# Refugee Nutrition Information System (RNIS), No. 12 – Report on the Nutrition Situation of Refugee and Displaced Populations

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## HIGHLIGHTS

***Angola*** *The overall nutritional situation appears to be stabilising as improved security allows more farmers to return to their land, with agencies providing the necessary agricultural inputs in advance of the planting season. Also, deliveries of emergency food aid have improved as more relief is transportable via road. However, some populations groups still remain inaccessible due to insecurity and may therefore be at heightened nutritional risk.*

***Rwanda/Burundi*** *The nutritional situation in the region appears generally stable based on available reports, low levels of wasting and mortality being estimated from most surveys. However, insecure and consequently inaccessible areas of Burundi, and the heavily populated north east of Rwanda, may be at heightened nutritional risk. A continued short–fall in general ration allocations in refugee camps in Zaire and Tanzania in conjunction with a newly imposed government ban on economic activities in the Zairian camps may lead to a decline in nutritional status in the coming months. Recent surveys show that the nutritional status of refugees in a number of the camps around Uvira in Zaire appears to be deteriorating.*

***Kenya*** *A recent planned reduction in general ration levels and updating of ration cards may be having some adverse impact on levels of wasting in the Dadaab area (in eastern Kenya). Seasonal risk of scurvy at this time of year is being monitored. The nutritional situation in the camps as reported overall is not alarming, but needs to be carefully watched.*

***Liberia Region*** *Continued progress towards enduring peace in Liberia is allowing better relief access to affected populations. Evidence of extraordinarily high levels of malnutrition is being found in some newly accessible areas: in one survey in Lower Bong/Upper Margibi wasting and/or oedema was seen in over 50% of the children surveyed. Most Liberian refugees in Cote d'Ivoire and Guinea are reportedly waiting to see if the peace becomes permanent before repatriating. In contrast, the situation in Sierra Leone is continuing to deteriorate with the south and east of the country particularly insecure and inaccessible to relief agencies. One survey (in Kenema) found levels of wasting between 20–37% suggesting that the long–term lack of access to emergency food aid is having a very serious nutritional effect.*

***Somalia*** *The overall nutrition situation in Somalia appears to be deteriorating. Recent surveys in Mogadishu and Kismayo have found high levels of wasting (17–25%) which are attributed to a variety of economic– and security–related factors. Many Somalis, especially in large urban centres, are presently at considerable nutritional risk.*

***Sudan*** *Constraints on Operation Lifeline Sudan and insecurity in parts of the South are beginning to adversely affect food security and nutrition. Cases of measles have also been reported in Southern Sudan. Populations in camps for the displaced outside Khartoum are also probably at heightened nutritional risk due to over–crowding and seasonal price inflation.*

***Afghanistan Region*** *Despite the current security situation in and around Kabul, which is reportedly tense, repatriation from Iran and Pakistan is continuing. The nutrition situation in Afghanistan appears to be stable. However, a recent survey showing somewhat elevated levels of wasting in an area to which many people are returning may indicate some nutritional vulnerability among the returnees and the resident population.*

***Nepal*** *Although levels of wasting among the Bhutanese refugees remain very low, the incidence of scurvy and angular stomatitis is beginning to rise slightly in some camps. The precise reasons for this are unclear, but the situation requires careful monitoring for micronutrient deficiencies.*

***Iraq*** *Although there are no new data on the 220,000 Marsh Arabs in southern Iraq and Iran, the declining nutritional situation in the south and central provinces described in a recent UN assessment must be must be affecting this highly vulnerable population. Aenemia and vitamin A deficiency have been reported as widespread in Iraq, reflecting 'the severity of the underlying nutritional situation'.*

***ADEQUACY OF FACTORS AFFECTING NUTRITION***

| Factor | Angola | Burundi | Kenya | Liberia | Rwanda | Sierra Leone | Somalia | Sudan | Tanzania | Zaire |
|---|---|---|---|---|---|---|---|---|---|---|
| *1. Degree of accessibility to large population groups due to conflict* | O | X | ✓ | O | ✓ | X | ✓ | O | ✓ | ✓ |
| *2. General resources* | | | | | | | | | | |
| *– food (gen. stocks)* | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | X | X | ✓ | ✓ |
| *– non–food* | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | X | X | ✓ | ✓ |
| *3. Food pipeline* | ?✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ?✓ | X | X |
| *4. Non–food pipeline* | ?✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ?✓ | ?✓ | ?✓ |
| *5. Logistics* | ✓ | X | ✓ | O | ✓ | X | ✓ | O | ✓ | ✓ |
| *6. Personnel** | ✓ | X | ✓ | ✓ | ✓ | ✓ | ✓ | O | ✓ | ✓ |
| *7. Camp factors*** | ✓ | O | ✓ | ✓ | na | ?X | O | O | O | O |
| *8. Rations – kcals* | ✓ | ✓ | X | ✓ | ✓ | X | ✓ | X | X | X |
| *– variety/micronutrients**** | ✓ | ✓ | X | ✓ | ✓ | X | ✓ | X | ✓ | ✓ |
| *9. Immunization* | ? | ? | O | X | ✓ | X | O | ?X | ✓ | ✓ |
| *10. Information* | O | X | ✓ | O | ✓ | X | ✓ | X | ✓ | ✓ |

✓ *Adequate* **O** *Problem in some areas* **X** *Problem* **?** *Don't know*
**?**✓ *Don't know, but probably adequate* **?X** *Don't know, but probably inadequate*

** 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/SCN[1] (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 twelfth of a regular series of reports.

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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 He 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.

**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**

James W.P.T. and Schofield C. (1990) *Human Energy Requirements.* FAO/OUP.

Schofield C. and Mason J. (1994) *Evaluating Energy Adequacy of Rations Provided to Refugees and Displaced Persons.* Paper prepared for Workshop on the Improvement of the Nutrition of Refugees and Displaced People in Africa, Machakos, Kenya, 5−7 December 1994. ACC/SCN, Geneva.

ACC/SCN (1994) *Update on the Nutrition Situation, 1994* (p81).

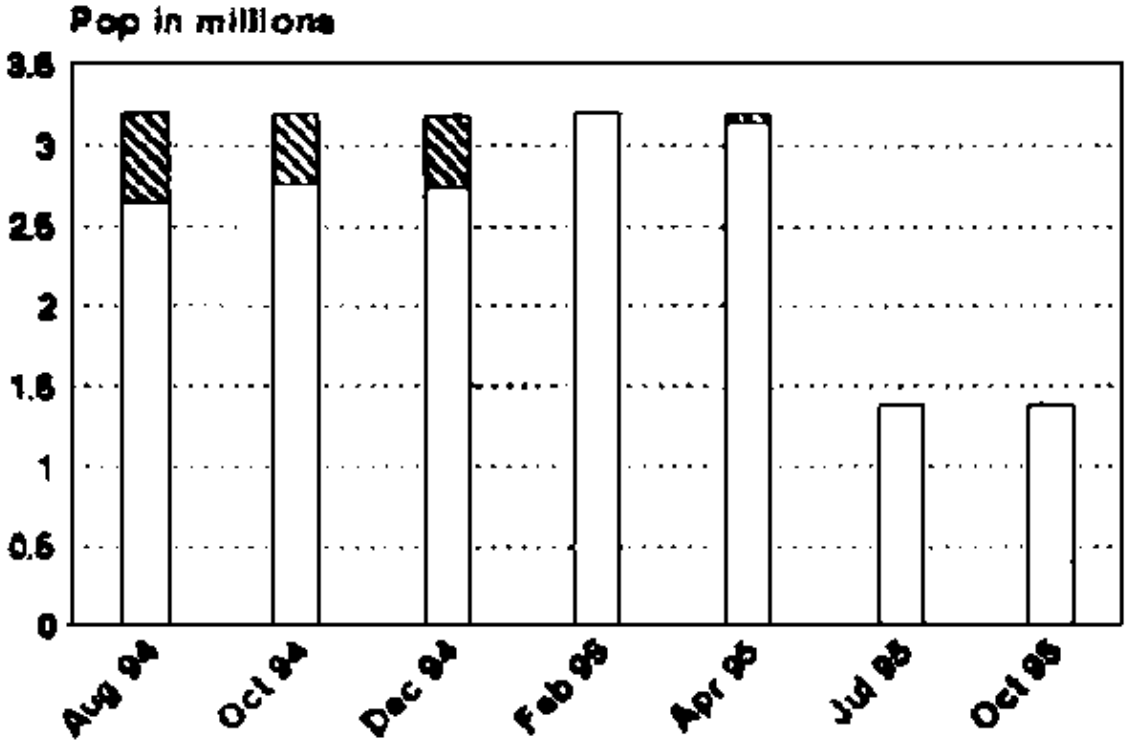
UNICEF (1994) State *of the World's Children* p.82. UNICEF, New York.

## SUB−SAHARAN AFRICA

### 1. Angola

(see Map 1 and Figure 3 A)

The overall situation in Angola continues to improve. Although an estimated 1.4 million internally displaced people, returnees and/or war affected people still require emergency assistance it is reported that many of the displaced are now returning home for the planting season beginning in September. It was planned to distribute seeds and tools to over 700,000 farmers in preparation for planting [WFP 11/08/95−22/09/95].




**A. Angola**

Trend in numbers of displaced/war affected. Shaded areas indicate those at heightened nutritional risk.

The much improved security situation is reducing dependence on expensive air transport of relief items, although banditry and landmines are still constraining expansion of relief programmes to some areas. At the end of August 1995 less than 30% of transport was by air because many roads which were closed, such as the one between Huambo and Menongue, now considered open. The demobilisation of soldiers is continuing [WFP 11/08/95– 02/10/95].

However, deterioration in land fertility due to over–use of safe farming areas in recent years, poor road infrastructure, land mines and occasional security incidents are still major constraints to agricultural production. As a result, the international community recognises the need to give urgent priority to rebuilding the devastated agricultural infrastructure and support services. NGO–managed food–for–work projects involving some 20,000 people are being implemented to re–build schools, health posts, latrines and irrigation canals and to re–open farmland and access roads [WFP 11/08/95–22/09/95, FAO Jul 95].

There is very little recent nutritional information available. One survey conducted in Caconda in Huila Province in August found 14.7% levels of wasting with 2.7% severe wasting (see Annex I (la)). Unfortunately, proposals for emergency feeding arising from this survey cannot be implemented due to the poor security situation in the area [WFP 25/08/95].

There are anecdotal reports of very high levels of wasting among the displaced populations surrounding cities, especially along the coast (i.e. Lobota, Benguera) [ICRC 10/10/95].

*Overall,* most of the 1.4 million Angolans currently receiving emergency assistance can be considered to be at moderate nutritional risk due to their dependence on food aid, although food security will most likely improve following the next harvest. However, significant levels of wasting may still exist in certain inaccessible parts of the country, particularly where insecurity is a factor, but accurate numbers of people affected are not available.

***How can external agencies help?*** Continued support for the recovery of agricultural production is needed. As new areas become accessible, nutritional surveys would be very useful to facilitate situation analysis, assessment of needs, and targeting services to improve nutrition.

**2. Benin/Ghana/Togo Region**

Violence in Togo in January 1993 led to the displacement of over 300,000 people into neighbouring Benin and Ghana. There are currently 157,000 refugees remaining in the two countries of asylum. Now that the political situation in Togo has stabilised, plans for an organised repatriation are being made.

*Benin* Approximately 5,000 Togolese refugees have already spontaneously repatriated to Togo leaving 45,000 refugees in the country. Organised repatriation is planned for the remainder in the near future [UNHCR 26/09/95, WFP 12/10/95]. There are no reports of any change in the adequate nutritional status of this refugee population.

*Ghana* It is hoped that a successful start to the spontaneous repatriation of Togolese refugees from Benin will encourage the approximately 98,000 refugees in Ghana to return home [UNHCR 28/09/95]. Their nutritional situation is not thought to be critical.

The adequate nutritional situation of the 14,000 assisted Liberian refugees has not seemingly changed since the last RNIS report. These refugees continue to adopt a "wait and see" attitude towards possible repatriation now that the situation in Liberia appears to be stabilising [UNHCR 28/09/95].

*Overall,* the approximately 157,000 refugees in this area are probably not at heightened nutritional risk (category IIc in Table 1).

**3. Burkina Faso**

(see Map 3)

There are approximately 74,000 assisted Touareg refugees in Burkina Faso and Mauritania. These refugees have fled ethnic violence in Mali.

*Burkina Faso* There are no reports of any change in the generally adequate nutritional situation of the 33,000 Touareg refugees from Mali and Niger in Burkina Faso. Many of this population arrived after a second wave of displacement in June/July 1994 [WFP 12/10/95].

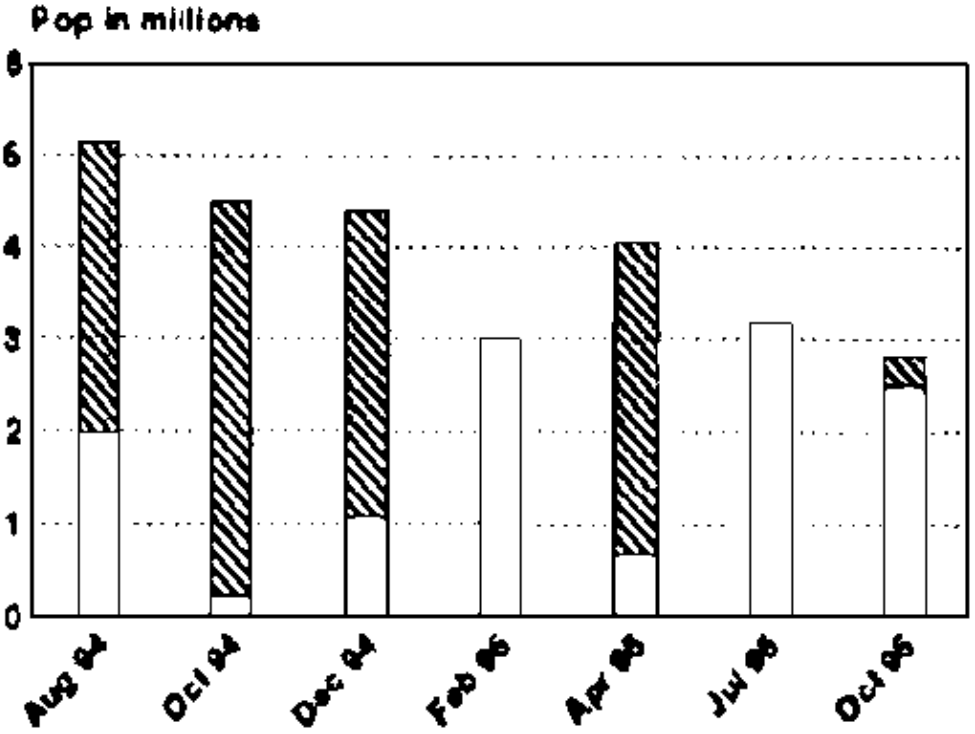
*Mauritania* There are approximately 41,000 assisted Touareg refugees from Mali in Mauritania. These refugees began arriving in southeast Mauritania at the end of 1991. There have been no further nutritional surveys on this population since the last RNIS report which described levels of 17.1 % wasting with a crude mortality rate of 6 times normal. These high rates were largely attributed to a poor general ration supply and high rates of diarrhoea. However, since then there has been an improved general ration distribution of millet, oil and pulses in August providing 1900 kcals/person/day to camp populations [MSF−F 11/09/95].

*Overall,* the refugees in Burkina Faso are not currently considered to be at heightened nutritional risk (category Iie in Table 1) while those in Mauritania could be considered to be at high risk (category IIa in Table 1).

**4. Burundi/Rwanda Situation**

(See Map 4 and Figure 3B)

With the exception of some camps around Uvira, in Zaire the nutritional status of most refugees, returnees and internally displaced people in the region is reported to generally remain adequate, in spite of persistent 20−30% short−falls in general ration allocations in the Zairian and Tanzanian refugee camps. The recent forced repatriation of Burundi and Rwandan refugees from Zaire has increased tensions. Re−registration in the Tanzanian camps has adversely affected relations between refugees, government and aid agencies. Voluntary repatriation is being encouraged although many refugees are reluctant to return home. Insecurity in parts of Burundi has rendered certain populations inaccessible while rebel incursions along the Zairian/Rwandan border are routinely reported. However, increasing numbers of people are returning to their land in Burundi while in Rwanda the process of rebuilding the damaged infrastructure is said to be progressing well.




B. Burundi/Rwanda Region

Trend in numbers of refugees/displaced and proportion severely malnourished or at high nutritional risk (black area).

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

| | Aug 94 | Oct 94 | Dec 94 | Feb 95 | Apr 95 | Jul 95 | Oct 95 |
|---|---|---|---|---|---|---|---|
| **Burundi** | 1,230,000 | 770,000 | 1,200,000 | 740,000 | 492,500 | 515,000 | 315,000 |
| **Rwanda** | 2,040,000 | 2,500,000 | 2,500,000 | 335,000 | 1,750,000 | 800,000 | 725,000 |
| **Tanzania** | 353,000 | 556,000 | 556,000 | 630,000 | 686,000 | 644,000 | 629,000 |
| **Zaire** | 1,500,000 | 1,240,000 | 1,240,000 | 1,290,000 | 1,130,900 | 1,202,200 | 1,158,000 |
| **Uganda** | 10,000 | 10,000 | 10,000 | 5,000 | 5,000 | 6,700 | 6,400 |
| **TOTAL** | 5,133,000 | 5,076,000 | 5,076,000 | 3,000,000 | 4,064,400 | 3,167,900 | 2,831,400 |

*Burundi* Estimates of the number of internally displaced people in Burundi are very difficult to make due to continued insecurity and resulting displacement in many provinces, notably rural Bujumbura, Cibitoke and Bubanza. Most recently there have also been reports of fighting in Muyinga province. An estimated one third of the population of these provinces is currently on the move as confrontation between the army and militia continues. The continued insecurity is creating further refugee movements, with, for example, 2000 new refugees reported to have arrived in Uvira in mid– September. This is offset by the return of refugees from Uvira to secure areas of Burundi. Improved security in many other areas has allowed the return of numerous displaced people to their fields permitting in turn a progressive reduction in the scale of emergency food aid distributions. A planning figure for the provision of emergency aid to 100,000 people is currently being used and it is anticipated that by March 19% this figure will have been further reduced to only 19,000 [FAO 16/08/95, WFP 18/08/95–22/09/95].

As a result of the sporadic need for supplementary food arising from periodic escalations in violence, a system for rapid provision of aid (normally a seven day ration) has been instituted in Burundi. This system has already benefited over 120,000 individuals. Insecurity is however, still preventing aid agency access in some areas, e.g. Cibitoke, with problems compounded by lack of implementing partners in the region and reluctance by private transporters to move food into unsafe areas.

There are approximately 215,000 Rwandan refugees remaining in Burundi. In line with other Rwandan refugees in the region, recent repatriations have been very small–scale with less than 200 people having

returned to Rwanda in recent months [WFP 22/09/95].

There are no new nutritional surveys available from Burundi, but given the volatile security situation, it is likely that pockets of acute malnutrition exist among some inaccessible populations. Cases of cholera have been reported in several provinces particularly in areas where water has been in short supply. Due to problems of access it is reportedly proving difficult to control these outbreaks [WHO 11/09/95,15/09/95].

*Rwanda* The population of Rwanda is presently estimated at 5,885,000, of which 5,450,000 are rural and dependent on agricultural production. There are no longer any camps for displaced people; these were closed in May 1995. It is thought that vulnerable families who are mostly recent returnees or internally displaced account for 15% of this population (725,000). Almost 30% of households in Rwanda are female−headed. Food distributions to recent returnees and formerly internally displaced people are continuing but problems with distribution lists often delay allocations. These targeted distributions are taking place to large populations in Butare, Kigali, Giterama, Gisenyi and Gikongoro [WFP 15/09/95].

During the course of 1995 a total of 186,000 refugees have returned to Rwanda. A system of way stations and agricultural support schemes is in operation for most returnee households. The low level of repatriation has proven very disappointing to the international aid community and is believed to reflect lack of confidence amongst Rwandans in the authorities' ability to guarantee their safety upon return [WFP 18/08/95, 11/09/95, 22/09/95].

The Zairian/Rwandan border is still officially closed, although the movement of aid workers and convoys with returnees is still allowed. Poor road conditions have hampered food distributions in some parts of Rwanda but food for work projects are said to be rapidly restoring damaged infrastructure [WFP 25/08/95, 01/09/95].

The recent harvest in Rwanda, although an improvement over previous years, is still 40% below a good year's average so that large amounts of food aid are projected to be necessary in the coming year [FAO 18/07/95].

There have only been a small number of recent nutritional surveys. A national nutritional survey in May 1995 found 9.7% wasting (see Annex I (4a)) while another survey during May in three communes of one prefecture (unspecified) found only 2.9% wasting (see Annex I (4b)). A more recent survey in Butare prefecture found sufficiently high levels of wasting to justify the establishment of five nutritional centres on a short term basis [UNICEF 06/09/95, WFP 11/09/95].

The targeted food distributions and increasing numbers of food for work schemes suggest that most households in Rwanda are not currently at heightened nutritional risk. An exception may be in the Northeast where there are many returnees without land and where large numbers of cattle and a lack of water have raised fears of potentially serious problems [WFP 01/09/95].

*Tanzania* A re−registration exercise in the camps has been completed and has led to a reduction in the number of beneficiaries to 629,000. Prior to the registration in the Karagwe camps, an estimated 6,000 refugees moved from the Ngara camps into the Karagwe camps in the hope of obtaining extra ration cards. Repatriation to Rwanda is still continuing at a very slow pace with many refugees considering that it is unsafe to return. A number of security problems have been reported around the camps and appear connected with un−registered refugees and bandit attacks on agency vehicles.

A recent survey from Musuhura Hill Camp in July (estimated population 84,000) in Ngara district found 6.4% levels of wasting with 3.1 % severe wasting (see Annex 1 4(c)). Disaggregated results for two refugee communes of origin (Birenga and Nyarugenge) within the camp found higher levels of wasting (11.4% and 13.6% respectively). These results are not different from those obtained in April 1995. Possible explanations put forward for these persistent levels of wasting were inadequacy of the general food distribution (general food distributions have only provided an average per capita ration of 1600 kcals in recent months), poor sanitation until recently, fewer food items on the market due to the dry season and consequent higher prices. The higher levels of wasting found amongst refugees from Birenga commune are thought to probably reflect the fact that this population was recently transferred from Benaco camp where it was one of the poorest communes. The coverage of the therapeutic feeding programme in the camp is estimated as 24% of the severely malnourished while measles immunisation coverage is very high at 93% [MSF−H 22/07/95].

*Goma, Zaire* A combination of forced repatriation of some 6,000 refugees, voluntary repatriation and re−registration has led to a decrease in the refugee population to 708,000. Efforts to promote voluntary repatriation have largely been unsuccessful. Tension between the Zairian military contingent and the refugees mounted throughout August and a number of security incidents, mainly connected with forced repatriation, led

to the evacuation of large numbers of relief staff who have subsequently returned. Tensions in Mugunga and Lac Vert camp led to temporary suspension of food distributions.

Food rations distributed throughout August and September have varied between 1500–1700 kcals/person/day.

The Zairian government announced its intention to start taxing commercial activity in refugee camps in August and by mid–September had announced a halt to all commercial activities by the refugees – a move which is expected to increase refugees dependence on food aid. The strategy of making the camps less attractive to refugees, including maintaining a curfew, is becoming clearer [WFP 11/08/95–02/10/95].

In *Katale* camp in July the crude mortality rate was 0.11/10,000/day and the under–five mortality rate was 0.26/10,000/day [MSF–H 14/09/95]. Both of these are below normally expected levels. Apart from these results, there have been no new surveys since the last RNIS report which showed a generally satisfactory nutritional situation in spite of low general ration deliveries in preceding months. However, the advent of the hungry season and potential effects of new legislation on refugee economic activity may well adversely affect refugee nutritional status in the coming months [WFP 22/09/95].

*Bukavu, Zaire* After the forced repatriation of some refugees from Bukavu, the situation in the town and camps remains tense. Tensions are also present between refugees and the local population. The number of refugees is currently estimated at 310,000 although the movement of refugees from one camp to another is making it difficult to be accurate about numbers. The voluntary repatriation programme is having only limited success as rumours of unfair imprisonment and clandestine massacres within Rwanda are spread by the Interhamwe in the camps. As in the Goma camps, only partial general rations (approximately 1500 kcals/person/day) have been delivered to camp populations in recent weeks. Furthermore, prevention of WFP trucks crossing the Burundi/Zaire border has led to low cereal stocks in Bukavu [WFP 18/08/95, 15/09/95].

Results from surveys conducted in the Bukavu camps in mid–July showed low levels of wasting ranging between 1.5%–4.8% with severe wasting varying from 0–1.6%. However, oedema, measured separately, was found in 2–4% of children (see Annex I 4(d–g)) [UNHCR 02/08/95].

*Uvira, Zaire* The recent attempted forced repatriation of large numbers of refugees caused most of the refugee population in Uvira to flee the camps temporarily and move to the hills. Camp food stores were looted during this exodus. Most of these refugees have now returned to the camps where a planning figure of 140,000 refugees (approximately 75,000 Burundis and 63,000 Rwandans) is still being used for food deliveries (the actual population in the camps is probably lower). Very few refugees are returning to Burundi while periodic influxes into Uvira continue as a result of security incidents in Burundi.

Food distributions are providing between 1700–1800 kcals/person/day and the nutritional situation appears to vary quite widely between camps. The Burundian military has ordered a halt to all deliveries of food aid by road from Burundi across the border to Uvira so that deliveries are now mainly by barge. There is concern that stocks of beans and oil may soon be exhausted [UNHCR 30/07/95].

Data at the end of July showed an increase in numbers admitted to feeding centres with many more cases of severe wasting. Under–five mortality rates had increased to over 2.5/10,000/day (2x normal) and in some camps was as high as 5/10,000/day (5x normal) [UNHCR 30/07/95].

Preliminary results from surveys conducted in the second half of August in three camps show worrying levels of wasting. In *Runingo* camp, the prevalence of wasting was measured at 21.6% with 12.3% severe wasting. In *Kajembo* camp wasting was 11.8% with 6.6% severe wasting and in *Luberizi* camp wasting was measured at 10.7% with 3.8% severe wasting and measles immunisation coverage was 61.1% (see Annex 14(h–k)) [UNHCR 30/08/95]. These levels of wasting are higher than those found in any previous survey since July 1994 (in April 1995 overall levels of wasting were only 3.8%) and may reflect a combination of factors including lack of access to general rations due to the departure from the camps following the forced repatriation attempts, the existence of cholera and dysentery, and the current hungry season [UNHCR 30/07/95].

Preliminary results from *Kagunga* camp indicated 6.1% levels of wasting and 2% severe wasting (see Annex I 4(h)). Measles immunisation coverage in this camp was 47.8% [UNHCR 30/08/95].

Coverage by therapeutic feeding programmes of the severely malnourished is extremely variable in the above camps, estimated as ranging from 24% to 80% in Kajebo and Runingo respectively [UNHCR 30/08/95].

Survey results in August from five other camps were better with wasting prevelances varying from 1.4–9.1 % and severe wasting ranging from 0–2.2% (see Annex 14 (1–p)). Measles immunisation coverage in the camps was low and ranged from 37%–62.5% [UNHCR 30/08/95].

Cholera has been reported in many camps throughout June, July and August with case fatality rates ranging from 1–22% (A case fatality rate for cholera of 1–2% is considered to be usual). Under five mortality rates for all camps in July were over 2.5/10,000/day (about twice the usual level) and appeared to be rising [UNHCR 29/07/95].

*Uganda* There are currently 6,400 Rwandan refugees in Uganda. This is a slight decrease from the time of the last RNIS report and is due to spontaneous repatriation of some of the refugees [UNHCR 18/09/95].

*Overall,* the internally displaced population in Burundi can be considered to be at high nutritional risk due to cholera (category IIa in Table 1) while no details on the nutritional status of the Rwandan refugees in Burundi are currently available (category III in Table 1). The vulnerable population in Rwanda and the refugee population in Tanzania are probably not currently at heightened nutritional risk (category lie in Table 1). The refugees in Goma and Bukavu, Zaire can be considered to be at moderate nutritional risk (category IIb in Table 1) and the refugees in Uvira at high risk (category I in Table 1) due to low measles immunisation coverage and, in some cases, elevated levels of wasting.

***How could external agencies help?***

- The main problem in *Burundi* is insecurity and resulting lack of access to vulnerable populations. However, when a reduction in insecurity allows, newly accessible areas should be rapidly surveyed for nutritional and health status and associated risk factors such as water availability.

- In *Rwanda* continued support for infrastructure repair work is needed while there should be close monitoring of nutrition in the north east of the country.

- Continued efforts are needed to improve the amounts of general ration supplied to refugee camps in *Tanzania* and *Zaire.* Furthermore, sanitation conditions in Tanzanian camps need to be improved along with coverage of selective feeding programmes in the camp, particularly for vulnerable communes, through promoting active case finding of malnourished children. In Zairian refugee camps there is an increased need for careful monitoring of nutritional status as the effects of the government ban on economic activity are felt. In the Uvira camps where surveys show serious malnutrition there is a need to urgently improve: the surveillance and treatment of cholera; coverage of selective feeding programmes and measles immunisation; and access to general food distribution.

**5. Central African Republic**

Most recent estimates are that there arc 13,300 Chadian refugees and 25,500 Sudanese refugees in the CAR. It is reported that a group of approximately 900 refugees from Mboki camp want to repatriate to the Sudan [DHA 24/05/95]. There are no reports of any change in the stable nutritional situation of these refugee populations.

**6. Djibouti**

Repatriation of Ethiopian refugees is completed, and, as of July 1995, the total number repatriated had reached 17,000, leaving approximately 23,000, mainly Somali refugees in country [UNHCR 03/05/95, WFP 24–25/07/95].

**7. Western Ethiopia/Eastern Ethiopia/Ogaden**

(see Map 7)

The total number of refugees/displaced/returnees in Ethiopia is currently estimated to be 380,000. This number is comprised of just over 55,000 Sudanese refugees in the West, 272,000 Somali refugees in the east, 18,000 Djibouti refugees in the north–east, 24,000 Somali and Kenyan refugees in the south and 11,000 displaced Eritreans in camps around Addis Ababa.

There are no reports of change to the somewhat variable nutritional situation for these refugees since the last RNIS report. At that time, the nutrition situation for the Sudanese refugees was generally satisfactory, with the exception of one camp. Levels of wasting for the Somali refugees were elevated, but appeared to be decreasing.

***How could external agencies help?*** There are currently no confirmed pledges for this refugee programme, and interruptions in distributions after October are expected unless commitments from donors are received.

**8. Kenya**

(see Map 8)

The total number of assisted refugees in Kenya has remained stable at 197,500 despite the continuing repatriation of Somali and Ethiopian refugees. This is largely due to the registration of children recently born in the Dadaab camps. Current estimates are that there are 158,000 Somali refugees, 33,000 Sudanese refugees and 6,000 Ethiopian refugees in Kenya.

There have been tensions over the governments plan to close Marafa camp (a coastal camp). The option given to refugees of repatriation or transfer to one of the Dadaab camps was not initially well received. Meanwhile voluntary repatriation has continued from the Dadaab camps with refugees returning to middle and lower Juba.

A recent round of surveys in August in the Dadaab area, where approximately 113,000 Somali, Sudanese and Ethiopian refugees are located, found that nutritional status appears to be deteriorating. These surveys were conducted as a follow up to surveys conducted in March 1995 (see RNIS #10) and were set against a background of a planned ration reduction in July 1995 from 2,100 kcals/person/day to 1,800 kcals. There was a recent update of ration cards as well which had led to a cancellation of many cards amongst the refugee population [MSF–B Aug 95, UNHCR 31/07/95].

In *Hagadera* camp (estimated population 41,000) wasting was measured at 12.1 % with 2.4 % severe wasting (see Annex 1 (8a)). This is an increase over a survey conducted almost a year ago when wasting was recorded at 5.3%. The survey team has suggested that the increase may be attributable to high rates of diarrhoea in the preceding two months and also to cancellation of ration cards. Measles immunisation coverage was 87.7% while coverage of the supplementary and therapeutic feeding programmes was only 37% and 22% respectively [MSF–B Aug 95].

In *Ifo* camp (population estimates vary from 44,000 to 37,000), wasting was measured at 12.1% with 4% severe wasting (see Annex 1 (8 (b)). A comparison with a recent survey shows a slight improvement in the overall nutritional status of the population (from 15.1 % in March 1995) but the level of severe wasting has increased and more children are presenting with oedema. It is possible that the reduced ration and removal of excess ration cards have contributed to the increase in malnutrition. A supplementary feeding programme was started in July 1995 but coverage remains low at 20%. Measles immunisation coverage was 74.2% [MSF–B Aug 95].

The level of wasting measured in *Dagahaley* (estimated population 34,000) was 9.8% with 1.5% severe wasting (see annex 1 (8 (c)). The overall level of wasting has increased from 6.5% in a March 1995 survey, but the level of severe wasting has decreased to 1.3%. This reduction in wasting may be due to therapeutic feeding centres and a supplementary feeding programme started in July. Based on estimates of numbers of malnourished children in the camp, coverage of feeding programmes is still low at 40%. Measles immunisation coverage was reportedly 89.9% [MSF–B Aug 95].

The overall nutrition situation in the coastal camps (estimated population 48,000) is described as adequate with food distributions proceeding smoothly. A policy has now come into effect whereby if cereal arrives in the form of grain, refugees are given 100 extra grams per person per day in order to compensate for milling losses. The water supply is also generally described as adequate, except in Jomuva camp where only 6.7 litres/person/day of water were available [IFRC 27/07/95].

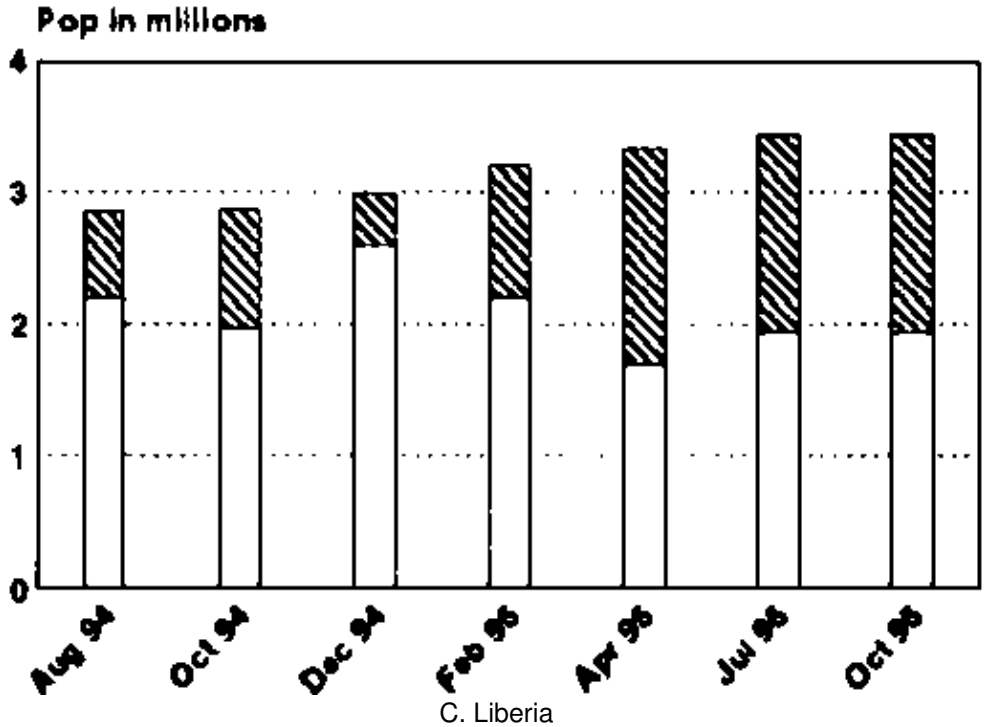
Blended foods are being distributed to all refugees at 50 grams/person/day in an effort to prevent micronutrient deficiencies, in particular scurvy. This began in July 1995 and will continue for three to four months. The nutritional status of the population will be closely monitored and recommendations will be made on appropriate action to be taken regarding the general distribution (i.e duration of distribution, quantity of blended food distributed) of blended foods [WFP 12/10/95].

*Overall,* the situation in the Dadaab camps appears to be under control, although gradually increasing levels of wasting are cause for concern and require careful monitoring (category IIb in Table 1). The remaining 84,500 refugees are probably not at heightened risk (category IIc in Table 1) although the seasonal scurvy risk which appears to affect all refugees residing in Kenya, should be noted and guarded against.

***How could external agencies help?*** There appears to be a need to increase the general ration level in the Dadaab camps where levels of wasting have gradually been increasing since rations were cut to 1800 kcals/person/day. There is also a need to improve the coverage of selective feeding programmes, through active case finding, and measles immunisation coverage in a number of camps. Water provision in Jomuva camp needs to be improved urgently.

**9. Liberia/Sierra Leone Region**

(see Map 9 and Figure 3C)




C. Liberia

Trend in numbers of refugees/displaced and proportion severely malnourished and at high risk (black area).

The signing of the peace accord in Liberia by all warring factions and the subsequent instalment of a Council of State is giving grounds for optimism that the present cease fire will hold and provide an opportunity for this war−ravaged country to rebuild itself. However, Liberian refugees in neighbouring Cote d'Ivoire and Guinea seem to be waiting to see how the disarmament process in Liberia progresses before repatriating. In contrast, the situation in Sierra Leone appears to be spiralling out of control as populations made inaccessible by fighting endure increasing hardship without outside relief assistance. This total population number is broken

down by country as follows:

| Location | Aug 94 | Oct 94 | Dec 94 | Feb 95 | Apr 95 | Jul 95 | Oct 95 |
|---|---|---|---|---|---|---|---|
| **Liberia** | 1,750,000 | 1,692,000 | 1,615,000 | 1,800,000 | 1,900,000 | 1,900,000 | 1,900,000 |
| **Sierra Leone** | 300,000 | 300,000 | 506,000 | 506,000 | 500,000 | 730,000 | 730,000 |
| **Cote d'Ivoire** | 250,000 | 325,000 | 330,000 | 330,000 | 330,000 | 227,000 | 305,000 |
| **Guinea** | 539,000 | 534,000 | 534,000 | 568,000 | 603,000 | 578,000 | 536,000 |
| **TOTAL** | 2,839,000 | 2,851,000 | 2,985,000 | 3,204,000 | 3,333,000 | 3 435 000 | 3,471,000 |

*Liberia* There remains an estimated 1.9 million people in Liberia in need of humanitarian assistance. Although the cease−fire, which came into effect at the end of August, is generally holding, certain areas, notably Southeast Liberia and Rivercess, still remain inaccessible to relief assistance due to insecurity. However, general ration distributions are now regularly taking place in the ECOMOG secured areas of urban Monrovia, Rural Montserrado, Lower Margibi and Lower Grand Bass (including Buchanan) to over 1.1 million beneficiaries. The composition of the food basket has recently been altered so that rice is replaced by bulgur wheat. The change has reportedly been accepted well by beneficiaries [WFP 18/08/95, 15/09/95].

With the opening up of new areas has come the discovery of extremely high rates of wasting amongst certain population groups. For example, a survey conducted in July in Lower Bong and Upper Margibi counties found a critical nutritional situation with 56.2% malnutrition (37.1 % with oedema and 19.1 % wasted) (see Annex I 9(a)). As is typical of Liberia, most of the severe malnutrition manifested itself as kwashiorkor; however 37% kwashiorkor does indeed represent a very serious emergency, as it was described by Save the Children Fund. Furthermore, the survey showed that children in the 5−10 year age group were as malnourished as those under five. There are also anecdotal reports of a critical food situation in the Upper Porpka district of Cape Mount/Bomi counties [SCF 31/07/95, WFP 11/09/95].

*Sierra Leone* The security situation in Sierra Leone remains tense with frequent reports of both government and rebel military action. There are currently an estimated 730,000 internally displaced people in Sierra Leone. While security in the Western and Northern parts of the country remains relatively stable, sporadic rebel attacks on both convoys and small civilian settlements continues in the east and south of Sierra Leone. Consequently, populations confined to towns or behind RUF lines are in an increasingly precarious situation as relief agencies risk attack in their efforts to bring assistance. Furthermore, private contractors are reluctant to transport relief to certain areas such as Kenema. This lack of access to civilian populations is reportedly leading to extremely high levels of wasting and there are unconfirmed reports of hunger−related deaths.

A recent survey conducted in Kenema in early August measured wasting both in the town and in the displaced camp. In the town (estimated population 100,000) wasting was recorded at 22.6% with 7.7% severe wasting (see Annex I 9(b)). The crude mortality rate was 2.4/10,000/day (8x normal) and the under five mortality rate was 5.6/10,000/day (almost 5x normal). Measles immunisation coverage was 69% [MSF−H 08/08/95].

In the camps for displaced people around Kenema (estimated population 26,000) wasting was measured at 37% with 11.5% severe wasting (Annex I 9(c)). The crude mortality rate was 5.2/10,000/day (17x normal) and the under−five mortality rate was measured at 19/10,000/day (16x normal). Measles immunisation coverage was 72% [MSF−H 08/08/95].

These high levels of wasting can largely be attributed to lack of food as the most recent relief food distribution was in May 1995. Furthermore, food distributions in May and previous months were only half rations. Food is reportedly available in markets but prices are very high so that many people are surviving on wild fruit, leaves and bush yam [IFRC 15/09/95].

Since the survey mortality has been reported to have increased due to a cholera outbreak. The condition is particularly prevalent in the IDP camp. Due to lack of drugs, medical material and limited in−patient facilities, the case fatality from cholera is believed to be high [IFRC 15/09/95].

A survey in August 1995 in Bo (population 250,000) found an overall prevalence of wasting of 22%. There was no significant difference in prevalence of wasting between residents and the displaced population. This population has been without a general ration for several months [MSF−B 10/10/95]

As only limited food has been delivered to Daru, Segbwema, Magburuka or Makeni (collective internally displaced population of over 250,000) due to insecurity, it can be assumed that the nutritional status of these populations is similar to that of internally displaced people in Kenema [IFRC 15/09/95].

*Cote d'Ivoire* There are currently approximately 305,000 Liberian refugees in Cote d'Ivoire and while political improvements in Liberia have not led to any large scale repatriation, it is reported that some spontaneous return is occurring.

There is a two tier ration for this refugee population whereby the "old" refugee population who have been in Cote d'Ivoire sufficiently long to attain marked self−sufficiency receive a ration of 960 kcals/person/day while newer arrivals, who are not believed to be greatly self−sufficient, receive a ration of 1,300 kcals/person/day [MSF−F 11/09/95]. An attack by Liberian rebels in June on villages in the West of the country has seriously disrupted the formerly excellent relations between refugees and local population. As a result one refugee camp had to be moved for reasons of security [IFRC 4/07/95].

A nutritional survey was recently carried out in Tabou Prefecture, where approximately 160,000 people (105,000 Liberian refugees and 55,000 local residents) live. Among the refugee population, wasting was measured at 8% with 2% severe wasting, and oedema, which was measured separately, was 2.2%. Anaemia was reported in 4% of the children and Bitot's spots (an early sign of vitamin A deficiency) was found in 0.2% of children. For comparison, wasting among the local population was recorded at 8.8% with 2.4% severe wasting. Oedema was measured separately at 10.2%. Anaemia was seen in 12.5% of children, and Bitot's spot's were seen in 1% of children [CARITAS Jul 95]. The nutritional status was thus similar for the refugee and local populations.

*Guinea* Estimates of the number of Liberian and Sierra Leonean refugees in Guinea vary from approximately 536,000−578000 people. The continued civil war in Sierra Leone does not appear to have led to any recent large scale refugee movements into Guinea.

There are approximately 20,000 Sierra Leonean refugees in Forecariah Prefecture in Guinea who currently receive approximately 1300 kcals/person/day. A recent survey among this population measured 8.2% wasting with 0.7% severe wasting. Measles immunisation coverage was only 49% but as this was based on evidence of vaccination card holders it is probably an under−estimate [OXFAM 26/09/95].

*Overall,* the population in Liberia that has been accessible for some time is probably not at heightened nutritional risk (category He in Table 1) while the inaccessible or periodically accessible populations (e.g. Lower Margibi) are at high nutritional risk (category IIa in Table 1). The population in Bo and Kenema, Sierra Leone are known to be at high nutritional risk (category I in Table 1) and the remaining population is likely to be at high nutritional risk (category IIa in Table 1). In Cote d'Ivoire, the refugees in Tabou Prefecture are at high risk due to micronutrient deficiencies, while the remaining affected population is not known to be at heightened nutritional risk (category IIc in Table 1). Most of the refugee population in Guinea is not currently considered to be at heightened nutritional risk (category He in Table 1) with the exception of those in Forecariah Prefecture who are probably at moderate nutritional risk (category IIb in Table 1).

***How could external agencies help?*** Further nutritional surveys in newly accessible areas in Liberia and subsequent support for large scale curative selective feeding programmes for all age groups where appropriate is urgently needed. This may involve re−opening abandoned and run−down health centres. In Sierra Leone, efforts must continue to improve food supplies to insecure areas in the south and east of the country while nutrition surveys should be conducted when and as security allows. There is also an urgent need to establish cholera surveillance in many of these areas as well as drug supplies and in patient facilities for treatment of the condition. In Tabou prefecture in Cote d'Ivoire there is a need for general ration support to counter the increase in levels of wasting while prophylaxis and treatment for vitamin A deficiency needs to be implemented through health centres. There is also a need for increased measles vaccination coverage in Forecariah prefecture in Guinea.

**10. Mauritanian Refugees in Senegal**

(see Map 3)

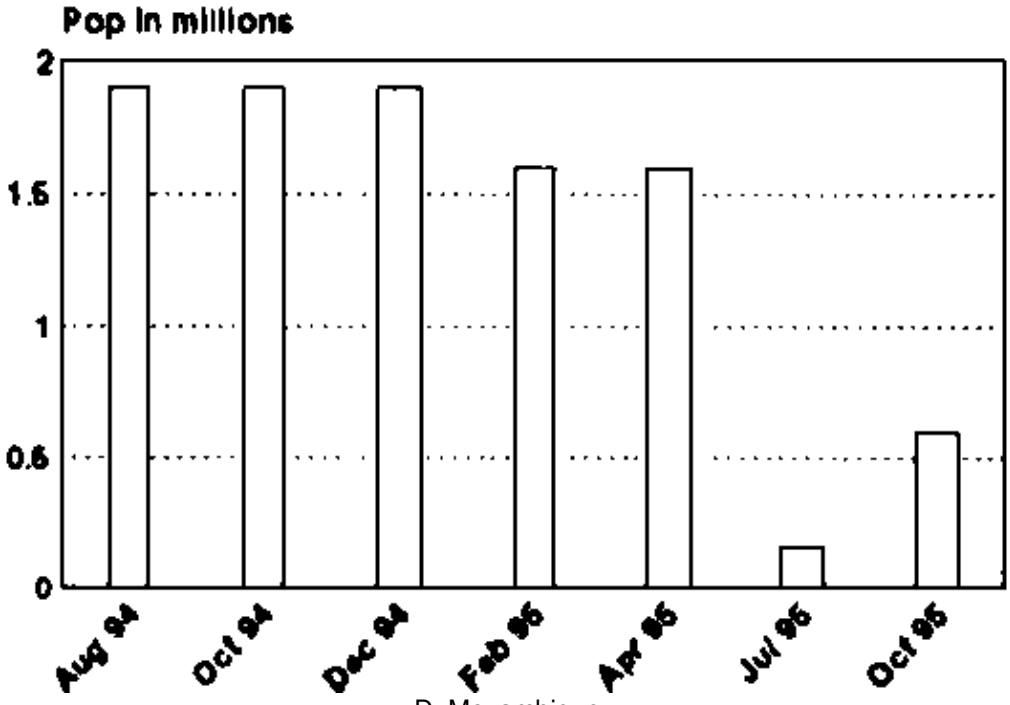
There are no reports of change in the situation for the approximately 52,000 Mauritanian refugees in Senegal currently receiving humanitarian aid. There are plans to phase out this assistance by the end of 1995, by

which time it is hoped that the refugees will either have reached self−sufficiency or been repatriated.

**11. Mozambique Region**

(see Map 11 and Figure 3D)

The number of returnees, demobilised soldiers and drought affected people requiring food aid in August in Mozambique was recently estimated at 600,000. This is an increase of 240,000 people since July due to household food stocks being used up. It is anticipated that this number will continue to increase up until the end of the marketing year. Official repatriation is complete, and the focus is now on reintegration programmes in Mozambique [UNHCR 11/10/95].




D. Mozambique

Trend in numbers of returnees and demobilised soldiers.

Harvests in the northern and central provinces of Mozambique have been far better than in the southern provinces where maize prices have already begun to increase. However, the overall food security situation in the country continues to be stable in most areas. There are exceptions in certain districts of Tete, Manica and Gaza provinces in the central and southern regions of Mozambique. These districts have low food reserves as a result of poor agricultural production (up to 70% of households have no reserves in some districts). As this is the post−harvest period, such levels are cause for concern. These findings are corroborated by information and indicators on growth faltering, number of meals eaten, and dependence on famine foods which point to a worsening problem. It is feared that due to the bad harvest in some of these areas many people will not be able to save seed for the next planting season [MSF−CIS Aug 95].

Nutritional surveys generally show very low levels of wasting. A July survey in the province of Nampula found 4.0% wasting with 0.3% severe wasting and another survey found 4.3% wasting and 1.6% severe wasting. In August a subsequent survey in the province found only 1.9% wasting with 0.5% severe wasting (see Annex I 11(a−c)) [MSF−CIS 08/95]. A large number of measles cases were reported in Nampula indicating that immunisation coverage is not adequate. A large number of kwashiorkor cases has been seen among admissions to feeding centres in the province which may well be related to the incidence of measles [MSF CIS Jun 95, WV Jun 95, MSF−CIS Aug 95].

A survey in July in the drought affected district of Magoe in Tete province found 5% wasting with 2.1% severe wasting (see Annex 111 (d)). A critical lack of drinking water in the province was noted in this survey. Two nutritional surveys in July in Chibabave province and in Zambezia province found 3.3% levels of wasting (see Annex 11 l(e−f)) [MSF CIS 08/95. MSF−CIS Jun 95].

Food aid distributions have generally been adequate but there continue to be problems in reaching certain remote areas or where insecurity exists. Additional funds are being sought to strengthen food distributions to affected population, including returnees.

*Overall,* these surveys appear to confirm that while food security varies within Mozambique, the nutritional status of populations surveyed is normal for the region.

***How could external agencies help?*** Measles immunisation needs to be stepped up in certain provinces such as Nampula. There is a need to improve mechanisms for distribution of food aid to remote areas receiving refugee returnees. This might involve further decentralisation of food distribution systems. Drought affected areas such as Tete province also need resources and agency support to improve water availability.

**12. Shaba/Kasai Regions**

(see Map 12)

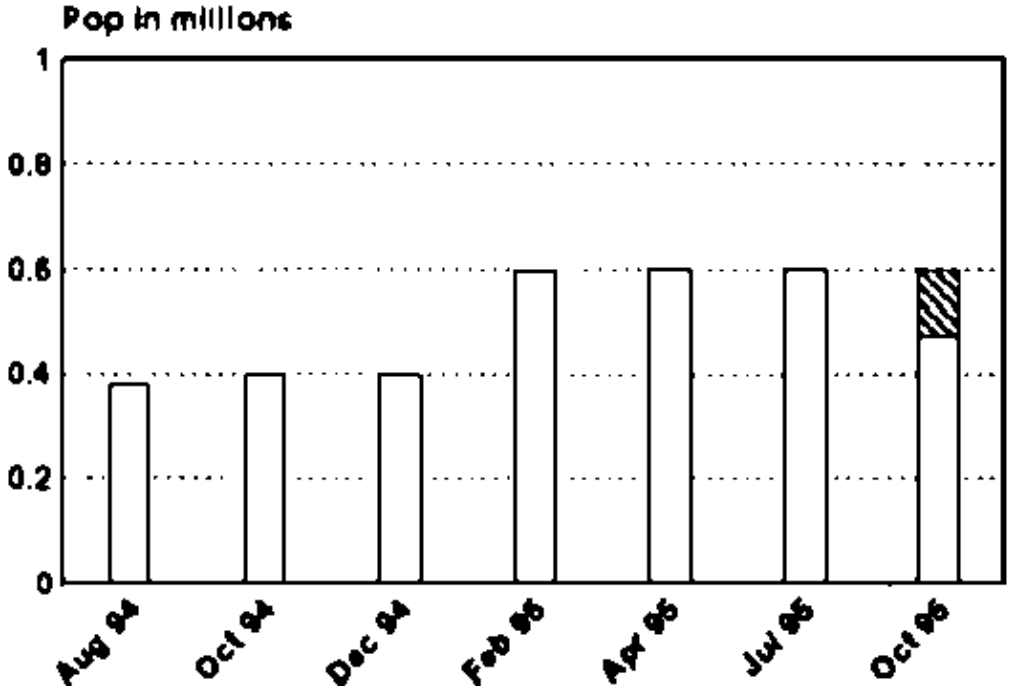
There are approximately 600,000 people who have been displaced by ethnic violence in the Shaba region in 1992. This population fled the area and moved into the Kasai region farther north where many of their ancestors lived. Large numbers stayed in towns, e.g. Mwene Ditu and Likasi, along the route north to the Kasai region.

There are no reports of change to the nutritional situation of the population. In the last RNIS report, the displaced population in Mwene Ditu was considered to be at high nutritional risk due to elevated levels of wasting, and the displaced populations in Likasi, Mbuji Mayi or Kabinda (combined population of 158,000) were thought to be at moderate risk.

**13. Somalia**

(see Map 13 and Figure 3E)

The capture of the town of Baidoa on September 17th by general Aideed's militia is only one example of the uncertain security situation in Somalia. Tensions are mounting in neighbouring Bakool and Gedo regions because of fears of possible further incursions by Aideed's forces. The previous RNIS report indicated that security incidents were having a significant impact on livelihood and almost certainly adversely affecting nutritional status. Due to weather patterns and access to farm inputs, the Gu harvest (August–September) varied from village to village in Lower and Middle Juba. It would appear that many people are now at significant nutritional risk, particularly those living in large towns [ICRC 10/10/95, WFP 25/08/95].



E. Somalia

Trend in numbers of internally displaced.

The last RNIS report included preliminary information on a survey conducted in Mogadishu in June. The details of this survey are now available and are as follows. Wasting rates were equivalently high amongst both residents (1.5 million) and the displaced (129,000) and were 25.1% with 6.4% severe wasting and 26.3% with 5.4% severe wasting respectively. One significant difference between the two population groups was that the displaced were more likely to be jobless than residents and so more dependant on food aid distributions. Compared with a survey conducted in November 1994 when levels of wasting were recorded at 10.1%, these results show a serious deterioration in the nutritional status of this population [AICF 20/06/95].

The survey showed that one in three children had suffered from diarrhoea recently and that poor water supplies in the city were partly responsible. Measles immunisation rates were 54.3% [AICF 20/06/95].

Many factors have been identified to explain the rise in levels of wasting. These include the fact that this survey took place just before the harvest at a traditionally food scarce time. The withdrawal of UNOSOM and international agencies is also said to have played a role in that paid employment for thousands of individuals ceased. Another factor is the reduction in port activity following UNOSOM withdrawal and diminished agricultural trading in and around Mogadishu as clans control different sectors of the city and security is uncertain. The nutritional survey also shows that levels of wasting are highest in those city districts which are most politically and geographically isolated from Mogadishu centre. The high levels of diarrhoeal disease must also be playing a role, especially, as a prevalent Somali practice is to withhold food from those with diarrhoea [AICF 20/06/95].

The findings of this survey have led NGOs to open up more selective feeding programmes for vulnerable groups in Mogadishu, and appropriate foods have been airlifted in [WFP 05/08/95].

A nutritional survey in Kismayo town in July showed similar problems to those existing in Mogadishu although levels of wasting were not as high. Problems unique to Kismayo were also shown to exist. In the town (estimated population 97,000) wasting levels were recorded at 17.8% with 2.7% severe wasting and measles immunisation coverage was estimated to be 97.8%. In the camps for the displaced around Kismayo (estimated population 9,000) levels of wasting were found to be 11.6% with 1.8% severe wasting. Measles immunisation coverage was 64%. The lower levels of wasting in the camps were attributed to the better coverage of selective feeding programmes [UNICEF 19/07/95]. These levels of wasting show no significant change to results recorded since January 1994.

Numerous factors are believed to be playing a role in these high rates of wasting in Kismayo. These include the fact that, 15% of the town population have arrived from refugee camps in Kenya within the last six months, the departure of UNOSOM in December has left a lot of people without income, and after WFP left in April the

community is completely dependant on market food which is increasingly expensive due to the poor harvest in the Juba valley, In Kismayo, the rainy season was long and illnesses seen as a result (i.e. diarrhoea and pneumonia) are also thought to be adversely affecting the nutritional status of this population [ICRC 10/10/95, UNICEF 19/07/95].

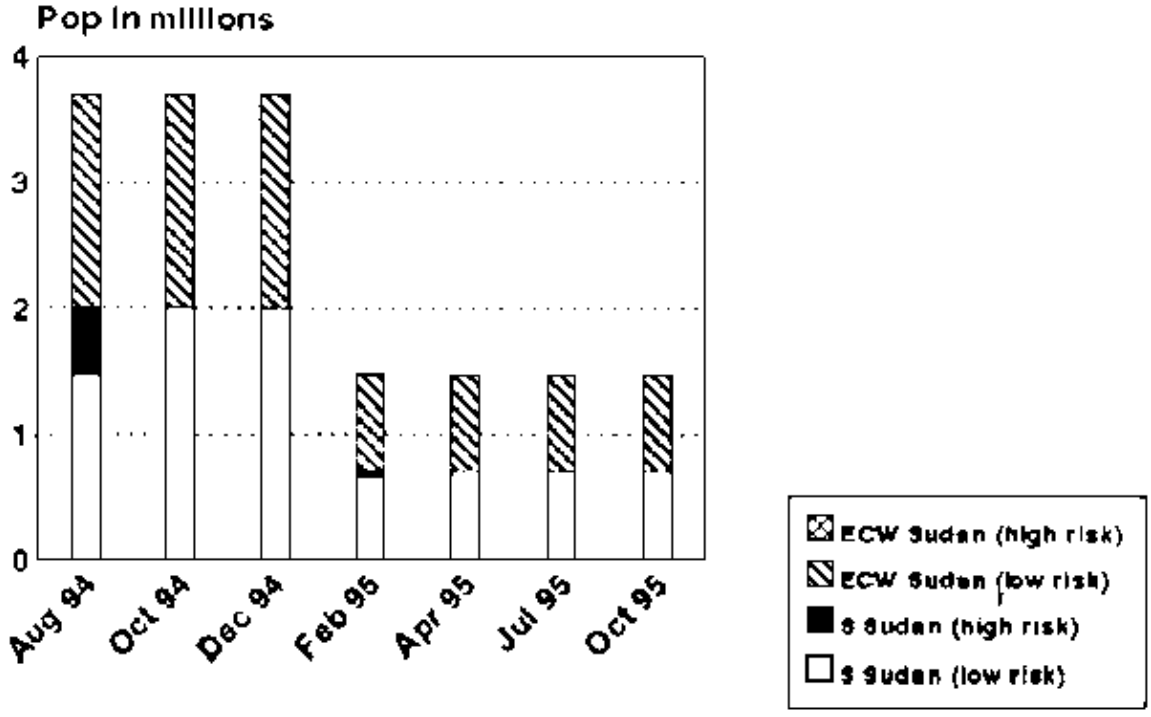
*Overall,* the displaced populations in Mogadishu and Kismayo can be considered to be at high risk with elevated levels of wasting (category I in Table 1). The remaining displaced population can be considered to be at moderate risk (category IIb in Table 1) due to the generally deteriorating security situation.

***How can external agencies help?*** Nutritional surveys are needed in other large urban centres (e.g. Baidoa, Belet Weyn, etc.). These could usefully include additional information on food security, health and other factors affecting nutrition so that interventions will be based on fuller information. The improvement of water supplies and measles immunisation coverage should be given priority in Mogadishu and Kismayo. Selective feeding programmes may need to be set up and/or expanded in Mogadishu and Kismayo and active case finding may be needed to increase coverage of these programmes. It is likely that targeted food aid in some villages in Lower and Middle Juba is needed.

**14. Sudan**

(see Map 14 and Figure 3F)

The situation in southern Sudan appears to be gradually deteriorating following a year when excellent harvests and improved relief access had created relatively stable food security for most of the population. This is due to a combination of constraints on OLS, poor rains in June and July leading to reduced planting, and increased levels of insecurity. There are also emerging concerns about the nutritional and health well–being of the displaced population in settlements around Khartoum.




F: Sudan

The estimated total number of refugees, displaced and war affected people in need of food assistance in the Sudan remains at 1.4 million. This number is comprised of 200,000 Ethiopian and Eritrean refugees, 720,000 displaced and war affected people in southern Sudan, 94,927 displaced in the transitional zone (just north of Southern Sudan) and 240,000 displaced in four settlements in Khartoum and an additional contingency for 125,000 war–affected people in other areas. The actual number of Eritrean and Ethiopian refugees in Sudan is over 500,000 with the majority settled in various cities and towns. Gradual repatriation is still taking place in spite of the break in diplomatic relations between the governments of Eritrea and Sudan. The total number of people in Sudan in need of non–food assistance is estimated to be 4.25 million (not included in Tables 1 and

2) [DHA 24/05/95].

Since May, Operation Lifeline Sudan (OLS) has faced increasing restrictions with flights banned to certain destinations, and restrictions on aid agency activity. This has been especially critical during the rainy season. There have also been increased levels of insecurity in certain areas despite the informal extension of the cease−fire which was scheduled to end in July 1995. Security in Bahr−el−Ghazl has been particularly problematic with NGOs complaining of harassment by local authorities and militias. Conflict related displacement has been reported in the towns of Yei and Thiek Thou [WFP 22/09/95, USAID 31/07/95].

A new system of targeting food relief in the South has been implemented for over a year and involves a more comprehensive assessment of need including coping strategies. This approach involves the setting up of relief committees, the majority of members being women, who are responsible for setting eligibility criteria and for organising food distributions. This improved system of targeting is said to have allowed a significant increase in efficiency of food deliveries.

Poor rainfall in June and July has adversely affected maize and sorghum plantings and there is growing concern about a drought affected belt extending from upper Nile down through Eastern Equatoria into Kenya. The sorghum harvest is already underway along the Nile corridor leading to Juba and has led to a 25% reduction in grain prices in Equatoria in one week [WFP 2/10/95].

Although there are no recent nutritional survey data there have been a number of anecdotal reports of deteriorating nutritional status due to restricted relief deliveries. Areas and population groups affected include Juba, Mangalatore and a Dinka population leaving the Mundri area camps in Western Equatoria. There has been a reported outbreak of measles in settlements for displaced people in South Kordofan with over three hundred cases and 80 resulting deaths [USAID 31/07/95].

There have been extensive demolition campaigns in the displaced camps in the Khartoum area. As a result the populations in remaining camps are growing and in turn placing a strain on the limited health and nutrition services provided by NGOs. Furthermore, the remaining camps are up to 40 kms from Khartoum which restricts access to food, water, education, markets and other services. A recent survey in Jebel Aulia camp found that malnutrition has increased over the past four years despite an ongoing food aid programme [USAID 31/07/95].

*Overall,* the population in Southern Sudan and the displaced population around Khartoum can be considered to be at moderate nutritional risk (category IIb in Table 1). The refugees from Ethiopia and Eritrea and the remaining displaced populations are not currently considered to be at heightened nutritional risk (category IIc in Table 1).

***How can external agencies help?*** There appears to be increasing restrictions on relief activities at the same time as a deterioration in the nutritional situation for most of the displaced/war affected population in this country. External agencies may want to consider means to increase access to vulnerable populations.

**15. Uganda**

(see Map 15)

The total number of assisted Sudanese and Zairian refugees in Uganda has increased very slightly over the last two months. A registration is planned for October 1995. Current estimates of the total number of assisted refugees are summarised in the box.

| Origin | Aug 94 | Oct 94 | Dec 94 | Feb 95 | Apr 95 | Jul 95 | Oct 95 |
|---|---|---|---|---|---|---|---|
| **Sudanese Refugees** | 230,000 | 268,000 | 274,000 | 300,000 | 310,000 | 322,000 | 324,000 |
| **Zairian Refugees** | 16,000 | 16,000 | 16,000 | 313,000 | 13,000 | 13,400 | 13,700 |
| **TOTAL*** | 246,000 | 284,000 | 290,000 | 313,000 | 323,000 | 335,400 | 337,400 |

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

The total number of Sudanese refugees has increased marginally to 324,000, but there has been movement of refugees between camps. Results from three surveys carried out in camps in the northeast have recently become available and are as follows.

• Survey data from *Ikafe* camp, Arua district (estimated population 46,300 Sudanese refugees), in April 1995 revealed that wasting levels were 6.9% with 2% severe wasting (see Annex 115(a)). Crude mortality rates were 0.54/10,000/day (slightly above normal) and under–five rates were 1.7/10,000/day (also slightly elevated). Measles immunisation coverage was 78% and only 6–10 litres/person/day of water were available. There were also insufficient latrines in the camp. The main causes of morbidity and death were diarrhoea and measles [Epicentre 24/07/95]. It is reported that the water supply situation has improved since this survey [UNHCR 18/09/95].

• Survey data from July in *Koboko* camp (estimated population 67,000 Sudanese refugees) indicated 8.2% levels of wasting with 1.9% severe wasting (see Annex I 15(b)). The crude mortality rate was 0.31/10,000/day (a normal level) and the under–five mortality rate was 1.4/10,000/day (slightly higher than usual). Measles immunisation coverage was estimated at 92.7% but water availability was reported as variable. There have been unconfirmed reports of some cholera cases [Epicentre 24/07/95].

• Recent survey data from July 1994 in *Rhino* camp (estimated population 22,000 Sudanese refugees) showed 13.9% wasting with 3.8% severe wasting (see Annex I 15(c)). The crude mortality rate was 0.41/10,000/day and the under five mortality rate was 1.3/10,000/day. Measles immunisation coverage was estimated to be 81.5% and approximately 14 litres/person/day of water were available. The main causes of morbidity were reported to be malaria and diarrhoea and there were also some unconfirmed reports of cholera [Epicentre 24/07/95]. It has recently been reported that the water supply situation in the camp has deteriorated due to repeated breakdown of the water pumps [UNHCR 18/09/95].

The food supply situation for Sudanese refugees in Uganda may have had some role in elevating levels of wasting. Food basket monitoring during August indicated that an estimated 80% of refugees still received a reduced ration and that this was largely due to inequities at the point of distribution. At the start of September, the average caloric content of the ration supplied to Red Cross managed camps was 1744 kcals/person/day [IFRC–a 15/09/95]. However, there is optimism amongst agencies that the food supply situation is generally improving.

The number of Zairian refugees in Uganda has increased slightly to 13,700 people. Their nutritional status is reportedly adequate [UNHCR 18/09/95].

*Overall,* the refugees from the northeastern camps of Ikafe and Rhino can be considered to be at moderate risk due to a combination of inadequate or erratic water supplies, poor sanitation facilities and inequitable food distributions resulting in elevated levels of wasting (category IIb in Table 1). The remaining Sudanese refugee population along with the Zairian refugees are not currently considered to be at heightened nutritional risk (category He in Table 1).

***How could external agencies help?*** Generally, there appears to be a need to review the current general ration distribution system for these camps. In Ikafe camp measles immunisation coverage, latrine construction and water availability need to be increased. In Koboko and Rhino camp cholera surveillance may be needed. Measles immunisation coverage needs to be improved. Water supplies also need to be improved.

**16. Zaire (Refugees)**

(see Map 12)

The nutrition situation of approximately 14,000 Ugandan refugees in Zaire is reportedly stable. Many of these refugees are eager to repatriate, but agreement has yet to be reached on how this will take place [UNHCR 18/09/95].

These have been no reports of any change in the situation of the approximately 50,000 Sudanese and 41,000 assisted Angolan refugees in Zaire.

### 17. Zambia

There are approximately 10,000 Angolan refugees assisted in Zambia. There are an additional 86,000 refugees who are not assisted and about whose nutritional status little is known. It is hoped that with the current positive political situation in Angola that many of these refugees will repatriate spontaneously [UNHCR 14/06/95]. There are no reports of change to the reportedly adequate nutritional situation for the small number of Zairian refugees in Zambia.

## ASIA – Selected Situations

An overview of the situation for refugees and displaced people in Asia as of the end of 1993 is as follows. There were an estimated 5.2 million refugees in Asia, over a half of whom were Afghans in Pakistan (1.4 million) and in Iran (1.3 million). There were reported to be 650,000 Iraqis in Iran. Other large groups were refugees from Myanmar in Bangladesh (52,000), Vietnamese in China (290,000), Sri Lankans in India (115,000), as well as considerable numbers from the conflicts in Cambodia, Laos and Vietnam in other countries. No comprehensive data were available on the numbers of internally displaced populations in Asia, but they were certainly in the millions. Figures of 600,000 Afghans internally displaced were quoted. In addition there were considerable numbers of internally displaced people in Iran and Myanmar.

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 relatively small populations of 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.

### 18. Afghanistan Region

(see Map 18)

Although the overall security situation in Afghanistan has generally remained stable, periodic outbreaks of hostility are still reported in some provinces, e.g. Badghis and Herat. Observers now believe that the political situation is once again deteriorating and that the Talaban, who control two thirds of the country, have now decided to resume offensives against the government. The situation in Kabul is therefore said to be very tense. Repatriation from Pakistan and Iran is continuing but it is anticipated that the rate of return will decrease as the winter months make travel more difficult. The main problem continually identified in Afghanistan is the resettlement of returnee populations and their impact on local populations. There are approximately 3.1 million people affected regionally, either as refugees or internally displaced people [UNHAA 06/08/95]. There are at least an additional 500,000 returnees and resident population affected by their arrival throughout the country. WFP support a wide variety of activities in Afghanistan including food for work projects, food relief distributions and subsidised bakeries in urban centres. However, food resources currently available to WFP Afghanistan are well below requirement with stocks in the North almost depleted. Donor pledges are needed immediately to prevent a shortfall in the coming months [WFP 06/10/95].

*Displaced in Kabul* The relative stability in Kabul since April 1995 has led to the spontaneous return of over 160,000 persons, mainly from Jalalabad and from Peshawar in Pakistan. Many agencies have implemented "Quick Impact Projects" involving infrastructure repair in order to assist the process of re–integration. Diarrhoeal diseases have reportedly increased due to the hot weather and in some areas of the country, such as in Ghazni, the problem is said to be of epidemic proportions [UNHAA 06/08/95].

*Displaced in Jalalabad* Past fighting in and around Kabul has led to large scale displacement of people to Jalalabad, although the recent stability in Kabul has led many families to return to the capital city.

Recent survey data from New Hadda camp (estimated population 80,000) shows 11.1% wasting with 1.5% severe wasting (see Annex I 18(a)) [MSF–H 14/09/95]. These levels of wasting are similar to those measured at the end of May 1995 (9.3% wasting with 2.2% severe wasting). However, rations have been estimated at approximately 1600 kcals/person/day which may not be adequate to maintain this nutritional status.

*Mazar−I−Sharif Camps for Displaced* Reports from three camps for the displaced in Northern Afghanistan (total population approximately 20,000) show very low rates of mortality but there is a high prevalence of diarrhoea and dysentery. Furthermore, in one camp (Kamaz) there have been confirmed reports of vitamin B2 deficiency which is apparently responding well to multi−vitamin treatment [MSF−B Jul 95].

*Refugees in Pakistan* There are approximately 1.2 million Afghan refugees in Pakistan, many of whom are reportedly self−sufficient. General ration distributions to this population have been phased out, although programmes aimed at assisting vulnerable groups (e.g. supplementary feeding and food for work programmes) are continuing [UNHCR 19/09/95].

*Refugees in Iran* There are approximately 1.5 million Afghan refugees in Iran. Only 20,000 of this population reside in camps, with most living and working among the local population. The recent reduction and/or elimination of food subsidies is leading to fears that many of these refugees will no longer be able to support themselves, and may therefore be forced to move to refugee camps in their area [UNHCR 19/09/95].

It is anticipated that 500,000 refugees will repatriate between March 1995 and March 1996. At the end of August, an estimated 86,000 had returned [UNHAA 06/08/95, UNHCR 19/09/95].

*Returnees to Afghanistan* Formal repatriation began in 1992 when there were approximately six million Afghan refugees in neighbouring countries. The number of refugees is now less than three million and it is hoped that the remaining refugee population will repatriate over the next three years [UNHCR Feb 95]

An example of the possible nutritional situation of returnees and the impact the returning population may be having on residents is shown by a survey recently conducted in Kandahar city. South East Afghanistan. This city has received over 250,000 returnees, many from Pakistan, since 1992 and it is expected that the current population of 350,000 (returnees and residents) will increase further as repatriation continues. The survey findings indicate a variety of nutritional and food related problems which may well be indicative of the situation in other returnee impacted areas of the country [MERLIN 15/06/95].

The prevalence of wasting were measured at 13.4% in the villages around Kandahar and 9.3% in the city itself (see Annex I 18(b−c)). The under five mortality rate was 4.8/10,000/day (6x the usual level). Although the survey methods prevent these results from being extrapolated to the whole population in the province, the results are believed to be indicative of more general nutrition related problems which may be derived from a rapidly fluctuating exchange rate and price inflation. There is concern that as more refugees return home, food stress may increase and effect even higher levels of wasting [MERLIN 15/06/95].

*Overall,* renewed instability and some survey results lead to the impression that the population inside Afghanistan (internally displaced and returnees) could be at moderate nutritional risk (category IIb in Table 1).The refugee populations in Iran and Pakistan are not currently considered to be at heightened nutritional risk (category He in Table 1).

***How could external agencies help?*** There is an urgent need for additional resources to prevent disruption to relief programmes in Afghanistan. In view of heightened levels of conflict, other additional assistance may soon be needed. There is also a general need to establish nutritional surveillance in those areas where large numbers of returnees are settling. The high levels of diarrhoea in many parts of the country suggest a need to support MCH services and associated health out−reach programmes. The fluctuating food security indicates a need to continue food price monitoring and support for food for work projects and also to support bakeries in a way which effectively subsidises bread consumption.

**19. Bhutanese Refugees in Nepal**

(see Map 19)

There are approximately 87,000 Bhutanese refugees in Nepal. Given the lack of progress in recent intergovernmental meetings between Bhutan and Nepal, most observers do not expect any significant repatriation of refugees in the near future [IFRC 05/07/95].

Towards the end of 1993, there were confirmed reports of widespread micronutrient deficiency diseases including beri−beri, scurvy, pellagra, and angular stomatitis among this population. Various curative and preventive measures were taken to bring the situation under control. These included the addition of blended

foods and fresh vegetables to the ration. A follow up survey was conducted in June 1995 which showed wasting rates among children under five of 5.7% with 0.9% severe wasting (see Annex I 19(a)). In general, rates in central and western camps were higher than in northern camps, as ascribed by some as reflecting overcrowding in the former. Adult malnutrition using BMI measurements was recorded at 18.1%. A cut−off of BMI<18 was used to define malnutrition. These results only show a marginal increase in malnutrition compared to an equivalent survey conducted in Bhutan in 1989. Measles immunisation coverage was 97%. The under−five mortality rate was 0.17/10,000/day and has been declining for the past 6 months [IFRC 05/07/95, SCF/UNHCR 25/07/95].

There were no cases of pellagra seen among the population surveyed. However, there was a 2.3% prevalence of beri−beri which, although significant, was not considered to be an alarming rate as symptoms take some time to be alleviated and the incidence of the disorder has dropped from 0.55 new cases/10,000/day in January 1995 to 0.005/10,000/day in June 1995. There was more concern over the rates and apparent increase in the incidence of scurvy and angular stomatitis. The scurvy incidence was estimated at 0.62 new cases/10,000/day in June 1994 compared with 0.17/10,000/day in December 1994; the incidence of angular stomatitis was 2.49/10,000/day compared to 1/10,000/day in December 1994. While both rates are much lower than peak levels in May 1994 and seasonal factors are know to have an impact, the persistence of both these conditions is worrying [SCF/UNHCR 25/07/95].

*Overall,* although beri−beri and pellagra do not currently appear to be problems in this population, these deficiencies should be guarded against. Scurvy and angular stomatitis appear to remain a problem and the approximately 3−4% of the population affected can be considered to be at high nutritional risk (category I in Table 1).

***How could external agencies help?*** The continued, although diminished incidence of micro−nutrient deficiency disease indicates the need to carefully monitor receipts of blended foods and vegetables in camps and to assess which groups remain vulnerable to these conditions.

### 20. Refugees from Rakhine State, Myanmar in Bangladesh

(see Map 20)

There are approximately 52,000 refugees from Rakhine State, Myanmar remaining in Bangladesh. Repatriation is continuing although on a smaller scale than was seen earlier in the year. This is mainly reported to be due to a slow down in clearance of refugees for return by the government of Myanmar. It is hoped that the rate of repatriation will increase after the monsoon season, but there is some concern that the overall programme will take longer than originally planned [IFRC 12/07/95]. Food supplies to the remaining camps continue to be adequate and nutritional status of the refugee population appears stable.

***How could external agencies help?*** Future support for NGOs may be needed if programmes continue longer than planned due to a lengthier repatriation process.

### 21. Southern Iraq

There is no evidence of any improvement in the situation of the 220,000 Marsh Arabs. This population has had to endure destruction of their traditional marsh habitat and consequent loss of livelihood and means of subsistence as well as various forms of persecution including arbitrary arrest, torture, executions and military attack. Some of the affected population has crossed the border into Iran attaining refugee status but most remain inside Iraq where they are largely inaccessible to aid agencies [UNECOSOC 04/09/95].

Although there have been no systematic nutritional surveys of this population and there is no current anecdotal information, a recent UN assessment mission in the country indicates an overall decline in food security and nutritional well−being for much of the Iraqi population. This deterioration must be particularly critical for the Marsh Arabs who are already known to be extremely vulnerable [WFP 15/09/95].

The mission found that an estimated 60% of the population in the centre/south of the country (which includes the Marsh Arabs) is in need of food assistance and that the government ration of 1100 kcals/person/day is proving insufficient to avert a major crisis. Widespread anaemia, marasmus, kwashiorkor and vitamin A

deficiency have been reported [WFP 15/09/95].

The UN's emergency operation which targets over one million vulnerable beneficiaries is running into difficulties as food shortfalls have meant that only one third of the target population can be supplied [WFP 15/09/95].

***How could external agencies help?*** A food aid shortfall is preventing WFP from supplying food rations to all identified vulnerable groups.

## Listing of Sources for October 1995 RNIS Report

| Org* | Date | Title of Report |
|---|---|---|
| AICF | 20/06/95 | Nutritional Anthropometrical Survey In Mogadishio, Displaced and Resident |
| CARITAS | Jul/95 | Evaluation de l'Etat Nutritional des Enfants Refugies en Cote d'Ivoire |
| DHA | 24/05/95 | Sudan Emergency Profile |
| EPICENTRE | 24/07/95 | Summary of Nutritional Surveys, North Uganda |
| FAO | 16/08/95 | FAO/WFP Crop and Food Supply Assessment Mission to Burundi |
| FAO | Jul 95 | Food Supply Situation and Crop Prospects in Sub−Saharan Africa |
| FAO | 18/07/95 | FAO/WFP Crop and Food Supply Assessment Mission to Rwanda |
| ICRC | 10/10/95 | Personal Communication |
| IFRC | 05/07/85 | Refugee Assistance Programme (Bhutanese Refugees) |
| IFRC | 12/07/95 | Bangladesh: Mayanmar Refugee relief Operation |
| IFRC−a | 15/09/95 | Update on Nutrition Situation in Uganda |
| IFRC | 15/09/95 | Update on Situation − Sierra Leone |
| IFRC | 27/07/95 | Kenya − Somali Refugees Situation Report |
| MERLIN | 15/06/95 | An Assessment of the Food and Nutrition Situation of Kandahar, SE Afghanistan |
| MSF−B | Aug/95 | Nutritional Survey Report − Hagadera, Ifo & Dagahaley Camps |
| MSF−B | 10 Oct 1995 | Personal Communication |
| MSF−CIS | Aug 95 | Monthly Bulletin − August 1995 |
| MSF−CIS | Jun/95 | Monthly Bulletin − June 1995 |
| MSF−CIS | 08/95 | Nutritional Surveys in Mozambique |
| MSF−F | 11/09/95 | Personal Communication (Touareg Refugees, Cote d'Ivoire) |
| MSF−H | 08/08/95 | Results of Baseline Survey, Kenema, August 1995 |
| MSF−H | 14/09/95 | Update on Katale (Goma) and New Hadda (Afghanistan) |
| MSF−H | 22/07/95 | Nutrition Survey Report − Musuhura Hill Camp, Tanzania |
| OXFAM | 26/09/95 | Nutrition Survey−Sierra Leonian Refugees, Forecariah Prefecture |
| SCF | 25/07/95 | Nutrition Survey of Bhutanese Refugees in Nepal |
| SCF | 31/07/95 | Nutritional Survey−Lower Bong/Upper Margibi Counties |
| UNECOSOC | 04/09/95 | Situation of Human Rights in Iraq |

| | | |
|---|---|---|
| UNHAA | 06/08/95 | Humanitarian Assistance for Afghanistan – Weekly Update |
| UNHCR | Feb/95 | Update on the Repatriation and Reintegration Programme for Afghanistan |
| UNHCR | 03/05/95 | Weekly Highlights – Ethiopia |
| UNHCR | 02/08/95 | Monthly Nutritional Report Bukavu Refugees Camps, July 1995 |
| UNHCR | 11 Oct 1995 | Personal Communication – Mozambique |
| UNHCR | 14 Jun 1995 | UNHCR, Angola to Promote Voluntary Repatriation |
| UNHCR | 18/09/95 | Personal Communication (Uganda) |
| UNHCR | 19/09/95 | Personal Communication (Pakistan, Iran) |
| UNHCR | 28/09/95 | Personal Communication (Liberia Region, Ghana) |
| UNHCR | 29/07/95 | Rapport Fin de Mission (Uvira) |
| UNHCR | 30/08/95 | Nutrition Survey, Uvira |
| UNHCR | 31/07/95 | Monthly Statistics (Kenya) |
| UNICEF | 06/09/95 | Nutrition Situation Inside Rwanda |
| UNICEF | 19/07/95 | Report of Kismayo Nutrition Survey |
| USAID | 31/07/95 | Sudan – Civil Strife/Displaced Persons Situation Report #3 |
| WFP | 01/09/95 | Weekly Update |
| WFP | 04/08/95 | Weekly Update |
| WFP | 02/10/95 | Weekly Update |
| WFP | 09/10/95 | Weekly Update |
| WFP | 12/10/95 | Personal Communication |
| WFP | 11/08/95 | Weekly Update |
| WFP | 11/09/95 | Weekly Update |
| WFP | 15/09/95 | Weekly Update |
| WFP | 18/08/95 | Weekly Update |
| WFP | 22/09/95 | Weekly Update |
| WFP | 25/08/95 | Weekly Update |
| WHO | 15/09/95 | Personal Communication – Cholera in Burundi |
| WHO | 11/09/95 | Press Release – Cholera in Burundi |
| WV | 02/10/95 | Monthly Report – Angola |
| WV | Jun/95 | World Vision Monthly Report for June 1995–Mozambique |

| ***Org** | |
|---|---|
| AICF | Action International Contre la Faim |
| CARITAS | |
| 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 |
| MERLIN | |
| 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 |
| UNHAA | United Nations Humanitarian Assistance for Afghanistan |
| UNECOSOC | 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 |

## List of Tables, Figures and Annexes

**Table 1. Information Available on Total Refugee/Displaced Populations**

**(as of end September 1995)**

| ***Situation*** | ***Condition*** | | | | | ***Population #s*** | | ***Nut Stat*** | ***Commen*** |
|---|---|---|---|---|---|---|---|---|---|
| | ***I: High Risk*** | ***IIa: High Risk*** | ***IIa: Mod. Risk*** | ***IIc: Not Critical*** | ***III: Unknown*** | ***Total*** | ***Change from Jul 95*** | | |
| ***Sub−Saharan Africa*** | | | | | | | | | |
| *1. Angola* | | | *1,400,000* | | | *1,400,000* | *0* | *imp* | *Pockets of malnutrition likely to exis accessible areas* |
| *2. Benin/Ghana/Togo* | | | | *157,000* | | *157,000* | *0* | *stat* | |
| 3. *Burkina Faso/Mauritania* | | | *41,000* | *33,000* | | *74,000* | *13,000* | *imp* | *Nutritional status proba improving d to improved* |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | *ratio* |
| *4. Burundi/Rwanda Region* | *140,000* | *100,000* | *1,018,000* | *1,358,400* | *215,000* | *2,831,400* | *–336,500* | *stat* | *Dec larg re– in T repa re– in C* |
| *5. Central Africa Republic* | | | | *38,800* | | *38,800* | *0* | *stat* | *Son prec situ erra inac wat* |
| *6. Djibouti* | | | | *23,000* | | *23,000* | *0* | *stat* | *Rev of S refu* |
| *7. Ethiopia* | *81,000* | | *173,000* | *108,000* | *18,000* | *380,000* | *0* | *stat* | |
| *8. Kenya* | | | *113,000* | *84,000* | | *197,000* | *0* | *det* | *Nut situ app dete Dad* |
| *9. Liberia Region* | *231,000* | *1,404,000* | *20,000* | *1,816,000* | | *3,471,000* | *36,020* | *stat/d* | *Poo mal exis dete sec nutr situ Sier* |
| *10. Mauritania/Senegal* | | | | *52,000* | | *52,000* | *0* | *stat* | *Foo to b out* |
| *11. Mozambique Region* | | | | *600,000* | | *600,000* | *440,000* | *imp* | *Tota a pl figu Mar Poo mal exis* |
| *12. Shaba, Zaire* | *60,000* | | *340,000* | *200,000* | | *600,000* | *0* | *det* | *Info Mw sho alar in le was* |
| *13. Somalia* | *138,000* | *462,000* | | | | *600,000* | *0* | *det* | *The vulr peo not prob high* |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *14. Sudan* | | | *960,000* | *440,000* | | *1,400,000* | *0* | *det* | *Logistic constraints South, & clo camps near Khartoum, increase risk* |
| *15. Uganda* | | | *66,300* | *271,400* | | *337,700* | *2,700* | *stat* | *Ikafe & Rhin camps ar ris due water/sanita problems & elevated lev of wasting* |
| *16. Zaire (r)* | | | | *104,700* | | *104,700* | *0* | *stat* | |
| *17. Zambia* | | | | *12,700* | | *12,700* | *0* | *stat* | |
| *Total Sub–Saharan Africa* | *650,000* | *1,966,000* | *4,131,300* | *5.299,000* | *233,000* | *12,279,300* | *155,220* | | |
| ***Asia (Selected Situations)*** | | | | | | | | | |
| *18. Afghanistan Region* | | | *790,000* | *2,700,000* | | *3,490,000* | *'" 0 '* | *stat* | *Unknown number of displaced ha returned hor Impact of returnees should be monitored* |
| *19. Bhutanese in Nepal* | *3,500* | | *83,500* | | | *87,000* | *0* | *stat* | *Cases of be beri, scurvy anguair stomatitis se* |
| *20. Bangladesh* | | | | *52,000* | | *52,000* | *–6,000* | *stat* | *Repatriation these refuge* is *continuing* |
| *21. Southern Iraq* | | *192,000* | | *28,000* | | *222,000* | *0* | *det* | *Those in Marshes considered high risk* |

** 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**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | ***October 1995 • RNIS #12 (population est*** |
| | **To/In** | | | | | | | | | | | | |
| ***From*** | *Angola* | *Benin* | *Burkina Faso* | *Burundi* | *Cote d'Ivoire* | *Ethiopia* | *Ghana* | *Guinea* | *Kenya* | *Liberia* | *Mali* | *Mauritania* | |
| *Angola* | 1400 | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Benin* | | | | | | | | | | | | |
| *Burkina Faso* | | | | | | | | | | | | |
| *Burundi* | | | | 100 | | | | | | | | |
| *Cote d'Ivoire* | | | | | | | | | | | | |
| *Ethiopia* | | | | | | 11* | | | 6 | | | |
| *Ghana* | | | | | | | | | | | | |
| *Guinea* | | | | | | | | | | | | |
| *Kenya* | | | | | | 24 | | | | | | |
| *Liberia* | | | | | 305 | | 14 | 408 | | 1'900 | | |
| *Mali* | | | 33 | | | | | | | | | 4 |
| *Mauritania* | | | | | | | | | | | | |
| *Mozambique* | | | | | | | | | | | | |
| *Rwanda* | | | | 215 | | | | | | | | |
| *Sierra Leone* | | | | | | | | 128 | | 100 | | |
| *Somalia* | | | | | | 272 | | | 158 | | | |
| *Sudan* | | | | | | 55 | | | 33 | | | |
| *Tanzania* | | | | | | | | | | | | |
| *Togo* | | 45 | | | | | 98 | | | | | |
| *Uganda* | | | | | | | | | | | | |
| *Zaire* | | | | | | | | | | | | |
| *Zambia* | | | | | | | | | | | | |
| ***TOTAL*** | 1'400 | 45 | *33* | 315 | 305 | 351 | 112 | 536 | 197 | 2'000 | 0 | 4 |

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) The breakdowns between the origins of the refugees in Guinea and Zambia are estimates

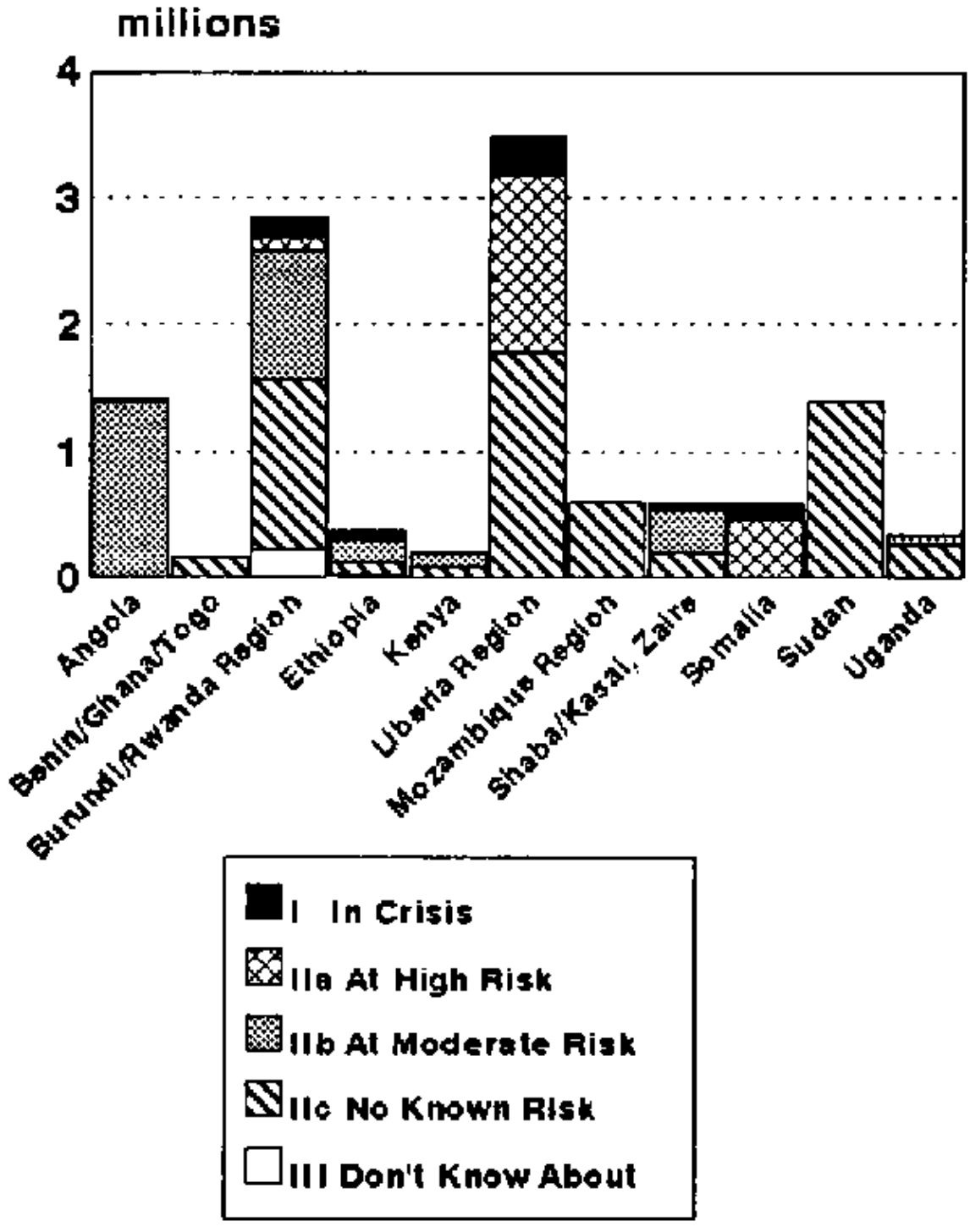
(3) Boxes on the diagonal (bold outline) show internally displaced populations (total =79 million)

(4) 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 Mozambique the description is by country of origin (i.e. row totals)

* These figures include an unknown number of Eritrean refugees

**Figure 1. Refugee and Displaced Populations**




Selected Areas In Africa (October 1995)

**Figure 2. Trends in Total Refugee/Displaced Populations and Risk Categories**

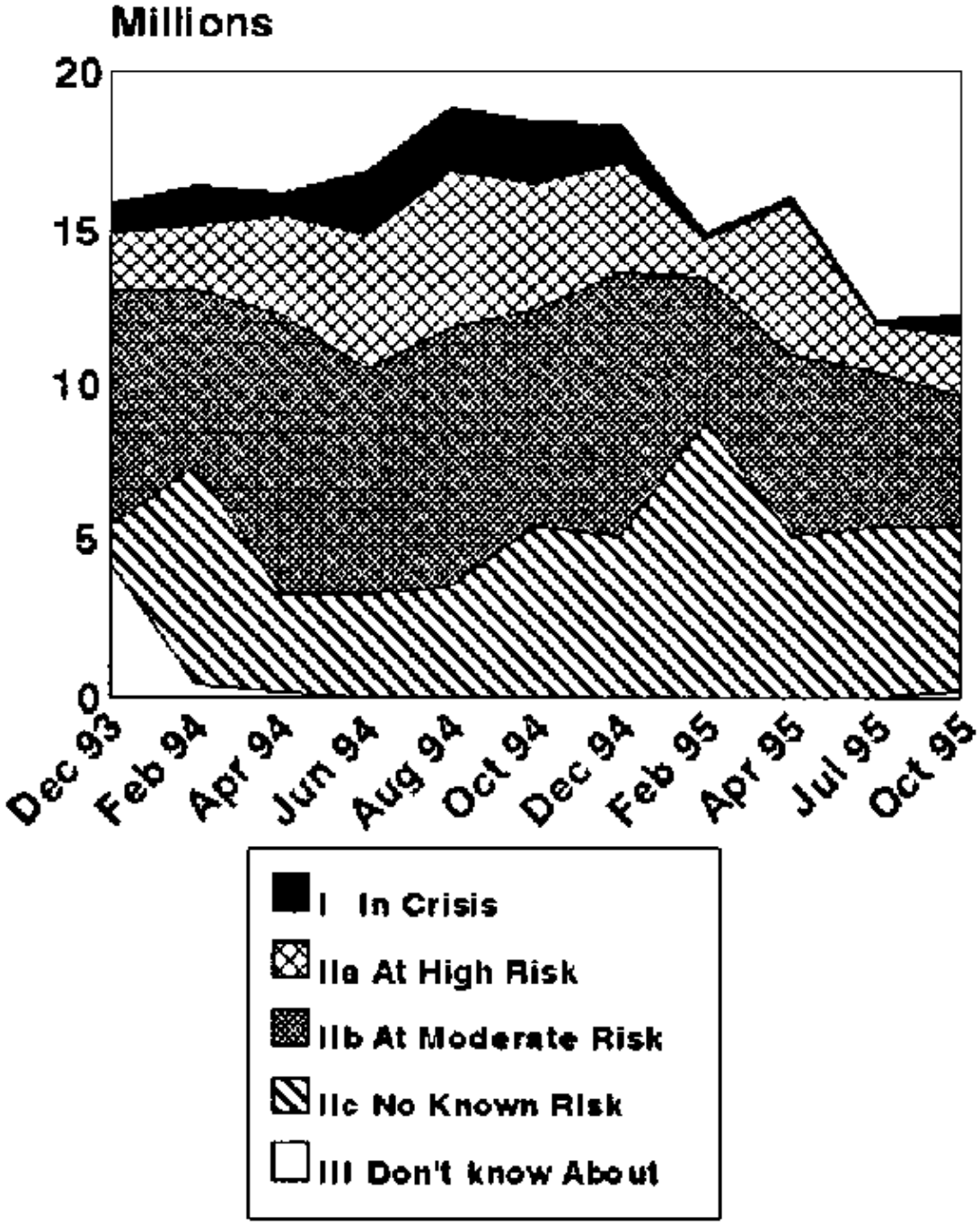
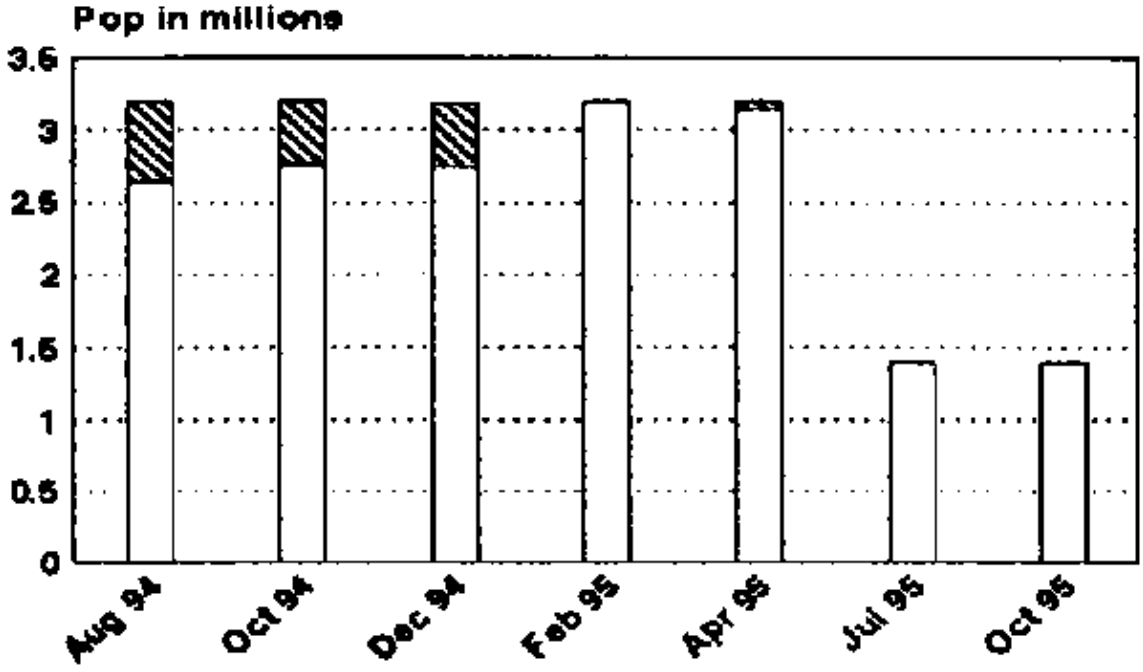
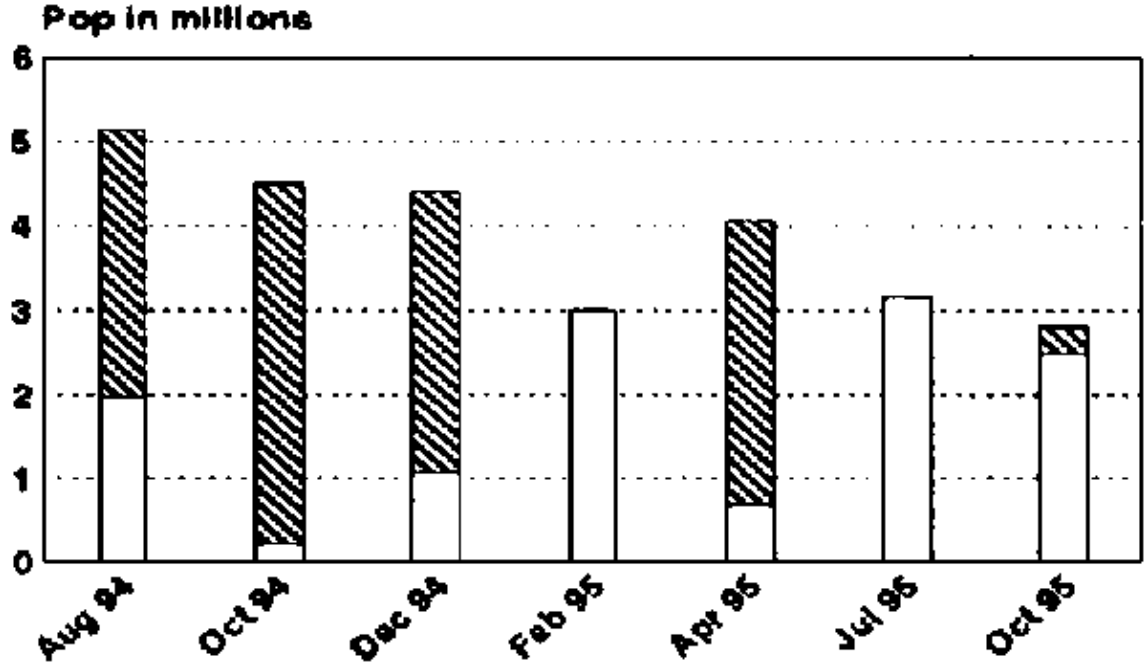


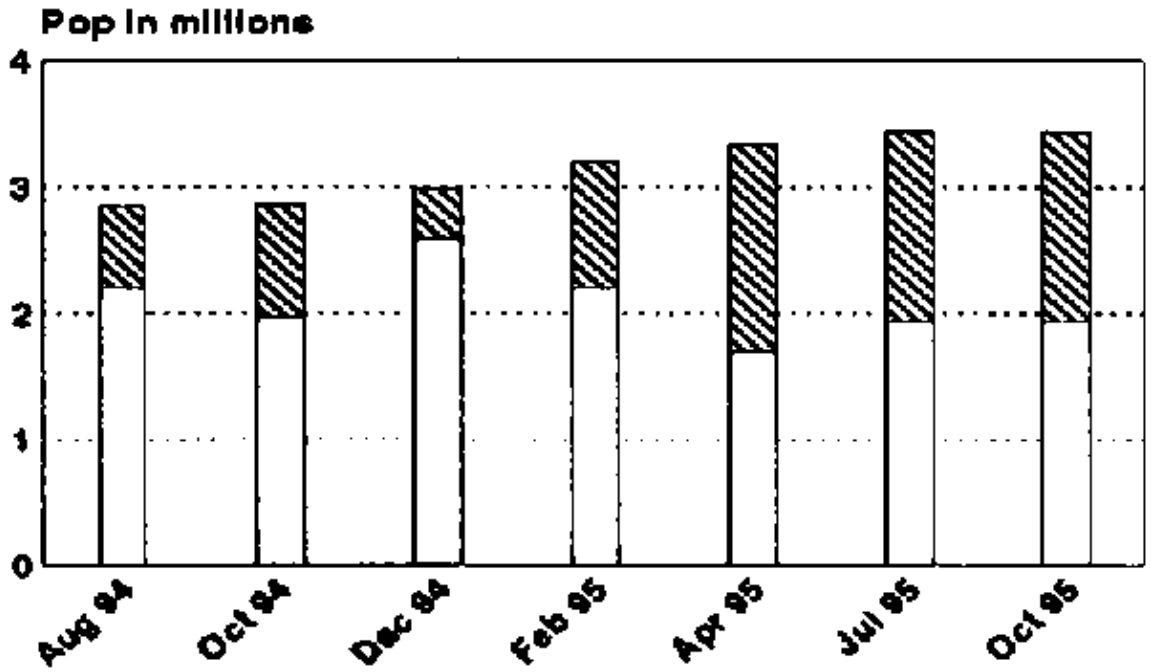

**Figure 3. Trends in Populations Estimates and Risk Categories in Six Countries**



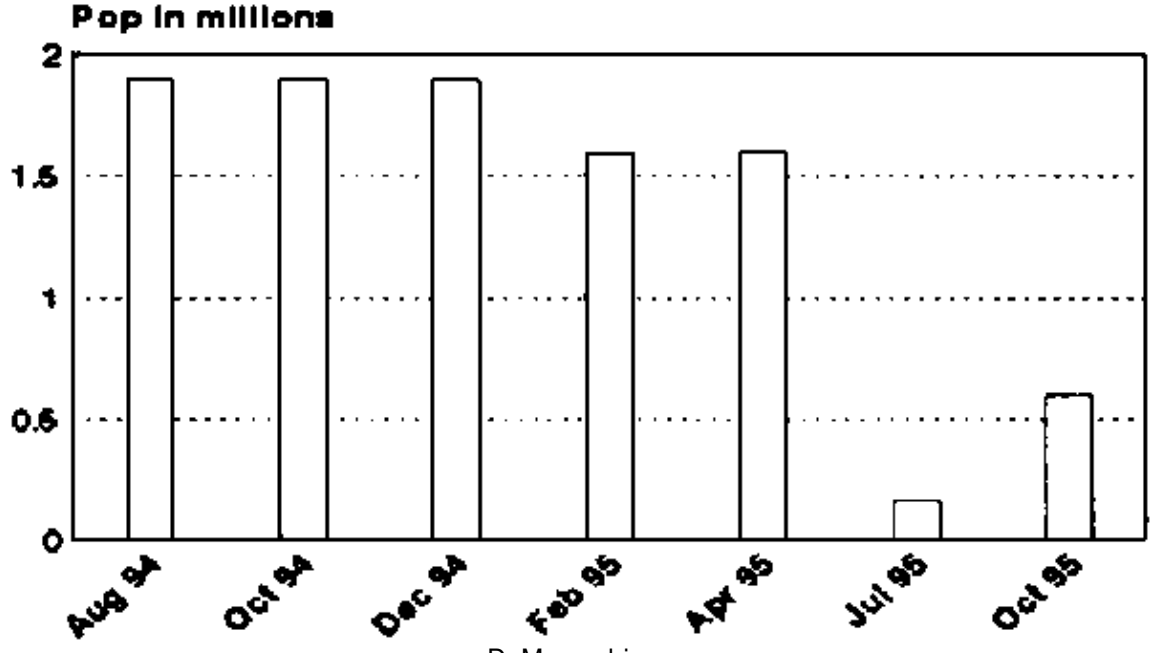

A. Angola



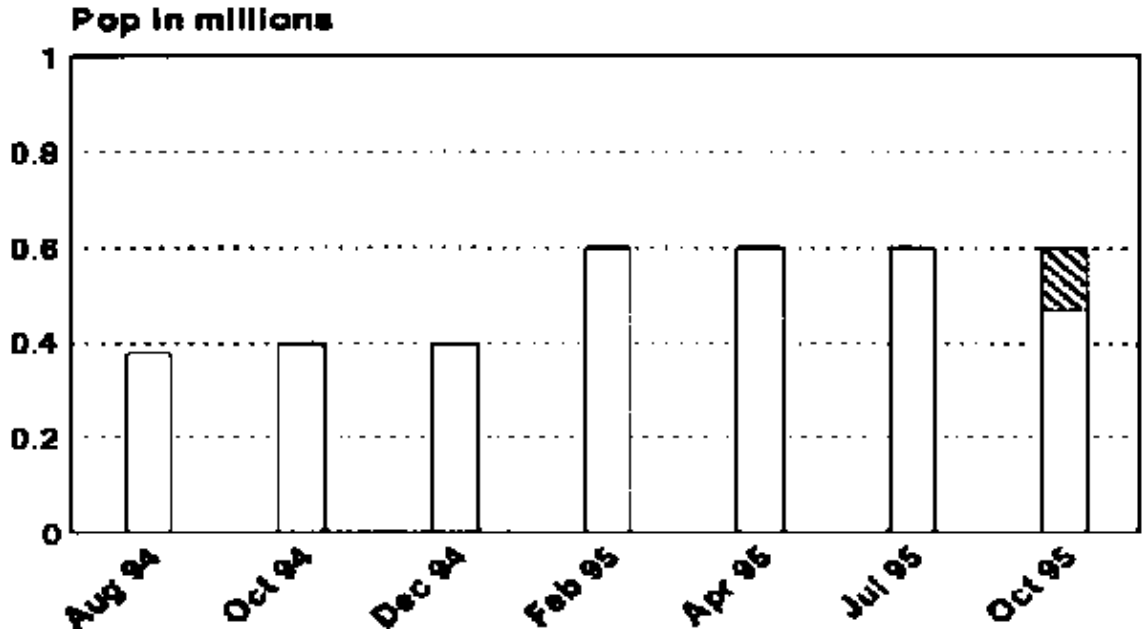

B. Burundi/Rwanda Region



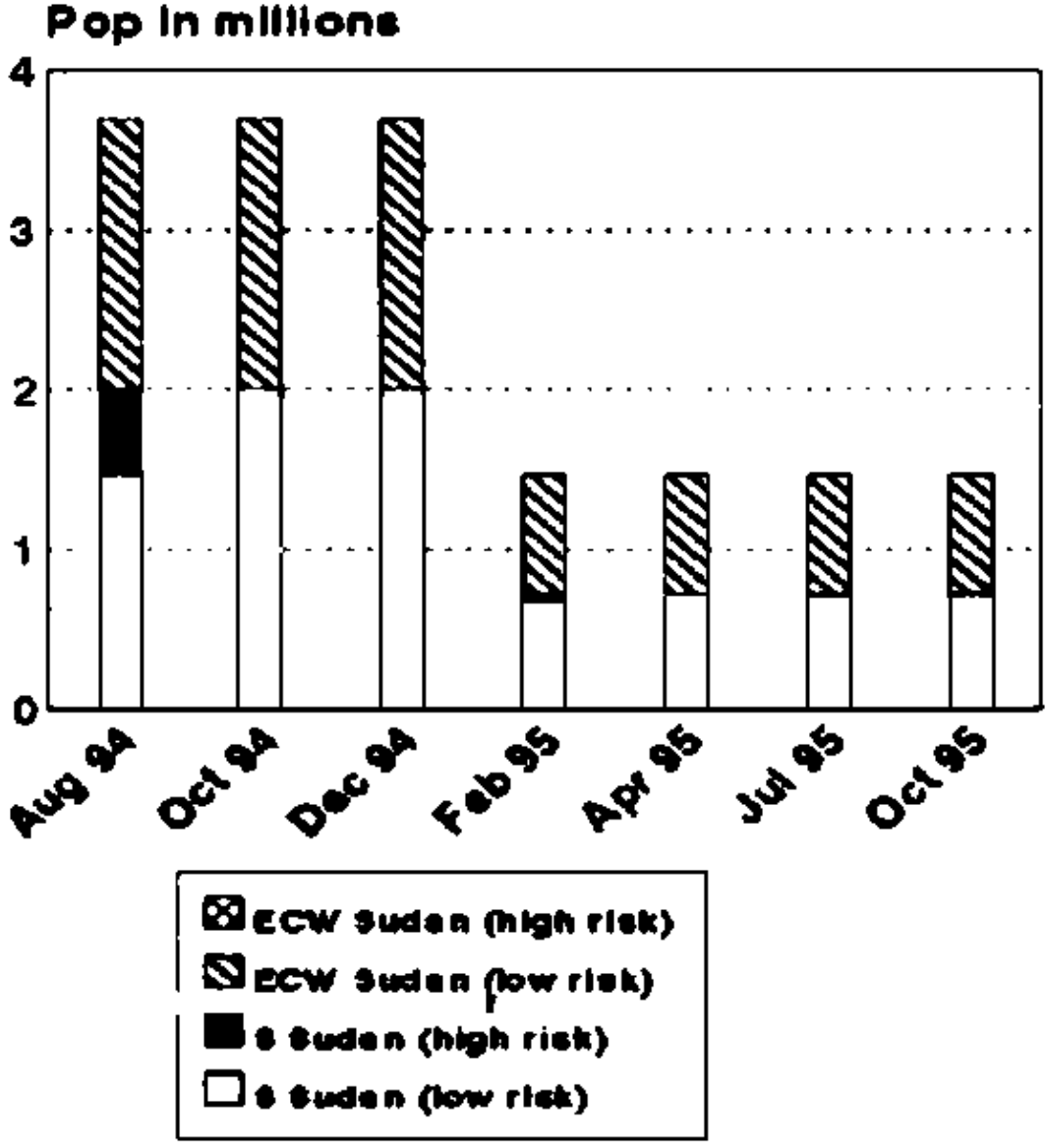

C. Liberia




D. Mozambique




E. Somalia




F: Sudan

***Shaded areas indicate those at heightened nutritional risk (categories I and IIa in Table 1).***

**Annex 1. Surveys Quoted**

| **Results of Surveys Quoted In October 1995 RNIS Report (#12)** | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | ***Under*** | ***Measles*** |
| | ***Survey*** | | | ***% Severely*** | ***Crude Mortality*** | ***5 Mortality*** | ***Immunisat*** |
| | ***Conducted by*** | ***Date*** | ***% Wasted**** | ***Wasted**** | ***(/10.000/day)*** | ***((/10,000/day)*** | ***Coverag*** |
| ***1. Angola*** | | | | | | | |
| *a. Caconda. Huila Province* | MSF–S | Aug.95 | 14.7 | 1.1 | | | |
| ***4. Burundi/Rwanda Region*** | | | | | | | |
| *a. Rwanda (national survey)* | Mm of Health | May.95 | 9.7 | | | | |
| *b. Rwanda (prefecture)* | MSF–S | May.95 | 2.9 | | | | |
| *c. Musuhura Hill Camp (Tanzania)* | MSF–H | Jul.95 | 6.3 | 3.1 | | | |
| *d. Hongo (Bukavu, Zaire)* | UNHCR | Jul.95 | 5.2 | 1.6 | | | 92.4% |
| *e. Kabira (Bukavu. Zaire)* | UNHCR | Jul.95 | 2.8 | 0.2 | | | 94.0% |
| *f. Kashusa (Bukavu. Zaire)* | UNHCR | Jul.95 | 1.5 | 0.2 | | | 93.7% |
| *g. Nyamirangwe (Bukavu. Zaire)* | UNHCR | Jul.95 | 4.8 | 0.0 | | | 94.4% |
| *h. Runingo (Uvira, Zaire)* | UNHCR | Aug.95 | 21.6 | 12.3 | | | |
| *i. Kajembo (Uvira, Zaire)* | UNHCR | Aug.95 | 11.8 | 6.6 | | | |
| *j. Luberizi (Uvia, Zaire)* | UNHCR | Aug.95 | 10.7 | 3.8 | | | 61.1% |
| *k. Kagunga (Uvira, Zaire)* | UNHCR | Aug.95 | 6.1 | 2.0 | | | 47.8% |
| | UNHCR | Aug.95 | 6.5 | 1.8 | | | 55.7% |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *l. Rwenena (Uvira. Zaire)* | | | | | | | |
| *m. Kamanyola (Uvira. Zaire)* | UNHCR | Aug.95 | 1.4 | 0.6 | | | 50.4% |
| *n. Lubarika (Uvira, Zaire)* | UNHCR | Aug.95 | 2.1 | 0.0 | | | 48.3% |
| *o. Biriba (Uvira, Zaire)* | UNHCR | Aug.95 | 2.7 | 2.2 | | | 37.1% |
| *p. Luvungi (Uvira. Zaire)* | UNHCR | Aug.95 | 9.1 | 2.1 | | | 62.5% |
| ***8. Kenya*** | | | | | | | |
| *a. Hagadera* | MSF–B | Aug.95 | 12.1 | 2.4 | | | 87.7% |
| *b. Ifo* | MSF–B | Aug.95 | 12.1 | 4 | | | 89.6% |
| *c. Dagahaley* | MSF–B | Aug.95 | 9.8 | 1.5 | | | 82.8% |
| ***9. Liberia Region*** | | | | | | | |
| *a. Lower Bong. Upper Margbi (Liberia)* | SCF | Jul.95 | 19.1 | 5.2(37.1%oedema) | | | |
| *b. Kenema Town (Sierra Leone)* | MSF–H | Aug.95 | 21 | 7.7 | 2.4 | 5.6 | 69% |
| *b. Kenema RTI Camp (Sierra Leone)* | MSF–H | Aug.95 | 37 | 11.5 | 5.2 | 19 | 72.0% |
| *d. Tabou Pref, refugees (Cote d'Ivoire)* | CARITAS | Jul.95 | 8 (<80%) | 2 (<70%) | | | |
| *e. Tabou Pref. residents (Cote d'Ivoire)* | CARITAS | Jul.95 | 8.8 (<80%) | 2.4 (<70%) | | | |
| *f. Foreccariah Pref (Guinea)* | OXFAM | Aug.95 | 8.2 | 0.7 | | | 42.9% |
| ***11. Mozambique Region*** | | | | | | | |
| *a. Namapa, Nampula* | WV | Jul.95 | 4.0 | 0.3 | | | |
| *b. Namapa, Nampula* | WV | Jul.95 | 4.3 | 1.6 | | | |
| *c. Namapa. Nampula* | WV | Aug.95 | 1.9 | 0.5 | | | |
| *d. Magoe District, Tete* | MSF–CIS | Aug.95 | 5.0 | 2.1 | | | |
| *e. Chibabave, Sofala Province* | MSF–CIS | Jul.95 | 3.3 (3rd%ile) | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *f. Nicoadala. Zambezia Province* | WV | Jul.95 | 3.5 (<80%) | | | | |
| ***13. Somalia*** | | | | | | | |
| *a. Mogadishu (resident)* | AICF | Jun.95 | 25.1 | 6.4 | | | 54.3% |
| *b. Mogadishu (displaced)* | AICF | Jun.95 | 26.3 | 5.4 | | | 54.3% |
| *c. Kismayo (Town)* | UNICEF" | Jul.95 | 17.8 | 2.7 | | | 97.9% |
| *d. Kismayo (Displaced Camps)* | UNICEF" | Jul.95 | 11.6 | 1.8 | | | 64.0% |
| ***15. Uganda*** | | | | | | | |
| *a. Ikafe* | EPICENTRE | Apr.95 | 6.9 | 2.0 | 0.54 | 1.7 | 78.0% |
| *b. Koboko* | EPICENTRE | Jul.95 | 8.2 | 1.9 | 0.31 | 1.4 | 92.7% |
| *c. Rhino* | EPICENTRE | Jul.95 | 13.9 | 3.8 | 0.41 | 1.3 | 81.5% |
| ***18. Afghanistan Region*** | | | | | | | |
| *a. New Hadda Camp* | MSF−H | Sep.95 | 11.1 | 1.5 | | | |
| *b. Kandahar. Afghanistan (villages)* | MERLIN | Jun.95 | 13.4 | | | 4.8 | |
| *c. Kandahar, Afghanistan (city)* | MERLIN | Jun.95 | 9.3 | | | 4.8 | |
| ***19. Bhutanese Refugees in Nepal*** | | | | | | | |
| *a. All 8 Camps* | SCF/UNHCR | Jun.95 | 5.7 | 0.9 | | 0.2 | 97.0% |

*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

**AMREF−African Medical and Research Foundation III

***Jointly conducted by: UNICEF, MSF, World Concern. Muslim−Aid−UK and Somali Red Crescent Society

**Notes on Annex I**

1. Angola

a. This survey was conducted by MSF−Spain in August 1995. No further details are currently available.

4. Burundi/Rwanda Region

a. This was a national survey carried out by the Ministry of Health in May 1995. A total of 1016 children (0−5 years old) were included in the survey. Wasting was defined as weight/height <−2 z scores.

b. This survey was carried out in three communes in one district by MSF−Spain. A total of 1292 children 0−5

years old were included. Wasting was defined as weight/height <−2 z scores.

c. This survey was carried out by MSF−Holland in Musuhura Hill Camp, Tanzania in July 1995. Systematic random sampling was used and children 65−110 cms were included. A total of 543 children were weighed and measured. Wasting was defined as weight/height <−2z scores or oedema and severe wasting was defined as weight/height <−3z scores or oedema.

d−g. These surveys were carried out by UNHCR in Bukavu in July 1995. Wasting was defined as weight/height <−2z scores and severe wasting was defined as weight/height <−3z scores. Oedema was measured separately.

h−k. These are preliminary results from four surveys carried out by UNHCR in Uvira in August 1995. Wasting was defined as weight/height <−2sd or oedema and severe wasting was defined as weight/height <−3sd or oedema.

l−p. These are results from five surveys carried out by UNHCR in Uvira in August 1995. Wasting was defined as weight/height <−2sd or oedema and severe wasting was defined as weight/height <−3sd or oedema.

8. Kenya

a. This survey was carried out by MSF−Belgium in August 1995 in Hagadera Camp. It was a two stage cluster sample survey that included 785 children 6−59 months old (or 65−110 cms in height) for a sample size of 785. Wasting was defined as weight/height <−2sd or oedema and severe wasting was defined as weight/height <−3sd or oedema.

b. This survey was carried out by MSF−Belgium in August 1995 in Ifo Camp. It was a two stage cluster sample survey that included 761 children 6−59 months old (or 65−110 cms in height) for a sample size of 785. Wasting was defined as weight/height <−2sd or oedema and severe wasting was defined as weight/height <−3sd or oedema.

c. This survey was carried out by MSF−Belgium in August 1995 in Dagahaley Camp. It was a two stage cluster sample survey that included 760 children 6−59 months old (or 65−110 cms in height) for a sample size of 785. Wasting was defined as weight/height <−2sd or oedema and severe wasting was defined as weight/height <−3sd or oedema.

9. Liberia Region

a. This survey was conducted by SCF at the end of July 1995 in Lower Bong/Upper Margibi Counties. A random weighted cluster sampling method was used and 769 children 65−110cms were included. Wasting was defined as weight/height <−2sd or oedema and severe wasting was defined as weight/height <−3sd or oedema.

b. This survey was conducted by MSF−Holland in Kenema Town in August 1995. 1071 children 6−59 months old were included in the survey. Wasting was defined as weight/height <−2sd or oedema and severe wasting was defined as weight/height <−3sd or oedema.

c. This survey was conducted by MSF−Holland in RTI Camp for displaced people outside of Kenema Town in August 1995. 330 children 6−59 months old were included in the survey. Wasting was defined as weight/height <−2sd or oedema and severe wasting was defined as weight/height <−3sd or oedema.

d. This cluster survey was carried out by CARITAS in July 1995 in Tabou Prefecture. 500 Liberian refugees 6−59 months old were included. Wasting was defined as <80% of the mean and severe wasting was defined as <70%. Oedema was measured separately.

e. This cluster survey was carried out by CARITAS in July 1995 in Tabou Prefecture. 499 local residents 6−59 months old were included. Wasting was defined as <80% of the mean and severe wasting was defined as <70%. Oedema was measured separately.

f. This survey was conducted by OXFAM in August 1995 in Foercahiah, Guinea. A systematic sampling procedure was used and 422 children 65−110 cms were included. Wasting was defined as weight/height <−2sd or oedema and severe wasting was defined as weight/height <−3sd or oedema.

11. Mozambique

a–b. These two surveys were conducted by World Vision in July 1995. Wasting was defined as weight/height <–2z scores and severe wasting as <–3z scores.

c. This survey was conducted by World Vision in August 1995. Wasting was defined as weight/height <–2z scores and severe wasting as <–3z scores.

d. This survey was carried out by MSF–CIS in August 1995 in Magoe District, Tete Province. Wasting was defined as weight/height <–2sd or oedema and severe wasting was defined as weight/height <–3sd or oedema.

e. This survey was conducted in July 1995 in Chibabave District, Sofala Province. Wasting was defined as weight/height less than the third percentile.

f. This survey was conducted by World Vision in July 1995 in Nicoadala District, Zambezia Province. Wasting was defined as weight/height <80% of the mean.

13. Somalia

a. This survey was conducted by AICF in June 1995 in Mogadishu. A two stage random cluster survey was carried out and 906 resident children 6–59 months old were included. Wasting was defined as weight/height <–2sd or oedema and severe wasting was defined as weight/height <–3sd or oedema.

b. This survey was conducted by AICF in June 1995 in Mogadishu. A two stage random cluster survey was carried out and 908 displaced children 6–59 months old were included. Wasting was defined as weight/height <–2sd or oedema and severe wasting was defined as weight/height <–3sd or oedema.

c. This survey was jointly conducted by UNICEF, MSF, World Concern, Muslim Aid–UK and the Somali Red Cross Society in July 1995. This was a random sample survey and the results are expressed for the resident population (n=622) and for the displaced population (n=735). Children less than or equal to 110cm were included. Wasting was defined as weight/height <–2sd or oedema and severe wasting was defined as weight/height <–3sd or oedema.

15. Uganda

a–c. These three surveys were conducted by EPICENTRE. They were cluster samples. Wasting was defined as weight/height <–2sd or oedema and severe wasting was defined as weight/height <–3sd or oedema.

18. Afghanistan

a. This survey was conducted by MSF–Holland in September 1995. 612 children were included. Wasting was defined as weight/height <–2sd or oedema and severe wasting was defined as weight/height <–3sd or oedema.

b. These surveys were conducted by MERLIN in June 1995. Results are expressed separately for the villages surrounding the towns and the city itself. A random sample of children 6–59 months was carried out. When age was uncertain, less than 115 cm was used as an approximation. Wasting was defined as <–2z scores and severe wasting was defined as <–3z scores.

19. Bhutanese Refugees in Nepal

a. This survey was jointly conducted by SCF and UNHCR in July 1995. It was a cross–sectional survey using a stratified sampling method. 330 children 6–60 months were included. Wasting was defined at weight/height <80% of the median and severe wasting was <70%.

## Annex 2. Seasonality

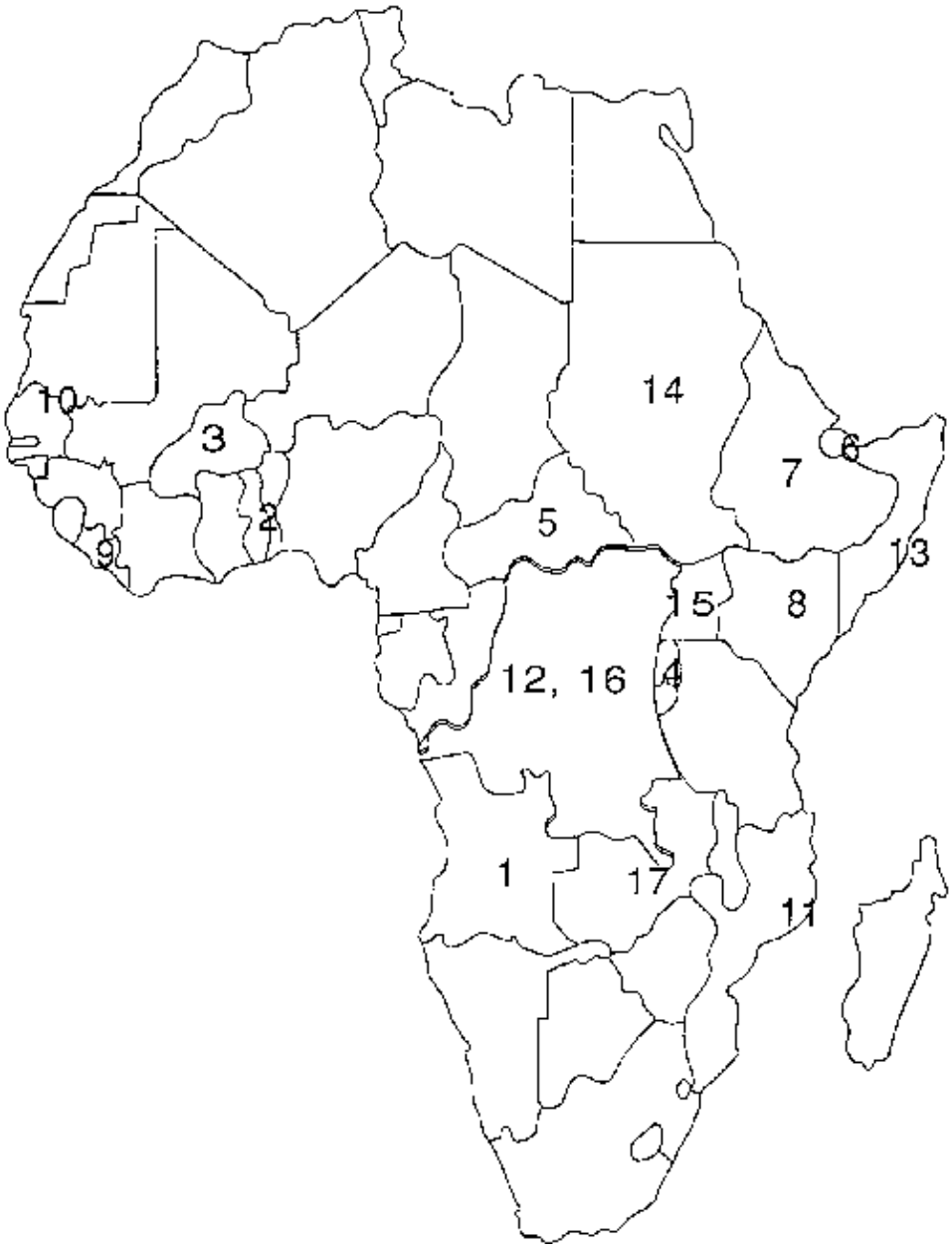
### *Seasonality in Sub–Saharan Africa**

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

*SOURCES:

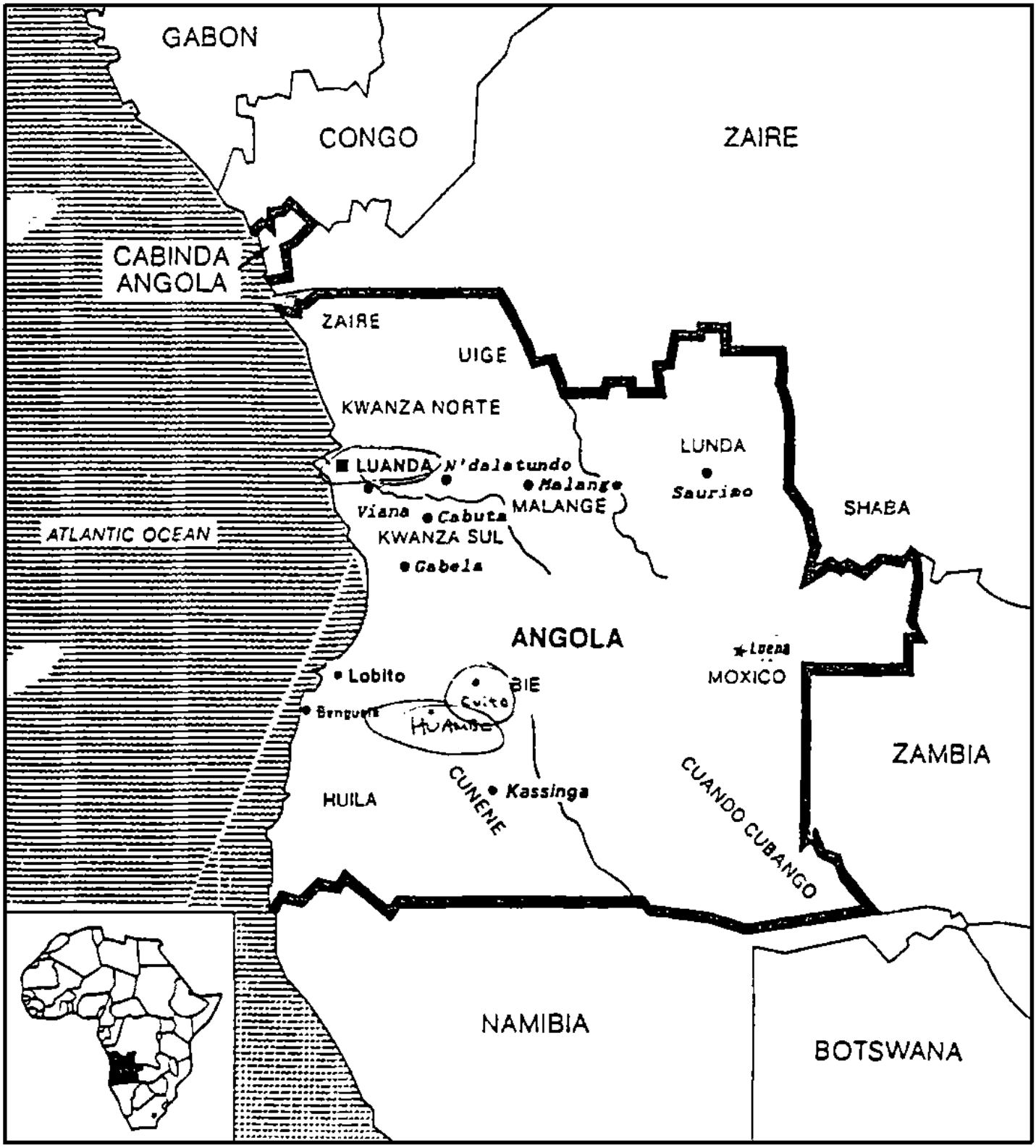
FAO, "Food Supply Situation and Crop Prospects in Sub−Saharan Africa", Special Report; No 4/5, Dec. 90 plus various FAO/WFP Crop and Food Supply Assessment Missions.

## List of Maps



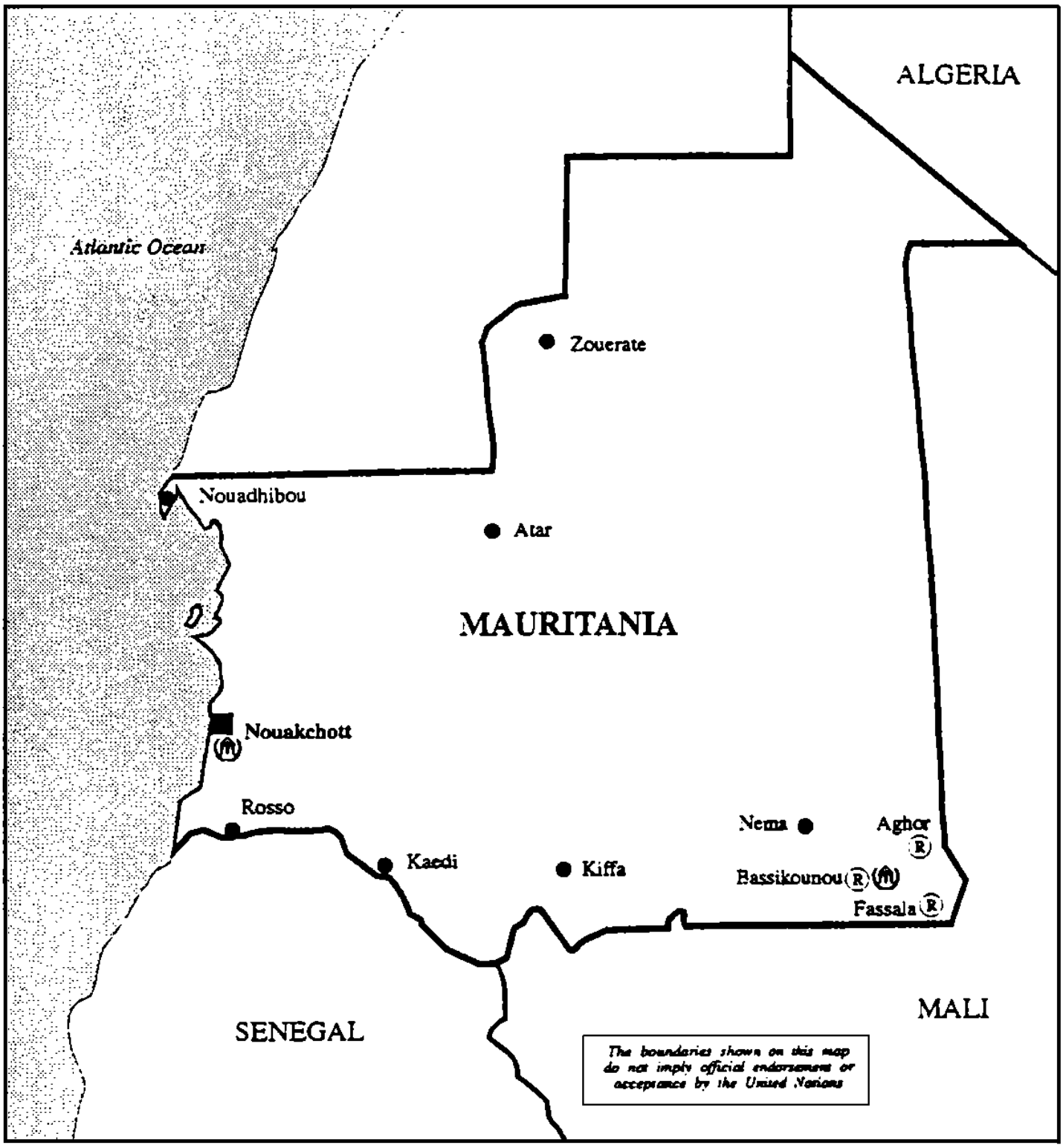

1. Angola
2. Benin/Ghana/Togo
3. Burkina Faso
4. Burundi/Rwanda Region
5. Central African Republic
6. Djibouti
7. Ethiopia
8. Kenya
9. Liberia Region
10. Mauritania/Senegal
11. Mozambique
12. Zaire
13. Somalia
14. Sudan
15. Uganda
16. Zaire
17. Zambia

**MAP 1 Angola**



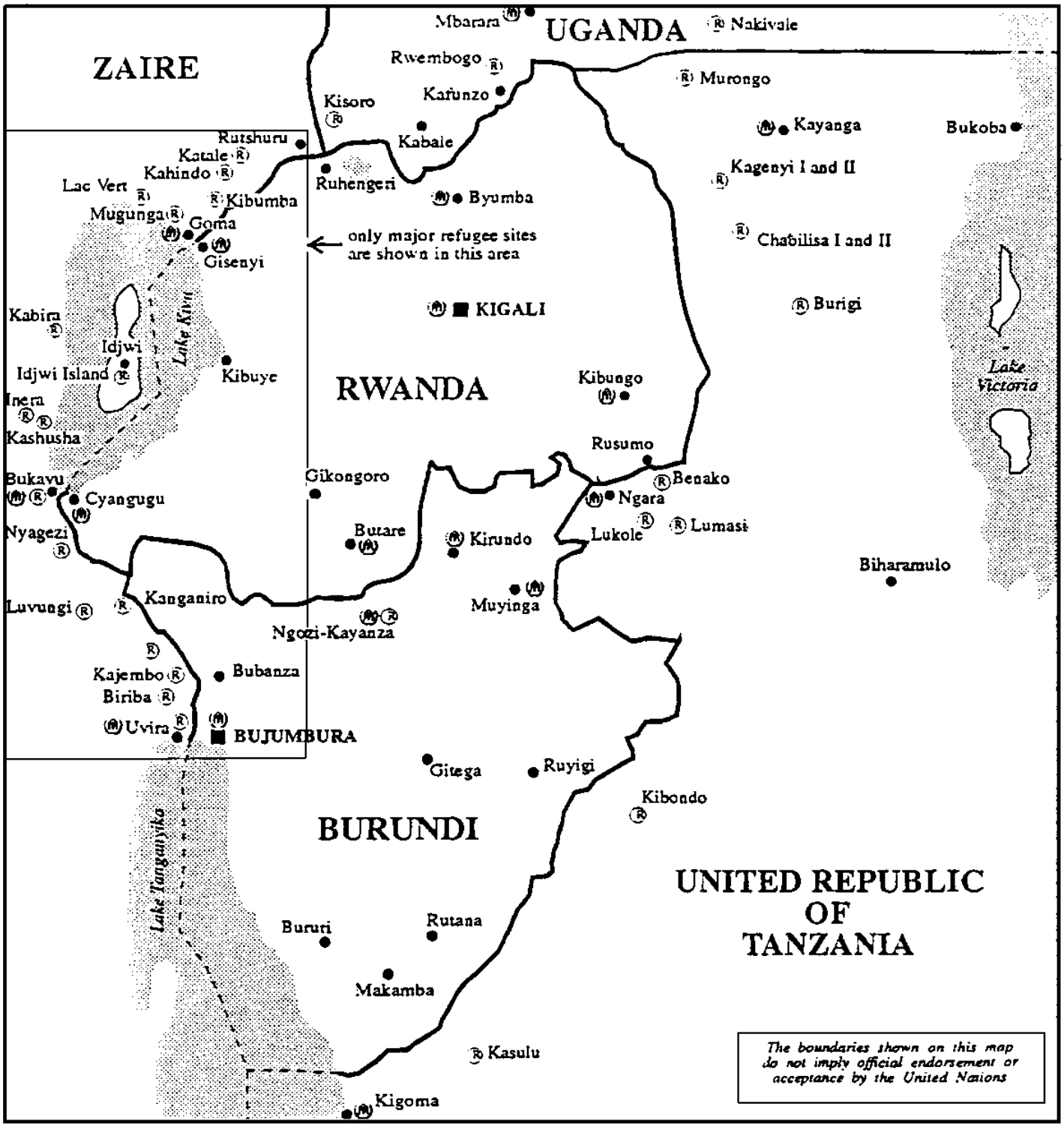

MAP 1 Angola

**MAP 3 Mauritania**



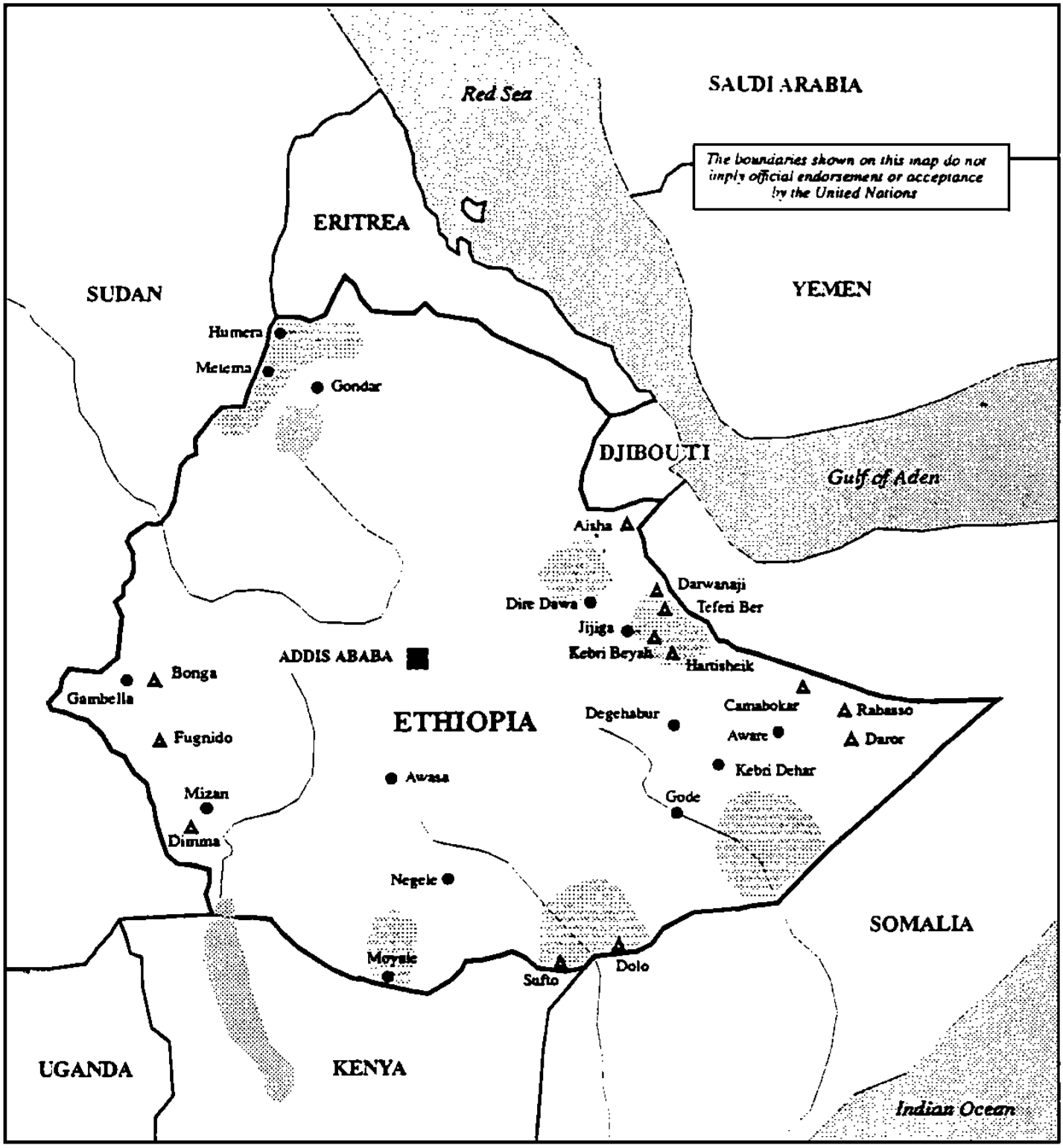

MAP 3 Mauritania

**MAP 4 Burundi/Rwanda Region**



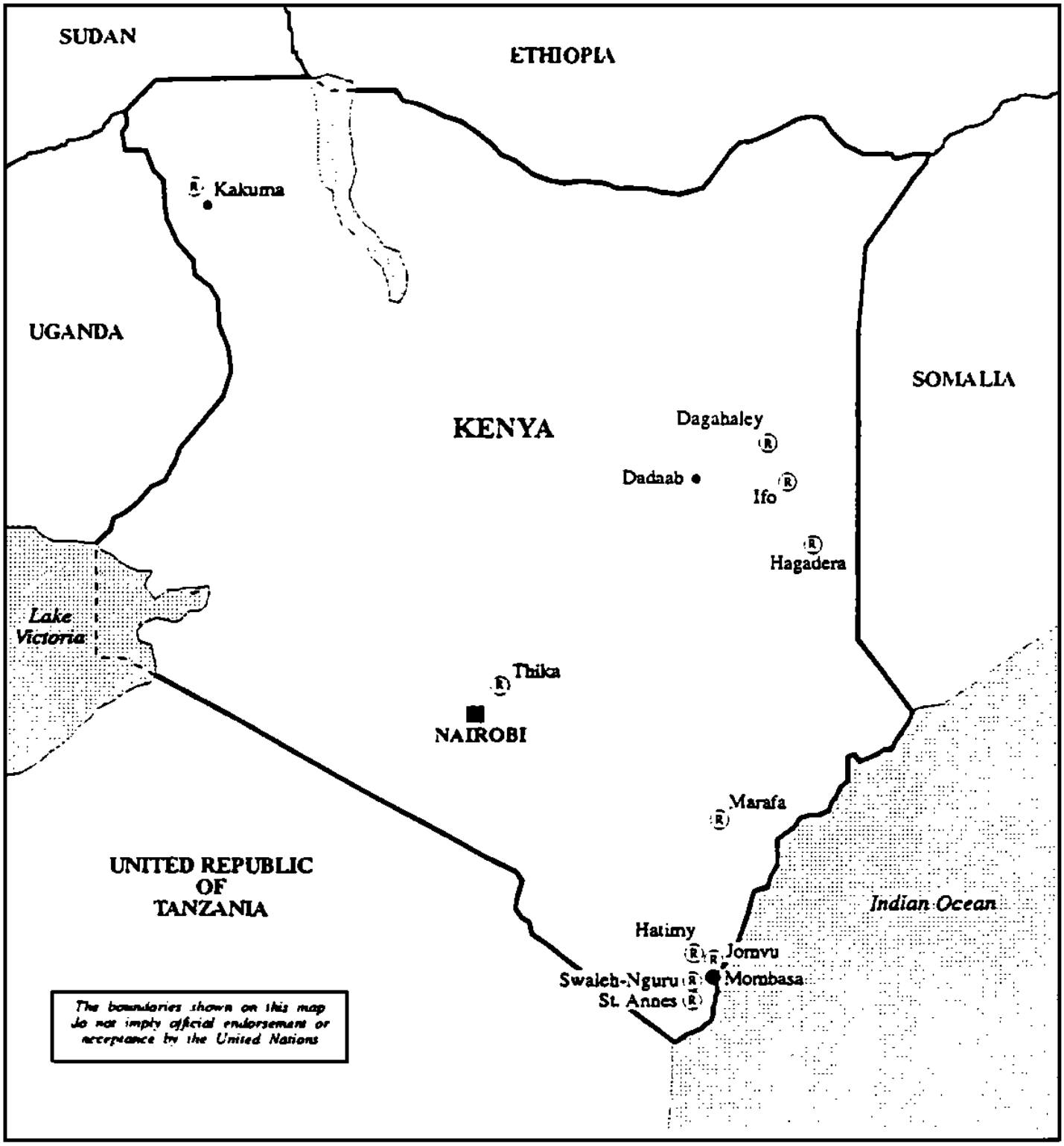

MAP 4 Burundi/Rwanda Region

**MAP 7 Ethiopia**



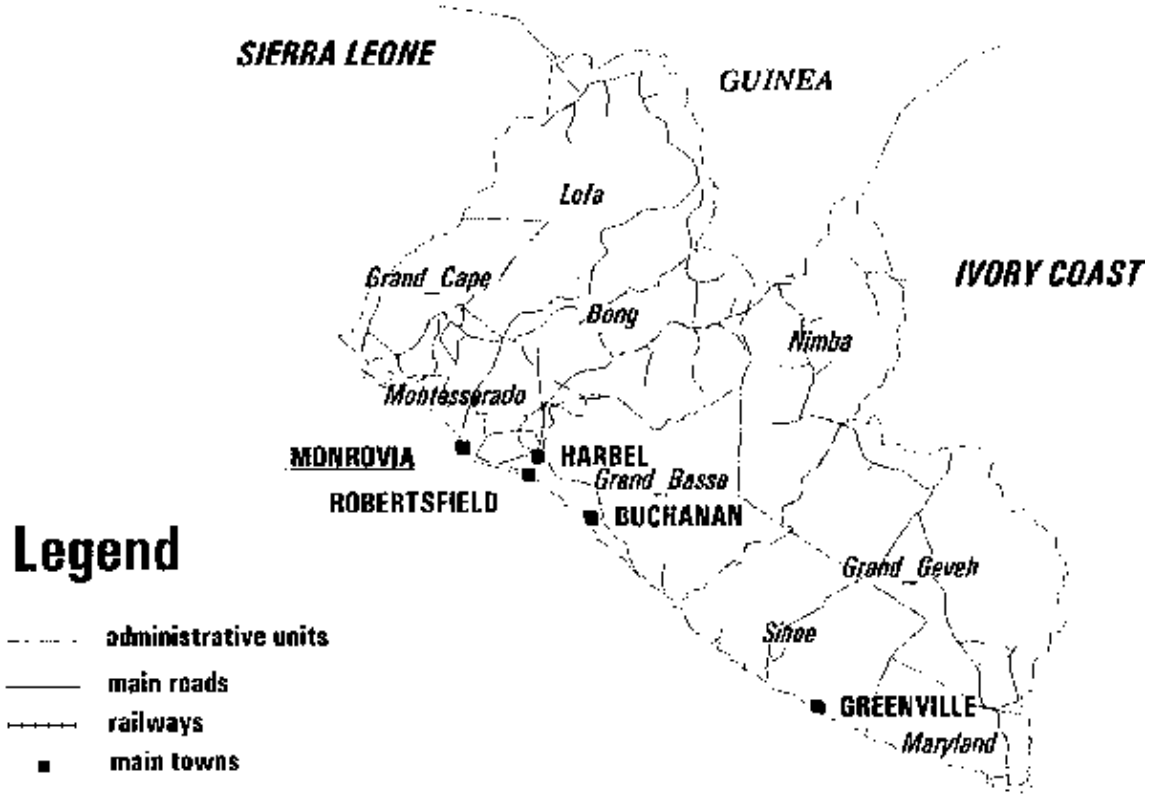

MAP 7 Ethiopia

**MAP 8 Kenya**

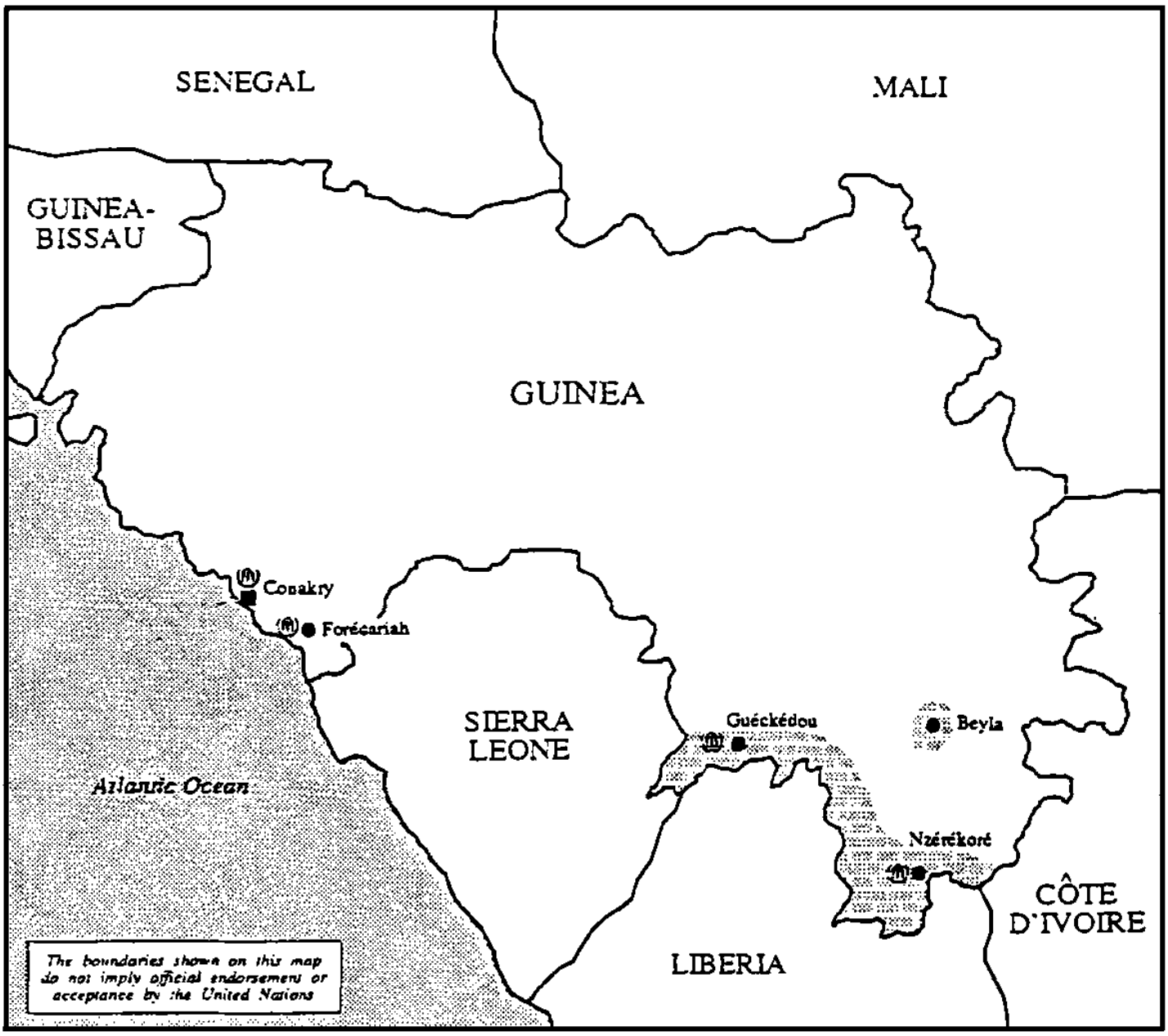



MAP 8 Kenya

**MAP 9 Liberia/Sierra Leone**

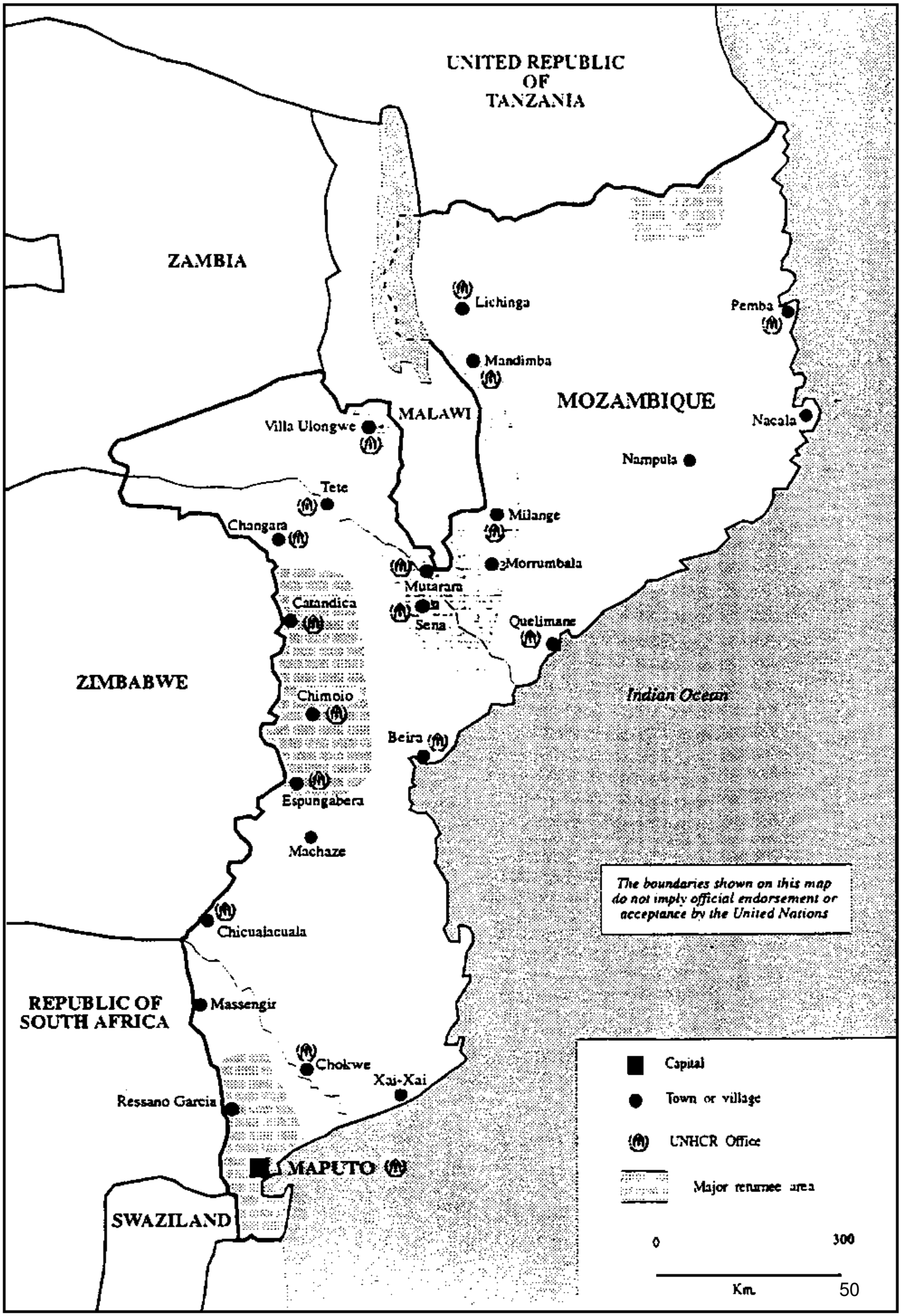



**MAP 9 Liberia/Sierra Leone (a)**



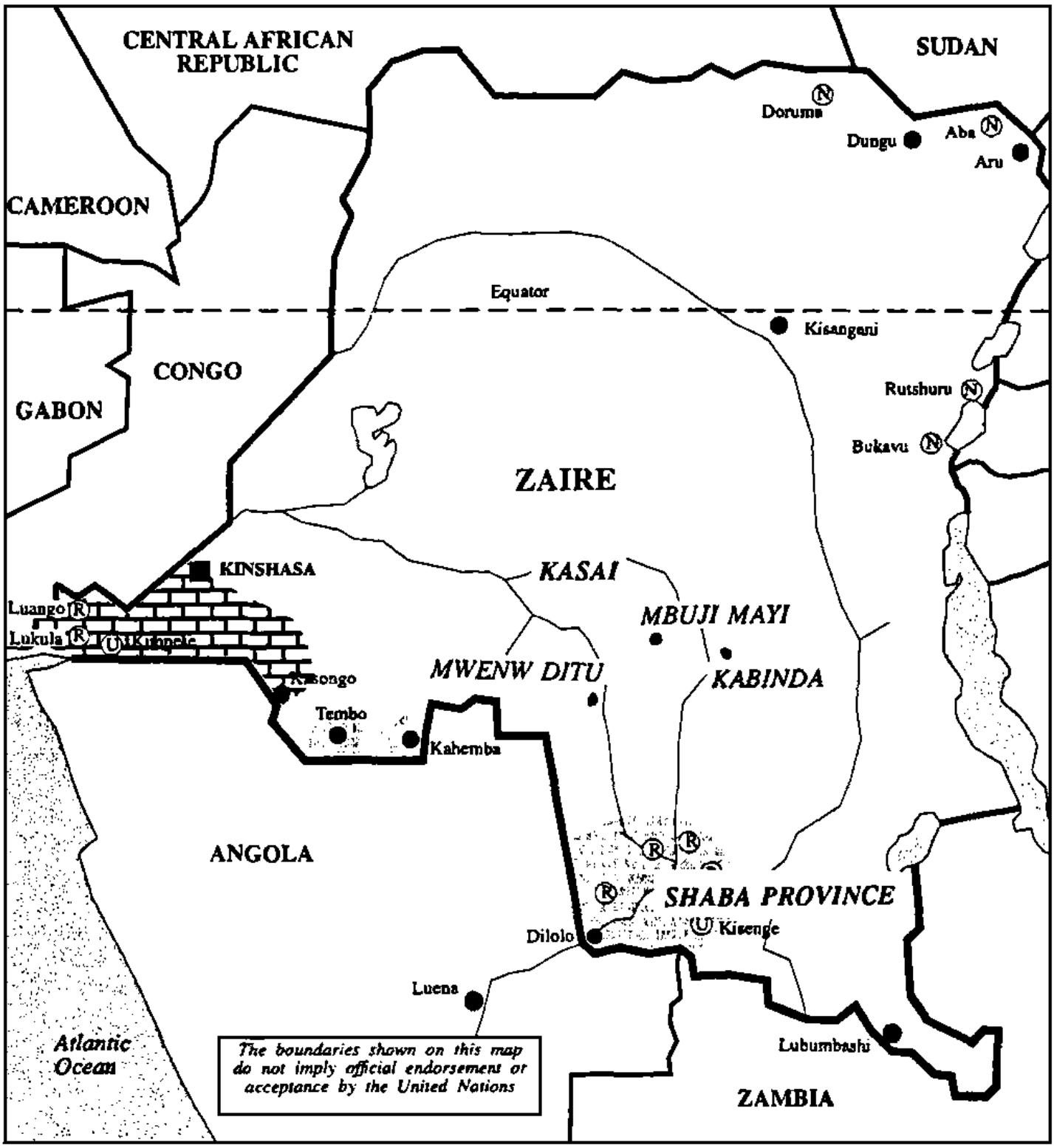

**MAP 9 Liberia/Sierra Leone (b)**

**MAP 11 Mozambique**


UNITED REPUBLIC OF TANZANIA
ZAMBIA
MALAWI
MOZAMBIQUE
ZIMBABWE
REPUBLIC OF SOUTH AFRICA
SWAZILAND
Indian Ocean
Lichinga
Pemba
Mandimba
Nacala
Villa Ulongwe
Nampula
Tete
Milange
Changara
Morrumbala
Mutarara
Caia
Catandica
Sena
Quelimane
Chimoio
Beira
Espungabera
Machaze
Chicualacuala
Massengir
Chokwe
Xai-Xai
Ressano Garcia
MAPUTO
The boundaries shown on this map do not imply official endorsement or acceptance by the United Nations
Capital
Town or village
UNHCR Office
Major returnee area
0
300
Km.

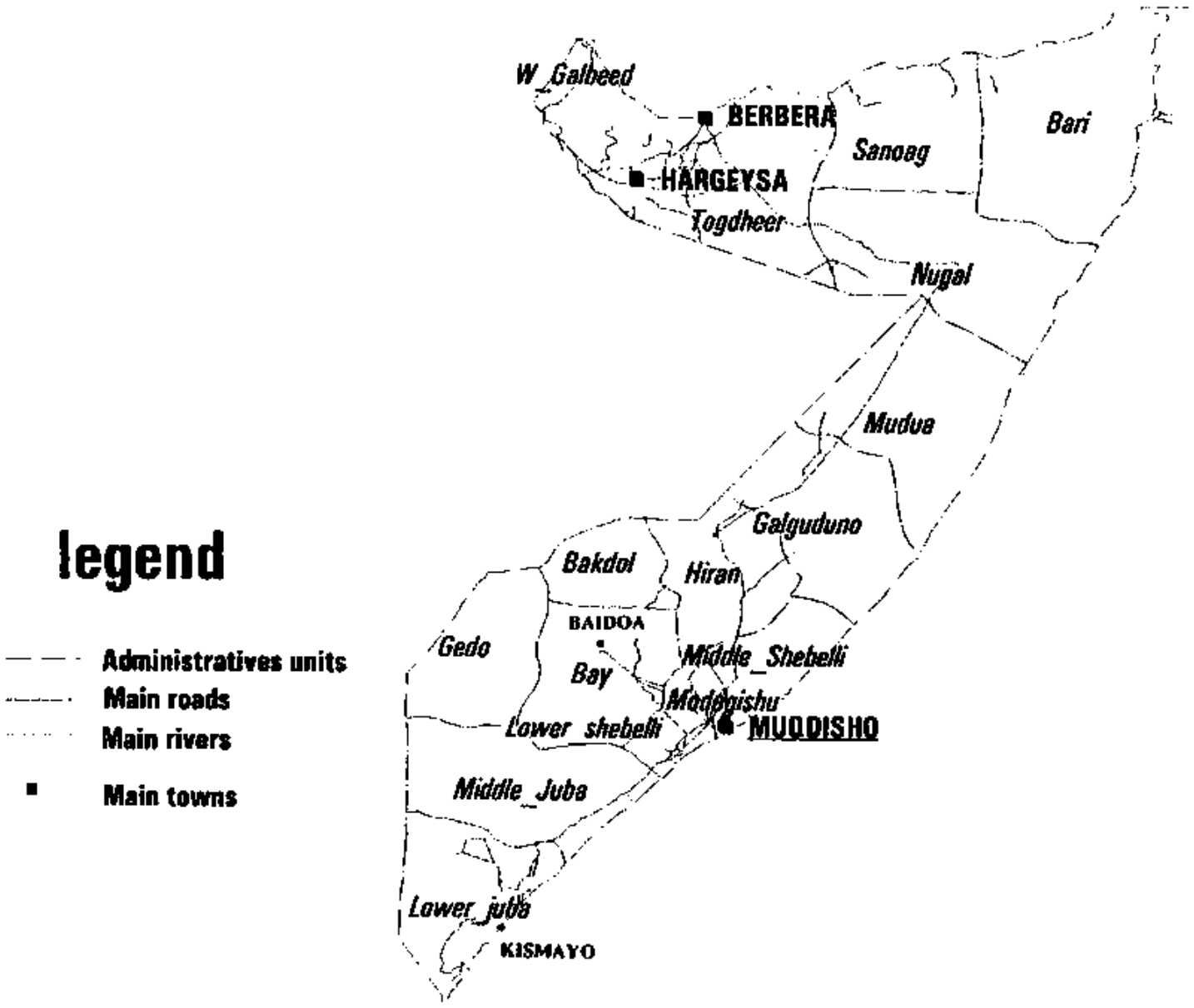
MAP 11 Mozambique

**MAP 12 Zaire**



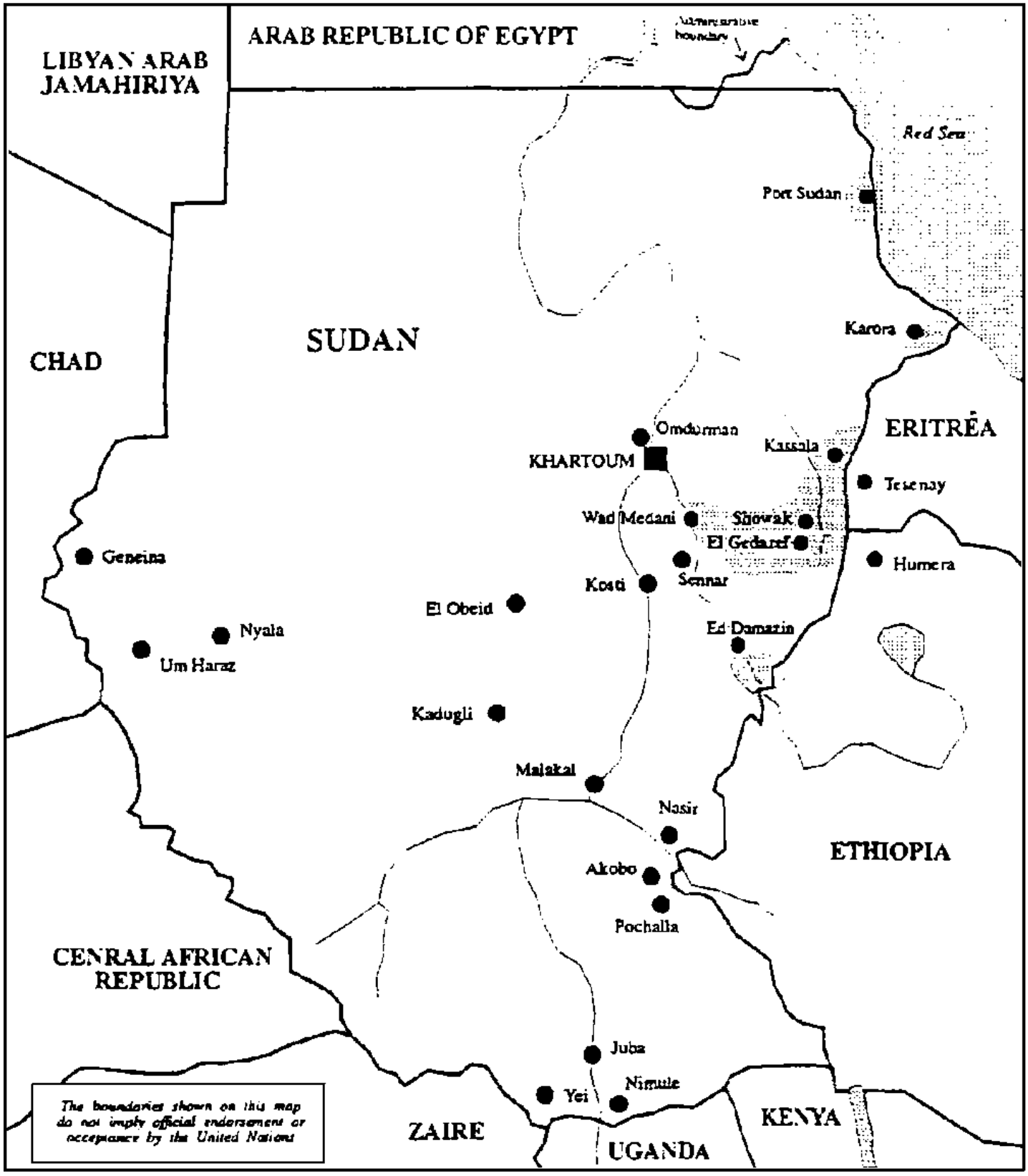

MAP 12 Zaire

**MAP 13 Somalia**



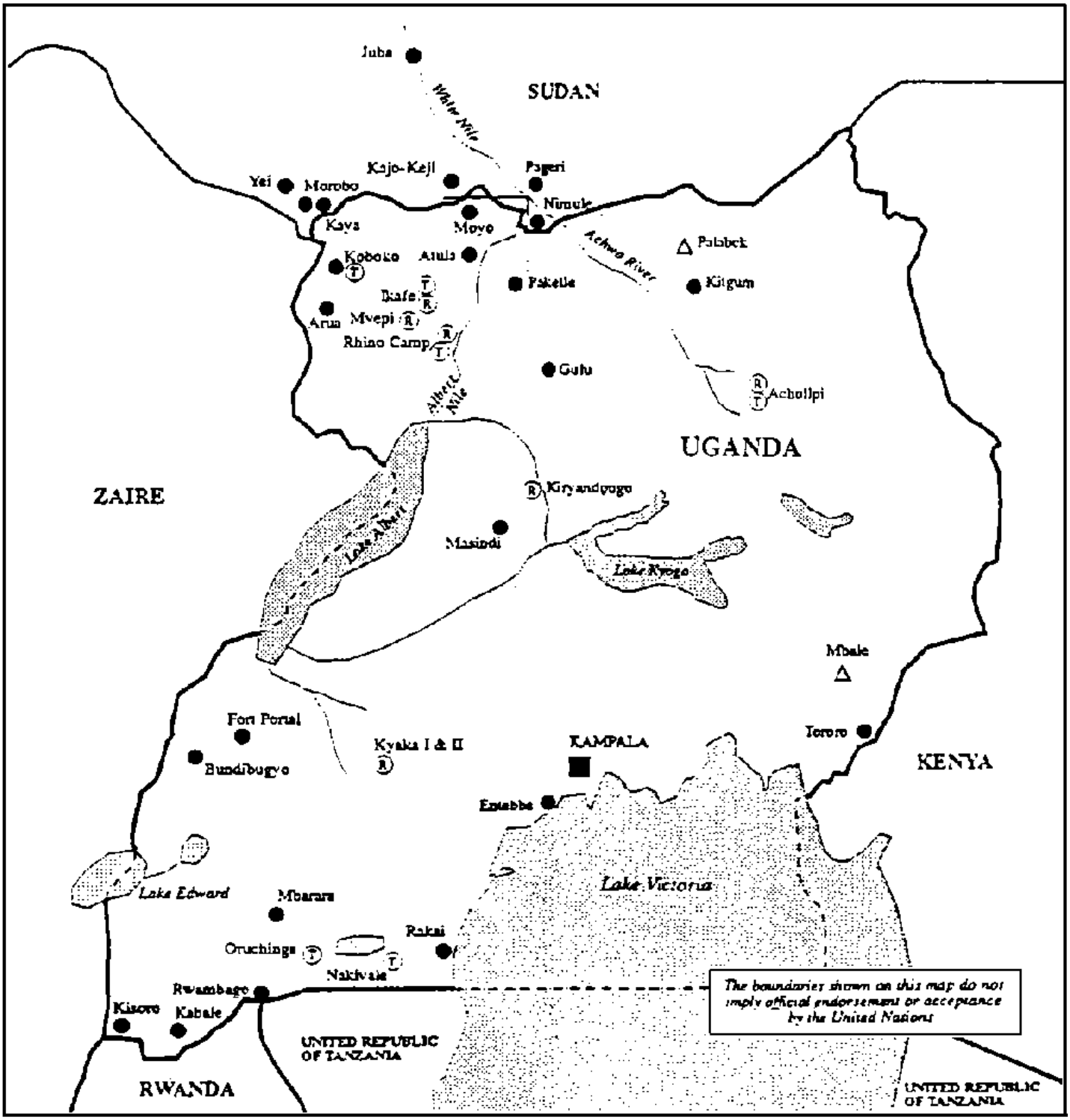

MAP 13 Somalia

**Map 14 Sudan**



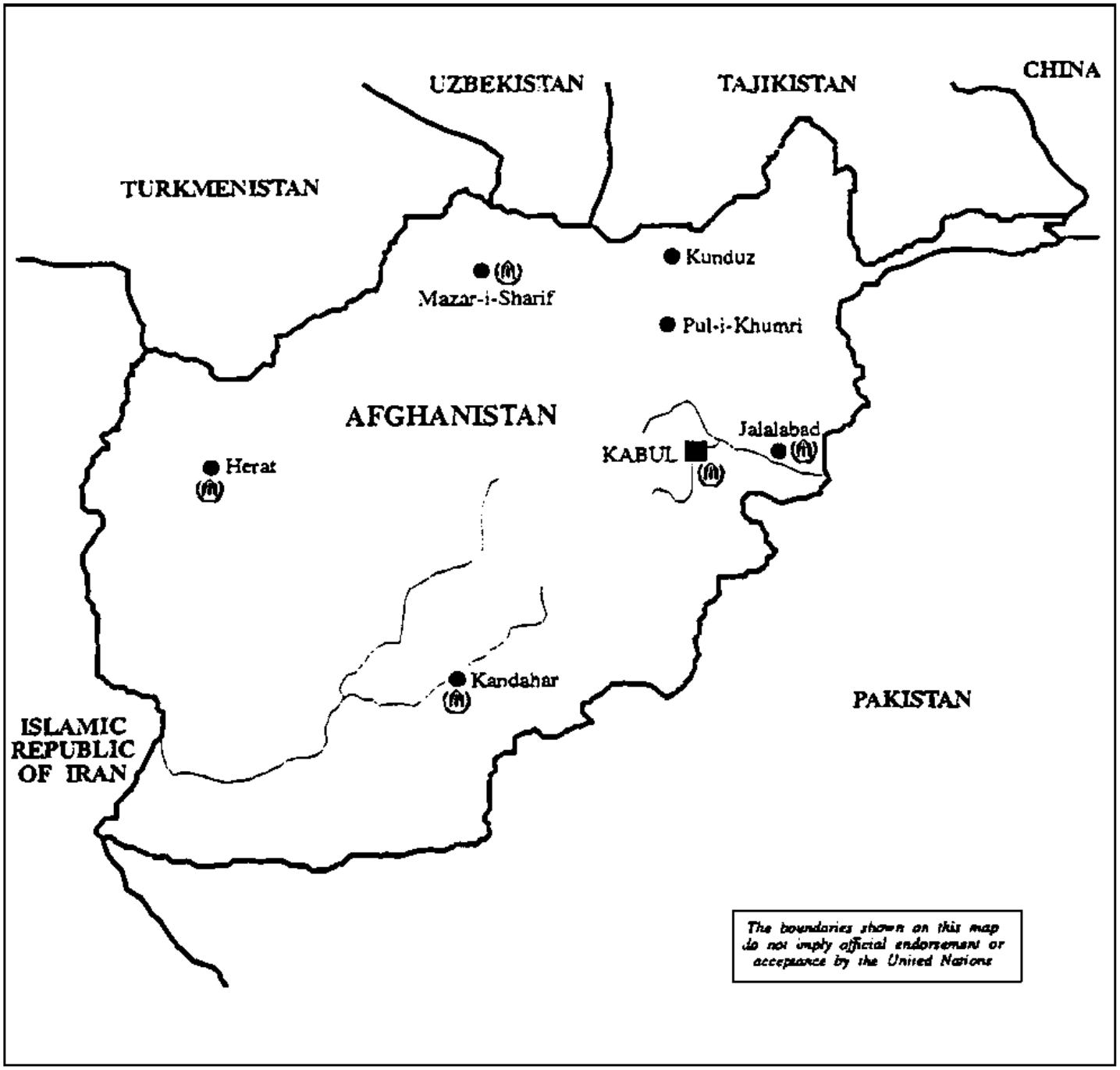

Map 14 Sudan

**MAP 15 Uganda**




MAP 15 Uganda

**MAP 18 Afghanistan**

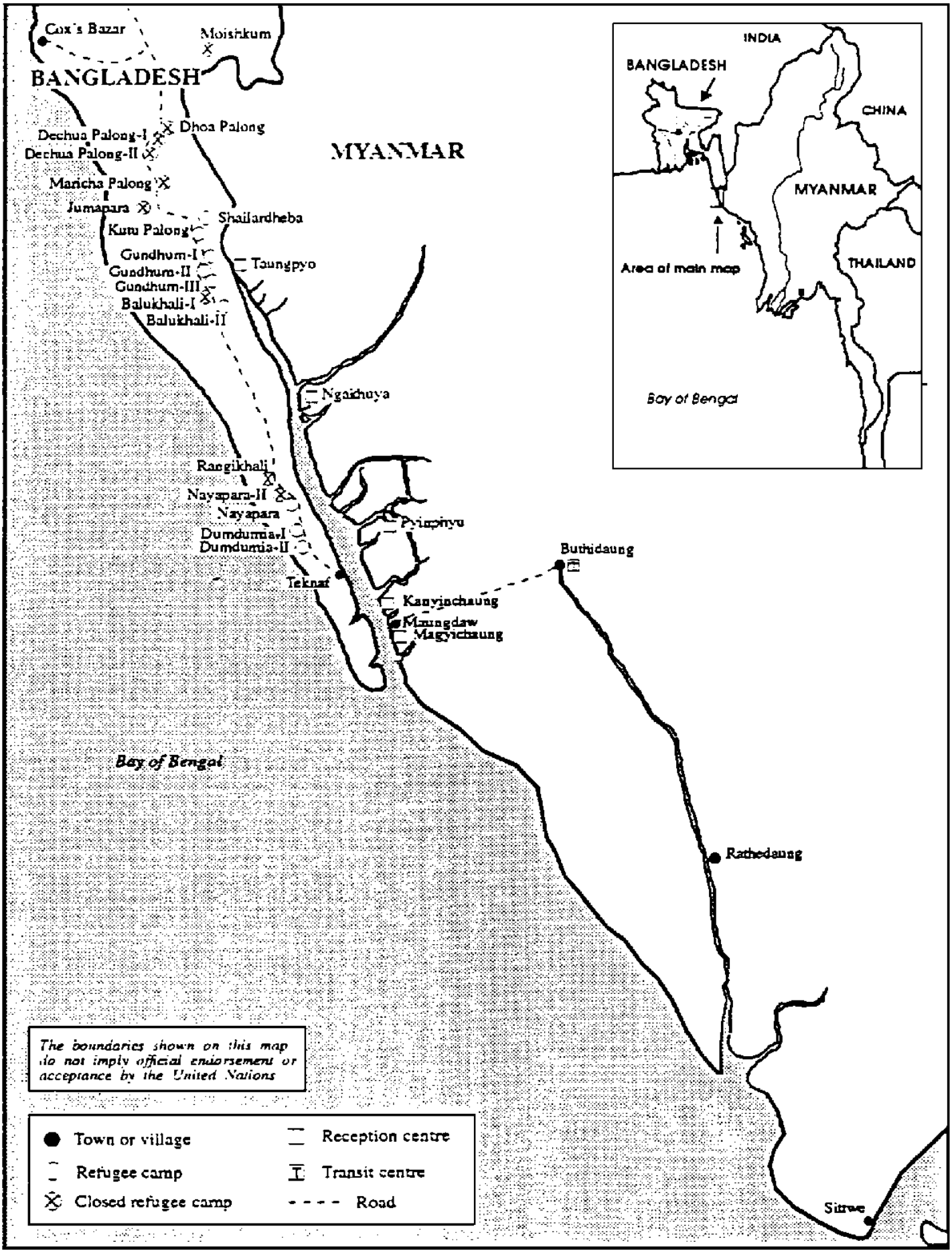



MAP 18 Afghanistan

**MAP 19 Nepal**


MAP 19 Nepal

**MAP 20 Bangladesh**




MAP 20 Bangladesh