0.9 (0.4–1.8)	0.5	1.4	58.6

<sup>\*</sup> According to cards and mothers' statements

BOX 1 FOOD SECURITY AND PUBLIC HEALTH, DALE WOREDA, SIDAMA ZONE, SNNPR, ETHIOPIA, OCTOBER 2003 (GOAL, 10/03)

<p><b>FOOD SECURITY</b> 54% of the families were eating 3 meals a day; 45% were eating 2 meals a day</p> <p><b>MAIN SOURCE OF FOOD</b> Own production: 61%, purchase: 23%, food distribution: 6%</p> <p><b>FOOD DISTRIBUTION</b> In the 4 months prior to the survey, 62% of the households did not receive general ration, 35% received two distributions</p> <p><b>SOURCE OF INCOME</b> 36% of the population were not earning money 18% were selling agricultural products 18 % were selling coffee 15% were engaged in waged labour</p> <p><b>PUBLIC HEALTH</b> <b>MORBIDITY</b> Cough/ARI: 16%, fever/malaria: 7.4%, diarrhoea: 3.1%</p> <p><b>SOURCE OF WATER</b> Unprotected water sources: 72%</p>
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In Boricha woreda, the nutrition situation seemed to have greatly improved compared to April 2003, when a DPPC/DPPB's survey showed a malnutrition rate above 15%. The number of admissions to therapeutic feeding centres dropped significantly from 143 in July 2003 to 58 in September 2003. The improvement in the situation may be partly explained by the harvest and by humanitarian interventions, especially in terms of food distribution and nutrition.

In Dale woreda, people were mainly relying on their harvest as their sources of food and income (see box 1). At the time of the survey, people's source of food was comparable to the situation in a non-drought year.

### Drought in Somali region

The last *Deyr* rains (October–November) were erratic and were concentrated in very limited areas to which a lot of pastoralists from other parts of Somali region, and even from northern Somalia have migrated. This has resulted in high pressure on pasture and water points (UNCT, 13/01/04). However, unexpected rains in January in six of the nine zones of Somali region have mitigated the situation by improving availability of water and pasture (OCHA, 30/01/03). It is, however, estimated that 1.1 million people will be in need of emergency food aid in 2004, especially until June 2004.

Fik is one of the most affected area (FEWS, 14/01/04). The nutrition situation has gradually deteriorated in Fik zone due to successive droughts, and appalling rates of acute malnutrition (around 30%) were reported in

March 2003 (see RNIS 42).

## Overall

Although the situation has improved in most parts of Ethiopia following a good harvest, several million people are still highly vulnerable due to successive bad years and lack of socio-economic development.

## SOMALIA

Following a retreat held in Kenya in mid-January 2004 in an attempt to revive the stalled peace talks, Somali leaders signed the Transitional Federal Charter, an agreement on a future parliament, which will elect a national president and draft a constitution (AFP, 29/01/04). The new assembly will have 275 members, who should be appointed within one month after the signing of the agreement. The security situation is still tense. Fighting in Gagadud area, Central Somalia has led to the displacement of thousands of families (IRIN, 22/12/03). Major displacements have also occurred in Bakool and Bay regions, south Somalia (ACF, 16/12/03).

Tension has risen in northern Somalia. Somaliland and Puntland both claim Sool region (AFP, 19/01/04), to which humanitarian aid is flowing in response to the current drought.

### Drought in Northern and Central Somalia

The Somaliland *Gu* cereal production was extremely good and the best of post-war years (FSAU-FS, 14/01/04). However, the current drought is having a major impact on the pastoralist group. In addition to the Sool plateau, which has been considered vulnerable for months, Bari, Nugal and Mudug areas are now raising concerns.

### WORRYING SITUATION IN SOOL PLATEAU

Following the failure of several consecutive rainfall seasons, the population of Sool plateau is highly vulnerable (see RNIS 43), and both emergency and long-term action is necessary (FSAU-FS, 22/11/03).

**Nutrition assessments carried out in November and December 2003 indicated a worrying situation (category II) (FSAU-N, 11/03; FSAU-N, 12/03). In November, among 540 children who were screened in villages, 13.7% were acutely malnourished, including 3.5% severely malnourished. In December, among 391 children who were measured in the sentinel sites chosen for long-term monitoring of nutrition and food security, 18.9% were acutely malnourished, including 3.8% severely malnourished.**

Distribution of food to malnourished children and their families has been gradually extended over the last months; in December 2003, WFP distributed food to about 13,000 families (WFP, 23/01/04). UNICEF, in addition to distributing food to malnourished children, also provided immunisation and health care (FSAU-N, 01/04). Cash grants and water interventions have also been implemented (FSAU-N, 01/04).

### DEGRADATION OF FOOD SECURITY IN TOGDHEER, BUT NUTRITION SITUATION AVERAGE

The failure of two consecutive rainy seasons has greatly affected the food security of the poorest. Migrations of families and herds in search of pasture have been reported, but only the middle and better-off wealth groups can afford to migrate. Several indicators showed a deterioration of the food security situation of those who remain (FSAU-FS, 14/01/04; FSAU-N, 01/04). **However, the nutrition situation does not seem of particular concern yet (category III). According to a rapid nutrition assessment carried out in 12 villages (391 children screened), 8.2% of the children had a MUAC < 125 mm, including 0.5% who had a MUAC < 110 mm; one child had oedema (FSAU-N, 01/04).**

### SERIOUS SITUATION IN LOWER NUGAL VALLEY

**The situation seemed very worrying (category I). A rapid nutrition assessment conducted in Talex district showed that 27% of the 175 children screened had a MUAC < 125 mm, of whom 5.8% had a MUAC < 110 mm (FSAU-N, 01/04).**

**Settlements of displaced people in Burao surroundings, Togdheer**

There are four main settlements around Burao town, where IDPs from the south and returnees from Ethiopia live. According to an exhaustive survey carried out in October 2003, 219 households were living in the settlements, of whom 55% had been residing in the area for more than three years, 28% were returnees and 16% were displaced (FSAU/MOHL/SRCS, 10/03).

BOX 2 FOOD SECURITY, PUBLIC HEALTH AND CHILD FEEDING PRACTICES, IDP SETTLEMENTS,  
BURAO, TOGDHEER, SOMALIA, OCTOBER 2003

FOOD INTAKE

Two meals a day

Mainly Somali *Anjera* (Somali pancakes) and tea

Limited consumption of milk, fruits and vegetables because of low purchasing power

FOOD SECURITY  
*SOURCES OF FOOD*

Purchase: 85.2%

*SOURCES OF INCOME*

Casual work: 61%

Small business: 20.6%

*COPING STRATEGIES*

Social support (borrowing, food aid and begging): 70.7%

Remittances: 7.5%

PUBLIC HEALTH  
*HEALTH CARE*

Seeking assistance when a child is sick: 95%

When seeking assistance; Public health facility: 55%

Private clinic/pharmacy: 40.9%

Traditional healer: 3.8%

Measles vaccination coverage: 80.2%

Disease in the previous 2 weeks; ARI: 30.1 %, diarrhoea:  
24.2%, malaria: 7.5%, measles in the previous month: 6.1%

*WATER*

Main source of drinking water; water trucking: 62.7%, borehole: 20.9%, *berkads*: 10%

*SANITATION*

Latrine: 40.9%

CHILD FEEDING PRACTICES

6–24 month olds breast-fed: 33.4%

Breast-feeding stopped at 0–5 months: 12.8%, at 6–11 months: 43.6%

Feeding frequency; 3 times: 50%; 4 times or more: 15%

Breast-feeding is started within 24–48 hours of delivery

Little time is devoted to the children,

because mothers are engaged in petty trade or casual work

BOX 3 FOOD SECURITY, DINSOR DISTRICT, BAY REGION, SOMALIA, SEPTEMBER 2003  
(IMC/UNICEF/FSAU, 09/03)

*A VAILABILITY OF FOOD*

Reduced milk and wild food availability because of drought

Shift from milk, meat and cereal diet to cereals alone

*SOURCES OF FOOD*

Household crop production: 87%

Purchase: 12.1%

*SOURCES OF INCOME*

Sale of crops: 70.5%, casual labour: 13.9%  
small business: 8.2%, sale of animals and animal products: 5.0%

*COPING STRATEGIES*

Purchase: 51.5%, sale of more livestock: 21.8%,  
casual labour: 13.2%, wild food collection: 8.4%

BOX 4 FOOD SECURITY AND PUBLIC HEALTH, TAYEGLOW DISTRICT, BAKOOL REGION, SOMALIA,  
OCTOBER 2003 (FSAU, 10/03)

FOOD SECURITY  
*SOURCES OF FOOD*

Household crop production: 78.5%  
Purchase: 20.1%

*SOURCES OF INCOME*

Sale of crops: 34.4%, casual labour: 32.3%  
small business: 21.5%, sale of animals and animal products: 9.0%

*COPING STRATEGIES*

Sale of more livestock: 38.5%, purchase: 24.6%,  
borrowing: 13.6%, begging: 3.4%

PUBLIC HEALTH  
*HEALTH CARE*

Seeking assistance when a child is sick: 93%  
When seeking assistance; private clinic/  
pharmacy: 53.7%, public health facility: 23.1%, traditional healer: 23.2%

*WATER*

Main source of drinking water; unprotected  
wells: 54.8%, protected wells: 18.9%

*SANITATION*

Latrine: 39.5%

**The nutrition situation was of concern (category II): 15.3% acute malnutrition, including 1.9% severe malnutrition. The mortality rates were, however, average;** CMR was 0.37 deaths/10,000/day and under-five mortality rate was 0.6 deaths/10,000/day. Overall, basic facilities were scarce in the settlements and households were vulnerable to food insecurity (see box 2). Displaced families from the south seemed the most vulnerable.

**Southern Somalia**

The closure of the Garissa cattle market in Kenya, because of rinderpest, will have a major impact on livestock exportation in Somalia (FEWS, 11/12/03).

**SITUATION OF CONCERN IN DINSOR DISTRICT, BAY REGION**

A random sampled nutrition survey was conducted in Dinsor district, Bay region, in September 2003 (IMC/UNICEF/FSAU, 09/03). **The nutrition situation and the mortality rates were of concern (category II) (see table 4). Previous surveys, carried out in August 1996 and December 2000, showed prevalence of malnutrition within the same range.**

The district is considered as having high potential for crop and livestock production; about 80% of the population is agro-pastoral. Whilst 2000 and 2002 were good cropping years, rainfalls were reduced in 2001 and 2003. Prices of imported goods have also recently increased. The food security situation in the district is considered vulnerable (see box 3).

**HIGH VULNERABILITY IN TAYEGLOW DISTRICT, BAKOOL REGION**

About 60% of the population is agro–pastoral, 20% is agricultural and 20% is pastoral. The 2003 *Gu* season was poor, resulting in food insecurity, especially for the poorest who had not enough stock from the previous harvests. **A random sampled nutrition survey conducted in October 2003 (FSAU/UNICEF/CARE/SRCS, 10/03) showed a precarious nutrition situation (category II), whilst mortality rates were below alert thresholds (see table 4).** Food security and public health situations were average (see box 4).

#### FOOD INSECURITY IN MARERE, JILIB DISTRICT, MIDDLE JUBA

The nutrition situation was dire during Summer 2003, with a lot of cases of kwashiorkor (see RNIS 43). MSF–H carried out an assessment of the situation in the area in December 2003 (MSF–H, 12/03). The assessment concluded that there has been chronic food insecurity in the area for the past five years, with acute food deficit before the harvests when people mostly rely on maize and unripe fruits. Food insecurity is mainly due to drought which led to poor harvests in bad years and insufficient food in better years as the population has to pay back the debts contracted in bad harvest years. In addition, access to drinkable water and to health care is limited. The Somali Bantu, who accounted for about 60% of the population, seem the most vulnerable.

TABLE 4 RESULTS OF NUTRITION SURVEYS, SOUTHERN SOMALIA, SEPTEMBER–OCTOBER 2003 (IMC/UNICEF/FSAU, 09/03; FSAU/UNICEF/CARE/SRCS, 10/03)

% Acute Malnutrition (95% CI)	% Severe Acute Malnutrition (95% CI)	Crude Mortality (/10,000/day)	Under 5 Mortality (/10,000/day)	Measles immunisation coverage (%)*
DINSOR DISTRICT, BAY REGION				
13.3 (11.2–15.8)	1.8 (1.0–2.9)	1.2	3.6	35.5
TAYEGLOW DISTRICT, BAKOOL REGION				
17.2 (14.9–19.9)	3.1 (2.1–4.4)	0.7	1.3	34.1

\* According to cards

The major cause of deaths was reported as being malnutrition, and especially kwashiorkor. In addition to the recommendations of medium to long–term intervention, which has also been advised by the FSAU (see RNIS 43), MSF–H recommends considering the provision of food aid in terms of pulses, oil and blended food, to avert serious food shortage during the hunger–gap season.

#### Recommendations

*From NICS, in Sool plateau*

- Consider implementing treatment of severe malnutrition

*From the survey in IDF settlements in Burao*

- Implement a supplementary feeding programme
- Continue to closely monitor the nutrition situation
- Improve sanitation
- Support income–generating activities

*From the survey in Dinsor district*

- Monitor the food security situation closely
- Support outreach health activities
- Continue supplementary feeding
- Improve access to water, both for domestic use and animals

*From the survey in Tayeglow, Bakool*

- Monitor the food security situation closely
- Establish a referral health facility (PHCC or hospital) to treat diseases and severe malnutrition
- Implement supplementary feeding
- Improve access to safe drinking water

*From the assessment in Marere area, Middle Juba*

- Consider implementing food distributions in terms of pulses, oil and blended food during the hunger-gap season, in addition to implementing medium to long-term food security intervention and to strengthening access to health care and to potable water

## **SUDAN**

As part of the on-going peace talks between the government of Sudan and the Sudan People's Liberation Movement/Army (SPLM/A), both parties have recently come to an agreement regarding wealth sharing (BBC, 26/01/04). Wealth, including revenues from oil, should be shared equally between the North and the South. Negotiations are continuing and are focussing on the status of Blue Nile, Nuba Mountain and Abyei provinces claimed by both forces (BBC, 26/01/04). It seems that the security situation has improved in the south.

On the other hand, the situation has worsened in Darfur, where battles between the government of Karthoum and rebel movements have been raging for months, leading to the displacement of thousands of people. The current crisis in Darfur does not seem to raise much interest from the international community.

### **Worsening situation in Darfur**

Fighting has intensified in Darfur over the last months. Targeting of civilians, such as air attacks, killings, beatings, burning and destruction of villages, has been widely reported (BBC, 03/02/04). Furthermore, access to the population and provision of humanitarian assistance have been repeatedly denied (MSF, 15/01/04; IRIN, 12/01/04). It seemed, however, that the government of Karthoum recently promised to provide better access for humanitarian workers (OCHA, 10/02/04). About 600,000 IDPs were estimated to be displaced in greater Darfur. North Darfur accounts for the majority of the IDPs (300,000), whilst 200,000 and 100,000 are settled in West Darfur and South Darfur, respectively (ORHC, 10/01/04). In addition, more than 100,000 people fled to Chad.

Due to the insecurity, UN agencies (under UN security rules) were authorised access to only 15% of the IDPs (ORHC, 10/01/04). Non-UN agencies may have had access to a larger population, but difficulties in obtaining travel permits greatly limit access to the population. In accessible areas, it is estimated that about 94% of the water needs have been covered and that health needs are fully covered; only 18% of the non-food item needs have been covered (ORHC, 10/01/04). The report of ORHC recommends that supplies be pre-positioned in case of increasing access to the population.

### **Better prospect for food security in Southern Sudan**

There is a better prospect for food security in southern Sudan in the months to come. The improvement of the security situation, which allowed and encouraged people to cultivate larger areas, and above average rainfalls led to a bumper harvest in October 2003 (FAO/WFP, 11/02/04). The cereal production was estimated to be 49% higher than in 2002 and has especially increased in Bar-el Ghazal and Equatoria. These two regions will, nevertheless, be in deficit, although there are huge variations between states; Western Equatoria will have a 30% surplus, but the surplus will probably be unmarketable due to poor transport conditions. Despite the improvement in security, in agricultural production and in livestock condition, the overall socio-economic situation remains poor.

It is estimated that 1.96 million people will need food aid (FAO/WFP, 11/02/04). This is a 2 % decrease in the caseload and an 11 % decrease in the amount of food needed, compared to 2003. The food aid needs also take into account assistance to an estimated 300,000 IDPs who might return owing to the improvement in the political situation.

#### AWEIL SOUTH, AWEIL EAST AND AWEIL NORTH COUNTIES, NORTHERN BAR EL GHAZAL

Two random sampled nutrition surveys were conducted in November 2003, in three districts of Aweil South county and in four districts of Aweil East and North counties (Tearfund, 11/03). **The prevalence of malnutrition indicated a precarious situation (see table 5), which seemed, however, to have slightly improved in Aweil South, compared to November 2002. The under-five mortality rate was of concern in Aweil East and North: 2.73/10,000/day.** Measles vaccination coverage was low in both surveys, 25.6% and 39–8% in Aweil East and North and in Aweil South, respectively.

#### BENTIU AND ROB KONA TOWNS, UNITY STATE, UPPER NILE

Bentiu and Rob Kona are controlled by the government of Karthoum. Despite the peace negotiations, the security situation remains tense in this area, where oil is extracted. Several humanitarian programmes are running, including food distribution, support to health care and nutrition programmes.

TABLE 5 NUTRITIONAL STATUS OF CHILDREN AND CARETAKERS, AWEIL SOUTH, NORTH AND EAST, NORTHERN BAR EL GHAZAL, NOVEMBER 2003 (TEARFUND, 11/03)

0–59 month old children		Caretakers	
% Acute Malnutrition (95% CI)	% Severe Acute Malnutrition (95% CI)	% 185 ? MUAC < 220 mm (at risk)	% MUAC < 185 mm (malnourished)
THREE DISTRICTS IN AWEIL SOUTH			
16.2 (13–20)	1.4 (0.5–3.0)	18.1	2.5
FOUR DISTRICTS IN AWEIL EAST AND NORTH			
16.6 (13.2–20.5)	1.9 (0.9–3.8)	21.8	0.7

**A random sampled nutrition survey carried out in December 2003 (ACF/Care/SRC, 12/03) showed no improvement in the situation since 2002; the prevalence of malnutrition has remained high and stable over the past two years (see figure 1)**

Food insecurity in the area is mainly due to limited access to fields and loss of livestock as a consequence of insecurity; petty trade is the most common coping mechanism but is limited (see RNIS 4I).

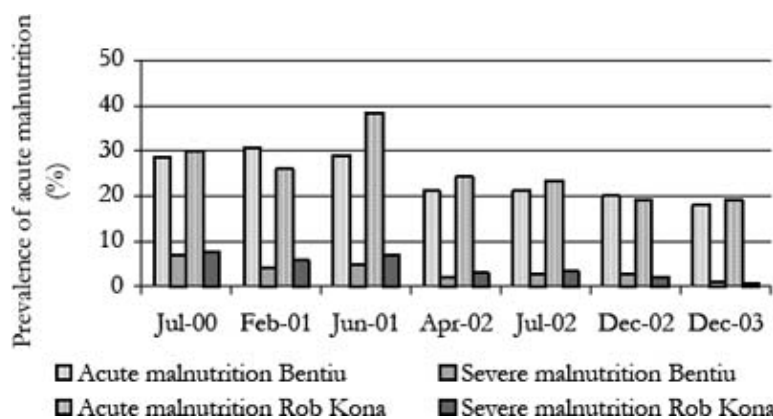


FIGURE 1 RESULTS OF NUTRITION SURVEYS, BENTIU AND ROB KONA TOWNS, UNITY STATE, SUDAN

#### Overall

Whilst the situation in Darfur remains highly worrying (category I), there is a better food security prospect this year in southern Sudan (category II). Populations are, however, chronically food insecure and only peace and



long-term development will ensure a sustainable improvement of the situation.

## Recommendations

### *From the ORHC in Darfur*

- Pre-position supply to respond quickly and effectively as soon as humanitarian access improves
- Position additional experts to undertake needs assessment missions as soon as humanitarian access improves
- Additional international NGOs are encouraged to joint the relief efforts in Darfur
- Donors are encouraged to commit more funds
- Examine civilian protection issues closely

### *From NICS in Bentiu and Rob Kona*

- Re-consider the scope of the humanitarian programmes in the area and consider implementing programmes which will significantly improve the food security of the population

## WEST AFRICA

### GUINEA

#### Refugees

After a massive wave of Liberian refugees in September 2003 (see RNIS 43), the influx of refugees has calmed down and only 100–200 arrivals per week were recorded in November/December 2003 (OCHA, 19/12/03). In addition, it seems that a significant number of Liberian refugees returned spontaneously to Liberia, although it is unknown if their returns are permanent (OCHA, 19/12/03). It was estimated that, in addition to about 100,000 refugees settled in camps (see table 6), around 70,000 refugees were living outside camps, as of mid-December 2003 (OCHA, 19/12/03). The majority of the refugees are Liberian (89,000), followed by Sierra Leonean (15,400) and Ivorian (6,800).



About 25,000 Sierra Leonean refugees were repatriated from Guinea (see RNIS 42) in the first semester of 2003. Repatriations were suspended during the rainy season and resumed in December 2003.

An evaluation of food security in Guinea showed that the situation in Forest Guinea, where the majority of the refugees are settled, although not critical, needs to be monitored carefully because of potential risks connected to the security situation in border areas and influx of populations (ACH–S, 07/03).

TABLE 6 REFUGEES SETTLED IN CAMPS IN GUINEA, DECEMBER 2003 (OCHA, 19/12/03)

Location	Camp	Nb of refugees
Kissidougou	Boreah	7,795
	Kountaya	16,350
	Telikoro	9,402
N'Zerekore	Kouankan	32,205
	Kola	6,527
	Nonah	6,820
	Laine	32,090
Total		111,189

### Returnees

Forest Guinea has also experienced an influx of returnees from Ivory Coast, since the events in Ivory Coast in September 2002. A rapid evaluation has estimated that, of around 100,000 returnees, about 50,000 are settled in five prefectures (Lola, Beyla, Kankan, Mandiana and N'Zerekore) along the Ivory Coast–Guinea border (OCHA, 09/01/04). Returned families represented about 10% of the total population in the border area (OCHA, 09/01/04), and according to an ACH–S evaluation, six of the 17 villages surveyed in Forest Guinea hosted returned families (ACH–S, 07/03). Nearly all the returned families resided with host families and were highly dependent on them for subsistence (OCHA, 09/01/04). Moreover, the economic situation has been affected in the area by the closure of the border with Ivory Coast (OCHA, 09/01/04). The priority needs, according to the people interviewed in the OCHA assessment, were health care, food and nutrition support, education and potable water (OCHA, 09/01/04). OCHA called for a comprehensive evaluation of the needs in the area and for action to sustain returnees' and host communities' livelihoods.

## IVORY COAST

Members of the “New Forces”, the rebel movement which controls half of the country, attended their first cabinet meeting at the beginning of January, after having suspended their participation since the end of September 2003 (IRIN, 06/01/04).

The decision to deploy an additional six thousand UN peace-keeping troops to supervise the disarmament process and to secure the country until the next election, due to be held in 2005, has been postponed, bending to pressure from the US (IRIN, 05/02/04).

The security situation is still volatile. In the northern and north-western parts of the country, there have been reports of clashes between factions and of intimidation of civilians (OCHA, 30/01/04).

In the southwest, inter-communal violence is reported being on the rise, leading to new displacements of people of Burkinabe origin (OCHA, 22/01/04). It was estimated that 21,000 IDPs were settled in Guiglo and that 7,400 Liberian refugees and IDPs resided in the nearby transit centres in Nicla. These transit centres were reported as lacking shelter and adequate sanitation to cope with the recent influx; programmes were underway to improve the situation. MSF and ACF were reported as being in the process of closing their nutrition programmes in Guiglo, owing to the improvement of the situation (OCHA, 02/01/04). In the regions controlled by the “New Forces”, the health system is almost totally dependent on humanitarian intervention and seems to run at only 30% of its normal capacity (OCHA, 30/01/04).

### Nutrition situation under control in the west

A random sampled nutrition survey was conducted in Man, Danane and Toulepleu departments in November 2003 (MOH/UNICEF/WHO, 11/03). Among the households surveyed, 13.2% were displaced; a higher proportion of displaced families resided in urban centres (21.6%) than in rural areas (4.1%).

**The results of the survey did not show a critical nutrition situation, either among children or women** (see table 7).

The survey also suggested that mortality rates were under control; the majority of the deaths which occurred over the year previous to the survey were due to war casualties. However, sources of income, sources of food and diet patterns have been altered by the current crisis.

TABLE 7 FOOD SECURITY INDICATORS, TOLEPLEU, MAN AND DANANE DEPARTMENTS, WESTERN IVORY COAST, NOVEMBER 2003 (MOH/UNICEF/WHO, 11/03)

0–59 month old children		15 to 49 year old mothers	
% Acute Malnutrition (95% CI)	% Severe Acute Malnutrition (95% CI)	Moderate Chronic Energy Deficiency 16 ? BMI < 18.5 (%)	Severe Chronic Energy Deficiency BMI < 16(%)
URBAN			
5.2	2.0 (1.2–3.4)	6.5	1.5
RURAL			
7.3	2.1 (1.3–3.5)	7.9	1.6
TOTAL			
6.3	2.1 (1.5–3.0)	7.2	1.6

#### **SOURCES OF INCOME MORE PRECARIOUS**

Sources of income were more precarious than before the war; only 68.6% of the households had a permanent job at the time of the survey (53.2% and 84.3% in urban and rural areas, respectively), compared to 84.9% before the crisis (76.5% and 93.9% in urban and rural areas, respectively). At the time of the survey, people were more reliant on temporary work.

#### **DECREASE IN FOOD CONSUMPTION AND FOOD DIVERSITY**

Sources of food have changed, the proportion of food purchased being higher than before the war (see table 8). However, the amount of money allocated to purchase of food has been more than halved compared to the pre-crisis situation.

The number of meals has decreased (see table 8) and the diet is less diversified than before, with the frequency of consumption of dairy products, vegetable oil (except palm oil), and cereal meals having been particularly reduced (see figure 2). About 7.5% of the population received food aid.

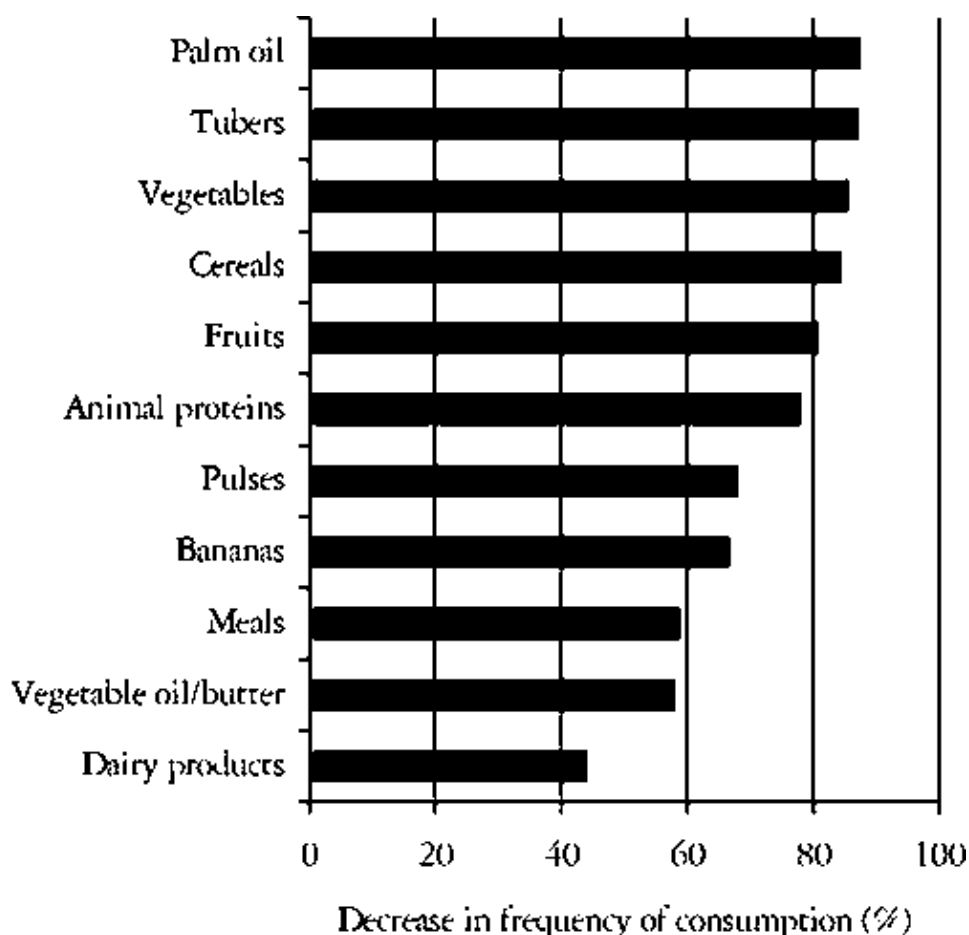


FIGURE 2 CHANGE IN FOOD CONSUMPTION AFTER THE CRISIS, TOLEPLEU, MAN AND DANANE DEPARTMENTS, WESTERN IVORY COAST, NOVEMBER 2003 (MOH/UNICEF/WHO, 11/03)

TABLE 8 FOOD SECURITY INDICATORS, TOLEPLEU, MAN AND DANANE DEPARTMENTS, WESTERN IVORY COAST, NOVEMBER 2003 (MOH/UNICEF/WHO, 11/03)

	Before the crisis		At the time of the survey	
	Urban	Rural	Urban	Rural
Main source of food	Own production 24.3% Purchase 74.9%	Own production 73.1% Purchase 26.8%	Own production 12.0% Purchase 86.2%	Own production 58.9% Purchase 40.5%
Number of meals/day (median)	3	2	2	2
Number of meals/day (mean)	2.52	2.4	1.78	1.62

#### STABLE SITUATION IN TERMS OF WATER AND SANITATION

On the other hand, the main source of water and the sanitation situation, although not ideal, were comparable to before the crisis.

#### CHILDREN'S FEEDING PRACTICES

According to the survey, breastfeeding was initiated within one hour after birth by 43% of the mothers; consumption of colostrum was reported by 94% of the mothers. 80.5% of the 12–16 month olds were still breastfed (68.5% and 91–5% in urban and rural areas, respectively), as well as 41% of the 20–23 months (34.0% and 49% in urban and rural areas, respectively). Only 4% of the minus 6-month-olds were exclusively breastfed; bottle-feeding was used by 6.6% of the mothers. Only 56.4% of the 6–10 month olds (67.7% and 46.7% in urban and rural areas, respectively) had received solid or semi-solid food the day prior to the survey.

## Average food security situation in Tabou department

Tabou department is divided into Grabo and Tabou *sous-préfectures*.

A food security assessment carried out in Grabo *sous-préfecture* by Oxfam in October 2003, showed that the population in Grabo could manage in the short-term (Oxfam, 10/03).

Cash cropping is predominant in the area. The production of palm oil nuts, rubber and coconuts is mostly under the control of big private companies, whilst cocoa and coffee are grown and sold by village communities. Before the war, a high number of third country nationals were cultivating in the area, which was also hosting Liberian refugees. Because of the conflict, a lot of third country nationals and Liberian refugees fled, leading to a lack of manpower, which was, at the time of the survey, one of the major constraints to agricultural production. On the other hand, labour was widely available for the remaining population. Although the rice harvest has been impaired by the conflict, people have been able to purchase rice or to switch to other staples such as maize or cassava. The nutrition situation did not seem critical; a rapid assessment conducted by ACF-F showed that among 624 children measured, 51 had a MUAC < 135 mm (8.2%), including 8 children who had a MUAC < 120 mm (1.6%) and 2 children who had a MUAC < 110 mm (0.3%); data on oedema were not provided.

Access to health care seemed very poor because of distance, lack of staff and shortage of medicines.

In the long-term, the current situation may have an impact on the food security in the area, because of lower incomes from cash crops and outside the area because of a decreased production of cash crops and rice.

Tabou *sous-préfecture* is adjacent to the Liberian border and is estimated to host about 45,000 Liberian refugees, mainly settled in villages. According to a food security assessment conducted by Oxfam in November 2003 (OXFAM, 11/03), food accessibility and availability has not deteriorated since June 2003 and did not seem to be of concern. The Ivorian population had strong livelihoods; they were deriving incomes from cash crop production and subsistence farming, the later also being a source of food. The Liberian community was involved in a wide range of income generating activities such as work in plantations, fishing and petty trade; to a lesser extent, they were also engaged in subsistence farming. Work opportunities in plantations were wide at the time of the survey but any reduction of employment opportunities would have a great impact on the livelihoods of Liberians. The most vulnerable cases seemed to be supported by other members of the communities. The assessment recommended supporting existing coping mechanisms. Priorities identified by the Ivorian community were health, education, water, roads and transport, whilst the priorities identified by the Liberian community were education, health care, sanitation, closer markets for selling goods, travel permits for ease of movement, clothes and food.

Access to health care seemed to be very limited, due to distance, a lack of qualified staff and shortage of medicines.

### Overall

Although the situation is still volatile in western Ivory Coast and people's living conditions have changed since the beginning of the crisis, it seems that the communities are able to cope and that the nutrition situation is not critical (category III). Strengthening of coping mechanisms is, however, necessary.

### Recommendation

#### *From the food security survey in Grabo*

- Implement a food security surveillance system
- Ensure access of appropriate and timely agricultural inputs to vulnerable members of the community through distribution of seeds and tools

#### *From the food security survey in Tabou*

- Implement a food security surveillance system

- Support and strengthen existing coping mechanisms through the provision of inputs such as fishing nets, agricultural inputs, improved market access through rehabilitation of roads

*From the nutrition survey in the West*

- Support the strengthening of nutrition activities

## **LIBERIA**

The peace process, signed in August 2003, is on-going but is not running very smoothly. The armed factions have succeeded in their demand for more ministerial positions, to the detriment of unarmed political parties and civil society groups (IRIN, 07/01/04). The disarmament, demobilisation and re-integration process has been postponed, after several thousand soldiers rioted at the occasion of the opening of the disarmament campaign in mid-December 2003 (AFP, 15/12/03).

Sporadic fighting has occurred, especially in Nimba, Gran Bassa and Bong counties, particularly before the UNMIL (United Nations Mission in Liberia) deployed (AFP, 18/11/03) in Tubmanburg, Garnga, Buchanan, Zwedru and Tapeta (IRIN, 04/02/04). Moreover, harassment of civilians by fighters is widespread in areas not controlled by the UNMIL (HRW, 21/01/04; IRIN, 30/01/04). As of late January 2004, the UNMIL only had about half of the 15,000 peacekeepers authorised by the United Nations.

Donors pledged around US\$ 500 million for the reconstruction of the country at a conference held in New York at the beginning of February (RI, 06/02/04). However, Refugee International notes that the Consolidated Appeal (CAP) 2004, to respond to the immediate humanitarian needs, has received very little support so far (RI, 06/02/04). The disarmament, demobilisation and reintegration project is also under-funded.

### **Humanitarian situation**

Reports of refugee returns from Guinea and Sierra Leone are increasing; UNHCR estimated that over 10,000 refugees returned, as of end January (UNHCR, 13/01/04; IRIN, 29/01/04).

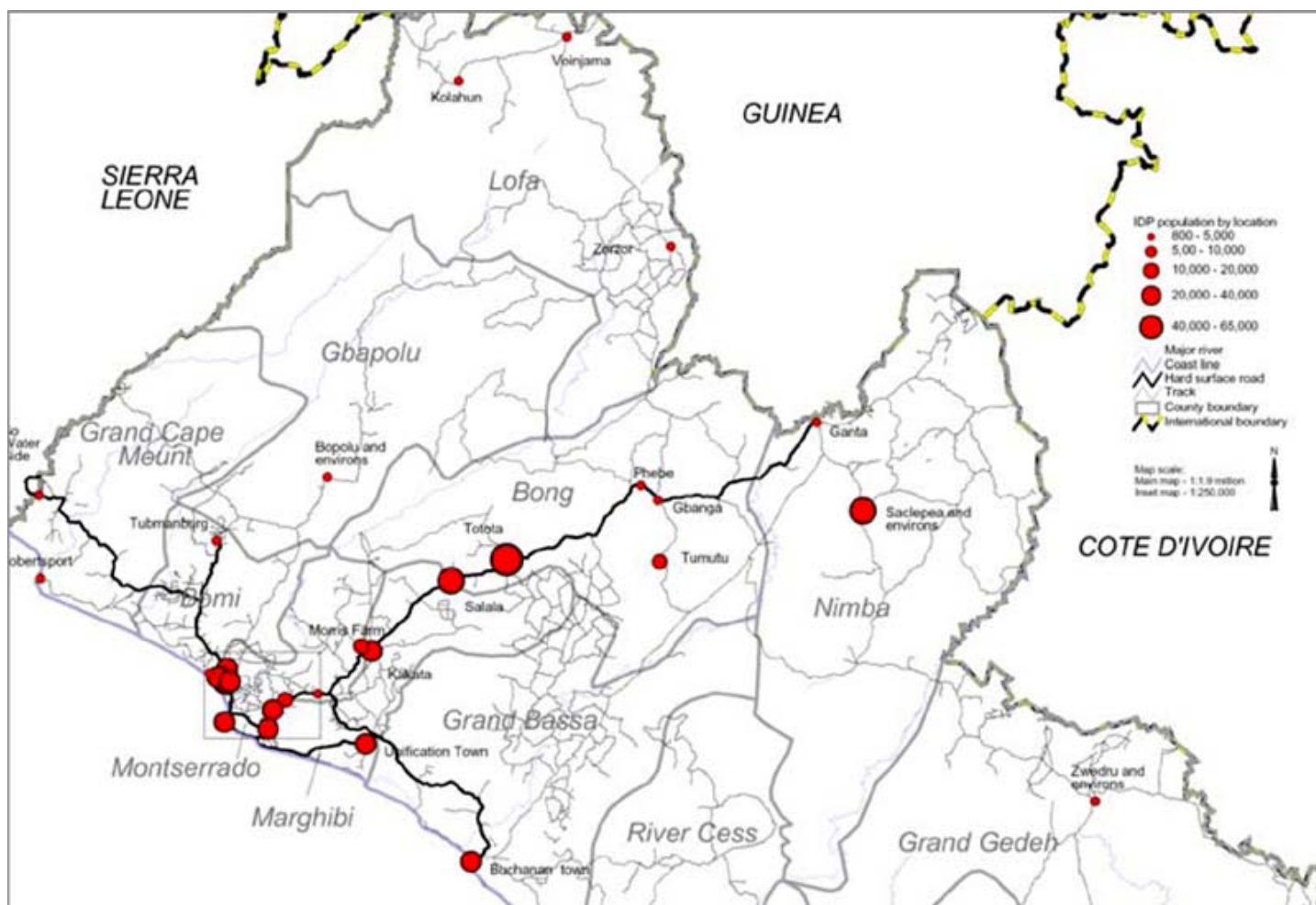
Most of the IDPs who had sought refuge in public buildings in Monrovia during Summer 2003 have spontaneously returned or have been resettled in camps outside Monrovia, in Montserrado county, which account for about 164,300 IDPs (OCHA, 05/02/04). An additional 200,000 IDPs are registered in formal IDP camps throughout the country (see map) (OCHA, 05/02/04).

An assessment done by Refugee International in Montserrado IDP camps reported that, although the situation has improved compared to November 2003, the camps were overcrowded and assistance was provided ad hoc, with huge disparities between camps (RI, 29/01/04).

Preliminary results of a nutrition survey carried out in seven IDP camps in Montserrado county suggest that the nutrition situation is under control to average (OCHA, 10/01/04). Distribution of rice seeds and of tools before the next planting season in April 2004 will be crucial for the future food security of the Liberians (FAO, 22/12/03; ICRC, 22/01/04).

### **Overall**

The situation continues to be critical in Liberia, deployment of UNMIL and disarmament of soldiers will be crucial for short-term improvement of the situation.



LOCATION OF KNOWN IDP CONCENTRATION (HAC, 03/12/04)

## SIERRA LEONE

The situation continues to improve. Economic performance has been doing well in 2003, with a 6.5% growth in real gross domestic product, resulting from growth in diamond production, a modest increase in manufacturing output, expansion in construction activities and recovery in agriculture (UNSC, 23/12/03). In 2003, rice out-put was 78% of its pre-war level, owing to an increase in areas planted and to major distributions of seeds. Other crops, such as cassava, sweet potatoes and groundnuts have also recovered. However, inflation rose in 2003, with, among others, the food index rising by 5% and medicine and medical care by 24%. There have been no significant influxes of refugees into Sierra Leone over the past six months. As of first January 2004, Sierra Leone hosted an estimated 70,000 Liberian refugees, of whom, 55,000 were settled in camps, 7,000 in urban centres and 7,500 at the border area (OCHA, 06/11/03).

An estimated 14,000 Sierra Leonean refugees are still settled in Liberia and about 15,000 Sierra Leonean refugees are hosted by Guinea (UNHCR, 31/10/03; OCHA, 19/12/03). About 4,000 refugees were repatriated from Liberia in 2003 (UNHCR, 31/10/03), and about 25,000 refugees were repatriated from Guinea (see RNIS 42) in the first semester of 2003. Repatriations from Guinea were suspended during the rainy season and resumed in December 2003.

TABLE 9 RESULTS OF NUTRITION SURVEYS, REFUGEE CAMPS, SIERRA LEONE, OCTOBER 2003  
(UNHCR/JOINT, 10/03)

Camps	% of the families interviewed who arrived in	% Acute Malnutrition (95% CI)	% Severe Acute Malnutrition (95% CI)	Crude Mortality (/10,000/day)	Under 5 Mortality (/10,000/day)	Measles immunisation coverage (%)*

	2003					
Bo district	15	4.8 (2.8–6.8)	0.1 (0.0–0.4)	0.1 (0.0–0.3)	0.3 (0.0–0.6)	97.8
Gerihun, Bo district	1.8	5.9 (3.6–8.2)	1 (0.7–1.3)	0.3 (0.1–0.4)	0.7 (0.2–1.2)	88.3
Jembe, Bo district	9.0	7.6 (5.1–10.1)	1.6 (0.4–2.8)	0.3 (0.1–0.5)	0.5 (0.1–0.9)	95.5
Jimmi Bagbo, Bo district	1.6	7.6 (5.0–10.2)	1.8 (0.5–3.1)	0.9 (0.6–1.1)	1.2 (0.6–1.8)	97.8
Bandajuma, Pujehun district	10.9	14.3 (10.7–17.9)	2.1 (0.7–3.5)	0.2 (0.1–0.3)	0.4 (0.1–0.7)	98.8
Largo, Kenema district	33.9	29.2 (25.0–33.2)	3.7 (2.0–5.4)	0.3 (0.1–0.4)	0.5 (0.1–0.9)	88.3
Tobanda, Kenema district	1.8	5.8 (3.7–7.9)	1 (0.8–1.2)	0.2 (0.1–0.3)	0.5 (0.1–0.8)	94.4
Taiama, Moyamba district	1.8	12.9 (9.9–15.9)	1.7 (0.6–2.8)	0.2 (0.1–0.3)	0	98.7

\* According to cards and mothers statements

### Contrasted nutrition situation in refugee camps

Random sampled nutrition surveys were carried out in eight Liberian refugee camps in Bo, Pujehun, Kenema and Mayamba districts in October 2003 (UNHCR/joint, 10/03). At the time of the assessment, 55,000 refugees were estimated to be living in the camps. Refugees were supposed to receive a full food ration (2,100 Kcal), although some problems in the distribution were reported, especially in Bandajuma camp. Refugees were considered to be almost dependent on food distribution, although some were engaged in income-generating activities or in agriculture. Health care was provided in all the camps, as well as access to safe drinking water and to sanitation facilities. However, a below standard amount of water was reported in Largo and Taiama camps during the dry season. There were supplementary feeding centres in Jimmi Bagbo, Bandajuma, Gondama, Jembe, Gerihun and Largo camps. Severely malnourished children were referred to therapeutic feeding centres. **The nutrition situation was contrasted depending on the camps; it was average in Gondama, Gerihun, Jembe, Jimmi Bagbo and Tobanda (category III), whilst it was of concern in Bandajuma and Taiama (category II), and serious in Largo (category I) (see table 9). The mortality rates were under-control (see table 9), except in Jimmi Bagbo, where a Lassa fever outbreak occurred.**

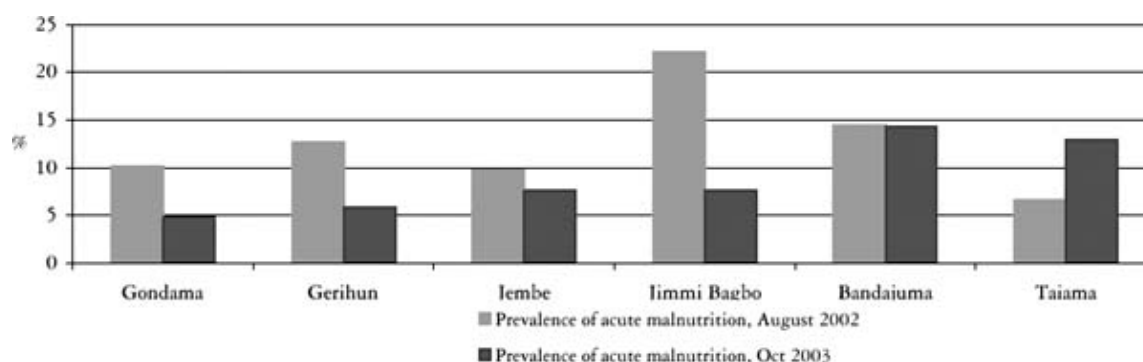


FIGURE 3 PREVALENCE OF ACUTE MALNUTRITION, REFUGEE CAMPS, SIERRA LEONE

No hypothesis regarding the difference in the nutrition situation between the camps could be drawn from the survey report. According to the people interviewed during the survey, more than 95% of the families in all the camps were receiving the general distribution. However, the actual amount of food received was not documented. In Largo camp, where the nutrition situation was the worst, the proportion of the refugees who arrived in 2003 was 34% and significantly higher than in the other camps (see table 9); this may play a role in



the high prevalence of malnutrition recorded.

Moreover, Largo is a newly established camp, refugees may have less access to food or income outside the camps, compared to refugees in long-term established camps. When compared to the prevalence of malnutrition recorded in August 2002 in six camps (see RNIS 40; see figure 3), the nutrition situation was better in October 2003 in all the camps, except in Bandajuma, where it has not changed and in Taiama where it has worsened.

### Recommendations

#### *From the survey in the refugee camps*

- Continue to provide a full food ration
- Maintain monitoring of the general food distribution
- Continue to run existing SFCs and implement SFCs in Taiama and Tobanda
- Strengthen active case finding and growth monitoring in clinics
- Give refugees better access to land cultivation

#### *From NICS in the refugee camps*

- Investigate the causes of the high rates of malnutrition recorded in some of the camps

## GREAT LAKES (CENTRAL AFRICA)

### BURUNDI

The peace process is raising hope in Burundi. Members of the Forces for the Defence of Democracy (FDD), a former rebel group which has signed a peace agreement with the President of Burundi, entered a new Government in late November (AFP, 23/11/03). Demobilisation of the FDD's fighters is also on-going. Moreover, promising peace-talks between the National Liberation Forces (FNL), the only rebel group which has not joined the peace process yet, and the President of Burundi, were on-going in January 2004 (AFP, 20/01/04). The security situation has improved, except in Bubanza province and in Bujumbura Rural province, where about 10,000 people were reported as having moved in January 2004 (IRIN, 14/01/04).

The number of Burundian refugees in Tanzania who returned to Burundi increased sharply in December 2003, with 6,000 returns (IRIN, 14/01/04). In 2003, according to UNHCR, 37,000 refugees were repatriated from Tanzania and 45,000 returned spontaneously (UNHCR, 20/01/04). It is estimated that around 300,000 Burundian refugees are still living in camps in Tanzania, in addition to about 470,000 refugees settled outside the camps (UNHCR, 20/01/04).

### Nutrition situation

**A random sampled nutrition survey was carried out in Ruyigi province in November 2003, during the hunger gap (ACF-F, 11/03). The nutrition situation was average (category III) and the mortality rates were under control (see table 10).** The prevalence of malnutrition was higher than in March 2002 (see RNIS 39), but this may be due to the hunger gap season. **Two random sampled nutrition surveys were conducted in Kirundo and Myinga provinces in July 2003 (IMC, 07/03). The nutrition situation was under control in Kirundo (category III) but of concern in Muyinga (category II),** especially given that the surveys were done after the harvest (see table 10). The nutrition situation seemed worse than in June 2002, particularly in Muyinga province. This may be partly explained by the failure of the crop season at the beginning of 2003.



In the first semester of 2003, the number of country was significantly higher than in 2002; admissions to SFCs were especially high (see figure 4; UNICEF–Burundi, 01/04). This may be due to the failure of the early 2003 crop season (A crop ) 2003, the number of admissions to feeding centres dropped to 2002 levels.

## Overall

Although the nutrition situation remains under control to average (category II/III), it seems that 2003 was a worse year than 2002. The next harvest is expected to be good, but insecurity in some provinces and the high number of returnees from Tanzania are factors that may affect vulnerability in 2004.

TABLE 10 RESULTS OF NUTRITION SURVEYS, BURUNDI, 2003(ACF – F, 11/03; IMC, 07/03))

Date	Agency	% Acute Malnutrition (95% CI)	% Severe Acute Malnutrition (95% CI)	Measles Immunisation coverage (%) <sup>*</sup>
MUYINGA PROVINCE				
07/2003	IMC	8.6 (6.0–11.2)	1.4 (0.3–2.5)	90.1
KIRUNDO PROVINCE				
07/2003	IMC	5.2 (3.2–7.3)	2 (1.3–2.7)	85.5
RUYIGI PROVINCE				
11/2003	ACF–F	6.4 (4.2–9.6)	0.8 (0.2–2.5)	87.1

<sup>\*</sup>According to cards and mothers' statements

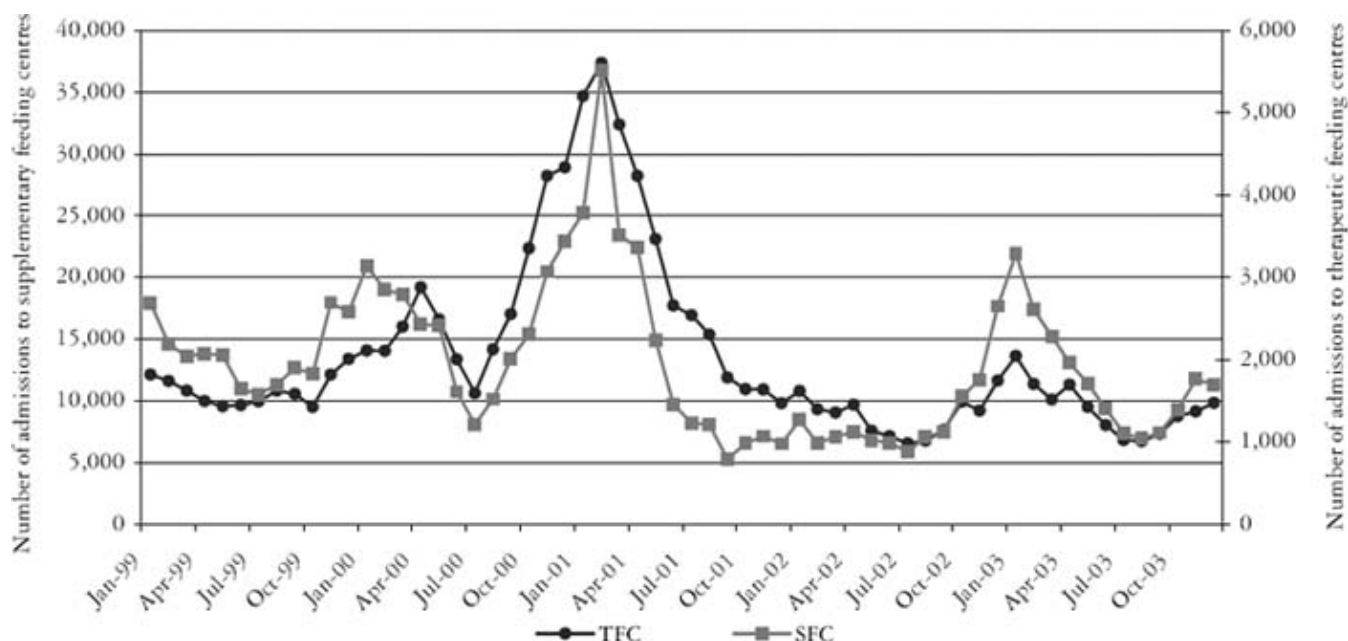


FIGURE 4 ADMISSIONS TO THERAPEUTIC FEEDING CENTRES (TFCs) AND SUPPLEMENTARY FEEDING CENTRES (SFCs), BURUNDI (UNCEF-B, 01/04)

## DEMOCRATIC REPUBLIC OF CONGO

The power-sharing transitional Government, which consists of members of the former Government, of former rebel movements and of the political opposition, has been functioning since July 2003 (UNSC, 17/11/03). The capacity and role of the MONUC (the UN peacekeeping force) have been reinforced (see RNIS 43) and the MONUC has begun to deploy outside Bunia town (UNSC, 17/11/03). It seems, that, as a consequence of these positive developments, violence has scaled down (RI, 15/12/03). However, harassment of civilians, including sexual violence and looting of assets and crops, is still widespread, especially in eastern DRC (OCHA, 24/11/03; OCHA, 11/12/03; RI, 15/12/03). Demobilisation and reintegration of fighters will be one of the major challenges of the coming months. **Two random sampled nutrition surveys were conducted in Mweso and Birambizo health zones, North Kivu, in August and September 2003 (MSF-H, 09/03). The nutrition situation was average in Birambizo health zone (category III) but more worrying in Mweso health zone (category II); the proportion of oedematous children was of concern in both areas (see table 11).** 17% and 33% of the families surveyed in Birambizo and Mweso health zones, respectively, were displaced. The population is mostly agricultural and the majority of the population was relying on its own production for food (see table 12). The population in Mweso seemed to be more vulnerable: a higher proportion of the population was eating only one meal a day, was relying on purchase for food and was involved in daily work. This may be because there were more displaced people in Mweso health zone than in Birambizo health zone.

TABLE 11 RESULTS OF NUTRITION SURVEYS, BIRAMBIZO AND MWESO HEALTH ZONES, NORTH KIVU, DRC, AUGUST–SEPTEMBER 2003 (MSF-H, 09/03)

% Acute Malnutrition (95% CI)	% Severe Acute Malnutrition (95% CI)	% oedema (95% CI)
BIRANBIZO HEALTH ZONE		
6.4 (4.9–7.9)	3.3 (1.9–4.7)	2.4 (1.0–3.8)
MWESO HEALTH ZONE		
10 (7.8–12.1)	5.6 (3.9–7.2)	2.4 (1.4–3.4)

TABLE 12 FOOD SECURITY INDICATORS, BIRAMBIZO AND MWESO HEALTH ZONES, NORTH KIVU, DRC, 08–09/03 (MSF–H, 09/03)

Birambizo health zone	Mweso health zone
NUMBER OF MEALS PER DAY	
2 meals: 83 %	2 meals: 72%
1 meal: 10%	1 meal: 16%
3 meals: 7%	3 meals: 12%
SOURCES OF FOOD*	
Own production: 80%	Own production: 60%
Purchase: 35%	Purchase: 56%
ACTIVITIES OF THE HOUSEHOLDS	
Cultivation of own field: 74%	Cultivation of own field: 49%
Daily labour: 10%	Daily labour: 30%
Small business: 10%	Small business: 5%

\* Respondents could give more than one answer

## Recommendations

*From the MSF–H survey in Birambizo and Mweso health zones*

- Continue to address nutritional needs through targeted interventions
- Assess nutrition situation in newly – accessible areas
- Continue nutrition surveillance
- Advocate for exemption of health fees for vulnerable populations

## REPUBLIC OF CONGO

An outbreak of violence between the government army and the “Ninjas” in Pool region, in March 2002, led to the displacement of about 50,000 people to Brazzaville. In addition, an estimated 50,000 people have been hiding in the forest in Pool region. Accessibility to Pool region was extremely difficult until a cease–fire agreement was signed in March 2003 (see RNIS 42). The security situation has since calmed down; displaced people have begun to return home and humanitarian organisations have had better access to the area. The security situation, however, remains volatile and hampers humanitarian aid and the return of families (OCHA, 26/12/03; WFP, 16/01/03); some people still prefer to stay in the bush rather than return to their villages (MSF, 16/09/03). Disarmament, demobilisation and reintegration of rebel soldiers will be crucial for the improvement of the security situation in the area. Although this was part of the peace agreement of March 2003, there are still some disagreements between both parties about the process (IRIN, 27/01/04). The number of rebel soldiers could be between 37,000 and 50,000, of whom about 1,900 are children (IRIN, 27/01/04; Reuters, 14/01/04).

It is estimated that of the 20,000 displaced people settled in camps near Brazzaville in mid–2002, about 6,700 remained at the end of 2003; the same number could be staying among the host population (IRIN, 27/01/04). The government of the Republic of Congo has launched a voluntary repatriation programme of IDPs in Brazzaville, in collaboration with UN agencies, NGOs and the Red Cross. Returnees are given the journey home and basic necessities (IRIN, 27/01/04).

In the Pool, damage to infrastructure and housing has been massive (OCHA, 02/09/03). There are acute humanitarian needs in terms of food security, health, water, sanitation and reconstruction (OCHA, 02/09/03). Some NGOs UN organisations and ICRC have begun implementing programmes, such as distribution of seeds and tools, distribution of non-food items, support to health care, therapeutic and supplementary feeding, and food distribution, especially in Kinkala and Minduli districts (ICRC, 13/10/03; IRIN, 26/12/03; IRIN, 27/01/04; MSF, 16/09/03).

**The nutrition situation seemed under-control in the IDP camps in Brazzaville in August 2003 and seemed average in the Pool region, with no acute emergency.**

## CHAD

Fighting has continued to rage in Darfur, Sudan, over the last months (see Sudan). In addition to the 70,000 people who had sought refuge in eastern Chad since Spring 2003, about 30,000 people fled Darfur in December 2003 alone (UNHCR, 06/01/04). A new wave of somewhere between 8,000 and 18,000 people entered Chad in the third week of January 2004, bringing the total caseload of Sudanese refugees to more than 100,000 (AFP, 25/01/04).

Refugees are scattered among the host population in more than 20 locations over 600 km along the Sudan–Chad border, in Biltine, Ouaddaï and Salamat prefectures (see map). Most of the refugees are women and children. A lot of men have stayed in Darfur to fight; others have been killed.

Both refugees and the host population face difficult conditions. Whilst some refugees were able to bring assets and/or livestock (AAH–USA, 01/04), others arrived with few or no assets and little food; they have been provided with food by the local population. Crops were harvested in October 2003 and the next harvest is only due by October 2004.



SUDANESE REFUGEES IN CHAD (UNHCR, 12/03)

One of the major concerns is the competition between refugees and the host population for the scarce resources in the area, especially regarding grazing land and water. Programmes toward improving conditions

of livestock are recommended, as well as the provision of assistance to the local population (AAH–USA, 01/04). Furthermore, both refugees and the host population are subjected to attacks and cattle raiding from Sudan (UNHCR, 09/12/03).

Refugees are living in makeshift shelters or in the open air. The environment is arid, with extreme variations in daily temperatures. Sources of water are scarce and availability of water will further decrease until the next rains, not expected before June 2004. Access to safe drinking water is even less (MSF, 17/12/03; UNHCR, 06/01/04).

Delivery of assistance has been slow and is still far from adequate. Only a few NGOs and humanitarian agencies were operational in January 2004 (MSF, 01/04). Provision of assistance is further hampered by the volatile security conditions, the remoteness of the region and the wide area to cover (UNHCR, 06/01/04). Also, funds are lacking; as of end January, WFP had only received one firm response to its US\$ 11 million appeal (OCHA, 26/01/04). Distributions of food and non–food items to some refugees have, however, started. WFP has begun to distribute food from stocks kept for use in Chad (IRIN, 07/01/04); blankets, mats and jerrycans have also been distributed to some of the refugees (UNHCR, 06/01/04; UNICEF, 23/01/04). A measles vaccination campaign is envisaged (UNICEF, 23/01/04). UNHCR has begun to prepare camps farther inland to relocate refugees. Because of the scar–will probably have to be established (AAH–USA, 01/04). The first hundreds of refugees were transferred to a camp located in Farchana, 55 km from the border, in mid–January 2004. The camp will be able to accommodate about 12,000 people (UNHCR, 23/01/04). Another site, Kouloungo, near Guereda, has been identified and will be prepared to host 8,000 refugees (UNHCR, 23/01/04). However, MSF calls in preparation of sites, to speed the process (MSF, 01/04).

BOX 5 FOOD SECURITY AND PUBLIC HEALTH AMONG SUDANESE REFUGEE, TINE, EASTERN CHAD,  
NOVEMBER 2003 (MSF–B, 11/03)

**FOOD SECURITY  
DISTRIBUTIONS**

Only one food distribution since the arrival of the refugees: sorghum and vegetable oil distribution for 25 days (1517 Kcal/pers/day) the week prior to the survey  
Plastic sheeting, jerrycans, blankets and hygienic tissues distribution the week prior to the survey

**AGRICULTURE AND LIVESTOCK**

Millet harvest in October 2003, harvest was reported bad; next harvest will be in October 2004  
Some refugee families have cattle

**A AVAILABILITY OF FOOD**

Market seems to be well supplied

**SOURCES OF FOOD/INCOME**

Daily work for host families  
Charity from host families

**PUBLIC HEALTH  
HEALTH CARE**

A health centre has been implemented for the refugees; major diseases are respiratory infections, urinary tract infections, non–bloody diarrhoea and malaria

No potential epidemic diseases

Measles vaccination coverage was 46.5% during the survey, according to mothers' statement; a measles vaccination campaign was carried out after the survey

**NUTRITION**

Therapeutic and supplementary feeding centres

**WATER**

Most of the refugees dig water from the nearby *waddi*  
Possibility of purchasing water from a communal water tap, but most refugees can not afford it

## **Nutrition situation**

### **TINE TOWN, BILTINE PROVINCE**

**An exhaustive nutrition survey was carried out by MSF-B in refugee settlements around Tine town, Biltine province, in November 2003** (MSF-B, 11/03). The population was unstable; people were moving from and inside the settlements. The survey recorded about 2,550 people in the settlements, of whom 536 were children aged 6–59 months. Most of the refugees arrived in July 2003 (73%) and August 2003 (24%). **The nutrition situation was serious, with 27.2% of the children surveyed being malnourished, including 2.2% severely malnourished.**

The retrospective mortality survey showed that many men were reported to have died from violence in Sudan. Only two deaths were reported since the arrival of the refugees in Chad. Food security and public health conditions were precarious (see box 5).

### **ADRE AREA**

On the other hand, the nutrition situation of the refugee children around Adre does not seem critical. Screenings showed that among 5,559 children measured, 27 had a MUAC < 110 mm (0.5%) and 369 had a MUAC < 125 mm (7.1%) (MSF-H, 12/03).

### **Overall**

The nutrition situation of the Sudanese refugees in Eastern Chad seems to differ depending on the location. Proper humanitarian assistance and funding are needed to strengthen livelihoods of both refugees and the host population.

## **SOUTHERN AFRICA**

### **ANGOLA**

The lack of infrastructure and basic services is one of the main constraints faced during this period of rehabilitation of the country. Donors' commitment is average, partly because they are waiting for a greater transparency in public sector expenditure and for an intensification of the efforts of the government for reconstruction (IRIN, 15/10/03).

As of mid-December 2003, it was estimated that about 100,000 Angolan refugees had returned in 2003, of whom 70,000 benefited from the UNHCR's repatriation programme (OCHA, 16/12/03). Around 250,000 Angolan refugees remain outside the country; 170,000 are expected to return in 2004 (OCHA, 16/12/03). According to government figures, around 3,400,000 IDPs have returned to their areas of origin, whilst about 800,000 remain displaced, of whom, 400,000 are expected to establish new livelihoods where they have settled (OCHA, 16/12/03).

Heavy rains during the current rainy season have had a negative effect on agricultural production in some areas and have greatly hampered the delivery of food aid, because of bad road conditions (OCHA, 25/01/04). WFP has been forced to cut rations to most beneficiaries owing to a break in the food pipeline and a limited access to parts of the country (IRIN, 03/02/04).

### **Precarious food security in central and south Angola**

Preliminary results of the vulnerability analysis has estimated that 1.2 million people will be highly vulnerable to food insecurity in the first half of 2004 and that half a million people are food insecure and need immediate assistance (FEWS, 31/01/04).

People in the central and southern maize-based farming area are more prone to food insecurity than the population of the northern cassava-based farming area. In addition, the fate of returnees and recently displaced people is of concern.

### **Food insecurity in Caconda municipality, Cuando Cubango province**

The nutrition situation in Caconda municipality has remained average over the past two years (see RNIS 43). A food security assessment was carried out in the municipality in December 2003 (ACH-S, 12/03). The study showed that people were experiencing food insecurity. The major constraint to food security was the area people were able to cultivate. As people had no more oxen and had a limited access to seeds, the area under cultivation was not enough to guaranty a sufficient harvest. Because of the food scarcity, people were eating green maize before it was ready to harvest, further limiting their food stock. The hunger-gap period was considered to have started four months earlier than in normal times. People who do not own fields, such as displaced people, are even more vulnerable as they have to borrow or rent land (against work in the owners' fields or part of the harvest). This land is often not very fertile. The main coping mechanisms are daily work in others' fields, consumption of wild food and selling of charcoal or firewood. The social cohesion seemed poor because of the years of conflict which have divided people; the displaced population and ex-UNITA soldiers are facing particular challenges.



The most important indicators of wealth, defined by the population, were the owning of oxen, ploughs, and of small livestock such as pigs or goats. Having dependants in town was also associated with a better status. According to the population, 70% to 84% of the households were classified as poor, depending on the area.

#### **Recommendations**

*From the ACH-S survey in Caconda municipality, Cuando Cubango province*

- Distribute oxen and ploughs, to improve capacities of agricultural production
- Implement food for work activities for re pairing infrastructure
- Community-based activities should be started only after social cohesion has improved

### **ZAMBIA**

Zambia hosts about 55,000 refugees from DRC (IRIN, 07/11/03) and approximately 90,000 refugees from Angola (IFRC, 03/11/03). A UNHCR's voluntary repatriation programme of Angolan refugees began in June



2003; about 17,600 refugees were repatriated before the programme was halted in November 2003 because of the rainy season (UNHCR, 04/11/03).

**A random sampled nutrition survey was carried out in Nangweshi refugee camp, Western province, in July 2003** (UNHCR/ICH, 07/03). The camp hosted around 26,000 Angolan refugees, as of June 2003. **The anthropometric survey revealed a good nutritional status (category IV): 1.2% (0.4–3.2) of the children surveyed were acutely malnourished, and no children were severely malnourished.** Moreover, the distribution curve of the weight-for-height index of the children surveyed in the camp was similar to the distribution curve of the population used as a reference (healthy American children, National Center of Health Statistics). The prevalence of stunting was, however, significant: 50.0% (44.6–55.4) of the children surveyed were considered stunted, including 14.8% (11.3–19.1) severely stunted. These data should be taken with caution, given the uncertainty about the children's ages.

Refugees are meant to receive a full food ration, but shortages in the food pipeline have occurred several times. Fields around the camp are available for cultivation by the refugees and home gardens are widespread. Refugees are allowed access to work outside the camp and there are also some income-generating activities in the camp, such as bakeries, black smiths and small shops. There is a significant market in the camp where food is widely available. All of the 12–23 month olds included in the survey were vaccinated against measles.

## ASIA

### AFGHANISTAN REGION

Afghanistan's constitution was ratified by the Constitutional Loya Jirga on 4 January 2004 (USAID, 08/01/04).

The security situation has further deteriorated over the last months, with an increase in terrorist activity and factional fighting (UNSG, 30/12/03). Civilians, and among others, humanitarian workers, are increasingly targeted. On the other hand, disarmament, demobilisation and reintegration of ex-combatants are on going in Kunduz and Paktia provinces (UNSG, 30/12/03). The NATO-led International Security Assistance Force has begun to deploy outside Kabul, taking command of the Kunduz Provincial Reconstruction Team (PRT) (NATO, 07/01/04). Provincial Reconstruction Teams are teams of civilian and military personnel, which deal with both security and reconstruction work. The implementation of these teams has been criticised by humanitarian agencies, for they mix military and aid action (RI, 07/07/03).



Attacks on the aid community have led to a reduction of activities, such as halting of UNHCR's repatriation programme from Pakistan and suspension of MSF's activities in Zhare Dasht camp, near Kandahar (BAAG, 18/12/03; MSF, 04/12/03). The winter plan is on-going. Food has been pre-positioned in areas which are not accessible during winter, and non-food items have been distributed to returnees and displaced populations (UNHCR, 11/12/03). Rehabilitation of public buildings, which accommodate displaced persons, has also been undertaken (UNHCR, 11/12/03).

## Improved nutrition situation

### KABUL CITY

A random sampled nutrition survey was conducted in Kabul in November 2003 (ACF-F, 11/03). Around 20% of the families interviewed were returnees and about 8% were displaced (arrived in Kabul over the last two years). **The nutrition situation, as well as the mortality rate, were under-control (category IV)** (see table 13). About 8% of the mothers were considered as malnourished (MUAC < 210 mm). The number of admissions to therapeutic feeding centres and to supplementary feeding centres was lower in 2003 than in 2002 and 2001. The nutrition survey was carried out in winter, when the prevalence of malnutrition is seasonally the lowest. The overall situation seems also to have improved in Kabul over the past months owing to favourable factors such as the country's recovery from drought, the limited number of returnees in 2003 compared to 2002 and the improvement in access to health care and in potable water. The percentage of returnees in ACF's feeding centres decreased from 18% between June and November 2002 to 2% during the same period in 2003. This can be explained by a decrease in the proportion of returnees in Kabul, by an improvement of the nutritional status of the returned children, or by both.

TABLES 13 RESULTS OF NUTRITION SURVEYS IN KABUL AND IN IDP CAMPS, HERAT PROVINCE, AFGHANISTAN, NOVEMBER 2003–JANUARY 2004 (ACF, 11/03; MSF-H, 12/03; MSF-H, 01/04)

% Acute Malnutrition (95% CI)	% Severe Acute Malnutrition (95% CI)	Crude Mortality (/10,000/day)	Under 5 Mortality (/10,000/day)	Measles immunisation coverage (%)*
KABUL				
4.2 (2.6–6.5)	0.5 (0.1–1.8)	0.49	0.63	84.6
SHADAYEE CAMP				
4.0	0.4	0.3	0.9	69.5
MASLAKH CAMP				
2.8 (1.4–4.3)	0.5 (0.0–1.1)	0.3	0.8	90.1

\* According to cards and mothers' statements

### DISPLACED CAMPS, HERAT PROVINCE

Humanitarian aid and especially food assistance was cut in Shadayee and Maslakh IDP camps in June 2003 (see RNIS 42). People living in Shadayee camp were encouraged to relocate to Maslakh camp, however some families have stayed on the Shadayee site. Nutrition surveys were undertaken in these camps in December 2003/January 2004 (MSF-H, 12/03; MSF-H, 01/04). The population of the camps dropped in 2003. At the time of the surveys it was estimated that about 13,300 people were settled in Maslakh; the exhaustive survey conducted in Shadayee camp found 3,550 people living there.

**The nutrition situation in the camps could be considered acceptable (category IV); mortality rates were below the alert thresholds (see table 13).** The major source of food during winter in both camps was labour (72% in Shadayee and 64% in Maslakh), followed by business in Maslakh (27%) and by wool spinning in Shadayee (14%).

It seemed that most of the households who remained in the camps could manage to get food by their own means. Their general living conditions are however unknown.

## Overall

It seems that the nutrition situation in Kabul City and in IDP camps in Herat province has improved and is under control. This may be due to the better rainfall patterns in 2003 and to the gradual resettlement of IDPs and returnees. However, these nutrition surveys have been done during winter, when malnutrition is seasonally the lowest. Follow-up of these populations is needed.

## BANGLADESH

In 1992, approximately 250,000 people of the Rohingya minority fled persecution from the Government of Myanmar. They originated from Northern Rakhine State in Myanmar and sought refuge in Cox's Bazar area in South Bangladesh; they were accommodated in 20 camps. Refugee registration closed at the end of 1992, although some people continued to arrive after the major wave. Dramatically high rates of acute malnutrition and mortality were recorded in 1992, but the situation improved thereafter.

Repatriations have been carried out since the end of 1992, with intermittent halts. Terms and procedures of repatriation have been repeatedly questioned (MSF, 03/02). The remaining caseload of refugees was consolidated in three camps, Nayapara 1 and 2 and Kutpalong, in 1997. As of August 2003, an estimated 19,804 refugees were settled in the camps (UNHCR, 08/03).

### Nutrition situation

**A random sampled nutrition survey, carried out in the three camps in August 2003, revealed a situation of concern: 12.8% (10.7–15.3) of the children surveyed were acutely malnourished, including 0.5% (0.1–1.3) severely malnourished (UNHCR, 08/03). No cases of oedema were detected.**

The prevalence of acute malnutrition has remained significant over the past years, varying between 11.5% and 16.5% (see figure 5).

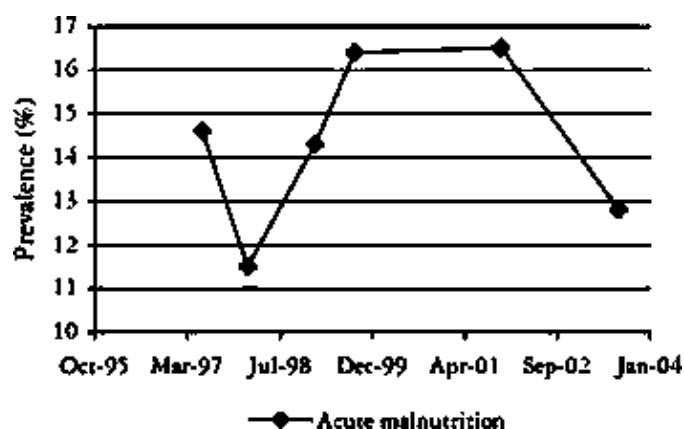


FIGURE 5 PREVALENCE OF ACUTE MALNUTRITION, REFUGEE CAMPS, BANGLADESH

A prevalence of stunting around 65% has been recorded since 1997, but these data should be taken with caution, given the uncertainty about the children's ages.

Angular stomatitis, which results from a deficiency in riboflavin (vitamin B2), has been recorded in the camps for a long time; the prevalence of angular stomatitis varied between 7.0% and 12.6% between 1997 and 1999 and was estimated at 7.9% in August 2003.

### Food security

Refugees are not allowed to move freely from the camps or to access work or land, although an unknown number of refugees may have access to a job outside the camps (UNHCR, 08/03). Refugees are considered to be almost completely dependent on external aid. The refugees' main source of food is the general food distribution, which refugees complement with fresh food.

## FOOD CONSUMPTION

According to a survey carried out by Concern in November 2001 among 368 families, the majority of the refugees (79%) reported eating twice a day, whilst 17% reported eating more than twice (Concern, 11/01).

According to an informal survey done by MSF in 2002, refugees cited food as their main concern (MSF, 03/02). Only 10 people said they had always enough food for two meals, whilst 51 people stated they had sometime enough food and 10 stated they never had enough food for two meals. The main reasons for not having enough food were: small quantity distributed for family size (cited by 90 people); sell/trade of part of the ration for other food or items (37 people); distributors of the food rations keep an amount for themselves (27 people), and the selling of part of the ration for cash (17 people).

## FOOD DISTRIBUTION

Food ration of basic items was 2007 Kcal/pers/day in 2000 and has gradually increased. Since November 2001, the food ration should provide 2,160 Kcal/pers/day (see table 14). Distribution of complementary food, such as vegetables or condiments, progressively decreased and finally stopped (UNHCR, 08/03). Problems regarding food distribution have been reported for a long time, with families complaining about not receiving their intended food ration (FEG, 06/01). However, the measures which have been taken since 2001, such as the implementation of food basket monitoring, fortnightly distributions instead of weekly distributions, and involvement of refugees in distributions, seem to have improved the system (MSF, 03/02; GOB/UNHCR/WFP, 07/02).

Food basket monitoring showed that the amount of food distributed was slightly below the intended ration in 2002 and in the first semester of 2003 (see figure 6), but food distribution has improved compared to 2001, when the ration averaged 92–93% of the target (FEG, 06/01).

The Food Economy Group showed that even if the ration received by the refugees was 100% of the intended ration, families which have several older children would not have enough to cover their energy needs. If the full ration is not distributed, this worsens the situation of the above –mentioned families and also affects other families, depending on their composition (FEG, 06/01). Moreover, it seems that some families do not receive food, these are people who have had their family book confiscated; the number of families in such a situation is unknown. There are also some new-borns, which were not registered by the Government of Bangladesh, their families do not therefore receive the ration entitled to them (MSF, 03/02).

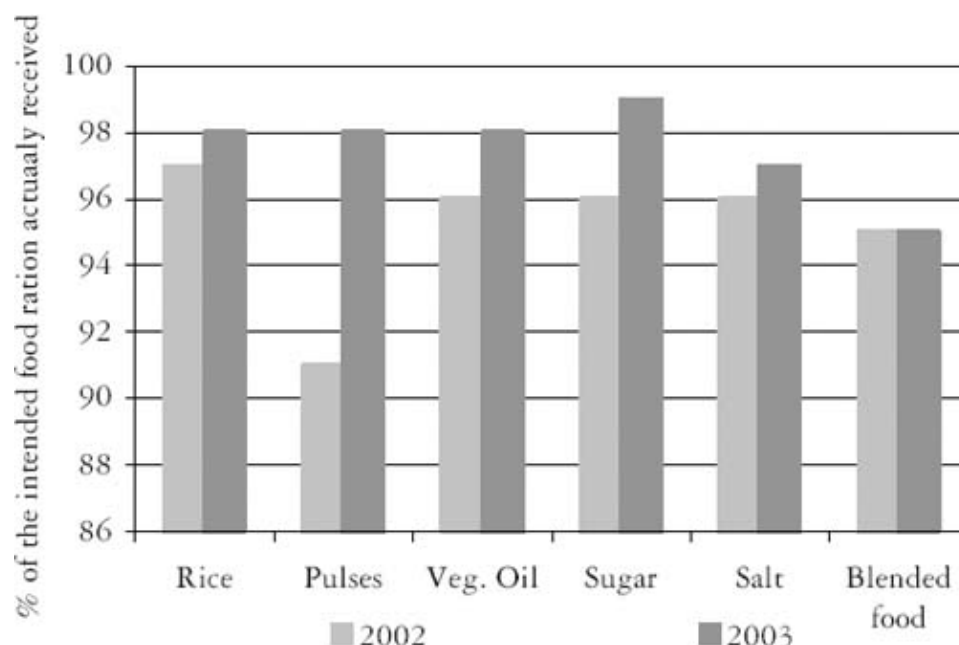


FIGURE 6 FOOD RATION DISTRIBUTED VS INTENDED FOOD RATION, REFUGEE CAMPS, BANGLADESH

TABLE 14 GENERAL FOOD DISTRIBUTION, REFUGEE CAMPS IN COX'S BAZAR AREA, BANGLADESH, AUGUST 2003 (UNHCR, 08/03)

Food items	Quantity (g/pers/day)
Rice	450

Pulses	40
Cooking oil	20
Salt	10
Sugar	10
Blended food	50

Small scale food for work and food for training are implemented for the most vulnerable families in the camps (GOB/UNHCR/WFP, 07/02).

## **OTHER SOURCES OF FOOD**

Almost all refugees (99%) reported using additional food to complement the general ration (Concern, 11/01). The most widely used additional foods were vegetables (96% of the families interviewed), followed by fresh or dried fish (63%) and poultry (43%).

Some small-scale gardening and poultry farming were introduced in the camps in 2000 (UNHCR, 08/03). 57% of the families reported gardening, 99% were gardening for their own consumption; 52% of the families were rearing poultry, of whom 80% reported eating chicken meat, 40% reported eating eggs and 16% and 9% reported selling chicken or eggs, respectively (Concern, 11/01). Most families bartered part of the food ration for other food or essential items (FEG, 06/01). There are some small kiosks in the camps, which sell food, basic assets and medicines (FEG, 06/01). There are also significant markets at the entrance of the camps where food, and especially vegetables and fish are widely available. Markets are used by both refugees and the host population.

## **SOURCES OF INCOME**

Refugees are prevented from accessing incomes. Aid agencies are prohibited to pay cash incentives to refugee workers (GOB/UNHCR/WFP, 07/02), and refugees are not allowed to work outside the camps. Although it is thought that some refugees have access to work, data are difficult to obtain because of the illegality of these activities.

According to the Concern survey, 86% and 90% of males and females respectively, were unemployed in Nayapara and 81% and 76% of males and females respectively, were unemployed in Kutupalong (Concern, 11/01). It seems that there are greater work opportunities around Kutupalong camp than around Nayapara. The main occupations for those who were employed were petty trading, tailoring, fishing and fish net weaving/production. Another study roughly estimated that about 40% of the refugees may have income opportunities (FEG, 06/01). It is believed that work opportunities are likely to be part-time and wages to be below normal rates (FEG, 06/01).

It is also thought that some refugees may receive remittances from relatives living outside the camps (FEG, 06/01).

## **ASSETS**

It seems that refugees own very few assets; even if they had brought some assets from Myanmar, they have sold most of them during their stay in Bangladesh (FEG, 06/01). Kerosene and cooking fuel (compressed rice husk) are distributed on a monthly basis; cloths and blankets are distributed yearly and other items are provided on a needs basis (GOB/UNHCR/WFP, 07/02). Soap, cloths and mosquito nets are produced by refugee women.

Refugees expressed their need for distributions of non-food items to be more regular and for non-food items to be of better quality (FEG, 06/01). The majority of refugees stated they never have enough firewood (81), whilst 37 said they sometimes have enough. The majority of them was therefore getting firewood from the forest, despite the risk of being harassed (MSF, 03/02).

## **Public health**

## **HEALTH CARE AND NUTRITION CARE**

Refugees have free access to health services; health care and nutrition services are now provided by the Government of Bangladesh. Until mid–August 2003, NGOs were providing health and nutrition services for children under ten years, pregnant and lactating women.

It seems that the health status and mortality rate have remained under control in the camps (MSF, 03/02).

## **HOUSING**

Shelters are overcrowded and damaged. According to MSF interviews, housing was the second main concern of the refugees (MSF, 03/02). Almost all refugees said their shelters were too small and had leaky roofs. The Government of Bangladesh has never accepted any notion of permanent structures, which has impaired realisations of a proper environment in the camps.

## **WATER**

Inadequate access to water has constantly been reported in Nayapara (UNHCR, 08/03). The water reservoir suffers shortage during the dry season and water has to be trucked in; in addition, it was reported that water taps were not being opened long enough for people to collect enough water (MSF, 03/02). According to MSF, the average daily availability of water was less than 10 litres/person. The infrastructure itself was reported as being worn. In Kupalong, 50 of the 59 refugees interviewed said they had enough water, whereas only 12 of the 59 refugees interviewed in Nayapara had enough water. The main reasons cited for insufficient water collection in Nayapara were that water taps were not opened long enough (36 people); that people had insufficient containers (25) and that there was short supply of water in the tank (27) (MSF, 03/02). People compensated for the shortage of water by going to another source (26) or by digging ponds in the camps (21). According to the Concern survey, whilst in Kutupalong almost all refugees were using the camp facilities for collecting water for drinking, washing and bathing, in Nayapara, 94% of the refugees were using the camp supply for drinking; the others were using tube wells. For washing and bathing 80% of the families were using the water supply, whilst 15% were using water from ponds or river (Concern, 11/01).

## **SANITATION**

There is one latrine for 23 people in Nayapara and 1 latrine for 18 people in Kutupalong, meeting the minimum standard (GOB/UNHCR/WFP, 07/02). However, it seems that sanitation conditions are not optimal, structures being old and not adapted to the camp: latrines and bath houses are not designed according to sex and are located far from some refugees' shelters (MSF, 03/02). The main reasons cited by the refugees for not using the latrines were that the latrines were too dirty, not private or too far.

## **Social and care environment**

There is a feeling of insecurity in the camps, about half of the refugees felt insecure, mainly because of fear of harassment by camp authorities or villagers (MSF, 03/02).

A majority of the refugees nevertheless think living conditions in the camps have improved (71 of 118) over the last ten years. The main reasons cited for improvement were: because schools have been made available (34); skills training has been implemented (25); and food ration distributions have been corrected (20). On the other hand, 28 people felt conditions were worse, mainly because the quantity and variety of food has decreased, and because of harassment (MSF, 03/02).

## **CHILDREN'S FEEDING PRACTICES AND CARE**

According to the UNHCR survey (UNHCR, 08/03), breastfeeding was initiated within one hour after birth by 42% of the mothers, and within 2–3 hours after birth by 48% of the mothers. 95.5% of the 12–16 month olds were still breastfed, as well as 48% of the 20–23 months. 53% of the minus 6 month olds were exclusively breastfed, whilst 43% received water and 25% received food; infant formula was not used. On the other hand, only 45.5% of the 6–10 month olds had received solid or semi–solid food the day prior to the survey. 89% of the mothers of children who had diarrhoea reported continuing to feed their children, and 18% reported increasing feeding. 97% of the mothers reported giving Oral Rehydration Salt when the child had diarrhoea (Concern, 11/01).

The mothers were in charge of food preparation and feeding of the children in 98% of the families in Nayapara and 91% of the families in Kutupalong. In the other families, brothers or sisters were in charge of the children (Concern, 11/01).

## **Nutrition situation in North Rakhine State, Myanmar**

A nutrition survey carried out in November 2000 in two townships, Maugdaw and Buthidaung, located in the north of North Rakhine state, revealed a precarious situation (ACF–F/WFP, 11/00). The prevalence of acute malnutrition was 22.3% (18.6–26.6), including 2.0 % (1.0–3.9) severe malnutrition. The situation seemed to be still dire in 2003.

### **Overall**

The nutrition situation in the camps is of concern (category II). Refugees are highly dependent on external aid, which is insufficient for them being food secure. The Government of Bangladesh puts a lot of constraints on refugee movements and on the design of the camps' infrastructure, which also limits the capacity of the refugees to fulfil their basic needs.

## **ABBREVIATIONS AND ACRONYMS**

AAH–USA	Action Against Hunger USA
ACF–F	Action Contre la Faim France
ACH–S	Action Contra El Hambre Spain
AFP	Agence France Presse
BAAG	British Agencies Afghanistan Group
BMI	Body Mass Index
CMR	Crude Mortality Rate
< 5 MR	Under–five Mortality Rate
FAO	Food & Agricultural Organization of the United Nations
FEWS	Famine Early Warning System
FSAU	Food Security Assessment Unit for Somalia
HRW	Human Rights Watch
ICH	Institute of Child Health
ICRC	International Committee of the Red Cross
IDP	Internally Displaced Person
IFRC	International Federation of Red Cross and Red Crescent Societies
IMC	International Medical Corps
IRIN	International Regional Information Network
MOH	Ministry of Health
MONUC	United Nation Organisation Mission in the DRC
MSF	Médecins Sans Frontières
MUAC	Mid–upper arm circumference
NGO	Non–governmental Organisation
OCHA	Office for the Co–ordination of Humanitarian Assistance
ORHC	Office of UN resident and humanitarian co–ordinator for the Sudan

RI	Refugees International
SRC	Sudanese Red Crescent
SRCS	Somali Red Crescent Society
UNCT	United Nations Country Team
UNHCR	United Nations High Commission on Refugees
UNICEF	United Nations International Children's Emergency Fund
UNSC	United Nations Security Council
UNSG	United Nations Secretary General
USAID	US Agency for International Development
WFP	World Food Programme
WHO	World Health Organization

## LISTING OF SOURCES

### Greater Horn of Africa

#### Eritrea

FAO/WFP	27/11/03	FAO/WFP crop and food supply assessment mission to Eritrea
Reuters	21/01/04	Eritrea speedy aid to meet food crisis – UN

#### Ethiopia

ACF–F/ADRA	10/03	Nutrition anthropometric survey, Boricha woreda, Sidama zone, SNNPR, Ethiopia
FAO/WFP	12/01/04	FAO/WFP crop and food supply assessment mission to Ethiopia
FEWS	14/01/04	Ethiopia, monthly food security report
GOAL	10/03	Nutrition survey, Dale woreda, Sidmam zone, SNNPR, Ethiopia
OCHA	04/11/03	Weekly situation update SNNPR, Oct 27–31 2003
OCHA	09/01/04	Weekly situation update SNNPR, 29 Dec 2003–4 Jan 2004
OCHA	30/01/04	Relief bulletin: weekly humanitarian highlights in Ethiopia, 30 Jan 2004
UNCT	13/01/04	Focus on Ethiopia, Dec 2003

#### Somalia

ACF	16/12/03	Action contre la Faim vient en aide à 6 000 déplacés dans le sud-ouest de la Somalie
AFP	19/01/04	Tension in north Somalia could derail peace talks: Kenya
AFP	29/01/04	Somalia moves closer to peace, agrees on parliament, presidency
IMC/UNICEF/ FSAU	09/03	Dinsor district nutrition survey
IRIN	22/12/03	Massive displacement in Galgadud
FEWS	11/12/03	Closure of Garissa (Kenya) cattle market: food security implications in the Garissa marketshed in Kenya and Somalia
FSAU–FS	22/11/03	Somalia food security emergency



FSAU-FS	14/01/03	Food Security Report
FSAU-N	11/03	Nutrition update
FSAU-N	12/03	Nutrition update
FSAU-N	01/04	Nutrition update
FSAU/MOHL/ SRCS	10/03	Nutrition survey, Burao settlement area
FSAU/UNICEF/ CARE/SRCS	10/03	Nutrition survey, Tayeglow district, Bakool region
MSF-H	12/03	Food and nutrition assessment, Marere, Somalia
WFP	23/01/04	WFP emergency report n°4
<b>Sudan</b>		
ACF-F/CARE/SRC	12/03	Nutrition anthropometric surveys, summary report, Bentiu and Rob Kona, Unity State
BBC News	26/01/04	Sudan deal nears on two regions
BBC News	03/02/04	Civilians targeted in West Sudan
FAO/WFP	11/02/04	FAO/WFP crop and food supply assessment mission to Sudan
IRIN	12/01/04	Humanitarian access to blocked in Darfur
MSF	15/01/04	MSF concerned for displaced following forced closure of camps by Sudanese authorities
OCHA	10/02/04	UN welcomes announcement of increased access to Darfur
ORHC	10/01/04	Darfur humanitarian needs profile
Tearfund	11/03	Anthropometric nutritional survey, Aweil east and north counties
Tearfund	11/03	Anthropometric nutritional survey, Aweil south county
<b>West Africa</b>		
<b>Guinea</b>		
ACH-S	07/03	Evaluation de la sécurité alimentaire et de la vulnérabilité en Guinée
OCHA	19/12/03	Guinea humanitarian situation report n° 5
OCHA	09/01/04	Report on Guinean returnees
<b>Ivory Coast</b>		
IRIN	06/01/04	Côte d'Ivoire: rebels return to cabinet, Soro absent
IRIN	05/02/04	Côte d'Ivoire: Washington delays UN deployment, Paris pushes DDR
MOH/CEF/WHO	11/03	Enquête nutritionnelle et de mortalité dans l'ouest de la Côte UNI-d'Ivoire
OCHA	02/01/04	Crisis in Côte d'Ivoire, situation report n° 18
OCHA	22/01/04	Inter-communal clashes in Côte d'Ivoire increase
OCHA	30/01/04	Crisis in Côte d'Ivoire situation report n° 20
OXFAM	10/03	Rapid food security assessment report, Grabo sous-préfecture, Tabou department, Bas Sassandra
OXFAM	11/03	

## **Liberia**

AFP	18/11/03	Fighting erupts in northeastern Liberia: UN
AFP	15/12/03	UN postpones Liberia disarmament process until January 20
FAO	22/12/03	Seed stocks in Liberia seriously decimated after many years of war
HRW	21/01/04	Liberia: fighters rape and loot in areas lacking peacekeepers
ICRC	22/01/04	Liberia: agricultural assistance for 30,000 families
IRIN	07/01/04	Liberia: warring parties succeed in demand for more top jobs
IRIN	29/01/04	Liberia: over 10,000 refugees trek home from Sierra Leone
IRIN	30/01/04	Liberia: villagers complain of harassment by MODEL in River Cess country
IRIN	04/02/04	Liberia: UNMIL orders armed factions to remove roadblocks in the interior
OCHA	10/01/04	Liberia humanitarian update
OCHA	05/02/04	Liberia in transition: background facts
RI	29/01/04	Liberia – IDPs and refugees
RI	06/02/04	High hopes at Liberia donors conference, but humanitarian response in question
UNHCR	13/01/04	UNHCR briefing notes

## **Sierra Leone**

OCHA	06/11/03	Sierra Leone: Humanitarian situation report Oct 2003
OCHA	19/12/03	Guinea humanitarian situation report No 5
UNHCR	31/10/03	UNHCR briefing notes
UNHCR/joint	10/03	Anthropometric Nutrition survey in the 8 refugee camps, Sierra Leone
UNSC	23/12/03	Twentieth report of the Secretary-General on the UN Mission in Sierra Leone

## **Central Africa**

### **Burundi**

ACF-F	11/03	Enquête nutritionnelle anthropométrique, province de Ruyigi
AFP	23/11/03	Burundi forms new govt including former Hutu rebel chiefs
AFP	20/01/04	Burundi president, diehard rebels make peace proposals at talks
IMC	07/03	Nutritional survey, Muyinga province, Burundi
IMC	07/03	Nutritional survey, Kirundo province, Burundi
IRIN	14/01/04	Burundi: Fighting displaces 10,000 civilians
IRIN	14/01/04	Burundi-Tanzania: Marked increase if refugee returnee figures
UNICEF-Burundi	01/04	Situation nutritionnelle
UNHCR	20/01/04	UNHCR briefing notes

## **DRC**

MSF-H	09/03	Report on the nutrition survey, Mweso and Birambizo health zones, North Kivu, DRC
OCHA	24/11/03	DRC: humanitarian access difficult, need great in Walikale
OCHA	11/12/03	DRC: Rape, pillage continue to plague southern Lubero, North Kivu province
RI	15/12/03	DRC interim government: Choices are “bad” or “worse”
UNSC	17/11/03	Fourteenth report of the Secretary-General of the United National Organisation Mission in the DRC

## **Republic of Congo**

ICRC	13/10/03	Major assistance operation in Pool region
IRIN	26/12/03	Congo: humanitarian convoy leaves for Mayama district of Pool
IRIN	27/01/04	Pool's displaced begin journey home
IRIN	27/01/04	Programme de DDR – les rebelles posent des conditions
MSF	16/09/03	MSF's return to Congo–Brazzaville's Pool region sees the “ears of the hippopotamus”
OCHA	02/09/03	Republic of Congo – Humanitarian crisis in the Pool region, OCHA situation report N° 1
OCHA	26/12/03	Congo: Humanitarian convoy leaves for Mayama district of Pool
Reuters	14/01/04	Congo Republic to demobilise 800 “Ninja” rebels
WFP	16/01/03	WFP emergency report n°3

## **Chad**

AAH-USA	01/04	Chad, exploratory mission report
AFP	25/01/04	Sudanese refugees pouring into Chad a major challenge: UNHCR
IRIN	07/01/04	Chad: No response yet to food appeal for Sudanese refugees
MSF-B	11/03	Nutrition and retrospective mortality survey, Tine 1 and Tine 2 refugee camps, Biltine province, Chad
MSF	17/12/03	Refugee crisis in eastern Chad worsens: MSF calls on agencies, including UNHCR, to step up assistance urgently
MSF-H	12/03	Medical report
MSF	01/04	Refugees in Eastern Chad, urgent assistance and protection required
OCHA	26/01/04	Chad–Sudan: WFP says plight of Darfur refugees getting worse
UNHCR	09/12/03	UNHCR briefing notes
UNHCR	06/01/04	UNHCR briefing notes
UNHCR	23/01/04	UNHCR briefing notes
UNICEF	23/01/04	UNICEF to protect health of Sudanese refugees in Chad

## **Southern Africa**

### **Angola**

ACH-S	12/03	Vulnerability assessment, Caconda municipality, Angola
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FEWS	31/01/04	Fews Angola food security update December 2003–January 2004: preliminary VA results
IRIN	15/10/03	Donors call for greater transparency
IRIN	03/02/04	WFP forced to cut rations to most beneficiaries
OCHA	16/12/03	Angola humanitarian coordination update
OCHA	25/01/04	Humanitarian situation on Angola– reporting period: 12–25 January 2004
<b>Zambia</b>		
IFRC	03/11/03	Angola, Rep of Congo, DR Congo, Namibia and Zambia: population movement information bulletin n° 1/03
IRIN	07/11/03	DRC–Zambia: refugees flee fighting
UNHCR	04/11/03	UNHCR briefing notes
UNHCR/ICH	07/03	Baseline micronutrient and nutrition survey report, Nangweshi refugee camp, Zambia
<b>Asia</b>		
<b>Afghanistan</b>		
ACF–F	11/03	Nutrition anthropometric survey, children 6–59 months, Kabul city, Afghanistan
BAAG	18/12/03	BAAG Afghanistan monthly review November 2003
MSF	04/12/03	MSF suspends activities in Zhare Dasht camp
MSF–H	12/03	Nutritional status, Maslakh IDP camp, West Afghanistan, Herat
MSF–H	01/04	Nutritional status, Shadayee camp, Herat province, West Afghanistan
RI	07/07	Security on the shape: PRTs in Afghanistan
UNHCR	11/12/03	UNHCR prepares for winter in Afghanistan despite security constraints
UNSG	30/12/03	Report of the Secretary–General on the situation in Afghanistan and its implications for international peace and security
USAID	08/01/04	Rebuilding Afghanistan: weekly activity update 29 December 2003–08/January 2004
<b>Bangladesh</b>		
ACF/WFP	11/00	Maungdaw and Buthidaung townships, North Rakhine State, Union of Myanmar
Concern	11/01	Nutrition survey in Kutpalong and Nayapara refugee camps among the Rohingya refugees, Cox's Bazaar/Teknaf, Bangladesh
Food Economy Group	06/01	Report of an explorative study of food security issues amongst Rohingya (Myanmar) refugees in camps in Cox's Bazar district, Bangladesh, May 2001
GOB/UNHCR/WFP	07/02	Joint food need assessment mission of refugees from Myanmar in Bangladesh
MSF	03/02	10 years for the Rohingya refugees in Bangladesh: past, present and future

**SUMMARY OF THE NUTRITION SURVEY RESULTS**

Survey Area	Population	Survey conducted by	Date	Acute Malnutrition* (%) (95% CI) <sup>§</sup>	Severe Acute Malnutrition** (%) (95% CI) <sup>§</sup>	Oedema %
<b>GREATER HORN OF AFRICA ETHIOPIA</b>						
Boricha woreda, Sidama zone, SNNPR	Resident	ACF/ADRA	Oct-03	4.1 (2.5–6.4)	0.1 (0.0–1.2)	0
Dale woreda	Resident	GOAL	Oct-03	7.9 (6.3–9.9)	0.9 (0.4–1.8)	0
<b>SOMALIA</b>						
IDP settlements, Burao, Togdheer	Displaced/Returnees	FSAU/MOHL/SRCS	Oct-03	15.3	1.9	0.3
Dinsor district, Bay	Resident	IMC/UNICEF/FSAU	Sep-03	13.3 (11.2–15.8)	1.8 (1.0–2.9)	0.2
Tayeglow district, Bakool region	Resident	FSAU/UNICEF/CARE/SRCS	Oct-03	17.2 (14.9–19.9)	3.1 (2.1–4.4)	0
<b>SUDAN</b>						
Upper Nile	Resident/Displaced	ACF-F/CARE/SRC	Dec-03	18.0 (14.7–21.9)	1.0 (0.4–2.6)	–
Upper Nile	Resident/Displaced	ACF-F/CARE/SRC	Dec-03	19.0 (15.6–23.0)	0.7 (0.2–2.1)	–
Mangargier, Gakrol & Wathmok districts, Aweil South county	Resident	Tearfund	Nov-03	16.6 (13.2–20.5)	1.9 (0.9–3.8)	–
Baac, Malualbaai, Madhol & Malual East districts, Aweil East & North county	Resident	Tearfund	Nov-03	16.2 (13.0–20.0)	1.4 (0.5–3.0)	–

WEST AFRICA IVORY COAST												
Man, Danane and Toulepleu departments, western Ivory Coast	Resident/Displaced	MOH/UNICEF/WHO		Nov-03	6.3 <sup>1</sup>	2.1 (1.5-3.0) <sup>1</sup>	-					
SIERRA LEONE												
Gondama, Bo district	Refugees	UNHCR/joint		Oct-03	4.8 (2.8-6.8)	0.1 (0.0-0.4)	-	0.1 (0.0-0.4)				
Gerihun, Bo district	Refugees	UNHCR/joint		Oct-03	5.9 (3.6-8.2)	1 (0.7-1.3)	-	0.3 (0.0-0.4)				
Jembe, Bo district	Refugees	UNHCR/joint		Oct-03	7.6 (5.1-10.1)	1.6 (0.4-2.8)	-	0.3 (0.0-0.4)				
Jimmi Bagbo, Bo district	Refugees	UNHCR/joint		Oct-03	7.6 (5.0-10.2)	1.8 (0.5-3.1)	-	0.9 (0.0-0.4)				
Bandajuma, Punjehun district	Refugees	UNHCR/joint		Oct-03	14.3 (10.7-17.9)	2.1 (0.7-3.5)	-	0.2 (0.0-0.4)				
Largo, Kenema district	Refugees	UNHCR/joint		Oct-03	29.2 (25.0-33.2)	3.7 (2.0-5.4)	-	0.3 (0.0-0.4)				
Tobanda, Kenema district	Refugees	UNHCR/joint		Oct-03	5.8 (3.7-7.9)	1 (0.8-1.2)	-	0.2 (0.0-0.4)				
Taiama, Moyamba district	Refugees	UNHCR/joint		Oct-03	12.9 (9.9-15.9)	1.7 (0.6-2.8)	-	0.2 (0.0-0.4)				
CENTRAL AFRICA BURUNDI												
Ruyigi province	Displaced	ACF-F		Nov-03	6.4 (4.2-9.6)	0.8 (0.2-2.5)	0.1					
Muyinga province	Resident	IMC		Jul-03	8.6 (6.0-11.2)	1.4 (0.3-2.5)	0.9					
Kirundo province	Resident	IMC		Jul-03	5.2 (3.2-7.3)	2 (1.3-2.7)	0.7					
DRC												
Birambizo health zone, North Kivu providence	Resident/Displaced	MSF-H	Aug-03	6.4 (4.9-7.9)	3.3 (1.9-4.7)	2.4	-	-	-	-		
Mweso health zone, North Kivu province	Resident/Displaced	MSF-H	Sep-03	10 (7.8-12.1)	5.6 (3.9-7.2)	2.4	-	-	-	-		
CHAD												
Settlements around Tine town	Refugees	MSF-B	Nov-03	27.2	2.2	0	-	-	-	-		
SOUTHERN AFRICA ZAMBIA												

Nangweshi refugee camp, Western providence	Refugees	UNHCR/ICH	Jul-03	1.2 (0.4–3.2)	0.3 (0.0–1.9)	0	–	–	–	–
ASIA AFGHANISTAN										
Kabul city	Resident/Displaced	ACF–F	Nov-03	4.2 (2.6–6.5)	0.5 (0.1–1.8)	0.1	0.5	0.6	27.5	84.6
Shadayee IDP camp, Heart province	Displaced	MSF–H	Jan-04	4	0.4	0.2	0.3	0.9	30.5	69.5
Maskakh IDP camp, Heart province	Displaced	MSF–H	Dec-03	2.8 (1.4–4.3)	0.5 (0.0–1.1)	0.3	0.3	0.8	27.2	90.1
BANGLADESH										
Nayapara and Kutupalong refugee camps	Refugees	UNHCR	Aug-0 3	12.8 (10.7–15.3)	0.5 (0.1–1.3)	0	–	–	–	–

<sup>1</sup> Children aged 0–59 months

\*Acute malnutrition (children aged 6–59 months): weight–height < – 2 Z–scores and/or oedema

\*\* Severe acute malnutrition (children aged 6–59 months): weight–height < – 3 Z–scores and/or oedema

§ 95 % Confidence Interval; not mentioned if not available from the survey report

# Measles vaccination coverage for children aged 9–59 months

NOTE: see at the end of the report for guidance in interpretation of indicators

## NOTES ON THE SURVEY METHODOLOGIES

### The Greater Horn Region

#### Ethiopia

#### BORICHA WOREDA, SIDAMA ZONE, SNNPR

The survey was conducted by ACF/ADRA in October 2003. A two–stage cluster sampling methodology of 30 clusters was used to measure 956 children between 6–59 months. The survey also estimated measles vaccination coverage and retrospective mortality rates over the previous 3 months.

DALE WOREDA, SIDAMA ZONE, SNNPR The survey was conducted by GOAL in October 2003. A two–stage cluster sampling methodology of 30 clusters was used to measure 900 children between 6–59 months. The survey also estimated measles vaccination coverage, retrospective mortality rates over the previous 3 months and various food security and health indicators.

#### Somalia

#### IDP SETTLEMENTS, BURAO TOWN, TOGDHEER

An exhaustive survey was carried out by FSAU/MOHL/SRCS in October 2003; 359 children were measured. Crude and under five mortality was estimated retrospectively over the previous 3 months. Various food security and health indicators were also recorded.

#### DINSOR DISTRICT, BAY REGION

The survey was conducted by IMC/UNICEF/FSAU in September 2003. A two-stage cluster sampling methodology of 30 clusters was used to measure 907 children between 6–59 months. Crude and under five mortality was estimated retrospectively over the previous 3 months. Various food security and health indicators were also recorded.

## **TAYEGLOW DISTRICT, BAKOOL REGION**

The survey was conducted by FSAU/UNICEF/CARE/SRCS in September 2003. A two-stage cluster sampling methodology of 30 clusters was used to measure 916 children between 6–59 months. Crude and under five mortality was estimated retrospectively over the previous 3 months. Various food security and health indicators were also recorded.

## **Sudan**

### **BENTIU AND ROB KONA TOWNS, UNITY STATE**

Two surveys, using a two-stage cluster sampling methodology of 30 clusters, were conducted by ACF–F/CARE/SRC, in Rob Kona town and Bentiu town, respectively, in December 2003. 956 children were measured in Rob Kona and 954 children were measured in Bentiu. The survey also estimated measles vaccination coverage.

### **MANGARGIER, GAKROL & WATHMOK DISTRICTS, AWEIL SOUTH COUNTY**

The survey was conducted by Tearfund in November 2003. A two-stage cluster sampling methodology of 30 clusters was used to measure 900 children between 6–59 months. The survey also estimated measles vaccination coverage.

### **BAAC, MALUALBAAI, MADHOL & MALUAL EAST DISTRICTS, AWEIL EAST & NORTH COUNTY**

The survey was conducted by Tearfund in November 2003. A two-stage cluster sampling methodology of 30 clusters was used to measure 912 children between 6–59 months. The survey also estimated measles vaccination coverage.

## **West Africa**

### **Ivory Coast**

#### **MAN, DANANE AND TOULEPLEU DEPARTMENTS, WESTERN IVORY COAST**

The survey was conducted in November 2003. The sample was a stratified multi-stage random sample. 1591 children have been surveyed from 60 clusters in urban areas and 60 clusters in rural areas. The survey also estimated various food security and public health indicators.

## **Sierra Leone**

### **EIGHT REFUGEE CAMPS IN BO, PUJEHUN, KENEMA AND MOYAMBA DISTRICTS**

Eight surveys, using a two-stage cluster sampling methodology of 30 clusters, were conducted (see table). Crude and under five mortality was estimated retrospectively over the previous 4 months as well as measles vaccination coverage.

Camp	Sample
Gondama, Bo district	799
Gerihun, Bo district	797
Jembe, Bo district	816
Jimmi Bagbo, Bo district	792
Bandajuma, Punjehun district	715



Largo, Kenema district	909
Tobanda, Kenema district	903
Taiama, Moyamba district	900

## **Central Africa**

### **Burundi**

#### **RUYIGI PROVINCE**

The survey was conducted by ACF–F in November 2003. A two–stage cluster sampling methodology of 30 clusters was used to measure 760 children between 6–59 months. The survey also estimated measles vaccination coverage.

#### **MUYINGA PROVINCE**

The survey was conducted by IMC in July 2003. A two–stage cluster sampling methodology of 30 clusters was used to measure 908 children between 6–59 months. The survey also estimated measles vaccination coverage.

#### **KIRUNDO PROVINCE**

The survey was conducted by IMC in July 2003. A two–stage cluster sampling methodology of 30 clusters was used to measure 898 children between 6–59 months. The survey also estimated measles vaccination coverage.

## **Democratic Republic of Congo**

### **BIRAMBIZO AND MWESO HEALTH ZONES, NORTH KIVU**

Two surveys, using a two–stage cluster sampling methodology of 30 clusters, were conducted by MSF–H, in Birambizo health zone and Mweso health zone, respectively. The samples excluded 6 and 3 health areas which were not accessible for security reasons, in Birambizo and Mweso health zones, respectively. 956 children were measured in Birambizo health zone and 945 children were measured in Mweso health zone. Various food security and health indicators were also recorded.

## **Chad**

### **TINE 1 & TINE 2 REFUGEES SETTLEMENTS, BILTINE REGION**

An exhaustive survey was carried out by MSF–B in November 2003; 536 children were measured.

## **Southern Africa**

### **Zambia**

#### **NANGWESHI REFUGEE CAMP, WESTERN PROVINCE**

The survey was conducted by UNHCR/ICH in July 2003. Households were selected using a systematic random sampling method; 344 children were measured. Anaemia, iodine status and vitamin A status were also investigated.

## **Asia**

### **Afghanistan**

#### **KABUL CITY**

The survey was conducted by ACF–F in November 2003. A two–stage cluster sampling methodology of 30 clusters was used to measure 900 children between 6–59 months. Crude and under five mortality was estimated retrospectively over the previous 3 months by the current household census method. The survey

also estimated measles vaccination coverage.

### **SHAI DAI IDP CAMP, HERAT PROVINCE**

An exhaustive survey was carried out by MSF–H in January 2004; 619 children were measured. The survey also estimated measles vaccination coverage and retrospective mortality rates over the previous 50 days.

### **MASLAKH IDP CAMP, HERAT PROVINCE**

The survey was conducted by MSF–H in December 2003. Households were selected using a systematic random sampling method; 615 children were measured. The survey also estimated measles vaccination coverage and retrospective mortality rates over the previous 50 days.

## **Bangladesh**

### **NAYAPARA AND KUTUPALONG REFUGEE CAMPS**

The survey was conducted by UNHCR in August 2003. A two–stage cluster sampling methodology of 30 clusters was used to measure 864 children between 6–59 months. Various food security and health indicators were also recorded.

## **INDICATORS AND RISK CATEGORIES**

The methodology and analysis of nutrition and mortality surveys are checked for compliance with internationally agreed standards (SMART, 2002; MSF, 2002; ACF, 2002).

Most of the surveys included in the Reports on Nutrition Information in Crisis Situations are random sampled surveys, which are representative of the population of the targeted area. The Reports may also include results of rapid nutrition assessments, which are not representative of the target population but rather give a rough idea of the nutrition situation. In that case, the limitations of this type of assessments are mentioned. Most of the nutrition survey results included in the Reports target children between 6–59 months but may also include information on other age groups, if available.

Detailed information on the methodology of the surveys which have been reported on in each issue, is to be found at the end of the publication.

### **Nutrition indicators in 6–59 month olds**

Unless specified, the Reports on Nutrition Information in Crisis Situations use the following internationally agreed criteria:

- **WASTING**, defined as weigh–for–height index ( $w-h$ )  $< -2$  Z–scores.
- **SEVERE WASTING**, defined as weigh–for–height index  $< -3$  Z–scores.
- **OEDEMATOUS MALNUTRITION OR KWASHIORKOR**, diagnosed as bilateral pitting oedema, usually on the upper surface of the feet. Oedematous malnutrition is always considered as severe malnutrition.
- **ACUTE MALNUTRITION**, defined as the prevalence of wasting ( $w-h < -2$  Z–scores) and/or oedema.
- **SEVERE ACUTE MALNUTRITION**, defined as the prevalence of severe wasting ( $w-h < -3$  Z–scores) and/or oedema.
- **STUNTING** is usually not reported, but when it is, these definitions are used: stunting is defined as  $< -2$  Z–scores height–for–age, severe stunting is defined as  $< -3$  Z–scores height–for–age.

- **MID-UPPER-ARM CIRCUMFERENCE (MUAC)** is sometimes used to quickly assess nutrition situations. As there is no international agreement on MUAC cut-offs, the results are reported according to the cut-offs used in the survey.

- **MICRO-NUTRIENT DEFICIENCIES**

Micro-nutrient deficiencies are reported when data are available.

## **Nutrition indicators in adults**

No international consensus on a definitive method or cut-off to assess adult under-nutrition has been reached (SCN, 2000). Different indicators, such as Body Mass Index (BMI, weight/height<sup>2</sup>), MUAC and oedema, as well as different cut-offs are used. When reporting on adult malnutrition, the Reports always mention indicators and cut-offs used by the agency providing the survey.

## **Mortality rates**

In emergency situations, crude mortality rates and under-five mortality rates are usually expressed as number of deaths/10,000 people/day.

## **Interpretation of indicators**

Prevalence of malnutrition and mortality rates are late indicators of a crisis. Low levels of malnutrition or mortality will not indicate if there is an impending crisis. Contextual analysis of health, hygiene, water availability, food security, and access to the populations, is key to interpret prevalence of malnutrition and mortality rates.

Thresholds have been proposed to guide interpretation of anthropometric and mortality results. A prevalence of acute malnutrition between 5–8% indicates a worrying nutritional situation, and a prevalence greater than 10% corresponds to a serious nutrition situation (SCN, 1995). The Crude Mortality Rate and under-five mortality rate trigger levels for alert are set at 1/10,000/day and 2/10,000/day respectively. CMR and under-five mortality levels of 2/10,000/day and 4/10,000/day respectively indicate a severe situation (SCN, 1995).

Those thresholds have to be used with caution and in relation to contextual analysis. Trend analysis is also recommended to follow a situation: if nutrition and/or mortality indicators are deteriorating over time, even if not above threshold, this indicates a worsening situation.

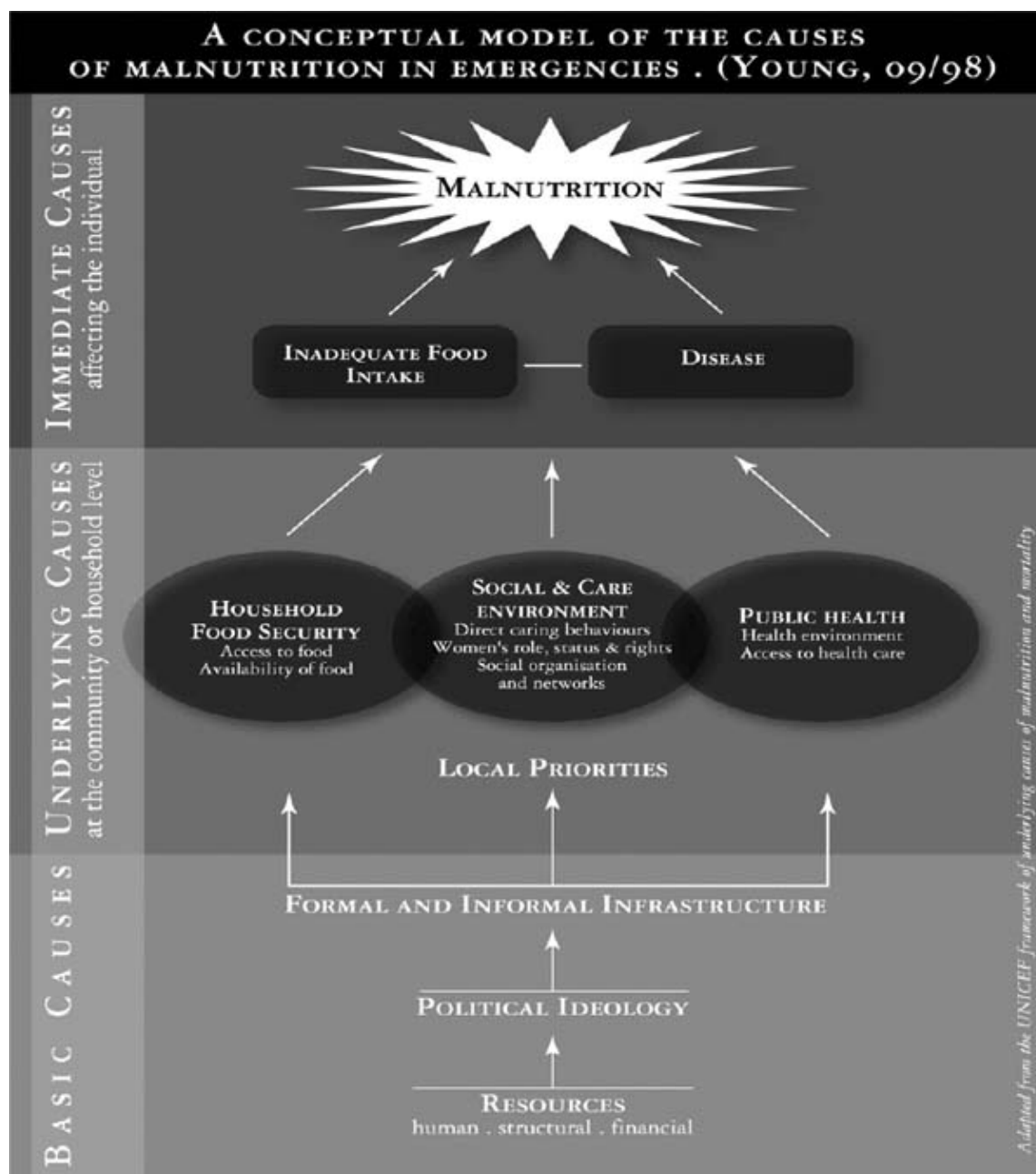
## **Classification of situations**

In the Reports, situations are classed into five categories relating to risk and/or prevalence of malnutrition. The prevalence/risk is indirectly affected by both the underlying causes of malnutrition, relating to food, health and care, and the constraints limiting humanitarian response. These categories are summations of the causes of malnutrition and the humanitarian response:

- Populations in *category I* – the population is currently in a critical situation; they either have a *very high risk* of malnutrition or surveys have reported a very high prevalence of malnutrition and/or elevated mortality rates.
- Populations in *category II* are currently at *high risk* of becoming malnourished or have a high prevalence of malnutrition.
- Populations in *category III* are at *moderate risk* of malnutrition or have a moderately high prevalence of malnutrition; there maybe pockets of high malnutrition in a given area.
- Populations in *category IV* are *not* at an elevated nutritional risk.
- The risk of malnutrition among populations in *category V* is *not known*.

## **Nutrition causal analysis**

The Reports on Nutrition Information in Crisis Situations have a strong public nutrition focus, which assumes that nutritional status is a results of a variety of inter-related physiological, socio-economic and public health factors (see figure). As far as possible, nutrition situations are interpreted in line with potential underlying determinants of malnutrition.



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## BACK COVER

### NICS quaterly reports

The UN Standing Committee on Nutrition, which is the focal point for harmonizing nutrition policies in the UN system, issues these Reports on Nutrition Information in Crisis Situations with the intention of raising awareness and facilitating action. The Reports are designed to provide information over time on key outcome indicators from emergency-affected populations, play an advocacy role in bringing the plight of emergency affected populations to the attention of donors and humanitarian agencies, and to identify recurrent problems in international response capacity. The Reports on Nutrition Information in Crisis Situations are aimed to cover populations affected by a crisis, such as refugees, internally displaced populations and resident populations.

This system was started on the recommendation of the SCN's working group on Nutrition of Refugees and Displaced People, by the SCN in February 1993. Based on suggestions made by the working group and the results of a survey of the readers, the Reports on Nutrition Information in Crisis Situations are published every three months.

Information is obtained from a wide range of collaborating agencies, both UN and NGOs. The Reports on Nutrition Information in Crisis Situations are put together primarily from agency technical reports on nutrition, mortality rates, health and food security. The Reports provide a brief summary on the background of a given situation, including who is involved, and what the general situation is. This is followed by details of the humanitarian situation, with a focus on public nutrition and mortality rates. The key point of the Reports is to interpret anthropometric data and to judge the various risks and threats to nutrition in both the long and short term.

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If you have information to contribute to forthcoming reports, or would like to request back issues of the report, please contact:

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