Relief and Rehabilitation Network



Good Practice Review 3

General Food Distribution in Emergencies:

from Nutritional Needs to Political Priorities

Susanne Jaspars and Helen Young

December 1995

This review is intended to stimulate discussion as to what constitutes 'good practice' in the field of emergency supplementary feeding programmes. Comments are therefore welcomed as are suggestions of actual examples which illustrate particular contexts and practices. Comments should be sent to:

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Subsequent versions of this review will, at the editor's discretion, take account of comments and suggestions received.

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Good Practice Review

General Food Distribution in Emergencies: from Nutritional Needs to Political Priorities

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Four other specialists with different backgrounds and representing different perspectives served as 'a peer group' providing comments on a draft of the text. The members of the peer group were: Jeremy Shoham, lecturer at the Nutrition Centre of the London School of Hygiene and Tropical Medicine; James Fennell, Head of Emergency Operations, Care International–UK; Bernie Doyle, Senior Emergency Preparedness and Response Officer, UNHCR; and John Hicks, freelance logistician, formally with Save the Children Fund (UK). The support and helpful comments of the peer group are gratefully acknowledged. Additional written comments were received from Harlan Hale, CARE–USA.

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Susanne Jaspars and Helen Young

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General Food Distribution in Emergencies: from Nutritional Needs to Political Priorities

1. Introduction

The number and size of emergencies are escalating at an alarming rate, and the number of people affected is greater than ever before. In many famine and conflict affected countries, relief projects may now reach anything from 10 to 40 percent of the population. In financial terms, food assistance is the single most important response of the international community to current emergencies.

The growing scale of emergencies resulted in a doubling in the demand for emergency food aid between 1989 and 1993, and has reversed the relative importance of food aid for emergencies compared with food aid for development. The vast majority of emergency food aid and food aid for protracted refugee and displaced persons operations is distributed in Sub-Saharan Africa and Southern Europe¹.

There is a dearth of published information about emergency food distribution programmes. By contrast, there is an abundance of unpublished reports that reflect the experience of agencies involved in food distribution, although much experience has never been recorded at all. As a result there has been little exchange of information, which limits the wider institutional memory, and reduces opportunities for learning from the practical experiences of coping with the various constraints in implementing food distribution. This, combined with the scale of the problem and the international response, makes this review all the more timely.

Between 1989 and 1993, worldwide emergency food needs increased from 1.1 billion dollars to 2.5 billion per year (Van Nieuwenhuyse, 1995). In 1986 WFP allocated 75 percent of its resources to development activities, in 1993/94 more than 85% of WFP resources went on humanitarian emergencies and refugee needs. The volume of food assistance provided by WFP has increased fivefold since 1986, from 550 thousand tons, to 2.5 million tons by 1994 (Van Nieuwenhuyse, 1995). Sub-Saharan Africa and Southern Europe took up 35.6 and 52.6% respectively of the total value of WFP emergency operations in 1993. In the same year, Sub-Saharan Africa took up 68% of WFP total commitments for protracted refugee and displaced person projects (FAO, 1993).

The objective of this review is to explore what is good practice in emergency food distribution². We have reviewed technical principles as well as the guidelines and experiences of agencies in the field. From practical examples of food distribution, we have tried to uncover the theoretical basis of approaches taken, and the practical constraints that determine what is actually done and the food ration that beneficiaries receive. Given the many constraints in distributing food to emergency affected populations, we consider the practical approaches that agencies have used to cope with these problems. In determining Good Practice, we try to clearly distinguish between theoretical principles and necessary pragmatism. Obviously, programmes need to be based on certain theoretical principles, but the best technical solutions are not always practical and compromise is necessary. Pragmatism is essential, but problems may arise when the original technical principles are forgotten. Changing of the 'ground rules' according to context is extremely dangerous as it grants a licence to relief agencies and workers to ignore certain theoretical principles according to their perceptions of the practical imperative. Shifting of the ground rules by operational agencies is usually justified on the basis of technical arguments, rather than practical limitations. This lends an air of professionalism and objectivity to the basis of the programme, even though fundamental technical principles no longer hold.

We regard food distribution as a process, incorporating several diverse activities. In order to review what is potentially good practice, we have broken this process of food distribution into a number of important aspects:

- ! Resourcing food assistance programmes
- ! Food procurement, including local purchase
- ! Needs assessment
- ! Targeting strategies
- ! Planning/determining rations
- ! Logistics (shipment, delivery, and local transportation and storage)
- ! Implementation of the distribution to beneficiaries
- ! Monitoring
- ! Stopping the distribution

Good Practice Review 2, published by the Relief and Rehabilitation Network in December 1994 (Shoham 1994), on Emergency Supplementary Feeding Programmes, discussed the needs of specific vulnerable groups, which are in addition to the general food ration.

The success of each of these is necessary in order to ensure an effective food distribution system – if any are lacking, the overall success of the programme will be significantly diminished. An emergency food distribution is an on-going process, during which several of the activities occur simultaneously and not necessarily in the order shown.

This review is chiefly concerned with assessing the need for food assistance, targeting, planning and determining food rations, and the management and organization of the delivery of general food rations (free food distribution systems). General rations are a combination of food commodities, which are distributed free of charge to a defined population. General rations aim to meet the needs of the affected population as a whole. This contrasts with the emergency supplementary feeding programmes discussed in Good Practice Review 2.

Individual aspects of the food distribution process are reviewed in detail in chapters 3 to 5: assessment and targeting planning rations, and the implementation of food distribution. The context in which food aid is provided is discussed in Chapter 2, in terms of the nature of emergencies, the organizations involved in food distribution, and the role of food aid. Each food distribution programme is highly situation-specific, and the possible variations within each scenario are numerous. By reviewing components of the food distribution process, we hope to help those involved in emergency food distribution think through each step of the process, and determine which approach is best for the situation in which they find themselves.

The food distribution process involves a variety of organizations or 'actors'. The different components of food distribution are usually dealt with by different organizations, and within an organization, different staff may be responsible for each component. For example, decisions on targeting and ration composition may be the responsibility of technical staff, and made at headquarters or country level, rather than by those implementing food distributions. This Good Practice Review is aimed both at those involved in policy making and planning and those involved in implementation.

Aspects of food distribution not considered in detail by this review include resourcing, food procurement, and the logistics of food delivery, local transport and storage, as some of these

may be dealt with in further good practice reviews³. These aspects are key to the success of a food distribution programme, and are frequently responsible for the greatest constraints in providing adequate food assistance to those in need. Difficulties in resourcing, timeliness of delivery and access to the affected area, are the main reasons for the international failure to meet the agreed food needs of beneficiaries. The problem of shortage of resources is probably the single greatest constraint. How agencies have dealt with inadequate food supplies, is discussed in more detail in Chapter 4.

As a result of the constraints in the provision of food assistance, there continues to be widespread failures to deliver the general food ration agreed during assessments and endorsed by the appropriate UN Head Offices, donors or other agencies. The consequences of these inadequate rations are obviously grave⁴. There are numerous examples where shortfalls in the agreed rations were accompanied by distressing statistics of malnutrition and micronutrient deficiencies.

Gross energy deficits have contributed to high levels of acute malnutrition, particularly in the acute stage of an emergency. Severe malnutrition carries a higher relative risk of mortality. In a poor health environment, the risk associated with moderate malnutrition may also be increased, due to the combination of malnutrition and disease, which means an increase in the rate of malnutrition results in a quantitatively higher mortality. Studies of the acute stages of a refugee emergency, where populations are totally dependent on outside food assistance and living in camp situations with poor health environments, have shown a clear relationship between inadequate rations, malnutrition and mortality (UN Administrative Committee on Coordination/Sub-committee on Nutrition (ACC/SCN),1994; p.

For further reading on this subject, we suggest a paper by Christine Van Nieuwenhuyse 'Getting food to victims of man-made disasters, food mobilization and logistics constraints', presented at the UNHCR Workshop on Tools and Strategies for Nutritional Needs Assessment and the Management of Food and Nutrition Programmes for Refugees and Displaced Populations, Addis Ababa, October 15th to 21st, 1995.

The consequences were brought to the attention of the international community at the 1988 Geneva Conference – Nutrition in Times of Disasters, organized by WHO, USAID and UNHCR and the 1991 Oxford Symposium – Responding to the Nutrition Crisis among Refugees: the Need for New Approaches, organized by the Refugee Studies Programme. The Oxford symposium was followed by a book; Refugees: Rationing the Right to Life' by David Keen, Zed Books, 1991; and a special issue of the Journal of Refugee Studies; The Nutrition Crisis Among Refugees, Vol 5, No 3/4, 1992.

81).

In addition, fatal vitamin and mineral deficiencies have occurred as a result of inadequate rations (Nieburg et al., 1992) (Box 1). Vitamin A deficiency (xeropthalmia), iron deficiency anaemia and iodine deficiency (goitre) are recognized as the three most significant micronutrient deficiency diseases worldwide. Given the endemicity of these deficiency diseases in less developed countries, they are to be expected among food insecure populations unless appropriate action is taken. In contrast to these endemic deficiency diseases, other micronutrient deficiency diseases, including scurvy (Vitamin C deficiency), pellagra (niacin deficiency) and beri beri (thiamine deficiency), had been virtually eradicated until they reemerged among refugee populations during the past decade (Box 1).

Given the fatal consequences of failures in food distribution, it is imperative that all of us involved in food distribution examine the problems that have led to an inadequate response,

Box 1

Reported micronutrient deficiencies among refugees dependent on food rations

(CDC, 1992; Toole, 1992)

Iron deficiency anaemia Somali refugees in Ogaden, Ethiopia 1986/87

Palestinian refugee camps in Gaza, West Bank, Jordan, Syria and Lebanon (in 1990, it was found that levels of anaemia had not fallen for the past

20 years).

Vitamin A deficiency Eastern Sudan 1984–85

Epidemic beriberi Eastern Thailand, 1995

(thiamin deficiency B1) Liberian refugee camps in Sierra Leone

Nepal 1994-95

Vitamin C deficiency or

scurvy

Eastern Sudan 1984

North west Somalia 1985 Hartisheik, Ethiopia, 1989

Kassala, Sudan 1991

Kenya 1994

Pellagra (niacin

deficiency)

Mozambican refugees in Malawi 1989, 1990 &

1991

to see where improvements are possible, and how we can deal with some of the practical constraints in the field to maximise the effectiveness of the response.

2 The Nature of Emergencies, International Response and the Role of Food Distribution

2.1 The nature of emergencies

The situations that come under the catch-all heading of emergency are wide-ranging and diverse. Even when broad generalisations are made as to the different causes of emergencies, they frequently over-simplify actual events and underestimate the complexity of the situation. Currently, there is no single available typology or classification system that adequately accounts for all types of emergencies. In relation to food distribution, it is useful to consider the definitions of emergencies proposed by the main actors, in particular the donors, UN agencies, such as the World Food Programme and UNHCR, and operational agencies, as this determines the likely availability of food aid and perceived need for food distribution (see Box 2).

Box 2

The World Food Programme definition of emergencies

..for the purposes of WFP emergency projects, emergencies are defined as urgent situations in which there is clear evidence that an event has occurred which causes human suffering or loss of livestock and which the government concerned has not the means to remedy; and it is a demonstrably abnormal event which produces dislocation in the life of a community on an exceptional scale (p A3-26, WFP, 1991).

Types of emergencies as distinguished for WFP purposes include;

- ! Sudden natural disasters, e.g. earthquakes, floods, tropical storms.
- ! Food scarcities due to drought or crop failure.
- ! Population displacements, e.g. refugees, internally displaced.

An emergency operation (EMOP) is the mechanism by which WFP provides emergency food aid for periods normally up to 12 months. A protracted refugee or displaced persons project (PRO/DPRO) is the mechanism by which continuing food assistance is provided beyond an initial 12 month period.

The term emergency implies a short or limited duration, whereby people are temporarily in need of relief, but the reality of current day emergencies is quite the reverse; most emergencies last for longer than one year and those characterized by widespread structural poverty are almost permanent. In these situations, it is not enough to consider immediate survival needs, assistance is needed to support sustainable livelihoods and thereby promote self-reliance.

Today, the most severe emergencies in terms of widespread food insecurity, starvation and excess mortality, are linked to war and conflict, which produce profound social disruption, usually as a result of massive population displacement, and it is this aspect of emergencies which causes most alarm and is often most memorable to those people who are directly affected.

Because of the overriding political dimension and for want of a more exact analysis, these are frequently referred to as complex humanitarian emergencies or complex political emergencies. This term particularly applies to the increasing number of emergencies that have occurred since the end of the Cold War in the former Soviet bloc countries, Africa and the Middle East.

 $Prior \, to \, 1990 \, most \, guidelines \, pointedly \, ignored \, the \, social \, and \, political \, dimensions \, of \, emergencies,$

..No mention is made of social, cultural, or political factors that are critical during famines, or rehabilitation. This guide is concerned, as it were with fire-fighting rather than fire prevention or reconstruction (de Ville de Goyet et al., 1978).

It is now widely recognized that the very nature and characteristics of complex political emergencies have major implications for the provision of relief assistance⁵ (Box 3).

8

This has indeed been realised by the majority of professional relief organizations, and is reflected within their operational programmes.

Box 3

Characteristics of complex political emergencies and their implications for food distribution Operational neutrality among humanitarian relief organizations

- ! the need to negotiate access and other conditions with rival political factions may result in compromising humanitarian goals or providing material support to the combatants.
- ! relief programmes employ or depend on people who are from the affected communities, who may not be impartial. At least they will have particular political affiliations, and at worse they may be directly implicated in human rights abuse. This emphasises the need for accountable and transparent systems.

Insecurity

- ! restricted access by either road, rail or air, limits coverage of relief programmes.
- ! restricted access makes it all but impossible to monitor assistance received at the household level.
- ! poor communications hinder effective operations.
- ! since the end of the Cold War the UN has pursued active forms of military support for humanitarian relief, which has had an impact on the perceived impartiality and safety of aid workers.
- ! the violent targeting of humanitarian relief workers, agencies provide their own armed security guards under insecure conditions.
- * competition for food aid between different groups leads to localised conflict and violence.

Lack of organizational infrastructure (breakdown in civil society)

- ! shift from a society with extended social networks, mutual obligations between members or groups to a society focused on individual or family gain and survival. Leaders may still be present, but no longer truly represent communities. This lack of community hinders participatory programmes and requires a high degree of external organization.
- ! external agencies have been forced to accept responsibilities for social security or service provision that properly are the role of the state. This role is perceived as being a 'holding operation' until longer-term development programmes were possible.

continued...

Box 3 (continued)

Lack of physical infrastructure (roads, railways, airstrips, schools, hospitals, government buildings)

! lack of infrastructure creates major logistical constraints.

Duration

! most complex political emergencies tend to be long-term not short-term, which has major implications for developing appropriate relief strategies that address structural problems, and also for resourcing relief work.

2.2 Institutional roles and responsibility – who does what?

The process of food distribution in emergencies involves several actors, including national authorities of the country concerned, UN agencies, the Red Cross movement, and NGOs, all of whom are dependent to varying degrees upon the donor agencies for making resources available. The way in which donors channel their resources largely determines the role played by the various organizations (ODI, 1993).

Donor countries may provide emergency food aid bilaterally, government to government or through NGOs, or multilaterally through WFP. NGOs may also resource their own food aid; many NGOs are now establishing their own food funds in response to the inadequacy of food provided through other channels. The ICRC and IFRC have become major providers of food aid.

The government of the affected country has the main responsibility for responding to emergencies, and UN agencies generally respond to government requests. The principal specialised UN agencies with a mandate to work in humanitarian emergencies are the Office of the UN High Commissioner for Refugees (UNHCR), the World Food Programme (WFP) and the UN Children's Fund (UNICEF), and to a lesser degree the UN Development Programme (UNDP). Other UN agencies are now trying to move into relief work as they see resources shift from development to relief. Only UNICEF has a unique mandate that allows it to provide assistance without the prior permission of the government or in areas where the government is not recognised by the General Assembly (ODI, 1993).

The UN is expected to coordinate international assistance, and in relation to resources, it estimates overall resource requirements and attempts to mobilise resources through appeals.

UNHCR has a major role in coordinating aid to refugees, returnees and displaced persons of concern to UNHCR. With WFP as the main provider of food aid in emergencies, a close working relationship between the two organizations is necessary. To this end a joint Memorandum of Understanding (MOU) was formulated (WFP/UNHCR, 1995). The current agreement came into effect on 1 January, 1994. In this MOU, WFP has taken on most of the

logistical aspects of the provision of food aid, but UNHCR remains responsible for registering refugees, food distribution and monitoring nutritional status.

Non governmental organizations operate under a range of modalities; they have their own independent programmes resourced by voluntary contributions, which may be private or from donors. They also operate as the implementing arm of the specialised UN agencies, UNHCR and WFP in particular.

Until recently the International Committee of the Red Cross (ICRC) was virtually the only NGO that operated in war situations, with the mandate of protecting and assisting the victims of international and civil wars. Unlike other NGOs, their operating practices are designed to cope with the problems of implementing programmes in war situations, outlined in Box 3.

The roles of NGOs are now far wider than before. In complex emergencies, they are often the chief providers of public welfare, expanding into a void left by the contracting power of host governments and the declining political interest of western powers following the end of the Cold War (African Rights, 1994).

A new generation of NGOs has appeared in response to complex emergencies. National organizations and local NGOs have emerged in regions where there were previously few, for example in Bosnia, Croatia and Southern Sudan. Some of these agencies are the relief wing of a local political movement, for example, the Sudan Relief and Rehabilitation Association, and in a war situation, are directly related to the conflict.

Food distribution in emergencies is also undertaken by a wide range of church groups. Churches are not relief agencies, but local churches are forced into relief distribution when they find themselves in the midst of a complex emergency.

The specific roles and obligations of different organizations involved in emergencies remain poorly defined. The international relief system is based on voluntary contributions, not the security of rights and obligations. UNHCR has a formal responsibility to protect refugees independently of host government requests, and to seek durable solutions. However, its mandate imposes no requirement to ensure the physical welfare of refugees. Although WFP

is the food aid organization of the UN system, and therefore provides food aid to meet the needs arising from emergencies, it assumes no responsibility for the beneficiaries' welfare (USAID,1989). WFP in turn is dependent upon the willingness of donors to provide food aid and resources. NGOs lack clearly stated responsibilities.

The other all important but usually ignored actors in the process of food distribution are the people themselves – those who are directly affected by hunger, drought, conflict or war. Lip-service is often paid to participation, but in practice their voices are rarely heard. The way in which western relief interventions are organized often excludes the skilled human resources among the affected population, as international organizations superimpose their relief culture wherever they perceive it is needed.

2.3 Standard agency procedures

Many of the more experienced and well established relief agencies have produced practical guidelines, handbooks or manuals that outline their policies and/or procedures for responding to emergencies. A list of the practical guidelines referred to in this review are shown in Annex 1.

Most guidelines aim tooffer practical advice and guiding principles for implementation. Agency guidelines are frequently interpreted as the policies of the particular publishing agencies, but unless this is stated explicitly it is not necessarily the case. Guidelines therefore do not carry the same authority as agency policies.

Guidance on practical procedures are also contained within policy statements; for example, the Red Cross Policy on the Nutritional Aspects of Relief Operations, Geneva, 1991, and UNHCR's and IFRC's policy on the acceptability, distribution and use of milk products. The WFP/UNHCR Memorandum of Understanding (MOU) reflects joint policy agreements and responsibilities, and at the same time presents a broad framework for implementation which has grown into a more operational tool for food management at both the headquarters and field level (Stevens, 1995).

Not surprisingly, the contents of the various guidelines vary according to their objectives and the agency's mandate or role. Although emergency food distribution is common to most

emergencies, the guidelines rarely cover the entire process of food distribution. For example, an agency that actually implements food distribution, such as CARE, focuses more on the logistical rather than nutritional aspects of food distribution. WFP and UNHCR have a major role in all aspects of food distribution, which is covered by their emergency handbooks, and a variety of other guidelines and policy documents. Many of the guidelines will give advice on what to do, but little guidance on how. For example, the implementation of food distribution has received relatively little attention until recently. UNHCR, CARE and OXFAM are now writing guidelines on this. Examples of gaps in guidelines are given throughout this review.

2.4 Role of food distribution

The role of emergency food distribution is principally to 'save lives', by alleviating hunger and starvation, and thereby preventing malnutrition and mortality⁶. Nutritional goals are uppermost for almost all actors involved in food distribution in emergencies. This is reflected by the media presentation of emergencies and in donor statements⁷, and echoed in practical guidelines and policy statements. Examples of the nutritional goals as stated in

Free food assistance is just one strategy among many that are needed to save lives in an acute emergency. Where lives are at risk, the most effective programmes simultaneously respond to both the nutritional and health risks. This means a concerted strategy aimed at meeting shortfalls in people's food needs (including treating the malnourished), while at the same time minimising the risk and severity of disease, by ensuring supplies of clean water, providing immunization and basic health services, supplementation with vitamin A, adequate sanitation, shelter, clothing and blankets, all of which should be prioritised as necessary. Food distribution in isolation of other strategies may not be the most effective means of reducing mortality, but without food distribution lives may be significantly be put at risk.

For example, at a donor consultation of priority emergency needs in Sudan, the question donors continued to ask was 'whether resources which were contributed to Sudan were being used as intended, to save lives, or not', OLS, July 1994.

Box 4

Objectives of food distribution according to guidelines

A number of definitions of the objectives of food distribution are set out in agency guidelines on food distribution. These include: sustaining life and the prevention of influxes of malnourished and seriously ill individuals into special feeding programmes (UN, 1977); providing enough food to maintain the health and nutritional status of the affected population (WHO, 1994); providing everybody with their nutritional requirements (OXFAM, 1994); feeding people and protecting their livelihoods (ICRC; Alain Mourey, pers communication 1995).

Box 5

Objectives of WPF/UNHCR as given in their 1995 Memorandum of Understanding

- 2.3.1. to actively promote self reliance among the beneficiaries through the implementation of appropriate programmes (including income-generating training programmes and other productive development activities) to assist with their food production or self-employment which will thereby facilitate a reduction of the food basket and ration;
- 2.3.2. to maintain (or restore, where necessary) adequate health and nutritional status among the identified beneficiaries through the provision of a food basket which is:
 - ! adequate (taking account milling losses, payment in kind for milling and the level of self-sufficiency) and supplied regularly and on time;
 - ! nutritionally balanced, diversified, culturally acceptable and fit for human consumption;
 - ! easily digestible for children and other vulnerable groups;
 - ! requiring a low fuel consumption for cooking and conforming to food and sanitary regulations/standards of the country where it is supplied. (WFP/UNHCR, 1995)

various guidelines are shown in Boxes 4 and 5. The distribution of food aid is a key objective shared by WFP and UNHCR, as stated in their MOU. This clearly describes the purpose of distributing a food basket, which is to maintain health and nutritional status' (WFP/UNHCR, 1995).

In more stable emergencies or in protracted emergencies where mortality rates may be no different to normal, the economic role of food aid becomes increasingly significant. Free

food aid is a resource which represents an income transfer as it releases income that would otherwise be spent on food, and thereby provides a form of economic or livelihood's upport.

Agencies may view food aid as a purely nutritional resource, assuming that refugees eat all and only what is provided. In contrast, refugees and other beneficiaries treat food rations as an economic as well as a nutritional resource (Refugee Studies Programme, 1991). Among refugees who are almost totally dependent on relief, food rations represent possibly their only economic resource. They must barter or sell rations to acquire additional foods, which they think are more appropriate, and other necessities, such as fuel, cooking implements, water carriers, clothing etc. Some agencies have been explicit about the objective of food assistance as being a form of economic support in particular programmes (Box 6).

Box 6

Free food distribution as an income transfer

In Red Sea Province, free food aid was provided by the World Food Programme and Oxfam to the Beja people between 1986 and 1989 as a means of economic recovery, rather than as a sources of essential nutrients.

In their assessments, Oxfam purposely ignored resources generated by charcoal production, in the hope that by "over-providing" food aid, this potentially land-degrading coping mechanism would be discouraged (Shoham and Clay, 1989).

The World Food Programme does not support the use of emergency food distribution solely as an income transfer, because of the inherent inefficiencies of such informal monetization. Programme costs are high, as agencies must still pay for the food itself and the costs of distribution to beneficiaries, but the benefits relatively low, as a result of widespread selling of food aid by beneficiaries pulling prices down and thereby creating unfavourable terms of trade for the sellers. It may be more efficient for the food aid to be sold in advance by the agencies (monetization) and cash delivered to the refugees instead. This position taken by WFP limits room for manoeuvre by operational agencies who, if they wish to obtain food

As an economic resource, food aid has many other roles, which are separate to its use for food distribution, and therefore not covered in this review. For example, food aid as part of an income support programme, such as food forwork or de-stocking programmes; the monetization of food aid to generate local currency to fund projects; local reserves of food aid can serve to prevent sudden price fluctuations in local markets and ensure that supplies are available if emergency relief is called for.

 $from \, the \, World \, Food \, Programme, must incorporate \, nutritional \, goals \, within \, their \, food \, distribution \, programme.$

Blinkered nutritional goals of emergency food distribution seek only to temporarily relieve the problem of hunger and malnutrition, with no concern as to the links between the current problems and people's future livelihoods. In such situations, efforts to promote self-reliance and empowerment may be undermined. Acknowledging a wider role for food aid would partly counter the paternalistic model of relief food distribution.

The success of emergency relief in India is partly because clear distinctions are not made between the nutritional and economic goals of food distribution. During the Indian drought of 1987, emergency relief was as much an economic as a nutritional intervention, providing employment as well as food (Shaw and Clay, 1993).

The objectives of providing food should determine the composition of the 'food basket' or rations that are distributed. If the objectives are purely nutritional, the proposed rations must meet certain criteria, such as; nutritionally balanced, culturally acceptable and fit for human consumption (see Chapter 4). Where the objectives are related to food as an economic resource, the nutritional balance of the rations may assume less importance, and it may be more appropriate to consider other criteria, such as the economic value of food commodities in terms of trading rations.

2.5 The wider role and significance of food aid

 $Food \, distribution \, can \, have \, positive \, and \, negative \, consequences \, beyond \, immediate \, programme \, objectives.$

As an integral part of everyday life, food has major social and cultural significance and defines relationships within and between families and other social groups. Food therefore has a major significance beyond the characteristics or quality of the food itself. A balanced food basket is not just a collection of macro- and micro- nutrients, as if they were taken from a medicine chest. Even the most narrowly defined nutritional objectives of providing food assistance are usually supplemented by quality standards in terms of cultural acceptability,

diversity, hygiene, ease of preparation and fuel economy. Some of the potentially negative consequences of providing food assistance are briefly considered in Box 7.

Box 7

The negative consequences of providing food assistance

- ! Creates a 'magnet effect' of drawing people away from their homes in the hope of receiving food assistance. This may result in overcrowding around distribution points and the associated problems of poor living conditions and greater exposure to disease. The disruption caused also contributes to a breakdown in social structures.
- ! Perpetuates the notion of a crisis situation, in which people are treated as victims dependent on external assistance for their survival.
- ! Provides a focal point for military recruitment and subscription.
- ! Produces a disincentive effect on local food production.
- ! Affects local market conditions, forcing down the price of staples and other foods provided as food assistance.
- ! Affects local social support mechanisms. For example, local support networks may contract and local assistance may be withheld as it is perceived that external relief is available.
- ! A targeted food distribution may be divisive thereby fuelling local conflict.

Only if these negative consequences are fully understood can they be addressed and used to plan more effective and successful food distribution programmes. For example, the distribution of food in rural villages as opposed to distributing food only in refugee camps and to the displaced in Southern and Eastern Ethiopia, was intended to stabilise population movements and discourage people from moving to camps, while at the same time stabilising food prices for others not benefiting from distribution.

It is vitally important to understand the political nature and role of food aid, particularly in relation to complex political emergencies. Food frequently becomes inextricably bound up in the dynamics of conflict and civil strife and, in extreme cases, food aid is used to sustain combat without resolving it (Macrae and Zwi, 1994). This occurs in different ways but is principally linked with the way in which parties to the conflict control access to food, either by withholding food assistance from areas or groups sympathizing with the opposition or alternatively, by directly benefiting from international material assistance. Unless this is understood, operational agencies can do little to minimise the abuse of free food

distribution by opposing parties. Issues of programme implementation, in particular targeting strategies (who gets what), are therefore fundamental to the success of the programme, and need to be negotiated and agreed to at the highest operational level, between the governing authority and the international agencies (see Chapter 2).

3. Assessment and Targeting

3.1 Introduction

An assessment to determine the priority needs of those affected should be one of the first stages in planning the relief response. Assessments of the need for food assistance generally determine;

- ! whether food assistance is needed,
- ! how much is needed and what types of food,
- ! who needs food assistance and why,
- ! locally available resources.

This provides the information and understanding needed to inform key decisions in the process of food distribution. The first decision of a food needs assessment must be whether assistance is needed at all (Mears and Chowdhury, 1994). Surprisingly, this is often bypassed, as it is automatically assumed food is needed. A maxim for assessments is 'you find what you look for', so if it is assumed food is needed then worthy recipients will quickly materialise.

The decision about how much food is needed, is determined either by estimating the overall food deficit and using this to estimate the food aid requirement, or alternatively by estimating the numbers of people affected, which is then used to multiply the individual ration amounts to arrive at the total food aid requirement. The latter is the common practice among refugees and displaced populations who are almost entirely dependent on external assistance. The former method of estimating food deficits, is often used as the basis of food aid estimates where people are home-based and more dependent on their own agricultural production for their main food supply. Whichever method of estimating food requirement is used, the actual delivery has tended to fall short of the assessed need.

Assessments should also provide information needed to plan the composition of the ration which is discussed in Chapter 4. The types of information needed to do this are shown in Box 9 (section 3.3).

Assessments should determine who is most seriously affected and why, in order to identify target groups. This is considered in the second section of this chapter.

Once the need for food assistance has been established, an analysis of locally available resources is needed to plan the actual distribution. A range of resources are needed to implement a food distribution. In addition to the obvious financial and food resources required, other relevant factors include human resources—the knowledge, experience and skills of local personnel; and organizational resources—infrastructure of local institutions, such as service institutions, cooperatives, unions, credit systems, and informal networks—tribal structures and extended families. The results of assessments are frequently used for advocacy, as the basis of appeals for more resources.

This presents rather an ideal picture of assessments, whereas in practice the process of assessment often appears disengaged from subsequent decision-making. There are indeed instances of food relief being despatched prior to a proper assessment, for example, in complex political emergencies, where assessments are extremely difficult to organize because of restricted access. This is unacceptable, and even in the most difficult circumstances it is inappropriate to provide food assistance without a prior assessment.

The weak link between assessments and subsequent decision-making is partly because decisions are made at a number of administrative levels by different actors. Assessors may make the initial recommendation that food assistance is required, but later decisions about the composition of the ration, strategies for identifying target groups etc, will be made by others. It is therefore vitally important that the objectives of the assessment are clearly thought through in relation to why the information is needed, what decisions need to be made, and by whom. This will determine what information must be collected and how.

This section on assessments first reviews broad types of assessments, and then considers the assumptions underlying them.

3.2 Broad types of assessments

Emergency needs assessments encompass a wide range of approaches and procedures, which vary according to the stage and type of emergency, and also according to the organizations involved in the assessment and the administrative level at which the assessment is initiated. In general, there are three main types of assessment related to food needs: initial rapid assessment in acute emergencies; detailed 'one-off' assessments and subsequent reviews/re-assessments undertaken in more stable or protracted emergencies; institutionalised monitoring such as famine early warning systems in famine prone areas and nutritional surveillance.

Initial rapid assessments are needed during a 'rapid onset' emergency, or following a delayed response to a slow onset emergency, where the speed of assessment is critical to inform urgent decisions. At most, only two or three days may be available as decisions must be made immediately. Rapid assessments are usually based on available information combined with views and opinions of locally experienced people, rather than collecting new information. In areas where agencies already have a presence, they will benefit from considerable local knowledge and experience, and possibly emergency preparedness plans. This contrasts with the difficulties facing agencies who first arrive during an emergency, with little or no experience of working in the area.

Initially, the estimated food aid requirements are often little more than informed guesswork. For example, crude population estimates may be based on a rough estimate of population density multiplied by the geographical area, with an additional factor for expected arrivals or departures. This is then multiplied by the agreed ration which provides an estimate of the food aid requirement. This forms the basis of the food 'pipeline' for the coming months. These simplistic estimates need to be followed up fairly quickly by a more detailed assessment. Thus the available information should be continuously updated and refined, which in turn is fed into programme planning.

Box 8

The Joint WFP/UNHCR Food Assessment Mission

The food needs of refugees in protracted emergencies are assessed during the Food Assessment Mission (FAM), which are a joint exercise involving UNHCR, WFP, and the local governing authority. Representatives from NGOs and donors may be invited to participate. Standard terms of reference for joint WFP/UNHCR assessments are provided in the WFP publication Food Aid in Emergencies', Annex B8–8. These recommend a review with national government, regional and local level authorities, refugee leaders/representatives, local (host) community leaders/representatives, technical experts and NGO representatives of the following:

- ! The characteristics and overall situation of the refugees, and host populations (numbers and demographic profile, trends and expected population movements, health and nutritional status, shelter, other services and self-reliance);
- ! The food supply situation;
- ! The effectiveness and costs of the food delivery and distribution operations;
- ! The possibilities and prospects for durable solutions and, in the mean time, for self-reliance and development-oriented activities;
- ! The extent and findings of monitoring (including on-going evaluation) activities;
- ! The efficiency of management systems and co-ordination arrangements.

They recommend a visit to a representative sample of the refugee population which, combined with consultations with technical experts, and the analysis of available studies, is used to ascertain the level of self-sufficiency of various groups, the suitability of the commodities and rations proposed and any problems relating to their use, and possible alternative strategies for the provision and use of food aid.

A visit to the main port, trans-shipment and primary storage bases is also recommended.

In more stable, on-going emergencies, such as protracted situations, the rehabilitation phase, or during the early stages of a drought-related famine, this type of rapid 'troubleshooting' assessment is unnecessary. There is usually time to plan and implement a wider ranging and more detailed assessment, which may focus on particular aspects of the situation, such as household food security and local coping strategies.

In protracted emergencies there may be annual assessments of food aid requirements, which fit into the annual planning cycle of local governing authorities, donors, UN agencies and non governmental organizations.

In parts of Africa, local governments make requests for emergency food assistance annually. These regular requests reflect an almost permanent emergency. In response, WFP and FAO regularly coordinate country level assessments to validate the local government figures. For example, nearly every year since 1984 the Government of Sudan has asked the international community for emergency food aid. This has been formalised since 1990 by GOS participation in annual UN assessments of need which are used to inform the inter-agency SEPHA appeals (Special Emergency Programme for the Horn of Africa).

In countries prone to food scarcity and famine, regular information on food security is provided by famine early warning systems (FEWS). Early warning systems aim to give prior warning when a food crisis threatens, and to provoke action that will avert the crisis. In some countries regular nutritional surveillance forms part of early warning systems, for example, in Ethiopia and Botswana.

3.3 What information is needed?

What information is needed depends on the objectives of the assessment and the target audience for the report. In relation to food distribution the information that is needed can be related back to the decisions that must be made as discussed in the introduction. These are shown in Box 9.

Box 9

Information needs in relation to decision-making

Decision Information Needed

Is food assistance needed?

Local food availability; agricultural production, losses, imports,

exports. And/or

Access to food (exchange entitlements) for different groups;

own production, trade, income, loans

And/or

Impact of emergency; nutritional status and other health

indicators

How much food is

needed

Population numbers affected multiplied by proposed ration

And/or

Food deficit; agricultural production less imports to region

What type? (ration

composition)

Factors influencing nutritional requirements: population

demography, environmental temperature, activity levels,

weight.

Cultural factors influencing the acceptability of foods.

Diversity. Food hygiene. Fuel economy.

 ${\bf Access\,to\,other\,sources\,of\,food; coping\,strategies\,-income}$

generation, trade, own production, loans, illegal acts.

continued overleaf...

3.4 Who undertakes the assessment?

Needs assessments may be organized by the local governing body, international NGOs, the UN, local agencies, or by a combination of these. The reliability of results and credibility of needs assessment are largely a function of who carried them out. The credibility of assessments are reinforced by undertaking joint assessments, which involve several actors, all of whom endorse the results (particularly if donors are included).

Conversely, international agencies do not always trust local assessments and requests for assistance, and prefer to undertake their own 'independent' assessment. Some local

Box 9 (continued)

Decision **Information Needed**

Who needs food and Vulnerable groups

why?

Physiologically vulnerable: infants and young children, pregnant and lactating mothers, the sick and convalescent, the

elderly. And/or

Socially vulnerable: unaccompanied minors, the disabled, most women-headed households, the elderly with no family support.

And/or

Economically vulnerable: people with livelihoods that are vulnerable to external shocks, e.g. drought, inflation, collapse in the labour market etc, and liable to become destitute as a result.

And/or

Politically vulnerable: members of oppressed or ostracized groups. Individuals who lack representation at any

organizational level, e.g. destitute and displaced.

Available resources Administrative: 1. institutional infrastructure: buildings,

warehouses, administrative organization. 2. logistical infrastructure: road, rail, sea or other transport networks. Economic: financial, market conditions and availability of foods for local purchase, fuel for transport and vehicle spare parts Human: knowledge, experience and skills of available personnel

and beneficiaries.

Local social structures and networks.

organizations may be closely connected with a network of obligations and expectations, which may not necessarily coincide with an objective view of severity of need. However, local people often know their own circumstances best, and in many situations contribute a wide range of skills and experience. In some situations, restrictions on travel may mean outsiders are not granted access and therefore must rely on local assessments, for example, in Somalia in 1992/1993.

All institutions must answer to their own constituencies, and to some extent within all organizations, needs assessments serve as a vehicle for political lobbying. Certainly, the results of needs assessments are used for advocacy and fundraising, which may not have been their original objectives.

3.5 Conceptual models of emergencies

The way in which we assess needs reflects our conceptual understanding of the nature and dynamics of emergencies, the process that brought them about and their principal outcomes. Inherent in all assessment methodologies are assumptions arising from the particular conceptual model of food crises or famine that has been adopted. These assumptions may be explicitly stated, but if not can usually be deduced from the approach taken. Assessments are usually based on one of the following approaches or models:

- ! need based on local availability of food (food deficit or biological model)
- ! need based on access to food (food security or entitlement approach)
- ! need based on local response to food shortages (coping strategies or behavioural model)
- ! need based on an analysis of the underlying causes of malnutrition and mortality
- ! need based on health crisis model of famine mortality
- ! need based on political vulnerability.

Usually various aspects of these different approaches are combined.

This may seem at first theoretical or too 'academic', but in practice the way in which an assessment is 'framed' largely determines the subsequent approach to implementing food distribution, and relief in general.

Need based on local availability of food - food deficit or biological model

Hunger, starvation, malnutrition and mortality are the result of a decline in overall food availability. The emergency is a problem essentially of food shortage or deficit which is manifested in malnutrition and thereby increased risk of mortality. Nutritional surveys are therefore often used to assess the severity of the food crisis or famine, and high levels of malnutrition are used to justify the need for free food assistance.

In many developing countries, particularly in Africa, famine early warning systems undertake annual crop assessments which give an indication of harvest shortfall, which can be used as a basis for predicting the expected food deficit.

Need based on access to food - food entitlements

Famine and starvation are not solely related to overall food supplies, but are the result of a decline in people's access to food or as Amartya Sen termed it, a decline in their 'exchange entitlements' (Sen, 1981). Entitlements' to food are through own food production, trade, exchange, credit or loans. This provides a useful framework for analyzing the underlying economic causes of famine, and is reflected in those assessments that focus on food security or 'access to food' by different groups, rather than simply looking at food availability. This is achieved by monitoring a wider range of indicators that reflect access to food by groups dependent on a range of livelihoods.

Apart from rainfall and agricultural production data, food security oriented early warning systems also monitor market conditions (prices and availability).

Box 11

Example of assessing need based on access to food – The Food Economy Approach to Needs Assessment

SCF (UK) have developed the 'food economy' approach to assessments, which originated from their work on the use of 'risk-mapping' for food crisis assessment. The food economy approach analyses exchange entitlements by assessing the relative importance of different food sources, for example, relief, own production, trade and exchange, claims and obligations. The food deficit is expressed in calorific terms; the percentage shortfall between the households annual food requirements (based on an average intake of 1900 kcal per person per day) and the energy value of the food to which the household has access. The results are presented in the form of pie charts. The information used for these calculations is gathered from interviews with key informants, who are asked to estimate the amount of different types of food available to the 'average household' in the population of interest (usually a village). This food economy approach has been widely applied in Africa.

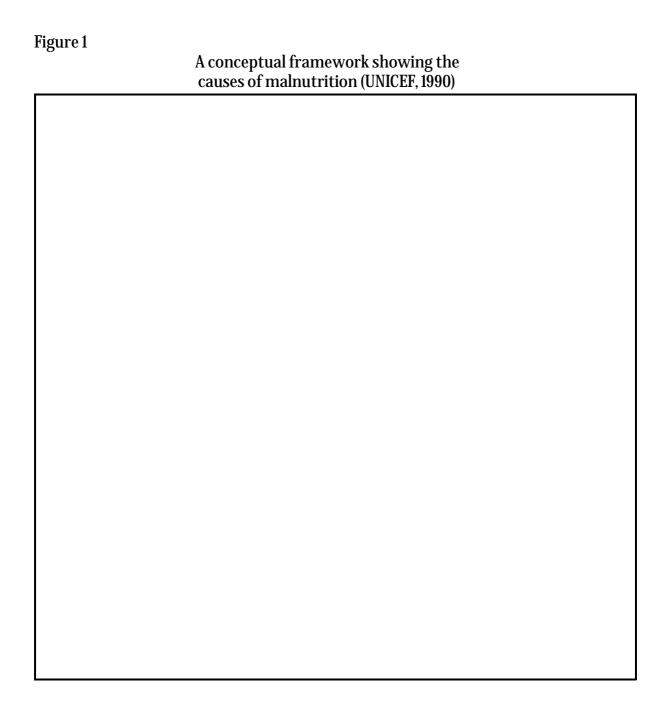
Taking account of the local response to food shortages – behavioural responses or coping strategies

Many people survive a famine as a result of their own resourcefulness and initiative. This is not without considerable cost to the individual, household and the community in the long and short term. The resourcefulness of people's coping strategies are often uncritically applauded without recognizing the enormous toll that is exacted in the process of coping. Since the late 1980s, needs assessments have increasingly tried to take into account behavioural responses, and looked for ways in which these could be supported where appropriate or alternatively, discouraged.

Coping strategies that may be monitored include sales of livestock, demand for credit or other loans, migration of family members, dietary changes and sales of wild foods. Localised early warning systems may monitor the stage of coping strategies that have been adopted or the proportion of the population relying on particular activities in order to assess the severity of a famine.

Need based on underlying causes of malnutrition and famine mortality

Malnutrition and mortality result from a combination of complex causes. These may be described with the help of a model which shows the various factors and how they are interlinked. The conceptual framework proposed by UNICEF (1990) is relatively simple and



can be adapted to develop locally specific models of malnutrition (Figure 1). This is extremely useful when trying to understand and organize large amounts of seemingly unrelated information, as it provides key headings and sub-headings, and indicates where different factors may be inter-linked.

The framework distinguishes between causes which operate at different levels of society, starting with the household, and including the community, district or region and country.

This is helpful as particular problems must be addressed at the appropriate level. The two immediate causes of malnutrition and mortality are inadequate food intake and/or infectious disease. These in turn are influenced by three groups of underlying causes: inadequate household food security, a poor health environment combined with inadequate health services, and/or inadequate care of women and children. A third level of causes is influenced by potential resources, economic structure, and the political and ideological superstructure. This framework is used to identify the factors that are causing malnutrition and mortality.

Needs based on health risk factors - the health crisis model

The health crisis model of famine mortality proposed by Alex de Waal (1989), suggested that famine mortality was entirely the result of a deterioration in the health environment associated with population displacement and social disruption (de Waal, 1989). The poor health environment brought about greater exposure to disease in a situation where treatment and care of the sick was extremely poor, hence the increased mortality. To some extent, this has now been modified as it is recognized that excess mortality is the result of both increased exposure to disease, combined with increased vulnerability to disease associated with malnutrition caused by lack of food.

This model reflects the combined strategies most agencies (OXFAM, MSFs, CDC, WHO) would advocate for the prevention of famine deaths, taking into consideration all those factors that constitute potential health risks. Aspects of public health that represent a health risk include: insufficient or poor quality water supply, inadequate sanitation, inadequate or overcrowded shelter, insufficient blankets or clothes, limited access to health services, and poor coverage of measles immunization. Any one of these factors will contribute to greater exposure or vulnerability to disease, and possibly a greater severity of disease.

Needs based on political vulnerability - role of conflict and war

In complex political emergencies, increasing attention is given to the role of war and violence in perpetuating or producing localised emergency conditions. In many situations, famine is a consequence and goal of conflict, for example, in Angola, Mozambique, Sudan,

Somalia and Ethiopia. Peacetime famines are by comparison usually much less severe. In complex political emergencies, the question of political vulnerability and power relations between different groups and factions cannot be ignored. Mortality, malnutrition and access to food are likely to be a direct result of political vulnerability.

Agency early warning systems are increasingly taking account of local intelligence, regarding alliances between principal combatant groups, predicted offensives or local attacks or raids. This information is needed to assess the role of relief resources in fuelling the conflict or in reinforcing oppressive regimes.

The tactics of war frequently prevent people from carrying out their normal agricultural and economic activities which brings about a situation of food crisis much earlier than would otherwise be so. For example, they may be forced to abandon their homes, or their movements may be severely restricted thereby preventing them from undertaking their normal activities. Consequently in the context of war, previously secure livelihoods are threatened and vulnerable.

3.6 The need for a conceptual framework

Practical guidelines are full of advice about methods of data collection and types of information, and give far less attention to interpretation or how to make sense of the information once it is available. Frequently, analysis and interpretation are limited to crude estimates of food requirements, with little or no attention given to the process of food entitlement failure or the impact on different groups. Conclusions and recommendations are sometimes made which cannot be justified by the information provided.

The root of the problem lies in the fact that we all have our own, often simplistic perceptions of emergencies which shape our ideas about the underlying causes, the outcomes to be prevented, and how best that can be achieved – although these ideas, whether held by the individual or by an institution, are not always conscious or explicit. This is reflected in the wide range of approaches to assessing needs shown in the previous section.

Without a clear view of the process and outcome of emergencies, meaningful data and information will remain elusive. We need to know how to define an emergency – what exactly is the outcome we are trying to prevent? Is it malnutrition and death, or is it destitution, social disruption or a collapse in civil society? Then we need to know how these come about – what is the process by which these occur? These questions must be addressed before a needs assessment can decide what to assess.

Consider the conceptual models presented in the previous section, and decide which aspects of the emergency are of greatest concern to you. This will help you plan your assessment, in terms of setting objectives, in relation to key decisions that must be made, identifying decision-makers or users of the information, and deciding what information must be collected.

From a nutritional perspective the UNICEF framework may be most suited to analysing the underlying causes of malnutrition and mortality, as it forces you to consider food security, the social aspects of care of women and children, and the role of public health, all of which are inter-linked. However, bear in mind that it fails to take into account the role of coping strategies and the impact of war and violence on the underlying causes. In addition, it focuses attention on women and children, and fails to take account of the vulnerability of others in emergencies.

3.7 Identifying target groups

A food distribution system must have defined target groups, who are perceived as particularly at risk or in need. The decisions about who to target are usually made by the implementing agency, possibly according to donor specifications, or alternatively by the people themselves through their representatives.

Identifying target groups is more than just a means of making sure the interventions reach the right people. The question of targeting goes hand in hand with assessment, as it raises the same conceptual questions about needs and vulnerabilities, and also very practical issues of how to identify and reach particular groups.

Identifying target groups raises the fundamental question who is at risk and why?, or alternatively who is vulnerable to what?. As with needs assessment, these issues are determined by the model of famine that is implicitly or explicitly adopted, and should be reflected by the objectives of the intervention. Unfortunately, these are not always clear.

The biological model of famine leads to an approach whereby food rations are directed at those who have food deficits, or alternatively are malnourished. Where resources are insufficient to provide everybody with rations, there is a strong argument to target the limited food supplies at those who show 'objective signs of starvation' or in other words, base food distribution on anthropometric assessment (Seaman and Rivers, 1988).

Alternatively, if a wider account of famine is taken, for example, one that considers local responses and coping strategies, food distribution may be partly intended as an asset transfer. This broadens the scope of the targeting strategy to include those households who have vulnerable livelihoods and risk destitution. In this sense, vulnerability implies an inability to cope or to deal with the consequences of drought. Although many poor people are vulnerable they are not necessarily so, as they may have greater defences against external shocks than richer households.

In complex political emergencies, both malnutrition and destitution are determined by 'political vulnerability'. Entire social or ethnic groups may be subjected to discrimination, intimidation, violence or other forms of human rights abuse (Duffield, 1994). Refugees represent a politically vulnerable group, and when they are removed from the source of their persecution they are easy to target. Conversely, targeting the politically vulnerable within their communities by outside agencies is probably a naive proposition.

The lack of a clear analysis of who is at risk and why is obviously one of the main reasons for a poorly targeted programme. The problem is often not a lack of information; rather it is the inadequacy of the subsequent analysis because of a lack of conceptual thinking.

3.8 Objectives of identifying target groups

In addition to ensuring food reaches the 'vulnerable', identifying target groups fulfils other objectives. Targeting has a major impact on costs – obviously, reducing the number of people who receive food reduces the amount of food aid needed and the costs of transport, storage and handling.

Limited resources were one of three reasons why NGOs targeted relief food aid during the African emergency in the mid eighties (Borton and Shoham, 1989). The two other reasons given for targeting were,

".the desire to concentrate on the worst affected areas and populations; the desire not to damage the local economy" (ibid).

However, in calculations of cost, the administrative costs of targeting must also be taken into account. Where the costs of distribution are absorbed locally, these costs are minimised but where there is an elaborate independent system for identifying beneficiaries and ensuring only these selected beneficiaries receive food, the administrative costs may exceed the savings gained from reducing the number of beneficiaries. If savings are to be made from identifying target groups, the administrative costs of targeting must be less than the costs of including everybody in the intervention.

3.9 Broad strategies for identifying target groups

In practice all relief is targeted to some degree as it is provided for a finite population. Targeting decisions are needed at several distinct administrative levels, including the country and region affected, the area, towns, villages or camps, and the households and individuals found within these. Where the geographical area of the emergency corresponds to an entire region or country, for example following a severe drought, or an area affected by civil war, donors prioritise broad geographic areas for assistance, as do NGOs and UN agencies.

Local targeting decisions are taken by relief programme managers, who identify affected populations, and develop systems to target particular groups of households or individuals within those populations. In some situations where community social structures are intact, relief food aid may be handed over to local representatives who are either traditional leaders, or representatives of a relief committee. These individuals then decide who should get food.

The most common targeting strategy is the 'equi-distribution' of rations or 'blanket' targeting of a defined population. How such populations are defined varies with the stage and type of emergency. The most well-defined group are refugees. The internally displaced who are settled in camps also represent an easily distinguishable group. Home-based populations and self-settled refugees are more difficult to target as their needs for emergency relief vary and more care is required to distinguish between those who need relief and those who do not.

In the acute stages of an emergency where food distribution is deemed necessary, rations are often provided to everybody affected where resources allow. In practice, the notion of 'equi-distribution' is often a myth, as certain individuals, households or groups may be excluded, while others receive more than their 'fair' share because of inefficiencies in the distribution system (see chapter five).

Inprotracted situations where the level of food assistance is being reduced, two basics trategies are followed; are duced ration for every body, or alternatively, rations targeted at selected communities, groups or individuals (Sections 4.6 and 5.11).

The strategy of reducing rations over time is evident in refugee situations where the ration is gradually reduced, following subsequent food assessment missions. The assumption is that refugees have attained a degree of self-sufficiency and therefore rations are gradually withdrawn. This system fails to address the problems of inequalities within the population; some refugees are unable to meet their food needs, while others do not need the ration provided. This type of general targeting is administratively easier to undertake than more selective targeting.

Criteria for targeting different types of vulnerability

Beneficiaries are identified according to certain criteria. These criteria should relate to the nature of vulnerability that is being addressed by the intervention. The criteria may be a categorization according to status: refugee/non-refugee; displaced/non-displaced; a cut-off on a continuous scale of measurement (nutritional status, degree of food deficit); or a combination of criteria (socially vulnerable groups within a refugee population).

Vulnerability Targeting criteria

Physiological Nutritional (anthropometric) status to identify malnourished children

and even sometimes adults. Pregnant and lactating women, the

elderly, the sick and convalescent.

Social The elderly, widows, women-headed households, orphans,

unaccompanied minors, the disabled, households who have been separated from their communities and normal representatives.

Economic Depends on the underlying cause of food insecurity, but may include

the drought affected (farmers, pastoralists, landless labourers etc who are affected by crop failure, livestock losses, unfavourable terms of trade, unemployment etc) and the displaced who have been separated from their economic means of survival. Alternatively, levels of food deficit may be calculated and communities prioritised for

distribution accordingly. Economic shock.

Political Refugees and those communities exposed to violence, oppression,

conflict and war. Within communities the question of political

vulnerability is much harder to address.

Identifying target groups either: selects particular communities, groups, families/households or individuals within a population who are then given the same ration size; or, the system differentiates between groups within the population by means of giving different rations to different groups (Box 11).

In practice, a combination of criteria are used to distinguish the beneficiary population, which may be applied simultaneously or in a number of stages. For example, in many refugee settings, food is only distributed to those refugees registered in camps, while refugees living in neighbouring villages or towns may be excluded. All camp residents may

qualify for a basic ration of cereals, while specific vulnerable groups receive additional complementary foods, and malnourished children are admitted to feeding programmes.

The Oxfam 1992 guidelines suggest the criteria used for selection should be associated with the objectives of the intervention, and should also be easily measured or assessed, otherwise errors will result in many vulnerable people being missed out. Criteria used to identify physiological vulnerability are used to select beneficiaries in supplementary and the rapeutic feeding programmes. Clear categories can be demarcated, such as the elderly, the sick and malnourished children under five years, attractive to relief agencies as they correspond to those who might otherwise die without the intervention, and also are perceived as politically neutral. This issue of targeting the physiologically vulnerable is dealt within more detail in Good Practice Review 2.

In extreme famine situations where the available food resources are totally inadequate, agencies have used nutritional status to target general rations to families whose children were malnourished. For example, in Ethiopia in 1984, the Relief and Rehabilitation Commission was unable to provide all those affected with an adequate general ration on a regular basis. Consequently, agencies operating supplementary feeding programmes provided a full ration to families with malnourished children. This situation went on for some time, as the issue of providing an adequate ration was never properly addressed. In an acute situation where the immediate priority is to save lives and food supplies are insufficient to meet the total need, targeting the malnourished is the most effective strategy.

Example of targeting selected groups within the population In Eastern Sudan, the Food Assessment Mission (FAM) by UNHCR, COR and WFP in late 1986 recommended that full rations should be phased out by only providing full rations to all post '84 refugees and selected refugee households considered unable to meet their food needs – 'vulnerable groups'. An upper limit for the proportion of vulnerable families in a settlement was also decided by the FAM and fixed at 20%. For other non-vulnerable refugee families, the cereal rations were stopped for six months, while pulses, oil and sugar were to continue to be distributed for the whole year.

Subsequent Food Assessment Missions modified this approach by dividing the settlements into categories where non-vulnerable refugees received different rations according to the category of their settlement. The number of categories varied from year to year. In summary, the system in Eastern Sudan comprised the following:

- ! Full rations for 12 months for all refugees in reception centres (new arrivals) and those considered 'vulnerable' in the settlements.
- ! Partial rations for 12 months or less for all "non-vulnerable" refugees living in settlements. The precise ration depended on the category of settlement in which the refugee lived.

Socio-economic criteria, such as income, land holdings, food stocks, or other asset holdings, are extremely difficult to apply as targeting criteria by outside relief agencies for several reasons: relief workers do not necessarily have an adequate understanding of the key socio-economic differences within a population; socio-economic indicators relating to individual households are costly and difficult to measure, and not necessarily reliable; a combination of criteria are usually required, as a multitude of factors determine the level of food security, which would increase the complexity of the system and the administrative burden.

In the mid-1980s, there were hopes that socio-economic indicators, such as grain and livestock prices and migration would provide a valuable tool for targeting, although it was acknowledged these were not well understood (Borton and Shoham, 1989). An example of s u c h a s y s t e m i s s h o w n i n B o x 1 3 .

Community managed distribution may, therefore, be the most appropriate means of targeting based on socio-economic criteria, providing community leadership is intact.

Box 14

Example of targeting according to levels of food deficit

Darfur, West Sudan – Household surveys and food monitoring by SCF(UK)

In order to facilitate the targeting of emergency food, SCF stratified the area councils of Darfur into agro/socio/economic zones, which formed the sampling base of a massive household survey. In parallel to this system, SCF employed field officers to collect general socio-economic data at village meetings. Aggregated food production data were converted into grain equivalent food availability at the rural council level. If the deficit was more than 40 percent, the council would be allocated food equivalent to that deficit. In addition, field officers made targeting decisions within zones or rural council areas based on first hand knowledge of villages (Shoham and Clay, 1989).

The involvement of local representatives in targeting decisions is a difficult issue, particularly in emergencies where social networks may be under great stress and not everybody is represented by the existing leaders and representatives. Where community leadership and structures are shaky it may be appropriate either to support them directly or to create new structures, such as relief committees. Whichever approach is taken, the principles of transparency and accountability must be applied (also see Chapter 5).

Self-selection

Another mechanism for selecting beneficiaries is by 'self-selection', whereby people decide for themselves whether or not to take advantage of the assistance offered, depending on whether they need the assistance offered, and what they must do in order to get it. For example, the provision of cooked food is not attractive for those who have their own food supplies and it also deters over-registration, as the amounts people get are obviously limited by what they can eat. Another example is the provision of subsidised food which may be considered a poor substitute for the preferred staple food, such as red sorghum rather than white sorghum. The better-off may not be interested in purchasing such food commodities.

Example of targeting by developing a system for the identification of vulnerable groups Eritrean and Tigrayan refugees in Eastern Sudan, 1986–89 (Young, 1990)

In refugee settlements in Eastern Sudan, a complex system for the identification of vulnerable groups was developed, based on a 'vulnerable groups' survey, where every refugee household was visited and individually assessed according to a number of previously agreed criteria. The survey team usually consisted of a counsellor from the Sudanese Commission of Refugees (COR), two home visitors and two representatives of the people from the settlement to be surveyed. A Vulnerable Group Committee from the settlement, who included representatives from COR, a counsellor and a refugee elder, then reviewed and endorsed the list drawn up by the survey team. Once the lists were drawn up they were relatively inflexible and families were not withdrawn or added. This system encountered many problems, including disagreements between the survey team members, refugees falsifying their situation in order to appear poor, doubts about reliability of the surveys, conflicting interests which undermined community development and finally, it was expensive to administer in terms of COR staff time.

In some refugee situations, refugees living in camps are self-selected as there are many more who live in neighbouring towns and villages. A study in Northern Iraq showed that among the registered displaced there was a far higher proportion of poor households than among the non-registered displaced (Ward and Rimmer, 1994).

Food or `cash for work' similarly may only be taken up by those able and willing to work for the wages of fered.

3.10 The realities of identifying and reaching target groups

Competing demands from different potential beneficiaries

Wherever resources are brought into a resource poor environment there will be competing demands between different groups. For example, in a refugee situation, there may be unregistered refugees outside camps, settled refugees who arrived in earlier influxes, destitute local people, and local people hosting refugees. Ideally the needs of these groups

The cross-mandate approach in Eastern and Southern Ethiopia

In Eastern and Southern Ethiopia, at the end of 1991, there were multiple displacements of several discrete groups who were in need of humanitarian assistance. Somali refugees and Ethiopian returnees had poured into the Hararghe and Ogaden regions fleeing the civil war in Somalia. At the same time these regions witnessed substantial influxes of former soldiers of the Ethiopian army including some who had been repatriated from Sudan. These regions had been severely hit by successive droughts and accompanying famine, and there were many destitute with little or no means of survival. Targeting discrete humanitarian programs to individual groups was untenable. An agreement was reached between the Ethiopian Government and the UN agencies to undertake what became known as a cross mandate operation. UNDP undertook a coordinating role, but UNHCR was the principal implementing agency extending its assistance measures beyond the refugee and returnee communities to include the internally displaced and other vulnerable populations as well.

One of the central notions of this approach was that relief should be provided on the basis of need rather than on categorizations of recipients. Although more equitable, due to the larger number of beneficiaries, a smaller amount of resources was received by each party. This resulted in criticisms from groups who believed they had a right to preferential treatment and to a more complete ration.

must be prioritised according to type and level of need – do they need food assistance for survival, or to support their livelihoods and thereby the local economy?

Different priorities

There are often widely divergent views between relief workers and local representatives as to who should benefit from the available food assistance. Outsiders, as the givers of food, usually assume this responsibility and usually give food relief on the condition it is targeted at particular areas, and at particular groups. For example, in Eastern Bahr el Ghazal in Southern Sudan, Oxfam asked local relief committees to agree on certain conditions before handing over the food, including:

- ! the principle of targeting the most 'vulnerable';
- ! widespread publicity for the distribution and its conditions (minimum unit to be distributed);

! that relief committee members personally participate in the distribution and take responsibility for reporting and any blame in the exercise (Broughton, 1994, Sep 22).

These views are usually accepted by local organizations in order to secure the resources, but may run counter to their own local priorities and the pressures from local interest groups. There are many accounts of emergency food not being used as it was intended; in particular, food that was intended for 'vulnerable groups' is distributed widely on the basis that all members of the community are thought to have a legitimate claim on the external resources. Local leaders in charge of food distribution in the Red Sea Hills, Sudan in 1985 did have a very clear and accurate perception of the needs of different families, but the allocation process took no account of this because it was considered that every family had to have a share, and families could not be excluded on the grounds of wealth (Dreze and Sen, 1989). On the contrary sheiks who usually had the largest herds, often got extra food (ibid).

Where local organizations have no independent resources and are unable to financially support even their own staff, part of the assistance will almost certainly be used to meet their existing commitments. The promise of free food aid was used to mobilise the population in parts of Southern Sudan to construct airstrips, which would allow access for the assessment teams and relief planes. In such situations, it is inevitable that not all the food aid will be targeted as the donor might have wished because of existing commitments made by local representatives.

In practice, targeting assistance is frequently a means of securing support or eliciting cooperation from influential groups or individuals. This dimension should not be ignored when developing strategies to reach target groups, as some directing of resources according to political priorities is inevitable. It would be better to consider these issues right at the beginning of the programme, and raise them for discussion and negotiation with local groups. This may mean external agencies having to partly compromise their own objectives by agreeing to meet some local objectives (on the condition that external objectives are also met). In the long run, this pragmatic approach is likely to prove more effective than ignoring local priorities by imposing outside ideas about who should get food, which are in turn ignored by the local groups responsible for distributing food. Opening up the subject of targeting priorities for debate and negotiation between agencies and local partners provides a more solid base for mutual understanding and a working partnership.

Conflict situations

Food distribution in a war zone is logistically more difficult than in peacetime, because of the restricted access for security reasons and the lack of infrastructure through which to distribute food. Restricted access also hinders routine monitoring. In terms of targeting it is often impossible to distinguish between combatants and non-combatants.

It may be specified by donors that food aid should only be provided to civilians, but defining non-combatants is difficult in most conflict situations (CARE,1995). Even if people are not directly involved in combat, they are generally required to take sides and may support troops by providing food. People may be civilians by day and combatants by night. Within one family, the women and children may be civilians and the men combatants.

In insecure areas with limited storage facilities, there are pressures to distribute food quickly to minimise the risk of attack or less serious leakage and loss. Such time constraints may mean food is given to the first in the queue – on a 'first come first served' basis. This discriminates against people living in outlying areas, and encourages settlement around distribution points.

The most severe emergencies occur in situations of extreme material dearth and poverty, in the context of war and violence. In a resource-poor environment, restricted targeting of free relief commodities can generate violence between competing groups,

During conflict in Mozambique, the arrival of relief supplies in a given area tended to intensify the fighting. For example, Renamo would often assault Frelimo-held towns shortly after aid had been delivered there. In circumstances where relief is scarce, the delivery of relief to one group or area may be particularly likely to incite violence. In 1991, when elements of the Nuer attacked Dinka people around Bor and Kongor, one contributory cause seems to have been Nuer resentment at apparent discrimination against them in relief efforts (p215, Keen and Wilson, 1989).

Because of the potential for a food distribution programme to contribute in one way or another to a conflict situation, or to become bound up in the dynamics of conflict, it is vital

that this is continually reviewed by the agencies involved and every possible step is taken to prevent this occurring.

Because of the high risk of abuse, effective monitoring of the identification of target groups is a prerequisite for a food distribution programme.

4. Planning Rations

4.1 Introduction

For most agencies, food rations are a nutritional resource. Rations are planned accordingly to meet nutritional requirements and criteria of cultural acceptability, digestibility and fuel consumption. However, experience from emergency food distributions shows that emergency-affected populations often have access to other food sources, and that assisted populations use rations as an economic resource by trading and exchanging rations, often to improve their diet.

Nutritionally adequate rations are usually planned in two stages:

- 1. Estimating the average per capita nutritional requirement of the population.
- 2. Planning rations, which involves the selection of commodities, estimation of expected losses, access to other food sources, and the likelihood or even desirability of trading part of the ration.

There are serious shortcomings in the way average nutritional requirements are used as the basis for defining nutritionally adequate rations. Moreover, even though most agencies agree on the factors that need to be taken into account to plan rations, there is little guidance on how to do this. Practical examples can give some insight into how this may be done.

In the acute stages of an emergency, particularly the early stages of displacement, it is valid to emphasize the nutritional aspects of providing food. In more stable, or protracted situations however, food rations are more an economic than a nutritional resource, and the criteria for planning rations should change accordingly.

Actual rations are often substantially different to the ration planned and agreed on, due to resourcing and logistical constraints. In reality, it is often practitioners that have to set ration scales based on available food stocks, rather than nutritional requirements and other technical considerations.

4.2 The myth of the nutritionally adequate ration

General food rations are usually based on the average per capita nutritional requirements for a population. Requirements are considered in terms of energy, fat, protein, and essential vitamins and minerals.

Most agencies use a planning figure for the average per capita energy requirements of the affected population, which is then increased according to factors that may increase energy requirements, or decreased depending on the population's access to other food sources. There is general agreement on the factors that need to be taken into account to adjust the figure, but there is considerable controversy over the planning figure itself.

A minimum daily per capita energy requirement of 1900 kcals was recommended as a planning figure for emergency affected populations (see Box 16), by Rivers and Seaman in 1988, as the minimum intake required for maintenance (USAID, 1989). Recently, however, many agencies have begun to advocate a higher planning figure. WHO is the most influential agency advocating a higher planning figure, and they now recommend a minimum of 2100 kcals. Agencies such as MSF and AICF have also revised their working figures upwards, and ICRC sets the working figure at 2400 kcals. The different planning figures are illustrated in Box 16.

The basis of the controversy over planning figures for energy requirements is the allowance made for activity levels, but also the lack of allowances for other needs. The latter is basically a dispute over what constitutes an 'adequate' ration.

The average requirement for a population is calculated using average energy requirements for defined age and sex groups, and the distribution of these age and sex groups in the population, multiplied by a factor to allow for activity (estimating energy requirements is discussed in more detail in Annex 2). Any estimate of activity levels reflects a value judgement on what levels of activity above the minimum for survival is desirable.

Box 17 Existing recommendations for average per capita energy requirements				
Organisation	Recommended requirement	Basis for recommendation		
WFP/UNHCR OXFAM/SCF IFRC	1900 kcal	Very little activity Warm climate Normal demographic distribution		
WHO MSF	2100 kcals	Light activity Warm climate Normal demographic distribution		
ICRC	2400 kcal	Use of food aid to meet other needs Meet needs of vulnerable groups Figure of 2400 corresponds to requirement for moderately active population.		

Note: UNICEF's emergency handbook (UNICEF, 1986) does not recommend an average requirement. For short-term survival they recommend 1750 kcals as the average daily requirement for individuals over 10 years, and 1250 kcals for children under 10 years. For maintenance 2100 kcals is recommended for those over 10, and 1500 kcals for those under 10 years.

The working figure of 1900 kcals/person/day is based on the normal demographic composition of a developing country, minimal activity, a warm climate, and no other special nutritional need. Minimal activity includes requirements for an additional 1.5 hours walking or 2 hours standing above the minimum requirement for survival. The WHO recommendation of 2100 kcals is based on light activity levels, which assumes that the majority of time is spent sitting or standing, with only limited time spent moving and work is limited to household tasks and desirable social activity.

There is agreement that these planning figures need to be adjusted if the demographic distribution of the population is abnormal, if the population is malnourished or if mortality rates are high, and at times of the year when activity levels may be higher. Agency recommendations for increases in energy requirements are shown in Box 17.

ICRC's planning figure of 2400 kcals represents average requirements of a population with moderate activity levels. However, the main reason for using a higher working figure is to include the needs of all vulnerable groups, and the expectation that if the main assistance provided to destitute populations is food aid, that part will be sold to meet other needs.

An adequate general ration should meet the needs of the majority of the population. Agencies using planning figures of 1900 and 2100 kcals for the energy content of general food rations assume that, once this figure is adapted, this will meet the energy needs of the majority of the population. Special selective, or targeted, feeding programmes are recommended in addition to the general ration to meet the needs of vulnerable groups. The concept of an 'adequate' general ration for everyone in the affected population, and special programmes for vulnerable groups, implies that people belonging to vulnerable groups are in the minority.

If traditional categories of vulnerable groups are examined, it becomes clear that in fact a huge proportion of emergency-affected populations belongs to a vulnerable group, and that several vulnerable groups are usually represented within one family. ICRC concluded that vulnerable groups may in fact form the majority of an emergency-affected population, and that the standard approach to estimating per capita energy requirements cannot be used as the basis of an 'adequate' general ration. Moreover, ICRC argues that setting up special programmes for vulnerable groups, aimed at individuals, undermines existing family and social structures. This approach conflicts with objectives of promoting self-reliance as this is dependent on functioning social support networks. It is worth examining this argument in more detail, taking each of the vulnerable groups in turn (extracted from Curdy, 1994):

- 1. The malnourished and those vulnerable to malnutrition. The concept of supplementary feeding of under fives, or malnourished children under five, is a borrowed concept from development contexts. In emergencies, a wider group is at risk.
- 2. Those with increased requirements. This traditionally includes pregnant and lactating women. However we should also take into account the importance of prematernal nutritional status, ensuring adequate maternal nutrition as early as possible, and the uninterrupted cycle of reproduction in developing countries. This

means we should take into account all women of reproductive age, which would increase the proportion of the population with additional requirements from 3 to 20%. Infectious disease also increases requirements. Especially in camp situations, there is usually a high prevalence of infectious disease, and disease is the immediate cause of death.

3. The socially vulnerable. This group is included because their access to food is reduced, and includes orphans, the elderly, the disabled, and single parent families. This often constitutes a large proportion of a refugee population.

Even if the general ration is adequate in terms of meeting the energy requirement of the population as a whole, this does not mean it is adequate for each individual within that population. Energy requirements differ from requirements of protein, vitamins and minerals, in that the recommended requirement for an individual is the *average* requirement for a group of individuals of the same age, sex, and weight, without provision for the known individual variation. For proteins, vitamins and minerals, we use a safe level of intake, which will meet or exceed the requirements of practically all individuals in the group (FAO/WHO/UNU,1985). Planning figures for the energy requirements of a population, are therefore an average for the population, based on average energy requirements for certain age and sex groups.

If everyone eats exactly the planned number of calories, some individuals will always be underfed. Individual needs will only be covered if redistribution of food occurs within and between recipient families, in proportion to their physiological needs (WHO, 1994). It is usually assumed families divide the ration amongst themselves, so that everyone's requirement is met (WHO, 1994).

Factors which may increase average energy requirements

Factor

Agency recommendations

Greater than normal proportion of men, pregnant women, or children and adolescents in population

Nutritional stress widespread illness undernutrition CMR>1/10,000/day

- Enhanced rations of 2250-2325 kcals (UNHCR)
- 2000–2200 kcals if malnutrition widespread (WFP, IFRC).
- Increase requirement by 15% for catch-up growth (UNICEF)
- Increase mean population requirement by 20 kcalif >15% malnutrition, by 10 kcalif 10–15% malnutrition, and 5 kcals if 5–10% malnutrition (WHO).*

Increased activity levels at certain times of the year or early stages of agricultural settlement or

self-sufficiency project

Increase cereals to 500 g.(UNHCR)

Increase energy requirement by 500 kcals (WFP). Increase requirement by 100 kcals for moderate

Increase requirement by 100 kcals for moderate activity, 150 kcals for moderate/heavy activity, 250 kcals for heavy activity** (WHO).

 Increase requirement to 2500–3500 kcals for heavy work (IFRC)

Cold climate

- Increase requirements by 5% (100 kcals) for every 5 degrees below 20 degrees Celsius (UNHCR, MSF, WFP,WHO)
- Enhanced rations of 2200–2400 kcals if population totally dependent on food aid <u>and</u> debilitated, exposed to cold, or engaged in heavy work (WHO/UNHCR/WFP)

Notes:

- *Prevalence of malnutrition is weight-for-height below 2 SD
- **These are additional mean energy requirements for the whole population of adults occupied for 7hours per day at different activity levels. Since WHO recommends a working figure of 2100 kcals, the total requirements are 2200 kcals, 2250 kcals and 2350 kcal/person/day for increasing activity levels.

But does redistribution in this fashion always take place? Are there people who may be excluded from this system of redistribution? During famines, especially those caused by conflict, social networks between families or population groups may have broken down, and families may have split up. Displaced populations often include high numbers of single parent families and orphans, who may be excluded from networks of redistribution.

Agencyguidelinesarebroadlyinagreementonrecommendationsforproteinandfatcontents of food rations. Recommendations for protein range from 8 to 12.5% of total energy. Most recommend that fat provides at least 10% of total energy. ICRC and WHO recommenda higher proportion of energy to be provided by fat; ICRC recommends 19% and WHO recommends 15–20% (Norton and Nathaniel, 1994). In general, there is consensus on requirements for micronutrients, based on recommendations of FAO/WHO expert committees (Norton and Nathaniel, 1994).

4.3 Which average energy requirement figure should be used as the basis for planning rations?

The choice of planning figure for per capita energy requirements to be used as the basis for planning rations, should not be a major issue as long as it is realised that it is a planning figure, that needs to be adjusted, and does not represent an adequate ration in terms of energy content. In reality, whether 1900, 2100, or 2400 kcals is chosen as the planning figure depends as much on the supplier of the food aid, as on technical considerations of energy requirements.

Ideally, the highest planning figure should be used for populations in the early stages of an acute emergency, when the population is totally dependent on external food assistance. This figure may still need to be adjusted, but it removes the need for special targeted or selective feeding programmes for vulnerable groups. A higher planning figure also takes into account anticipated shortfalls in the food pipeline, as is common in the early stages of an emergency.

Agencies adopting a higher planning figure are likely to have to resource part of the food aid requirements themselves, as the higher planning figure is unlikely to be adopted by WFP. In their emergency handbook, WFP recommends a planning figure for average energy requirements of 1900 kcals. The only agency which recommends a planning figure of 2400 kcals, resources all their food aid themselves.

The use of the 1900 kcals planning figure for energy requirements, in the acute stages of an emergency, will often necessitate the establishment of selective or targeted feeding programmes, as the needs of vulnerable groups may not be met. As long as the vulnerable groups constitute a minority of the population, the total food aid requirements for general rations and selective feeding will be less than if a higher planning figure is used for energy requirements. However, if the proportion of vulnerable groups is large, a stage will be reached where the value of total food aid needs, using the lower planning figure plus that for selective feeding, equals that if the higher planning figure was used for general rations. This would be a persuasive argument in advocating a higher initial planning figure.

It has recently been argued that there can be no single working figure that applies to all populations, because demographic composition, body weights and temperature vary widely between populations (Schofield and Mason, 1994). It has been recommended that average per capita requirements for each specific emergency-affected population are calculated based on demographic composition of the country of origin or on information from demographic surveys, actual body size of the population, and the additional factors described above. Look-up tables may be produced in the near future to select the most appropriate planning figure for the particular population (see Annex 2). The proposed method still assumes that selective feeding programmes will be established to meet the needs of vulnerable groups.

Whichever planning figure is used, it must be remembered that this is an average, and that only if redistribution occurs within the population, everyone's requirements will be met. In a population where a high number of people are excluded from networks of redistribution, a case can also be made for setting higher ration levels. In some programmes, the needs of orphans and unaccompanied minors was taken into account in planning their food rations (see Box 18). In most operations however, the socially excluded are catered for by special programmes, rather than adjusting the general ration.

Box 19

Rations allowing for social exclusion

In Kenya, almost half of a refugee population of Southern Sudanese consisted of unaccompanied minors, mostly adolescent boys. These boys lived in groups in the camp, with a caretaker who supervised and assisted in the preparation of meals. Clearly the requirements of adolescent boys were higher than the average nutritional requirements of a population of normal demographic composition, and since their ration was cooked under supervision, they were expected to eat what they were given (although a considerable amount was still traded). To take their needs into account, the general ration for the entire camp was set at the requirement of the boys' 2500 kcals/person/day.

4.4 Selection of commodities for nutritionally adequate rations

Most agencies recommend at least three basic commodities to ensure sufficient energy, protein and fat in the ration. The ration usually includes a staple, such as cereals, an energy rich food, oils and fats, and a protein rich food, pulses (beans, groundnuts, lentils). Examples of typical rations given in guidelines are shown in Table 1.

Table 1

Typical rations as recommended by guidelines (for populations totally dependent on food aid)

Commodity gm/pers/day	UNICEF	MSF	WFP/UNHCR (WHO)			Oxfam	ICRC
Cereals	350-400	400	400(450)	400(450)	400(450)	350-400	433
Pulses	50	60	20	60	40	50-100	133
Oil	20-40	25	25	25	25	20-40	50
Blended food		100	30				
Fish/meat					20		
Sugar		15	20	15	20		
Salt		5	5	5	5		
kcals	1600–1970	2260	1930 (2100)	1930 (2100)	1930 (2100)	1510-2360	2450

Note: where only 3 commodities are given, guidelines do emphasize the need to add vitamin- and mineral-rich foods, and foods to improve palatability, where populations are totally dependent on food aid.

Examples of enhanced rations

Commodity gm/pers/day	WFP/UNHCR/WHO		
Cereals	400	450	
Pulses	40	50	
Oil	25	25	
Blended food	30	50	
Fish/meat	60	30	
Sugar	20	20	
Salt	5	5	
Veg/fruit	150		
kcals	2250	2325	

In the Memorandum of Understanding (MOU) between UNHCR and WFP, sugar and blended foods are also included as basic food commodities for refugees. Examples of blended foods include Corn Soy Blend (CSB), Corn Soy Milk (CSM), Wheat Soy Blend (WSB), Wheat Soy Milk (WSM), which are produced in the US, as well as locally-produced blended foods such as UNIMIX (Kenya) and Faffa (Ethiopia). Blended foods are a pre-cooked blend of cereals and pulses, fortified with essential vitamins and minerals. The inclusion of these commodities in the food basket is not automatic, but subject to the joint needs assessment process (UNHCR/WFP,1994). The role of blended foods is discussed in more detail below. Salt is also considered a basic commodity for refugees, making a total of six basic commodities: cereals, pulses, oil, salt, sugar and blended food. The MOU specifies that WFP will mobilize all basic commodities.

In addition to basic commodities, guidelines emphasize the need for complementary foods, when populations are totally dependent on food assistance. Complementary foods are commodities that are necessary to improve the quality of the diet in terms of vitamins and minerals, and the acceptability and palatability. Increased palatability will encourage consumption, and therefore, better nutrition. For refugees, UNHCR is responsible for the provision of complementary foods, which may include: local fresh foods (vegetables or fruit), condiments (spices), canned meat or fish, milk powder and biscuits. IFRC also includes tea and coffee under complementary foods. In non-refugee situations, complementary foods may be provided by the Government, or other agencies (NGOs).

Milk powder and biscuits are generally not advised for distribution as part of the general ration. Most agencies have a clear policy restricting the use of milk powder to situations where this can be prepared under supervised conditions, such as therapeutic and wet supplementary feeding programmes. Similarly most agencies have a policy against the use of breastmilk substitutes. IFRC also advises against canned baby food, canned fruits and vegetables, cheese, soups, confectionary, frozen foods, and military survival type rations.

Biscuits are generally recommended for use in the rapeutic and supplementary feeding only, but have sometimes been given in the very early stages of an emergency, when cooking facilities are absent, other foods are not available, or food has to be airlifted. UNHCR often stockpiles biscuits as part of their contingency planning. In extreme circumstances, biscuits

have been distributed as part of the general ration, for example during periods of shortage of basic foods for Rwandese refugees in Zaire.

All guidelines agree that food rations should be culturally acceptable to the beneficiary population, and that they must be able to process and prepare it. Adequate supplies of water, fuel, cooking utensils and grinding facilities must be provided. Ideally, foods should also be low in fuel consumption and easily digestible. In reality, unacceptable foods have been provided to emergency-affected populations, as a result of constraints in resourcing, transportation, and cost.

Most agencies prioritize dietary energy in the initial stage of the emergency and, for this reason, staples are seen as most important. However, they also recommend that a full set of basic foods should be mobilized and included in the rations as soon as possible, especially if the population is totally dependent on relief for an extended period.

Strategies to provide sufficient micro-nutrients in the ration $% \left(x\right) =\left(x\right) +\left(x\right) +\left($

The provision of sufficient micro-nutrients in food rations for populations totally dependent on food aid has often been problematic. Examples of outbreaks of micro-nutrient deficiency diseases were given in Chapter 1. Ideally, foods should be provided that contain sufficient micro-nutrients, but in practice this has not always been feasible. Alternative strategies used by agencies have included food fortification and distribution of vitamin or mineral tablets in the short term, or support for agricultural production and income generation in the longer term. Strategies used by beneficiaries include the informal monetization of food aid, and strategies to obtain access to other food sources, which is discussed in the next two sections. The solution depends on the type of deficiency and the local circumstances.

It has been particularly difficult to provide foods in the ration that contain sufficient Vitamin C to meet requirements. Vitamin C is found in fresh fruit and vegetables, and is destroyed by cooking and over long periods of storage. Logistical difficulties of transportation and distribution, as well as insufficient availability and high cost, have prevented distribution of vegetables in most situations. In the past, some small emergency-affected populations in Asia and Latin America, where vegetables could be purchased locally, have received vegetables in the ration. In the Horn of Africa, this has been attempted with

limited success, as refugee populations are large, often settled in the most isolated and inhospitable areas of the country with poor road networks, and local availability of fruits and vegetables is limited. Distribution of more durable vegetables such as potatoes or onions has been recommended, instead of soft fruits or leafy vegetables (Toole, 1994), but this has not yet been attempted (see Box 19).

Strategies to provide sufficient Vitamin C in the general ration

1. Distribution of vegetables

150 gm/person/day of green leafy vegetables were distributed as part of the general ration to Bhutanese refugees in Nepal in 1992. Although distribution was difficult and time consuming, vegetables were available in sufficient quantities in nearby areas for local purchase.

In Somalia, distribution of citrus fruits was attempted to Ethiopian refugees in 1987. Problems were encountered because the fruits were purchased in farms about 2000 km from the camps, and quality specifications were not adhered to by suppliers. The long distance resulted in a high proportion of spoilage. Consequently this operation was not repeated.

2. Distribution of orange juice powder.

In Yugoslavia, orange juice powder enriched with Vitamin C was provided as part of the food ration. This was an effective strategy, but cost ten times more than providing the same amount of Vitamin C in tablet form (Toole, 1994).

3. Fortification

Following the failure of fruit distribution in Somalia, fortification of DSM with Vitamin C powder was tried. Vitamin C powder was mixed by hand with DSM at the time of distribution. This programme was not evaluated because of the outbreak of civil war, and cannot be repeated because of policies against the use of DSM in the general ration. Fortification of other foods is difficult because Vitamin C is destroyed by cooking.

The inclusion of blended food in the general ration is the most common form of providing Vitamin C to populations dependent on food aid, if including fresh foods in the ration is not possible or if refugees have no access to fresh foods by other means. US produced blended foods have 40 mg. of Vitamin C per 100 gm.

4. Distribution of Vitamin C tablets

In refugee populations where scurvy outbreaks have occurred, Vitamin C tablets had to be distributed until foods with Vitamin C could be provided. Tablets were given once or twice a week, necessitating employment of additional staff or redirection of Community Health Worker activities. Unless the taking of tablets could be observed, compliance was low.

Rich food sources of micro-nutrients

Micro-nutrient Rich Food Source

Vitamin C Fresh fruit and vegetables

- 150 gm/person/day recommended by UNHCR

Niacin Nuts, beans, wholegrain cereals

Milk

- 20 groundnuts/person/day recommended if maizebased diet, by participants at the Machakos nutrition

workshop

Thiamine Nuts, beans, wholegrain or lightly milled cereals

Iron Meat

Dark green leafy vegetables

Niacin deficiency (pellagra) has been found in populations where maize is the principle cereal, and thiamine where polished rice is the main cereal provided. Food rations are usually deficient in iron, as iron in non-animal foods is poorly absorbed, and the provision of meat is usually not feasible. Rich sources of these micro-nutrients are shown in Box 20.

Tablet distribution is generally not recommended, except for Vitamin A. Vitamin A can be distributed on a six monthly basis, whereas the B Vitamins and Vitamin C need to be distributed on at least a weekly basis, making this logistically difficult, expensive and labour intensive. Past experience of this approach has revealed low compliance (Toole, 1994). As it is difficult to provide sufficient iron in food rations to meet the requirements of all groups, it is therefore necessary to provide iron supplementation to groups with the highest requirements, such as pregnant and lactating women.

Fortification is probably most feasible for cereals, as this is the commodity most regularly provided. However, cereals are often provided as whole grains, and milling is usually done on a small scale at camp level. In addition, the source, type and presentation of cereals may change during the course of an operation (Henry and Seaman, 1992). The two possibilities are for donors to supply fortified cereal flour, or to mill and fortify cereals locally. Fortification at source would certainly be feasible, but experience has shown that suppliers are often not prepared to take the trouble of fortifying with micro-nutrient pre-mixes (Toole, 1994). The US does fortify foodstuffs for regular feeding programmes with Vitamin A, iron and other micro-nutrients, but not for refugee feeding programmes (RSP, 1991), and many countries fortify foods for their own populations. The only fortified foods regularly used in emergency feeding are salt, which is fortified with iodine, and blended foods. Local fortification is in most situations only possible if substantial investment in local milling capacity is made. In Malawi, maize flour was fortified locally with nicotinamide, following an outbreak of pellagra.

Blended foods

The inclusion of blended foods as part of the basic ration for refugees was formalized in the MOU between UNHCR and WFP, which states that "in an attempt to pre-empt any micronutrient deficiency, WFP will provide populations wholly dependent on food aid, with micronutrient fortified blended foods." It has recently been recommended (SCN/UNHCR, 1994) that 60 gm/person/day of blended foods are provided in the first 6 to 12 months of an operation, until an alternative strategy is developed. It was also recommended that the use of blended food by beneficiary populations be investigated, as it may be cooked for longer than necessary, destroying the Vitamin C, and because the food may not be consumed by all family members.

Asecond purpose for including blended foods in the general ration is as an appropriate weaning food for children. However, the use of the same blended foods as a special food for children and for prevention of micro-nutrient deficiencies, has recently been questioned (SCN/UNHCR,1994; Briend, personal communication). The nutritional composition of blended foods required for feeding malnourished children in selective feeding programmes, and for preventing micro-nutrient deficiencies are substantially different (Briend, 1994). Two types of blended foods may be needed, one as a special food for malnourished children, and

another to prevent micro-nutrient deficiencies (SCN/UNHCR,1994). An alternative, more cost-effective approach would be to fortify a cereal for prevention of micro-nutrient deficiencies, to produce a blended food for use in selective feeding programmes only, and to assume that families can prepare weaning foods themselves from fortified cereals, pulses and oil (Briend, personal communication).

4.5 Making allowance for losses in transport, handling and milling

Losses incurred during transport, handling, milling and distribution are recognized by all agencies involved in food distribution, and most give recommendations for taking into account 'acceptable' losses. In the 1988 nutrition conference 'Nutrition in Times of Disasters', it was suggested that there should be a 5% adjustment in food rations for losses experienced during transport within countries with ports, and 10% for land-locked countries. Although most agencies state that losses experienced during the milling process should also be taken into account, few give a figure for the adjustment that should be made. Typical losses of 10–20% during the milling process are given by WFP in their handbook for emergencies (WFP, 1991). This would imply that an increase of 10–20% in the ration is necessary to compensate for milling losses.

Where milling is done by the beneficiary, allowances are rarely made for the cost of milling, which often has to be met through the sale of food. If this were to be taken into account in planning rations, the increase in the cereal ration would be considerably higher than 10–20%

(see Box 21). The example in Box 21 makes it clear that it would be unrealistic to compensate for milling costs by increasing the ration.

Agencies generally agree that if whole grains are distributed, sufficient milling facilities

Box 22

Example of milling costs

In food rations for Rwandese refugees in Tanzania, maize was increased from 350 gm/person/day to 420 gm. (an increase of 20%), if it was provided in the form of wholegrain rather than flour. However, in May/June 1994, when wholegrain maize was provided, there was only one mill in the village near the refugee camp, where the cost of milling one bag of maize was the same as the value of the same quantity of maize if it was sold. Refugees would therefore have had to sell half their maize ration, in order to mill the other half. Wholegrain maize was transported out of the camp to nearby towns in great quantities.

should be ensured at camplevel. UNHCR recommends that ideally refugees/returnees should receive milled cereals (UNHCR/WFP,1994), except where milling or grinding facilities can be assured at the local level. IFRC recommends the distribution of wholegrain cereals, unless milling facilities are not available. In refugee situations, WFP is responsible for meeting the costs of milling. Advantages of distributing wholegrain cereals are that they contain more nutrients, have a longer shelf-life, are cheaper, and less subject to losses during handling (WFP, 1991). A specific advantage of distributing flour is that flour can be fortified.

Losses may occur for a variety of other reasons, but are judged unacceptable and therefore not included in the planning of rations. This includes diversion by soldiers or militia in conflict situations, and losses due to bad management or corruption. The latter are avoidable and can be corrected by improving the system of distribution and monitoring.

4.6 Allowing for access to other food sources

Many emergency affected populations already have, or acquire, sources of food other than that provided by food rations. Where income generating opportunities exist, and these are consistent with people's own customs or previous sources of livelihood, these opportunities will undoubtedly be taken up. Refugees are the group generally considered to be most

dependent on food aid, but even for refugees, there is ample evidence of initiatives to gain access to other sources of food (see Box 22). Farming, trading and gathering wild foods are

Box 23

Example of strategies used by refugees to improve access to food

Ethiopian refugees in Somalia were involved in a range of economic activities: grocers and vegetable sellers, coffee, tea house and restaurant owners and butchers, carpenters, and other craftsmen. A group of refugee women established successful soap factories. Where the physical environment permitted, a large number of refugees was engaged in farming, 75% in the camps studied by Kibreab (1994). A group of farmers left a refugee camp, self-settled along the Juba river, and established two villages with four farms. They constructed an irrigation system by hand, built their own health centres and schools, and after only one year of cultivation were close to self-sufficiency (Kibreab, 1994).

Box 24

Low rations and low malnutrition rates indicating access to other sources of food

- ! In Uvira, Zaire, levels of wasting amongst Burundi refugees also remained low despite poor general rations and poorly operated selective feeding programmes. This was attributed to the fact that refugees had access to land and were living in an area where there had always been movement of populations between Burundi and Zaire.
- ! In Liboi, Kenya, the prevalence of malnutrition amongst Somali refugees decreased from 10.6% in December 1992 to 5.1% in March 1993 in the face of a very poor general ration supply. The general ration provided only about 1000 kcal/person/day in December 1992 and January 1993, and 1270 kcals in February. The main reason for the decrease in malnutrition in spite of poor general ration supply was thought to be good availability of food in the market including an increased quantity of milk because of the rainy season.

also common strategies. We have indirect evidence of access to other sources of food in situations where the ration distributed was considerably below the agreed ration, but expected increases in malnutrition did not occur (see Box 23).

Most guidelines recommend that access to other food sources is taken into account in planning rations (UNHCR 1991 and WHO 1995).

Guidance on how to do this is, however, limited. Several guidelines suggest that the level of self-sufficiency needs to be assessed before planning rations. We have already seen in Chapter 3 that attempts to do this have been few. Even if we were able to assess food produced or purchased for the population as a whole, how would we use this to plan rations? It is unlikely that every family or individual would produce or purchase the same amount. Access to food would depend as much on redistribution of additional food. Taking into account economic strategies is difficult, as not all resources may be spent on food, and economic strategies are often uncertain. Moreover, the economy of the camp may actually be based on food distribution. A distinction needs to be made between access to food from crisis response and from strategies that contribute to well-being. Crisis responses may indicate the need for more food rather than less.

UNHCR gives some specific guidance on planning rations that allows for access to other sources of food:

- ! If the population produces its own food, this item could possibly be withdrawn from the ration.
- ! Income generation may add to the diet where there is labour migration, or where refugees are dispersed amongst the local population.
- ! Where fresh foods are available on the market, and trade exists, cereals may be emphasized in the ration (UNHCR, 1991).

Guidelines do make assumptions about access to other sources of food based on the category of disaster victim. In their emergency handbook, WFP makes the distinction between rations for short-term assistance to victims of sudden disasters, rations for refugees and displaced persons, and rations for drought victims. For the first category, WFP recommends three basic foods, but if the range of commodities is limited, the cereal component may be increased. For refugees totally dependent on food aid for long periods, the ration should meet all requirements, including fresh foods and some variation in the diet where possible. Drought victims are assumed to have access to some foods and retain their normal household facilities to process and prepare food, as long as the intervention

is timely. In this case, it is recommended that general distributions are limited to one or two basic food items. In line with the guidelines, drought victims often receive only cereals, displaced populations often receive three commodities (cereals, pulses, oil), and basic rations for refugees may consist of six commodities or more.

With increasing duration of an operation, it is generally assumed that the assisted population becomes increasingly self-sufficient, and rations are reduced. When the food ration is reduced in a protracted refugee operation, the first step is usually to reduce the number of items in the ration, and then reduce the quantity. The first items to be removed are often those that provide micro-nutrients; fresh foods or blended foods. Hence the same assumption is made as that based on categories of disaster victims; when people have some access to other resources, they can complement a basic diet of cereals, pulses and oil, or perhaps cereals only.

Guidelines for planning rations should be used in a flexible and imaginative way rather than rigidly (WHO,1994). It is not possible to give a set of 'rules' for adapting rations according to access to other sources of food, as this will be highly location- and population-specific, and must be based on as much information as possible about the population's access to food. It is only ever possible to estimate access to other sources of food, based on quantitative estimates of food produced and nutritional status, combined with qualitative information on coping strategies, opportunities for income generation and purchase of food and redistribution within the population, as described in Chapter 3. Based on this information, an informed guess will have to be made about which commodities can be adapted. In some situations, it may be possible to remove or reduce one particular commodity, for example blended foods, if the population has access to fresh fruits or vegetables, cereals, pulses, or if it is able to grow these. Partial rations may be appropriate if access to all foods is similar (see Box 24).

As adaptations to rations will be based on estimates, any adjustment in the ration will have to be followed by close monitoring of nutritional status and access to food by vulnerable groups. Monitoring may show that some sections of the population are unable to reach self-sufficiency. A range of rations may therefore be needed, or targeting of rations to certain groups may be necessary. As explained in Chapter 3, targeting of rations based on socio-economic criteria within a population has proved to be impossible. It may be possible to give

different ration levels to populations in different camps, or areas, or otherwise clearly

Box 25

Examples of rations that take into account other sources of food

- ! In the Liberia Regional operation for refugees and internally displaced people, the ration recommended after 5 years was 200 gm. of cereals and 25 gm. oil/person/day, partly because assisted populations were involved in food production and a number of economic activities. For the rural population in Liberia (700,000 IDPs), it was recommended to supply 60 gm/person/day of pulses instead of vegetable oil, due to the local availability of palm oil and lack of adequate protein sources in the rural areas. Vulnerable groups, such as newly arrived IDPs, children under five, and the elderly, received additional quantities of CSB (125 gm/person/day) and cereals (100 gm./person/day).
- ! After 14 years of care and maintenance activities, Afghan refugees in Pakistan were considered almost completely self-sufficient. A reduced ration of 10 kg/person/month of cereals (333 gm/day), and 600 gm/person/month (20 gm/day) was recommended. This was later reduced to 5 kg cereals and 300 gm. oil, followed by distribution to vulnerable groups only.

distinguishable groups (e.g. old-caseloads and new arrivals in the case of refugees), based on degree of self-sufficiency, but not within a camp or community. Within a camp or community, targeting of rations could only be done on the basis of physiological or social criteria, such as children, the disabled, elderly etc (see Box 24).

4.7 Trade and exchange of rations

As well as taking opportunities to gain access to additional sources of food, emergency affected populations commonly trade and exchange the food aid they receive for other more culturally acceptable foods, or to meet basic non-food needs. Food rations are sold by both poor and relatively better-off families, to meet a variety of other needs not provided for by relief assistance. Whereas the poor may sell to pay for milling and firewood, the better-off may sell to diversify their diet (Keen, 1992). Although it is recognized by most agencies working in emergencies that the sale of food aid by beneficiaries is both necessary and desirable in many situations, donors do not support the use of emergency food aid as an

economic resource to meet non-food needs. In most situations therefore, trading of rations cannot be taken into account in planning rations, unless the agency resources the food itself. Where this is not possible, a more feasible strategy may be to remove restrictions on trading, rather than adapt rations.

Box 26

Example of sale of food aid by refugees

In Benaco camp, in Tanzania, sale of food aid by Rwandan refugees occurred on a large scale. There were five markets in the camp, four of which acted as large maize collection sites. Tanzanian traders came from far and often returned maize to the towns from which WFP had transported it to the camp. The traders payed WFP hired drivers to take food out of the camp again. Maize was the most commonly sold item. This can be explained by the fact that this was given in greater quantities than the other commodities, and overregistration of some groups, but also because maize was not a traditional part of the diet of the refugees. Traditional staples such as plantain and root crops were bought with the sale of maize. Maize was provided in the form of whole grain, when there was only one mill available in a village nearby (Jaspars, 1994).

The sale of food aid by beneficiaries often results in a considerable improvement in the quality of the diet. The ability to trade rations was seen as a crucial factor in the prevention of scurvy in Ethiopian refugees in Somalia and in preventing pellagra amongst Mozambican refugees in Malawi. Restriction of trade in these populations led to outbreaks of these deficiency diseases. It is also recognized that food aid is usually the main form of assistance provided to emergency-affected populations, and that food aid has to be sold to meet essential non-food needs.

"the inadequacy of the food ration and food basket provided in disaster situations needs to be recognized, especially in long-term situations. A more liberal policy, with strict control mechanisms if necessary, is needed to permit, at individual and program levels, the sale of food items to generate funds for local purchase of supplementary foods or fuel" (Statement made by B. Szynalski, Emergency Director, WFP at 1988 Conference on 'Nutrition in Times of Disasters').

When food aid is exchanged for other foods in the market however, this usually leads to a loss of nutritional energy as terms of trade between food aid items and local foods are

usually highly unfavourable. Many feel (SCN/UNHCR, 1995) that the failure to take into account trading of rations contributes to the inadequacy of ration size and composition. Only ICRC takes into account the need to trade food aid in planning emergency food rations. They argue that if people are destitute, and food is the only assistance provided, an adequate allowance must be made for this economical use of food aid, remembering that only food eaten can be counted as caloric intake. Commodities recommended to make up ICRC's 2400 kcals working figure include: 13kg cereals, 4kg legumes and 1.5kg oil, per person per month. The argument for increasing rations to allow for trading only applies to situations where populations are totally dependent on food aid.

Rather than adapting or increasing rations to allow trade, necessary trading strategies could be supported by removing restrictions on population and food movements. All too often, the sale of food aid is seen as evidence that the population in general is receiving too much food, and is restricted. Restrictions on movements only have the effect of reducing the rewards to the beneficiary, as restriction of movement may mean having to buy goods at higher prices and sell at lower ones (Keen, 1992).

Host governments may view sales of food aid as undesirable because of negative effects on the local population. In Tanzania, the large Rwandan refugee influx caused an increase in prices of most commodities in the market by 100%, except for those commodities provided in the general ration, whose prices collapsed. As cereals and pulses in the ration had been locally procured by WFP, this had serious consequences for local farmers in the region, who depended on maize and beans for their income.

4.8 Planning rations as an economic resource

In some situations it may be more appropriate to plan rations as an economic resource (see Chapter 2). Indeed, in many emergency operations, the role of food aid as an economic resource is implicit in the rations provided, although not explicitly stated as an objective. For example, the distribution of one or two food items to drought victims could be justified on an economic as well as a nutritional basis. If food aid is intended to cover a food deficit due to drought, this represents an economic resource as, for farmers, food produced is a source of income as well as food, part of which is sold to meet other needs.

In some protracted refugee operations, rations appear to be more an economic than a nutritional resource. For the Liberia regional operation, the WFP project document covering the 5th year of the operation states that "the WFP basic ration cannot be considered as dietary support, but rather constitutes an income transfer and an essential supplement to the families' food intake" (WFP,1995). The rations shown in Box 24 could equally be seen as a form of economic support.

To plan rations as an economic resource, a different set of criteria applies to that used to plan nutritionally adequate rations. These would centre around the economic value of the food, rather than nutritional composition. There are two options for planning rations as an economic resource:

- Include commodities that would normally be produced or consumed by the population.
 Distribution of these commodities would release income that would otherwise be spent on food.
- 2. Include high value commodities, that can be sold, and money spent according to the affected population's own priorities.

In OXFAM's Practical Guide on Food Scarcity and Famine, it is argued that "where the food scarcity problem is one of limited access on the part of certain groups to the available food, it is unrealistic to make quantitative estimates of loss of entitlements. A detailed description of how different groups are affected will help in deciding the composition of the ration. In a situation of loss of entitlements, a single commodity ration consisting of cereals may be more appropriate than a mixed food basket, unless there are serious nutritional problems in the community" (Young, 1992).

Entitlement protection programmes in India, described in Chapter 2, involved a combination of employment schemes and free food distribution to vulnerable groups or the unemployable. If food was distributed, this consisted of cereals only. In Kenya in 1985, 10 kg of maize per person per month, was given to vulnerable groups. In Zimbabwe drought relief in 1982, the official ration for those affected consisted of 20 kg maize per person per month. In Botswana, food distribution to destitutes and other vulnerable groups consisted of a ration of 60 kg of cereals per recipient per year (Dreze and Sen, 1989).

The distribution of high value commodities as a source of income is rare. UNHCR/WFP guidelines for the use of food aid to address food insecurity in Somalia specifically recommend the distribution of high value commodities such as oil and sugar, if the objective is to provide a source of income. These guidelines were produced for the years following the severe famine in 1991–92, when the population was attempting to rebuild livelihoods. Distribution of high value commodities was thought to be appropriate if sufficient staple food was found in the market, at low prices, but household food availability was low. Another situation might be where staple food is not in the market but traders would increase supply if the demand is increased (Jaspars and Ala-Outinen, 1994).

Whatever food is distributed as a source of income, the value of the commodity when sold by the beneficiary is likely to be far lower than the value of procuring, shipping and transporting food aid. If large numbers of people are selling the same commodity, terms of trade between this commodity and items bought in the market will be unfavourable. Distribution of high value commodities could only be done on a small scale, where demand for the item is high amongst the non-assisted population, and where markets are functioning well enough to supply the needs of the assisted population. Markets would need to be monitored closely. Cash distribution has been recommended as a more efficient transfer of resources than food distribution for refugee operations (Keen, 1992).

Box 27

Advantages and disadvantages of distributing high value commodities instead of mixed food rations

Advantages

- ! Attracts food into the area, stimulating local economy;
- ! Allows for quick initial response;
- ! Reduces transport costs;
- ! Reduces destruction of roads:
- ! Stimulates local production, or lessens interference with local food production;

Disadvantages

- ! Increases food prices with possible negative effects on those who are not assisted;
- ! Causes low returns for sale if large numbers of people selling same item;
- ! Increases susceptibility to diversion and corruption;
- ! Does not ensure markets function well enough to supply items to purchase.

4.9 What factors determine the actual ration?

In reality, the actual ration is often substantially different from the ration planned and agreed on. An example of this is shown in Table 2. Resourcing and logistical constraints often determine the actual ration that can be distributed, rather than technical considerations of nutritional requirements and access to food. One of the major factors influencing the actual ration is the accuracy of estimates of the size of the affected population for resourcing purposes, or problems with registering the beneficiary population. Accurate registration and estimation of beneficiary numbers in emergencies is extremely difficult, and is a subject that will be discussed in more detail in a subsequent Good Practice Review.

There are many situations where even the ration agreed on is not consistent with theoretical needs. In planning rations, some compromise always has to be made between what is ideal and what can in fact be obtained in sufficient quantities and be delivered in time, making responsible and reasonably economic use of the resources available (WFP,1991).

The most common reasons for inadequate general rations in emergencies, are briefly summarized below:

- ! Underestimation of the size of the affected population used for resourcing food aid, because:
 - In the initial stage of an acute emergency the size of the affected population has to be estimated very quickly.
 - In protracted operations, population estimates used for resourcing food cover long periods, and assessments are usually done well in advance of the period covered by the assessment.
 - FEWS cannot predict the number of people in need of food aid, and estimates of the effect of drought on a population have to be made at least 6 months before food aid is needed.
- ! A larger number of people registered than numbers used to supply food. Overregistration may cause large differences between estimates of the actual population and the population registered for food distribution. This is not accepted by donors of food aid, and food may be supplied for the estimated actual population, regardless of whether the population is re-registered or not.
- ! The political priorities of host or donors governments may influence the timeliness and scale of response. For example, host governments may be reluctant to declare a state of emergency or alternatively exaggerate the extent of the emergency in order to attract more aid. Donor response often depends on the political relationship with the recipient country.
- ! Lack of resources for the main UN agencies is the overriding constraint in the provision of adequate rations. This includes a lack of cash to pay for local purchase of food, institutional costs, and in-country transport. In addition, advance donor pledges to WFP's emergency food reserve are frequently insufficient or tied, necessitating special emergency appeals.

Table 2
Agreed versus actual ration scales due to resourcing and logistical constraints for Rwandese refugees

	Agreed	Ration scales in March 1995		
Commodity	WFP/HCR	Bukavu	Goma	Tanzania
Cereals	420	350	100	360
Pulses	120	120	50	100
Oil	25	20	10	25
Blended food	50	20	10	25
Salt	5	5	5	5
kcals	2287	1883	990	1900

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Source: Minutes of UNHCR Food Coordination Meeting for the Great Lakes Region, in Nairobi, March 1995.

ution programmes are provided in-kind. The type of commodities in the ration are therefore often determined by agricultural surpluses of the major donors such as the US, Canada, Australia and the EU.

- ! The late delivery of food aid, as a result of the long lead times from the initiation of a request to the arrival of commodities at the distribution sites, typically 5 to 9 months. To reach the actual destination could easily take another 3 months. WFP's response is often determined by its ability to borrow food from other programmes, government stocks or purhase food locally.
- ! Organization and coordination problems within and between international relief agencies have constrained programme effectiveness.
- ! Logistical factors such as inaccessibility of areas due to insecurity or poorly serving infrastructure frequently hinder the supply of food aid required.

4.10 Strategies for dealing with an inadequate food supply

In reality, the commodities available for distribution may be inadequate to constitute the well-balanced, nutritionally adequate ration originally planned. Some commodities may be missing, which means the ration scales may need to be altered or attempts made to resource missing commodities locally. When the overall quantity of food is insufficient, a choice has to be made as to whether everyone should receive reduced rations, or whether food should be targeted at particular groups. Practitioners may also find themselves in situations where food is available in country, but not all can be transported to the intended beneficiaries and food delivery has to be prioritized.

If the actual ration has to be set too low because of unacceptable over-registration, the total quantity of food may in fact be enough for the actual population, but there are too many beneficiary documents in circulation, or too many multiple registrations on beneficiary lists. Dealing with problems of registration, and manipulation of food distribution, are discussed in Chapter 5 on implementing food distribution.

Insufficient overall quantity

Beneficiaries may be able to resource the shortfall themselves. The first strategy is therefore to investigate the coping mechanisms that the population has developed to gain access to other sources of food. However, crisis responses involving unacceptable hardship must be distinguished from strategies that contribute to well-being. Assessing the nutritional status of children will not necessarily be sufficient to estimate the impact of low rations, as in some populations children are preferentially treated in times of food scarcity.

In the early stages of an acute emergency, populations are least likely to have access to other food sources, and a decision has to be made as to whether to reduce rations for everyone, whether to target the limited available food to certain groups or individuals only, or whether to use a combination of the two.

In the early stages of an acute emergency, the immediate priority is to save lives, and ideally those whose lives are at greatest risk should be targeted with higher rations.

Anthropometric status of children is often used to target those at highest risk of dying. Children below 70% or 80% weight-for-height may be targeted, depending on the presence of other health risk factors. We have little or no information on adult anthropometry and risk of death, and in situations of severe shortage, adults may have to be targeted based on clinical signs of starvation. Alternatively, families with malnourished children could be targeted, as was done by SCF in Ethiopia in 1984.

Any targeting strategy may be controversial, and create resentment, leading to violence. In large concentrated camp populations, especially where control over food distribution is politicized, targeting may pose a security risk. The realities of targeting may mean that a reduced ration has to be distributed to everyone in the affected population (see Chapter 3).

When the 1900 kcals figure for maintenance of energy requirements was recommended (see section 4.2), 1500 kcals was recommended as the minimum for survival (USAID, 1989). This figure was rejected for planning rations, but could be used to indicate at what level of food shortage a targeting strategy becomes essential. Even in a highly politicized situation, the use of physiological targeting criteria may seem the least controversial. The distribution of cooked food rather than dry rations, is a way of both reducing rations, and self-targeting, whilst causing least resentment.

As well as immediately implementing one of the strategies described above, it is worth finding out if expensive commodities are being resourced, that can be replaced by cash. Cash could then be used to effect quick local purchase of food in larger quantities than would have been resourced of the more expensive commodity.

Missing commodities

When the population is not able to make up the ration shortfall, the strategy adopted will depend on which item in the ration is missing, or available in insufficient quantity. If basic commodities such as cereals, oil, and pulses are missing, the possibilities for commodity substitution should be investigated, so that the energy value of the ration is maintained. Food tables in the back of most guidelines give the energy value per 100gm. of most commonly provided commodities. Most cereals have an energy value of 360 kcals/100gm., most pulses 335 kcals/100gm., and oil has 900 kcals/100gm. If oil quantities are insufficient,

children should receive priority treatment, as they need an energy-dense diet to meet their requirements. Where rations are regularly traded, the cash value of the commodities could be taken into account, instead of the nutritional value. Oil and sugar are generally the items of highest value, so cereals could be replaced by relatively small quantities of oil or sugar, but much higher quantities of cereals or pulses will be required to substitute shortages of these high value commodities, than if substitution was based on nutritional value. Ideally, one basic commodity should be replaced with another, but in extreme cases, basic commodities have had to be replaced by special foods such as biscuits or blended foods, for example in Goma, Zaire.

If micro-nutrient rich foods are missing from the ration, possible strategies that should be investigated include: local purchase of micro-nutrient rich foods (see Box 20), for example groundnuts if pellagra is a risk; local purchase of blended foods; local fortification of food aid (see section 4.4); or mass distribution of vitamin and mineral tablets. The distribution of tablets should only be considered as a last resort.

Insufficient transport capacity

Food may be available in-country, but due to problems of access or limited transport capacity, it may not be possible to deliver the agreed ration, and commodities have to be prioritized. Depending on the situation, it may be appropriate to prioritize on the basis of energy density, nutritional value of the food, or the cash value. Energy dense foods are those which contain a high amount of energy, for a relatively small volume. These include items such as oil, but also high energy biscuits and blended foods. Where food has had to be airlifted, and populations have little or no access to other foods, biscuits and blended foods have been prioritized, as they have a high nutritional value as well as being energy dense. Where these items were not available, and/or the population had some possibility for exchange, cereals and oil have been prioritized, giving a lower ration of cereals, and an increased ration of oil. If exchange of food by the local population is possible, foods may be prioritized based on cash value alone. For example, in South Sudan, salt had an extremely high value, and was widely used as a 'currency' for obtaining other food or non-food items.

Informing the population

In all situations of food shortage, it is important to inform the population. If the beneficiary

Box 28				
How to deal with an inadequate supply				
Problem	Strategy			
Insufficient overall quantity	Investigate coping mechanisms Reduce ration for everyone Target those at increased risk of dying Implement combination of reducing rations and targeting Distribute cooked food Investigate if expensively resourced commodities can be substituted for cash and/or local produce			
Missing commodities1. Missing basic foods2. Missing micro-nutrient rich foods	 Investigate coping mechanisms Commodity distribution so that energy value of ration is maintained Distribution of vitamin or mineral tablets Local purchase of blended foods or nutrient rich foods, eg. groundnuts to prevent pellagra Local fortification of food aid 			
Insufficient transport capacity	Prioritize items of high energy density or nutritional value, eg. oil, blended foods, biscuits Prioritize items of high cash value, depending on possibility for exchange by beneficiaries eg. oil, salt			

population knows they will receive only partial rations for a period, they may be able to plan for this, and develop alternative ways of gaining access to food. Resentment and violence is less likely to occur if the population knows what is happening. The beneficiaries may be able to provide invaluable perspectives on which targeting strategies are most acceptable.

5. The Implementation of Food Distribution

5.1 Introduction

In most food aid programmes, attention is focused on resourcing, logistics, and typical nutritional programmes such as nutritional surveillance and supplementary feeding, rather than the actual implementation of food distribution. The lack of significance attached to the implementation of food distribution stems from the perception that food distribution is a simple matter of handing out food, which requires little thought in terms of planning, management and monitoring. However, the implementation of food distribution is a crucial aspect of the food distribution process.

"the problem of relief food distribution is not to design a nutritionally adequate ration, but to ensure that the population has access to it" (Rivers and Seaman; at 1988 conference "Nutrition in Times of Disaster").

Food distribution systems can easily be abused or manipulated if not planned well, with disastrous consequences. Poorly managed food distributions have contributed directly to malnutrition and death in numerous situations. In refugee populations, malnutrition was attributed to failure in the management of food distribution as long ago as the operation for Cambodian refugees in Thailand in 1979, and as recently as operations for Somali refugees in Kenya in 1992/3, and Rwandan refugees in Zaire in 1994. Several agencies are now trying to address this problem by developing guidelines for food distribution, for example UNHCR, CARE and Oxfam. At present however, agency guidelines give little detail on how to implement food distribution once decisions on who needs assistance and on what to distribute have been taken.

5.2 Principles of implementing food distribution

Although procedures for implementing food distribution should vary according to the local context, there are certain principles which apply to all food distribution systems.

All food distribution systems should be fair, equitable, regular, accountable, and transparent⁹. Beneficiaries of food distribution should know the rations they are entitled to, the method of distribution, and the distribution schedule. The more transparent the system, the fewer the opportunities for abuse leading to unfair distribution practices. Those who distribute food should be accountable to the beneficiaries as well as to the donors of food aid.

All food distributions involve coordination, logistics, actual distribution, monitoring, and reporting, which are carried out by a range of actors, including the government, UN agencies, NGOs, local partners and the beneficiaries of food aid. Good management of food distribution systems therefore requires appropriate allocation of responsibilities between the different actors, and authority and decision-making must be clearly defined.

A single controlling authority should be responsible for policy matters, determining overall priorities. Mechanisms for information exchange and coordination between all actors must be well planned (WFP,1991). Coordination committees composed of all major actors are necessary both at national level for policy and planning, and in major operational areas for operational decisions.

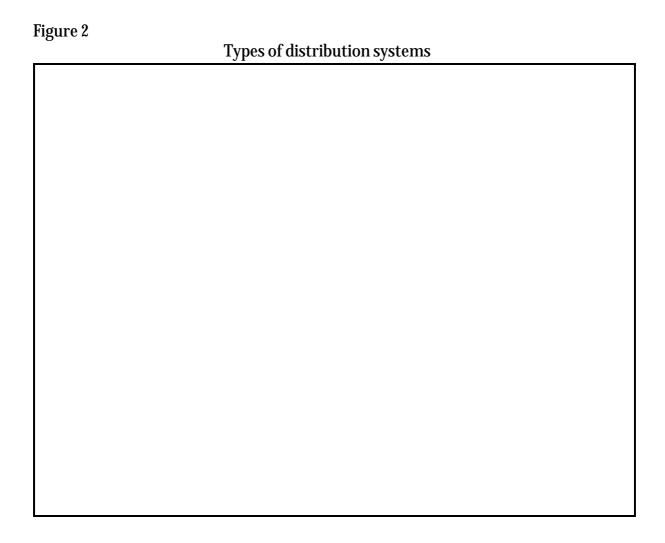
There are common elements in the implementation of food distribution, which include the estimation of beneficiary numbers, selecting the type of recipients, type of beneficiary documents, determining the physical organization of food distribution, as well as monitoring.

Information on the beneficiary population is essential for designing a distribution system. No food distribution can start without an estimate of the size of the population. The size of

This statement was made by the "working group on the Management of Food Distribution", at the UNHCR nutrition workshop held in Addis Ababa, October 1995. Much of this section is based on the proposals of the working group. Discussions of the working group were based on a background paper prepared by S. Jaspars "The Management of Food Distribution to Large Refugee Populations". A report of the workshop is being prepared by UNHCR.

the population also influences the choice of recipient and the physical organization of the distribution, such as the number of distribution points. Knowledge of the socio-political context is crucial in deciding who manages the distribution, or who should be the recipient of food aid, and whether registration by beneficiaries is adequate.

Beneficiary participation should be encouraged in food distribution, which can vary from programmes where the community manages the entire programme or parts of it, to participation in 'food committees'. Food committees are often recommended to provide a forum for discussion or information on the distribution. Participation in itself is not necessarily beneficial, as this depends on who participates. Unless participation is clearly defined, the most active roles tend to be taken up by more powerful members of the society or the more educated members of the population, usually men. The key role women play in ensuring the nutritional well-being of families needs to be recognized, and the system should support this. This support is not necessarily guaranteed by distribution to women, or by specifying a gender balance in food committees.



Food distribution systems can be classified in a number of ways, none of which adequately reflect the variety possible. Figure 2 illustrates the different possibilities for distribution. In general, the national government, an NGO or the Red Cross, act as implementing agencies for a food aid donor. These can choose a variety of recipients: local government, traditional leaders, newly established groups or leaderships, or families or individuals. Food distribution systems have been classified as direct or indirect, centralized or decentralized, according to who manages distribution, or by type of recipient. In this review, we describe distribution systems using the latter two. In some cases, recipients are also 'managers' of distribution, for example leaders may receive food in order to distribute it to families. UNHCR has recently decided to classify distribution systems according to whether recipients are individuals, family heads or community leaders. In reality, emergency response is often a combination of government, community, and agency activities. This review describes the different distribution systems, and goes on to examine the various elements of each system.

5.3 Who manages food distribution?

Government-managed distribution

Food may be distributed to affected communities or families by local government or public distribution systems. WFP recommends that "maximum use should be made of existing organizations and structures within the affected localities, with adaptations and redeployment as necessary" (WFP,1991). Government intervention however more frequently involves mechanisms for price stabilization than large-scale free food distribution. Along with price stabilization measures such as sales of food through public distribution systems, and subsidized food sales through fair price shops, free food may be distributed to selected vulnerable groups through schools, social welfare, clinics..etc.

Box 29

Examples of government-managed distribution in Africa

! During the Western Relief Operation, in 1988 in Sudan (distribution of grain to Darfur, Sudan), grain was bought within the country from the Agricultural Bank of Sudan, transported by local contractors, and distributed to village level by local government. The largest part of the relief grain (85%) was sold at subsidized rates through the local government sugar cooperatives. The remainder was intended for free distribution to the poorest through the Sudanese Red Crescent (Buchanan-Smith, 1989).

In some countries, special intersectoral committees have been set up for the distribution of relief, for example in Ethiopia and Sudan. At the local level, District Famine Committees and/or Village Food Committees, may be established for selection of beneficiaries of food aid, distribution, and coordination of relief. Village committees often include village elders or other community representatives as well as government officials.

The extent of government involvement in relief operations varies considerably from one emergency situation to another. Whereas in India, emergency response is almost entirely in the hands of the government, in many emergencies in Africa, the role of government has often been limited to coordination. In the long term, sustainable and efficient famine

prevention and emergency response can only be possible with close involvement of the governments of the countries concerned. As emergencies often occur in the same areas, and are increasingly protracted in nature, it has been recommended that national governments should be supported in developing a capacity for preparedness and management of relief operations. This includes intersectoral training at all levels, integrated human resource development, and possibly the development of regional training facilities (WHO,1994; ACC/SCN, 1995).

Community-managed distribution

A variety of distribution methods have been termed community-managed distribution. In some, all aspects of food distribution are managed by the community, whereas in others, the community participates but only manages part of the programme. In entirely community-managed programmes, traditional leaders register beneficiaries and distribute food to families according to their perception of need.

In partly community managed programmes, community representatives manage one aspect of the programme or participate through food committees. For example, an agency may register beneficiaries and monitor, whilst the community distributes. Alternatively, community representatives register beneficiaries and the agency distributes. Food committees may participate in planning and monitoring the distribution. Food committees have sometimes been established according to criteria given by an external agency. The agency may, for example, specify the inclusion of women, and/or the exclusion of government officials and traditional leaders. This has been done where distribution through traditional leaders or government had led to diversion and corruption in the past (Oxfam, 1995).

UNHCR increasingly distributes food to newly created refugee groups, rather than groups based on traditional social or administrative structures. Groups have been created based on family size, camp section, etc. Food is provided to the group as a whole, or to group leaders, and group members then divide the food amongst themselves. An information campaign on family ration entitlements is essential for this system to work well.

Box 30

Examples of community-managed distribution

- ! During the 1992 drought in Kenya, Oxfam distributed food aid with the assistance of newly established relief committees. Members of the committee were selected by the community, but Oxfam specified that there should be equal numbers of men and women on the committee. The main role of the committees was to provide information on, oversee and manage food distribution. Registration of individuals was done by Oxfam, and distribution was supervised by monitors employed by Oxfam.
- ! In refugee camps in Ethiopia, Zaire and Tanzania, food was distributed to groups formed according to their family size, rather than traditional structures. This could only be done after a registration. For example, refugees are divided into groups of 20 families, each having a family ration card indicating the same family size. Commodities are handed over to the group, and food is divided amongst the group, in the presence of agency distribution staff. The method of dividing the ration is determined by the group (UNHCR, 1995).

Agency-managed distribution; distribution direct to families or individuals

Implementing agencies often distribute food directly to families. This requires registration of beneficiary families, sometimes limited to beneficiary lists, but often linked with the issuing of ration cards. A family member has to collect the ration at a distribution site, where the family ration is weighed or measured (scooped) by agency staff, after presentation and verification of the ration card. Distribution to individuals has mostly been in the form of cooked food, in a very limited number of situations, such as conflict situations and the very early stages of an emergency (see section 5.4).

Many variations on agency-managed distribution systems are possible. Especially in the absence of a registration, a compromise between what is ideal and what is possible may have to be made. For example, in the initial stages of an emergency, food has been distributed direct to families, based on lists provided by community representatives. Distributions using family ration cards were made more flexible by organizing ration shops, where rations could be collected at any time within a specified period (UNHCR, 1995).

Box 31

Examples of agency-managed distribution

- ! In many camp situations, as well as other emergencies, food is distributed direct to families, using ration cards. The number of refugees is determined by a registration, and refugees are provided with family ration cards. Food is distributed to heads of families, according to family size, by an implementing agency at a centralized distribution point, upon presentation of ration cards. The order of distribution may be by family size or section in the camp. A separate agency may monitor the ration received for a randomly selected number of families.
- ! In Thailand, UNHCR organized distribution to Cambodian refugees according to demographic distribution. The camp was surveyed to establish the ratio of women (>10 years; 118 cm) to the average family size. Ration tickets were issued to women over this height at periodic head counts. Food rations were pre-packed according to this ratio, and the distribution intervals (UNHCR, 1995).
- ! In Somalia in 1992, ICRC distributed cooked food to an estimated 1 million people through 1000 kitchens to overcome problems of looting and theft. Distributing cooked food had advantages in terms of: reaching the intended beneficiaries, self-targeting (only those who really needed it came to get food), overcoming discrimination. Two cooked meals were provided each day, providing a total of 1900 kcals. Adults and children received the same, allowing for catch-up growth in children. ICRC was unable to provide fresh foods, but in some locations, members of the local population were able to provide vegetables and spices to supplement the ration. ICRC also distributes cooked food in Angola, for similar reasons, as well as low food supply (Alain Mourey, personal communication, 1995).

Implementing agencies do not necessarily distribute food directly to families, but may simply assist in secondary transportation to the distribution point, supervision and reporting.

5.4 Deciding on the type of recipient

Recipients in the different distribution systems include traditional leaders, government officials or institutions, food committees or groups, households, or individuals. Each option has its advantages and disadvantages, in terms of resources (funds, time, space, staff), compatibility with existing social structures, the risk of abuse, and ease of monitoring. These should determine what is desirable for a particular context. What can be done is usually a compromise between what is desirable and what is feasible. Practical feasibility is often determined by the socio-political context, the stage of the operation, availability of resources (including food supply), security conditions and access, the size of the population etc. The advantages and disadvantages of distributing to different recipients are shown in Box 32.

Local Government

Agencies generally recommend that use should be made of existing infra-structure and community structures where they are functioning to the benefit of the beneficiary population. Governments can draw on extensive networks of information, administration, communication, transport and storage at short notice (Dreze and Sen, 1989). The success of entitlement protection programmes, in for example Botswana, Cape Verde, Kenya, and Zimbabwe, was a result of government efforts (Dreze and Sen, 1989). However, if the emergency affects large populations, direct distribution of food aid to affected families may be beyond the capacity of existing government structures. Whole countries or provinces may be involved, or regions may be overwhelmed by a large refugee influx. In this case, the assistance of external agencies may be necessary. Alternatively, local infrastructure can be reinforced. In situations of internal conflict or government oppression, governments are not expected to act in the interests of their own people and distribution to government institutions would be inappropriate.

Traditional Leaders

Distribution of commodities in bulk to traditional leaders is generally only recommended if the community is small, community structures are intact, and community representatives can be identified who will distribute food equally amongst the population

in need. Knowledge of the existing social structures and power relations within the community is therefore essential before deciding to distribute to traditional leaders.

Abusive power relations may exist within assisted populations, particularly in complex political emergencies, where more powerful groups may oppress or exploit weaker groups (Duffield, 1994). In this case, we may want to undermine existing power relations, by selecting new groups or leaders, or distributing directly to families.

In some situations, food has to be distributed to leaders not because this is the preferable option, but because it is the only practically feasible option. In the initial stages of the refugee influx, food is often distributed to leaders due to lack of time, resources, and because the population has not yet been registered. In conflict situations, food has been distributed to leaders due to restricted access. If distribution to leaders is implemented in situations where social structures have broken down, or where abusive power relations exist, the risk of abuse is high. In conflict situations, there is a high risk of diversion by combatants. Distribution to leaders in such situations is usually seen as a short-term solution only, to be replaced as soon as possible by distribution to new leaders or groups, or direct to families.

Distribution to dispersed populations is often done through traditional leaders or community representatives, because distribution to families directly would be impossible. Registration would be difficult, especially for refugee populations who are integrated with the local population. Distribution to individual families in dispersed populations would be labour and time consuming either on the part of the agency or the beneficiaries.

New leadership

Oxfam found that distribution by village food committees was a good intermediate approach between distribution directly by agency to families, and distribution to traditional or political leaders. Village committees encouraged a sense of identification with the programme, promoted rebuilding social ties, and increased the agency's understanding of local society. Village committees also introduced a degree of accountability (Oxfam, 1995). UNHCR has created refugee groups based on family size or section of the camp, following problems of abuse with other distribution systems. Re-registration and re-issuing of ration cards was necessary before creating the new groups. The externally created groups

managed the distribution to some extent, and there was no need for large numbers of distribution staff as refugees divided the food amongst themselves. Moreover, there was no reliance on community structures that did not exist, and abusive power relationships could be undermined.

Household/family

Food is most commonly distributed directly to families in refugee or displaced camps, where the population is large but accessible, and where existing community structures have broken down. Some agencies recommend distribution to families as the ideal form of distribution (WFP,1991). Registration and the issuing of ration cards may give initial control over beneficiary numbers. Scope for abuse remains, but the risk is reduced (see section 5.8). Often, food is distributed direct from agencies to families because of a lack of knowledge about the beneficiary population, rather than because this system is most appropriate. When social structures are intact, food distribution to families may be inappropriate, as agencies may unwittingly undermine valued and respected social structures within the population.

Box 32 (continue	· ·				
Recipient	Chaosing the type of recipient fo	r food distributiones			
Recipient Families	Adyantages Efficient for large,	Disadvantagets			
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Government	ihfhaistalicoute slufficidatine f ! Builds alpeloscal capacity.	icialitynIttetle beneficiary participation. ! Highegistriftlionahienfeasary.cture			
	! Undermines abusive pov	ver n leeRbsttorbeandis foorces kary.			
	relations.	! Government may have political or			
	 Less risk of unequal distribution. 	financial motives for controlling food distribution.			
Traditional	! Social and cultural values of	f			
leatheirs als	the Npopopation respected tic				
(cooked food)	! Easdisioninitiad sitonges of	plo Vinned atisum ės gential.			
	elm vog eeg is tant do mei is ped sed! On ly ac ge c i i qui i e sme all fot act aff an				
	plopholatitions.cards needed.	cor equipritiers t.			
	! Lowasystnonitoring.	! Ris Do fya possible o o iad starll groups.			
	! Quakercomes problems of	birdke podswithlity for exchanging			
	•	neds Diffractituts, snoullitureds have to be			
	ne Selfatargeting. ! No reliance on non-existent	met.			
	social structures.				
New leadership	! Undermines abusive power	! External registration needed.			
-	relations.	! Ration cards may be needed.			
	! Lower risk of abuse.	! Need for information campaign.			
	! Increases agency				
understanding of local society.					
	! Some participation.				
	! Self-monitoring.	har			
	! Low cost, because low number of distribution staff.				
	! Crowd control.				
	. Olowa collidol.	continued overleaf			

Agencies differ in their recommendations on whether male or female members of the household should receive the food ration when food is distributed to families. In polygamous societies, distribution to women may be more appropriate as these may represent separate households (Oxfam, 1995).

Distribution to women has also been recommended because women are traditionally responsible for food management within the household, and because female-headed households might otherwise be left out. However, women are often responsible for a whole range of activities in the family, and having to wait for a long time to collect food can have negative effects, for example in terms of childcare. Manipulation of food aid due to power imbalances cannot be overcome by distribution to women, and may simply put women at risk of having food forcibly taken away from them.

Individuals

Distribution of cooked food to individuals has only been implemented in a limited number of situations, because of the high cost in terms of staff and materials. Cooked food has been distributed in conflict situations because it reduces the risk of abuse, discrimination and theft, and in the early stages of an emergency when beneficiaries do not have access to fuel or cooking equipment. Cooked food distribution is generally not recommended because it may be culturally unacceptable, hygiene is difficult to ensure, food intakes may be lower than intended, and it is difficult to meet the needs of small children who need meals regularly (WHO, 1994).

5.5 Is registration necessary?

Some form of registration is necessary for all food distributions, but the type of registration may vary from simply estimating the total number of beneficiaries, to collecting detailed information on each family and/or individual. The method of registration used is closely linked to the system of distribution adopted, and as for food distribution, either communities themselves, or external agencies, can register the potential beneficiaries of a programme. In most programmes, an initial list of beneficiaries is produced with the assistance of community leaders, or by government officials. Registration is a continuous exercise, requiring regular verification by checking registration data, and comparisons with other estimates of population numbers.

Simple estimation of beneficiary numbers by community representatives may suffice when communities are small and intact, if the operation is expected to be of short duration only

(UNHCR,1994; WFP,1991), if refugee or displaced people are dispersed, and living integrated with the host population (UNHCR,1994), or if the affected populations are nomadic (Mitchell and Slim,1990). Registration may not be feasible if access is restricted, in the emergency phase of an operation, when the beneficiary population changes, or if the population is disorganized.

If food is to be distributed to families or newly created groups in large populations, or if detailed information is necessary for programme planning or protection purposes, a formal family registration is necessary. UNHCR recommends registration as soon as possible for large camp based populations (UNHCR, 1994). An external family registration for food distribution is often judged necessary if beneficiary estimates obtained by other means appear incorrect or if the system previously used has been abused. Methods and rationale for registration will be discussed in detail in a subsequent Good Practice Review.

5.6 Deciding on the physical organization of the distribution system

The physical organization of food distribution, or the method of actually handing out the food, involves decisions on whether ration cards are needed, whether food should be 'scooped', how often food should be distributed, how many distribution points are needed, and on the layout of distribution centres. The decision made on type of recipient or on the management of the distribution, already determines much of the physical organization.

Ration cards

External registration of families is often linked to the distribution of family ration cards. Ration cards facilitate control over distribution, and represent a guarantee of entitlement to the beneficiary. Ration cards are frequently used when food has to be distributed to large populations. In small populations, lists of names to call out during distribution may suffice, but for large populations, lists become unmanageable and using them for food distribution involves long waiting times.

WFP recommends the use of ration cards in distributions that continue for more than a month and in refugee and displaced operations (WFP,1991). UNHCR recommends the use of

ration cards as this fixes the number of beneficiaries, and makes programme planning, targeting vulnerable groups, and monitoring easier. The ration card should specify: address (village, camp sector), name of head of family and total number of family members. A stamp or mark is needed to prevent forgery.

Scooping

Direct distribution to families usually necessitates the 'scooping' of rations. Scoops measure rations by volume rather than weight. Rations could be measured according to weight, but this would be a very lengthy procedure (UNHCR, 1995). Weighing has its advantages when the ration scale changes from one distribution to another, or the frequency of distribution changes. Both scooping and weighing is labour-intensive in terms of distribution and supervisory staff.

A common misconception is that scooping of rations ensures the fairness of distribution. Scooping may in fact only provide an illusion of control to the distributing agency, hiding widespread abuse which consequently is not acted upon. In addition, rations can be underor over-scooped. UNHCR no longer recommends scooping of rations as an ideal way of handing out food.

Distribution interval

Rations are commonly distributed weekly, bi-weekly or monthly. The more frequent the distribution, the greater the cost in terms of staff time and transport. The distribution interval needs to be determined according to the quantity of food that recipients can carry, the distance people have to travel to collect food, available food stocks, and logistic capacity. Intervals less than 1 week are administratively cumbersome, and intervals of more than 2 weeks may involve more food than the beneficiary can carry (USAID, 1989). In general, 1–2 week intervals are recommended for concentrated populations, and 1 month for scattered populations, or in protracted operations. Bulk commodities are sometimes distributed more frequently than other commodities.

Irregular distribution intervals can undermine the confidence of the beneficiaries and increases the need to cheat (UNHCR, 1995). In the initial stages of an operation it is often

camp food stocks that determine the distribution interval. For example in Tanzania, three day rations were given to Rwandan refugees for the first months of the operation because of low camp stocks.

Number of distribution points

The number of distribution points is influenced by the size of the camp or area covered, whether the population is camp based or dispersed, and on resources. Distribution points should be close to the beneficiaries and located in such a way as to minimize the number of people who attend any one distribution point at any one time (UNHCR,1995). Access by road is essential. UNHCR recommends that distribution is decentralized, rather than centralized, and that for dispersed populations, beneficiaries should not have to travel more than five km. The final choice will be a compromise between resources available, convenience for the beneficiary population and access.

UNHCR recommends at least one distribution site per 20,000 people in camp situations (UNHCR,1995). In reality, there may be fewer points in refugee camps; refugee camps in Kenya had only one distribution point for populations of 30–40,000. More distribution points are generally used in programmes for dispersed populations; World Vision's food distribution to drought-affected in Malawi, in 1992, had 11 distribution centres for 85,000 beneficiaries.

Layout of distribution centre; crowd control

When populations are still home-based, existing community infrastructure can be used as distribution sites, such as churches, schools and community centres (CARE, 1995). In camps, a distribution centre usually has to be established. When distributing food to large populations, the layout and organization of the distribution centre is crucial for crowd control. Experience has shown that it is better to separate entrance and exit, that layout of the queuing areas should minimize overcrowding, and that waiting periods should be minimized. Where large numbers of people come to one distribution site, several lines of people may have to be served simultaneously, with beneficiaries being clearly informed which line to join. According to WHO, each line will require 1 clerk to check cards, 1 person to distribute each commodity and at least 2 crowd controllers (WHO, 1994). If the climate is hot,

and distribution takes a long time, it is necessary to provide shelter, drinking water and toilets.

Staff requirements

The staff required for distribution depends on the type of distribution system. Guidance on staffing and payment generally refer to agency-managed distribution. UNHCR recommends two distribution staff per 1000 people (UNHCR, 1995). WHO recommends that to eliminate personal bias, favouritism, and vulnerability to pressure, reliable individuals may have to be recruited from outside the affected community, especially for positions such as storekeeping and administration (WHO, 1994).

5.7 Food distribution monitoring

Monitoring is an essential component of any distribution system. The type of monitoring will depend on the type of distribution system, and availability of resources.

The aim of monitoring is to assess on a regular basis whether the objectives of food distribution are being achieved. This includes the delivery of food to its intended destination, efficient and fair distribution, and use by recipients that improves nutritional and health status or food security. How food is used often depends on the acceptability of the item, and the possibility or necessity of sale or exchange of food aid. Depending on who monitors, monitoring will be a combination of analysing reports on food movements and distribution, supervisory visits, physical checks and surveys, as well as systematic cross-checking of all sources of information. Monitoring findings must be reviewed immediately, reported back to the controlling authority, and action taken where necessary.

The local government is in overall charge of monitoring the progress of operations. WFP country offices are required to monitor deliveries of WFP supplied food and observe its distribution, and may also monitor food aid supply through other channels. In refugee situations, UNHCR is responsible for monitoring changes in refugee numbers, food distribution and nutritional status. The latter may be contracted out to an NGO. Each agency is obviously responsible for monitoring its own implementation. For agencies which

 $ICRC, monitoring\ may\ be\ internal\ only.$ However, more commonly, food is provided by a donor or UN agency and distributed by an NGO or local government body, in which case reporting on the distribution will be a requirement of the food donor. In general, donor reporting is limited to the delivery of food to its intended destination and information on food use and impact is rarely requested. In fact, except in refugee situations, there are no clear agreements on monitoring impact.

Monitoring beyond food delivery depends entirely on the individual agencies present.

Monitoring delivery, stocks and food transfers

Information on WFP food delivery is contained in shipping documents, dispatch reports, and

Box 32

Reports in emergency food operations

1. Standard WFP operational reports:

- ! Current food requirements in each distinct operational area (number of beneficiaries, projected requirements);
- ! Current stock levels of all commodities in ports and at distribution points;
- ! Current status of confirmed food aid shipments, and outstanding pledges;
- ! Actual reported distribution/use of commodities in each area/operation;
- ! Projections for port off-take and deliveries to each operational area month by month during the next few months, and the consequent stock levels in the ports and each operational area. (taken from WFP, 1991).

2. UNHCR/WFP:

- ! Food Availability Status Report. This report combines information on supply and distribution, and makes projections based on estimated population figures for the following 6 months, the agreed ration scale, in-country stocks and expected supplies, to identify potential breaks in the food pipeline. WFP/UNHCR reporting on refugee food assistance operations is likely to change in the near future.
- 3. Distributing agencies (NGOs)/UNHCR:
- ! Distribution reports, which should have information on the population fed and the total amount of food distributed (as well as balance before and after distribution, and losses). Standardized reporting procedures are being developed by UNHCR for refugee situations.

4. NGOs:

- ! Food Basket monitoring reports. Information from weighing a sample of rations distributed:
- ! Anthropometric survey reports. Proportion of children under five malnourished, and/or mean nutritional status of children under five.

documents on confirmed and unconfirmed donor pledges. For WFP operations, information on WFP food supply is summarized on the Food Availability Status Report (FASREP), which combines information on food distributed, population projections, in-country stocks and expected supply, to identify potential breaks in the food pipeline.

The FASREP, although intended to reflect overall food supply and distributions for particular operations, generally only provides information on WFP food. This means that for most operations, the FASREP does not accurately reflect "food availability status". Food may be provided bilaterally, or through local institutions or organizations. So a far larger number of commodities may be provided, than is indicated on the FASREP.

Stock reporting should be done at each stage of the distribution network, which may include checks at a primary warehouse near the port of entry, at extended delivery points, close to the distribution site, and at the distribution site itself. This consists of tracking receipts, issues, and stock balances. At warehouses and/or distribution sites, stock ledgers with this information must be maintained, with a ledger for each commodity (CARE, 1995). The amount issued from the store should correspond to the number of people to be served and the ration scale used. Periodically, stock ledgers should be verified for accuracy by physical inventory counts. Checking food receipts at the distribution point will require at least a random weighing of bags received, as well as counting the number of bags. Monitoring registration data

The accuracy of registration data can be checked occasionally by verifying ration cards, when people come for distribution, and by various methods of estimating the population size. The latter include counting dwellings in a random number of sections in a camp, counting the number of people in a random number of dwellings, or extrapolation from the number of under fives. Community health workers can sometimes also give an accurate estimate of the population in sections/areas for which they are responsible. It also includes the use of aerial photography. These methods are described in more detail in the UNHCR Registration Guidelines (UNHCR, 1994) and will be described in a subsequent Good Practice Review.

Monitoring the implementation of distribution

Agencies that distribute food produce a report on each distribution. These reports have information on the size of the population that received food at a particular distribution, and the total quantity of food distributed. Changes in the population fed, differences between population at distribution and other estimates, can be monitored from these reports. Percentage over- and under-distributions can be calculated by comparing the quantity of food that should have been distributed according to the population, and the quantity that was actually distributed. Distribution reports for each distribution point are then combined for the operation as a whole. Where different agencies are involved in distribution, the coordinating agency or government will be responsible for consolidation of reports. In refugee situations, this is done on at least a monthly basis, by UNHCR, which then provides this information to WFP for preparation of the FASREP.

Physical checks of rations distributed, or 'food basket monitoring' at distribution sites are now regularly carried out by many agencies. This may include checks by the distributing agency, UNHCR or WFP, as well as agencies not involved directly in distribution, such as MSF or AICF. Food basket monitoring involves the selection of a random number of families at the distribution site and their rations are weighed. This type of monitoring has gained increasing popularity in recent years, particularly in refugee situations, and is seen by some as a regular aspect of their relief programme (Van der Kam, 1995). However, considerable uncertainty still exists about the objective of food basket monitoring, what it actually involves, what the information means, and the methods that should be used.

Foodbasket monitoring is useful in monitoring the distribution process, but not necessarily for monitoring the rationultimately received by individuals. Food basket monitoring at the distribution site checks the quantity of food received against what should have been received for a particular ration card, or according to stated family size. However, the actual family size may be different from that stated, or the family may own more than one ration card, or no ration card at all. Presenting results of food basket monitoring in terms of energy and protein received per person per day is therefore misleading. Food basket monitoring is useful in providing information on the variation in rations distributed, for example to different groups, or at different times of the day. It is also useful in the early stages of a refugee emergency, when a registration has not yet been done, and distribution reports a relikely to be in accurate. There are numerous examples of instances where food basket monitoring has shown that the rations actually distributed differ from the ration scales et for that distribution (see Box 33).

Box 33

Examples of results of food basket monitoring Food Basket Monitoring in Benaco camp, Tanzania, June 1995 (Source: AICF)

Rations (gm/person/day)

Commodity	Official	Distribution Site	Distributed (N=79 HH)
Sorghum	420	335	294
Beans	120	100	76
CSB	25 (50)	25	29
Oil	25		
Salt	5		
kcals	2287	1722	1383

(confidence interval: 1256–1510)

The calorie content of the ration distributed ranged from 378 to 3303 kcals/person/day. For 41% of the population, the ration distributed consisted of less than 1100 kcals, for 25% this was between 1100 and 1500 kcals, for 19% between 1501 and 1900 kcals, and for 15% > 1900 kcals.

The criteria for when and where to implement food basket monitoring are far from clear. Rations distributed are checked much more frequently in refugee situations than in other emergency contexts. This is probably because monitoring is easier for a distribution system with ration cards, which is common in refugee camps. In other distribution systems, there is a tendency to rely more on self-monitoring, or self-policing by beneficiaries.

Monitoring what people receive

Checking rations at the distribution site does not monitor whether certain groups have been left out altogether (coverage of the food distribution), or whether some groups or families have been under- or over-registered. Monitoring this involves some form of assessing food availability in the household. Either those households that are most likely to

be left out of the food distribution could be monitored, or households could be randomly sampled and assessed.

Household surveys have sometimes been carried out as part of food basket monitoring. There is currently no agreement on methodology. Some agencies have carried out large quantitative surveys with lengthy questionnaires, and weighing of food found in beneficiaries homes, for example, NGOs and UNHCR working in Ngara, Tanzania, and Goma, Zaire. These surveys are labour-intensive and time consuming both in terms of field work and analysis of results, and have sometimes met with resistance from the beneficiary population. Others have conducted more informal household visits, for example Social Services in refugee camps, and combined this information with other information on food distribution, to get an overall picture. As with all surveys, the information gained has to be carefully balanced against the costs. For example, if there is serious concern about the coverage of food distribution, or an outbreak of micro-nutrient diseases, a large survey may be warranted, but such surveys cannot be justified on a regular basis.

Monitoring acceptability and use of food aid

Background information on the beneficiary population's traditional food habits is generally used to judge the acceptability of particular commodities. The UN's Guide to Food and Health Relief Operations for Disasters, contains tables with popular staples and acceptable alternatives, for most populations (UN, 1977). If this is not sufficient, rapid appraisal techniques could be used. This could include focus group interviews (group interviews with groups likely to have similar views or habits), ranking exercises (getting refugees to rank different foods according to preference based on a number of characteristics), or simple observation and interviews at the distribution site.

Market monitoring assists in monitoring acceptability, the sale of food aid, and assessing access to other food sources. Combined with other information on access to food and nutritional status, this can be used to recommend changes in the food ration, or to predict or explain improvements or deteriorations in access to food and nutritional status. Market prices of all food items in the ration and common foods bought can easily be monitored, which, together with an estimate of total availability, provides information on the extent of the sales and the demand for other food items. Terms of trade between goods commonly

bought and sold are useful, as they provide information on changes in entitlements. Information on market prices should be complemented by interviews with traders, sellers and buyers in the market in order to understand why sale or exchange takes place.

It is difficult to tell from market sales alone whether this is the result of families selling part of their ration, or of diversion of food before or during distribution. Often, beneficiaries do not sell directly on the market themselves but go through middle-men, who collect large enough quantities to sell. Only a combination of market, distribution site, and household monitoring, can distinguish between the different forms of food aid sales.

Market monitoring is often a key component of famine early warning or food security information systems. Market monitoring is essential if access to other food sources, or trading of food is taken into account in planning rations, and if food is provided as a source of income.

Monitoring impact

Monitoring impact will depend on the objective of the food distribution. If the objective was to save lives, or improve/maintain nutritional status, impact is monitored through nutritional and mortality surveillance. Results should obviously be interpreted with care, as nutritional status and mortality do not reflect food distribution alone.

Monitoring impact where the objective is to support livelihoods, or provide economic support, is more difficult. For example, one of the objectives of Oxfam's food distribution in Turkana and Samburu was to support the pastoral economy and this was evaluated by assessing livestock slaughter rates and sales, growth in livestock holdings and milk production, purchasing power of pastoralists, as well as nutrition and health related indicators.

Box 34 Designing a food distribution system				
Component	Options	Choice of options influenced by:		
Type of recipient	Local government Traditional leaders New leadership Families Individuals	Presence/capacity of state infra- structure; knowledge of the population; social structures; power relations; risk of abuse; stage of operation; access; population size; resources continued overleaf		

Box 34 (continued)		
Component	Options	Choice of options influenced by:
Registration	By beneficiaries By external agency	Type of distribution system; knowledge of population; social values of population; mobility of population; stage of emergency; expected duration of operation; resources; access
Beneficiary documents	Beneficiary lists Ration cards	Group, family or individual registration; size of population; duration of operation
Measuring out rations	By beneficiaries Scooping Weighing	Distribution to group, or family; time; population size; frequency of changes in ration scale and types of commodities; resources
Distribution interval	Bi-weekly Weekly Bi-monthly Monthly	Food supply; resources; distance to distribution point; access; logistics capacity; packaging of commodities
Number of distribution points	Central point Many points	Size of camp/area; access; resources; monitoring capacity
Layout of distribution point	Existing structure Special distribution centre	Home based or dispersed population; number of people per distribution point
Monitoring	Food supply reports FASREPs (WFP/UNHCR) Food distribution reports Food Basket Monitoring Household surveys Market monitoring Self-monitoring by beneficiaries	Distribution system; source of food supply; type of emergency; technical expertise; resources: funds, staff; agencies present

5.8 Common problems in implementing food distribution

Common problems in food distributions are over-registration of beneficiaries, over- and under-distribution, and unequal distribution. These problems may arise from inaccuracies or differences in beneficiary estimates, manipulation or abuse of the system by those responsible for the distribution, or because of faulty distribution practices. Multiple registration or 'cheating' by beneficiaries is often a strategy for dealing with inadequate or irregular food supply, or anticipated shortages.

Over-registration for food distribution

In any emergency situation requiring food aid, there may be at least four different population estimates:

- 1. The population estimates used for resourcing food.
- 2. The current official population (for example as in situation reports).
- 3. The number of beneficiaries coming for food distribution.
- 4. An estimate of the actual population.

The problems of under-estimation of the size of the affected population for resourcing purposes, leading to inadequate rations was already mentioned in section 4.9.

When a population is registered for food distribution, over-registration may result from multiple registration, inflation of group or family size, and registration of the local population in the case of refugees. When lists or estimates of beneficiaries are provided by leaders, a difference often develops between the actual population estimate and the beneficiaries for food distribution, especially when independent estimates of the population are not available to use as a bargaining tool. If new beneficiaries can be registered during the course of an operation, recycling and multiple registration may occur, especially in refugee situations if the camp is close to the border. After registration, excess ration cards may come into circulation as a result of population movements and because ration cards are usually

not changed after deaths or births. Difficulties of registration will be discussed in more detail in a forthcoming Good Practice Review.

Inflation of numbers for food distribution is one of the most common sources of friction between donors, local governments, UNHCR and WFP, and the number of people judged in need of food assistance eventually agreed on is often the result of a process of negotiation. Unless the population can be re-registered to match the negotiated figure, rations will be inadequate for some (see box 35). In some situations however, people have under-registered themselves, for example in a World Vision distribution to drought affected populations in Malawi in 1992, where registration was thought to be linked to taxation.

Over- and under-distribution

Box 35

Examples of problems with registration

- In Benaco camp in Tanzania, large differences developed between the estimated actual refugee population and the population for food distribution as estimated by refugee leaders, even though UNHCR held daily negotiations with leaders. At one point, numbers for food distribution increased by 100,000 over a three day period. The lowest number for food distribution reached through negotiation was about 340,000. A registration conducted soon after this estimate was made reduced the estimate to 230,000.
- ! In Ethiopia, the official number of Somali refugees registered for rations ranged between 294,259 in January 1989 to 355,788 in August 1989. The actual population was estimated at around 170,000, and WFP and UNHCR delivered food to the camp on the basis of a planning figure of less than 200,000. Officials managing the camp awaited the arrival of sufficient food to distribute to the registered numbers. As a result, weekly rations were given out at 2 to 3 week intervals, and families with only one ration card received considerably less than the official ration (Toole and Bhatia, 1992).

Wrong estimation of beneficiary numbers is the most common reason for over-or underdistribution, but even when the inaccurate figures are used, the actual quantity of food distributed rarely matches exactly the quantity of food that should have been distributed according to this figure. Over-distribution may be the result of faulty measurement of rations (intentional or not), packaging of items in non-standard weights, or coercion by beneficiaries and nepotism.

Under-distribution is most likely to be the result of under-resourcing or failure in supply, but has also been the result of diversion either before or during the distribution process by beneficiary representatives or the implementing agency. Non-collection of rations due to unacceptability can also appear as under-distribution.

In conflict situations, the misappropriation of food aid by soldiers, militia and other combatants is common. Agencies sometimes allow these groups to take a proportion of the food aid so that those who need it can be reached. African Rights terms this 'fieldcraft' (African Rights, 1994). However, unless terms are clearly negotiated, the danger is that initially 'acceptable' rates of diversion quickly become much worse, with the benefits to combatants eventually outweighing those for the intended beneficiaries.

Food may also be diverted for personal gain. Corruption and diversion can occur at all levels: government, UN, NGO, recipients. Food may be diverted or stolen during transportation, from warehouses, or during the distribution process for example by under-scooping or losing ration cards. Registration staff may sell ration cards. This has implications for the quality as well as the quantity of the ration distributed. High value commodities such as oil, are more likely to be diverted than cereals.

Unequal distribution; manipulation and abuse

The practices described above may lead to over-distribution for some, but underdistribution for others within the same beneficiary population. Inflation of beneficiary numbers and unequal distribution may occur at the same time.

Inequality of distribution has been most serious where food was distributed to leaders'in a population whose normal community structures no longer existed, or where relations between groups were abusive. Powerful individuals or groups may present themselves as leaders and control the distribution of food to further their own political or military goals. For example, in the camps with Rwandese refugees in Zaire and Tanzania, food was

distributed with the assistance of commune leaders, who in many cases had been implicated in, or even directly responsible for the genocide in Rwanda. Control over food distribution reinforced their power over the communities. In Somalia and South Sudan, displaced camps were created and maintained by powerful groups, simply to obtain assistance.

5.9 Strategies for overcoming problems in food distribution

Some problems can be corrected with time and experience, for example through monitoring, re-registration, or changing the distribution system. Considering many of the problems associated with the distribution of free food rations, alternatives to distribution of free food rations could be developed, as described in section 5.10. In some situations however, the problems are so serious that negative effects of distributing food outweigh the benefits (see Chapter 2), and food distribution should possibly be stopped.

Monitoring and audits

Close monitoring of the food distribution process can prevent abuse, and detect problems early so they can be dealt with. Through a combination of the monitoring strategies described in section 5.7, the causes of problems in distribution can be discovered and acted upon. In a recent nutrition workshop, regular audits of distributing agencies were recommended (ACC/SCN, 1995).

Box 36

Example of abuse of food distribution systems resulting in diversion/unequal distribution

In Pakistan, "there had been reports since the very beginning of the refugee exodus of political parties having a part in the distribution system and access to rations being dependent on the possession of a party card. It is also likely that entitlement to a ration card has been based on tribal, ethnic, religious or kin status. Camps in tribal areas have also tended to receive fewer supplies than those in areas controlled by the Pakistan Government. Because of corruption within the system, UNHCR later insisted on distributing to family heads, but they were not always successful in bypassing the Maliks (traditional leaders)." (Marsden, 1992).

Negotiation

When population estimates provided by community representatives are an over-estimate, this can be corrected by organizing an external registration or by negotiation. Often, both will be necessary as organizing a registration takes time. Negotiation is only possible if independent estimates of the population are available (see section 5.7). Negotiation is most likely to be successful in small, stable, communities, and/or if those responsible for distribution have an in-depth knowledge of the population and agree with changing the estimate. In large unstructured populations, living in unorganized settlements however, negotiation is likely to be only partially successful. In this case, a percentage of the agreed ration may have to be given to each representative, recognizing that some beneficiaries will lose out, and that a registration will have to be done.

Registration/re-registration

Multiple registration of families or inflation of family size, leading to an excess of ration cards, can only really be solved by re-registering the population and re-issuing ration cards, and/or changing the distribution system. Cooperation of the beneficiary population is essential for organizing a registration but this is often difficult as sections of the population are benefiting from excess ration cards. However, re-registration has usually been possible where necessary. In most situations where a selected group is benefiting from distribution, others will be losing out. Discussions with beneficiaries through food committees, health workers etc., may eventually lead to great enough pressure on the few that are benefiting to agree to a re-registration. How to carry out registrations will be discussed in a forthcoming Good Practice Review.

Changing the distribution system; implementation in phases

Organising food distribution in the initial stages of an emergency is extremely difficult. Little may be known about the size of the population, or the social organization, yet food often has to be distributed immediately. In addition, the funds, equipment and staff needed to implement the best distribution system are often not available. However, as the operation develops, a more desirable distribution system can be designed and implemented. In many

past refugee operations, three phases of implementation can be identified, starting with distribution of food to leaders, followed by a centralised distribution system, whereby families are registered and issued with ration cards, to be later replaced by distribution to groups.

Protecting vulnerable groups

Organizing are-registration, or changing food distribution may take months, and vulnerable groups may have to be protected in the meantime. As it is impossible to know what ration entitlement each family has, the most feasible option is to target vulnerable groups based on physiological criteria, as described in section 4.10 (and Chapter 3). For example, in the face of insufficient food due to over-registration, in Hartishek, Ethiopia, all under fives were targeted for additional feeding, considerably reducing the prevalence of malnutrition. A similar strategy was used to protect under fives from problems of unequal distribution in Benaco camp in Tanzania. This should only be seen as a short-term strategy.

Informing the population of their entitlements/self-policing

If the beneficiaries are aware of their entitlements and the system of distribution, they can monitor food distribution themselves. Beneficiaries could be provided with access to weighing equipment at the distribution site, so they can check whether they receive the correct ration.

5.10 Alternatives to distribution of free food rations

The systems described in the previous sections are those that aim to distribute free food rations to families. Other possibilities exist, which are similar to the uses of food aid in development. For some emergencies, it may be possible to meet the needs of the affected population by an expansion of WFP development projects, for example if emergencies are expected to be of short duration only, or in areas which face recurrent disasters (WFP,1991). Development projects which could be expanded include vulnerable group feeding and Food for Work projects (FFW). Other possibilities include monetization of food aid, fair price shops, and voucher or coupon programmes etc. These methods of food distribution are

increasingly used in emergencies, particularly conflict-related and/or protracted emergencies (Cuny, 1994).

Monetization of food aid stimulates markets by lowering food prices, thereby increasing access to food for the affected population. Monetization has been used as a strategy to distribute food in insecure or conflict areas where access is restricted. Merchants remaining in the affected areas are often willing to buy food and take this back to the area on their own. Numerous examples can be found where merchants have been able to do this; from Sudan into Eritrea, and similarly in Afghanistan, Sri Lanka and Cambodia. Initially food may be sold at higher prices than if monetized directly by an agency, but as the food needs of wealthier families are satisfied, food prices may drop (Cuny, 1994).

Other mechanisms of price stabilization include the sale of subsidized food through public distribution systems, or fair price shops. Fair price shops, or ration shop systems may be operated by private traders, government, or cooperatives, and are used to distribute free rations to selected groups or individuals as well as to sell commodities at subsidized prices.

Food for Work (FFW) has the advantage that final distribution is easier than direct distribution. FFW is, however, administratively cumbersome, and certain sections of the population are excluded, often the most vulnerable. In emergencies, the objective of FFW may be to provide food as well as providing employment. The work that is being undertaken should ideally contribute to the food security and well-being of the community in the longer term. During rehabilitation, or the early stages of an emergency, a careful examination must be made as to whether FFW programmes complement the local population's efforts at preventing famine or rebuilding livelihoods.

Coupon or voucher programmes have been used in a number of situations as a means of distributing food and other items. People are given, or payed in, coupons, which have a certain value, and can be used to 'purchase' items at single special relief shops. These shops sell food, along with a number of other items. It will be up to the beneficiary to decide what to buy. This approach allows people to select items compatible with their own responses and priorities when food insecure or threatened by famine (see Box 37).

Box 37

Examples of alternatives to distribution of free food rations

- ! In Somalia in 1993, wheatflour, sugar and oil were monetized on local markets. Initially this was only done in Mogadishu, as this was the largest market, but later also in other towns. Particular consideration was given to locations where traders faced difficulties in getting food to the market, but demand was high, and interest was shown by traders. WFP would carry out a feasibility study before monetization would be considered. Funds raised from monetization were used for local purchase of grain for distribution in areas where this was considered necessary (Jaspars and Ala-Outinen, 1994).
- ! In Northern Iraq, Save the Children Fund distributed vouchers to help new settlers survive the first difficult winter back in their village, and to assist others to settle permanently. Families could choose what they liked, to the value of £140. They could select food, livestock, fertilizer, seed, building materials, clothes etc. They were discouraged from selecting food only. Livestock was the most popular item, and food the second, but a wide range of items was selected, indicating the range of people's needs. Items to be bought with vouchers were brought into the region by SCF. Many items were initially rejected, and replaced by better quality items, at the contractors expense.

5.11 Stopping food distribution

Existing guidelines offer little or no specific guidance on strategies for phasing out or stopping food distribution. WFP recommends that free relief food distributions should normally be a temporary, short-term measure, and should be stopped as soon as possible.

Ideally, the duration of the programme, or criteria for stopping food distribution should be agreed at the start of an operation, between the agencies involved, and discussed with the community that is to receive food (Young, 1992).

The provision of emergency food aid is usually agreed on for a specified period. WFP emergency operations provide assistance for up to 12 months, and may be continued as a protracted operation, following an assessment. For example, following a drought, it may be

agreed to provide food aid until the next harvest, and an assessment of this harvest determines whether food aid should be continued. In reality, the duration of most emergency food aid operations tends to be much longer than the period specified initially. This is expected for many refugee and displaced operations, but is also true for many other emergency situations.

Box 38

Household survey to assess self-sufficiency in Côte d'Ivoire (Zinsou and Aka Koby, 1994)

Four years after the start of the operation for Liberian refugees in Côte d'Ivoire, 650 households were surveyed to assess their level of self-sufficiency. The objectives of the survey included the determination of household size, identification of income generation activities and the use of income generated. This was investigated by distributing a questionnaire with 98 questions to the selected households. Conclusions from the survey included:

- ! the average household size was too big to reach self-sufficiency;
- ! the average monthly household income was less than that of the local population, and there were large differences in income within the refugee population;
- ! only 53% of refugees had access to land;
- ! only 6.9% of households benefited from income generation projects;
- ! 83% received food aid which was also used as a source of income.

Recommendations focused on income generation and food production activities rather than food rations. In terms of food rations, it was recommended that food aid for households with a regular income be reduced. It was recommended that food distribution for other groups be continued because a regular income was not guaranteed, and because reducing or stopping rations posed security risks.

Even though the survey recommended continuation of food distribution, WFP and UNHCR later used the survey results to recommend phasing out of food distribution as follows:

- ! phase out food distribution to the oldest case-load;
- ! reduce rations to the 'intermediate' stay group;
- ! slightly adjust ration to the newest group;
- ! deliver additional targeted assistance to vulnerable groups.

(Stevens and Ramirez, personal communication)

The long duration of many emergency food distributions is partly because of an increase in protracted conflict-related emergencies, but also because the objective of providing food aid often changes during the course of an operation. Initially the objective of providing food aid may be to save lives, but during the course of the operation this may change to supporting livelihoods. Supporting livelihoods by means of food aid could be of indefinite duration.

The phasing out of food distribution is usually recommended when the nutritional status of the assisted population is stable at acceptable levels, when the population is considered to be self-sufficient, or has returned to a state similar to that before the emergency. This is assessed using a variety of assessment methods described in Chapter 3. In the case of refugee operations, assistance is phased out following repatriation, or following integration and self-sufficiency in the host country.

Assessing self-sufficiency has been a difficult exercise to undertake, and the results of assessments have met with limited success in terms of being able to give practical recommendations in reducing ration sizes or changing the composition. An example of a household survey supported by UNHCR is given in Box 38.

6. Conclusions

Good practice in terms of ration distribution is not just a matter of technical issues of planning rations and logistics. To be successfully applied, good practice must take into account the wider context. Food aid has an impact on the local social, economic and political processes and is affected by them. If this is ignored, food assistance is unlikely to meet its original objectives, or worse, will be manipulated by powerful groups, at the expense of the intended beneficiaries.

For too long, the social, economic and political dimensions of food assistance have been ignored, with consequent diversion and manipulation of food aid. These aspects have major implications at all stages of the food distribution process, as described in this review. Political considerations at the international level may seem beyond the influence of the relief worker, but at the local level, unless local power relations are taken into account, they will have a significant impact on UN programme outcomes. In such circumstances, the relief worker is little more than a pawn in a wider game.

The western model of relief justifies interventions in narrow technical terms. Donors and UN agencies make a clear distinction between food aid for emergencies and for development (saving lives as opposed to supporting self-sufficiency). This Review shows that in reality a clear division cannot be drawn between the nutritional and economic goals of emergency food distribution. In all emergency contexts, food rations are used as an economic as well as a nutritional resource, and in some, the uses are more economic. This has implications for the targeting and the planning of rations.

Many of the existing agency guidelines lack clear guidance on certain major technical issues, such as targeting and actual implementation, while almost all ignore the social and political context. This narrow focus provides an opportunity for decision-makers to justify political priorities in technical terms. By ignoring the social and political issues the relief worker gives a 'carte blanche' to those groups and agencies who manipulate food aid for their own political purposes. It is imperative that the relief community takes responsibility for gaining a deeper understanding of the local social and political context, and applying this knowledge to planning and implementing food distributions. Obviously this is done to a certain extent,

although not always explicitly. At present this is not standard procedure as presented in guidelines, and in a wider sense is not generally considered an aspect of 'good practice'.

Conceptual thinking and analysis is fundamental for a better understanding of the processes at work in emergencies. It serves as the basis for assessments, planning rations and designing strategies for identifying and reaching target groups. It is not enough to consider overall food deficits or even the local coping strategies, without analysing who is at risk and why? Checklists given in guidelines cannot be used to unravel the complex relationships that influence the need for food distribution and its success. A conceptual framework is a practical tool for conceptual thinking as it encourages people to consider the linkages and relationships between key factors and also their relative importance. Limited conceptual understanding leads to narrow objectives, or no objectives at all. In the absence of clear objectives, logistical targets may take over; programmes become logistics-driven, rather than needs driven.

Currently, there is no single conceptual framework for use in emergencies and a wide range of approaches exist (see Chapter 3). In the absence of an overall conceptual framework for use in emergencies, this Review suggests the use of the UNICEF framework, taking into account the fact that it fails to address the needs of people other than women and children, and also that it is intended for use in a peacetime developmental context, not an emergency potentially bound up in politics, war and conflict. It therefore must be modified to take account of the local coping strategies, and the impact of war and conflict on the three groups of underlying causes of malnutrition and mortality: food security, adequate maternal and childcare, and access to health services and the health environment.

The entire process of food distribution, from assessment to final monitoring and evaluation, is based on the western model of relief which assumes that food shortages lead to hunger, malnutrition and death, which can be prevented by food distribution. In reality, actual programmes are shaped significantly by the perspectives and priorities of the affected population and the particular local context. This produces a dual reality, one for fieldworkers and one for local people. The former is based on the technical principles of good practice, while the latter is the social, economic and political reality. True, 'good practice' represents the coming together of the two worlds. Good practice is based on sound theoretical

principles. However, in practice, these principles may be impossible to apply, and therefore programmes are modified for pragmatic reasons.

The need for pragmatism has not been explicitly recognised by policy makers and technicians, who continue to make recommendations and prepare guidelines based on theoretical principles only. As a consequence, practitioners have little guidance on how to put these principles into practice, or how to deal with practical constraints. Relief strategy and accountability is often left to the implementing relief agency, without guidance or support from donor or coordinating UN agency. Food is often provided by donors on condition that it is effectively targeted at those most in need, yet guidelines are not clear about effective strategies for the identification of target groups. In planning rations, practitioners have guidance on which factors to take into account, but not on how to do this. It is often practitioners who have to set ration scales based on available food stocks, rather than based on nutritional requirements and other technical criteria.

In the process of food distribution, the link between assessment and planning rations is weak. Whereas assessments have advanced from a simplistic view of famine as a food availability decline, to approaches which take into account entitlements and coping strategies, food needs are usually still planned on the basis of estimates of food deficits or numbers of people affected, multiplied by standard rations.

Although most agencies recommend that access to food, trading of food aid, and coping strategies are taken into account in planning rations, in general, rations are mainly planned on the basis of nutritional requirements. A realistic approach to planning rations, which recognizes that these factors cannot be measured quantitatively, would allow the planning of rations to progress from a food deficit approach to one which takes into account entitlements and coping strategies. Estimates of access to other food sources are just that –estimates. Any planned ration based on criteria other than nutritional requirements is essentially an informed guess and needs to be flexible.

One of the main constraints in the planning and coordination of the entire food distribution process is that different actors are responsible for different aspects of the process, none of whom have a thorough understanding of the process as a whole. Different aspects of food distribution may be implemented by different agencies, and even within an agency,

nutrition, food aid, and logistics may be the responsibility of different staff in different sections. Staff at headquarters may make guidelines for food distributions, but practitioners may have to develop strategies based on a totally different reality.

The low numbers and positions of all staff responsible for aspects of food distribution reflect the low importance attached to food distribution by most agencies. This is clearly an anomaly, given that food aid is the single most important response in emergencies, and that the consequences of mismanagement are disastrous. A first step in improving food distribution must be for all actors to recognize the complexities of food distribution, and take action in terms of appropriate technical and financial input, and organizational change.

Nutritionists are in an ideal position to plan and monitor food distributions, taking into account the linkages and relationships between all factors influencing food distribution. However, nutritionists have become side-tracked by the search for the 'nutritionally adequate ration', and better and more accurate methods of estimating requirements. Estimates of nutritional requirements are useful as planning figures, to use as the basis for planning rations, but careful examination of the way in which a population's average nutritional requirements are estimated exposes the nutritionally adequate ration as a myth. The focus on technical issues has been to the detriment of finding approaches to overcome practical constraints and methods for implementation.

In this review we have shown that in reality, it is the dictates of the pipeline that determine the actual rations, which is in turn determined by the priorities of host governments and donors, agency responsibilities and coordination, constraints of logistics and infrastructure, and the degree of loss and diversion. Given the reality of food aid supplies and the context of current emergencies, the quest for the best formula to calculate adequate rations is futile. There are many other areas where our efforts would be better spent, as identified by this review of practice. For example:

- ! The development of a conceptual framework for emergencies;
- ! Realistic targeting strategies that reflect a combination of insider and outsider priorities based on a process of consultation and negotiation;
- ! The identification of systems to implement emergency food distribution that are appropriate to the local social and political context;

! Development of institutional arrangements that will allow for effective coordination in planning and monitoring food distribution.

Improvements in any one of the above would help maximise the impact and effectiveness of the resources that are available locally.

This Review partly reflects the authors' personal experience, combined with a selection of agency guidelines, publications and internal reports. However, the collective experience of the international relief community is, of course, much wider and more diverse than that presented here. Significant advances in the provision of humanitarian relief can only come from a collective commitment to critically reviewing each aspect of distribution that the authors have briefly touched upon in this Review.

Annex 1

Guidelines and policy statements that refer to emergency food distribution (in chronological order)

This list is not exclusive and covers only those guidelines referred to in this review.

- Peel, S., Selective Feeding Procedures, Oxfam Practical Guide No 1, Oxfam.
- Protein calorie advisory group of the UN, A guide to food and health relief operations for disasters, New York, United Nations, 1977, Ch 5 Organization of Food and Health Relief.
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- LRCS, The Red Cross Policy on the Nutritional Aspects of Relief Operations, Geneva, League of Red Cross and Red Crescent Societies/International Federation of National Red Cross and Red Crescent Societies, 1991.
- UNHCR/WFP, Provisional Guidelines for Calculating Food Rations for Refugees, UNHCR, September 1991.
- WFP, Food Aid in Emergencies, Book A: Policies and Principles, Chapter A6 Rations and Food Aid Requirements, First edition, Rome, World Food Programme, September 1991.
- Centres for Disease Control, Famine Affected, Refugee, and Displaced Populations: Recommendations for Public Health Issues, Centres for Disease Control, Morbidity and Mortality Weekly Report (MMWR), 1992, 41RR-13,
- Young, H., Food Scarcity and Famine, Assessment and Response. Oxfam Practical Guide No 7, Oxford, Oxfam, 1992,

- OLS, OLS Feeding Programme Management: Guidelines for Southern Sudan, Draft for Final Comments, Operation Lifeline Sudan, September 1993
- UNHCR, Food and Nutrition Briefing Kit', Geneva, Division of Programmes and Operational Support, UNHCR, 1993, October.
- Mears, C.; Chowdhury, S., Health Care for Refugees and Displaced People, Oxfam Practical Guide No 9, OXFAM, 1994.
- MSF, Nutrition Guidelines, 1st edition, Paris, Medecins Sans Frontieres, 1994, Section 1 Nutritional Strategies in Emergency Situations, Section 2 Rapid Nutrition Surveys, Section 3 Selective Feeding Programmes.
- WHO, The Management of Nutritional Emergencies in Large Populations (draft), Geneva, WHO, 1994, Draft copy from 15.6.94, and parts from 20.5.94.
- UNHCR, Registration Guidelines, 1994, UNHCR, Geneva.
- UNHCR,1995, Commodity Distribution, A Practical Guide for Field Staff, Draft Sep 15,1995, UNHCR, Geneva.

Annex 2

Estimating Energy Requirements

A person's energy requirement depends on their basal metabolic rate (BMR) and activity levels. The basal metabolic rate is the metabolic rate in the post-absorptive state and at complete rest in a thermoneutral environment. In practice, BMR is equal to the energy expenditure of subjects during sleep. BMR is determined by age, sex, and body weight. Formulas exist for different age and sex groups to predict BMR based on the weight of an individual, and are given in the report on energy and protein requirements by a joint FAO/WHO/UNU expert committee (FAO/WHO/UNU,1985). This defined energy requirements as follows:

"The energy requirement of an individual is the level of energy intake from food that will balance energy expenditure when the individual has a body size and composition and level of physical activity, consistent with long term good health; and that will allow for the maintenance of economically necessary and socially desirable activity." (FAO/WHO/UNU, 1985).

The recommended energy requirement for a person of a certain age, sex and weight, is the average requirement for people of that age, sex and weight, without allowance for known individual variation . In reality, the requirements of some individuals will be higher, and for some lower than the recommended requirement.

Allowances are made for activity levels by multiplying BMR by a Physical Activity Level (PAL) factor. The FAO/WHO/UNU expert committee classified activity levels into light, moderate and heavy physical activity; corresponding to 1.55,178 and 2.1 times BMR for men and 1.56,1.64 and 1.82 times BMR for women. Light activity assumes that the majority of time is spent sitting or standing, with only limited time spent moving and work limited to household tasks and desirable social activity, moderate and heavy activity assumes the majority of time spent on specific occupational activities. The FAO/WHO/UNU expert committee felt unable to recommend an operational 'maintenance' requirement, due to insufficient available evidence (FAO/WHO/UNU,1985). Any estimate reflects a value judgement on what levels of activity above the minimum for survival should be included. The committee did however give 1.4 times BMR as a guide, which was based on an additional 1.5 hours per day

walking or 2 hours standing. The 1900 kcal/person/day planning figure for a population's average per capita energy requirements is based on activity levels of 1.45 times BMR, and the 2100 figure recommended by WHO is based on 1.55 times BMR.

Recommended energy requirements are based on a temperature of 20 degrees Celsius, and are increased if the temperature falls below this level. Rivers and Seaman recommended an increase of 1% in requirements for every degree below 20 degrees Celsius. Requirements are also increased if the population is malnourished, to allow for catch-up growth. 5000 kcals above maintenance are needed to gain one kg in weight (USAID, 1989).

The average per capita energy requirement for a population is calculated using the average requirements for defined age and sex groups of a certain weight, and the distribution of these age and sex groups in the population. The planning figures for the average per capita energy requirements of emergency-affected populations are based on the normal demographic composition of a developing country.

In recent nutrition workshops organized by UNHCR and jointly by UNHCR and the ACC/SCN, it was recommended that average per capita requirements for the specific population affected, be calculated because demographic composition, body weights and temperature vary widely between populations (Schofield, 1995; Schofield and Mason, 1994). It was recommended that population specific requirements be worked out first by estimating the BMR for the population based on the specific age and sex distribution and secondly by making allowances for activity levels, pregnancy, and temperature. A computer software package and look-up tables are being produced which give requirements according to country of origin, activity level and temperature.

Initially available demographic information from the country of origin could be used. However, the demographic composition of displaced populations is often different from stable populations which means a demographic survey of the emergency-affected population is necessary to accurately assess average requirements. Schofield and Mason (1994) illustrate the influence of demographic composition by comparing average requirements for a population in Yugoslavia, which is predominantly old with those of a population in Kenya, which is predominantly young. The respective requirements are 2163 and 1864 kcals.

Selection of activity levels and body weights to estimate requirements essentially involves a subjective judgement on what is desirable. There are three options for the use of weight of adults and adolescents in the calculation of BMR; observed current weight, the usual weight of the population when healthy, or the desirable weight (that of a Western populations)¹⁰. In the UNHCR workshop in Ethiopia it was recommended that the actual weight when the average Body Mass Index¹¹ (BMI) of the population is at least 20 be used, but when this is less than 20 the weight should be taken as equivalent to BMI of 20–22. Initialy available information on adult weights and heights from the country of origin can be used, modified later by information from field assessments on the affected population. Field assessments need only measure heights, from which weights can be worked out if a BMI of 20-22 is taken.

Requirements for children are based on observed intakes rather than energy expenditure.

BMI is a measure of the nutritional status of adults, and is calculated by dividing weight by height squared. The normal range of BMI is 20 to 25.

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Glossary

Basic foods Food commodities which constitute the main bulk of the

 $distributed\ rations, such as\ cereals, pulses\ and\ oil, and\ which$ $provide\ the\ main\ requirements\ in\ terms\ of\ energy, protein$

and fat.

Basic Ration Ration consisting of basic foods.

Beneficiary Those entitled to food aid in a particular programme.

Beri-Beri Thiamine deficiency disease.

Blended food A pre-cooked blend of cereals and pulses, fortified with

essential vitamins and minerals.

Complementary Foods that improve the nutritional quality and palatability

Food of the basic food ration.

Coping Strategies Strategies adopted by populations in order to cope with the

threat of famine, with the aim of preserving assets, or

preventing destitution.

Dry ration Rations given in dry uncooked form, to be taken home and

cooked by the beneficiaries.

Food Basket The selection of food commodities included in the ration.

Food entitlement Access to food, or the ability to acquire food, through own

food production, trade, exchange, credit or loans. Similar

concept to food security.

Food Security Access by all people at all times to enough food for an active

healthy life. Its essential elements are the availability of food

and the ability to acquire it.

Fortification The addition of essential vitamins or minerals to widely used

foods such as cereals, oil, sugar and salt, in order to prevent

micro-nutrient deficiencies.

General ration A combination of food commodities which are distributed

free of charge to everyone within a defined population, to meet the needs of the affected population as a whole.

Monetization The sale of food aid on the market by donor or implementing

 $agency \,to\,generate\,funds, and/or\,to\,lower\,market\,prices\,in\\ order\,to\,improve\,access\,to\,food. Food\,aid\,may\,be\,monetized$

informally by the beneficiaries.

Pellagra Niacin deficiency disease.

Pipeline Expected food aid supply for a particular programme but not

yet available in-country, based on confirmed pledges from

donors, shipments, and other dispatches.

Ration The particular amounts of food provided by an assistance

programme for beneficiaries in a specified target group.

Ration planning The estimated average per capita energy requirement for an

figure emergency-affected population, used as the basis for

planning rations. Also referred to as working figure.

Ration scale The quantities of each commodity included in the ration,

expressed in grams/person/day.

Recipient Those who receive food aid, possibly in order to distribute to

the ultimate beneficiaries, including for example, community leaders, government institutions, heads of households.

Scurvy Vitamin C deficiency disease.

Selective feeding The provision of foods to specific vulnerable groups. Selective

feeding programmes usual include therapeutic and

supplementary feeding programmes.

Supplementary

feeding

The provision of foods to specific vulnerable groups in addition to the general ration, with the aim of preventing or

reducing excess mortality.

Targeting Restricting the coverage of an intervention to those who are

perceived to be most at risk, in order to maximise the benefit

of the intervention whilst minimizing the cost.

Wet ration Rations provided in cooked form, to be eaten 'on site' rather

than to be taken home.

Note on Terminology

In this review we use the popular terms malnutrition and nutritional status in place of the more physiologically correct terms, growth failure and anthropometric status. Protein-energy malnutrition and nutritional status are usually assessed quantitatively by measuring growth failure and anthropometric status of under fives respectively. In the context of emergencies, we use the term malnutrition to refer to acute malnutrition, as measured by the weight-for-height index, reflecting wasting, or thinness. Severe malnutrition refers to children below 70% weight-for-height, and moderate malnutrition refers to children between 70% and 80% weight-for-height. Where the prevalence of malnutrition is discussed, this refers to the percentage of children under five in the surveyed population, below 80% weight-for-height.