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HIGHLIGHTS

The overall number of refugees, returnees and displaced people in Sub-Saharan Africa has increased substantially over the last two months. This increase is mainly due to a revised estimate in the number of people affected in Mozambique and Southern Sudan. Both of these estimates have increased due to lower than expected harvests in the respective countries. However, the number of people at high nutritional risk (categories I and IIa in Table 1) has decreased due to improvements in the security situation in the Liberia/Sierra Leone region.

Angola The continued peace in Angola is leading to plans for an organised repatriation of refugees. Surveys continue to show that the nutritional status of the population is improving in accessible areas. However, wasting rates are still very high in those areas where poor infrastructure or mined roads prevent easy access for humanitarian aid agencies.

Burundi/Rwanda Region The high level of insecurity in north and north west Burundi has been impeding relief activities for internally displaced and refugee populations and has also led to considerable population movements into neighbouring Tanzania and Uvira in Zaire. It can be assumed that populations in these insecure areas will be experiencing some degree of nutritional stress. There is also concern over the incidence of cholera in these areas and the lack of access to health care facilities. The relatively good harvest in Rwanda has, in conjunction with targeted food aid, helped stabilise the food security situation while adequate food deliveries to the Rwandan refugee populations in Zaire and Tanzania are ensuring a stable nutritional situation in the refugee camps. However, there is some concern over the lack of access to fuel in the Coma and Bukavu camps.

Liberia/Sierra Leone Although the ceasefire has generally held in Liberia, recent serious security incidents have led to suspension of ECOMOG deployment in some areas. Prior to this, relief activities had been extended to a number of areas newly secured by ECOMOG forces and allowed some spontaneous refugee repatriation. However, nutritional assessments in these newly accessible areas often show extremely high levels of wasting. Furthermore, recent poor harvests in Liberia will mean that food aid is needed for many
months, especially for new returnees. There is also considerable concern over the lack of health infrastructure throughout Liberia, particularly given the confirmed outbreak of yellow fever. In Sierra Leone, the security situation is still very tense and has constrained food aid movement to many locations for long periods. This is repeatedly reflected by the high levels of wasting found in surveyed populations. There is also concern about outbreaks of yellow fever in the country.

**Mozambique** The rains for this year’s harvest have generally been good and there are no signs of faltering nutritional status in the country. However, cases of pellagra still continue to be reported in one district. The general ration programme has clearly been effective although there continue to be reported problems with the underestimation of beneficiary numbers and poor targeting borne out of logistical difficulties.

**Somalia** Although the “deyr” harvest has been fairly good, a variety of factors including persistent insecurity, poor environmental health and limited employment opportunities, interact to adversely affect the nutritional status of large numbers of Somalis. The most current nutritional survey results confirm those of other recent surveys in large urban centres which found high levels of wasting due to limited access to food and high levels of morbidity.

**Sudan** The 1995 harvest was far worse than the preceding years “bumper” harvest. Taken in conjunction with the high level of insecurity in the south, this will render many in southern Sudan vulnerable to food insecurity. Indeed, recent surveys of camps for the internally displaced in the south continue to show high levels of wasting. An annual survey of Ethiopian and Eritrean refugees in Eastern Sudan shows levels and patterns of wasting similar to those found in 1994. Elevated levels of wasting in some camps are worrying and should be investigated. High levels of vitamin A deficiency are currently being reported among the displaced populations around Khartoum.

**Zaire** A large proportion of the population displaced from the Shaba region who have settled in towns outside the area are becoming increasingly self-sufficient and as a consequence, aid agency support has been reduced. However, in some of these locations, e.g. Mwene Ditu, levels of wasting are still extremely high, reflecting mainly low agricultural productivity and poor economic assimilation amongst those displaced from Shaba.

**Afghanistan** Fighting is continuing in and around Kabul leading to an exodus of some of the population to Jalalabad. The remainder of the country is reportedly calm. However, many of those who have been displaced to Kabul in preceding months are now more permanently housed and better assimilated into the local economy. This is reflected in far lower levels of wasting than those recorded late last year. Nevertheless, the effect of the fighting on access to the city and food prices and the advent of winter is making food security increasingly precarious for many.

### ADEQUACY OF FACTORS AFFECTING NUTRITION

<table>
<thead>
<tr>
<th>Factor</th>
<th>Angola</th>
<th>Burundi</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Zaire</th>
<th>Liberia</th>
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<tr>
<td>1. Degree of accessibility to large population groups due to conflict</td>
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? Adequate  
O Problem in some areas  
X Problem  
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?? 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.

Note: Situations for which detailed information is available are included in this table. Other potentially critical situations (e.g. Ethiopia or Shaba, Zaire) are not currently included due to a lack of detailed information. They will be included as more information becomes available.

INTRODUCTION

The UN ACC/SCN1 (Sub–Committee on Nutrition), 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 normally every two months. Distributing this information is intended to raise awareness and facilitate 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 fourteenth of a regular series of 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 at end of report). 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 organized 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 “How could external agencies help?”. This is included when there is enough information on current needs and opportunities, and when there is a substantial risk to nutrition.

The tables, figures and maps at the end of the report can provide a quick overview. Map A shows the location of the situations described and the shaded areas are those in a critical situation. Table 1 gives an estimate of the probable total refugee/displaced/returnee population, broken down by numbers at risk. 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 IIa 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. No information is currently available on populations in category III.

In Table 2, refugee and displaced populations are classified by country of origin and country of asylum. Major population groups in Africa (i.e. over 100,000 people affected from the country of origin) are included. Internally displaced populations are identified along the diagonal line.

Figures 1–3 display some of the data graphically. Figure 1 shows the data in Table 1 as a current snapshot of population numbers and estimated risk. Figure 2 shows trends over time in total numbers and risk categories for Africa. Figure 3 shows the same data for specific situations. Annex I summarizes 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, not 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.

**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 181/1,000 live births, equivalent to 1.2/10,000 children/day and for South Asia the U5MR is 0.8/10,000/day(in 1992, see UNICEF, 1994, p.84).

**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.

References


Sub-Saharan Africa

1. Angola

(see Map 1 and Figure 3)

The security situation has remained generally calm in Angola since mid–December, although periodic problems with security clearances have led to delays in food deliveries in the northern part of the country. The process of registering newly accessible populations for general ration distribution has been continuing. In spite of the fact that food is increasingly being delivered by road, agencies are still dependent on light aircraft for access to many populations. WFP have recently requested further donor support for the essential light aircraft operation which is presently under–funded. Increased confidence in an enduring peace is leading to the expectation that demobilisation of soldiers will begin soon and that voluntary repatriation from neighbouring countries (e.g. Zambia and Zaire) will continue and pick up speed in 1996. Organised repatriation is planned to begin in May 1996 in order that refugees can return before the planting season commences in October [UNHCR 1995–97, WFP 12/01/96].
Emergency assistance is currently being provided to approximately 1.4 million internally displaced people, returnees and/or war–affected people. It is anticipated that the number of beneficiaries will decrease to one million by March 19% as increasing numbers of families attain self–sufficiency [UNHCR 1995–97, WFP 22/12/95, 12/01/96].

Most recent nutritional surveys show an adequate nutritional status amongst populations in easily accessible areas. For example, a survey in Benguela city (with an estimated 300,000 population of residents and displaced) found only 4.4% levels of wasting and/or oedema with 1.6% severe wasting and/or oedema (see Annex 1 1(a)). However, measles immunisation coverage was low at 44.3%. These results compare favourably with a survey conducted in 1993 when levels of wasting were recorded at above 10% [MSF–F Nov 95].

A survey implemented in Kwanza Sul province showed 4.8% wasting and/or oedema with 3% severe wasting and/or oedema. In Kwanza Norte province, a survey in two areas also found relatively low levels of wasting of 4.9% and 2% (see Annex 1 1(b–c)). General food distributions in these areas are continuing [UNCAH 28/01/96].

In contrast, a recent survey in the city of Golungo Alto (population estimated to be 10,400) in Kwanza Norte province found far higher levels of wasting. The city is not served by a tarmac road and consequently becomes difficult to reach during the rainy season. The survey recorded levels of wasting and/or oedema of 20.4% with 12.3% severe wasting and/or oedema. Oedema rates alone were measured at 10.1% (see Annex 1 1(d)). These very high rates are all the more worrying in light of the fact that there had been a dry ration distributed for the three months prior to this survey. Since this survey, a feeding centre has been opened. Measles immunisation coverage was low at 47.6% [UNCAH 28/01/96, WV 27/10/95].

A recent survey in the district of Mavinga (estimated population 80,000) which is currently only accessible by air as the roads are so heavily mined, found the prevalence of wasting and/or oedema to be 7.6% with 1% severe wasting and/or oedema (see Annex 1 1(e)). The crude mortality rate was 0.43/10,000/day and the under–five mortality rate was 1.6/10,000/day. Both these rates are slightly above normal. These results show an overall deterioration compared to survey results from September 1994 which showed only 3.2% wasting (using MUAC). The deterioration is attributed to continuous bad harvests since 1992, labour shortages as the working populations migrates to neighbouring provinces for work and an absence of selective feeding programmes in 1995 [AICF 06/11/95].

A survey conducted in Balombo, Benguela province found 14% wasting with 4.3% severe wasting (using MUAC, see Annex 1 1(f)). A simultaneous household survey identified a large number of cases of diarrhoea suggesting a strong correlation with the elevated levels of wasting. The water supply in the area will be
investigated [UNCAH 28/01/96]. A survey conducted in M’banza Congo town showed 14% wasting and/or oedema with 3.4% severe wasting (see Annex 1 (g)) [MSF−H 13/02/96].

Overall, the population of Golungo Alto is in category I in Table 1 due to elevated levels of wasting. The remaining affected population is probably at moderate nutritional risk (category IIb in Table 1) due to continued dependence on food aid.

How could external agencies help? In general in the country there is a need for:

- increased funding for the light aircraft programme which is essential to the delivery and monitoring of emergency assistance;
- large-scale funding to restore health infrastructure in the country as more areas become accessible;
- expanded nutritional surveillance capacity to monitor these newly accessible areas;
- donor pledges of CSB and salt are needed to maintain this year’s food aid pipeline.

Some specific needs can be identified by area:

- In Benguela, a measles immunisation campaign, and the continuation of selective feeding programmes which have helped bring down rates of wasting;
- In Golungo Alto, support for selective feeding programmes where rates of wasting are extremely high and measles immunisation programmes;
- In Mavinga, distribution of farm tools and seeds, and better provision of primary health care services.

2. Benin/Ghana/Togo Region

There are currently approximately 110,000 refugees in Benin and Ghana. The majority of this population arrived from Togo in January 1993. As the political tensions which originally led to this crisis have largely been resolved, spontaneous repatriation has been occurring.

Benin There are approximately 20,000 Togolese refugees in Benin whose nutritional status is reported to be adequate. The decrease in number since the previous RNIS report (28,000) is due to repatriation which is expected to continue in the coming months and to be largely completed by June 1996. At that time it is expected that a small number of remaining refugees will continue to require assistance [UNHCR 26/01/96, WFP 09/02/96].

Ghana Recent estimates are that there remain approximately 71,000 Togolese refugees in Ghana. This decrease in number from the last RNIS report (82,000) is due to some spontaneous repatriation, and a verification exercise. It is expected that most of these refugees will repatriate by June 1996, leaving only a small number of vulnerable refugees in Ghana who will require assistance. Currently, the nutritional status of this refugee population is reportedly adequate [UNHCR 26/01/96].

There are approximately 14,000 Liberian refugees in Ghana. Plans for the voluntary repatriation of these refugees are being finalised, but the current security situation in Liberia precludes establishing an exact time-frame for such a programme (see section #9 for further details) [UNHCR 26/01/96].

Togo There are approximately 6,000 refugees from Ghana in Togo whose nutritional situation is reportedly adequate [WFP 09/02/96].

Overall, the refugee populations in Benin, Ghana, and Togo are not currently thought to be at heightened nutritional risk (category IIc in Table 1).
3. Burkina Faso and Mauritania

**Touareg Refugees** (see Map 3)

There are approximately 68,000 assisted Touareg refugees in Burkina Faso and Mauritania.

**Burkina Faso** There are no reports of change to the generally adequate nutritional situation of the approximately 33,000 Touareg refugees from Mali and Niger.

**Mauritania** There remain approximately 35,000 Touareg refugees in Mauritania. A pilot repatriation project has begun, although some spontaneous repatriation is already occurring. As a result, one of the camps (Aghor) has been closed [UNHCR 02/02/96].

It has recently been reported that the number of admissions to selective feeding programme centres has increased dramatically. While a seasonal increase in the number of cases of diarrhoea will adversely affect the nutritional status of this population, incomplete ration allocations and the low quality of some of the commodities, e.g. millet, in the food basket have been identified as contributory factors. More recently, local purchases of some food commodities have been made to improve the general ration [MDM 14/01/96, UNHCR 02/02/96].

*Overall*, the refugees in Burkina Faso are probably not currently at heightened nutritional risk (category IIc in Table 1) while those in Mauritania can be considered to be at moderate nutritional risk (category IIb in Table 1) due to periodic incomplete rations and the high incidence of diarrhoea.

4. Burundi/Rwanda Situation

(See Map 4 and Figure 3)

Widespread insecurity in northern Burundi has led to some refugee displacement to Tanzania and movement into Uvira in Zaire. The insecurity has constrained relief deliveries in the area. There is also concern over cholera in the north, and limited population access to health facilities. Refugee repatriation from Zaire, Tanzania and Burundi to Rwanda is continuing at a steady but slow pace. Harvest estimates are better than last year but still well below pre–civil war levels so that emergency food aid will continue to be needed in Rwanda throughout 1996. The nutritional situation of refugees in Tanzania and Zaire is reportedly adequate.
Trend in numbers of refugees/displaced and proportion severely malnourished or at high nutritional risk (shaded area).

Current estimates of affected populations by country of present residence are given in the box below:

<table>
<thead>
<tr>
<th></th>
<th>Dec 94</th>
<th>Feb 95</th>
<th>Apr 95</th>
<th>Jul 95</th>
<th>Oct 95</th>
<th>Dec 95</th>
<th>Feb 96</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>1,200,000</td>
<td>740,000</td>
<td>492,500</td>
<td>515,000</td>
<td>315,000</td>
<td>504,000</td>
<td>275,400</td>
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<tr>
<td>Rwanda</td>
<td>2,500,000</td>
<td>335,000</td>
<td>1,750,000</td>
<td>800,000</td>
<td>725,000</td>
<td>800,000</td>
<td>737,000</td>
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<td>Tanzania</td>
<td>556,000</td>
<td>630,000</td>
<td>686,000</td>
<td>644,000</td>
<td>629,000</td>
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<td>653,000</td>
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<tr>
<td>Zaire</td>
<td>1,240,000</td>
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<td>1,130,900</td>
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<td>1,158,000</td>
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<td>Uganda</td>
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<td>6,700</td>
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<td>5,076,000</td>
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<td>4,064,400</td>
<td>3,167,900</td>
<td>2,831,400</td>
<td>3,077,400</td>
<td>2,883,200</td>
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</table>

**Burundi** The security situation in Burundi has been extremely poor in recent weeks, and this has adversely affected deliveries of humanitarian aid. Serious incidents in Ngozi at the end of December led to the temporary evacuation of virtually all international aid staff from the north of the country. A major security incident was reported between the Hutu militia and the Burundi army causing between 12,000–16,000 Rwandan Hutu refugees in the northern Burundi camp of Mugano to flee to Tanzania. Although the Tanzanian authorities reinforced the closure of the border with Burundi, an exception was made and this new influx of refugees was allowed to cross. More recently, there were reports at the end of January that a further 15,000 refugees from the nearby camp of Ntamba had left for the Tanzanian border [SCF 12/02/96, UNHCR 31/01/96, WFP 05/01/96, 12/01/96, 19/01/96].

UN and NGO activity has also been largely suspended in the north western province of Bubanza and Cibitoke where insecurity has reportedly led to several thousand people leaving the area and moving into Zaire or safe points along the border. Reports indicate that the civilian population, including some wounded, are fleeing to Uvira at a rate of 200–300 per day. WFP activities in the central province of Gitega were also suspended in mid–December following grenade attacks on staff. No movement of returnees has taken place from Uvira through Gatumba since the closure of the Burundian border with Zaire in early December [WFP 05/01/96, WFP 12/01/96, 19/01/96].
Estimates for Burundi in 1996 are that there will be 170,000 beneficiaries who are either internally displaced, recent returnees or in the first stages of recovery and rehabilitation, and a further 105,400 Rwandan refugees who will require food aid in the coming year. However, given the fluid security situation in Burundi, these beneficiary estimates may prove to be quite inaccurate [FAO 28/12/95, WFP 19/01/96].

Cases of cholera which were initially identified in August 1995 are continuing to be reported in northern provinces, particularly Cibitoke, Bubanza and Bujumbura Rural and Bururi provinces. As humanitarian organisations have evacuated these areas due to insecurity, affected populations have extremely limited access to health care. It is feared that literally hundreds of people with cholera in these provinces are not receiving medical assistance [WHO 28/12/95].

The most recent survey information available is from camps for the internally displaced at the end of November 1995 when wasting and/or oedema in Muhanga camp (estimated population 5,800) was 16.1% with 5% severe wasting and/or oedema. In Gasenyi camp (estimated population 4,900), wasting and/or oedema was measured at 15.0% with 3.9% severe wasting and/or oedema. A similar situation was seen in Gohombo camp (estimated population 400) and Buraniro camp (estimated population 820) where wasting and/or oedema were 18.2% and 17.2% with 3.0% and 4.1 severe wasting and/or oedema respectively (see Annex 1 4(a−d)). These wasting and oedema levels are high, usually associated with elevated mortality and should trigger remedial action [MSF−H 13/02/96].

**Rwanda** With the exception of Cyangugu province, the overall security situation in the country appears to be improving with a continual decline in reported security incidents over the past six months. UNAMIR has now received a final mandate extension until March 8th with its primary role being to facilitate the voluntary and safe repatriation of Rwandan refugees. Weekly repatriation rates from neighbouring countries have ranged from approximately 1,000 to over 4,000 over the past six weeks. The majority of returnees come from Zaire and Burundi [WFP 12/01/96, 19/01/96].

Results from the WFP/FAO annual crop assessment mission indicate that yields are better than last year but still well below pre−civil war levels. It is expected that food aid assistance will still be needed for approximately 737,000 vulnerable people, including displaced and returnees, in the first half of 1996. Given the unpredictability of rates of repatriation, these estimates may need to be significantly revised at some subsequent date. Areas in Kibungo, Butare and Byumba prefectures are all reporting poor harvests due to erratic rainfall. Food for work programmes are now being targeted at the most vulnerable in these areas. Although, there are currently no new nutritional data, the improved harvest in conjunction with the targeted food aid programme suggests that the majority of the Rwandan population currently enjoy a relatively stable food security situation [FAO 28/12/95, WFP 19/01/96].

**Tanzania** The estimated number of refugees in Tanzania has increased to 653,000 with the recent arrival of 22,000 Rwandan refugees coming from Burundi. The border with Burundi remains officially closed, but some Rwandan refugees coming from Burundi have been allowed to cross [SCF 12/02/96, WFP 26/01/96, 09/02/96].

There have been no further nutritional surveys since the last RNIS report. These previous surveys indicated low levels of wasting of between 1−5% in the Ngara camps. However, the food supply situation is reportedly tight, and buffer stocks of food are being used to feed the refugees [IFRC 14/02/96].

**Goma, Zaire** Repatriation is continuing at a slow pace and current estimates are that there are approximately 721,000 Rwandan refugees residing in the Goma camps. This increase since the last RNIS report is due to births in the camps. Although the food supply situation in Goma is said to be good, lack of fire−wood is becoming a limiting factor in food preparation. A firewood distribution programme in Kahindo and Katale camp has had to be cancelled due to lack of funding. Many women faced great risk as they were forced to forage further afield in search of wood outside the camps. Rapes were frequently reported. Most recent reports are that there has been a firewood distribution for this population. It has also been reported that the Zairean army has moved into some of the camps in the Goma region. This is hindering efforts to bring food into the camps [IFRC 14/02/96, WFP 26/01/96, 09/02/96].

Results from the most recent nutritional surveys for the camps were included in the last RNIS report. These surveys generally indicated very low levels of wasting of between 1−4%. However, a trend toward an increasing level of malnutrition was noted, and it has been suggested that the current ration of 1500 kcals/person/day be increased. Water availability in the camps averages 11.2 litres/person/day [UNHCR 01/01/96, 08/01/96, UNHCR—a 08/01/96].
Meetings are currently underway in all camps to involve women in the organisation of relief food distribution [WFP 12/01/96, 19/01/96].

Bukavu, Zaire Current estimates are that there are 310,000 Rwandan refugees in Bukavu. Lack of firewood has also placed considerable strain upon this refugee population some of whom reportedly started dismantling bridges out of desperation to acquire a fuel source. Most recent reports are that as in the Goma camps there has been a firewood distribution for this population. Current rations are approximately 1600 kcals/person/day [UNHCR 29/01/96, WFP 19/01/96, 26/01/96].

The border closure between Burundi and Zaire in early December has reportedly had an adverse effect upon the Bukavu food delivery schedule [WFP 05/01/96].

Uvira, Zaire The number of refugees in Uvira has increased to approximately 180,000 due to the influx from Burundi and movement of refugees living in nearby villages into camps. Refugees are arriving from Burundi at a rate of 200–300 per day with observers describing some of the new arrivals as malnourished [WFP 12/01/96].

A recent household survey in one camp found that at least two thirds of refugee income comes from sale of the general ration. Other revenues and resources come from day labour. Refugees have apparently begun to prepare for forced repatriation by economising on ration consumption and monetising whatever is left. There is no new information on refugee nutritional status since the previous RNIS report which indicated low levels of wasting [WFP 19/01/96].

Crude mortality rates in many of the camps are just above normal ranging from 0.27/10,000/day to 0.63/10,000/day and under-five mortality rates range 0.49/10,000/day to 1.98/10,000/day. The exception to this is Luuvungi camp where the crude mortality rate was 0.84/10,000/day (almost three times normal) and the under-five mortality rate was 2.88/10,000/day (again, about three times normal) [MSF-H 13/02/96].

Uganda There are approximately 6,800 Rwandan refugees currently in Uganda whose nutritional status is reportedly adequate. There are no current plans for an organised repatriation of this population [UNHCR 10/01/96].

Overall, the refugee and displaced populations in Burundi can be considered to be high nutritional risk (category Ia in Table 1) clue to heightened insecurity in the country, and limited survey data indicating high levels of wasting and/or oedema. The remaining population affected regionally is not currently considered to be at heightened nutritional risk (category IIc in Table 1).

How could external agencies help? Logistical infrastructure needs improvement throughout the region, e.g. port rehabilitation in Bujumbura, road rehabilitation in Tanzania and road maintenance in Uvira and Bukavu as well as additional support for the Tanzanian railway corporation and a logistic base in Kampala. Additional support is needed urgently for health programmes in Burundi, particularly reinforcing epidemiological surveillance capacity for cholera and intensifying information programmes which promote chlorination of water.

Nutritional surveys in those areas of Burundi where insecurity is currently affecting relief deliveries. Rapid nutritional assessments would provide updated information on areas where security is currently affecting food aid deliveries. In Rwanda there is a need for nutritional monitoring in areas where large numbers of returnees are settling, while in Uvira nutritional surveys are required in camps which are receiving new arrivals from Burundi. Finally, a long-term strategy is required for providing cooking fuel for refugees in Goma and Bukavu.

5. Central African Republic

Most recent estimates are that there are 13,300 Chadian refugees and 25,500 Sudanese refugees in the CAR. There are no reports of any change in the stable nutritional situation of these refugee populations.
6. Djibouti

(see Map 6)

There are no reports of change for the approximately 25,000 Somali refugees in Djibouti whose nutritional status was reported as adequate in the last RNIS report.

7. Ethiopia

(see Map 7)

There are approximately 388,000 assisted and a further 35,000 unassisted refugees in Ethiopia (not included in Table 1). There have been no reports of change in the nutritional status in these populations since the last RNIS report. The most recent surveys available indicated a variable situation for the 275,000 Somali refugees in camps in the west. The nutritional situation for the 60,000 Sudanese refugees and the 18,000 Djibouti refugees was thought to be adequate.

Overall, since no information to indicate that the situation has changed is available, it is assumed that the populations in Fugnido, Kebre Beyah, and Darwonaji remain at high risk (category I in Table 1) and the populations of Hartisheikh, Teferiber, Daror and Aisha can be considered to remain at moderate risk (category IIb in Table 1). The remaining refugee populations are probably not at heightened nutritional risk (category IIc in Table 1).

8. Kenya

(see Map 8)

The total estimated number of refugees in Kenya continues to decrease due largely to the repatriation of Somali refugees. It is currently estimated that there are 173,000 refugees in Kenya. This number is comprised of 126,000 Somalis, 41,000 Sudanese and 6,000 Ethiopians [UNHCR 31/12/95].

There are no recent nutritional data available on these refugees. However, as highlighted in the previous RNIS report, there needs to be continued monitoring for any potential negative impact on nutritional status due to the reduction in the ration from 2100 Kcals/person/day to 1800 Kcals/person/day and the discontinuation of CSB. These refugees are not currently thought to be at heightened nutritional risk (category IIc in Table 1).

9. Liberia/Sierra Leone Region

(see Map 9 and Figure 3)

Apart from one large-scale incident, the security situation has generally been calm in Liberia, allowing increased relief access to formerly inaccessible populations. Enduring peace is allowing some spontaneous refugee repatriation. Surveys in newly accessible areas often show extremely high levels of wasting and virtually non-existent health infrastructure. Recent crop assessments in Liberia have shown very poor aggregate levels of production. Until the recent cease-fire at the end of January in Sierra Leone, poor security had continued to disrupt provision of relief supplies and led to marked food price inflation. Nutritional surveys in areas that are poorly accessible due to insecurity repeatedly show high levels of wasting. A recent cereal crop assessment in Sierra Leone shows harvests to be well below averages of previous years.
Until recently, the current cease fire had been relatively well respected by the opposing political factions in Liberia. This had led to plans being made for the repatriation of over 700,000 Liberian refugees from surrounding countries of asylum. However, at the end of December, intensive fighting between ULIMO and ECOMOG forces in Tubmanburg, Bomi County resulted interrupted relief activities in the region. An estimated 17,500 people have now left the area and are residing in three shelters at the Bo river where they are receiving assistance. Eventually, food aid was delivered to over 50,000 civilians trapped in Tubmanburg. Other less serious security incidents, some involving international NGOs, have been reported in Lofa country and in Sinoe county in recent weeks [UNHCR 26/01/96, WFP 19/01/96].

It is currently estimated that there are 1.8 million people in Liberia who are in need of humanitarian assistance. Approximately 1.1 million of these people are living either in Monrovia, or in the surrounding counties and are therefore accessible. The remaining 700,000 are inaccessible or only periodically accessible. This also includes about 120,000 Sierra Leonean refugees, although the number may well be higher as an unknown number of refugees have crossed into Liberia due to the insecurity in their home country. There is reportedly some spontaneous repatriation taking place. Although numbers are difficult to verify, an estimated 3,000–12,000 refugees have repatriated so far [UNHCR 26/01/96, WFP 05/01/96].

A recent convoy to Lofa reported that most towns and villages in the area have been destroyed, including schools and hospitals. This picture of a shattered infrastructure is repeatedly documented by agencies visiting formerly inaccessible areas. The majority of the population in areas outside ECOMOG control have limited or

### Current estimates of the numbers of people affected in the region are summarised below:

<table>
<thead>
<tr>
<th>Location</th>
<th>Dec 94</th>
<th>Feb 95</th>
<th>Apr 95</th>
<th>Jul 95</th>
<th>Oct 95</th>
<th>Dec 95</th>
<th>Feb 96</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberia</td>
<td>1,615,000</td>
<td>1,800,000</td>
<td>1,900,000</td>
<td>1,900,000</td>
<td>1,900,000</td>
<td>1,900,000</td>
<td>1,800,000</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>506,000</td>
<td>506,000</td>
<td>500,000</td>
<td>730,000</td>
<td>730,000</td>
<td>730,000</td>
<td>730,000</td>
</tr>
<tr>
<td>Cote d'Ivoire</td>
<td>330,000</td>
<td>330,000</td>
<td>330,000</td>
<td>227,000</td>
<td>305,000</td>
<td>305,000</td>
<td>305,000</td>
</tr>
<tr>
<td>Guinea</td>
<td>534,000</td>
<td>568,000</td>
<td>603,000</td>
<td>578,000</td>
<td>536,000</td>
<td>605,000</td>
<td>605,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>2,985,000</td>
<td>3,204,000</td>
<td>3,333,000</td>
<td>3,435,000</td>
<td>3,471,000</td>
<td>3,540,000</td>
<td>3,440,000</td>
</tr>
</tbody>
</table>
no access to health services. This is particularly worrying given reports of yellow fever and cholera in many areas. A yellow fever outbreak was confirmed in November 1995, with at least 359 cases reported in Buchanan and many other suspected cases reported throughout the country. Since then a massive immunisation campaign has been underway in Monrovia and accessible areas outside the capital. There is no specific treatment for yellow fever and case fatality rates can be as high as 50% [WHO 03/01/96, 04/01/96].

In spite of the cease–fire violations, ECOMOG deployment has allowed roads to be opened to areas of Grand Gedeh, Sinoe and Maryland county during December. This has allowed for nutritional assessment of some populations that have been cut–off from humanitarian assistance for very long periods. One such rapid assessment in the Putu area (estimated population 10,000) of the northern district of Konobo in Grand Gedeh county found 37.1% wasting with 5.7% severe wasting (see Annex 1 9(a)). None of the children included in the survey had a health card and there were concerns for an extremely low rate of measles immunisation coverage. These results are even more worrying considering that the sample was a settled population and that future refugee returnees from Cote d'Ivoire may well settle in the area. Such high levels of wasting clearly dictate an urgent need for emergency general and selective feeding programmes in the area [WFP 05/01/96, WV Dec 95].

Displacement of people to avoid fighting means not only a short–term need for humanitarian aid, but also leads to a longer term disruption to agricultural production. An FAO crop assessment mission estimated that even on the most optimistic assumptions, rice production in 1995 was only 23% of the pre–civil war level and cassava production had fallen by as much as 50%. The mission also reported that extensive and continuous population displacement had left large tracts of land deserted and that insecurity in settled areas outside the ECOMOG controlled zone had made it difficult for farmers to store seed for planting. A major influx of returnees will, therefore, have significant implications for food aid needs. Furthermore, few households, even in high potential areas, will be self–sufficient in rice production [FAO Jan 96, SCF 12/02/95].

At the end of 1995, delays in receiving donor pledges and a break in arrivals in the food pipeline have caused serious problems in relief food distributions. WFP food stocks were limited to bulgur wheat and CSB at the end of December and donors had only pledged one quarter of requirements for 1996 by the end of 1995 [WFP 26/01/95].

Sierra Leone Until the recently declared RUF cease–fire, the security situation in Sierra Leone remained tense with main supply routes from Freetown to provincial capitals officially closed. Nevertheless, transporters still managed to move some food to main up–country warehouses without military escort. Rebel attacks on roads and villages continued and new influxes of displaced populations occurred. For example, 20,000 people fled to Bo town in early January. Closure of main transport routes inevitably affected delivery schedules. Thus, only a half ration of cereals without vegetable oil could be distributed to the displaced in Segbwema in December. The constraint on road transport led to increasing reliance upon air freight and cross–border operations from Guinea. Food prices also rocketed in certain areas as a result of transport constraints. Current estimates of the numbers affected by the fighting in country remain at 730,000 [WFP 15/12/95, 05/01/96, 19/01/96].

The continued insecurity and resulting lack of access to many populations undoubtedly had an adverse impact on the nutritional status of many people. For example, a nutrition survey conducted in Gondama (combined population of displaced and residents of 57,400) near Bo found 28.1% wasting with 5.7% severe wasting (see Annex 1 9(b)). These results compare unfavourably with a survey conducted in May 1994 when wasting and/or oedema were measured at 14%. An estimated 70% of the displaced in the camp were receiving the general ration of bulgur wheat. However, only 27% had any food stocks left over from the previous distribution three weeks earlier suggesting insufficient ration amounts. Prior to this there had been a three month gap in general ration distributions. The crude mortality rate was 2.7/10,000/day (9x normal) and the under–five mortality rate was 3.7/10,000/day (3x normal). Following a measles vaccination campaign in October, 97.7% of children were found to be immunised [AICF 13/10/95]. Malnutrition rates have reportedly gone down since the road has been opened to relief and commercial convoys [WFP 09/02/96].

A nutritional survey which was conducted in Bonthe islands was mentioned in the last RNIS report (#13). Details of the survey are included here. There are an estimated 33,000 displaced people on four islands in Bonthe district in the south of the country. Approximately 90% of this population are displaced. The survey found a prevalence of wasting of 12.9% with 2.3% severe wasting (see Annex 1 9 (c)). The prevalence of oedema was 2.4%. Only 25% of the sample population had enough food stocks for even a few days; 15% were involved in their own food production. Coverage of selective feeding programmes in the four islands was found to be low. Measles immunisation coverage was 24% but may be an under–estimate as only those presenting cards were considered to be immunised. The crude mortality rate was 2.6/10,000/day (6x normal)
Emergency food supplies were shipped to the islands early in January, and the nutrition situation of this population has now reportedly improved [WFP 05/01/96, WHO 01/12/95].

Measles cases continue to be reported in virtually all clinics, but more so in the Western Area where plans to conduct a mass immunisation campaign have yet to be realised. A suspected outbreak of yellow fever is being investigated around the Kenema area. Immunisation programmes were begun while confirmation of the outbreak was awaited [WHO 03/01/96, 15/01/96].

Preliminary assessment of cereal production in Sierra Leone by FAO's GIEWS indicate that production at the end of 1995 was 66% of the average for the previous 8 years and that the food supply situation will therefore remain “tight”. Food assistance will be needed for the country, but it is hoped to shift the focus away from general food distributions to targeted feeding programmes, including school feeding, distributions for vulnerable groups and food for work [FAO Nov 95, WFP 09/02/96].

Côte d'Ivoire

It is currently estimated that there are 305,000 Liberian refugees in Côte d'Ivoire, although the actual number may be somewhat lower due to spontaneous repatriation [UNHCR 26/01/96].

Guinea

There are approximately 605,000 refugees from Liberia and Sierra Leone in Guinea, 536,000 of whom receive food aid. Actual numbers may be slightly lower due to some recent spontaneous repatriation to Liberia [UNHCR 26/01/96].

A nutritional survey was recently conducted amongst the refugee population in the prefecture of Macenta in Guinée Forestière bordering Liberia. The findings of this survey may also provide some insights into the nutritional security of other refugee populations in Guinea. This population, which arrived between 1993–5, resides in 79 small camps close to local villages. The survey found 6% wasting (see Annex 1 9 (d)) which is comparable to a survey conducted in Guinée Forestière in 1992 where levels of wasting were 4.7%. Only 34% of the sample cultivated a field while even fewer owned livestock (18%). Approximately 90% had some form of income. Over 65% of households had food reserves that would last less than one week at the time of the survey. Based on responses from mothers an estimated 40% of children were vaccinated against measles [AICF 25/11/96].

Although these results suggest an adequate nutritional status, it should be noted that the survey took place shortly after a harvest and a general ration distribution. Furthermore, the low food stocks, poor immunisation coverage and rising morbidity rates that occur in the hungry season between June and August when rates of employment are also low, are all factors that could dramatically effect a decline in nutritional status amongst this population. Overall, the nutritional security of this population should, therefore, be viewed as precarious [AICF 25/11/96].

Overall, the affected populations in the Putu area, Grand Gedeh (Liberia) and Gondama (Sierra Leone) are in category I in Table 1 due to high levels of wasting. The population in Liberia that is periodically accessible, and most of the population in Sierra Leone, are considered to be at moderate nutritional risk (category IIb in Table 1), as is the refugee population in Guinea. The refugee population in Côte d'Ivoire and the accessible population in and around Monrovia are not currently thought to be at heightened nutritional risk (category IIc in Table 1).

How could external agencies help? In Liberia, needs include:

- increase food aid pledges;
- provide increased funding to support the rebuilding of health infrastructure in newly accessible areas;
- continue epidemiological surveillance and immunisation capacity for yellow fever and measles;
- assess the nutritional situation of those recently displaced to Bo river;
- distribute an emergency general ration, and set up selective feeding and measles immunisation programmes in Konobo district.

In Sierra Leone, it would be helpful to:

- implement measles immunisation campaigns in Western areas;
- set up selective feeding programmes and investigate the discrepancy between numbers displaced and number registered as displaced in Gondama camp;
• evaluate the equity of the general ration programme in Gondama camp, possibly involving systematic food basket monitoring at distribution points and household level;

• assess the nutritional situation in three to four months time in Gondama camp;

• continue general ration provision in the Bonthe islands, open more selective feeding programmes, and increase measles immunisation coverage.

10. Mauritanian Refugees in Senegal

(see Map 3)

There was a final food distribution to the approximately 52,000 Mauritanian refugees in Senegal in December 1995. This population is now considered to be self-sufficient and will no longer receive assistance [UNHCR 06/02/96].

11. Mozambique Region

(see Map 11 and Figure 3)

Current estimates are that there are 1.2 million returnees and drought affected people currently in need of food aid. The number of beneficiaries is higher than originally planned as the 1995 May/June harvest did not provide enough food for self-sufficiency throughout the year for as many households as anticipated. Presently, the food pipeline is adequate until April 1996. With the exception of Tete and northern Manica, rainfall has been favourable throughout the country, leading to extensive planting and good prospects for agricultural production in 1996 where seeds and tools are available. However, it has been reported that, in some districts, distributions of seeds were late or insufficient [MSF–CIS Jan 96, WFP 12/01/96].

Food security is generally stable, although two highly food insecure areas exist in the south (Inhambwe) and
centre (Tete, Manica and Sofala) of the country. There have been several reports of insufficient food aid allocations in certain priority districts. Several problems exist. According to various NGO surveys, numbers of needy people may increase considerably as harvests run out in many districts, e.g. Mabote and Funhalouro. Targeting by implementing agencies is often poor; thus, there is a tendency to concentrate distribution in those areas most accessible rather than in those areas with the most vulnerable populations. Furthermore, some agencies have apparently chosen to distribute half rations in order to increase coverage [MSF−CIS Jan 96].

In spite of these difficulties with the general ration programme, there have been no reports of a deteriorating nutrition situation from any district. As reported in the last RNIS, a nutritional survey in Mutarara in November only found 5% levels of wasting. However, cases of pellagra continued to be reported in Mutarara during October and November and during the nutritional survey the prevalence of pellagra in the district was estimated at 1.4%. Accounting for confidence intervals and assuming a population of 250,000 it is possible that between 1600−5400 cases of pellagra occurred in the district in November. In response to this outbreak, donors are looking into the possibility of distributing fortified corn soy blend mix [MSF−CIS Jan 96].

**Overall**, the population with pellagra is placed in category I in Table 1 and the remaining population of the district is likely to be at high nutritional risk (category IIa in Table 1). The rest of the affected population is probably not at heightened nutritional risk (category IIc in Table 1).

**How could external agencies help?** There may be a need to increase numbers registered for food aid relief in food insecure areas where many non−beneficiaries are consuming extremely poor diets. More effective targeting would counterbalance any tendency to saturate certain areas for logistical or programmatic reasons. Some districts need immediate seed distributions, e.g. Massingir, Chigubo, Changara, Cheringoma and Muanza.

12. Somalia

(see Map 12 and Figure 3)

It is estimated that there are 840,000 vulnerable people in Somalia. This number consists of 600,000 returnees and 240,000 internally displaced people. The current “dehr” harvest is reported to be “fair to good”. This is encouraging as yields from the earlier and more significant “gu” harvest in August 1995 were much lower than expected contributing to dramatic food price inflation. The areas worst affected by the reduction in the main crop “Gu” harvest were the sorghum belt areas of Bay, Bakool, Hiraan and the lower Shabelle regions [FAO Jan 96, WFP 12/01/96].
Presently, nutrition and food security in Somalia is driven by a variety of factors including, weather, security, functional logistic infrastructure, employment opportunities, and environmental health. There is a strong sense of an overall deterioration in security, especially in southern Somalia with fairly regular reports of security incidents in Mogadishu, Baidoa, Kismayo and the Juba valley over the past six weeks (Merlin, personal communication 8/02/96). Furthermore, the effect of the continued closure of Mogadishu port, although partly offset by the opening of Merca port and others around the capital, has been food price inflation that has hit Kismayo and the Juba valley hardest. Recent surveys described in previous RNIS reports indicated high levels of nutritional vulnerability, particularly in large urban centres like Mogadishu and Kismayo. A more recent nutrition survey in Bardera demonstrates a similar pattern of vulnerability [FAO Jan 96, WFP 12/01/96, UNHCRS 19/12/95−15/1/96, MERLIN 08/02/96].

The population of Bardera (estimated at 26,000) is comprised of residents, displaced people and returnees from Kenya. The survey measured prevalence of wasting at 19.3% with 3.6% severe wasting. Oedema rates were measured at 2.8% (see Annex 1 12(a)). Measles immunisation coverage was 68% although a vaccination campaign is presently underway. All surveyed families collected untreated drinking water from the Juba river. Only two public wells were functional and diarrhoea accounted for 45% of reported morbidity. Only 40% of the sample owned a garden or field and an even smaller percentage had livestock as so many had died during the war or due to drought [AICF Nov 95].

During the survey the road between Baidoa and Bardera was closed, following the capture of Baidoa town by the forces of General Aideed, so that prices on the local market had increased substantially. Over 60% of families reported only eating one meal on the previous day. The displaced and returnee populations appear to be most acutely affected by food insecurity [AICF Nov 95].

Food for work programmes are now being implemented in the Gedo region, and plans are being made to implement feeding programmes [WFP 09/02/96].

Overall, it appears that the food security situation has continued to deteriorate in Somalia. The population in Bardera is at increased risk (category I in Table 1). The remaining vulnerable population already identified is likely to be at heightened nutritional risk (category IIa in Table 1). Other vulnerable groups are likely to exist among resident populations.

How could external agencies help? Given the precarious nature of food security in Somalia there is a need for more extensive nutritional monitoring in both urban and rural areas to help identify populations requiring humanitarian support. More specifically there is a need to both improve the quality and quantity of water and coverage of selective feeding programmes in Bardera.

13. Sudan

(see Map 13 and Figure 3)

The total estimated number of people needing assistance in Sudan for 1996 has increased from 1.4 million, cited in the last RNIS report, to 2.3 million, although not all beneficiaries are expected to require assistance during the entire year. This number consists of 1.7 million displaced and/or war affected people in Southern Sudan, 154,000 people in the transitional zone, 185,000 displaced people around Khartoum and 200,000 Ethiopian and Eritrean refugees [DHA Jan–Dec 96, WFP 09/02/96].
The increased estimate in the number of potentially vulnerable people for 1996 is due largely to expected decreased crop yields compared with last year's bumper harvest. Estimates are that sorghum and millet production will be 12% and 46% respectively lower than last year. It is anticipated that cereal production will be particularly low in north and west Kordofan and north Darfur and that these states will experience severe deficits which must be met from other surplus states [WFP 12/01/96].

In addition, ongoing insecurity and logistic difficulties in the south and transitional zones makes it likely that many in the area will remain in need of assistance. It has been suggested that a contingency for rapid interventions may be necessary in the event of localised crop failures, breakdown in local economic structures, or new population displacements in the event of renewed military activity [FAO Dec 95, SCF 12/02/96].

A recent nutritional survey in Mogale camp for the displaced in Eastern Equatoria, Southern Sudan illustrates the ongoing need for humanitarian assistance in the south of the country. Prevalence of wasting was measured at 16% with 1.3% severe wasting (see Annex 1 13(a)). Overall levels of wasting have therefore not
changed since a survey conducted in November 1994 when 18% prevalence of wasting was recorded. However, the prevalence of severe wasting has decreased markedly from November 1994 when it was measured at 6.5%. Less than 60% of malnourished children were registered in the camp feeding centre [AICF 22/11/95].

Primary concerns for the approximately 185,000 displaced people in camps around Khartoum are security of tenure in the camps as government policy is opposed to permanent settlement and access to basic services. A survey conducted in October 1995 showed levels of wasting ranging from 13.7% to as high as 36.8% in the displaced camps. It was also reported that the prevalence of night blindness (an indication of vitamin A deficiency) has been as high as 6.7%. Furthermore, serious outbreaks of diarrhoeal disease, with unacceptable levels of child mortality have also been reported in certain camps [DHA Jan–Dec 96].

Estimates of the number of assisted Ethiopian and Eritrean refugees in Sudan vary from 196,000 to 283,000 and there may be up to a further 290,000 unassisted refugees in the country. Currently, food is being distributed to 200,000 refugees who reside in camps in the East of Sudan. A census that was meant to take place in October/November 1995 has been postponed until March 1996 so that the exact population breakdown between Ethiopian and Eritrean refugees is not available. Very rough estimates are that there are 40,000 Ethiopian refugees and 160,000 Eritreans, many of whom are spontaneously repatriating [UNHCR 23/01/96].

Most recent nutritional information on this refugee population comes from a series of surveys conducted by the Sudanese Relief and Rehabilitation Commission between June and September 1995. This is the pre−harvest “hungry” season period in Sudan. Levels of wasting in Um Rakuba (estimated population 12,000) and Safawfa were low at 7.0% and 6.4% respectively. In Wad Sherife (estimated population 52,000) and K Girba (estimated population 13,000) wasting levels were somewhat higher at 13.0% and 10.4%. Higher levels still were found in the Shagrab camps (estimated population for Shagrab I, II, and III is 33,000) where prevalence of wasting was 15.3%. These patterns of wasting mirror those found in similar surveys conducted during 1994 at the equivalent time of year. The results in 1994 found highest rates of wasting in the Shagrab camps (19%) where poor water supplies and resulting high rates of diarrhoea were believed to be contributory factors. Prevalence of wasting in Wad Sherife was also found to be relatively high at 14.1% (see Annex 1 13(b−f)) [UNHCR Oct 95].

Overall, the refugee population in the Shagrab camps is in category I in Table 1 due to elevated levels of wasting. The displaced population around Khartoum is also in category I in Table 1 due to vitamin A deficiency. The affected population in Southern Sudan can be considered to be at moderate nutritional risk (category IIb in Table 1), although there are likely to be areas where the nutritional risk is very high. The remaining refugee population and the affected population in the transitional zone are probably not at heightened nutritional risk (category IIc in Table 1).

How could external agencies help? Some of the needs in Sudan include:

- continuation of extensive nutritional surveillance in southern Sudan, especially in camps for the internally displaced where many populations experience periodic nutritional stress;
- investigation into the high levels of wasting persisting in certain Eastern camps for Ethiopia and Eritrean refugees, e.g. Shagrab and Wad Sherife;
- increasing coverage of the selective feeding programme in Mogale camp in southern Sudan;
- treatment of vitamin A deficiency in the IDP camps around Khartoum.

14. Uganda

(see Map 14)

It is currently estimated that there are 222,000 Sudanese and Zairian refugees in Uganda.
| Sudanese Refugees | 274,000 | 300,000 | 310,000 | 322,000 | 324,000 | 217,000 | 210,000 |
| Zairian Refugees  | 16,000  | 313,000 | 13,000  | 13,400  | 13,700  | 11,800  | 12,300  |
| **TOTAL***        | 290,000 | 613,000 | 323,000 | 335,400 | 337,400 | 228,800 | 222,300 |

* Rwandan refugees in Uganda are included in section #4.

There are an estimated 210,000 Sudanese refugees which represents a decrease since figures quoted in the last RNIS report. This revision is due to a census conducted last year rather than any repatriation. Efforts to decongest camps, particularly Koboko camp, are continuing with almost 10,000 refugees being moved to less crowded camps over the past few months [UNHCR 10/01/96]. A recent survey in Koboko showed 11.2% wasting and/or oedema with 1.1% severe wasting and/or oedema (see Annex 1 14(a)). These results are similar to those from July 1995 when wasting and/or oedema was measured at 8.8% [MSF−H 13/02/96].

The number of Zairian refugees has increased very slightly to 12,300 refugees. Refugees appear to be crossing into Uganda mainly in order to take advantage of better economic and educational opportunities [UNHCR 10/01/96].

**Overall**, these refugees are not currently considered to be at heightened nutritional risk (category IIc in Table 1).

**15. Zaire**

(see Map 15)

Refugees in Zaire (excluding Rwandans and Burundis included in section #4) There are estimated to be well over 200,000 Angolan refugees in Zaire although only 50,000 are currently being assisted by UNHCR. The assisted population are expected to require assistance in order to repatriate to Angola while the remainder will probably return spontaneously. The organised repatriation is due to begin in mid−1996 when pre−departure health and nutrition screening, immunisation programmes and the updating of health cards are planned [UNHCR Jun 95−Dec 97].

Displaced from Shaba, Zaire There are approximately 600,000 people who have been displaced by ethnic violence which erupted in the Shaba region at the end of 1992. This population fled north into the Kasai region where many had ancestral links. During the migration large numbers stopped temporarily in villages along the route north, while others settled permanently at these sites. Currently, there is little further displacement from the Shaba region and the most recent set of nutritional survey information shows that the level of self−sufficiency obtained by this migrant population varies enormously.

Many of those fleeing the Shaba region settled in the sub−region of Kabinda in the Kasai region of Zaire. During 1995, this population received some general ration support and were also given agricultural tools and seeds. A nutritional survey in November 1995 in Lupata found wasting rates of 9.9% with a severe wasting prevalence of 1.3% (see Annex 1 (15(a)). There appeared to be little difference between the nutritional status of the resident and displaced population. A survey in Gandajika recorded wasting at 8.6% with 0.6% severe wasting (see Annex 1 15(b)). Levels of oedema of 4.0% were more worrying. Furthermore, this survey found significantly higher prevalence of wasting among those displaced from Shaba than amongst the resident community [MSF−B 17/11/95].

A nutritional survey conducted in Likasi in December 1995 found levels of wasting of 5.5% with 0.3% severe wasting and no reported oedema (see Annex 1 15(c)). These levels show no significant difference to the 7% prevalence recorded in a survey in January 1995. The results are encouraging and suggest that a large part of the displaced population are now self−sufficient as a general ration was gradually phased out during 1995. As a result of these consistently low levels of wasting the selective feeding programmes implemented by MSF Belgium will now be phased out in early 1996 [MSF−B 07/12/95].

In contrast, a survey conducted in Mwene Dim, another transit point along the route north from Shaba, showed a far more serious situation. Among the resident population (estimated at 220,000) wasting and/or oedema rates were measured at 17.8% with 4.8% severe wasting and/or oedema. Wasting and/or oedema rates among the displaced population (estimated at 40,000) was 42.9% with 9.3% severe wasting and/or
These extremely high levels of wasting probably reflect a variety of factors. For example, the survey was conducted in the “hungry” season just prior to the harvest and therefore also coincided with a period when food prices were very high. Also, the increased population in the town has placed enormous strain on available agricultural land and food resources. Furthermore, many household income receipts are barely sufficient to cover food needs so that there is little income to spend on health care so that untreated childhood illnesses often lead to malnutrition [MSF–B–a 26/10/95].

Overall, the displaced and resident affected populations in Mwene Ditu is in category I in Table 1 due to elevated levels of wasting. The remaining displaced population and the refugees are not currently considered to be at heightened nutritional risk (category IIc in Table 1).

How could external agencies help? There is an urgent need to increase agricultural support for the large population in Mwene Ditu, especially the displaced, and to improve coverage of selective feeding programmes by decentralising facilities and implementing active case finding at immunisation sites. There is also a clear requirement for funding for increased health staff, equipment, drugs and medicine at existing and new health centres. In Gandajika there is a need for targeted agricultural support for those who have been displaced from Shaba.

16. Zambia

Organised repatriation of the approximately 26,000 assisted Angolan refugees in Zambia is scheduled to begin in 1996 and will be completed over a fourteen month period. Before departure refugees will undergo health and nutrition screening and be given updated health cards while children under five will be vaccinated. There are a further 70,000 unassisted refugees who have been considered self–sufficient for a long time, and are expected to repatriate without assistance [UNHCR Jun 95–Dec 97].

ASIA – Selected Situations

The most recent overview of the numbers of refugees and displaced people in Asia (as of the end of 1994) is as follows. There were an estimated 5.0 million refugees in Asia, of whom 1.1 million were Afghans in Pakistan and in Iran (1.6 million). There were reported to be 610,000 Iraqis in Iran. Other large groups were refugees from Myanmar in Bangladesh (120,000), Vietnamese in China (290,000), Chinese (Tibet) in India (110,000), and Bhutanese in Nepal (100,000). No comprehensive data were available on the numbers of internally displaced populations in Asia, but they were certainly in the millions (UNHCR, 1994 ‘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 previous reports of micronutrient deficiencies. As in the past, we also include information on Southern Iraqi refugees in Iran.

17. Afghanistan Region

(see Map 17)

Fighting has escalated in and around Kabul, although elsewhere the situation in Afghanistan is reportedly calm. Overall regional estimates of those affected by events in Afghanistan remain at 3.1 million.

Kabul The Taliban forces have continued to attack Kabul city throughout December and January inflicting many casualties. Since the fighting between government and Taliban forces recommenced in September 1995 approximately 60,000 people have left Kabul. Prior to the renewed fighting an estimated 200,000 people had returned to Kabul from Peshawar and Jalalabad since April 1995. Current fighting has disrupted the normal pattern of trade and commercial deliveries to the city resulting in food price inflation and shortages of essential food commodities. International aid agencies in Kabul have come together to implement an Emergency Winter Relief Plan [UNHAA 04/01/96, 14/01/96]. WFP have been delivering food to the capital via
Jalalabad with much of the food being used to feed orphans, widows, and the disabled.

Although an assessment of the nutritional situation in Kabul in November found a much improved situation compared to ICRC surveys conducted earlier in 1995, the situation for many is still believed to be precarious, especially with the advent of winter. Much of the noted improvement has been due to the displaced being housed properly and assimilated into the economy. The survey found that levels of wasting in children under five were 5.6% with 1.2% severe wasting. Prevalence of oedema was 0.6% (see Annex 1 17(a)). There was no significant difference in levels of wasting between resident and displaced populations. Most people were exclusively dependent on the local market with only a small proportion of families having access to parcels of land or owning animals. Only 3% had received food aid in the previous month. Although the vast majority of resident and displaced families had some form of employment, income was insufficient to provide even minimum food requirements. Many families have therefore been forced to sell assets or borrow money [AICF 08/11/95].

**Displaced in Jalalabad** The situation around Jalalabad is reportedly calm. However, the fighting in and around Kabul has led to large scale displacement of people to Jalalabad. Recently up to 5,000 people per week have been arriving although it is not clear whether these people are settling in the local communities or the camps for the displaced [UNHAA 04/01/96].

A recent nutritional survey in New Hadda showed 4% wasting and/or oedema with 0.6% severe wasting and/or oedema. The crude mortality rate was 0.11/10,000/day (lower that a usual level) and the under-five mortality rate was 0.17/10,000/day (see Annex 1 17(b)). These indicators show a relatively good situation [MSF–H 13/02/96].

**Refugees in Pakistan** Repatriation is continuing for the 1.2 million refugees in Pakistan, many of whom are considered self-sufficient and are no longer assisted with a general ration distribution. Assistance is targeted to vulnerable groups including the disabled, the elderly, primary school children and families without an able-bodied adult male. It is estimated that 153,000 Afghan refugees repatriated in 1995. Plans for the further repatriation of 250,000 in 1996 are underway [UNHAA 26/12/95, UNHCR 07/12/95, 12/02/96].

**Refugees in Iran** Repatriation of the approximately 1.5 million Afghan refugees in Iran is continuing. Over 195,000 people repatriated in 1995. It is expected that repatriation will slow down over the winter as travel becomes more difficult [UNHAA 13/12/95, 26/12/95, UNHCR 12/02/96].

**Overall**, the population of Kabul can be considered to be at nutritional risk (category IIa in Table 1). The remaining population affected regionally is not currently thought to be at heightened nutritional risk (category IIc in Table 1).

**How could external agencies help?** Funding is required to help repair hospital and dispensary infrastructure throughout Afghanistan. In Kabul, nutrition monitoring is necessary given the precarious nature of food security for most residents in the city. Also, supplementary feeding programmes need to be better targeted than is currently the case, e.g. to moderately malnourished children. The recent nutrition survey in Kabul identifies the need for more therapeutic feeding facilities for the severely malnourished.

**18. Bhutanese Refugees in Nepal**

(see Map 18)

There are approximately 90,000 Bhutanese refugees remaining in Nepal. Although there are currently no plans for repatriation, it is hoped that talks about a potential repatriation programme will resume in the near future. Crude mortality rates are very low, with high birth rates. Agreement to implement improved health (including family planning) services in 1996 has been reached [UNHCR 26/01/96].

The nutritional situation of these refugees remains adequate. A recent screening of children under five years old found only 1.3% levels of wasting (see Annex 1 18(a)). Cases of micro-nutrient deficiency diseases such as scurvy, angular stomatitis and beri--beri, are reportedly declining, and fortified blended foods, fresh vegetables and par boiled rice are now being distributed and are apparently well accepted amongst the refugee population. The incidence rate of ARI, which was recorded as high in the last RNIS report, is now decreasing [SCF 19/01/96, UNHCR 26/01/96].
Overall, this population is not currently considered to be at heightened nutritional risk (category I in Table 1).

19. Refugees from Rakhine State, Myanmar in Bangladesh

(see Map 19)

There are approximately 50,000 refugees from Rakhine State, Myanmar in Bangladesh. Repatriation is continuing, but at a very slow rate. It is hoped that the repatriation process will pick up speed and that many of the refugees will have returned home by June 1996, before the monsoon season [UNHCR 26/01/96]. A recent survey found that overall levels of wasting were 9.5% with 0.2% severe wasting and/or oedema (see Annex 1 19(a)). This compares favourably with wasting rates of 15% amongst the local population. Crude mortality rates were recorded at 0.25/10,000/day (normal) while under-five mortality rates were 0.58/10,000/day (normal). Morbidity data indicates the existence of angular stomatitis (associated with deficiency of riboflavin) with crude incidence rates of 11/1,000/month and under-five rates of 4.8/1000/month [UNHCR 06/02/96].

Overall, despite low levels of wasting, this population is at high risk due to the presence of micronutrient deficiencies (category I in Table 1).

20. Southern Iraq

There has been no updated information on the health and nutrition condition of the 220,000 Marsh Arabs in southern Iraq. The last RNIS reported a deteriorating situation for those remaining in country, while the small portion of this population who have crossed into Iran are not currently felt to be at heightened nutritional risk.

List of Sources for February 1996 RNIS Report

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MSF–B 26/10/95 Nutritional Survey in the Bonthe Islands

MSF–B–a 26/10/95 Enquete Nutritionnelle Ville de Mwene Ditu, Kasai Oriental/Zaire

MSF–CIS Jan. 96 Bi – Monthly Update

MSF–F Nov. 95 Enquete Nutritionnelle dans la Municipalite de Benguela

MSF–H 13/02/96 Survey Results

SCF 12/02/96 Personal Communication (Liberia, S Sudan, Tanzania)

SCF 19/01/96 Personal Communication (Nepal)

UNCAH 28/01/96 Humanitarian Assistance in Angola – Situation Report

UNHAA 13/12/95 Weekly Update (Afghanistan)

UNHAA 14/01/96 Weekly Update (Afghanistan)

UNHAA 26/12/95 Weekly Update (Afghanistan)

UNHCR 07/12/95 Refugee Update No 5

UNHCR 01/01/96 Fact Sheet – Goma Camps

UNHCR 02/02/96 Personal Communication – Touareg Refugees

UNHCR 06/02/96 Personal Communication – Senegal

UNHCR 07/02/96 Health and Nutrition Status of Refugees in Bangladesh – 1995

UNHCR 08/01/96 Food Distribution Report – Goma Camps

UNHCR 10/01/96 Personal Communication – Uganda

UNHCR 12/02/96 Personal Communication – Afghanistan Repatriation

UNHCR 1995–97 Appeal for the Repatriation and Reintegration of Angolan Refugees

UNHCR 23/01/96 Personal Communication (Sudan, Uganda)

UNHCR 26/01/96 Personal Communication (Liberia Region, Benin, Ghana, Nepal, Bangladesh)

UNHCR 29/01/96 Food distribution Report, Goma

UNHCR 31/01/96 Rwanda and Burundi Operation – Update of the Situation as at 31 January 1996

UNHCR 31/12/95 Update on Numbers of Refugees in Kenya

UNHCR Oct. 95 Summary of SRRA Survey Results

UNHCR–a 08/01/96 Basic Food Ration in Goma

UNHRC 15/01/96 From Relief to Development in Somalia

WFP 02/02/96 Weekly Update

WFP 09/02/96 Weekly Update

WFP 05/01/96 Weekly Update

WFP 09/02/96 Personal Communication – Draft of RNIS # 14

WFP 12/01/96 Weekly Update

WFP 19/01/96 Weekly Update

WFP 22/12/95 Weekly Update

WFP 26/01/96 Weekly Update
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*Org

- AICF: Action International Contre la Faim
- CONCERN
- FAO: Food & Agricultural Organization of the United Nations
- GOAL
- ICRC: International Committee of Red Cross
- IFRC: International Federation of Red Cross
- IOC: Integrated Operation Centre Kigali
- MDM: Médecins du Monde
- Min of Health: Ministerio da Sauda, Republica de Mocambique
- 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
- SCF: Save the Children Fund
- UCAH: United Nations Humanitarian Assistance Coordination Unit (Angola)
- UNHAA: United Nations Humanitarian Assistance for Afghanistan
- UNHRCS: United Nations Humanitarian and Resident Coordinator for Somalia
- UNECSOC: United Nations Economic and Social Council
- UNHCR: United Nation's High Commission on Refugees
- UNICEF: United Nation's Children Fund
- WFP: World Food Programme
- WHO: World Health Organization
- WV: World Vision
### Table 1 – Information Available on Total Refugee/Displaced Populations (as of February 1996)

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**Sub-Saharan Africa**

1. Angola (id/wa)  
   - Population Numbers: 10′400 1′389′600 1′400′000 0 imp  
   - Comments: Pocket pockets of malnutrition are likely to exist in inaccessible areas.

2. Benin/Ghana/Togo Region  
   - Population Numbers: 110′000 110′000 −14′000 stat  
   - Comments: Decrease in total due to repatriation.

3. Burkina Faso/Mauritania  
   - Population Numbers: 68′000 68′000 0 imp  
   - Comments: Nutritional status probably improving due to improved rations.

4. Burundi/Rwanda Region  
   - Population Numbers: 308′000 186′000 2′380′000 2′874′000 −203′400 stat  
   - Comments: Decrease in total due to decreased estimated number of displaced in Burundi.

5. Central African Republic  
   - Population Numbers: 38′800 38′800 0 stat  

6. Djibouti  
   - Population Numbers: 25′000 25′000 0 stat  

7. Ethiopia  
   - Population Numbers: 81′000 173′000 134′000 388′000 0 stat  

8. Kenya  
   - Population Numbers: 173′000 173′000 −13′000 det  

9. Liberia/Sierra Leone/Guinea/Cote  
   - Population Numbers: 57′400 672′600 1′705′000 1′105′000 3′540′000 0 stat/det  
   - Comments: Pockets of malnutrition are likely to exist in inaccessible areas.
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<th>Differ.</th>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudan</td>
<td>2'300'000</td>
<td>2'300'000</td>
<td>900'000</td>
<td>det</td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>222'000</td>
<td>222'000</td>
<td>0</td>
<td>imp</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zaire</td>
<td>262'000</td>
<td>443'000</td>
<td>705'000</td>
<td>0</td>
<td>stat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Zambia</td>
<td>26'000</td>
<td>26'000</td>
<td>13'300</td>
<td>stat</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>440'300</strong></td>
<td><strong>2'041'100</strong></td>
<td><strong>3'453'600</strong></td>
<td><strong>5'726'800</strong></td>
<td><strong>2'300'000</strong></td>
</tr>
</tbody>
</table>

**Notes:**
- May exist in Liberia in inaccessible areas; deteriorating security and nutritional situation in Sierra Leone.
- Displaced in Mutarara at high risk due to pellagra. More vulnerable people due to lower than expected harvests, and subsequent lack of food stocks.
- Increased number of vulnerable people due to continued insecurity.
- Increased total due to increased number of those needing aid in S Sudan.
- Reduced estimated numbers due to census in October.
- Those in Mwene Ditu at high risk.
- The increased number is due to an update estimate, not an influx of refugees.
I. High Prev – Those reported with high prevalences of malnutrition and/or micronutrient deficiency diseases and sharply elevated mortality rates (at least 3x normal).

IIa: High Risk – At high nutritional risk, limited data available, population likely to contain pockets of malnutrition.

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

IIc: 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 February 1996 – RNIS #14 (population estimates in thousands)
<table>
<thead>
<tr>
<th>Country</th>
<th>N. of People</th>
<th>M. of People</th>
<th>G. of People</th>
<th>S. of People</th>
<th>W. of People</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eritrea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>11</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Ghana</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guinea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td></td>
<td>24</td>
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<tr>
<td>Liberia</td>
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<td>14</td>
<td>477</td>
<td>1'700</td>
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</tr>
<tr>
<td>Mali</td>
<td></td>
<td>33</td>
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<td></td>
<td></td>
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<td>Mauritania</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>105</td>
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<tr>
<td>Somalia</td>
<td></td>
<td>275</td>
<td>126</td>
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<td></td>
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<tr>
<td>Sudan</td>
<td></td>
<td>60</td>
<td>41</td>
<td></td>
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<td>Tanzania</td>
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</tr>
<tr>
<td>Togo</td>
<td>20</td>
<td></td>
<td>71</td>
<td></td>
<td></td>
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<tr>
<td>Uganda</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zaire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zambia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>1'400</td>
<td>20</td>
<td>33</td>
<td>275</td>
<td>305</td>
<td>0</td>
</tr>
</tbody>
</table>

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 = 9.5 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).

Figure 1 – Refugee and Displaced Populations
Figure 1 – Refugee and Displaced Populations – Selected Areas in Africa (February 1996)

Figure 2 – Trends in Total Refugee/Displaced Populations and Risk Categories
Figure 2 – Trends in Total Refugee/Displaced Populations – By Risk Categories Africa: December 1993–December 1995

Figure 3 – Trends in Population Estimates and Risk Categories in Six Countries
Annex 1 – Results of Surveys Quoted in February RNIS Report (#14) – usually children 6–59 months

<table>
<thead>
<tr>
<th>Survey Area</th>
<th>Survey Conducted by</th>
<th>Date</th>
<th>% Wasted*</th>
<th>% Severely Wasted*</th>
<th>Oedema (%)</th>
<th>Crude Mortality (/10,000/day)</th>
<th>Under 5 Mortality (/10,000/day)</th>
<th>Measles Immunisation Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Angola</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Benguela City</td>
<td>MSF–F</td>
<td>Nov. 95</td>
<td>4.4</td>
<td>1.6</td>
<td>0.0</td>
<td></td>
<td></td>
<td>44.4</td>
</tr>
<tr>
<td>b. Calulu, Kwanza</td>
<td>WV</td>
<td></td>
<td>4.8**</td>
<td>3.0**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S Sudan (high risk)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S Sudan (low risk)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Dange–Ya–Mena, Kwanza Norte</td>
<td>WV</td>
<td>4.9**</td>
<td>2.0**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Galungo Alto</td>
<td>WV</td>
<td>Oct. 95</td>
<td>20.4**</td>
<td>12**</td>
<td>10.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Mavinga, Cuando Cubango</td>
<td>AICF</td>
<td>Nov. 95</td>
<td>7.6</td>
<td>1.0</td>
<td>0.0</td>
<td>0.43</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>f. Balombo, Benguela Province</td>
<td>CRS</td>
<td></td>
<td>14 (MUAC)</td>
<td>4.3 (MUAC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. M'banza Congo Town</td>
<td>MSF–H</td>
<td>Jan 96</td>
<td>14.0**</td>
<td>3.4**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Burundi/Rwanda Region

| a. Muhanga Camp | MSF–H | Nov. 95 | 16.1** | 50** |
| b. Gasenyi Camp | MSF–H | Nov. 95 | 15.0** | 3.9** |
| c. Gohombo Camp | MSF–H | Nov. 95 | 18.2** | 3.0** |
| d. Buraniro Camp | MSF–H | Nov. 95 | 17.2** | 4.1** |

9. Liberia Region

| a. Putu, Grand Gedeh County (Liberia) | WV | Dec. 95 | 31.7 (<80%)** | 5.7 (<70%)** |
| b. Gondama (Sierra Leone) | AICF | Oct. 95 | 28.1 | 5.7 | 1.9 | 2.7 | 4.0 |
| c. Bonthe Islands (Sierra Leone) | MSF–B | Nov. 95 | 12.9 | 23 | 2.4 | 2.7 |
| d. Macenta (Guinea) | AICF | Nov. 95 | 5.7 | 0.9 | 0.3 |

12. Somalia

| a. Bardera, Gedo Region | AICF | Nov. 95 | 19.3 | 3.6 | 28 |

13. Sudan

<p>| a. Mogale Camp (S Sudan) | AICF | Nov. 95 | 16.0** | 1.3** |
| b. Um Rakuba | SRRA | Sep. 95 | 7.0 (&lt;80%) |
| c. Safawwa | SRRA | Sep. 95 | 6.4 (&lt;80%) |
| d. Wad Sherife | SRRA | Sep. 95 | 13.0 (&lt;80%) |
| e. K Girba | SRRA | Sep. 95 | 10.4 (&lt;80%) |</p>
<table>
<thead>
<tr>
<th>Country</th>
<th>Area</th>
<th>Agency</th>
<th>Date</th>
<th>Key Indicator</th>
<th>Value(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>f. Shagarab Camps</strong></td>
<td>SRRA</td>
<td>Sep 95</td>
<td>15.3</td>
<td>(&lt;80%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>14 Uganda</strong></td>
<td>a. Koboko Camp</td>
<td>MSF−H</td>
<td>Jan. 96</td>
<td>11.2**</td>
<td>1.1**</td>
<td></td>
</tr>
<tr>
<td><strong>15 Zaire</strong></td>
<td>a. Luputu, Kasai</td>
<td>MSF−B</td>
<td>Nov. 95</td>
<td>9.9</td>
<td>1.3</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>b. Gandajika, Kasai</td>
<td>MSF−B</td>
<td>Nov. 95</td>
<td>6.8</td>
<td>0.6</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>c. Likasi, Kasai</td>
<td>MSF−B</td>
<td>Dec. 95</td>
<td>5.3</td>
<td>0.3</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>d. Mwene Ditu (Resident)</td>
<td>MSF−B</td>
<td>Oct. 95</td>
<td>17.8**</td>
<td>4.8**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. Mwene Ditu (Displaced)</td>
<td>MSF−B</td>
<td>Oct. 95</td>
<td>42.9**</td>
<td>9.3**</td>
<td></td>
</tr>
<tr>
<td><strong>17. Afghanistan Region</strong></td>
<td>a. Kabul</td>
<td>AICF</td>
<td>Nov. 95</td>
<td>6.6</td>
<td>1.2</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>b. New Hadda Camp</td>
<td>MSF−H</td>
<td>Dec. 95</td>
<td>4.0**</td>
<td>0.6**</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>18 Bhutanese Refugees in Nepal</strong></td>
<td>a. All 8 Camps</td>
<td>SCF</td>
<td>Nov. 95</td>
<td>1.3</td>
<td>(&lt;80%)</td>
<td></td>
</tr>
<tr>
<td><strong>19 Refugees in Bangladesh</strong></td>
<td>a. All camps</td>
<td>UNHCR</td>
<td>1995</td>
<td>9.5</td>
<td>0.2</td>
<td>0.25</td>
</tr>
</tbody>
</table>

* 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 pg 4 for guidance in interpretation of indicators.

SRRA = Sudanese Relief and Rehabilitation Association

**NOTES on Annex 1**

1. Angola
   a. This survey was conducted by MSF–France in Benguela City in November 1995. 976
children 6–59 months old were included in the survey. Wasting was defined as wt/ht <−2z scores and severe wasting was <−3z scores. No cases of oedema were seen.

b. This survey was conducted by World Vision in Calulu, Kwanza Sul province. The information was obtained from a Humanitarian Assistance in Angola update, and no further details are currently available.

c. This survey was conducted by World Vision in Kwanza Norte province. The information was obtained from a Humanitarian Assistance in Angola update, and no further details are currently available.

d. This survey was carried out by World Vision from 23–27 October 1995 in Golungo Alto, Kwanza Norte province. This was a two stage cluster sample and children 6–59 months were included. Wasting was defined as wt/ht <−2 sd of the median weight for height and/or oedema, and severe wasting <−3 sd of the median weight/height and/or oedema. Oedema was also measured separately.

e. This survey was carried out by AICF in Mavinga, Cuando Cubango province from 26 October–6 November 1995. This was a cluster sample survey and 780 children 6–59 months (65–110 cms height used if age unknown). Wasting was defined as wt/ht <−2 sd and severe wasting was <−3 sd. Oedema was measured separately.

f. This survey was conducted by Catholic Relief Services (CRS) in Balumbo, Benguela Province. Wasting was measured by MUAC. This information was obtained from a Humanitarian Assistance in Angola update, and no further details are currently available.

g. This survey was carried out by MSF–Holland from 30–31 January 1996 in M’banza, Angola. It was a cluster sample survey, and 506 children were included in the survey. Wasting is defined as wt/ht <−2 sd and/or oedema and severe wasting as <−3 sd and/or oedema.

4. Burundi/Rwanda Region

a–d. These surveys were conducted by MSF–Holland at the end of November 1995. Wasting is defined as wt/ht <−2 sd and/or oedema and severe wasting as <−3 sd and/or oedema.

9. Liberia/Sierra Leone Region

a. This was a rapid nutrition assessment conducted in December 1995 by World Vision. Children 6–59 months old were included in the survey; where age was not known, the upper limit was 115 cms. A random sampling method was used and 265 children were weighed and measured. Wasting was defined as wt/ht <−2 sd of the median weight for height and/or oedema, and severe wasting <−3 sd of the median weight/height and/or oedema.

b. This survey was carried out by Action Internationale Contre la Faim (AICF) from 10–13 October 1995. This was a 30x30 cluster survey including 917 children 6–59 months old. Wasting was defined as wt/ht <−2 z scores and severe wasting <−3 z scores. Oedema was measured separately.

c. This survey was conducted by MSF–Belgium from 24–26 October 1995. This was a cluster survey that included 796 children 6–59 months old. Wasting was defined as wt/ht <−2 z scores and severe wasting <−3 z scores. Oedema was measured separately.

d. This survey was conducted by Action Internationale Contre la Faim (AICF) from 18–25 November 1995. This was a two stage cluster sample survey that included 935 children 6–59 months old. Wasting was defined as wt/ht <−2 z scores and severe wasting <−3 z scores. Oedema was measured separately.

12. Somalia

a. This survey was conducted in Bardera, Gedo Region in November 1995. It was a cross sectional survey using random, two stage cluster sampling. 908 children 6–59 months old
were included in the survey. Wasting was defined as \( \text{wt/ht} < -2 \) z scores and severe wasting \( <-3 \) z scores. Oedema was measured separately.

13. Sudan

a. This information comes from a draft of a nutritional survey conducted by Action Internationale Contre la Faim (AICF) from 20–22 November 1995. It was a two stage cluster sample survey. Wasting was defined as \( \text{wt/ht} < -2 \) z scores and severe wasting \( <-3 \) z scores.

b–f. These surveys were conducted by the Sudanese Relief and Rehabilitation Association between June and September 1995. Wasting was defined as \( <80\% \) wt/ht.

14. Uganda

a. This survey was conducted by MSF–Holland in January 1996. Wasting is defined as \( \text{wt/ht} <-2 \) sd and/or oedema and severe wasting as \( <-3 \) sd and/or oedema.

15. Zaire

a. This survey was carried out by MSF–Belgium from 7–9 November 1995 in Luputa, Zaire. It was a cluster sample survey which included 1099 children 6–59 months old. Wasting was defined as \( \text{wt/ht} < -2 \) z scores and severe wasting \( <-3 \) z scores. Oedema was measured separately.

b. This survey was carried out by MSF–Belgium from 14–17 November 1995 in Gandajika, Zaire. It was a cluster sample survey which included 705 children 6–59 months old. Wasting was defined as \( \text{wt/ht} < -2 \) z scores and severe wasting \( <-3 \) z scores. Oedema was measured separately.

c. This survey was carried out by MSF–Belgium from 5–7 December 1995 in Likasi, Zaire. It was a two stage cluster sample survey which included 797 children 6–59 months old. Wasting was defined as \( \text{wt/ht} < -2 \) z scores and severe wasting \( <-3 \) z scores. No cases of oedema were seen.

d–e. This survey was conducted by MSF–Belgium from 23–26 October 1995 in Mwene Ditu, Zaire. The results are broken out by resident and displaced populations. A total of 1525 children 6–59 months old (or 65–110 cms if age was not known) were included. This was 816 resident children and 710 displaced children. Wasting was defined as \( \text{wt/ht} <-2 \) sd and/or oedema and severe wasting was \( <-3 \) sd and/or oedema.

17. Afghanistan Region

a. This survey was conducted by Action Internationale Contre la Faim (AICF) in Kabul from 28 October – 8 November 1995. This was a two stage cluster sample survey which included 884 children 6–59 months old, or 65–110 cms if age was not known. Wasting was defined as \( \text{wt/ht} < -2 \) z scores and severe wasting \( <-3 \) z scores. Oedema was measured separately.

This survey also measured 404 non-pregnant women aged 15–45 years and used a BMI of \(<18.5\) to define wasting.

b. This survey was carried out by MSF–Holland in December 1995. Wasting was defined as \( \text{wt/ht} < -2 \) sd and/or oedema and severe wasting was \( <-3 \) sd and/or oedema.

18. Bhutanese Refugees in Nepal

a. This information comes from a screening exercise on children under five carried out in November 1995. Wasting was defined as \( \text{wt/ht} <80\% \) of the median.

19. Refugees from Rakhine State, Myanmar in Bangladesh

a. This information comes from a UNHCR health and nutrition report for the year 1995. Wasting is defined as \( \text{wt/ht} <=-2z \) scores and severe wasting \( <=-3 \) z scores in children under five years old.
### Annex 2 – Seasonality in Sub-Saharan Africa*

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

*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.

### List of Maps

**Map A – Situational Map**
1. Angola
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5. Central African Republic
6. Djibouti
7. Ethiopia
8. Kenya
9. Liberia/Sierra Leone
10. Mauritania
11. Mozambique
12. Somalia
13. Sudan
14. Uganda
15. Zaire
16. Zambia

Map A – Situational Map

Map 1 – Angola
Map 1 − Angola

Map 3 − Mauritania
Map 11 – Mozambique

Map taken from MSF–CIS Bi–Monthly Bulletin
Map 13 – Sudan

Map 14 – Uganda
Map 15 – Zaire

Map 17 – Afghanistan
Map 17 – Afghanistan

Map 18 – Nepal
Map 18 – Nepal

Map 19 – Bangladesh
Map 19 – Bangladesh