

**Refugee Nutrition Information System (RNIS), No. 22 – Report on the
Nutrition Situation of Refugee and Displaced Populations**

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Refugee Nutrition Information System (RNIS), No. 22 – Report on the Nutrition Situation of Refugee and Displaced Populations

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Highlights

Repatriation and the attainment of self-sufficiency in Central African Republic and for the Togolese and Malian refugees have meant that emergency operations in these areas have ended. Unusually heavy rains in Ethiopia, Sudan, Uganda, Kenya and Somalia are causing widespread flooding and leading to the displacement of hundreds of thousands of people in the affected regions. Whenever possible, humanitarian aid is delivered by boat and helicopter. These floods have also wiped out crops in many particularly food insecure areas, and will most likely lead to an increased need for humanitarian assistance in the long term.

Angola A deteriorating security situation in Angola is leading to fresh population displacements and affecting humanitarian aid programmes. Prior to this, there had been significant spontaneous return of refugees as peace appeared to be holding. Humanitarian agencies are increasingly reluctant to commit large scale resources for rehabilitation activities in case insecurity forces sudden closure of programmes.

The Great Lakes Insecurity in Burundi is still widespread and continues to lead to significant displacement. Regroupment camps are being disbanded where security allows, but the nutritional situation in many of the camps is very poor. Levels of wasting in recent surveys were over 13% and measles immunisation coverage was low. There are also some reports of alarming nutritional situations amongst resident populations in areas of conflict. The war in Congo/Brazzaville is now formally over. Many people have been displaced across national borders or within the country and an estimated 650,000 people will need humanitarian assistance. The total number of refugees and IDPs in the Democratic Republic of Congo (DRC) is now much reduced as the majority of Rwandan and Burundi refugees have returned home. However, violence still continues in Eastern DRC and the nutritional situation in many of the areas affected remains poor. In Rwanda, the return of over one million refugees and escalating insecurity in many prefectures is placing a considerable strain on food security. It is likely that the nutritional situation across much of the country will deteriorate until the next harvest in January and that the demand for food for work projects will increase until then. The nutritional situation of refugees in the Tanzanian camps is generally adequate and stable, with levels of wasting at or below 5%.

Ethiopia The nutritional situation in the Somali refugees camps in the east is stable but poor with wasting levels varying from 8.2% to 19.2%. The blanket supplementary feeding programmes in the camps are helping to prevent any nutritional deterioration in spite of inadequate general ration deliveries in recent months. However, the Sudanese refugees camps in the west have experienced a marked decline in nutritional status in recent months. Levels of wasting were measured between 10.8–27.2%, indicating an acute emergency in some camps. Much of this deterioration has been attributed to inadequate provision of general rations.

Kenya Prior to flooding in the Dadaab area, the nutritional situation in the camps for Somali refugees had improved markedly since the previous survey in January 1997. The blanket supplementary feeding programme for under fives had contributed significantly to this situation. The nutrition situation in Kakuma is better than previously thought.

Liberia/Sierra Leone As the peace process gathers momentum, there is an increasing spontaneous return of refugees to Liberia. The new-found stability has meant that most areas of the country are now accessible and that food security and nutritional status are much improved for the majority of the population. Some agencies are experiencing difficulties importing food and non-food items into Sierra Leone due to an embargo imposed after a coup d'etat. In-country stocks are reportedly depleted. There are large numbers still displaced by the recent fighting and levels of wasting of 13% have been measured in several locations.

Somalia The recent floods in Somalia have caused extensive damage to crops and housing and has displaced hundreds of thousands of people. This is compounding food insecurity caused largely by poor harvests in the grain producing belt of the country and insecurity. It is anticipated that many households will remain at nutritional risk until the next harvest in June 1998.

Sudan Emergency conditions in the drought affected areas of rural Red Sea State still prevail in spite of the distribution of a general ration and selective feeding programmes. There is also a high reported prevalence of vitamin A deficiency. Deteriorating security in parts of Southern Sudan has led to further displacements and continues to jeopardise humanitarian interventions. In spite of the considerable efforts of those involved in Operation Lifeline Sudan, levels of wasting as high as 26% are still being found in camps for the displaced.

Afghanistan Although fighting is still perilously close to Kabul, the nutritional status of the capital's population has remained more or less stable for the past two years. This can largely be attributed to feeding programmes and the subsidised bakery programme established by humanitarian agencies. However, the news from Hazarajat region is worrying, with reports of over 160,000 people facing starvation due to poor harvests and a blockade on all items, including food aid, imposed by the Taliban.

Adequacy of Factors Affecting Nutrition

Factor	Angola	Burundi	Rwanda	Tanzania	Dem Rep Congo	Liberia	Sierra Leone	Somalia	Sudan	N. Uganda
1. Degree of accessibility to large population groups due to conflict	O	X	O	?	O	?	X	X	O	X
2. General resources										

– food (gen. stocks)	?	?	?	?	?	?	X	?	X
– non-food	X	??	??	?	?	?	X	?	X
3. Food pipeline	?	?	?	?	?	??	?	??	X
4. Non-food pipeline	X	?	?	?	?	??	?	?	?x
5. Logistics	O	X	O	?	O	?	X	X	O
6. Personnel*	?	X	??	?	O	?	?	?	?
7. Camp factors**	?	X	??	?	?	?	?	O	O
8. Rations									
– kcals	?	X	O	?	O	?	X	X	O
– variety/micronutrients***	?	X	O	?	O	?	X	X	O
9. Immunization	?	X	?	?	O	X	X	X	X
10. Information	?	X	X	?	O	?	X	X	O

? Adequate

O Problem in some areas

X Problem

? Don't know

?? Don't know, but probably adequate

?X Don't know, but probably inadequate

na not applicable

* This refers to both adequate presence and training of NGOs and local staff where security allows.

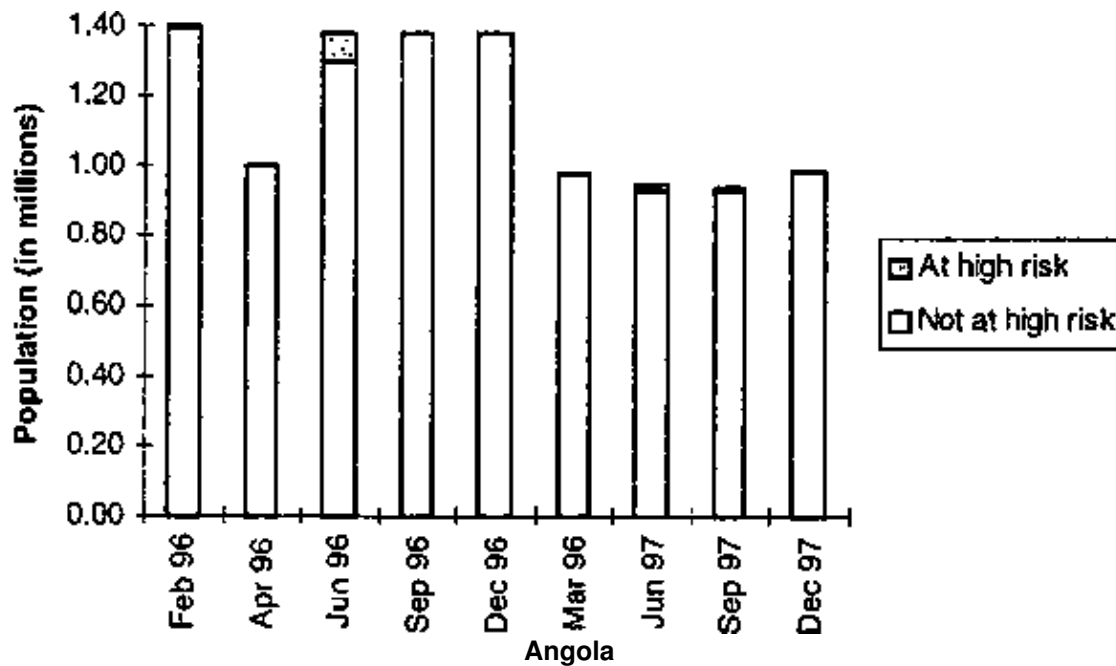
** This refers to problems in camps such as registration, water/sanitation, crowding, etc

*** Rations may be inadequate due to inaccessibility.

Sub-Saharan Africa

1. Angola

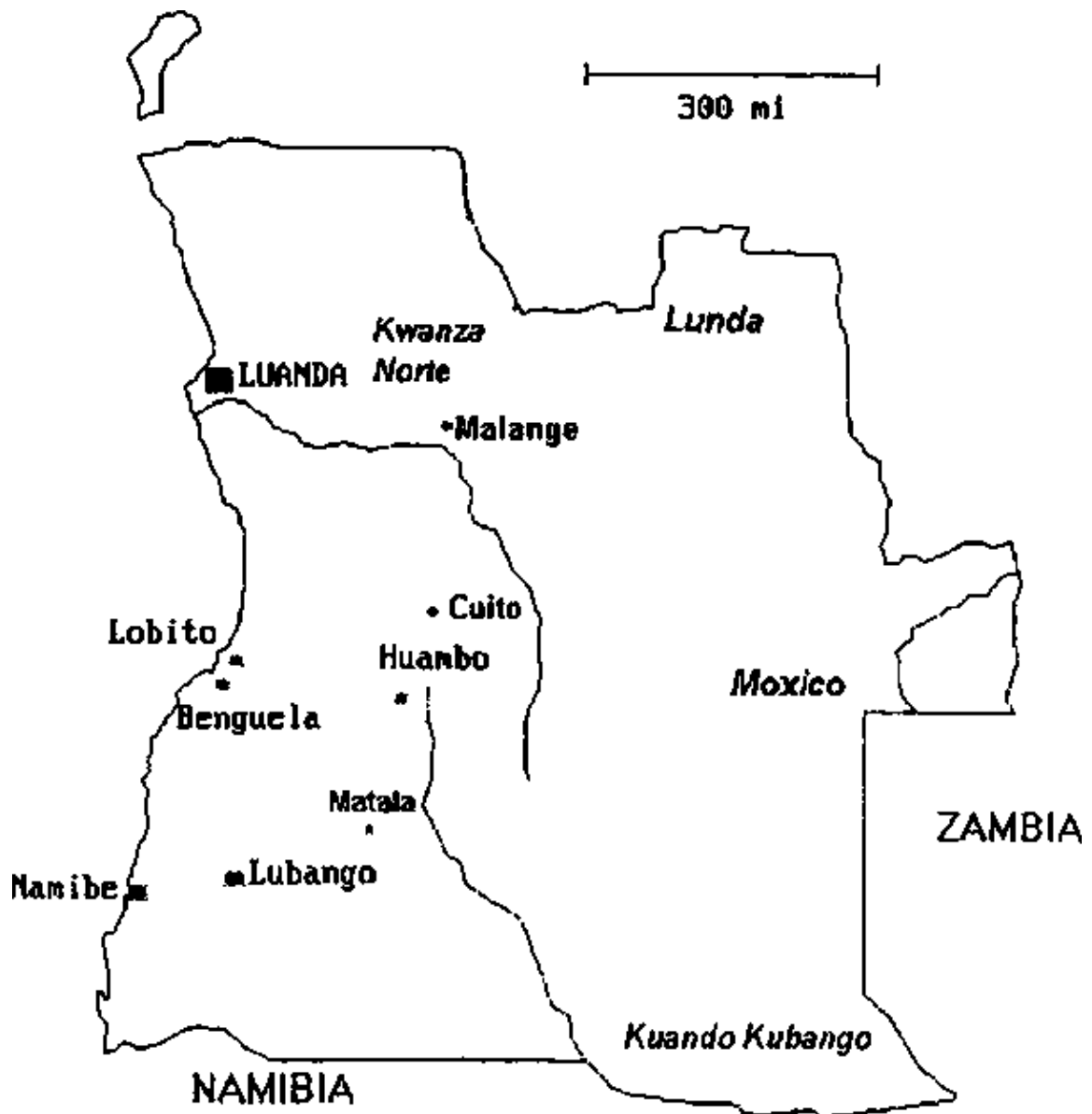
A twenty year long conflict in Angola ended with the signing of the Lusaka Protocol in November 1994. The conflict left the country in ruins – the health care system was not functioning, and large tracts of land were infested with landmines. Hundreds of thousands of people were displaced either inside the country or as refugees in neighbouring countries. Serious insecurity was reported over the following years, but in early 1997, the peace process seemed firmly established. This was underscored by the swearing in of the Government of National Unity and Reconciliation and the initiation of many rehabilitation programmes.



However, since August 1997, the security situation in the country has deteriorated once again with numerous incidents being reported. For example, an ambush in Benguela province led to the death of six people from the UN Observer Mission for Angola (MONUA) and the German demining NGO Saint Barbara Foundation. There have also been reports of a serious deterioration in security in Huila province. Because of the uncertain security situation, UN agencies and NGOs appear reluctant to continue to pour their resources into rehabilitation programmes for fear that these might be interrupted in the event that the insecurity escalates into a much larger emergency. Therefore, such programmes have been dramatically scaled down and contingency planning initiated, especially with regard to vulnerable populations in UNITA controlled territory [IRIN 25/09/97].

There remain at least 662,000 displaced and war-affected people requiring food aid in Angola. In addition, there are 315,000 people being assisted as part of the demobilisation programme. Approximately 117,000 people have returned spontaneously to Angola from neighbouring countries in 1997. However, violence in some areas is leading to fresh population displacements. For example, recent insecurity in Benguela province has caused the displacement of up to 9,000 people. The area, is currently only accessible by helicopter, and assistance will be provided following an assessment of needs [IRIN 06/11/97, OXFAM-a 23/10/97, WFP 14/10/97, 17/10/97, 31/10/97].

The last RNIS report included information on newly displaced people in N'Zaji. At that time, wasting was measured at 10% with over 4.3% severe wasting. Since September, the number of displaced people has increased and was estimated at almost 11,000 in mid-October. Most of these people are housed with friends and family in the town, but there are over 1,000 in a camp outside of the town. There are growing concerns about the town's capacity to continue to receive such a large influx of displaced persons [WFP 17/10/97].



Over 3,800 spontaneously returning Angolan refugees from nearby countries were registered during the month of September. There are now approximately 2,100 Burundi and Rwandan refugees in Luau, Moxico province. These refugees are arriving from the Democratic Republic of Congo (DRC) [WFP 17/10/97].

Demining in Angola is continuing in many areas. Initially, efforts were focused on clearing main logistical corridors to transport humanitarian aid by road. Now, secondary roads are being cleared in many areas to allow for the resettlement of displaced people, and implementation of rehabilitation and development projects. Cleared areas have also meant safer firewood collection and access to new water sources [WFP 31/10/97].

Overall, the affected population can be considered to be at moderate risk (category IIb in Table 1) due to continued dependence on humanitarian aid, and an apparently deteriorating security situation.

Ongoing interventions: The consolidated appeal for Angola was launched early in 1997, covering the period January–December 1997. As of mid–October, many needs outlined in the appeal remained underfunded, and only 32% of the overall funding required had been pledged or contributed. Earlier RNIS reports have flagged the need to rehabilitate the health care system and more specifically to ensure an adequate supply of essential drugs. To date, funding for such projects has not been forthcoming. These, and other funding needs must be urgently met.

The present situation in N'Zaji is likely to be similar to situations where other large numbers of returnees have concentrated. There appears to be a need to determine how to foster greater self–reliance amongst returnees and how best to support host families that are assisting returnees until the latter achieve greater self–reliance. Food security assessments of areas where there are large numbers of returnees should be regularly conducted,

2. Benin/Ghana/Togo Region

It is estimated that up to 300,000 people fled socio-political disturbances in Togo in 1993 and took refuge in neighbouring Benin and Ghana, where humanitarian assistance was provided. Between 1994–97, the political situation in Togo stabilised to the point where refugees began repatriating, both spontaneously and with assistance from UNHCR [UNHCR 27/11/97].

The repatriation programme is now successfully completed. As part of this programme, resources were made available to improve existing water and sanitation facilities, strengthen health care capacity, and implement income generation projects in areas of return. There remain some 6,000 Togolese refugees in Benin and Ghana, some of whom may repatriate after elections in Togo in 1998. An adequate, although initially slow, response to the appeal for this repatriation programme contributed considerably to the success of the operation. [UNHCR 27/11/97].

3. Burkina Faso/Mauritania – Malian Refugees

Approximately 150,000 people fled Mali in the 1990s due to a combination of famine and unrest in Mali. Many of these people took refuge in Burkina Faso and Mauritania.

Organised repatriation for those in Burkina Faso was recently completed. Some refugees, however, remain and will be dealt with on a case-by-case basis. Refugees in Mauritania began to return home in June 1995, and repatriation was completed in June 1997 [IRIN-WA 09/12/97, UNHCR 14/05/97, WFP 14/10/97].

There are concerns about the situation to which the refugees are returning in Mali. Refugees are returning to hundreds of sites in large areas of desert where access is difficult. Most of these areas are waterless, without serving roads and lack industry or commerce to provide employment for returnees. Food is reportedly a problem, and there are anecdotal reports of cases of malnutrition. Most of the returnees have only very small amounts of food reserves. Their attempts at agriculture are failing in some areas due to lack of rains or irrigation, and their livestock herds, decimated by drought and years of conflict, are not numerous enough to provide them with the meat and milk that were formerly the staples of their diet. The food situation of the returned refugees may become worse in the months to come. There are also serious problems with water supply in refugee returnee sites. Many sites do not have wells so inhabitants have to walk for several hours to the nearest water source. There are inadequate personnel and resources available to deal with these serious problems [RI 07/10/97].

Ongoing interventions: More resources are needed for programmes in refugee returnee areas. Only \$6 million of the \$17 million originally budgeted for this programme are currently available. Areas of refugee return lack adequate water supplies, schools, and health facilities. Quick impact projects and food for work programmes need to be funded and established in these areas. There is also a need to support government efforts to provide education and health care for these returnees. Provision of traditional medicines as included in the official Malian pharmacopoeia would be a first step in health care.

4. Burundi/Rwanda (Great Lakes) Region

There remain approximately 3.5 million people requiring humanitarian assistance in the Great Lakes Region. Security incidents appear to be intensifying in number and severity in the Eastern Democratic Republic of Congo (DRC), Burundi and Rwanda. The insecurity is having a negative impact on the food security situation of large numbers of people; at the same time, it is hampering efforts by the humanitarian aid community to assist, particularly in Eastern DRC and Burundi. Numbers of people affected and locations overtime are summarised in the box below:

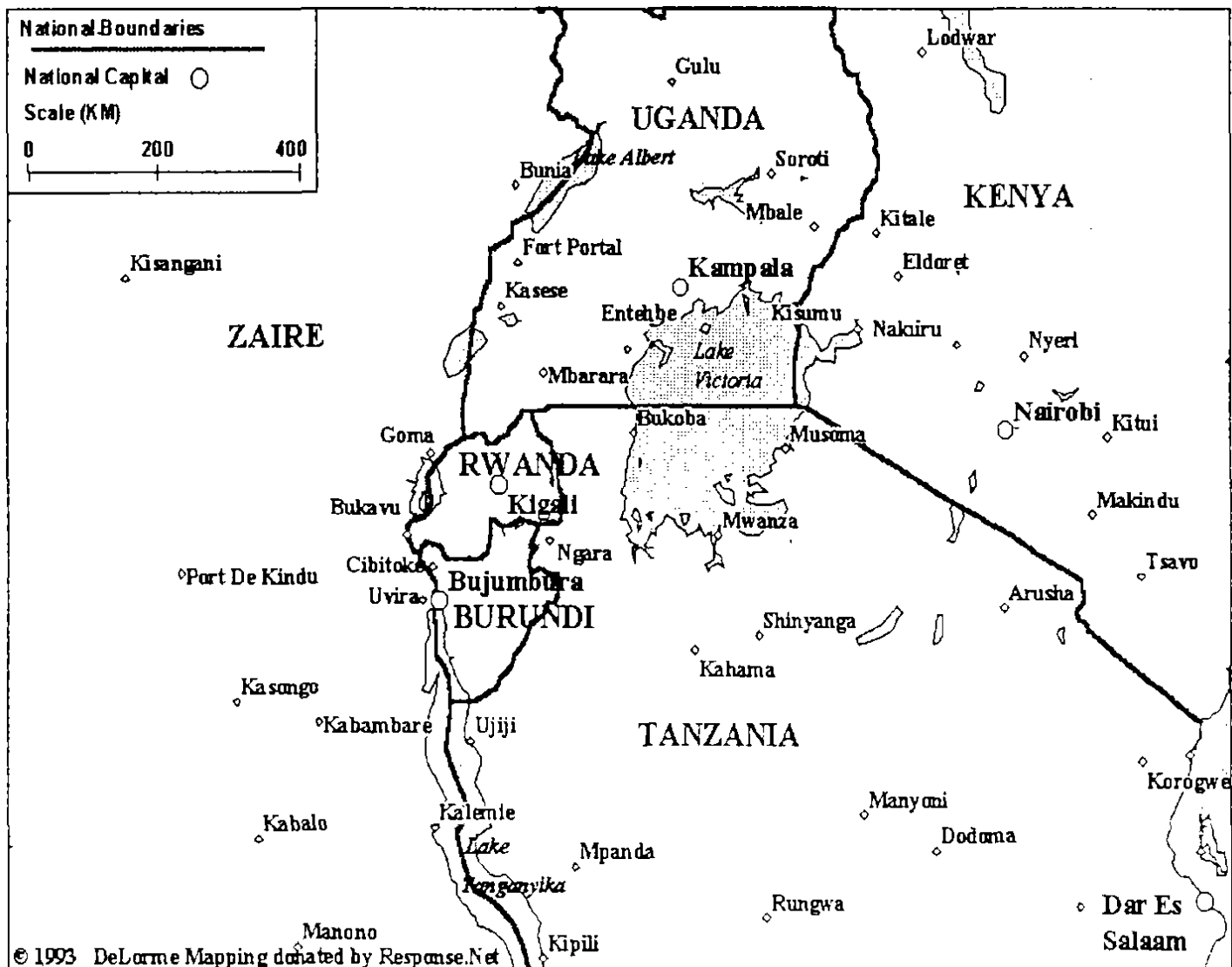
Location	Jun. 96	Sep. 96	Dec. 96	Mar 97	Jun. 97	Sep. 97	Dec. 97
Burundi	289,000	300,000	296,000	300,000	265,000	260,000	570,000
Rwanda	749,000	598,000	1,179,000	2,600,000	2,600,000	727,000	1,400,000
Tanzania	642,000	653,000	759,000	344,000	390,000	311,000	318,000
DRC	1,419,000	1,444,000	668,000	599,000	514,000	823,000	585,000
Congo/Brazzaville	–	–	–	–	–	465,000	650,000

Malawi	-	-	-	-	-	1,200	1,200
Total	3,106,000	3,002,000	2,913,500	3,843,000	3,769,000	2,587,200	3,542,200

Burundi Insecurity has plagued the country since a *coup d'etat* in July 1996, and in many provinces, the security situation appears to be deteriorating. The provinces that are reportedly particularly affected are those near the border with Tanzania, and with that of the DRC.

Approximately 570,000 people are housed in 'regroupment camps' similar to camps for IDPs. These people have been grouped together ostensibly for their own protection in particularly insecure provinces. However, recent reports from some areas are of attacks on these camps. For example, an attack by insurgents on a camp in Southern Buriri left eight people dead. In another example, 4,000–5,000 people were evicted from Rwegura in Kayanza province, and the site was burned. In other more secure areas, return packages are being distributed and people are returning home [IRIN 21/10/97, 10/11/97, UNDP/07/11/97, WFP 03/10/97, 10/10/97].

Two surveys were carried out in the regroupment camps in Kayanza province (estimated population in camps 70,000) in August 1997. In the camp in the south of the province, wasting was 12.8% with 0.9% severe wasting. Oedema was measured at 1.1%. Measles immunisation coverage was 23.5% as determined by possession of an immunisation card, and 85.1% including oral verification by the mother. The under-five mortality rate was 4.7/10,000/day, four times a usual level (see Annex I (4a)). In the camp in the north of the province, wasting was 13.4% with 1.9% severe wasting. Oedema was measured at 0.7%. Measles immunisation coverage was 35.4% as determined by possession of an immunisation card, and 79.3% including oral verification by the mother (see Annex I (4b)). The under-five mortality rate was 4.3/10,000/day, again four times a usual level. The ration provided to the camps has provided just under 1800 kcals/person/day [ACF Aug. 97].



THE GREAT LAKES REGION

updated by ReliefWeb: 7.6.96

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The main causes of the high mortality rates were identified as diarrhoea and malnutrition. Sources of water are reportedly far from residences making it difficult to access. In addition, health and nutritional centres are also far away for many people [ACF Aug. 97].

In Bubanza province (estimated population of 225,000 with 65,000 displaced), wasting was measured in six displaced and regroupment camps and found to be 13.2% with 9.2% severe wasting. Oedema was measured at 6.2% (see Annex I (4c)). In addition, suspected cases of pellagra, beri-beri and scurvy were noted by the survey team. Further investigation in order to verify the presence of this micronutrient malnutrition is underway. Supplementary feeding programmes are underway and include over 6,000 beneficiaries [CAD 21/08/97, 29/11/97].

Market prices in Bubanza have increased to five times the pre-crisis level. Based on the nutrition survey in August, one meal per day was usually consumed, consisting of cassava leaves, cassava or rice. Vegetables were generally difficult to find on the market, apart from tomatoes. Water supplies are reportedly inadequate in the province and sanitation is a major problem. The communes in the north and east are inaccessible due to insecurity and cultivable land is being reportedly being sabotaged. The insecurity is forcing people to remain in camps instead of going back to the fields to cultivate and in some areas is also preventing NGOs from

assisting with nutritional programmes targeted to vulnerable groups [CAD 21/08/97, 29/11/97].

Since these surveys, anecdotal reports are of an 'alarming nutritional status' in many provinces. A nation-wide assessment of nutritional programmes by one NGO indicated a serious nutritional problem in areas of conflict. In addition, there are reports that feeding centres are over-burdened, in many cases caring for three times the intended number of patients. There are currently 46,000 malnourished children receiving supplementary and therapeutic feeding in Burundi [DHA 31/10/97, IRIN 19/11/97, WFP 07/11/97].

The Government of Burundi had planned to close the regroupment camps as security allowed. Current plans are to move people to smaller camps, closer to their homes. Most of these new sites are located along main roads and construction of housing is reportedly underway. However, in areas like Kayanza province where there has been no improvement in security, reinstallation of regrouped persons remains suspended [IRIN 17-23/10/97].

The internal air operation which has served as a vital link to the interior of the country cut off by insecurity, has been under threat due to shortages of funds.

Congo/Brazzaville After four months of fighting between government forces and supporters of the democratically-elected president, supporters of the former military leader took control of the capital city, the second largest city, Pointe Noire and the airport, and a formal end to the war was declared on the 16th of October 1997. However, it is reported that the security situation is not completely calm. The fighting in the country led to wide-scale population displacements both internally and as refugees to neighbouring DRC. Now that the situation is relatively stable, some people are returning to their homes. It is estimated that 650,000 people in the Congo will need humanitarian assistance over the next three months [IRIN 10-16/10/97, 22/10/97, 21/11/97, WFP 17/10/97, 14/11/97].

Recommendations have been made to provide a one month ration to returnees and a three month ration of CSB, oil and high energy biscuits to other vulnerable groups in the city. In addition, food-for-work projects will be implemented to assist in the rebuilding of the city [WFP 31/10/97].

Much of the city's infrastructure, which had been damaged in earlier fighting in 1992 after elections, has been destroyed, and since the rainy season has begun, the risk of epidemics is growing. Work currently being undertaken is intended to prevent epidemics and includes the provision of medicines, shelter, improved sanitation and provision of drinking water. There have been critical shortages of medical equipment and medicines [IFRC 06/11/97, IRIN 22/10/97].

There are a 60,000 people displaced in Pointe Noire. Food rations were distributed to this population in mid-October. There are approximately 10,000 Rwandan and Burundi refugees in two sites in Congo/Brazzaville who fled DRC during Kabila's take-over of the country [WFP 17/10/97, 24/10/97].

Democratic Republic of Congo (DRC) The total number of refugees and IDPs in DRC is estimated to be 585,000. This number does not take account of the unknown number of Burundi and Rwandan refugees who remain unaccounted for since the dispersal of refugee camps in Eastern DRC (then Zaire) in 1996. This number could be as high as 200,000. There are at least 23,000 Rwandan and Burundi refugees remaining in Eastern DRC. A UN investigation team, sent to look into allegations of human rights violations in Eastern DRC began work on 8 December 1997, after weeks of delays [DHA 17/11/97, IRIN 25/11/97, 08/12/97].

The number of refugees from Congo/Brazzaville in DRC increased in October until there were estimated to be 40,000 in the country. Most of these people were living with families in Kinshasa and approximately 10,000 were housed in Kinkole camp outside of Kinshasa. A measles epidemic broke out in Kinkole camp in early October. Immunisation campaigns were immediately undertaken. Since the end of hostilities, voluntary repatriation has begun, and the number of refugees remaining in DRC is currently estimated to be 30,000 [IRIN 03/12/97, WFP 03/10/97, 10/10/97].

Current estimates are that there remain 23,000 Burundi and Rwandan refugees in Eastern DRC [WFP 17/10/97]. Many feel there are up to 200,000 who are still unaccounted for. Insecurity caused by clashes between rebel groups and government forces have led to internal displacement in Eastern DRC of over 100,000 people [DHA 17/11/97, IRIN 10-16/10/97].

A survey carried out in the village of Kitchanga (estimated population of 19,538), 90 km northwest of Goma, may give an idea of the nutritional situation in other villages in the region. Inter-ethnic conflict which has plagued the area since 1993 has led to large displacements. The nutritional status of Kichanga village had

deteriorated. In February 1996, a survey showed a global malnutrition rate of 8.2% (wt/ht < -2 SD or oedema). A survey carried out in April 1997 showed only 3.3% wasting. However, oedema was measured at 8.1% (see Annex I (4d)). The survey showed that residents were more at risk of malnutrition than the displaced. This may have reflected a number of factors including the high rates of crop theft and the fact that those left in the town may have been those with the least means to leave. The crude mortality rate was 0.94/10,000/day and the under-five mortality rate was 1.37/10,000/day. Measles immunisation coverage was 54% [MSF-H Oct. 1997].

Since the above-mentioned survey, the security situation has remained tense in Eastern DRC with periodic upsurges of violence interrupting humanitarian activities. For example, during the week of 6-13 of October, food was provided in Bukavu for over 4,000 people. However, no monitoring of the distributions was possible due to the security situation. UNHCR has closed its office in Goma, and is reducing activities in Bukavu [WFP 17/10/97].

Recent reports are that chronic malnutrition (stunting) is a more serious problem among children in Eastern DRC than acute malnutrition (wasting). Specifically, it was stated that wasting varied from 6-11% with 0.1-1.3% severe wasting while stunting was 58-67% [IRIN 21/10/97]. However, some acute problems do occur. For example, during September there was an estimated 20% increase in the number of people receiving supplementary and therapeutic feeding in Goma connected with the arrival of displaced persons from Masisi.

Other refugees and IDP population in DRC: There are a number of other refugee and IDP populations in the DRC.

- *Internally Displaced from Shaba* There are no new nutritional data on the approximately 260,000 residents and displaced in Mwene Ditu. Most recent reports are from October 1995, and showed levels of wasting as high as 42% (see RNIS # 14). Insecurity in DRC is likely to exacerbate their already difficult situation.
- *Angolan refugees* There are approximately 150,000 Angolan refugees in the Democratic Republic of Congo, 50,000 of whom require assistance. Prior to an upsurge in fighting in Angola, some spontaneous repatriation was occurring (see RNIS #21).
- *Sudanese refugees* There are approximately 111,000 Sudanese refugees in DRC who are fleeing the continuing insecurity in Sudan (see RNIS #21).
- *Ugandan refugees* There are approximately 4,000 Ugandan refugees in Eastern DRC [DHA 17/11/97].

Rwanda The return of over a million refugees to Rwanda and escalating insecurity in many prefectures has put a considerable strain on the food supply in the country. In addition, the rains began a few weeks later than normal which is likely to have a negative impact on the January harvest. Food aid will be needed for 1.4 million people in the coming months in the form of food-for-work, feeding programmes and seed protection rations. At the same time, reconstruction and rehabilitation of the country's infrastructure are underway [IRC 10/10/97, WFP 03/10/97].

Insecurity is increasing in the country, particularly in the western prefectures. One example of this was the murder of a WFP driver when his vehicle was attacked at a check point. Since this attack, stricter measures, including military escorts, have been taken to ensure safety when delivering food. These added precautions, which have been shown to be necessary, have led to some delays in food deliveries. Intense fighting between the Rwandan army and Hutu rebels was reported in the north-western area of Gisenyi in early October and a large number of people are said to have fled. The border with the DRC has been closed by the DRC authorities in order to prevent movement of Rwandans into neighbouring Goma [IRIN 14-20/11/97, UNDP 04/11/97, WFP 24/10/97].

Household food stocks in many prefectures are reportedly low. Food prices continue to rise, particularly for beans, a staple food, and the purchasing power of many rural families is low. As a result, more and more people are participating in food-for-work programmes [USAID 27/10/97, WFP 17/10/97].

The food security situation is not likely to improve before the January harvest. Furthermore, the prospects for the January harvest are uncertain due to a number of factors. Less than optimal rain patterns early in the growing season led to a delay in planting of nearly a month. In some areas insecurity has hampered

cultivation, and some households reportedly lack sufficient agricultural inputs, such as seeds and tools [USAID 27/10/97].

There are approximately 15,000 refugees from the DRC in Mudende camp in Rwanda. Preliminary discussions with the refugees are underway on the possibility of repatriation, but no date has been set as yet [WFP 17/10/97].

Programmes aimed at helping with the reintegration of returnees and rehabilitation of infrastructure are on-going. Examples of projects currently underway include:

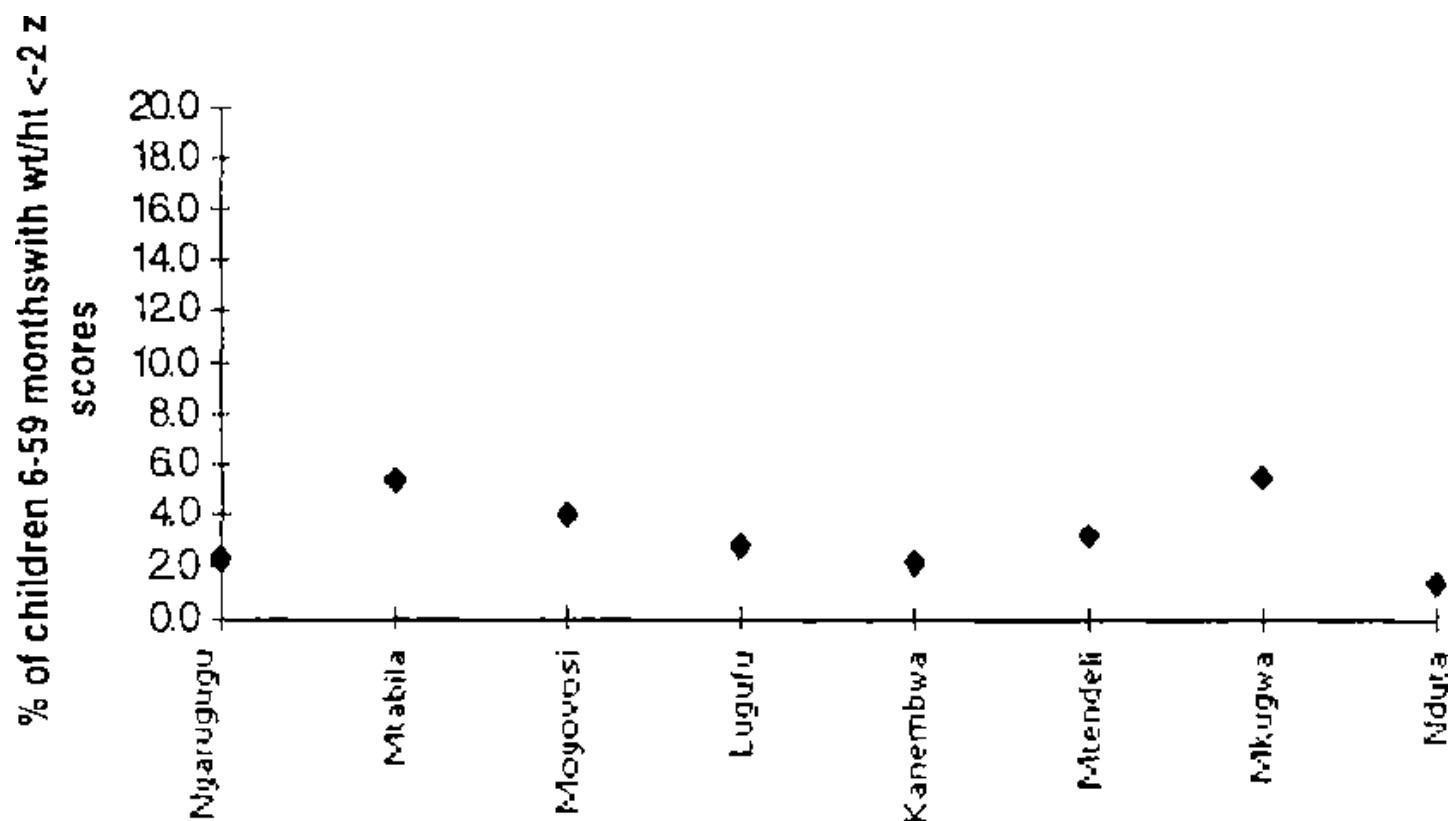
- the rehabilitation of rural water systems;
- the rehabilitation of schools and health centres;
- loan schemes to start small businesses;
- training programmes for women [IRC 10/10/97].

There are no nutritional details on the vulnerable population in Rwanda, however the worsening food security situation coupled with what appears to be increasing insecurity in many provinces is likely to have an adverse effect on the nutritional status of the population. There are anecdotal reports that malnutrition is increasing and emergency food assistance is being given in some areas following requests from local authorities [IRIN 03-09/10/97]. As a consequence of growing food insecurity, more and more people are participating in food for work programmes with new projects being created in a number of prefectures. The months leading up to the January harvest are likely to be particularly difficult without the increased participation of humanitarian agencies.

Tanzania There remain approximately 318,000 Congolese and Burundi refugees in Tanzania, The government of Tanzania is pursuing its programme to identify and resettle refugees and illegal immigrants in the towns along the Rwandan and Burundi border [DHA 17/11/97].

Since the end of September, approximately 8,500 Congolese and 8,900 Rwandans have been identified by the Government of Tanzania as living illegally in the villages of Kigoma. Most of these refugees have been transferred to camps, where some are already registered, while a few Congolese have preferred to spontaneously repatriate [WFP 01/11/97].

Some organised repatriation to DRC had been taking place. During the month of September almost 3,500 refugees returned. In addition, a further 500 refugees returned on their own. There are reportedly 45,000 refugees registered to repatriate. One constraint on the repatriation exercise is the limited capacity to receive refugees in DRC [IRIN 24/11/97, WFP 03/10/97, 10/10/97, 05/12/97].



Malnutrition in Refugee Camps in Tanzania Aug-Sep 1997

Surveys carried out in Kasulu District (estimated population for the four camps is 146,000) in September 1997 showed levels of wasting varying from 2.3–5.4% (see Annex I (e–h)). This is a significant improvement over results from a survey in April, when levels of wasting were as high as 23%. The under-five mortality rate was 1.2/10,000/day, and measles immunisation coverage varied from 57.8%–79.1%. Although the food pipeline has been stable in camps like Nyarugusu since March 1997 there have been some complaints that the food distributed is not sufficient for the two week period and that certain commodities like green peas and white maize meal cause abdominal problems. Selective feeding programme coverage in this camp is also poor at only 28% and 46% for supplementary and therapeutic feeding programmes respectively. Water availability in Nyarugusu is also poor at only 12.6 litres per person per day [AEF 23/04/97, 29/08/97, UNHCR 18/09/97].

Survey results from the four camps in the Kibondo district (estimated population 60,000) showed levels of wasting ranging from 1.3–5.6% (see Annex I (4i–l)). These results are comparable to those from a survey carried out in April, except for Nduta camp. Measles immunisation coverage varied from 68.1%–82.3%. These camps have received a stable general ration and residents have also had access to small plots of land where they have been able to grow vegetables and some other crops. However, in some of the camps supplementary feeding programmes coverage is very poor. For example, in Mtendeli camp only 9% of moderately malnourished children reported participation in the feeding programme [IRC 30/08/97, 01/09/97, 03/09/97, 05/09/97, UNHCR 18/09/97].

In April, wasting in Nduta camp (population estimated at 13,735) was measured at 11.7% (see RNIS #20). In response, a blanket feeding programme was implemented to provide 200 grams of blended food per day to children under five years old. In the September survey, wasting was measured at 1.3% with 0.4% severe wasting. No cases of oedema were seen. Measles vaccination coverage was 82.3%. The reduction in levels of wasting is largely attributed to the blanket feeding and to the fact that there are far fewer new arrivals to the camp showing a compromised nutritional condition [IRC 01/09/97, UNHCR 18/09/97, WFP 14/11/97].

A two month buffer stock of food was pre-positioned in all the refugee camps in October. This was done because in the past, the rains, which normally fall in November and April, often make access to the camps difficult, if not impossible. This pre-positioning will allow for uninterrupted food distributions should the camps become temporarily inaccessible due to rains [WFP 10/10/97].

Overall, in regroupment camps where surveys have been carried out, high levels of severe wasting and elevated mortality rates indicate these populations are at high risk (category I in Table 1). The remaining population in Burundi is likely to be in a similar situation (category IIa in Table 1), although there are no data

currently available. The refugee and displaced populations in Congo/Brazzaville can be considered to be at moderate risk (category IIb in Table 1) since insecurity is hampering some relief efforts. The IDPs and refugees from Uganda in DRC can be considered to be at moderate risk (category IIb in Table 1), and the remaining refugees in DRC are not currently considered to be at heightened risk (category IIc in Table 1).

The affected population in Rwanda can be considered to be at moderate risk (category IIb in Table 1) and the refugees in Tanzania are not currently considered to be at heightened risk (category IIc in Table 1).

Ongoing Interventions: Given the uncertainty of the status of the regroupment camps in Burundi, it is difficult to plan strategies and interventions. Close monitoring of the nutritional situation in these camps should, however, be continued and short-term interventions undertaken where feasible. Funding for the WFP internal flight network in Burundi needs to be found if this important operation is not to be suspended. In Bubanza province, the current coverage of the general ration programme needs to be investigated and there is an urgent need for a targeted feeding programmes. Furthermore, there needs to be verification of suspected micronutrient malnutrition.

In the Congo/Brazzaville, a flash appeal for food, shelter, health care, sanitation, seeds and tools needs to be met in order not to waste the opportunity to rapidly normalise the humanitarian situation. With the advent of the rainy season, there is an increasing risk of epidemics, making water and sanitation provision top priorities.

The Government of DRC has recently estimated the cost of a proposed reconstruction plan at \$1.29 billion, \$728 million of which it hopes will be covered by donors. The Eastern DRC is still lacking medical supplies. Furthermore, immunisations not regularly being carried out, suggesting these programmes need further support. Furthermore, in Kitchanga and other villages in areas which have recently experienced insecurity, there may be a need to establish therapeutic and supplementary feeding facilities and to consider the implementation of measles vaccination campaigns.

Rwanda will require increasing support in the form of food aid until the January harvest. Much of this support, which may still be required after January, will need to be in the provision of expanded food-for-work programmes which can partly address the need to rebuild the country's devastated infrastructure. It is also important to provide agricultural inputs before the next planting season.

Although the nutritional situation in the camps in Tanzania is generally good, there are some specific problems. In Nduta camp, there is a need to improve the community outreach of health workers so that they can identify a greater number of cases of malnutrition for referral to feeding centres, thereby improving feeding programme coverage. There is a similar need in Mtendelti camp. In Nyarugusu camp there is an urgent need to improve the water supply and investigate complaints about the general ration. Selective feeding programme coverage also needs improvement through strengthening health worker outreach. There is a need to improve measles immunisation coverage in many of the Tanzanian camps.

5. Central African Republic

Periodic mutinies among the Central African Republic (CAR) military have occurred since April 1996. Peace accords were signed in January 1997, and a peace keeping force was established. Further clashes between army mutineers and peacekeepers in Bangui at the end of June led to the displacement of up to 100,000 people who left the capital city and moved to Samba and Bimon, south-west of the city. There was concern that this increased population would strain local services, and that food, shelter, clean drinking water and medicines would be in short supply. However, most of the displaced people have now returned home [DHA 11/07/97, UN 06/08/97, WFP 04/07/97].

Efforts are being focused on strengthening the peace process in CAR to avoid this sporadic violence. For example, a UNDP initiative will help demobilise and reintegrate soldiers into civilian life, design a disarmament strategy, and plan a national conference on reconciliation [UNDP 28/07/97].

The 20,000 Chadian refugees in CAR have repatriated and the approximately 25,000 Sudanese refugees have reportedly attained self-sufficiency and no longer require emergency assistance [WFP 10/12/97].

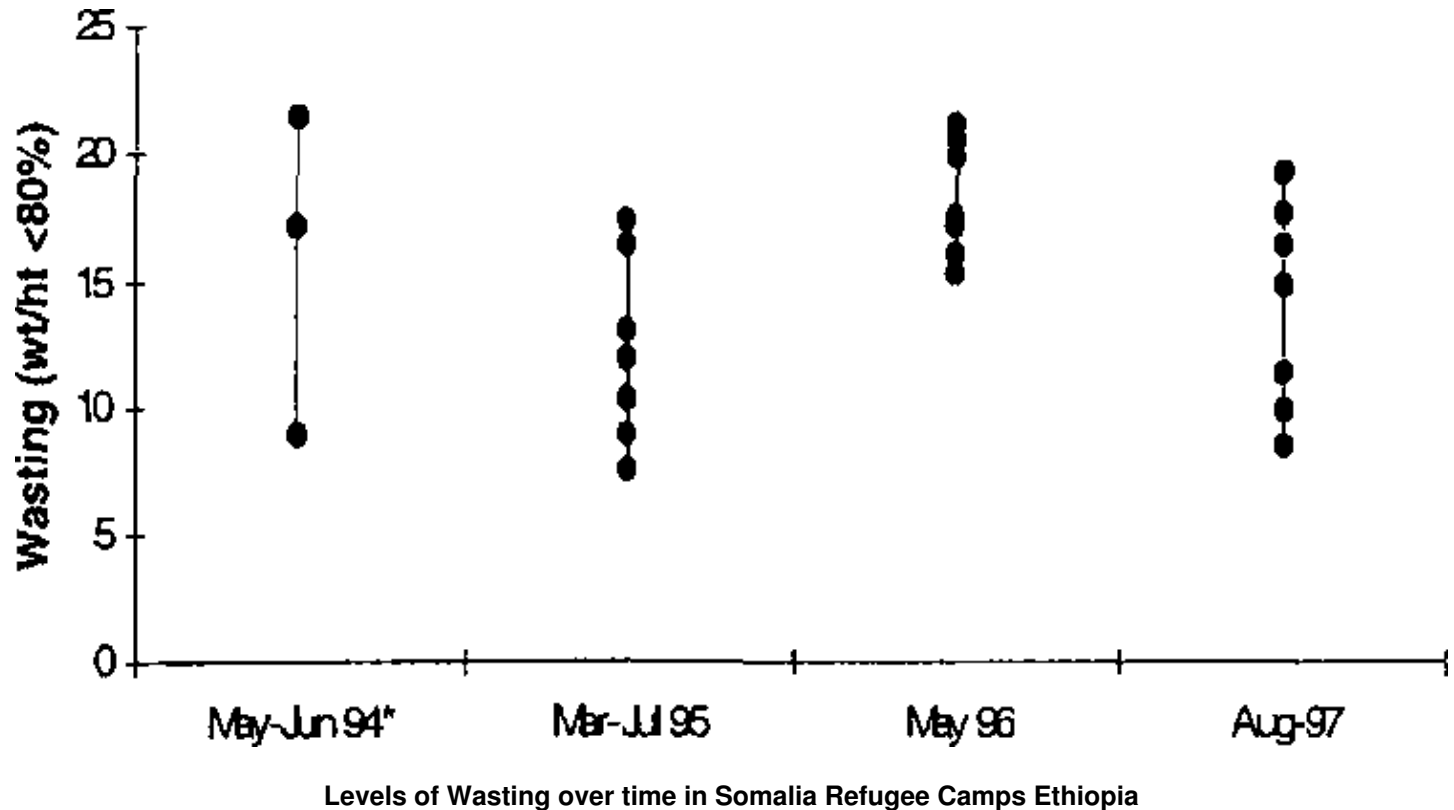
6. Djibouti

There are approximately 25,000 Somali and Ethiopian refugees in Djibouti requiring food aid. Currently cash and food aid pledges are urgently needed for this operation [WFP 14/10/97].

7. Ethiopia

There are approximately 394,000 refugees in Ethiopia comprised of 278,000 Somali refugees, 53,000 Sudanese refugees, 8,700 Kenyan refugees, 18,000 Djibouti refugees, 11,000 internally displaced people around Addis Ababa and a further 25,000 people in the Dollo region, including 10,000 people in Gode.

A food assessment mission in June 1996 recommended diversifying the food basket supplied to the Somali refugees in Eastern Ethiopia. This was implemented at the beginning of January 1997 when the cereal ration was reduced but sugar and Famix were added. Unfortunately, this change led to a reduction in calories provided as sugar and Famix could not be supplied regularly. The effect has been to reduce caloric levels of the general ration by between 100–200 kcals per person per day. A blanket feeding programme for all children under five years old was initiated in 1996. In order to assess the impact of these changes surveys were scheduled for the August/September period of 1997. The last RNIS report included preliminary results of these surveys. The final results are summarised here since they differ from the preliminary findings.



In the August surveys, levels of wasting in the camps varied from 8.5–19.2%. This shows a generally decreasing trend in rates of malnutrition, although the overall nutritional status remains poor. Measles immunisation coverage was estimated at 83%. The survey team largely attributed the slight improvement in nutritional status in the Eastern camps to the successful blanket feeding programme but also recommended re-examining the adequacy of the general ration. Feeding programme coverage was generally good except for the blanket feeding in Kebre Beyeh where the low figure of 61.4% is mainly attributed to the large number of new arrivals and unregistered refugees in the camp [UNHCR 29/10/97].

There are approximately 53,000 Sudanese refugees in four camps in Western Ethiopia. Following the previous assessment mission in 1996, the general ration provided to three of the camps was cut from 2150 to 1600 kcals/person/day on the basis that refugees in these camps were becoming increasingly self-sufficient. Sherkole, the newest of the camps is provided with 2,200 kcals/person/day. With the exception of Sherkole, there is no blanket supplementary feeding in these camps. Levels of wasting in the camps varied from 10.8–27.2% with severe wasting of 1.3–4.2%. This shows a marked deterioration when compared with previous survey results which varied from 6–17.6%. These elevated levels of wasting indicate a need to review the assumption of partial self-sufficiency upon which previous ration reductions were made. In Fugnido camp, where the nutritional situation is most dire, refugees are very dependent on an inadequate general ration and appear less able to support additional food needs than was assumed in 1996. The increased levels of wasting in the camps may also reflect the fact that the full food basket has not consistently been delivered so that rations reached a new low in July and August 1997 of only 1447 kcals per person per day [UNHCR 29/10/97].

Measles immunisation coverage varied from 30.9–97.2%. Sherkole and Fugnido camps had the lowest coverage, but in the case of Sherkole, the EPI programme has not been fully established and the population has more than tripled since the last campaign. Logistical constraints (manpower and vehicles) were largely determined to be the main obstacles in Fugnido camp [UNHCR 29/10/97].

Cyclical droughts, insufficient water catchment systems and broken pumps all contribute to severe water insecurities in all camps. This is directly related to increased malnutrition rates and also leads to population movements which further contribute to food insecurity. Insufficient rains in the western camps this year led to a greatly reduced harvest which it is predicted will have a longer term impact on nutritional status.

Flooding is reported in the Gode region of Ethiopia. There are approximately 10,000 returnees in this area and most recent survey information was from May 1997 and showed over 50% wasting (see RNIS #20). Several areas are cut off from road transport, and supplies are being airlifted in [WFP 05/12/97].

Overall, while the nutritional situation in the Eastern camps shows a slightly improving trend, levels of wasting remain elevated and this population can be considered to be at heightened risk (category I in Table 1). The exception to this would be the populations in Rabasso and Daror camps which can be considered to be at moderate risk (category IIb in Table 1).

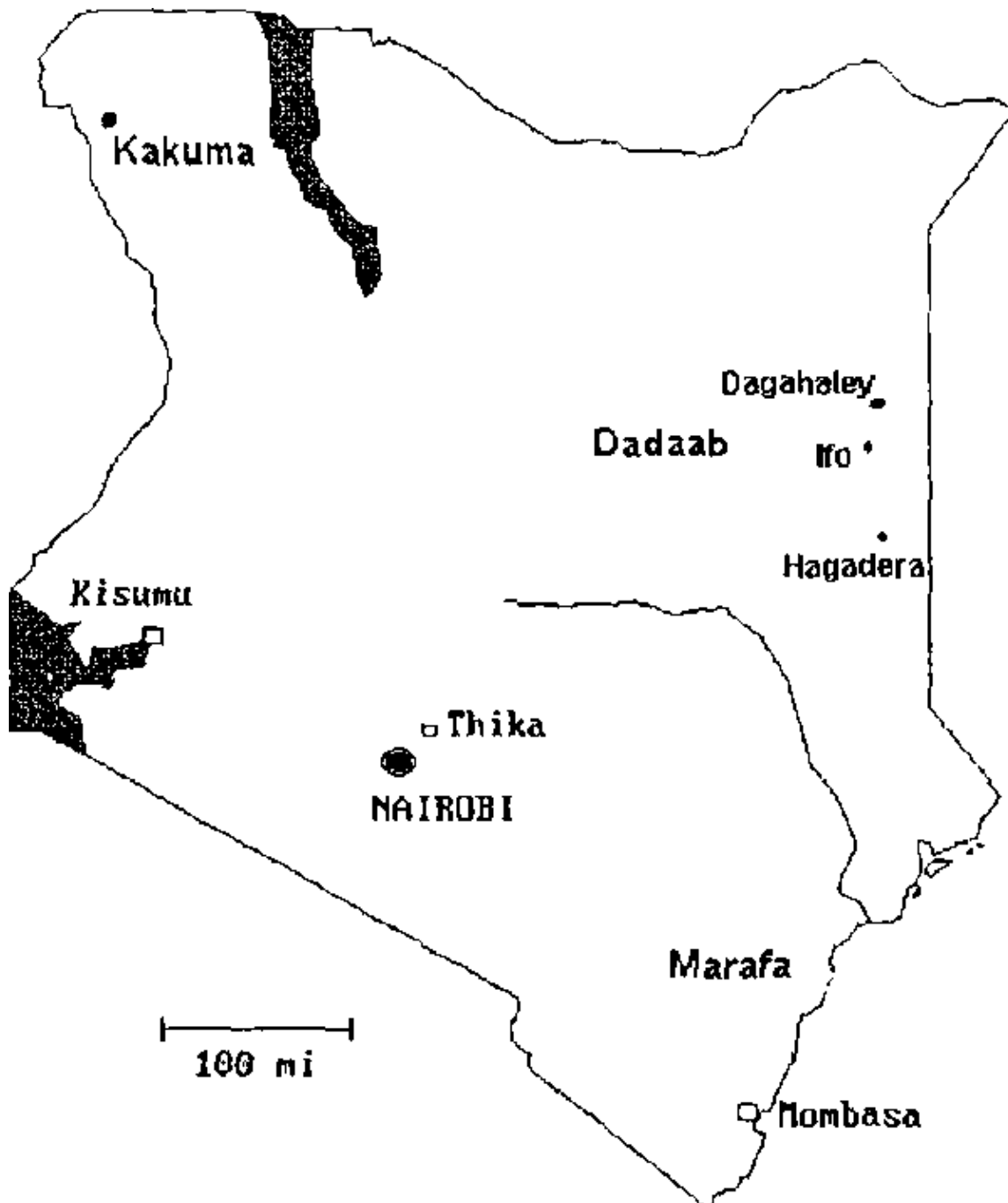
The Sudanese refugees in the Western camps can be considered to be at heightened risk (category I in Table 1) due to high levels of wasting. Those in the Gode region, affected by flooding are also at high risk. No information is currently available on the internally displaced, those in Dollo, or the Kenyan refugees (category IIc in Table 1).

Ongoing interventions: The adequacy of the general ration should be reviewed in the eastern camps due to high prevalence of malnutrition. The blanket supplementary feeding should be continued in all camps and efforts should be made to improve coverage of this programme in Kebre Beyeh. In the western camps, there is an urgent need to review assumptions about self-sufficiency, especially in camps like Fugnido. General rations should be adjusted accordingly. The problem of adult and adolescent malnutrition should also be investigated. Further attention must also be given to improving immunisation coverage in Fugnido and Sherkole, as well as coverage of all feeding programmes in the Western camps.

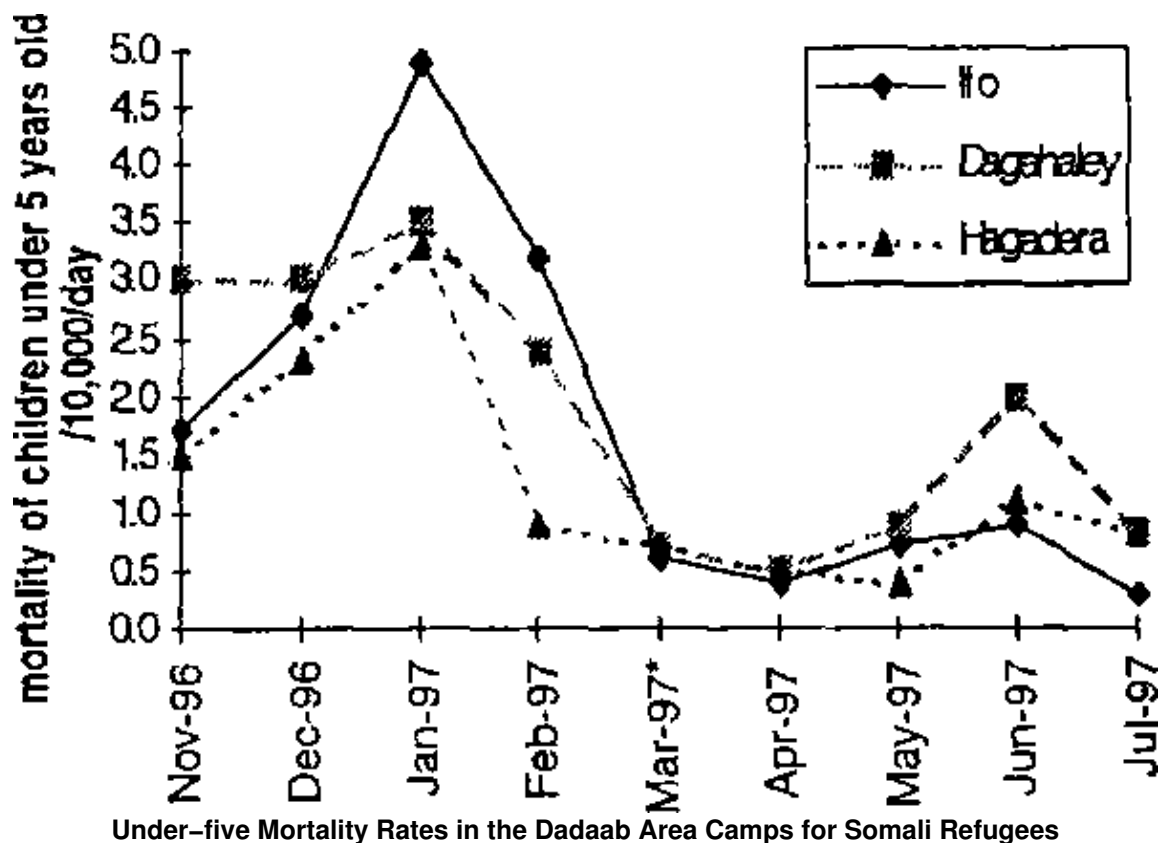
8. Kenya

There are approximately 175,000 refugees in two main areas in Kenya. This total number is comprised of 132,000 Somali, 37,000 Sudanese and 6,000 Ethiopian refugees [UNHCR 31/10/97].

There were approximately 132,000 Somali refugees in three camps in the Dadaab region of Kenya. Most of these refugees arrived in 1991–2, fleeing fighting which accompanied the over-throw of the military rulers. Recent flooding has led to the spontaneous evacuation of most people in these camps. Information below describes the situation prior to the flooding.



Surveys carried out in January 1997 showed very high levels of wasting of 26–33%. In response, a blanket feeding programme was begun in March. A follow-up survey in August 1997 showed an improved situation with wasting 10.4–17.6% and severe wasting 0.8–1.7% (see Annex I (8a–c)). Measles immunisation coverage, confirmed by a vaccination card, was 95% in two of the camps. In Hagadera camp, coverage was 90%. It has been suggested that the increase in levels of wasting seen between November 1996 and January 1997 were due to a serious outbreak of diarrhoea combined with a seasonal peak in malaria. Furthermore, the situation had begun to improve before the introduction of the blanket feeding. The under-five mortality rate had decreased to 0.4/10,000/day [MSF–B Aug. 97, MSF–B 12/10/97].



*Blanket supplementary feeding programme began:

General ration provision has been erratic in 1997. One or more commodities have often been missing, and while attempts are made to compensate for the energy value of a missing item by increasing the quantity of another, this doesn't compensate for the nutrient content of the missing item [MSF-B 12/10/97]. Energy needs for this population are now estimated at 1880 kcals per person even though the 1996 assessment recommended 2100 kcals per capita per day. Furthermore, blended foods are only given out during the dry season even though no such restrictions were made by the 1996 assessment team. The immediate consequence of missing commodities from the general ration is that refugees are quickly drawn into an economy of swapping and ration trading. However, the terms of trade often do not favour refugees and calorie intake may be further reduced.

In addition, scurvy has been identified as a seasonal problem in these camps. Cases of scurvy are often noted during the August–December period, which coincides with a reduction in the availability of camel milk and what little fresh vegetables are sometimes available. The micronutrient content of the ration has been deficient in vitamin C, and other micronutrients. Efforts to distribute micronutrient-rich foods, such as fresh vegetables, have been mostly unsuccessful due to the remote location of the camps and a drought in the area leading to reduced production. Blended foods were not distributed in the general ration until September. It is not known, however, how much vitamin C remains in CSB after cooking. Vitamin supplements have been provided to children in feeding programmes over the last year. More recently, questions have been raised over the validity of the diagnosis of scurvy in the camps [SCF 23/09/97, UNHCR 20/11/97].

A household food economy assessment was carried out in September to update information obtained in September 1996. The report stresses that the situation for these refugees has changed little and they remain highly dependent on food aid. In some cases, these people are "thought to be slightly worse off than they were a year ago. This is attributed to many factors including the arrivals of refugees transferred from other camps, irregularities in food commodities distributed, and drought in the area. A number of fundamental barriers to increased self-reliance were also mentioned in the assessment, For example, the camps are in a semi-arid environment and travel outside the camp is officially restricted [SCF 23/09/97].

Heavy rains at the end of November led to flooding and it is reported that most of the refugees have fled the camps in search of higher ground. It is reported that shelters have collapsed, food stocks have been destroyed, and latrines have been flooded. Food and non-food items are being airlifted into flood-affected areas [WFP 21/11/97, 05/12/97].

There are approximately 48,000 refugees in Kakuma camps, mainly of Sudanese origin. A survey in April 1997 showed high prevalences of wasting and anaemia among children under five years old and school age children. Unaccompanied boys were noted as being particularly severely affected by anaemia.

Questions were raised about the validity of these findings, and, after a further screening and validation exercise, it was concluded jointly by UNHCR and the International Rescue Committee (IRC) that the prevalence of wasting was likely to be at or below 5% less than 80% of the median weight for height for children under five years old. A school feeding programme has been initiated for 17,000 children, and it was further recommended that adequate health care services be provided along with vitamin A, iron, folic acid and vitamin C on a regular basis [UNHCR 17/11/97].

A recent household food economy assessment concluded that the major source of food for the Kakuma population remains food aid. There are a number of constraints preventing refugees from becoming more self-sufficient, including the limited potential for farming, a ban on owning livestock and difficulties in travelling outside of the camp. There are also problems with erratic general ration commodity supplies. Although efforts are always made to compensate for the calories of a missing general ration commodity, the nutrient value is often not replaced. Food commodity supplies have been more irregular than last year (no beans for two and a half months from January and no oil for two and a half months between June and August). The ration is deficient in certain micronutrients although some efforts have been made to provide complementary foods like cabbage and dried fish. However, these commodities have been provided in such small quantities that the micronutrient shortfall in the general ration has remained considerable. The assessment concluded that the situation for the majority of the camp had deteriorated slightly since last year. However, the ability of certain individuals to "recycle" and therefore obtain extra ration cards may have gone some way to offset factors that undermined food security [SCF 19/09/97].

Both the Dadaab and Kakuma camps have problems in providing the full general ration allocation at each distribution. Breaks in the pipeline for different commodities are not uncommon. Many of the difficulties are due to the remoteness of the refugee sites and transportation, particularly during the rainy season.

Overall, the nutritional data available on the refugees in the Dadaab camps points to an improving situation. However, recent flooding has disrupted camp facilities, and these refugees are at heightened risk of mortality due to flooding (category IIa in Table 1). The situation for those in the Kakuma camps is less dire than previously available information indicated. This population can be considered to be at moderate risk due to the irregular supply of the ration (category IIb in Table 1).

Ongoing interventions: The Dadaab camps will need rebuilding once flood levels recede. These camps also require redoubled efforts to provide the general ration food basket in future distributions. UN and donors must commit themselves to meeting these needs. The blanket supplementary feeding programme should continue as long as general rations remain inadequate. At the same time it may prove useful and instructive to investigate whether it is cost effective to implement a blanket feeding rather than improve general ration provision. Furthermore, questions have been raised on the veracity of scurvy diagnoses in the camps. These need to be validated.

An assessment is needed in Kakuma camp to determine whether the water table can tolerate increased water extraction leading to pumping in order to enhance tapstand gardens. There is also a need to address elevated levels of anaemia in school-age children.

9. Liberia/Sierra Leone Region

After almost twenty years of civil war, the peace process in Liberia seems firmly in place. Almost all areas in the country are now accessible. Internally displaced people are beginning to return home and repatriation is scheduled to begin before the end of 1997. In Sierra Leone, there is guarded optimism since the signing of a peace accord to end the fighting which has been ongoing since a *coup d'etat* in May 1997. Somewhat increased access to populations in conjunction with the recent harvest is likely to be having a positive effect on the nutritional situation of the population.

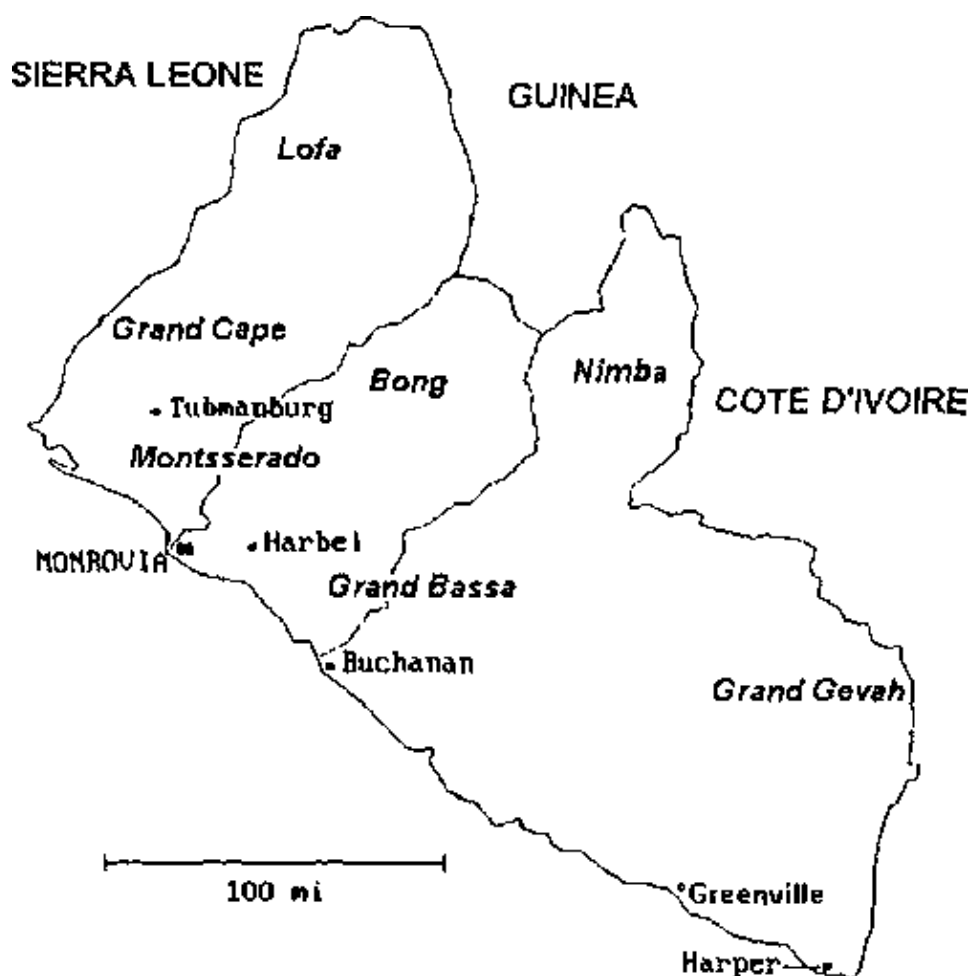
Population estimates for refugee and IDP populations over time are summarised in the box below:

Location	Jun. 96	Sep. 96	Dec. 96	Mar. 97	Jun. 97	Sep. 97	Dec. 97
Liberia	1,800,000	1,800,000	1,800,000	1,100,000	710,000	700,000	700,000

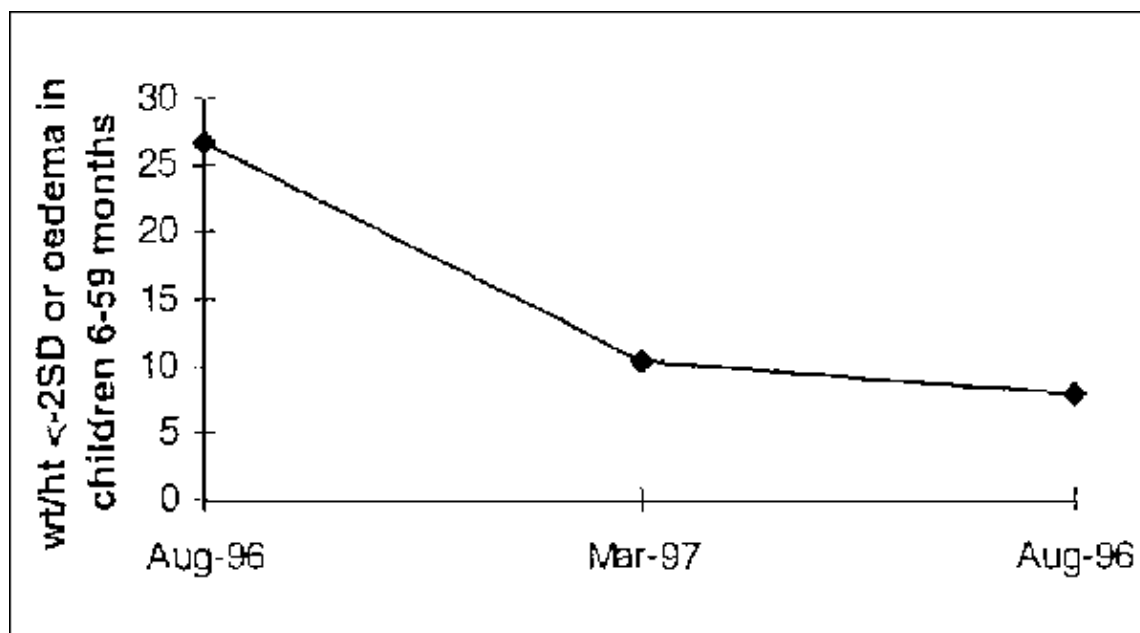
Sierra Leone	756,000	609,000	609,000	548,000	453,000	453,000	200,000*
Cote d'Ivoire	305,000	305,000	305,000	305,000	305,000	210,000	210,000
Guinea	536,000	536,000	536,000	536,000	545,000	405,000	405,000
Total	3,397,000	3,250,000	3,250,000	2,489,000	2,013,000	1,768,000	1,515,000

* Numbers requiring humanitarian assistance may be far higher than the current estimate.

Liberia A civil war in Liberia, which began in 1989 with the overthrow of the President, came to an end with the signing of a peace accord and the subsequent election of Charles Taylor as president. It is estimated that at least 700,000 people require humanitarian assistance in Liberia, and there are approximately 480,000 refugees in neighbouring countries. Much of Liberia was inaccessible to humanitarian aid during the war due to insecurity. It is now reported that most of country is accessible, and preparations are underway for the repatriation of refugees in countries of refuge such as Guinea and Cote d'Ivoire.



The stable security situation has allowed for improved food security in many areas. Populations are able to obtain more food for themselves, and humanitarian aid can be delivered. This is resulting in an improvement in the nutritional status in many areas. For example, a survey carried out in Upper Bong county in September showed 6.7% wasting with 0.4% severe wasting. Oedema was measured at 1.9% (see Annex I (9a)). Survey results overtime are shown in the graph below. Measles coverage, confirmed by a vaccination card, was 45.5%. Coverage not confirmed by a card (i.e. mother's recollection) was 20.1%. While these coverages are still low, they do show an improving trend. However, food security is still poor in some areas. For example, a recent report indicated that farmers in Nimba country were borrowing food and that there were few food commodities on the market [WFP 03/10/97, ACF 12/09/97].

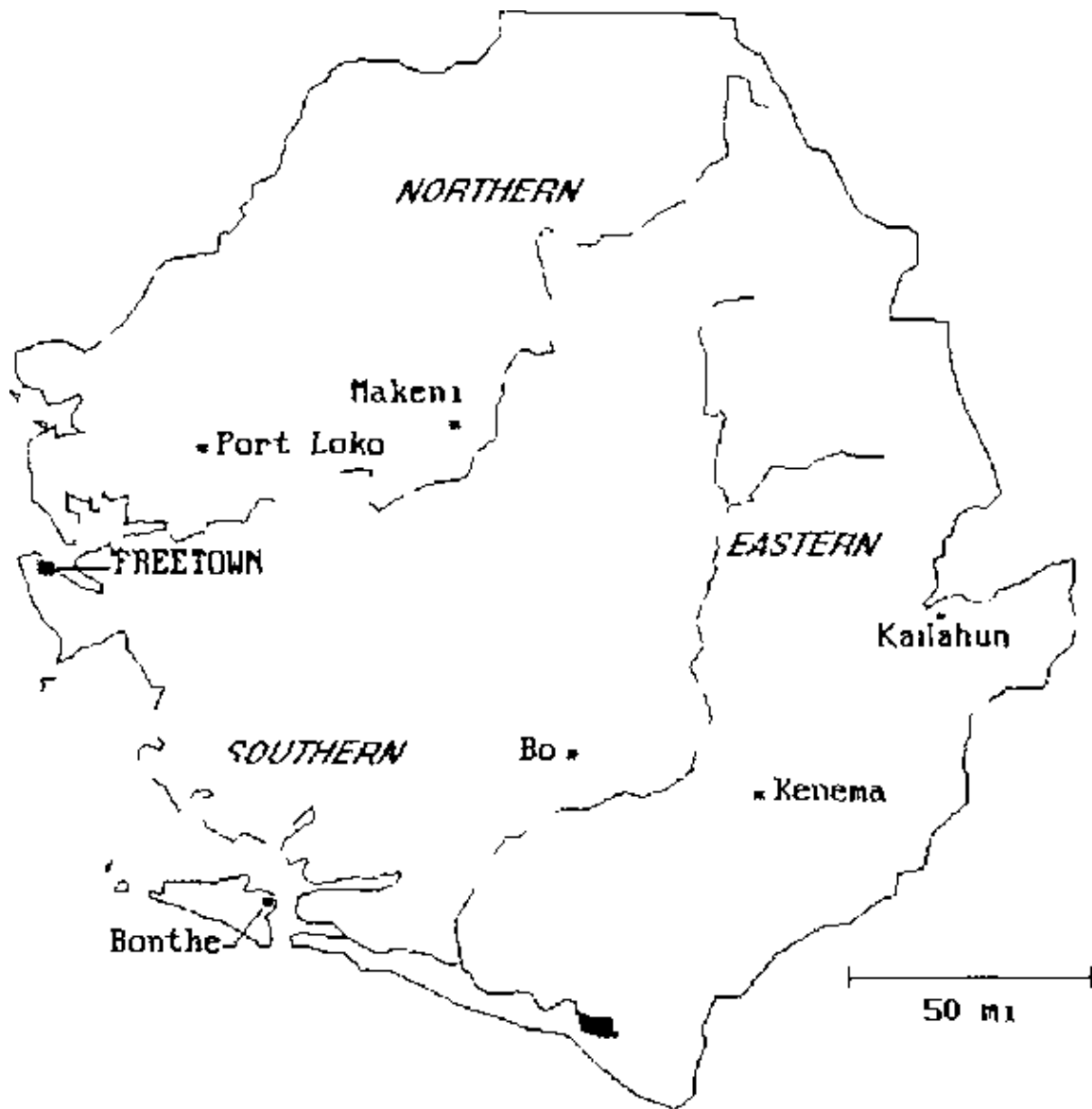


Malnutrition in Upper Bong County, Liberia overtime

Organised repatriation is scheduled to begin before the end of 1997 for the approximately 480,000 Liberian refugees in neighbouring countries. It is estimated that to date about 120,000 refugees have spontaneously returned – mainly from Cote d'Ivoire and Guinea. The repatriation process is scheduled to be completed by the end of 1998. Internally displaced people are also reportedly returning home. For example, a recent verification exercise in the shelters for displaced people in Monrovia showed a decrease of 16,000 people. A number of quick impact projects to rehabilitate roads, schools and clinics have been carried out as part of re-integration activities for returnees [UNHCR Oct. 97, WFP 03/10/97].

The twenty year war has left the country's infrastructure in total ruins, and schools, roads and health centres will need to be rebuilt. Areas of the country which are still inaccessible remain so due to a lack of roads. Some of the necessary reconstruction work is underway and is being implemented as food-for-work projects [DHA 30/09/97, 29/10/97].

Sierra Leone A coup d'etat in May 1997 threw the country back into a state of war, with widespread fighting and population displacements. As a result of the coup, sanctions were imposed by the Economic Community of West African States (ECOWAS), but humanitarian goods have been excluded from the embargo. A peace accord was signed on 22 October 1997. The peace accord made provisions for an immediate cease-fire, the restoration of the constitutional government, the return of refugees and internally displaced people, and the increased delivery of humanitarian aid. Although the cease-fire seems to have generally been holding there have been several reports of insecurity. There are at least 200,000 people internally displaced and requiring humanitarian assistance in Sierra Leone; many more who are not displaced are likely to need assistance [DHA-a 28/10/97, IRIN-WA 18-24/10/97, 06/11/97, WFP 24/10/97, 07/11/97].



Recent nutrition survey data points to a deteriorating situation in many areas. Makeni is a town in the Northern province where many have fled insecurity in surrounding areas. A survey conducted in Makeni town April 1996 showed 13% wasting and/or oedema with 4% severe wasting and/or oedema. These results led to the opening of a therapeutic feeding centre. A follow-up survey in October showed 13.2% wasting with 1.4% severe wasting. Oedema was measured at 0.8% (see Annex I (9b)). These results are comparable to those from the April survey. Measles immunisation coverage, confirmed by a vaccination card, was low at 39.1% [ACF 29/10/97].

In Bombali district wasting was measured at 14.2% with 1.3% severe wasting. Oedema was measured at 1.3%. Measles immunisation coverage, as confirmed by a vaccination card, was low at 35.4%. A further 35.5% of the mothers said their child had been immunised. In Tonkolili district wasting was measured at 17.7% with 1.9% severe wasting. Oedema was measured at 1.2%. Measles immunisation coverage, as confirmed by a vaccination card, was low at 28.2%. A further 26.5% of the mothers said their child had been immunised (see Annex I (9c-d)) [ACF 29/10/97].

These surveys were carried out just before the harvest, at the end of the 'lean period'. Since many of these people are farmers, an improvement in the nutritional situation is likely following the November harvest. It is expected that this harvest will be improved in many areas. This is due to a number of factors. First, the influx of the RUF into urban areas has made it safer to farm. Second, villagers have been living in the bush close to their farms making it more difficult for armed groups to loot crops. Third, the recent insecurity in Freetown resulted in the forced resettlement of many to their farms. However, there are still many areas where harvests would have been adversely affected by the displacements which occurred [IRIN 14-18/10/97, ACF 29/10/97].

The resurgence of insecurity in the country in May and a subsequent embargo led to a marked decrease in

the humanitarian aid provided. Humanitarian aid is meant to be exempt from the embargo, but there are reportedly difficulties importing supplies. Agencies have been distributing supplies they had in stock, but these are mostly depleted. If problems and delays with importing humanitarian aid are not resolved, there is likely to be a negative impact on the nutritional situation in many parts of the country [ACT 23/10/97, IRIN-WA 14/11/97, WV 11/12/97].

In an attempt to have a comprehensive picture of the humanitarian situation in Sierra Leone, an inter-agency emergency monitoring system has been set up. This will track the health status of the population by collecting information on mortality, morbidity and malnutrition. The food security situation will be monitored by tracking market prices, population movements, and harvest data [DHA-a 28/10/97].

Cote d'Ivoire There are approximately 210,000 Liberian refugees in Cote d'Ivoire. There are no reports of change to their generally adequate and stable nutrition situation of this refugee population. Repatriation for these refugees is scheduled to begin in 1998 [UNHCR Oct. 97].

Guinea There are estimated to be 170,000 Sierra Leonean refugees and 235,000 Liberian refugees in Guinea. Some spontaneous repatriation has already taken place, and a further 45,000 people are expected to repatriate in 1997. The remainder will repatriate in 1998 [UNHCR Cot 97].

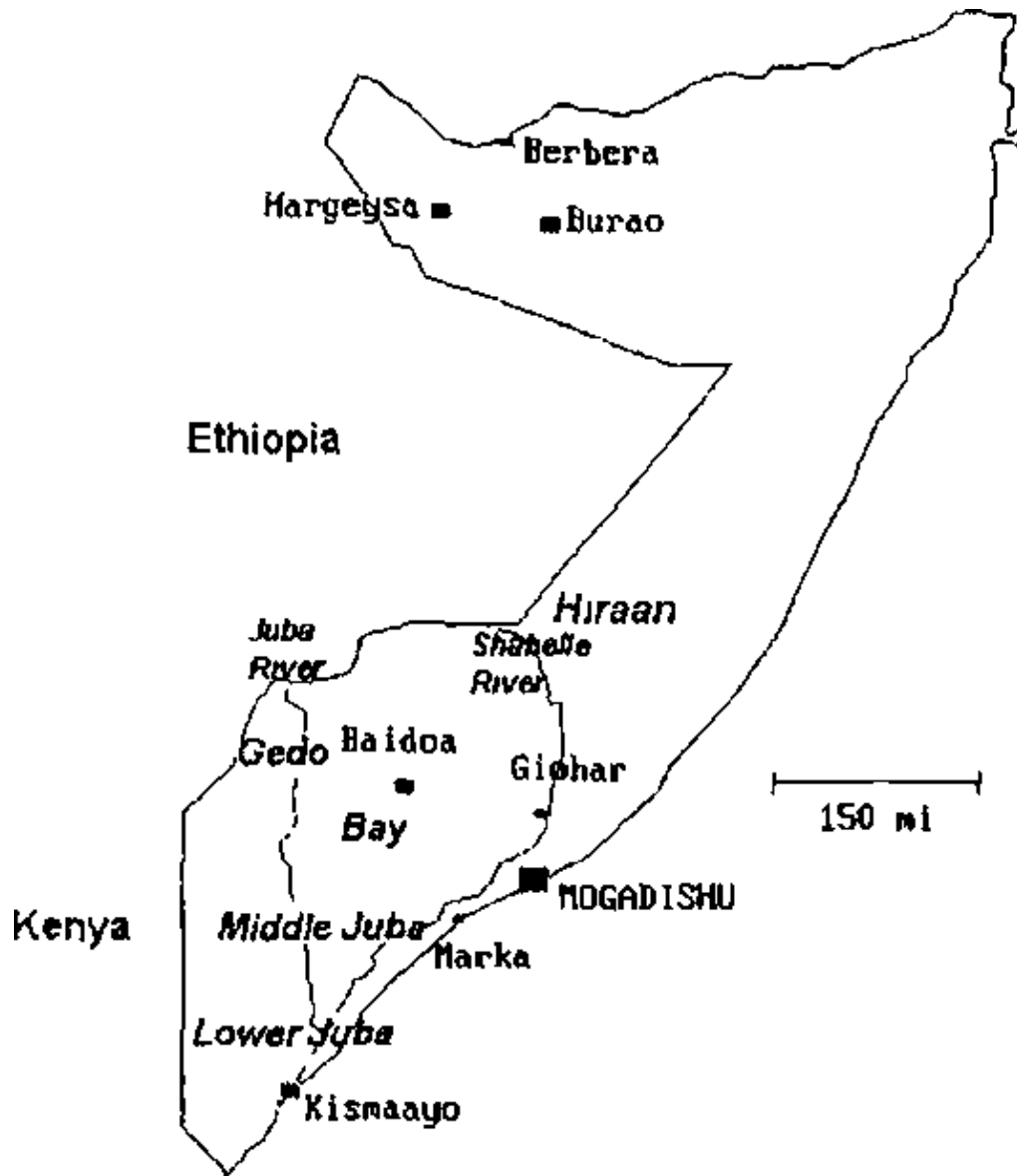
Overall, the affected population in Sierra Leone can be considered to be at heightened risk due to continuing insecurity and reduced humanitarian relief receipt (category IIa in Table 1). The rest of the population affected regionally is probably not at heightened nutritional risk (category IIc in Table 1).

Ongoing interventions: As repatriation to Liberia begins, the need to rehabilitate the country's infrastructure intensifies, i.e. schools, roads, water and sanitation and health services. Nutritional surveillance systems need to be established in country as agencies begin to consider withdrawing. More specifically, in Upper Bong County measles immunisation coverage needs to be improved and the efficacy of the present vaccination system should probably be re-assessed. Efforts to collect information on food security in the area should also be intensified.

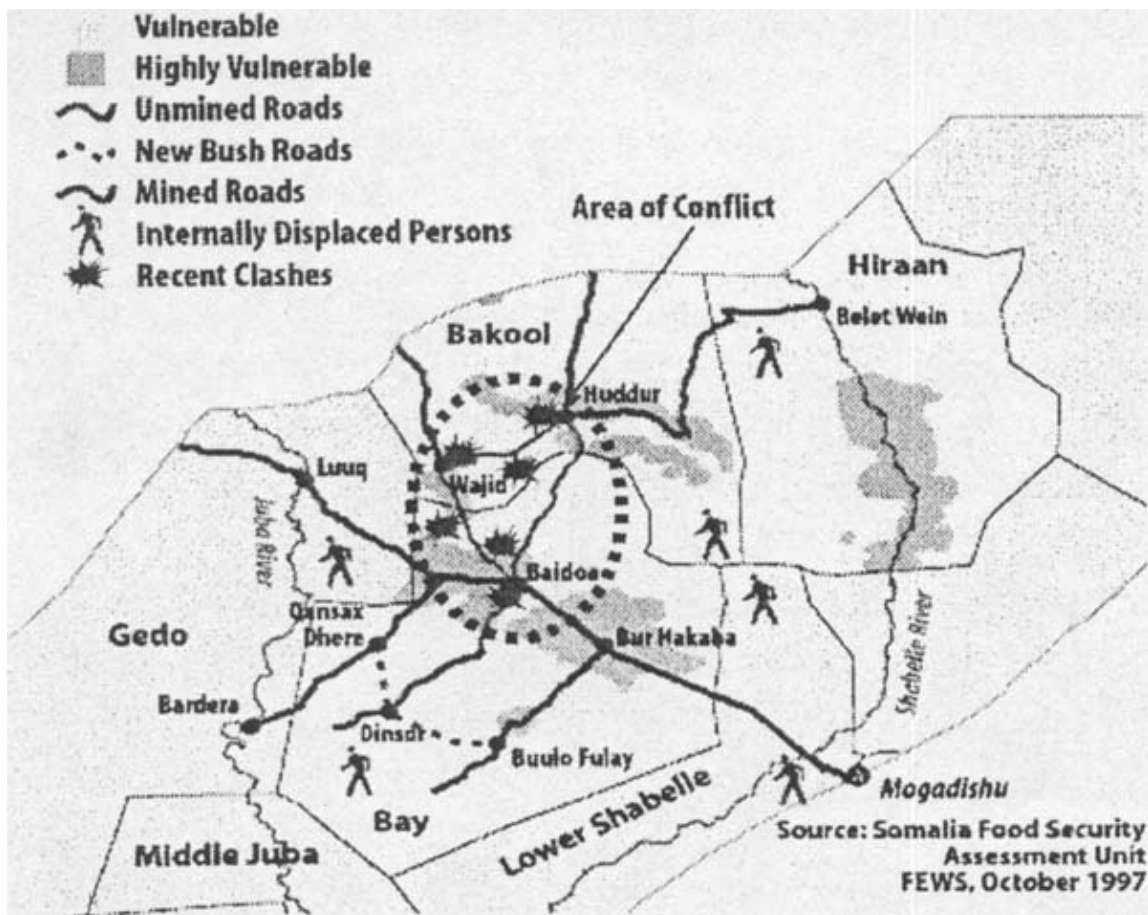
The inter-agency food and health monitoring systems in Sierra Leone are critical initiatives and should be supported with resources as required. Measles immunisation coverage in Makeni town, and Bombali and Tonkolili districts needs to be increased. Furthermore, there is a requirement for regular nutritional surveillance in these areas and continuous screening of children for admission to feeding centres.

11. Somalia

Insecurity in Somalia has persisted since the eruption of civil war in 1988 and the overthrow of the military rulers in 1991. Since that time there has been no effective government in the country. Continuous insecurity combined with low crop yields has led to heightened food insecurity in many areas of the country. Low crop yields can be directly attributed to the insecurity, rainfall patterns, lack of agricultural inputs, and plant pests and diseases. The total cereal production for the 'Gu' season was unchanged from last year but 37% lower than pre-war averages.



The recent 'Deyr' rains have been the heaviest recorded since 1992 and have caused extensive flooding in many areas in southern Somalia but in particular around the Shabelle and Juba rivers. In some areas the rainfall has been measured at over 600% the usual level. Initial aerial surveys indicated destruction of homes and planted crops affecting thousands of families. Many thousands of livestock have also been lost. Hundreds of thousands of people have been displaced. In addition, roads have been washed away, trapping many people in the areas around the flooded villages [WFP 01/11/97, WV 31/10/97]. The numbers of people requiring emergency assistance in Somalia are estimated at 1.2 million people. These include beneficiaries of food for work projects, returnees and IDPs. There are at least 240,000 people requiring immediate assistance due to flooding; some of these people were already targeted with projects mentioned above.



Southern Somalia – Vulnerability in the Sorghum Belt, October–December 1997

An assessment in October in what is referred to as the sorghum belt of southern Somalia (Bay, Bakool and Hiraan regions) showed that insecurity coupled with poor growing conditions have led to the depletion of household food reserves. It was estimated that 173,000 vulnerable people in the sorghum belt required food assistance until mid–December. In early October 1997, distributions of seeds to many needy households affected by droughts, floods or conflict were undertaken. However, at approximately the same time, a deteriorating security situation, which led to mines being planted along major transport routes, interfered with food distributions. The insecurity also hindered the free flow of information from areas considered to be vulnerable [FSAU 15/10/97, USAID 27/10/97].

Relief programmes are being carried out for those displaced by the flooding and continuing insecurity wherever possible. These include deliveries of blankets, high energy biscuits and medicines. However, access to populations in need is difficult and deliveries are being undertaken by boat. Where possible stocks are being pre–positioned [ICRC 06/11/97, WFP 31/10/97, 28/11/97, 05/12/97].

Overall, the current displacement has exacerbated the vulnerability of many families. "Many people have lost their few remaining resources and the flood–affected population can be considered to be at heightened nutritional risk (category IIa in Table 1). The remaining population can be considered to be at moderate risk (category IIb in Table 1). Furthermore, the loss of crops, which were due to be harvested in January 1998, will determine that many will remain exceeding vulnerable until the next harvest in July and that as food prices rise due to scarcity many more households will become at risk.

Ongoing interventions: Some of the most urgent needs for those affected by the floods are for shelter and household items. Access is difficult, and boats and helicopters are required to reach the affected populations. An inter–agency response has outlined the need for these items, as well as medical supplies and food. It is estimated that 20,000 metric tons of food will be needed for the next six to seven months.

In addition to food, hospitals lack medicines and supplies. This is particularly worrying since current conditions are conducive to cholera which is endemic in the region. A priority is therefore the provision of safe drinking water. It will also prove vital to carefully monitor outbreaks of cholera, malaria and other water borne diseases. At the same time anti–malarials, cholera kits and water treatment systems should be readily available. In addition to these short term needs, there is an ongoing need for agronomic inputs, e.g. seeds and pesticides,

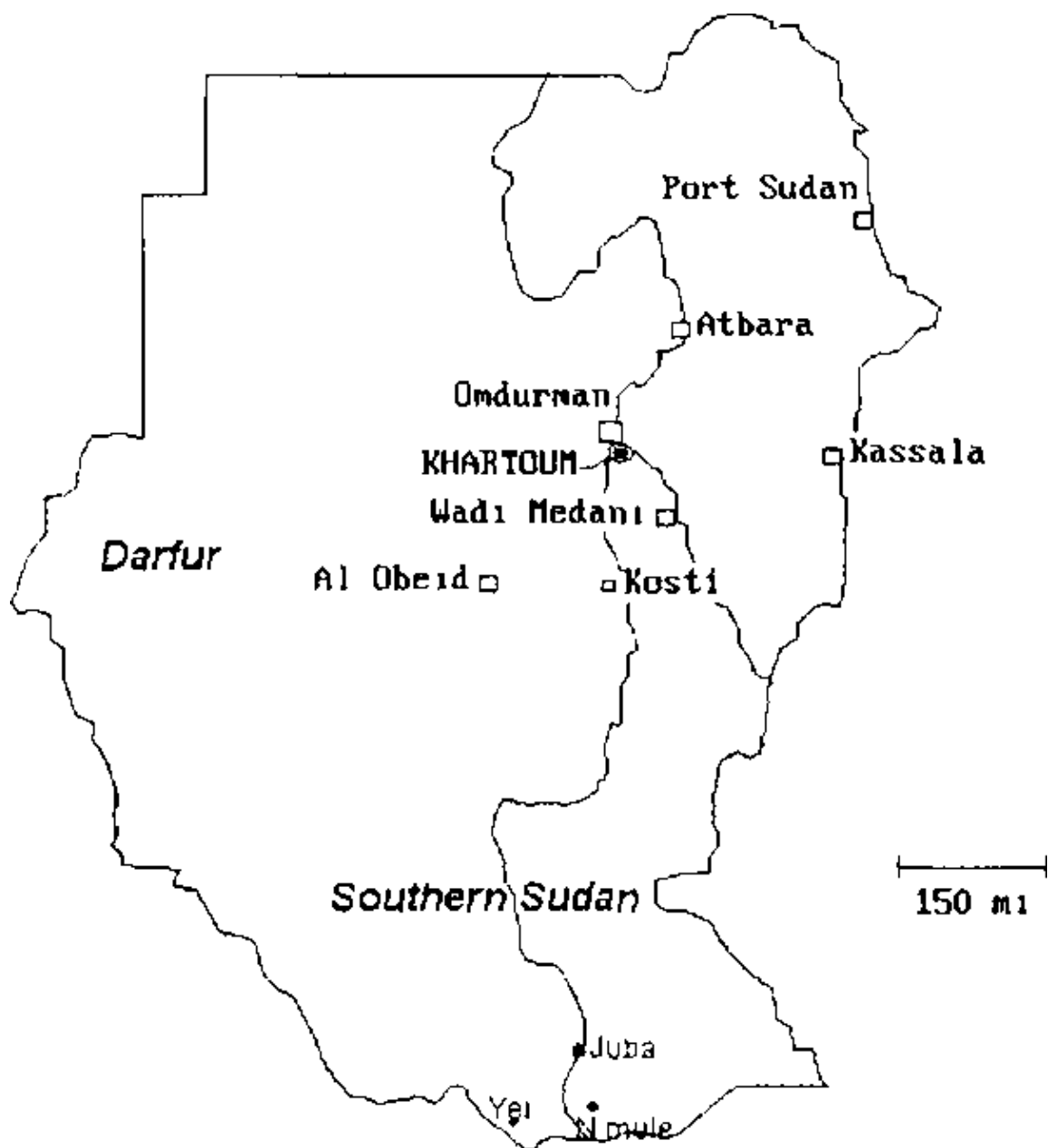
etc. to strengthen production capacity in the coming months once the flood waters recede.

11. Sudan

There are currently 2.8 million people in Sudan in need of emergency humanitarian aid. This total number includes at least 2.2 million people in Southern Sudan, 374,000 in the transitional zone, 80,000 in Khartoum and approximately 138,000 Ethiopian and Eritrean refugees.

Khartoum There are no new nutritional data on the approximately 80,000 internally displaced people in camps around Khartoum. Past reports have indicated high levels of wasting among this population (see RNIS #16, 14).

Red Sea State A deteriorating food security situation was noted in the Red Sea State area in northeast Sudan in October 1996 due to a series of droughts. This led to the undertaking of a nutritional survey in some provinces which showed very high levels of wasting and some population displacement as a result of lack of food (see RNIS #18). Supplementary feeding programmes were set up, along with general food distributions.



A recent survey was carried out in order to describe the overall situation in Port Sudan and the rural areas, including both resident and displaced populations. In Port Sudan Town, wasting and/or oedema was measured at 10.1% with 1.2% severe wasting and/or oedema. The under-five mortality rate was 1.12/10,000/day. Adult malnutrition¹ was also measured and led to the finding that 21.8% of women were malnourished (BMI<18.5, indicating mild energy deficiency) with 6.2% severely malnourished (BMI<16,

indicating severe energy deficiency). Women may be especially vulnerable due to male migration to towns at this difficult time of year since not all males who migrate get jobs and remit money (see Annex I (11 a–b)) [MOH/OXFAM 06/10/97].

¹ Cut-offs and interpretations for BMI measurements from: Bailey, K.V. and Ferro-Luzzi, A.. Use of body mass index of adults in assessing individual and community nutritional status. *Bulletin of the World Health Organization*, 1995, 73 (5): 673–680. See 'Indicators' box on back cover.

In the rural areas, wasting and/or oedema was measured at 28.1% with 6.0% severe wasting and/or oedema. The under-five mortality rate was 1.84/10,000/day. High rates of night blindness and Bitot's spots were noted. Although coverage of the vitamin A supplement distribution had improved since the previous survey, coverage was still low, especially in rural areas. The endemic problem of micronutrient deficiency in the state has been exacerbated by diminished availability of milk. Furthermore, in rural areas green leafy vegetables are discarded or used as animal feeds. Although the MOH has a state-wide programme of vitamin A supplementation, due to lack of resources, remoter areas are poorly covered. Fifty percent of women measured were malnourished (BMI<18.5) with 11.6% severely malnourished (BMI<16) (see Annex I (11c–d)) [MOH/OXFAM 06/10/97].

In both the urban and rural population risk of malnutrition for children increase when complementary foods are introduced (generally at 4–6 months in Port Sudan and 12 months in the rural areas), although there is a bigger increase in the rural areas. This may be partly due to the fact that milk which is used as one of the first complementary foods period has become scarcer due to the droughts [MOH/OXFAM 06/10/97].

Although there has been considerable loss of livestock with the successive droughts, the main form of livelihood amongst the rural population is still livestock production. The terms of trade for livestock has improved considerably since the survey last year [MOH/OXFAM 06/10/97].

Currently, the coastal areas of the Red Sea Hills and those along the Nile are threatened by rising waters across eastern Africa. As a result, inhabitants of Port Sudan may be at risk of outbreaks of cholera and other infectious diseases [IFRC 19/11/97].

Southern Sudan A war between Southern Sudanese and Government forces has been ongoing for almost fifteen years. Peace talks aimed at bringing about an end to the war have been initiated on several occasions. The most recent talks took place at the end of October 1997, but reached no conclusive accords [IRIN 31 Oct – 6 Nov 97, SCIO 15/11/97, WFP 31/10/97].

There has been a general deterioration in the security situation in Southern Sudan. For example, continued fighting around Juba and in Bahr-el-Ghazal is leading to new population movements and rendering people food insecure. The fighting continues to jeopardise humanitarian efforts in the area. In another example, almost 2,000 people fled their homes in Torit due to rebel activity. Estimated food aid needs for the November–December period in 1997 were three times those for the corresponding period in 1996 [IRIN 28/11/97, OLS 13/10/97, WFP 17/10/97].

There are reports of malnutrition amongst many of the internally displaced populations in southern Sudan. For example, recent reports indicated malnutrition amongst concentrated groups of displaced in a number of areas in Juba county. Aid is distributed with Government clearance and as security allows. In the first three weeks of October food had been delivered to over 195,000 people though the southern corridor [WFP 24/10/97].

Nutritional surveys often confirm a high prevalence of malnutrition as recently occurred with a survey in August in Aswa camp, near Nimule on the Sudan–Uganda border. This camp was established in 1996, and has had a relatively stable population until May 1997. At that time, there was an influx of newly displaced people and the population increased from approximately 3,800 to 5,300. From May–August 1997, the number of children enrolled in supplementary feeding programmes increased steadily and at the end of August a nutritional survey showed 26.3% wasting with 2.9% severe wasting. No cases of oedema were reported (see Annex I (11e)). Only 38.6% of malnourished children were found to be enrolled at feeding centres [ACF 23/08/97].

The population is divided into two groups for ration distribution. Those who have been in the camp for a while receive a half ration while the newer arrivals receive a full ration. There appear to be several factors leading to this high prevalence of wasting. The ration is meant to provide 1800 kcals/person/day, but oil has been

missing from the ration since July 1997. In addition, this population receives seeds and tools but the new arrivals were too late for this distribution. Furthermore, the harvests of those who had received the seeds and tools was poor due to drought. Also, new arrivals had to wait up to two months to receive food aid during which time they were dependent on the generosity of neighbours and scavenging for wild food [ACF 23/08/97].

A recurring problem with food distribution delays in Southern Sudan is highlighted by events in Aswa camp. In July, CSB was provided (by mistake) for the supplementary feeding centre instead of the usual UNIMIX. However, two weeks were required to obtain the authorisation necessary to distribute this commodity, during which time no food was distributed through the supplementary feeding programme [ACF 23/08/97].

Ethiopian and Eritrean Refugees There are approximately 400,000 Ethiopian and Eritrean refugees in Sudan, 138,000 of whom require assistance. There are no reports of change to their nutritional status. The most recent nutritional data available is from December 1996, when levels of wasting varied from 3.2–15.7% (see RNIS #19).

Overall, the displaced population around Khartoum can be considered to be at moderate risk of malnutrition and associated mortality (category IIb in Table 1) due to past reports of high levels of wasting and limited access by humanitarian agencies. The displaced population in the Red Sea State can be considered to be at high risk (category I in Table 1), as can the population in Aswa camp in Southern Sudan. The remaining population in Southern Sudan can be considered to be at moderate risk, although there are undoubtedly pockets of high risk. The Ethiopian and Eritrean refugees are probably not currently at heightened risk (category IIc in Table 1).

Ongoing interventions: General ration distributions and selective feeding programmes should be continued in the Red Sea State. Vitamin distributions should also be continued. Other initiatives to improve nutritional and food security would include project to assist in the re-stocking of livestock and support to MOH for their vitamin A distribution programme.

An OLS Needs Assessment will form the basis for the 1998 Appeal for Southern Sudan. However, in the meantime food pledges are needed to fill pipeline gaps. As procedures for distribution authorisation disrupt food aid provision, some exploration of possible alternative procedures may prove useful. In Aswa camp for the displaced, agencies should continue operating the supplementary feeding programme and include oil with the current ration of 300 gms of UNIMIX. The camp population would also benefit from improving outreach of health care workers in order to improve coverage of the feeding centre. The nutritional status in the camp should be re-assessed in six months time.

12. Uganda

The number of refugees and IDPs identified as requiring assistance in Uganda is estimated to be at least 586,000 people. This represents an increase from the last RNIS report, due to an increased numbers of IDPs. In fact, the number of IDPs is changing rapidly and may well be higher than that cited. Numbers are broken down by country of origin in the box below:

<i>Origin</i>	<i>Jun. 96</i>	<i>Sep. 96</i>	<i>Dec. 96</i>	<i>Mar 97</i>	<i>Jun. 97</i>	<i>Sep. 97</i>	<i>Dec. 97</i>
Sudanese Refugees	214,000	214,000	214,000	225,000	165,000	175,000	176,000
IDPs	–	20,000	200,000	200,000	150,000	270,000	382,000
Rwandan Refugees	7,000	7,000	11,500	14,500	17,000	14,000	14,000
Refugees from DRC	12,300	15,800	15,800	28,800	21,000	14,000	14,000
Total	233,3000	256,800	441,300	468,300	353,000	473,000	586,000

Insecurity caused by fighting between government forces and rebel factions is leading to large-scale population movements in many areas of the country. In the early months of 1997, the conflict was largely restricted to the north and northwest areas of the country. By July, areas in the south western regions were also affected. The situation remains fluid – often as one areas stabilises another experiences an escalation in conflict. Fresh displacements occur with each upsurge in fighting, with some small-scale returns when the fighting subsides. Food resettlement packages have been given in a number of areas, but insecurity often disrupts humanitarian agency work [ICRC 12/11/97, USAID 27/10/97, WFP 03/10/97, 07/11/97]. There are no nutritional details available on the displaced population, but insecurity and the onset of the rainy season are

hampering food aid deliveries. This is likely to have a negative impact on the nutritional situation of these people.

There are approximately 176,000 Sudanese refugees in settlements in northern parts of Uganda, 2,000 of whom have recently arrived, fleeing fighting around the southern Sudanese town of Torit. Many of these people have small plots of land to farm and are partially self-sufficient. A survey carried out in Mongola settlement (population 10,800) showed 4.1% wasting, with no severe wasting, oedema was measured at 0.1%. In the surrounding villages (total population 3,200), wasting was measured at 5.9% with 0.5% severe wasting. Oedema was measured at 0.8% (see Annex I (12a–b)). These results show a drastic decrease in prevalence of wasting since December which has occurred in spite of the fact that general ration deliveries to this population have been erratic with half rations delivered on some occasions. These relatively low levels of malnutrition can be partially explained by a harvest of groundnuts and maize in the weeks preceding the survey. Although an improvement since the previous survey, coverage of the supplementary feeding programme in the surrounding villages was only 40.5% while in the settlement coverage was 62.5% [ACF Sep. 97, IRIN 28/11/97].

The number of Congolese and Rwandan refugees in Uganda has remained constant over the reporting period at almost 28,000 people. There are no new reports on the nutritional situation of this population.

Flooding due to unusually heavy rains in western parts of the country have led to the displacement of up to 150,000 people [IRIN 04/12/97].

Overall, the refugee and displaced populations in Uganda can be considered to be at moderate risk (category Mb in Table 1) due to ongoing insecurity and flooding.

Ongoing interventions: There is a need for nutritional surveys in areas of conflict and displacement as and when security permits. More specifically, in Mongola settlement there is a need for home visiting to screen children for admission to feeding centres as coverage is presently low. There should also be another nutritional survey in April 1998 during the "hungry season" period.

13. Zambia

There are approximately 100,000 Angolan refugees in Zambia, 15,000 of whom require humanitarian assistance. Recent reports are that 1,500 of these refugees have repatriated [IRIN 05/12/97]. There are also approximately 10,000 refugees from DRC.

Asia – Selected Situations

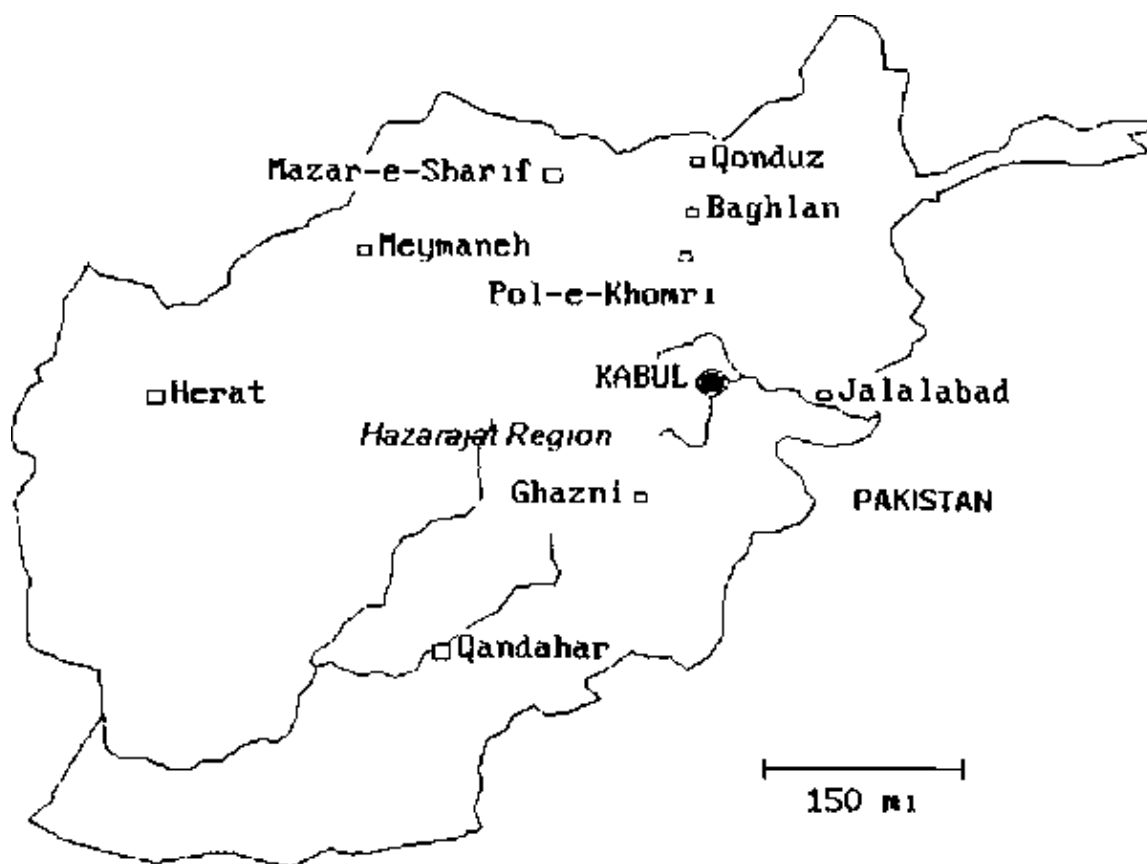
The most recent overview of the numbers of refugees and displaced people in Asia (as of the end of 1996) is as follows. There were an estimated 4.8 million refugees in Asia, of whom over 1.2 million were Afghans in Pakistan and in Iran (1.5 million). There were reported to be 600,000 Iraqis in Iran. Other large groups were refugees from Viet Nam in China (289,000), and Bhutanese in Nepal (92,000). No comprehensive data were available on the numbers of internally displaced populations in Asia, but they were certainly in the millions (UNHCR, 1997 'Populations of Concern to UNHCR').

This section of the report aims to give updated information on some of these situations. The current situation for the Afghan refugees/displaced populations, the largest single group in Asia with approximately three million affected people, is described. Available information on the Bhutanese refugees in Nepal and refugees from Myanmar in Bangladesh are included because of reports of micronutrient deficiencies. A section on the situation in Sri Lanka is also included. As in the past, we also include information on Southern Iraqi refugees in Iran.

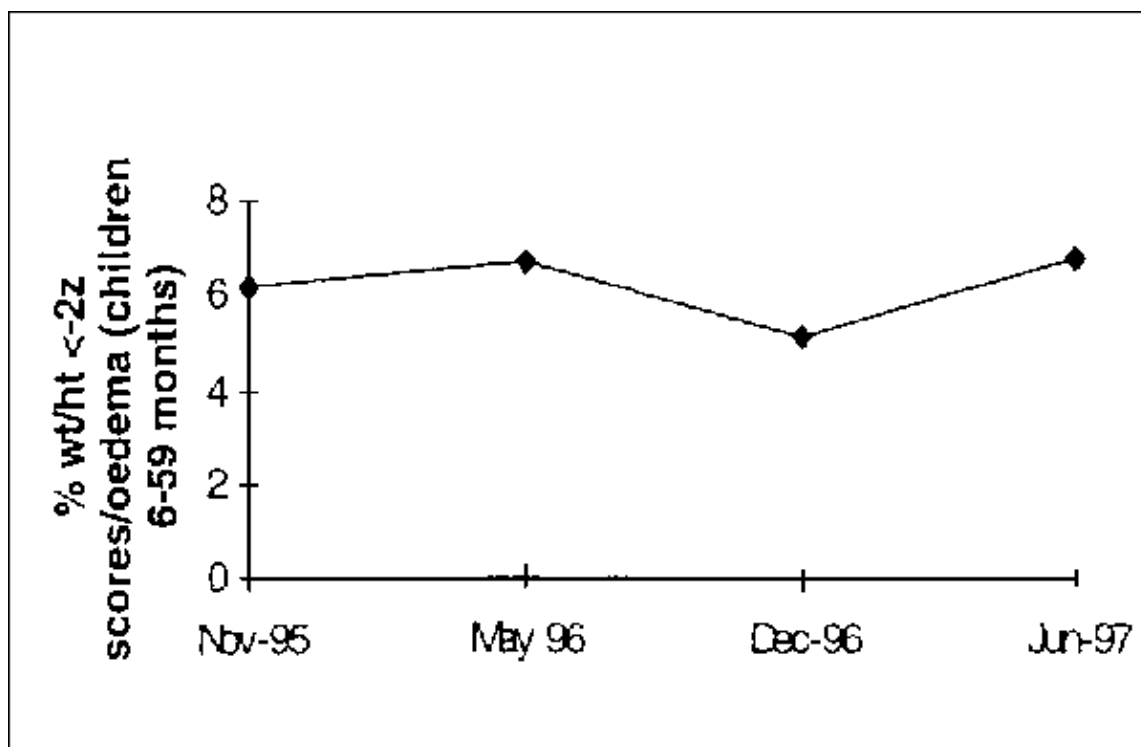
14. Afghanistan Region

Fighting is continuing in Afghanistan, with the front line now about 30–40 kilometres north of Kabul. Much of the rest of the country is calm. UN buildings have been looted and at the end of October in one area – Hairaton – 50,000 tons of food per day were being taken to feed troops. This has, reportedly, since stopped [DHA 28/10/97].

Access to some services for women in Kabul is improving. For example, a recent report confirmed that women were being admitted to Kabul's hospitals, and that many female staff have returned to work. However, after a visit to the country, the UN Assistant Secretary-General and Special Advisor on Gender Issues concluded that 'the situation of women in Afghanistan is...a very dire one' [ICRC 26/11/97, UNDP/PI 26/11/97].



A survey carried out in June 1997 in Kabul showed 6.7% wasting with 0.5% severe wasting. Oedema was measured at 0.1% (see Annex I (14a)). These results are comparable to those obtained in previous surveys (see graph).



Malnutrition in Kabul over time

However, closer analysis of the data shows that a greater proportion of children have low weights (although they are not malnourished as defined by $-2\text{ SD} < \text{WHZ}$) than in any previous survey since November 1995. There are a number of factors at play here. The fact that prevalence of wasting has not increased is likely to be attributable to the existence of feeding centres and the bakery subsidy programmes. However, the food security situation in the capital is still precarious for most people. The country has had to face a blockade from Iran and Pakistan who have been the major exporters of food to Afghanistan. This has contributed to an increase in the price of wheat flour at a time when there has been no increase in wages. Coverage of the selective feeding programmes in Kabul was low at only 224% [ACF Jun. 97].

Permission from the Taliban to import food aid into the Hazarajat region has so far not been granted and it is estimated that 1.2 million people are affected by the blockade, with 160,000 of the most vulnerable facing starvation unless food supplies reach the area. A combination of the blockade and poor harvests due to frost and flooding has meant that many households are anticipated to run out of food by December. The more expensive option of airlifting food supplies into the area is now planned [DHA 13/11/97, WFP 26/11/97].

There are reports of some returnees from Pakistan to Kandahar [DHA 28/10/97].

Pakistan There are no reports to change in the adequate nutritional status of the approximately 330,000 Afghani refugees requiring aid in Pakistan.

Iran There are no reports on the nutritional status of the approximately 322,000 assisted Afghani refugees in Iran.

Overall, those requiring aid in the Hazarajat region, where access has been denied, are likely to be at heightened risk (category Ha in Table 1), particularly with the beginning of the winter season. The remaining population in Afghanistan is likely to be at moderate risk (category IIb in Table 1), while the refugees in Iran and Pakistan are not currently considered to be at heightened risk (category IIc in Table 1).

Ongoing interventions: Resources should be made available for the urgent airlift programme to Hazarajat region. In Kabul there is a need to continue close monitoring of the population's nutritional status and to keep open the existing feeding centres in the capital city. There is also a need to increase home visiting by community health workers in order to improve prevention and detection of malnutrition. Increased co-ordination between humanitarian agencies may help to ensure all vulnerable individuals and families are receiving adequate aid.

15. Bhutanese Refugees in Nepal

There are approximately 92,000 Bhutanese refugees in Nepal who fled their country of origin in the early 1990s. Reports over the last few years have been of an adequate and stable nutrition and health situation for this population, despite continual diagnoses of a few cases of pellagra, beri-beri, and scurvy.

In 1998, the general ration provided will be very slightly reduced with a small reduction in the amount of rice to be provided [UNHCR 21/11/97].

Ongoing interventions: The annual nutritional survey which is generally carried out in June, will be particularly important to verify whether there have been any effects of the general ration changes on the population.

16. Refugees from Rakhine State, Myanmar in Bangladesh

Approximately 250,000 people fled Myanmar's Rakhine State in 1991 and 1992 to seek refuge in Bangladesh. Repatriation under UNHCR auspices began in 1994, and there are currently 21,000 refugees remaining in two camps in Bangladesh.

Refugees recently refused rations made available to them for several weeks in protest of the forced repatriation of approximately 400 people in July 1997. The boycott is now over and the ration distributed is providing approximately 1900 kcals/person/day and consists of rice, pulses, oil, salt, and sugar [UNHCR 21/11/97]. Fortified blended foods have been missing from the general ration since November 1996, and despite symptoms indicating micronutrient malnutrition (prevalence of angular stomatitis of 8.9% – see RNIS #21), no substitute has been found, although local procurement of the commodity is now being explored by WFP [UNHCR 08/12/97].

A survey in June 1997 showed 14.6% wasting (see RNIS 21). Efforts to address this malnutrition include increased outreach on the part of health workers in encouraging parent to enrol their children in feeding programmes. To compensate for a lack of blended foods in the supplementary feeding programmes for pregnant and lactating women, a wet feeding programme of high energy milk (whole milk powder, oil and sugar) was introduced in November 1997 for this group. It is likely that the nutritional situation is improving [UNHCR 08/12/97].

Overall, this population can be considered to be at heightened risk (category IIa) due to the presence of micronutrient malnutrition, although there is likely that the situation is improving.

Ongoing interventions: An assessment of feeding programme coverage should be undertaken. If coverage is found to be low, an investigation into reasons for this would be needed.

17. Marsh Arabs in Southern Iraq

Living standards in Iraq have deteriorated sharply since imposition of the international embargo imposed following the Gulf war. The Marsh Arabs are believed to be amongst the most affected groups as this population have suffered persecution for many years. A programme implemented by the government to drain the marshes has deprived the Marsh Arabs of their livelihoods and their homes. This population has also had to endure extreme hardships as a result of arbitrary arrests and torture, as well as discrimination with regard to gaining access to resources.

The more recent oil-for-food arrangements which have been sanctioned by the international community now allows Iraq to sell oil providing the proceeds are used to purchase food and other goods for humanitarian purposes. However, in spite of this new arrangement, malnutrition remains a problem in the country. The food rations available through government programmes do provide a significant portion of energy needs but are deficient in other nutrients, particularly vitamin A and C. The extent to which the Iraqi population can supplement this ration to obtain a more balanced diet is not known [FAO 03/10/97, WFP 10/10/97]. Furthermore, as eligibility for this ration requires the beneficiary to show an identify card, it is likely that many families are missing out on this ration, i.e. families are in the process of registering, families choose not to register or families have been denied the right to register. It is probable that large numbers of Marsh Arabs are unregistered [RNIS #21].

Many Marsh Arabs have crossed the border and are living in a number of camps as refugees in Iran. New arrivals are continually being reported and it is currently estimated that there are 46,000 refugees living in the camps. A further 57,000 are living outside of the camps and are thought to be self-sufficient [OHRI 09/09/97]

There have been no new nutritional surveys on this population since 1994. At that time, wasting in children between 12–60 months was measured at 25% (see Annex I (17a)). There were many problems identified at this time, including an inadequate general ration, inadequate water and sanitation and inadequate medical care. These difficulties have now reportedly largely been resolved. There are however some residual problems with the regularity of food distributions and a lack of vitamins, particularly vitamin A and C in the ration. Also, the ration does not provide a commodity that is suitable as a complementary food. There is also a reported lack drugs so that antibiotic treatments are not always offered when necessary [OHRI 09/09/97, ICA 1994].

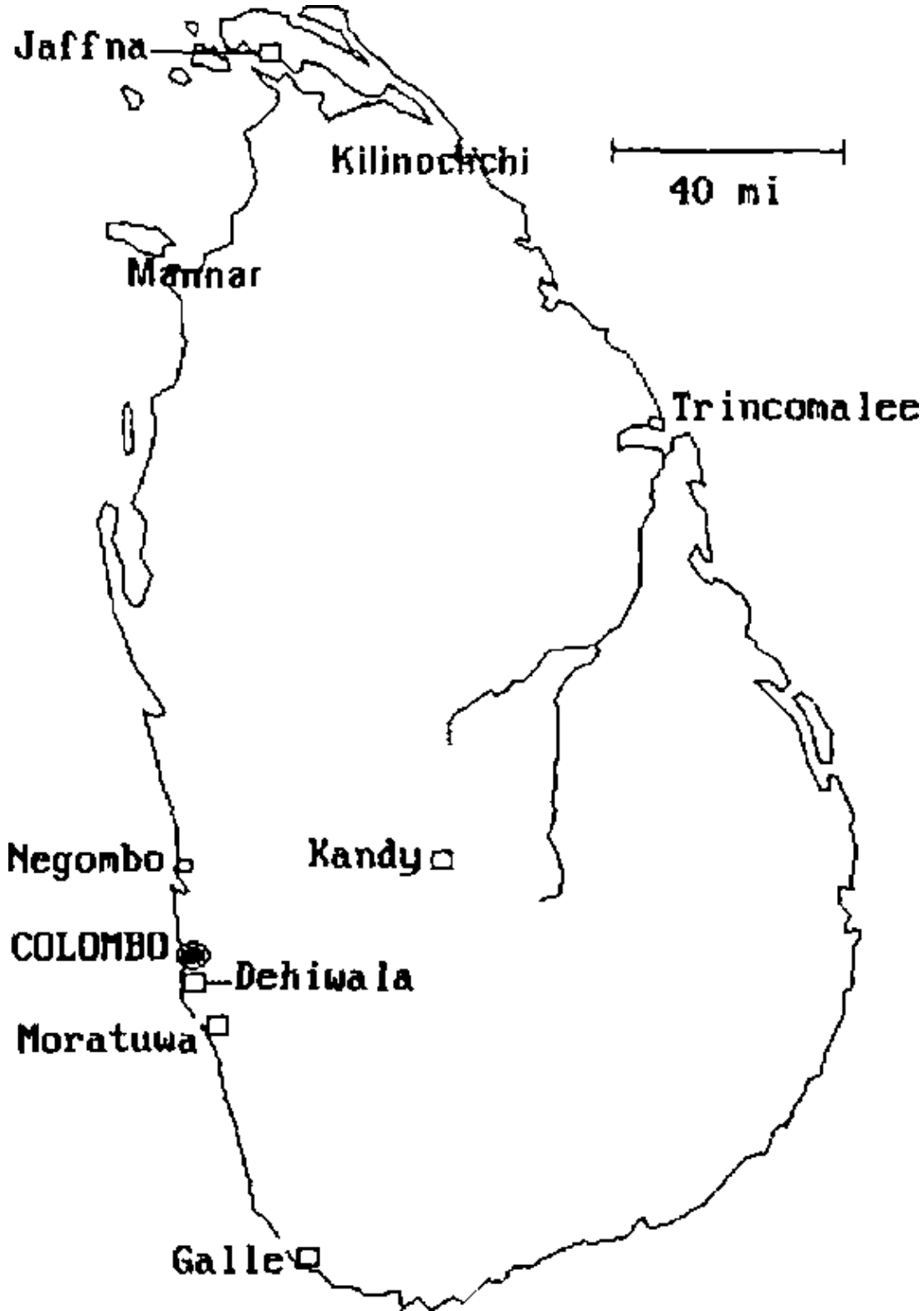
Overall, the Marsh Arabs in Iraq are thought to remain at heightened risk of mortality due to inadequate food and medical services (category IIa) although there are a lack of data to support this assertion. The refugees in Iran are not believed to be at heightened risk (category IIc in Table 1)

Ongoing interventions: The need for vulnerable group feeding in Iraq, e.g. orphanages, IDPs, social institutions, malnourished children under five, remains essential as the current food basket does not meet the special needs of these groups. These programmes, along with economic rehabilitation, particularly agricultural rehabilitation will help many Iraqi civilians. It is, however, unlikely to have a significant positive impact on the Marsh Arabs who remain a marginal population.

In the camps in Iran, consideration should be given to providing a fortified blended food which will improve vitamin intake and also make available an appropriate complementary foods. However, provision of such a food would necessitate some form of nutritional education to encourage most appropriate use of this type of food. There is also a need for more drugs and vitamin A and C distribution for under fives through camp clinics.

18. Sri Lanka

A civil war between government forces and the separatist Liberation Tigers of Tamil Eelam (LTTE) has been ongoing in Sri Lanka for the past 14 years. The security situation is very fluid, but at present, the government controls most of the country. The LTTE controls areas in the Wannai region. The number of people internally displaced by this fighting is difficult to determine with any precision, and best estimates are that they number around 410,000. Many displaced people are living with relatives or friends, and an estimated 21,000 are living in UNHCR–assisted open relief centres. In addition, there are approximately 65,000 people living as refugees in government–run camps in India.



Assistance to the displaced populations is being provided by the government of Sri Lanka as well as international agencies such as UNHCR, although insecurity sometimes hampers aid deliveries. A recent

survey in Mulikulam, Mannar district, an open relief centre housing many who fled insecurity in June 1997, showed a worrying situation. Wasting was measured at 24.3% with 7.3% severe wasting. These high levels of wasting were thought to be attributable to many factors, including inadequate water supplies and irregular food distributions. Since the survey, water supplies have improved, and supplementary feeding programmes have been established [MSF–F 19/08/97, UNHCR 27/08/97].

Much of the country's infrastructure has been destroyed in the ongoing conflict. Micro–projects are being implemented in order to address these problems. These projects are designed to minimise the potential for further displacement for socio–economic reasons, and to stabilise populations by recreating community structures. Projects include:

- road construction;
- water and sanitation systems construction;
- school renovations and;
- assistance for small businesses.

Overall, the affected population in Sri Lanka is not currently thought to be at heightened risk (category IIc in Table 1). There are likely to be pockets of high risk, such as in Mulikulam, Mannar district, but population breakdowns are not currently available.

Ongoing interventions: Security is the main impediment to improving the timelines of food distributions. However, there is room for improving the monitoring of food distributions. Furthermore, micro–projects should be continued and supported where security allows.

Listing of Sources for December 1997 RNIS Report #22

Org*	Date	Title of Report
ACF	Jun–97	Nutrition Survey, Kabul
ACF	Aug–97	Enquete nutritionnelle anthropometrique et enquete de mortalite retrospective. Province de Kayanza, Burundi
ACF	23/08/97	Aswa Camps – Anthropometric Nutritional Survey, South Sudan
ACF	Sep–97	Anthropometric Nutritional Survey in Mongola and Local Villages, Moyo, N Uganda
ACF	12/09/97	Nutritional Survey – Upper Bong County, Liberia
ACF	29/10/97	Nutritional Anthropometric Surveys – Sierra Leone
ACT	23/10/97	ACT Update No. 8 on Sierra Leone
AEF	23/04/97	Nutrition Survey Report – Nyarugusu Refugee Camp, Kasulu, Tanzania
AEF	29/08/97	Nutrition Survey Report – Nyarugusu Refugee Camp, Kasulu, Tanzania
CAD	21/08/97	Nutritional Survey, Bubanza Province
CAD	29/11/97	Comments on Survey in Bubanza Province
DHA	30/09/97	Liberian Humanitarian Situation Report No. 86
DHA	28/10/97	Afghanistan Weekly Update No. 238
DHA–a	28/10/97	Sierra Leone Humanitarian Situation Report
DHA	29/10/97	Liberian Humanitarian Situation Report No. 88
DHA	31/10/97	Burundi Humanitarian Situation Report No. 28

DHA	13/11/97	Afghanistan Weekly Update No. 240
DHA	17/11/97	Population Movements in the Great Lakes Region
FAO	3/10/97	FAO/WFP Food Supply and Crop Assessment Mission to Iraq
FSAU	Oct-97	Complex Food Emergency in Sorghum Belt
ICA	16/06/05	A Nutritional Survey for Children in the Iraqi Refugee Camps in the Southwest of Iran
ICRC	06/11/97	After the fighting, the floods
ICRC	12/11/97	Update No. 97/01 on ICRC Activities in Uganda
ICRC	26/11/97	Women gradually being readmitted to Kabul hospitals
IFRC	22/10/97	Great Lakes Region – Tanzania: Burundian and Rwandan Refugees
IFRC	19/11/97	Eastern Africa: Floods – Somalia, Kenya, Sudan, Ethiopia
IFRC	06/11/97	Congo–Brazzaville: Internally Displaced
IRC	30/08/97	Nutrition Survey Report – Mkugwa Refugee Camp (Tanzania)
IRC	01/09/97	Nutrition Survey Report – Nduta Refugee Camp (Tanzania)
IRC	03/09/97	Nutrition Survey Report – Kanembwa Refugee Camp (Tanzania)
IRC	05/09/97	Nutrition Survey Report – Mtendeli Refugee Camp (Tanzania)
IRC	10/10/97	Emergency Response (Rwanda)
IRIN	25/09/97	Emergency Update No. 257 on the Great Lakes
IRIN	21/10/97	Emergency Update No. 274 on the Great Lakes
IRIN	06/11/97	Emergency Update No. 286 on the Great Lakes
IRIN	10/11/97	Emergency Update No. 288 on the Great Lakes
IRIN	19/11/97	Update No. 295 for Central and East Africa
IRIN	24/11/97	Central and Eastern Africa: IRIN Update 298
IRIN	25/11/97	Central and Eastern Africa: IRIN Update 299
IRIN	28/11/97	Central and Eastern Africa: IRIN Update 302
IRIN	03/12/97	Central and Eastern Africa: IRIN Update 305
IRIN	04/12/97	Central and Eastern Africa: IRIN Update 306
IRIN	05/12/97	Central and Eastern Africa: IRIN Update 307
IRIN	08/12/97	Central and Eastern Africa: IRIN Update 308
IRIN	21/11/97	IRN Update No. 297 for Central and Eastern Africa
IRIN	22/10/97	Background Brief on Congo–Brazzaville
IRIN	10–16/10/97	IRIN Weekly Round–up 26–97 of Main Events in the Great Lakes Region
IRIN	14–20/11/97	Central and Eastern Africa: IRIN Weekly Round–up 31–97
IRIN	17–23/10/97	Great Lakes: IRIN Weekly Round–up 27–97 of Main Events in the Great Lakes Region
IRIN	1 Oct – 6 Nov	Great Lakes: IRIN Weekly Round–Up 29–97 31 Oct–6 Nov 97

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IRIN-WA	11/11/97	IRIN-West Africa Update 80-97
IRIN-WA	02/12/97	IRIN-West Africa Update 95-97
IRIN-WA	14/11/97	Weekly Roundup 22-97 of Main Events in West Africa 7-13 Nov 97
IRIN-WA	09/12/97	IRIN-West Africa Update 100-97
IRIN-WA	06/11/97	IRIN-West Africa Update 77-97
IRIN-WA	18-24/11/97	IRIN-WA Weekly Roundup 19-97 of Main Events in West Africa
MOH (Sudan) and Oxfam	06/10/97	Food Security and Nutrition Survey, Red Sea State, Sudan
MSF-B	Aug-97	Nutrition Survey Report for Ifo, Dagahaley and Hagadera Camps
MSF-B	12/10/97	Food Availability in Dadaab
MSF-F	19/08/97	Nutrition Survey in Mulikulam, Mannar District
MSF-H	Oct-97	Nutritional Survey - Kitchanga
OHRI	09/09/97	The situation of Iraqi refugees in Iran
OLS	13/10/97	OLS Weekly Update
OXFAM-a	23/10/97	Emergencies Bulletin - Angola, October 1997
OXFAM	23/10/97	Emergencies Bulletin - Sudan, October 1997
RI	07/10/97	Tuareg Refugees Return to a Bleak Future in Mali
SCF	19/09/97	Household Food Economy Update of Kakuma Refugee Camp
SCF	23/09/97	Household Food Economy Update of Dadaab Refugee Camps
SCIO	15/11/97	Sudan Monthly Report November 1997
UNDPI	07/11/97	4,000 to 5,000 displaced persons are evicted.... in Burundi
UNDPI	26/11/97	UN official, returning from Afghanistan, reports dire conditions for women
UNDPI	04/11/97	While human rights situation in Rwanda worsens, UN operation prevents further violence
UNHCR	21/11/97	Personal Communication - Bangladesh, Sri Lanka, Nepal, and Liberia Region
UNHCR	14/05/97	Malian refugees in Mauritania
UNHCR	18/09/97	Summary of Survey Results (Tanzania)
UNHCR	Oct-97	Repatriation and Reintegration of Liberian Refugees
UNHCR	29/10/97	Report on Joint Nutrition Survey
UNHCR	31/10/97	Monthly Population Statistics - Kenya
UNHCR	17/11/97	Statement on Health and Nutrition Situation in Kakuma
UNHCR	20/11/97	Personal Communication - Kenya
UNHCR	27/07/97	Comments on Survey Results
UNHCR	27/11/97	Report on the Repatriation of Togolese Refugees (draft)

UNHCR	08/12/97	Comments on Bangladesh Section
UNHCR	Jul 97 – Dec 98	Appeal for UNHCR's Programme in Sri Lanka
UNSG	04/12/97	First Report to the Security Council concerning the situation in Central African Republic
USAID	27/10/97	FEWS Bulletin – October 27, 1997
WFP	03/10/97	Weekly Update
WFP-a	10/10/97	'Oil-for-food' deal improves the overall food situation in Iraq
WFP	10/10/97	Weekly Update
WFP	14/10/97	Regional Reports on Relief Operations
WFP	17/10/97	Weekly Update
WFP	24/10/97	Weekly Update
WFP;	31/10/97	Weekly Update
WFP	01/11/97	WFP undertakes emergency aerial surveys in Southern Somalia
WFP	07/11/97	Weekly Update
WFP	14/11/97	Weekly Update
WFP	21/11/97	Weekly Update
WFP	26/11/97	Thousands face starvation – food convoys blocked
WFP	28/11/97	Weekly Update
WFP	10/12/97	Comments on CAR
WFP	05/12/97	Weekly Update
WV	31/10/97	Somalia Monthly Report Ending Oct 1997
WV	11/12/97	Personal Communication – Sierra Leone

*Org	
ACF	Action Contre la Faim
ACT	Action Churches Together
AEF	African Education Fund International
AI	Amnesty International
BAAG	British Agencies Afghanistan Group
CAD	Children's Aid Direct
CONCERN	
CWS	Church World Service
DHA	Department of Humanitarian Affairs
FAO	Food & Agricultural Organization of the United Nations
FSAU	Food Security Assessment Unit for Somalia
GOAL	
ICA	Iraqi Civil Aid

ICRC	International Committee of Red Cross
IFRC	International Federation of Red Cross
IRIN	Integrated Regional Information Network (of DHA)
IRIN-WA	Integrated Regional Information Network for West Africa (of DHA)
JRS	Jesuit Refugee Service
MSF-B	Medecins Sans Frontieres – Belgium
MSF-CIS	Medecins Sans Frontieres – Celula Inter-Seccoes
MSF-F	Medecins Sans Frontieres – France
MSF-H	Medecins Sans Frontieres – Holland
MSF-S	Medecins Sans Frontieres – Spain
OHRI	Organisation of Human Rights in Iraq
OLS	Operation Lifeline Sudan
PROMED	On-line Medical Updates
RI	Refugees International
SCF-UK	Save the Children Fund (United Kingdom)
SCIO	Sudan Catholic Information Office
SF	Sudan Foundation
UNAA	United Nations Humanitarian Assistance for Afghanistan
UNDPI	U.N. Department of Public Information
UNECOSOC	United Nations Economic and Social Council
UNHRCS	United Nations Humanitarian and Resident Coordinator for Somalia
UNHCHR	United Nation's High Commissioner for Human Rights
UNHCR	United Nation's High Commission on Refugees
UNICEF	United Nation's Children Fund
USCR	US Committee for Refugees
WFP	World Food Programme
WHO	World Health Organization
WV	World Vision

Tables and Figures

Table 1: Information Available on Total Refugee/Displaced Populations (as of December 1997)

<i>Situation</i>	<i>Population Numbers</i>				<i>Nutr Stat*</i>	<i>C</i>
	<i>Condition</i>	<i>Total</i>	<i>Change from Sep-97</i>			

	<i>I High Prev</i>	<i>Ila High Risk</i>	<i>Ilb Mod Risk</i>	<i>Ilc Not Critical</i>	<i>III Unknown</i>				
Sub-Saharan Africa									
1 Angola			981,000			981,000	39,000	det	Increased to due to arriva Rwandan an Burundi refu from DRC an some further displacemen
2 Benin/Ghana/Togo Region									
3 Burkina Faso/Mauritania						0	-40,500	stat	Organised repatriation complete
4 Burundi/Rwanda Region	135,000	435,000	2,354,000	618,200		3,542,200	955,000	det	Security problems regionally Increased to due to
									increased ne in Cong/Brazza and Rwanda
5 Central African Republic						0	-33,400	stat	The emergen operation ha ended due to combination repatriation a attainment o self-sufficien
6 Djibouti				25,000		25,000	0	stat	Increased to due to better estimate of population numbers
7 Ethiopia	263,000		78,000		53,000	394,000	0	stat	Recent surve results show levels of was in many cam
8 Kenya		132,000	48,000			180,000	3,500	stat	Dadaab are camp popula at high risk o to flood dam to camp structures
9 Liberia/Sierra Leone/		200,000		1,315,000		1,515,000	-249,000	imp	Decreased number requ ass/stance in Liberia

Guinea/Cote d'Ivoire										Som dispe Sierr to co
10 Somalia		240,000	930,000			1,170,000	0	det	Floo popu heig	
11 Sudan	8,000		2,648,800	138,000		2,794,800	0	stat	Poch maln likely Sout	
									Critic in Re pers	
12 Uganda			586,000			586,000	113,000	det	Incre due num	
									inter dispe requ assis	
13 Zambia				25,000		25,000	10,000	stat	Incre due of re DRC	
Total (Sub-Saharan Africa)	406,000	1,007,000	7,625,800	2,121,200	53,000	11,213,000	796,800			
Asia (Selected Situations)										
14 Afghanistan Region		160,000	1,590,000	652,000		2,402,000	0	stat	Incre num requ eme Afgh	
15 Bhutanese Refugees in Nepal				92,000		92,000	0	stat	A pr the p may risk	
									due micr defic dise	
16 Bangladesh		21,000				21,000	0	det	Rem refug risk micr ma/r elev wast	
17 Southern Iraq			174,000	46,000		220,000	0	stat	Thos Mars	

										considered to at high risk
18 Sri Lanka			500,000			500,000			stat	

I: High Prev – Those reported with high prevalences of malnutrition (where available > 20% wasting) and/or micronutrient deficiency diseases and sharply elevated mortality rates (at least 3x normal).

Ila: High Risk – At high nutritional risk, limited data available, population likely to contain pockets of malnutrition (e.g. wasting).

Ilb: Mod Risk – Moderate risk, may be data available, pockets of malnutrition may exist

Ilc: Not Critical – Probably not at heightened nutritional risk.

III: Unknown – No information on nutritional status available.

** Indicates status of nutritional situation. Imp–improving; det = deteriorating; stat = static (i.e. no change).*

Table 2: Summary of Origin and Location of Major Populations of Refugees, Returnees and Displaced People in Africa December 1997 – RNIS #22 (population estimates in thousands)

From	To/In										
	Angola	Burundi	Congo/Brazzaville	Cote d'Ivoire	Dem Rep Congo	Eritrea	Ethiopia	Ghana	Guinea	Kenya	Li
Angola	979				50						
Burundi	1	570			5						
Congo/Brazzaville			450		30						
Cote d'Ivoire											
Dem Rep Congo					367						
Eritrea											
Ethiopia							36			6	
Ghana											
Guinea											
Kenya							9				
Liberia				210				16	231		
Rwanda	1		11		18						
Sierra Leone									170		
Somalia							278			132	
Sudan					111		53			37	
Tanzania											
Uganda					4						
Zambia											

TOTAL	981	570	461	210	585	0	376	16	401
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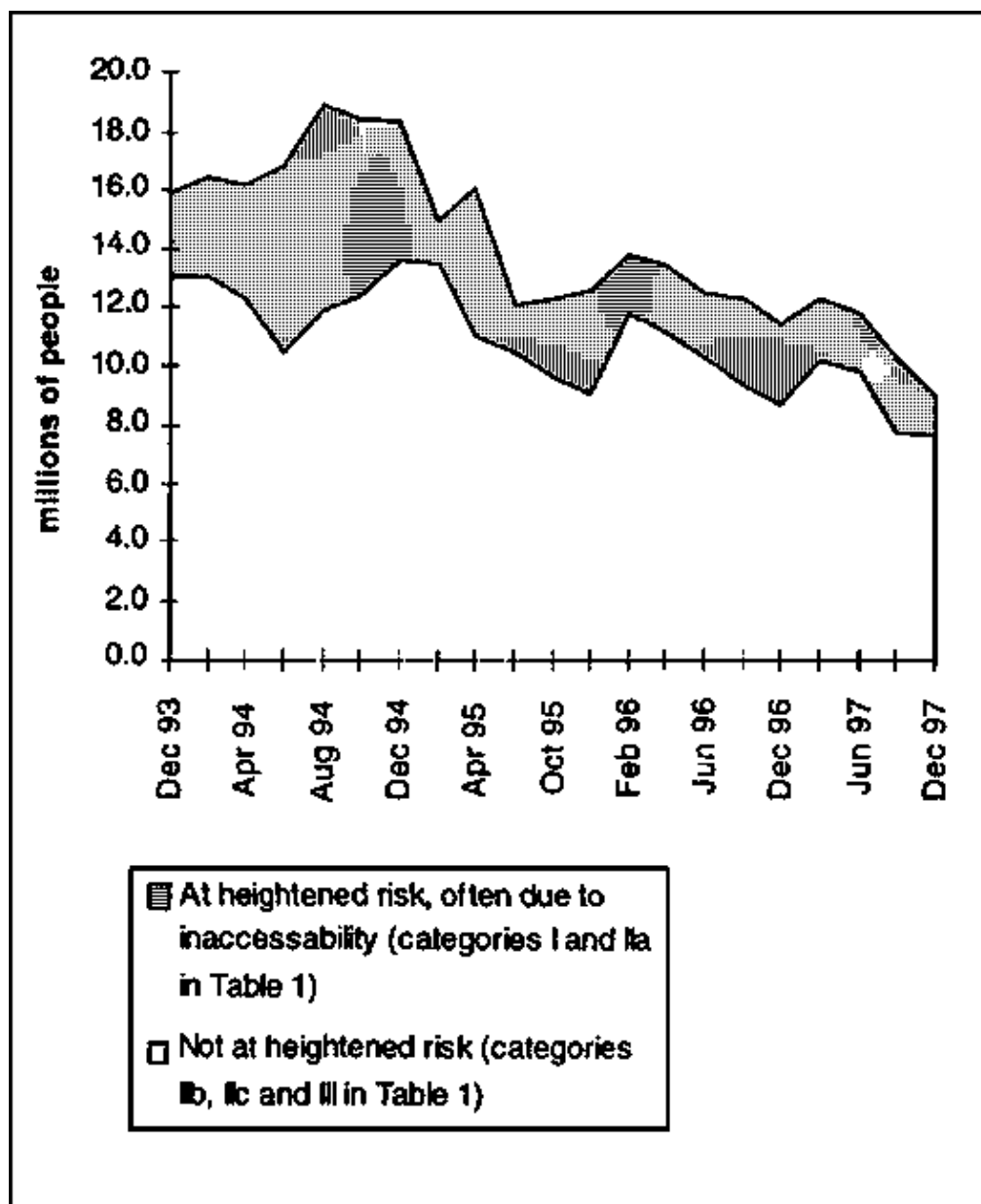
NOTES:

(1) This chart is intended to include major population groups in Africa (i.e. over 100,000 people affected from country of origin).

(2) Boxes on the diagonal (shaded) show internally displaced populations (total = 8.8 million).

(3) Numbers referred to in the text are usually by the country where the population is located (i.e. column totals).

For the regional situations of Burundi/Rwanda and Liberia/Sierra Leone the description is by country of origin (i.e. row totals).



Numbers of Refugees and Internally Displaced in Sub-Saharan Africa and Estimated Nutritional Risk over Time (Dec. 93–Dec. 97)

Annex 1: Results of Surveys Quoted in December 1997 RNIS Report (#22) – usually children 6–59 months

Survey Area	Survey Conducted by	Date	% Wasted*	% Severely	Oedema (%)	Crude Mortality	Un Mo
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				<i>Wasted*</i>		<i>(/10,000/day)</i>	<i>(/10,000/day)</i>
4. Burundi/Rwanda Region							
<i>a. South Kayanza Province, Burundi</i>	ACF	Aug-97	12.8	0.9	1.1		4.7
<i>b. North Kayanza Province, Burundi</i>	ACF	Aug-97	13.4	1.9	0.7		4.3
<i>c. Bubanza Province, Burundi</i>	CAD	Aug-97	13.2	2.9	6.3		
<i>d. Kitchanga, Eastern DRC</i>	MSF-H	Apr-97	3.8	0.5	8.1	0.94	1.37
<i>e. Nyarugugu Camp, Kasulu District, Tanzania</i>	AEF	Aug-97	2.3	0.3	0.0		1.06
<i>f. Mtabila, Kasulu District, Tanzania</i>	UNHCR	Sep-97	5.4	0.7			
<i>g. Moyovosi, Kasulu District, Tanzania</i>	UNHCR	Sep-97	3.9	0.5			
<i>h. Lugufu, Kasulu District, Tanzania</i>	UNHCR	Sep-97	2.7	0.4			
<i>i. Kanembwa Camp, Kibondo, Tanzania</i>	IRC	Sep-97	2.2	0.3	0.0	0.2	0.86
<i>j. Mtendeli Camp, Kibondo, Tanzania</i>	IRC	Sep-97	3.2	1.0	0.0	0.41	0.92
<i>k. Mkugwa Camp, Kibondo, Tanzania</i>	IRC	Sep-97	5.5	1.0	0.0		
<i>l. Nduta Camp, Kibondo, Tanzania</i>	IRC	Sep-97	1.3	0.4	0.0	0.63	
7. Ethiopia							
<i>a. Kebre Beyah</i>	ARRA/UNHCR/WFP/SCF (UK)	Aug 97	14.8 (<80%)	2.2 (<70%)			
<i>b. Camaboker</i>	?	Aug 97	11.3 (<80%)	1.3 (<70%)	0.0		
<i>c. Rabasso</i>	?	Aug 97	8.5 (<80%)	0.5 (<70%)	0.2		
<i>d. Daror</i>	?	Aug 97	9.9 (<80%)	1.1 (<70%)	0.1		
<i>e. Aisha</i>	?	Aug 97	19.2 (<80%)	1.4 (<70%)	0.2		
<i>f. Tereriber</i>	?	Aug 97	16.4 (<80%)	1.7 (<70%)	0.7		

<i>g. Darwonaji</i>	?	Aug 97	17.6 (<80%)	2.1 (<70%)	3.3		
<i>h. Hartishek (A&B)</i>	?	Aug 97	12.3(<80%)	3.2 (<70%)	0.0		
<i>i. Bonga</i>	?	Sep-97	14.2 (<80%)	1.6 (<70%)	1.5		
<i>j. Fugnido</i>	?	Sep-97	27.2 (<80%)	4.2 (<70%)	0.5		
<i>k. Dimma</i>	?	Sep-97	10.8 (<80%)	1.3 (<70%)	1.6		
<i>l. Shirkole</i>	?	Sep-97	13.7 (<80%)	2.7 (<70%)	1.6		
8. Kenya							
<i>a. Ifo camp</i>	MSF-B	Aug-97	10.4	0.8	2.0		
<i>b. Dagahaley Camp</i>	MSF-B	Aug-97	12.1	1.3	1.3		
<i>c. Hagadera Camp</i>	MSF-B	Aug-97	17.6	1.7	1.5		
9. Liberia/Sierra Leone Region							
<i>a. Bong County, Liberia</i>	ACF/LWF (WS)/SCF (UK)	Sep-97	6.7	0.4	1.9		
<i>b. Makeni Town, Sierra Leone</i>	ACF	Oct-97	13.2	1.4	0.8		
<i>c. Rural Bombali District, Sierra Leone</i>	ACF	Oct-97	14.2	1.3	1.3		
<i>d. Tonkolili, Sierra Leone</i>	ACF	Oct-97	17.7	1.9	1.2		
10. Sudan							
<i>a. Port Sudan, Red Sea State (children)</i>	MOH/OXFAM	Aug-97	10.1*	1.2**			
<i>b. Port Sudan, Red Sea State (adults)</i>	MOH/OXFAM	Aug-97	21.8 (BMI<18.5)	6.2 (BMI<16)			
<i>c. Rural Red Sea State (children)</i>	MOH/OXFAM	Aug-97	28.1**	6.0**			
<i>d. Rural Red Sea State (adults)</i>	MOH/OXFAM	Aug-97	50.0 (BMI<18.5)	11.6 (BMI<16)			
<i>e. Aswa Camp, Southern Sudan</i>	ACF	Aug-97	26.3	2.9	0.0		
12. Uganda							
<i>a. Mongola Settlement</i>	ACF	Sep-97	4.1	0.0	0.1		

<i>b. Local Villages (near Mongola)</i>	ACF	Sep-97	5.9	0.5	0.8		
14. Afghanistan Region							
<i>a. Kabul</i>	ACF	Jun-97	6,7	0.5	0.1		
17. Iraq							
<i>a. Southwest Iran (Iraqi refugees)</i>	ICA	1994	21.2	3.8			
18. Sri Lanka							
<i>a. Mulikulam, Mannar District</i>	MSF-F	Aug-97	24.3 (<80%)	7.3 (<70%)			

* wt/ht unless specified; cut-off = n.s. means not specified but usually -2SD wt/ht for wasting and -3SD wt/ht for severe wasting

** Oedema is included in this figure.

NOTE: see box on back cover for guidance in interpretation of indicators.

Notes on Annex I

4. Great Lakes Region

a. This survey was carried out by Action Contre la Faim (ACF) in the displaced and regroupment camps in the southern part of Kayanza Province in August 1997. It was a transversal cluster survey measuring 963 children 6-59 months old or 65-110 cms if the age was not known. Wasting was defined as weight/height <-2 sd and severe wasting was defined as weight/height <-3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. The number is far higher if validation by the mother is included (see text). Global malnutrition is defined at wt/ht <-2 sd and/or oedema - in this case 14.0% (CI 11.0-17.5).

b. This survey was carried out by Action Contre la Faim (ACF) in the displaced and regroupment camps in the northern part of Kayanza Province in August 1997. It was a transversal cluster survey measuring 418 children 6-59 months old or 65-110 cms if the age was not known. Wasting was defined as weight/height <-2 sd and severe wasting was defined as weight/height <-3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. The number is far higher if validation by the mother is included (see text). Global malnutrition is defined at wt/ht <-2 sd and/or oedema - in this case 14.1% (CI 9.80-19.9).

c. This survey was carried out by Children's Aid Direct (CAD) in Bubanza Province in August. Displaced and regroupment camps in six accessible regions of the province were surveyed. It was a random sample, with sample size based on an expected prevalence of 35%. 651 children 6-59 months old were included in the survey. Wasting was defined as weight/height <-2 sd and severe wasting was defined as weight/height <-3 sd. Oedema was measured separately.

d. This survey was carried out by MSF-Holland in the Kitchanga region in Eastern DRC. It was a cluster survey, including 32 clusters. 937 children 6-59 months were included in the survey. Wasting was defined as weight/height <-2 sd and severe wasting was defined as weight/height <-3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. The number is far higher if validation by the mother is included (see text). Global malnutrition is defined at wt/ht <-2 sd and/or oedema - in this case 11.4% (CI 9.5-13.7).

e. This survey was carried out by African Education Fund International (AEF) in August 1997 in Nyarugusu camp for Congolese refugees in Tanzania. A systematic sampling method was used and 352 children 6–59 months old (or 65–110 cms if age was not known). Wasting was defined as weight/height <-2 sd and severe wasting was defined as weight/height <-3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. The number is far higher if validation by the mother is included (see text). Global malnutrition is defined at wt/ht <-2 sd and/or oedema – in this case 2.3% (CI 1.0–4.6).

f. These survey results from Mtabila camp in Kasulu District in Tanzania were communicated by UNHCR. 781 children were included in the survey. Wasting is defined as weight/height <-2 sd and severe wasting <-3 sd. No cases of oedema were noted.

g. These survey results from Moyovosi camp in Kasulu District in Tanzania were communicated by UNHCR. 759 children were included in the survey. Wasting is defined as weight/height <-2 sd and severe wasting <-3 sd. No cases of oedema were noted.

h. These survey results from Lugufu camp in Kasulu District in Tanzania were communicated by UNHCR. 728 children were included in the survey. Wasting is defined as weight/height <-2 sd and severe wasting <-3 sd. No cases of oedema were noted.

i. This survey was carried out by the International Rescue Committee (IRC) in Kanembwe camp, Kibondo District, Tanzania in September 1997. It was a systematic sample survey including 693 children 6–59 months old, or 65–110 cms if age was not known. Wasting was defined as weight/height <-2 sd and severe wasting was defined as weight/height <-3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. Global malnutrition is defined at wt/ht <-2 sd and/or oedema – in this case 2.2% (CI 1.2–3.7).

j. This survey was carried out by the International Rescue Committee (IRC) in Mtendeli camp, Kibondo District, Tanzania in September 1997. It was a systematic sample survey including 511 children 6–59 months old, or 65–110 cms if age was not known. Wasting was defined as weight/height <-2 sd and severe wasting was defined as weight/height <-3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. Global malnutrition is defined at wt/ht <-2 sd and/or oedema – in this case 3.2% (CI 2.2–4.5).

k. This survey was carried out by the International Rescue Committee (IRC) in Mkugwa camp, Kibondo District, Tanzania in September 1997. It was an exhaustive sample survey including 198 children 6 months old and greater than 65 cms, and less than 59 months old or less than 110 cms. Wasting was defined as weight/height <-2 sd and severe wasting was defined as weight/height <-3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is based on response to a question during the survey.

l. This survey was carried out by the International Rescue Committee (IRC) in Nduta camp, Kibondo District, Tanzania in September 1997. It was a systematic sample survey including 1015 children 6 months old and greater than 65 cms, and less than 59 months old or less than 110 cms. Wasting was defined as weight/height <-2 sd and severe wasting was defined as weight/height <-3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is based on response to a question during the survey. Global malnutrition is defined at wt/ht <-2 sd and/or oedema – in this case 1.3% (CI 0.7–2.3).

7. Ethiopia

a–h. These were joint surveys carried out by UNHCR/ARRA/WFP/SCF(UK) in the Eastern camps for Somali refugees in Ethiopia. The surveys were carried out in August 1997 and included 4,562 children 4–60 months old (or 60–110 cms). It was a random cluster survey. Wasting is defined as weight/height $<80\%$ of the median and severe wasting $<70\%$. This is done in order that the results be comparable to previous surveys. Oedema was recorded separately.

j-l. These were joint surveys carried out by UNHCR/ARRA/WFP/SCF (UK) in the Western camps for Sudanese refugees in Ethiopia. The surveys were carried out in September 1997 and included 1,945 children 4–60 months old (or 60–110 cms). It was a random cluster survey. Wasting is defined as weight/height <80% of the median and severe wasting <70%. This is done in order that the results be comparable to previous surveys. Oedema was recorded separately.

8. Kenya

a. This survey was carried out by MSF–Belgium with participation from UNHCR, CARE, WFP, Al Haremein, and MOH in Ifo Camp. It was a two–stage cluster sample survey including 894 children 6–59 months old or 65–110 cms. Wasting was defined as weight/height <–2 sd and severe wasting was defined as weight/height <–3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. Global malnutrition is defined at wt/ht <–2 sd and/or oedema – in this case 12.4% (CI 9.5–16.0).

b. This survey was carried out by MSF–Belgium with participation from UNHCR, CARE, WFP, Al Haremein, and MOH in Dagahaley Camp. It was a two–stage cluster sample survey including 912 children 6–59 months old or 65–110 cms. Wasting was defined as weight/height <–2 sd and severe wasting was defined as weight/height <–3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. Global malnutrition is defined at wt/ht <–2 sd and/or oedema – in this case 13.4% (CI 10.4–17.0).

c. This survey was carried out by MSF–Belgium with participation from UNHCR, CARE, WFP, Al Haremein, and MOH in Hagadera Camp. It was a two–stage cluster sample survey including 914 children 6–59 months old or 65–110 cms. Wasting was defined as weight/height <–2 sd and severe wasting was defined as weight/height <–3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. Global malnutrition is defined at wt/ht <–2 sd and/or oedema – in this case 19.1% (CI 15.6–23.2).

9. Liberia/Sierra Leone Region

a. This was a joint survey carried out by ACF/LWF(WS)/SCF(UK) in Upper Bong County, Liberia from 8–12 September 1997. It was a two–stage cluster sample survey including 936 children 6–59 months old. Wasting was defined as weight/height <–2 sd and severe wasting was defined as weight/height <–3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. The number is far higher if validation by the mother is included (see text). Global malnutrition is defined at wt/ht <–2 sd and/or oedema – in this case 7.7% (CI 5.5–10.6).

b. This survey was carried out by Action Contre la Faim in October 1997. The survey used a simple systematic sampling method and included 502 children 6–59 months old. Wasting was defined as weight/height <–2 sd and severe wasting was defined as weight/height <–3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. Global malnutrition is defined at wt/ht <–2 sd and/or oedema – in this case 13.9% (CI 11.0–17.4).

c. This survey was carried out by Action Contre la Faim in October 1997. It was a two stage cluster sample survey including 469 children 6–59 months old. Wasting was defined as weight/height <–2 sd and severe wasting was defined as weight/height <–3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. Global malnutrition is defined at wt/ht <–2 sd and/or oedema – in this case 16.6% (CI 13.2–20.5).

d. This survey was carried out by Action Contre la Faim in October 1997. It was a two stage cluster sample survey including 900 children 6–59 months old. Wasting was defined as weight/height <–2 sd and severe wasting was defined as weight/height <–3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card. Global malnutrition is defined at wt/ht <–2 sd and/or oedema – in this

case 18.9% (CI 5.4–23.0).

11. Sudan

a. This assessment was a collaborative effort between the Ministry of Health (MOH) Red Sea State and OXFAM UK/I. It was a two stage cluster sample survey in Port Sudan including thirty clusters of thirty children 6–59 months old (or 65–110 cms). Wasting was defined as weight/height < -2 sd and severe wasting > -3 sd. Oedema was included with this figure for reporting purposes. Wasting was 10.1 (CI 7.9–12.9) and severe wasting was 1.2 (CI 0.6–2.5)

b. This assessment was a collaborative effort between the Ministry of Health (MOH) Red Sea State and OXFAM UK/I. 713 women were measured in Port Sudan. Wasting was defined as BMI <18.5 and severe wasting <16 .

c. This assessment was a collaborative effort between the Ministry of Health (MOH) Red Sea State and OXFAM UK/I. It was a two stage cluster sample survey in Rural Red Sea State including thirty clusters of thirty children 6–59 months old (or 65–110 cms). Wasting was defined as weight/height < -2 sd and severe wasting > -3 sd. Oedema was included with this figure for reporting purposes. Wasting was 28.1 (CI 22.7–34.0) and severe wasting was 6.0 (CI 4.3–8.2)

d. This assessment was a collaborative effort between the Ministry of Health (MOH) Red Sea State and OXFAM UK/I. 697 women were measured in Port Sudan. Wasting was defined as BMI <18.5 and severe wasting <16 .

e. This survey was carried out by Action Contre la Faim in August 1997. It was an exhaustive survey including 650 children 6–59 months old. Wasting was defined as weight/height < -2 sd and severe wasting was defined as weight/height < -3 sd. Oedema was measured separately. Measles immunisation coverage included in Annex I is supported by an immunisation card.

12. Uganda

a. This survey was carried out by Action Contre la Faim in September 1997 in Mongola Settlement. This was a two stage cluster sample survey including 748 children 6–59 months old. Wasting was defined as weight/height < -2 sd (result 4.3% with CI 2.5–7.0) and severe wasting was defined as weight/height < -3 sd. Oedema was measured separately.

b. This survey was carried out by Action Contre la Faim in September 1997 in the local villages surrounding Mongola Settlement. This was a two stage cluster sample survey including 390 children 6–59 months old. Wasting was defined as weight/height < -2 sd (result 6.7% with CI 3.7–11.5) and severe wasting was defined as weight/height < -3 sd. Oedema was measured separately.

14. Afghanistan Region

a. This survey was carried out by Action Contre la Faim in Kabul in June 1997. It was a random cluster survey including 943 children 6–59 months old. Wasting was defined as weight/height < -2 sd and severe wasting was defined as weight/height < -3 sd. Oedema was measured separately. Global malnutrition is defined at wt/ht < -2 sd and/or oedema – in this case 6.8% (CI 4.7–9.7).

17. Marsh Arabs

a. This survey was carried out by Iraqi Civilian Aid in June 1994. It was a cross-sectional survey of 450 children 12–60 months old. Wasting was defined as weight/height < -2 z scores and severe wasting < -3 z scores.

18. Sri Lanka

a. This survey was carried out by MSF–France in August 1997. It was an exhaustive survey including 535 children 6–59 months old. Wasting was defined as weight/height $< 80\%$ of the median and severe wasting $< 70\%$. No cases of oedema were noted.

Seasonality in Sub-Saharan Africa*

Country	Climate/Rainy Season/Harvest
Angola	Coastal area desert, SW semi-arid, rest of country: rains Sept–April
Burundi	Three crop seasons: Sept–Jan, Feb–Jun., and Jul–Aug.
CAR	Rains March–Nov
Djibouti	Arid Climate
Ethiopia	Two rainy seasons February to May and June to October
Kenya	N–E is semi-arid to arid, Central and SW rains: March–May and Nov–Dec.
Liberia	Rains March–Nov
Mozambique	Coast is semi-arid, rest wet–dry. Harvest May
Rwanda	Rains Feb–May with Aug. harvest and Sept–Nov with Jan harvest
Sierra Leone	Rains March–Oct.
Somalia	Two seasons: April to August (harvest) and October to January/February (harvest)
Sudan	Rains April–Oct.
	Northern Rains begin May/June
	Southern Rains begin March/April
Togo	Two rainy seasons in S, one in N. Harvest August
Uganda	Rains Mar–Oct.
Zaire	Tropical climate. Harvest in N: November; in S January

* SOURCES:

FAO, "Food Supply Situation and Crop Prospects in Sub-Saharan Africa", Special Report; No 4/5, Dec. 90 plus various FAO/WFP Crop and Food Supply Assessment Missions.



Map of Africa



Summary of WFP/UNHCR Guidelines for Estimating Food and Nutritional Requirements

In line with recent recommendations by WHO and the Committee on International Nutrition, WFP and UNHCR will now use 2,100 kcals/person/day as the initial energy requirement for designing food aid rations in emergencies. In an emergency situation, it is essential to establish such a value to allow for rapid planning and response to the food and nutrition requirements of an affected population. An in-depth assessment is often not possible in the early days of an emergency and an estimated value is needed to make decisions about the immediate procurement and shipment of food.

The initial level is applicable *only* in the early stages of an emergency. As soon as some demographic and food security information is available, the estimated per capita calorie requirements should be adjusted

accordingly. Factors to consider when adjusting the initial reference level include:

- demographic composition (age and gender);
- activity level of the population;
- climate;
- health, nutritional and psychological status of the population;
- household food security.

Food rations should complement any food which the affected population is able to obtain on its own through activities such as agricultural production, trade, labour, and small business. An understanding of the various mechanisms used by the population to gain access to food is essential and will lead to a more accurate estimation of food needs. A thorough assessment of the degree of self reliance and level of household food security is therefore a prerequisite for the design of a longer term ration. Frequent and regular assessments are necessary to adequately determine food aid needs on an on-going basis.

The importance of ensuring an adequate basic ration for the affected population at the onset of an emergency is considered to be one of the basic principles in ration design. In addition, rations must be culturally acceptable. The quality of the ration provided, particularly in terms of micronutrients, is stressed and levels provided will aim to conform with standards set by other technical agencies.

taken from: *WFP/UNHCR Guidelines for Estimating Food and Nutritional Requirements*, Oct. 1997.

Copies of the Guidelines are available from:

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June 1997 Questionnaire – a brief analysis

Responses to a questionnaire distributed in June 1997 were very positive. Many respondents gave examples of how the information in the RNIS Reports is used on a regular basis including: one source of information for decision-making, background for those about to go to the field, and teaching to name a few. Most of you feel the publication schedule is appropriate. You can look forward to the following changes in 1998:

? Expansion into other geographical areas was supported by most. We will begin by expanding our coverage in Asia, and in due course include information on Eastern Europe and Latin America.

? The SCN's home page will be accessible in 1998. There will be a page for RNIS information which will include an archive of the Reports, and a section for information received at the SCN, but not yet included in an RNIS Report.

? French translation of the reports will be pursued. As a pilot project, we will translate the text of the Report, and distribute it through email.

The UN ACC/SCN¹, which is the focal point for harmonizing policies in nutrition in the UN system, issues these reports on the nutrition of refugees and displaced people with the intention of raising awareness and

facilitating action to improve the situation. 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. This is the twenty second of a regular series of reports. Based on suggestions made by the working group and the results of a survey of RNIS readers, the Reports on the Nutrition Situation of Refugees and Displaced People will be published every three months, with updates on rapidly changing situations on an 'as needed' basis between full reports.

¹ ACC/SCN, c/o World Health Organization, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Telephone: (41-22) 791.04.56, Fax (41-22) 798.88.91, Email accscn@who.ch.

Information is obtained from a wide range of collaborating agencies, both UN and NGO (see list of sources). The overall picture gives context and information which separate reports cannot provide by themselves. The information available is mainly about nutrition, health, and survival in refugee and displaced populations. It is organised by "situation" because problems often cross national boundaries. We aim to cover internally displaced populations as well as refugees. Partly this is because the system is aimed at the most nutritionally vulnerable people in the world – those forced to migrate – and the problems of those displaced may be similar whether or not they cross national boundaries. Definitions used are given in the box on the next page. At the end of most of the situation descriptions, there is a section entitled "Ongoing interventions". This is included when there is enough information on current needs and opportunities, and when there is a substantial risk to nutrition.

The tables, and figures at the end of the report can provide a quick overview. Table 1 gives an estimate of the probable total refugee/displaced/returnee population, broken down by risk category. Populations in category I in Table 1 are currently in a critical situation, based on nutritional survey data. These populations have one or more indicators showing a serious problem. Populations at high risk (category Ha in Table 1) of experiencing nutritional health crises are generally identified either on the basis of indicators where these are approaching crisis levels and/or also on more subjective or anecdotal information often where security and logistical circumstances prevent rigorous data collection. Populations at moderate risk (category IIb in Table 1) are potentially vulnerable, for example based on security and logistical circumstances, total dependency on food aid, etc. Populations in category IIc are not known to be at particular risk. In Table 2, refugee and displaced populations are classified by country of origin and country of asylum. Internally displaced populations are identified along the diagonal line. Figure 1 shows trends over time in total numbers and risk categories for Africa. Annex I summarises the survey results used in the report.

Indicators

WASTING is defined as less than $-2SDs$, or sometimes 80%, wt/ht by NCHS standards, usually in children of 6–59 months. For guidance in interpretation, prevalences of around 5–10% are usual in African populations in non-drought periods. We have taken more than 20% prevalence of wasting as undoubtedly high and indicating a serious situation; more than 40% is a severe crisis. SEVERE WASTING can be defined as below $-3SDs$ (or about 70%). Any significant prevalence of severe wasting is unusual and indicates heightened risk. (When "wasting" and "severe wasting" are reported in the text, wasting includes severe – e.g. total percent less than $-2SDs$, *hot* percent between $-2SDs$ and $-3SDs$.) Data from 1993/4 shows that the most efficient predictor of elevated mortality is a cut off of 15% wasting (ACC/SCN, 1994, p81). Equivalent cut-offs to $-2SDs$ and $-3SDs$ of wt/ht for arm circumference are about 12.0 to 12.5 cms, and 11.0 to 11.5 cms, depending on age. BMI (wt/ht²) is a measure of energy deficiency in adults. We have taken BMI<18.5 as an indication of mild energy deficiency, and BMI<16 as an indication of severe energy deficiency (WHO, 1995).

OEDEMA is the key clinical sign of kwashiorkor, a severe form of protein–energy malnutrition, carrying a very high mortality risk in young children. It should be diagnosed as *pitting* oedema, usually on the upper surface of the foot. Where oedema is noted in the text, it means kwashiorkor. Any prevalence detected is cause for concern.

A CRUDE MORTALITY RATE in a normal population in a developed or developing country is around 10/1,000/year which is equivalent to 0.27/10,000/day (or 8/10,000/month). Mortality rates are given here as "times normal", i.e. as multiple of 0.27/10,000/day. [CDC has proposed that above 1/10,000/day is a very serious situation and above 2/10,000/day is an emergency out of control.] Under-five mortality rates (U5MR) are increasingly reported. The average U5MR for Sub-Saharan Africa is 175/1,000 live births,

equivalent to 1.4/10,000 children/day and for South Asia the U5MR is 0.7/10,000/day (in 1995, see UNICEF, 1997, p.98).

FOOD DISTRIBUTED is usually estimated as dietary energy made available, as an average figure in kcals/person/day. This divides the total food energy distributed by population irrespective of age/ gender (kcals being derived from known composition of foods); note that this population estimate is often very uncertain. The adequacy of this average figure can be roughly assessed by comparison with the calculated average requirement for the population (although this ignores maldistribution), itself determined by four parameters: demographic composition, activity level to be supported, body weights of the population, and environmental temperature; an allowance for regaining body weight lost by prior malnutrition is sometimes included. Formulae and software given by James and Schofield (1990) allow calculation by these parameters, and results (Schofield and Mason, 1994) provide some guidance for interpreting adequacy of rations reported here. For a healthy population with a demographic composition typical of Africa, under normal nutritional conditions, and environmental temperature of 20°C, the average requirement is estimated as 1,950–2,210 kcals/person/day for light activity (1.55 BMR). Raised mortality is observed to be associated with kcal availability of less than 1500 kcals/person/day (ACC/SCN, 1994, p81).

INDICATORS AND CUT-OFFS INDICATING SERIOUS PROBLEMS are levels of wasting above 20%, crude mortality rates in excess of 1/10,000/day (about four times normal – especially if still rising), and/or significant levels of micronutrient deficiency disease. Food rations significantly less than the average requirements as described above for a population wholly dependent on food aid would also indicate an emergency.

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