

PART 2: TECHNICAL NOTES

The technical notes are the second of four parts contained in this module. They provide information on distribution of food distribution in emergency responses. The technical notes are intended for people involved in food assistance and nutrition programme planning and implementation. They provide technical details, highlight challenging areas and provide clear guidance on accepted current practices. Words in italics are defined in the glossary.

Summary

This module is about the distribution of food rations to defined emergency-affected households. The important factors needed to plan an appropriate and adequate ration are considered. The elements also needed to ensure a successful general food distribution and eligibility criteria for effective targeting and monitoring system are discussed.

Key messages

1. Assessment should be carried out to determine if food support is a priority need in the context in question and to define who, for how long, how much and with what types of food.
2. The objectives of a GFD are developed from the needs assessment and could vary from saving lives and protecting the nutritional status of a population to protecting and rehabilitating livelihoods.
3. The nutrition and energy needs of a population are affected by a number of factors (climate, activity, health and nutrition status, age and sex), which must all be considered when planning food aid requirements. It is important to consider the risk of MDDs among populations dependent on food aid and ensure the planned ration minimizes the risk of MDD.
4. The GFD should meet the nutrition and energy needs of the recipient population. The food provided should be appropriate and, ideally, be familiar to the population. There are two stages to planning a ration: to establish the energy requirements of the population, and to select the type and quantity of food.
5. Eligibility criteria must specify the characteristics of individuals or households which are thought to require a certain quantity and quality of food.
6. Targeting uses eligibility criteria and aims to maximize the efficient and effective use of resources.
7. All food aid is geographically targeted in the sense of distributing food to the population of one geographical area and excluding another. Targeting may take place between countries, between regions in a country or between sub-region, food economy or livelihood zones, districts or villages.
8. There are two primary systems for distributing food aid to the general population: take home rations and large scale cooked food distribution. Other forms of general food distribution, such as Food-for-Work and voucher programs are gaining in popularity.
9. Accountability, transparency and coordination are key elements for implementing a successful GFD.
10. Monitoring all aspects of the GFD should ensure that food effectively reaches intended beneficiaries in the agreed quantities and measure its impact on food security and nutrition.
11. A GFD can be phased out when its objectives have been achieved, and the implementation criteria no longer apply.

Sphere standards

Food security, food transfers standard 1: General nutrition requirements

Ensure the nutritional needs of the disaster-affected population including those most at risk are met.

Food security, food transfers standard 2: Appropriateness and acceptability

The food items provided are appropriate and acceptable to recipients so that they can be used efficiently and effectively at the household level.

Food security, food transfers standard 3: Food quality and safety

Food distributed is fit for human consumption and of appropriate quality.

Food security, food transfers standard 4: Supply chain management

Commodities and associated costs are well-managed using impartial, transparent and responsive systems.

Food security, food transfers standard 5: Targeting and distribution

The method of targeted food distribution is responsive, timely, transparent, safe, supports dignity and appropriate to local conditions.

Food security, food transfers standard 6: Food use

Food is stored, prepared and consumed in a safe and appropriate manner at both household and community levels.

Source: The Sphere Project *'Humanitarian Charter and Minimum Standards in Humanitarian Response; Chapter 3: Minimum Standards in Food Security and Nutrition'*, The Sphere Project, Geneva, 2011.

These technical notes are based primarily on the following references as well as the Sphere standards set out in the box below:

- World Food Programme, *Food and Nutrition Handbook*, Rome, 2005
- International Committee of the Red Cross, *Nutrition Manual for Humanitarian Action*, 2008
- Emergency Nutrition Network Special Supplement 1, *Targeting in Emergencies*, 2004

Introduction

General food distribution (GFD) is the term used for food rations that are given out to selected households affected by an emergency. The food ration consists of a number of items (the minimum three are cereal, pulses and oil, but items such as salt, sugar, fresh vegetables, canned meat or fish can be added). The general ration is normally delivered as a package of dry items.

GFD is used to respond to an assessed food need based on livelihood, economic or nutritional indicators or key vulnerable group targeting. The objectives of a general food distribution arise from the definition of need and could vary from saving lives and protecting the nutritional status of a population to protecting and rehabilitating livelihoods. General food rations

can be designed using ration planning tools (e.g. NutVal). Aside from the energy content of the diet, a well-balanced ration should provide a suitable combination of protein, fat, and vitamins and minerals. Rations should be planned to make up the difference between the nutritional requirement and what people can provide for themselves. Where people have no access to any food at all, the distributed ration should meet their total nutritional requirements. Water, while an important component of bodily function is not considered a food need or commodity and is not distributed within a GFD ration.

Targeting of the GFD aims to ensure that food aid is received on the basis of need and endeavours to prevent 'harm' by limiting any negative impact of food aid.¹ Above all else, targeting is implemented to maximize the efficient and effective use of resources. All food aid is geographically targeted in the sense of distributing food to the population of one geographical area and excluding another. Targeting generally falls into two broad categories: individuals or households (or groups of households). Eligibility criteria, i.e. the characteristics of those individuals or households to be targeted with food, arise from the objectives and must be practical to apply and monitor. There are two primary systems for distributing food aid to the general population: take home rations and large scale cooked food distribution. Other forms of general food distribution, such as Food-for-Work and voucher programs are gaining in popularity.

¹ In this document "food aid" refers to the general food distribution component of a potentially larger food assistance program. See page 33 for more information on the changing landscape of food assistance.

Monitoring of the food distribution system is important and should ensure that food effectively reaches intended beneficiaries in the agreed quantities while measuring its impact on food security and nutrition. It should also allow for a review of the system itself. Once the objectives of a GFD have been achieved, and the implementation criteria no longer apply then a GFD program can be phased out.

The United Nations (UN) World Food Programme (WFP) is the largest organization responsible for GFD and the International Committee of the Red Cross (ICRC) is another key organization implementing GFD. The ICRC may be able to operate in areas affected by conflict where WFP may not be present. In addition, some NGOs such as CARE and World Vision may conduct GFDs, often with commodities procured through WFP. Module 2 describes agency mandates in greater detail.

Assessing Food Needs

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 for how long,
- Locally available resources.

This provides the information and understanding needed to inform key decisions in the whole process of general food distribution including setting objectives, planning the ration, targeting, distributing and monitoring. The first decision of a food needs assessment must be whether assistance is needed at all. Surprisingly, this is often bypassed, as it is automatically assumed food is needed.

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 re-assessments undertaken in more stable or protracted emergencies;
- Institutionalised monitoring such as nutritional surveillance and early warning systems.

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. Initially, the estimated food aid requirements are often little more than informed guesswork. For example, 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 that 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.

In more stable, protracted emergencies 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 countries or regions prone to food scarcity and famine, regular information on food security and nutritional status can be provided by **institutionalized data collection systems** either within government structures or within humanitarian agencies operating in the area. Early warning systems aim to give prior warning when a food crisis threatens, and to provoke action that will avert the crisis. There are a number of methods and systems in place including the Integrated Phase Classification (IPC) system, the Famine Early Warning system (FEWS), and other more localized food security and nutrition surveillance programs such as the National Food and Nutrition Sentinel Site Surveillance System (FNSSS) in Zimbabwe.

There are three broad approaches used for assessing the food needs of a population. These involve assessment of livelihood or economic outcomes, nutritional outcomes and vulnerable groups. These approaches can be used simultaneously in an assessment but there are some common challenges in the selection of indicators that the application of indicators across contexts can present. See **Challenge 1** for more information.

'Livelihood or Economic Outcomes', compare need against people's current or predicted ability to access enough food. These assessments measure the process by which households become food insecure and malnutrition occurs. The causes of their food insecurity may be multiple, for example, environmental (e.g. drought, flood affected) and socio-political (e.g. displaced, refugee, conflict affected). The Household Economy Approach or livelihoods groupings are among the assessment methods used for assessment of these outcomes. Module 9 describes food security assessments in more detail.

Challenge 1: Applying common indicators across contexts

Humanitarian classification systems in general aim to better inform decision makers as to the severity of the crisis and the type of response needed. These systems attempt to find a solution to the challenge of which indicators to use to determine population needs and the associated programmatic responses. For example, some contexts such as those in large parts of southern Sudan, Somali and northern Kenya have consistently high malnutrition rates, as well as unfavourable climatic conditions that frequently impact negatively on food security. In these contexts, consistently high malnutrition and mortality rates may become 'normalized' by key decision makers and are less likely to trigger a GFD response than in other countries that have lower malnutrition and mortality rates. This leads to inequality with regard to analysis and use of the criteria employed to initiate a GFD.

In order to facilitate comparisons between countries or regions and over time for decision-making about appropriate policies, programmes and resource allocation, the Integrated Food Security Phase Classification (IPC) is a food security severity scale developed globally by a partnership of UN agencies, NGOs and donor agencies. It aims to provide a common technical approach to classify food security according to reference outcomes that are based on recognized international indicators of food security, nutrition and mortality. The IPC has been introduced in several parts of Africa and Asia, and continues to gain momentum among governments, UN, NGO, donors, and academic organizations. Indicators of wasting and chronic malnutrition and mortality have been included in the IPC, along with those of food security. In most humanitarian classification systems mortality is considered the prime indicator by which to measure the impact of a humanitarian crisis, although the prevalence of anthropometric wasting is frequently used as a proxy for mortality and within the IPC mortality and malnutrition have been called the "ultimate outcome indicators".

Efforts should be made to utilize humanitarian classification systems such as the IPC to collect and analysis common indicators as part of the process for initiating GFDs in order to react appropriately to the context specific crisis.

'Nutritional Outcomes' measure current physical distress as reflected by nutritional status. Anthropometric assessment, (e.g. weight-for-height, MUAC or nutritional oedema), is the most widely used. Anthropometric assessments give an estimate of the current prevalence of malnutrition in the measured group. Anthropometric assessment is often limited to children aged 6-59 months, as it is assumed that young children are the first to show signs of malnutrition in a population that is facing a nutritional crisis. The results are intended to inform an understanding of the situation of the whole population. Anthropometry can have some limitations when used to estimate the prevalence of current distress:

- In locations with a high prevalence of malnutrition in non-crisis years, there can be difficulties in separating out the effects of the crisis and the "normal" high underlying rate of malnutrition, unless baseline data are available for the same season.
- There are no agreed upon techniques in use for estimating the nutritional status of pregnant and lactating women. Similarly, the interpretation of anthropometric assessment of adults and the elderly presents difficulties.
- A high prevalence of malnutrition cannot be reliably used to infer that there is significant household food shortage. For example, malnutrition may be caused by disease and not a lack of food.

- Acute malnutrition is often a late indicator (i.e. malnutrition takes time to develop) and, therefore, when the objective is to prevent malnutrition, economic or livelihood assessments may be more appropriate than anthropometric surveys.

'Vulnerable groups' refers to population sub-groups who may be at risk of malnutrition even if household food security is deemed to be sufficient. Groups who have specific physiological food needs include the elderly, pregnant and lactating women, the handicapped and the ill. Those groups who are vulnerable to malnutrition will vary from place to place and should be specifically assessed rather than assumed.

Mortality rates of more than 2 deaths/10,000/day for children under five years and malnutrition rates greater than 15 per cent (*percentage of the median weight for height*) are considered a serious situation. These indicators, together with food security and health information, often determine whether or not GFD is the most appropriate response. Factors such as the probability of mass displacement, adoption of drastic *coping strategies*, which will have a long term negative impact on *livelihoods*, high levels of *morbidity*, collapse of a peace process or increased violence in an already volatile area are all crucial when determining the appropriateness of initiating a GFD.

Box 1: Examples of GFD Objectives

- To meet immediate and medium term food needs and restore and protect the livelihoods of vulnerable and marginalised groups.
- To improve the access to food for IDPs and returnees in the targeted areas
- To support the improved nutrition and health status of children, pregnant and lactating women, people living with HIV/AIDS and other vulnerable groups
- To help to improve the health and nutritional status of mothers and children

While needs assessments may become increasingly precise with regard to identifying levels of need of the affected population, food aid remains a fairly blunt tool to respond to identified need. For example, while a needs assessment may determine the average household food gap to the nearest 10 per cent, logistical and implementation practicalities necessitate that, at best, rations can only realistically be planned and designed as full, three quarter, half or quarter rations for an affected population.

Setting Objectives of GFD

The objectives of a general food distribution arise from the definition of need. Given a definition of need, the objective should describe who should get food aid, how much food aid, when and why. Objectives should be set with a considered understanding of the potential for putting in place a distribution system. The objectives of GFD could vary from saving lives and protecting the nutritional status of a population to protecting and rehabilitating livelihoods. See Box 1.

Ration planning for GFD

There are two stages for calculating food aid requirements. The first stage is to establish the energy requirements and the second stage is to select the quantity and type of food commodities to be included in the ration or 'food basket'. A full food ration, which assumes that the affected population has no access to alternative sources of food, should meet all the nutrition and energy needs of the recipient population. The initial calculation of food aid requirements should be made on the basis of need and not the availability of resources.

First stage: Estimation of energy requirements

A full ration provides 2100 kcal/person/day (formerly the ration was 1900 kcal and was increased in 1997 by the United Nations to better reflect nutritional requirements). A daily food ration of 2100 kcal provides the average energy needs for most people within an affected population and assumes the following: standard population demographic distribution²,

average body size, a warm climate of 20°C, normal nutritional and health status and light physical activity. See **Annex 6** for examples of daily rations.

However, 2100 kcal/person/day does not meet the energy and nutrition needs of 'special' groups such as pregnant and lactating women, malnourished children, and people suffering from certain illnesses who have a higher energy and nutrition requirement. These groups may need selective feeding programmes, such as therapeutic and supplementary programmes, in order to meet their nutritional requirements.

ICRC recommends a ration of 2400 kcal/person/day. This would meet the average energy needs of a moderately active population and cover the nutritional needs of pregnant and lactating women, the effects of cold climatic conditions, physical activity, catch-up growth and nutrient losses during transport, storage and distribution. The strategy adopted by ICRC aims to minimize the need for selective feeding programmes.

The energy requirement of the population in need is referred to as the 'mean per capita energy requirement'. The planning figure of 2100 kcal (or 2400 kcal for ICRC) is multiplied by the population size to establish the overall energy requirements for a population. The working figure of 2100 kcal may be adjusted for the following reasons:

- **Age and structure of the population:** A population composed exclusively of women and children will require approximately six per cent less energy than a standard population. Where males constitute the total population, the average daily energy requirements would be increased by 6 per cent. See **Challenge 2**.
- **Nutrition and health status of the population:** The health status of a population may affect the average energy requirements. For example, World Health Organization (WHO) guidelines recommend a 10 per cent increase in energy to maintain nutritional status and avoid weight loss of asymptomatic individuals living with HIV, while adults with AIDS related illnesses require a minimum increase of between 20 and 30 per cent in energy intake.

² There are two average demographic composition profiles that are representative of all groups living in a given situation- one applies to economically developed countries, and the other to underdeveloped or developing countries.

Challenge 2: Suitable Rations for the Elderly

Theoretically, a well-planned general ration is usually adequate for older persons. However, in practice, a number of other factors often result in the general ration not actually meeting the nutritional needs of this demographic group. Some of these factors include: poor physical access to the ration as a result of marginalization or isolation; poor digestibility, especially of whole-grain cereals; lack of motivation or inability to prepare foods; and poorer access to opportunities for supplementing the ration. In emergency situations, these factors are exacerbated due to a general breakdown in normal family and community support mechanisms. The elderly need access to easily digestible micronutrient rich foods with family and community support for food preparation.

Energy requirements usually decrease in the elderly, but micronutrient requirements remain unchanged, therefore the elderly should have access to foods that are nutrient dense and of a high nutrient quality. Current standard GFD rations are often inadequate for the elderly and more attention should be placed on using fortified blended foods or possibly ready to use commodities designed for prevention of malnutrition.

- **Physical activity levels:** If the population is involved in more than light activity the ration should be increased accordingly:
 - Moderate activity (e.g., walking short/medium distances)
 - Adult males: +360 kcal
 - Adult females: +100 kcal
 - Whole population (adults and children): +140 kcal

For heavy activity such as agricultural labour, walking long distances and carrying heavy loads:

- Adult males: +850 kcal
 - Adult females: +330 kcal
 - Whole population (adults and children): +350 kcal
- **Environmental temperature:** For every 5°C drop below 20°C, an additional 100 kcal/day/person should be provided. For example:
 - 15°C: +100kcal
 - 10°C: +200kcal
 - 5°C: +300kcal
 - 0°C: +400kcal
 - **Access to alternative food sources:** If the population has access to alternative food sources it may be possible to reduce the average calorie requirements. However, it is difficult to accurately calculate the calorie intake from alternative food sources. Care must be taken when reducing the ration across the board to ensure marginalized groups are still able to meet their minimum energy and nutrition requirements. Targeted monitoring of potentially vulnerable groups is advised.

- **Provision of milled or unmilled cereal:**

When recipients of food aid mill whole grain cereal, the volume of the cereal is reduced by up to 20 per cent and therefore the nutrient and energy content of the ration is also reduced. A whole-grain ration should compensate for this loss as well as for the additional milling costs. Compensation is normally in kind and between 15 and 20 per cent.

Second stage: Design of the Food Basket

Energy

Energy is not a nutrient but a measure of total food intake. Calories or kilocalories are a unitary measure of energy. Energy is needed for essential body functions (such as breathing), growth (especially during childhood and pregnancy), and physical activities (working and playing). The total amount of energy needed by different individuals varies, depending on physical activity, age, sex, body size and the surrounding climate. See **Annex 1** for the energy requirements of different population groups. Fat and protein should provide at least 17 per cent and 10 to 12 per cent respectively of the energy in a well-balanced diet.

All foods are made up of a combination of *macronutrients* (protein, fat, carbohydrate) and *micronutrients* (vitamins and minerals). Together with water, these nutrients are essential for keeping a person alive.

Macronutrients

Macronutrients form the bulk of the diet and supply all the energy needed by the body. *Carbohydrate* is an important source of energy (carbohydrate provides 4 kcal/g). For many (poorer) people in the developing world, carbohydrates are the main energy source and accounts for as much as 80 per cent of the food they eat.

Fats and oils provide an important source of energy (fat provides 9 kcal/g) and forms part of the essential structure of cells.

Proteins provide the building blocks for body tissues, with the excess used for energy (protein provides four kcal/g). Proteins are required in higher amounts during periods of rapid growth, such as infancy and early childhood, pregnancy, lactation, and after infections or injuries. Animal protein contains all of the essential amino acids, while vegetable proteins contain limited quantities of some of the essential amino acids.

Micronutrients

An individual's requirement for different micronutrients depends on age and gender. There are also key periods when micronutrient requirements increase: pregnancy and lactation, child growth and during certain illnesses. Micronutrients are needed in small amounts, but are nonetheless essential for life and needed for a wide range of body functions and processes. See Module 4 for greater detail on population requirements for vitamins and minerals.

Vitamins are required for essential metabolic processes. Vitamins are divided into two groups: water-soluble such as vitamin B and C, which are generally not stored in the body; and fat-soluble vitamins such as vitamin A and D, found in most animal products, which are stored in the body (primarily in the liver).

Minerals are essential elements for hormones, enzymes and other body tissues.

The following should be considered when selecting commodities for a food basket:

- **Nutritional and dietary considerations:** When people are receiving partial rations, the foods supplied in the ration must nutritionally complement the foods people obtain for themselves.
- **Environmental Conditions:** Populations in need of food support may be living in conditions that influence the selection of commodities. For example, for populations living in flood zones with lack of cooking facilities you will need to consider different commodities than for populations in an established camp setting with cooking and market access.
- **Risk of MDDs:** Populations who are dependent on general food rations with little or no opportunity to access other foodstuffs, especially fruits and vegetables, are at risk of developing *micronutrient deficiency diseases* (MDDs). Even if a population receives a full ration and consumes it all, there are still insufficient amounts of certain micronutrients. The most common emergency-situation MDDs come from a lack of iron, vitamin A and C, iodine, thiamine and niacin. See Challenge 3 below and Modules 4 and 14 for detailed information.

- **Acceptability and familiarity of the food items:** Wherever possible, the staple food should be acceptable and familiar to the recipients. The relative amounts of each commodity in the food basket should reflect population preferences. However, the range available in an emergency ration is often restricted for a variety of reasons.
- **Storage, quality control and specifications:** All foods distributed must be fit for human consumption and meet certain quality specifications. Transport, storage and handling of the food commodities must be carried out with care and carefully monitored. Flour does not keep as well as whole grains, and it is therefore better to mill the grain as close as possible to the final distribution point and time of delivery. Generally, a rule to apply is that if the time taken to manufacture a commodity and get it to the final distribution point is less or equal in time to the shelf life then the food commodity is suitable for distribution in those conditions. This is particularly important for blended cereals, as they have a shorter shelf life (9 to 12 months when stored in ideal – cool and dry – conditions). Distributing blended cereals in countries with high temperatures and humidity will further reduce the shelf life. Cooking oils are susceptible to rancidity; therefore, lightproof and airtight packaging is required.
- **Food processing and preparation:** Food commodities should be easy to prepare and have a short cooking time. The time it takes to cook food is especially important in the early stages of an acute emergency when fuel supplies may be scarce. See **Box 1** for fuel saving strategies. Adequate supplies of essential non-food items must be ensured to allow the proper preparation and consumption of items in the food basket.

Table 1 compares the recommended nutrition requirements of average populations with the nutritional content of the standard UN food ration for populations fully dependent on food aid. The table shows that the rations lack sufficient amounts of vitamin B2 and vitamin C. See **Challenge 4** for more discussion. WFP and UNHCR have developed a spread sheet application (Nutval) for planning, calculating and monitoring the nutritional value of the general food rations. Nutval (<http://www.nutval.net>) has been designed to make the jobs easier for those involved in planning food rations. It aims to ensure nutritionally adequate rations to minimize public health problems such as micronutrient deficiencies.

Challenge 3: Micronutrient Deficiency Diseases (MDDs) among emergency affected populations

Populations dependent on GFD rations are often at a heightened risk of MDDs. In most situations, a range of strategies is employed to prevent MDDs among populations dependent on rations but these present additional challenges and complications to the GFD. These are described in detail in module 14 and only briefly outlined below.

1. Inclusion of fresh fruit and vegetables in the ration: Fresh food items, which are micronutrient-rich, are purchased locally and distributed as part of the general ration. However, transport and storage of fresh produce then becomes a major challenge.
2. Addition of a particular food aid commodity: A commodity that has a relatively high micronutrient content is added or exchanged for another commodity, e.g., addition of groundnuts or pulses, which contain relatively high amounts of niacin, to populations who are heavily reliant on maize (which is low in niacin). The supply chain might not always allow for these changes to occur.
3. Provision of fortified foods: *Food fortification* is the process when one or more micronutrients are added to food during processing. This increases the nutritional value of the food without greatly increasing the cost, or adversely affecting its taste or general acceptability. Commodities provided through a GFD should be fortified (i.e.: oil with Vitamin A, salt with iodine, etc.). Programs for national or localized food fortification can be hard to achieve even in stable situations let alone in an emergency setting. However advocacy and other means towards these ends could be considered in more protracted emergency situations.
4. The use of specially designed micronutrient powders or 'sprinkles' that can be added directly to a meal in order to increase the micronutrient quality. This strategy is mostly used with vulnerable population groups who require a higher micronutrient intake such as pregnant and lactating women as well as children (6 to 59 months). Distributing these powders requires investment in terms of logistics and additional work and often getting recipients to adhere to continually using these supplements can be hard when there are no immediate visible benefits.

The risk of MDDs among populations dependent on GFDs should be acknowledged and efforts made to address the challenges posed in order to ensure that populations in need have access to sufficient amounts of micronutrients.

Table 1: Content of standard ration and average population nutrition requirements

Nutrient	Energy	Protein	Fat	Calcium	Iron	Vit A (Retinol)	B1	B2	B3	Vit C
Average population requirement	2100 kcal	53 g	40 g	450 mg	22 mg	1650 IU	1 mg	1 mg	12 mg	28 mg
% of requirements met by standard ration	101%	113%	121%	109%	103%	284%	241%	83%	158%	71%

Source: Emergency Nutrition Network and Save the Children United Kingdom, *Targeting Food Aid in Emergencies Special supplement*, ENN/SCUK, 2004.

Food Basket Commodities

GFD rations are usually composed of a minimum of cereals, pulses and oil with additional items added as appropriate and feasible. A well-balanced ration should provide a suitable combination of macro and micronutrients. See **Annex 2** for macronutrient content of food aid commodities and **Box 3** for the use of milk powder.

Cereal grains comprise the bulk of food aid delivered during a GFD. As the staple food in most food aid contexts, cereals provide the largest proportion of energy, a large part of the

protein and significant amounts of micronutrients for those dependent on food aid. Cereal, provided as flour for cooking, is more versatile than grain. It is also more palatable and reduces the fuel requirements for cooking. The levels of micronutrients present depend on the type of cereal and the extraction rate during milling or other processing. The more refined the flour, the lower the level of micronutrients. WFP and UNHCR are committed to providing milled grain, rather than whole grain, especially in the early stages of an emergency. However, the provision of milled cereals may be difficult to sustain in protracted operations due to the reduced shelf life of flour, the additional transport expense and logistical

Box 2: Fuel-saving strategies

Improved (fuel-efficient) stoves

Improved stoves rely on (a) enclosing and insulating the fire and/or (b) controlling the airflow. Simply by shielding a wood fire from draughts 30 to 40 per cent fuel savings can be achieved. Improved stoves are usually made with, or with a combination of, mud, metal, clay or ceramic.

Energy-saving cooking practices

Certain cooking practices can help in saving fuel, including using tightly fitting lids and the correct choice of pot, cutting foods into small pieces, pre-soaking beans, and grinding of beans and hard grains, such as maize. Removing excess soot build-up and putting fires out promptly will also improve efficiency.

Collective cooking arrangements

Increasing the numbers served from the same pot maximizes cooking efficiency.

The use of alternative biomass fuels (alternatives to firewood)

Some examples of alternative fuels include peat, charcoal and grass. Typical consumption levels of firewood range between 1 and 2 kg per person, per day.

Use of non-biomass fuels (solar cookers and kerosene stoves)

Solar cookers can only be used where there is high enough exposure to sunrays. Fireless cookers, or hay basket cookers, are usually made with a basket or box that is insulated with cloth, uses newspaper or wood shavings and is covered with a tightly fitting insulated lid.

The use of kerosene for cooking in an emergency requires special stoves and fuel storage containers. Fire risk is considerable at all stages of distribution. People may not know how to operate the stoves, which significantly increases the risk of fire. For these reasons, the use of these stoves is discouraged at the household level but may be used communally where there is less risk of fire and the kerosene and hardware being sold.

Source: World Food Programme, *Food and Nutrition Handbook*, Rome, 2005

Challenge 4: Nutritional Inadequacy of Planned Food Baskets

One of the most frequent problems is that the food ration is not nutritionally adequate, mostly in terms of quality. By definition, most general rations are insufficient in calcium, vitamin B2 (riboflavin), and often fat, vitamin C and A (especially if blended food such as fortified CSB is not part of the general ration). This creates a dilemma for those that conduct the distribution as they knowingly provide a deficient food ration and that, if access to other food products is limited, the recipients will eventually become micronutrient deficient. Though many humanitarian actors acknowledge this phenomenon, little is (or can be) done. Inclusion of fresh food is a solution but is logistically challenging and therefore expensive. Provision of food rations that exceed the required calories allows for bartering for other food and non-food products, but not necessarily always of high nutritional value. Provision of fortified CSB is mostly restricted to SFPs and does not reach all recipients. Cash vouchers for specific nutritionally valuable commodities can help. Micronutrient supplementation in the form of powders has become more common to address the micronutrient gap but suffers still from acceptance and therefore adherence problems. Micronutrient spreads are effective but expensive and again are often restricted to SFPs.

Dietary diversity is the best solution for food rations that are deficit in micronutrients because it is the most appropriate and dignified approach.

challenges of providing sufficient quantities of flour. An advantage of the traditional milling of grain in the home is that cereals milled that way tend to have a higher micronutrient content due to the processing methods. In addition, grain can be fortified during the milling process. One caveat, though, milling grain at home is labour intensive, particularly for women.

Legumes/Pulses are an important source of protein and provide a range of micronutrients for those receiving the GFD. Pulses require careful preparation to make them palatable, safe and digestible. They must be pre-soaked, hence the need for containers and water. They often take a long time to cook, which increases the demand for cooking fuel. Less cooking time is required for pulse flour, split peas, lentils and grams.

TECHNICAL NOTES

Canned meat, cheese, and dried fish are expensive commodities and can be hard to procure in sufficient quantities. Agencies involved in GFD's may have different approaches to inclusion of these commodities; for example, WFP does not use them in GFD programmes on a regular basis whereas ICRC frequently includes them.

Vegetable oil distributed in a GFD must be fortified with vitamin A and is therefore an excellent source of that vitamin: 40 grams of fortified oil potentially provides 100 per cent of children's daily needs for vitamin A and about 70 per cent of adults' needs.

Fortified Blended Foods (FBFs) are processed mixtures of cereals and other ingredients (e.g., pulses, dried skimmed milk, and possibly sugar and/or some kind of vegetable oil) that have been milled, blended, and pre-cooked. Examples of blended foods are Corn Soy Blend (CSB), and Wheat Soy Blend (WSB). The protein provided by blended foods includes all the essential amino acids. Fortified blended foods are sometimes used in the general ration, to help provide an additional source of micronutrients. According to WFP, the nutritional specifications of 100 grams of dry blended food should provide 380 kcal, 14 per cent protein, 6 per cent fat and a vitamin and mineral complex. See **Annex 6** for fuller descriptions of blended foods and micronutrient content of fortified foods.

Corn Soy Blend Plus (CSB +/++) is a reformulation of the original CSB to meet the additional energy density and micronutrient needs of some population subgroups. CSB+ is a product for children two years of age and older, adolescents, pregnant/lactating women, adults and other vulnerable groups such as those with chronic illnesses. It is a mixture of cereals, soy beans, sugar and a vitamin/mineral mix. According to WFP, the nutritional specifications of 100 grams of CSB+ is similar to FBFs and should provide 380 kcal, 14 per cent protein, 6 per cent fat and a vitamin and mineral complex. CSB++ is a more digestible form of CSB intended for children 6-23 months. In addition to the above-mentioned components it includes dried skim milk and oil in its formulation and has a higher nutritional value with 410kcal, 16 per cent protein, 9 per cent fat and a vitamin and mineral complex. Both of these new CSBs contain an improved micronutrient formulation. As of early 2010 WFP has replaced all FBF's in GFDs with the improved CSB+/++. CSB++ can also be used in treatment as well as prevention programs.

Sugar is sometimes included in the GFD and can play an important role in the diet by improving palatability and, particularly in the case of a child's diet, energy density. Sugar is usually pre-mixed into the CSB to ensure that the distributed sugar is actually used for consumption of CSB (as opposed to tea for example) and it ensures that the CSB is palatable.

Salt improves palatability and since the salt in the ration is always iodized it serves a crucial nutritional function.

There are other food aid commodities that do not conveniently fit into the above food groups and are usually only used in specific contexts as follows:

High Energy Biscuits (HEB) and "BP5" are comparable in energy and protein and can be suitable to meet emergency food needs on a temporary basis. When cooking facilities are not in place or unknown or in case of sudden need, compact foods such as high-energy biscuits are easy to handle, transport and distribute. BP5 requires no preparation and thus no additional resources are required to prepare it (e.g. fuel, cooking and serving equipment, water and trained personnel). Crushed into drinking water or milk they can produce porridge (thick or thin according to taste), no cooking is required and they are useful for feeding children/elderly and or ill people. HEBs also contain optimal amounts of minerals and are often used to complement a ration; BP5 has been developed for use as a complete food and sole source of both macro- and micronutrients. Both HEB and BP-5 contains about 458kcal, 15.5g of fat and 16.7g proteins per 100g. They are also vitamin and mineral fortified. 100-150ml of water should be provided for every two biscuits consumed. However, BP5 is expensive; nearly three times as much compared to HEB, and is not a 'usual' food. Furthermore, it is monotonous to eat daily. As soon as possible normal food should be provided.

Meals ready-to-eat (MREs) or Humanitarian daily rations (HDR). These rations are the most expensive food aid commodities and are usually reserved for immediate response during the first few days of a sudden disaster or the displacement of large numbers of people. Usually these products contain high quality protein, fat and carbohydrate with added vitamins and minerals.

Liquid Nutrient Supplements (LNS) are a family of ready-to-use food (RUF) products designed to deliver nutrients to vulnerable people. Originally designed for use in therapeutic and preventative nutrition programs, LNS products are gaining popularity and in the future may increasingly be considered for use in the early phases of GFD programs. They are described as "lipid-based" because the majority of the energy provided by these products is from lipids (fats). All LNS provide a range of vitamins and minerals, but unlike most other multiple micronutrient supplements, LNS also provide energy, protein, and essential fatty acids. LNS recipes can include a variety of ingredients, but typically have included vegetable fat, peanut/groundnut paste, milk powder and sugar. Alternative recipes and formulations are currently being explored in efforts to develop affordable and culturally acceptable products for a range of settings. RUFs do not require dilution or cooking, are safe to store without refrigeration and risk of contamination is low. Examples of LNSs are Plumpty'Nut and Nutributter.

Box 3: The use of milk products in GFDs

Guidelines for the use of milk powder state that dried milk powder should not be distributed to emergency affected populations as part of a general dry ration. This is because of the danger of it being used as a breastmilk substitute and the risk of high levels of microbial contamination when prepared with unclean water or in unsanitary conditions. These risks are greatly increased in an emergency setting. During emergencies, dried whole milk and dried skimmed milk (DSM) may be used to fortify cereals and porridges or as an ingredient in the local production of processed foods, for example, blended foods. See **Annexes 3 and 4** for further information on United Nations guidelines for the use of milk powder, and policy guidelines on infant formulas and breastmilk substitutes.

The most cost-effective ration is based on a combination of cereals, pulses and oil. A limited degree of food aid commodity trading at the household level is acceptable, provided there is no large-scale diversion of the food aid or detrimental effects on the health/nutritional status of the community. Certain commodities may have a potentially high resale value (e.g., sugar and oil). The inclusion of high resale commodities in the GFD may allow beneficiaries to purchase other essential food and non-food items that are not otherwise available in the

diet, such as fruits and vegetables. However, this may not be the most cost effective means of ensuring households have access to other essential food and non-food items. Other more cost effective alternatives may include cash or voucher distribution or distribution of the essential items for which the food aid is being exchanged. See **Case example 1**. However, in some situations, food may be the most readily available resource for enabling beneficiaries to access other essential items.

Case example 1: Fresh Food Vouchers for Refugees in Kenya

The town of Dadaab in North Eastern Kenya is home to three refugee camps, together hosting over 240,000 people. The camps were established in mid-1992 and host refugee communities from various countries but the Somali population is the biggest in numbers. Due to ongoing insecurity in Somalia, regular influx into the camps has continued. The three camps are managed by the United Nations High Commission for Refugees (UNHCR). Food is provided by the World Food Programme (WFP) as a general dry ration, comprised of cereal, legumes, oil and sugar. At the time of writing the ration does not include fresh foods, such as vegetables or fruit, and many residents have little access to food beyond that which is provided. Each of the camps has a market where resident vendors sell a variety of items, including fresh foods. However, since residents are prohibited from employment, their ability to access these foods is limited to external support they get from remittances or through the sale of part of the general food ration. Malnutrition rates had been high in the camps and lack of nutritional diversity was identified as an ongoing underlying cause of malnutrition. To increase the consumption of nutritious fresh foods by the refugee population, a voucher programme was implemented by Action Against Hunger USA (ACF – USA) between September 2007 and April 2009.

The programme targeted children 6 to 59 months enrolled in selective feeding programmes. It provided their caregiver with vouchers worth 600KSh per month to enable them to buy fresh vegetables, fruit, milk and eggs in the local market. Since each camp has functioning markets with vendors specialising in the sale of fresh fruit and vegetables, a local supply was easily accessible to the beneficiaries. By providing a voucher for a defined list of items instead of providing cash, ACF were able to maintain some control over beneficiary spending. To complement the voucher component, health education focused on food hygiene and a balanced diet was provided to all beneficiaries as part of the voucher distribution process.

Results showed that the programme improved the dietary diversity (a proxy indicator of the nutrient adequacy of the diet for individuals) of refugee households while also helping to improve the coverage rates of the nutrition programmes and improved the business of the programme vendors in camp. The community appreciated the voucher approach as it provided them with an increased level of choice about the foods to purchase. The camp community is dependent on aid organisations to meet their basic needs, and while this programme also provided items of food assistance to beneficiaries, it did so in an indirect way that maintained the dignity of the beneficiaries and should therefore be a preferred approach where feasible.

Source: *Field Exchange Issue 36*, July 2009

Box 4: Examples of food commodity substitutions

Blended food and beans	1 to 1
Sugar and oil	2 to 1
Cereal and beans	2 to 1
Cereal for oil (not oil for cereal*)	3 to 1

* If, for example, no oil is available for inclusion in the ration, either 100g sugar or 150g cereals could substitute for 50g oil.

Source: World Food Programme, *Food and Nutrition Handbook*, Rome, 2005

Factors affecting the actual delivered ration versus the planned ration

In reality, the actual ration is often substantially different from the planned ration. 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 delivered in time. Common reasons for a difference between planned (designed) rations and actual rations are detailed below:

I. Availability of food items

The selection and number of items in the food basket are frequently determined by availability. When certain food items are unavailable they can be replaced with other items of similar nutritional value. Ideally, substitution should be temporary and recipients should be fully informed of the change in food basket composition through the public information systems. Examples of food commodity substitution are shown in **Box 4**.

When there is insufficient food aid available to meet ration requirements there are three options available:

- Postpone distribution until a full ration for the total population is available.
- Distribute an equal share of available commodities to the entire population (e.g., a reduced ration).
- Give a larger (or full) ration to the more vulnerable groups within the target population and a smaller (or no) ration to the less vulnerable groups within the target population.

Whichever option is adopted, recipients must be kept fully informed of changes to the distribution schedule or amounts and the reason for the change. Ideally, recipients are part of the decision making process on what option is eventually adopted.

II. Estimation of the size of the affected population

The actual size of the population in need can vary from the estimated or planned program population leading to insufficient quantities of food being distributed. Reasons for this difference in planned and actual figures can be various.

- 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 cover long periods of time and assessments are usually done well in advance of the distribution time therefore leading to a disconnect between estimated need and actual need
- Duplicate registration of recipients

III. political priorities

The political priorities of host or donor countries 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 scale of the emergency in order to influence aid. Donor response often depends on the political relationship with the recipient country.

IV. Lack of resources

Lack of resources by implementing agency including "in-kind" donations of food commodities aid, lack of cash to pay for local purchases, institutional costs, and in-country transport.

V. Late delivery

Late delivery of food aid, for example due to long order or transportation times, seasonal or logistical factors, or insecurity.

Calculating Program Needs – Food Aid Quantity

Once the size and composition of the ration has been agreed upon, food aid requirements for the population in need can be calculated. This entails a scaling up of the ration planned for the individual to a food delivery planned for a certain defined population over a defined period of time. See **Box 5** for a more detailed description.

Box 5: Food aid requirements for a population over a defined time period**Ration item (pppd) x Beneficiaries x Planning period x Transport loss adjustment**

Ration item Pppd:	Individual amount in grams of each ration item per person (pp), per day(pd)
Beneficiaries:	The projected average number of beneficiaries for the project
Planning period:	The duration of the feeding operation in days.
Transport loss adjustment:	Add-on percentage for losses during transport, storage and handling. For a country with a port: +5%; landlocked country: +10%

Source: World Food Programme, *Food and Nutrition Handbook*, Rome, 2005.

Targeting

After the food basket has been designed to meet the objectives and scale of the GFD, steps to implement the program need to be taken. Targeting is based on a broad set of indicators, reflecting who has been affected by a shock and to what degree a population has been affected by the shock. Targeting criteria shape the design and objective of the GFD, e.g., who gets food, how much do they get, when do they get it and why do they receive it. Targeting aims to ensure that food aid is received on the basis of need and endeavours to prevent 'harm' by limiting any negative impact of food aid. Above all else, targeting is implemented to maximize the efficient and effective use of resources. See **Box 6**.

Ideally, the cost of targeting within a community, in terms of time, human resources, food and funds, should be less than the cost of distributing food to the entire population. As the proportion of households to be excluded from the distribution decreases, the savings through targeting diminish. At a certain point, the difference in cost between feeding everyone and implementing a targeted programme (with associated resources for targeting) may no longer justify targeting food aid, and a blanket distribution may be more cost effective.

For targeting to be justified, there should be significant and identifiable differences between the target and non-targeted population. Defining *eligibility criteria*, i.e. the characteristics of those individuals or households to be targeted with food, arise from the objectives. Clearly, if an objective is to meet the needs of a group of individuals or households which are thought to require a certain quantity and quality of food, then the eligibility criteria must specify the characteristics of these individuals or households. There must be agreement with the community about the objective of the GFD, eligibility criteria and the distribution mechanism to target vulnerable households. The process for establishing the eligibility criteria must be transparent and involve all the key stakeholders.

Eligibility criteria for receiving food aid should be practical in that it must be possible to verify that the recipients who receive food aid are the intended recipients. A targeting system can be no more accurate than its ability to identify the beneficiaries. Criteria need to be both sensitive (to ensure that those eligible included) and specific (to ensure that those not eligible are excluded). This is important in order to be able to establish the inclusion and exclusion error. *Inclusion error* is the proportion of individuals who are not eligible for but are receiving food aid. *Exclusion error* is the proportion of individuals who

Box 6: Core principles of targeting

1. Constructive and honest discussions with the community are important. For example, if the community deviates from the recommended targeting criteria, or redistribution is occurring on a large scale, it is important that the community and official representatives are able to agree on a solution. It is important that such challenges are regarded as a way of strengthening and improving the system rather than indicating its failure.
2. Targeting systems must be transparent and clearly understood by recipients and non-recipients. This requires appreciable investment in communication and sensitization.
3. Targeting is a pragmatic exercise, requiring judgement, compromise and constant reconsideration.
4. There must be sufficiently experienced and knowledgeable human resources to assist with the process and implementation of the targeting system.
5. Targeting should be culturally acceptable among the community, otherwise the food aid risks being distributed to all households within the community, or households who receive food aid will re-distribute to excluded households.
6. Targeting may not be appropriate among camp populations, as most refugees and camp-based IDPs expect to receive full rations and may therefore be unwilling to be involved in a targeting process.

Case example 2: Balancing Inclusion/Exclusion Errors in Darfur

Displacement in response to armed conflict is a major cause of hunger in Darfur. In the initial stages of the conflict, targeting criteria were based mainly on whether or not a person was displaced. However, following a food security and nutrition survey, it was determined that rural residents were similarly susceptible to food insecurity, putting them in a more precarious position than some IDPs. These non-displaced people were vulnerable on several fronts: their harvest was threatened by poor climate conditions in 2004, they were experiencing the negative consequences of the conflict, including limited market access and a virtual cessation of trade, and their communities were increasingly burdened by hosting large numbers of IDPs. Assisting a large number of IDPs in a village raised tensions in the communities, as did targeting all IDPs and only some of the residents. Therefore, WFP and partners needed to find a fair and transparent way to ensure that the most food-insecure people were assisted. After discussions with partners and communities, WFP arrived at a pragmatic formula: in rural villages already identified as vulnerable to food insecurity and in which hosted IDPs exceeded 50 per cent of the total population, WFP would provide rations for the entire village population. It is possible that some residents did not require immediate food assistance, but they constituted a small minority, and identifying and excluding these individuals would have taken vital human resources away from distribution and monitoring tasks and could have led to further tensions.

Source: WFP (2006). 'Targeting in Emergencies'. Policy Issues, WFP 2006

are in fact eligible for but are not receiving food aid. GFD aims to have low inclusion and exclusion error. It is impossible to completely eliminate such errors, which need to be minimized. See **Case example 2** for an example of managing inclusion and exclusion errors. If the inclusion and exclusion error is high, it may be necessary to reset eligibility criteria and the design of the GFD system.

All food aid is geographically targeted in the sense of distributing food to the population of one geographical area and excluding another. Targeting may take place between countries, between regions in a country or between sub-region, food economy or livelihood zones, districts or villages. These targeting decisions are usually informed by broad sets of indicators, which determine the extent to which different areas are affected by a given shock. In some situations, geographical targeting provides the best strategy for achieving the targeting objective and further targeting may be unnecessary. However, targeting within geographic areas is appropriate when:

1. There are identifiable differences between the intended target and non-target population
2. The targeted population is a minority of the population
3. It is operationally feasible to implement a targeted distribution
4. The community co-operates with the targeting strategy

Targeting generally falls into two broad categories: individuals or households (or groups of households).

Targeting individuals

Eligibility criteria applied to individuals vary in the ease and accuracy with which they can be applied. For the most part, criteria applied to individuals are set through administrative targeting. The need to target individuals in emergencies usually arises because inadequate support has been given to households, e.g. because of early warning failure, shortage of relief food, or because they have been excluded in some way from support to the general population. Individuals are targeted because it is thought that they have special needs and are unlikely to be able to meet their food needs, e.g. the sick, particular ethnic groups, pregnant or lactating women, the elderly, the disabled, or orphans.

Targeting the disabled and elderly

The elderly may be nutritionally vulnerable. Reduced physical or mental function may make it difficult for them to access food, particularly in situations of displacement where social support networks or access to traditional foods is disrupted. The nutritional vulnerability of older people should not be assumed in every context, but older people may be nutritionally vulnerable in a situation where the majority of the population are older people (if, for example, the remainder of the population has fled or migrated). The definition of the elderly in a general population may be difficult. Equally, trying to define disability is a complex and controversial matter. Acceptable definitions changes over time and from one culture to another.

Targeting institutions

Institutions may be targeted to reach specific groups who are thought to be vulnerable, e.g. hospital patients, orphanages or schools. These groups may face special problems in a crisis, as relatives may find it difficult to provide support and Government support for institutions may collapse.

Targeting households

Households are usually targeted by 'socio-economic' indicators, health or nutritional status and are based on assessment or assumption that specific types of household in the population cannot meet their survival or livelihood needs.

Targeting households according to socio-economic status

Economic assessments may lead to criteria that can be difficult to apply in a field setting. For example a 'poor' population group might be defined as one that has less than a certain amount of land or livestock, criteria that it may be difficult or impossible to verify during a distribution. To use these criteria for the inclusion of an individual household in distribution, an outside agency would require a survey of all households. This may be practical on a small scale or with a densely settled population but is usually not possible. Sensitive and specific criteria may be difficult to develop, as there may be multiple characteristics that define the eligible group.

Targeting households according to the nutritional status of children: the 'family ration'

In the absence of a clear understanding of who is food insecure, a common targeting system is to assume that households with a malnourished child registered in a feeding centre are food insecure and to provide them with a ration. Households with children that are malnourished are, therefore, targeted for a general household ration. This targeting strategy, sometimes referred to as providing a 'family ration', has been adopted in a number of emergency contexts where support for the general population is absent or inadequate. However, this assumption may not be valid where a child is malnourished primarily due to other factors such as disease or inadequate care. While the provision of a family ration may target food to a proportion of needy households, the strategy in situations of overall scarcity has potential weaknesses;

- a) It may exclude households in need of food that do not have an eligible child and lead to families attempting to admit children who do not meet the eligibility criteria. This is particularly problematic if families deplete all assets in order to prevent their children becoming malnourished. Often the children end up becoming malnourished at a later date.
- b) Some children may be kept in an undernourished condition to ensure that the family has access to a ration.
- c) Providing the ration at the point of the malnourished child's discharge is contrary to the logic of the distribution since it keeps a household in need for a potentially long period before they receive food support.
- d) Where several agencies are providing services in the same area and the same child attends several centres to receive multiple rations.

Targeting households according to other indicators such as chronic illness (tuberculosis and HIV), gender, age

Targeted vulnerable feeding provides a family ration to households on the basis of individual eligibility criteria, i.e., the household has a malnourished child, someone who is chronically ill (e.g. tuberculosis or HIV) a pregnant or lactating woman, an elderly or disabled person, or someone who is socially vulnerable, such as an orphan. This system recognizes that vulnerable individuals are part of a household, and household members will share the food ration received. Furthermore, by virtue of having a vulnerable individual in the household, all members of the household may be at an increased risk of food insecurity and possibly malnutrition.

The high prevalence of HIV has brought the targeting of people living with HIV (PLHIV) and AIDS affected households into prominence. Unmanaged HIV infection and AIDS can create additional risk of food insecurity and attention has been given to how food insecure households, with the additional burden of HIV and AIDS, can be effectively targeted. First, it should be noted that the impact of HIV and AIDS on household food security is highly variable (i.e. HIV affects both poor and wealthy households) and depends on a range of factors, such as which household members are affected, the household livelihood strategy and the demographic profile of the household. It is probably a reasonable assumption to make that in most settings the effect of HIV and AIDS (through the loss of productive household members, increased costs) is to increase the level of vulnerability. However, much poverty will arise from other, unrelated causes so that the most food insecure households may or may not be HIV infected or AIDS affected. Therefore, attempts to target AIDS affected households alone are unlikely to be appropriate, as they will exclude other food insecure households. Furthermore, in most contexts, it is difficult to develop criteria that identify people living with HIV and their AIDS affected households accurately. Many people will not know their HIV status and even if they did, open discussion may increase the stigmatisation they face and could be unethical. Proxy indicators of HIV, such as chronic illness, may go some way to identifying these households, but run the risk of inclusion and exclusion errors by supporting households which are not food insecure or excluding households which need support. Where the objective of targeting is to address food insecurity it may be better to, for example, target the poorest households and adjust this to provide a better quality of diet to households with chronically ill members.

Targeting households headed by females, on the basis that such households are most vulnerable to food insecurity, is another strategy that is often used by agencies. However, as with all possible target groups, no assumptions should be made which are not validated by assessment about the food security of female-headed households.

Challenge 5: Community-based versus administrative targeting

Assuming the key steps for implementing CBTD are conducted, it is clear that CBTD encourages greater community participation and increases the likelihood of a transparent and accountable targeting system, compared with administrative targeting.

However, there may be a number of weaknesses or problems with the CBTD approach that may be highly context specific. For example, in some communities wealth differentials may be so small that targeting is not feasible, while in other communities the ethos of sharing is so culturally important that targeting is not accepted. The cost to the community and individuals can also be significant. Those on village relief committees have to find time to visit households and attend meetings while any ill feeling that the targeting system creates in the community may be directed towards those on the committee. There may also be considerable hidden costs for implementing agencies. Sensitizing and supporting communities to the approach may require considerable investment of time and human resources.

Currently, there is limited comparative information on the cost and effectiveness of CBTD and administrative targeting. It is therefore not possible to promote one method above another.

More data should be collected on the relative cost effectiveness of different eligibility requirements and forms of targeting as well as recommendations made for use in most appropriate settings.

The elderly are another vulnerable group that can be targeted. To minimize the risk of the elderly having inadequate food intake the following should be considered when targeting a vulnerable feeding programme to the elderly:

- Ensure they are involved during the assessment phase.
- Provide blended food as part of their ration.
- Ensure physical access to the general ration.
- Decentralize distribution sites.
- Ensure older people have sufficient access to fuel and water for cooking.
- Ensure the weight of the food rations is small enough to be carried/transported

There are programme design factors that increase the risk of the elderly suffering from inadequate food intakes: an inadequate assessment of needs at the outset, poor physical access to the ration, constraints in food processing and pre-preparation, and limited opportunity for accessing food through complementary coping strategies.

Conducting Targeting

Historically, government officials and humanitarian agencies have conducted GFDs, in non-camp situations with the assistance of traditional leaders and village committees. This combination of actors would be responsible for registration and ensuring those receiving the food aid were the neediest. This type of approach is referred to as administrative targeting. However, during the last decade there has been a shift towards a new system of targeting and distribution called community-based targeting and distribution (CBTD), whereby the responsibility for defining eligibility criteria, identifying recipients and distributing the food aid is with a village food distribution or village relief committee, often set up specifically for these tasks. Both methods have their advantages and disadvantages as outlined in **Challenge 5**.

In community-managed systems, the community through an elected committee is used to identify beneficiaries. Community managed systems are usually distinguished from 'administrative' systems by the more active participation of the recipient population, rather than only its representatives, with the aim of reaching mutually agreed and acceptable eligibility criteria since those who are identifying the most needy are those who have the greatest knowledge about the targeted communities. Thus, eligibility criteria tend to be more subjective, complex and locally specific than those used in administrative targeting. The village distribution or relief committee is aware of the quantity of food aid to expect, when it will be received and the proportion of the community entitled to receive food aid. However, CBTD is generally applied only in smaller programmes in small communities or in protracted emergencies in a stable context. In large food distribution systems, the levels of supervision may be low and the scope for inclusion and exclusion errors with CBTD may be large.

The rationale behind CBTD is that by giving responsibility for targeting and distribution to the community through elected village committees there will be greater accountability and transparency. It is also intended to translate into less involvement of, and resources expended by, outside implementing agencies in identifying recipients and overseeing distribution. Members of the village distribution committee are elected by the community (women are encouraged to participate, with WFP guidelines advocating for committees to be 50 per cent female) and the success of the community-based targeting system is largely dependent on the village committee being accountable and transparent to all members within their community.

Case example 3: Perceptions of vulnerability and eligibility criteria in Kenya: 2000-2002

The Kenya Food Security Group commissioned a review of the strengths and weaknesses of the community-based targeting distribution system that was implemented throughout much of Kenya during the food crisis from 2000 to 2002.

One of the key assumptions that shaped the 'official' targeting strategy was that not all households in the community had been equally affected and therefore not all households in the community would require food aid. Many of the food distribution committees at the village level and the affected communities disputed this assumption, and believed all people had been affected by the drought so all people required food aid. For example, pastoralists with reasonable herd sizes were officially not perceived to be vulnerable and therefore did not require food aid. However, communities believed such pastoralists were vulnerable because their remaining assets (livestock) had dropped in value and were not productive (no milk production), and that money was needed to purchase water and pasture in order to keep the animals alive.

The village distribution committees recognized that some members of the community might require more assistance than others but were of the view that all households needed some food aid. The committees developed their own targeting strategy, which enabled all households to be included and consequently ration sizes received at household level were smaller than anticipated. The committees were convinced that with their previous experience of managing resources during times of hardship that the strategy they developed was more appropriate for the community compared to the official strategy suggested.

The implementing agencies were aware that such deviations from government recommendations were not received positively by the national policy makers. Therefore, implementing agencies were frequently reluctant to admit the truth to the national policy makers. This meant less transparency and honesty between the different structures and levels. Such deviations from the agreed-upon standards could be used as a 'lessons learnt' exercise to strengthen future GFD.

Source: Maxwell, Simon, 'A review of the community-based targeting and distribution system used in Kenya in 2000-2002', unpublished.

Programme implementation may be extremely difficult where there are fundamentally different views over eligibility criteria. See **Case example 3**. Unfortunately, it is not uncommon for a combination of political, social and cultural factors to end up frustrating efforts to target the neediest households.

See **Box 7** for key steps, and **Case example 4** for an example of community-based targeting.

Distribution Modalities

There are two primary systems for distributing food aid to the general population: take home rations and large scale cooked food distribution. The distribution of rations must ensure the regular and sufficient food consumption of its recipients. It must be organized in a way that complies with a set frequency, involving the intended amounts and timeframes, and avoids

Box 7: Key steps in community-based targeting

1. Implementing agency meets with local authorities and village members in public meetings to inform them that food aid will be provided and to explain what proportion of the population will be targeted.
2. A relief committee (RC) is elected with the aim of having broad representation of all the constituent groups, including adequate representation of women. The RC could be at village level or cover a larger geographic area.
3. The RC discusses with the implementing agency the criteria that should be used for inclusion in the recipient group. These criteria can then occasionally be discussed publicly.
4. The RC then draws up lists of households that meet the agreed-upon criteria, which are then registered to receive food. The lists are read out in a public meeting in the village.
5. The distribution is conducted by the RC; a staff member of the implementing agency could be present.
6. Post-distribution monitoring is conducted by the implementing agencies, perhaps in collaboration with the RC, either through food basket monitoring, or qualitative and key informant interviews.

Source: Jaspars, Susanne and Jeremy Shoham, 'Targeting Food Aid in Emergencies', *ENN Special Supplement*, 2004.

Case example 4: Community-based targeting in Myanmar: 2005

A key component of the WFP programme in Myanmar has been community-based targeting. With the country under sanctions, UN agencies are expected to provide assistance directly to communities and not through government channels. In Northern Rakhine State, WFP has four programme components: food for vulnerable groups, food for work, food for training and food for education. In 2004, the vulnerable group feeding adopted the community-based targeting system for identifying recipients and distributing the food aid.

The community-based targeting system was introduced in order to reduce the influence of village leaders, and to increase community participation and transparency. Overall, the CBTD component of the programme was considered a success. The new targeting system included broader eligibility criteria. Under the old system, 95 per cent of the caseload was female-headed households. With the new targeting system, only 80 per cent of the households were female headed, which made room for other groups, e.g., the landless, elderly with no support, and the physically and mentally handicapped. CBTD has also lowered the exclusion error, with inclusion estimated at 88 per cent. CBTD bypasses the political system at village level and may lead to strengthening civil society, which will be beneficial for other development activities.

One of the reasons for the success of the CBTD approach in Myanmar appears to be that because of the other components of the WFP intervention, such as FFW, the community was under less pressure to include everyone in the vulnerable group feeding programme, as it had alternative opportunities for accessing food.

Source: Shoham, Jeremy, *Field exchange*, 26, November 2005.

interruptions at all costs. A GFD programme may use a combination of existing and newly established structures for implementation. In stable situations, existing government structures such as information networks and transport and storage systems may be used. This may be quicker and cheaper than establishing new parallel systems. The initial needs assessment should include information on how suitable local systems are in supporting the GFD.

There are a number of factors (discussed below) to help ensure a successful GFD system, whether it is take home rations or cooked food, which should be considered before the actual mechanics of distribution are decided. See **Table 2** for a summary of the benefits, risks and limitation of the different distribution modalities.

Context awareness

It is important to be aware of the social and political divisions within an area. Determine whether or not traditional community leadership mechanisms have collapsed and/or if they are truly accountable and representative to all groups within a community. Assess if it is appropriate to use these mechanisms to assist with the identification of vulnerable people within their community. By being unaware of the context and existing local tensions, GFDs can further increase these tensions, leading to increased insecurity and resulting difficulties for GFD implementation. See **Case example 5**.

Management and coordination

In order to implement a GFD on a large scale, committees/working groups/task forces need to be established at a number of levels. Members of these groups should have the interest

of the recipients at heart; ideally have previous experience of GFD systems, knowledge of the area and people affected by the shock, and the ability to mobilize qualified and experienced staff quickly. They should also be neutral, impartial and accountable, and display transparency. Members of the committee at the central and regional levels are typically made up of government representatives, UN agencies, implementing organizations, donors and religious leaders.

These committees play an important role in managing and coordinating the GFD system, as well as systematically reviewing the system so that it can be improved and adjusted where necessary. The roles and responsibilities of the GFD committee at all levels should be agreed upon at the onset and clearly set out in relation to the roles and responsibilities of the implementing organizations. Good organization and coordination between all concerned is vital for the successful operation of the GFD.

Training and support for the implementation process

Some GFD committees, especially at the village level, may be inexperienced and may initially require training and support. Although this may appear time consuming and less of a priority at the height of a crisis, it is important to remember that the greater the energy invested in the process of establishing a GFD system the higher the chance of a successful GFD system being implemented. Local GFD committees, which are working well, can also usefully provide a forum for discussion and a means for disseminating information about the distribution system to the community, as well as eliciting recipient views about the GFD programme.

Case example 5: Selection of representatives to distribute food in Rwandan refugee camps: 1994

In the Rwandan refugee camps in Tanzania and the Democratic Republic of the Congo in 1994, food distributions were initially organized on a communal basis, with commune heads preparing lists and assisting in the distribution itself. This was the same type of distribution system that was implemented in the IDP camps in Rwanda from 1990-93, but one found to be inequitable and open to abuse by commune leaders. The great advantage of this system was that distributions could start almost immediately and required fewer agency staff than a system distributing on the basis of a sector, cell or head of household. The principal disadvantages were that, in large camps, distributions were often lengthy and chaotic and, above all, were more open to abuse by the commune leaders, who were able to influence the size of ration received by particular groups and divert a proportion of the food for their own use. The use of commune leaders to distribute food was politically charged and potentially beneficial to the militia and those who had been involved in the genocide, given the context that produced the refugee exodus, e.g., the call for Hutus to “leave the country and continue the struggle from across the border”, the role of the militia in instigating and spreading the genocide and the involvement in the militia of many commune and prefecture leaders.

Source: Core Team Overseas Development Institute, ‘The international response to conflict and genocide lessons from the Rwandan experience’, Study 3, Humanitarian Aid and effects, *Journal of Humanitarian Assistance*, 6 May 1996.

Decentralized GFD system

When distributing food aid to dispersed and mobile populations a decentralized system (high number of distribution sites over a geographic area) will help to increase the coverage rate and help to reduce the exclusion rate. However, decentralization will also increase costs associated with transport, human resources and administration.

Timing of the GFD

The timing of a GFD is critical. GFDs implemented before mass migration, adoption of long-term negative coping strategies and increased rates of severe malnutrition and mortality will ultimately involve less expenditure in order to protect and rehabilitate the population affected by the shock. However, food aid and the mechanisms for resourcing and transporting it do not always lend themselves to timely delivery of aid. Emergency food aid often arrives late, and all too frequently appropriate resources are not readily available until the situation has deteriorated considerably and the situation becomes news (the CNN factor). It is often only at this point that resources, in particular food aid, are made available by the donor community for GFD.

It is also important to consider the timing of a GFD and its potential impact on food production and market prices. In some situations, GFDs need to be timed for the ‘hungry season’ and phased out post-harvest. However, **the potential disincentive effects of food aid should be an argument for looking at the appropriateness of the assistance being provided, and the way it is provided, not whether it should be provided at all.** In countries or regions where food is available locally, it may be quicker and cheaper to purchase food aid locally. Local purchase also provides commodities that people in need of food aid are used to and can also stimulate the local economy.

Women

There is a view that women are more likely to ensure that food aid resources are consumed by household members and less likely to sell the ration for non-essential items, e.g., alcohol and tobacco. Targeting food aid to women is a WFP requirement for food assistance programmes. While it may be relatively easy to ensure women have a presence in village distribution committees or receive the food aid, it is more difficult to ensure they actively participate in decision making and that their opinions and suggestions are given equal weight to those of their male counterparts. In some cultures it is unrealistic to expect major cultural changes during the life of the GFD, however, every effort should be made to include women in decision making and implementation, although expectations of their participation should be realistically managed. See **Case example 6.**

Cost to the recipient

When planning a GFD system, it is important to consider the cost to the recipient, such as the time it takes for them to walk to the distribution site and the time spent waiting around for the distribution. There may also be costs for transporting food home. As a reminder, full rations for one month weigh roughly 18 kg; a family of five, of which three are small children (and, thus, cannot carry their ration), must then carry away 90 kg at once, that is, 45 kg per adult – a considerable weight for most adults. The frequency of distribution rounds must therefore be set by referring to common sense, and adapt to circumstances. If recipients face a four-day journey on foot to reach distribution points, they can hardly be expected to undertake such a journey more than once a month. In camp settings, on the other hand, it may be most practical to conduct distributions on a weekly basis. The ultimate decision must also allow for the constraints of the distributing agency in terms of staff and logistics, with respect to the number of recipients and the time required for the distribution itself. Where women or the elderly pick up the food at distribution sites, agencies often

Case example 6: Targeting food aid directly to women in southern Sudan: 1995

WFP initially used the chief structure for food distributions in southern Sudan during the 1990s. However, this system saw food being diverted, resulting in exclusion of many vulnerable households. In 1995, after many discussions with the key stakeholders it was decided to distribute food through locally based relief committees. The members of the committee would be elected by the community and would consist of seven women and six men. Each village elected a woman to identify the vulnerable households. While there were weaknesses in this system, the benefits were the following: Women stressed that more of the food reached the household; women felt re-empowered as managers of the food and participated in the decision-making process. It provided female role models through a system that allows men and women to work together for their community. By using them to identify the vulnerable households, women became active and contributed to their community. Unfortunately after the women received the food aid, the authorities would insist on part of the ration being given to them as a tax. Neither women nor men had the power to resist this taxation system.

Source: Chapman, Cassandra, 'Is targeting of food aid directly to women based on gender roles an appropriate response?', *Field Exchange*, 6, February 1999.

make arrangements for more manageable bag sizes and/or acknowledge that as soon as the women receive the food, a large proportion of the ration is given to male members of the household to help carry the food home. Whenever possi-

ble, such costs to the recipient should be minimized, e.g., by trying to ensure time spent waiting for the food ration is kept to a minimum and costs for milling whole grain are compensated for by an increased grain ration.

Table 2: Benefits, risks and limitations of different distribution modalities

Method	Benefits	Risks/Limitations
Cooked food distribution to individuals	<ul style="list-style-type: none"> • Only way of guaranteeing access to food by the (politically) vulnerable. • Reduces risk of theft and taxation. • No registration or ration cards needed. • Overcomes problems of lack of fuel, utensils, water, and physical weakness. 	<ul style="list-style-type: none"> • Creates population concentrations. • Risk of attack and military recruitment. • Health risks associated with overcrowding. • High cost because of high staff and material needs. • Food needs to be stored and can therefore be stolen or looted.
Take home rations with administrative targeting distribution	<ul style="list-style-type: none"> • Ensures that households receive food • Initial control over beneficiary figures • Less risk of diversion by elders and taxation by military and administration. • Undermines abusive leadership. 	<ul style="list-style-type: none"> • Over-registration of more powerful groups, leading to unequal distribution. • Difficult to register mobile populations; movement is increased at times of insecurity. • Little beneficiary participation.
Take home rations with community based targeting distribution (CBTD)	<ul style="list-style-type: none"> • Faster than distribution on the basis of registration. • Empowers people and makes them more responsible. • Creates social contracts by electing committee members. • Reduces overhead costs. • Can specify gender balance. • Enhances agency understanding of local society. 	<ul style="list-style-type: none"> • Local representatives are under pressure to favour relatives, the more powerful and divert to the military. • Local representatives may exclude outsiders, such as the displaced. • Agency needs to identify the politically vulnerable and ensure they are represented. • Time consuming to establish truly representative committees. • In acute crisis, traditional leadership may take over.

Adapted Source: Susanne Jaspars. 'Solidarity and Soup Kitchens: A review of Principles and Practice for Food Distribution in Conflict.' *HPG Report 7*, ODI. 2000.

Case example 7: Ngara refugee camp Tanzania

In 1994, there was concern that there was considerable over-registration among the Rwandese refugees in Ngara camp in Tanzania. Refugee leaders were reluctant to cooperate with an external re-registration process out of fear that this would lead to a reduction in the amount of food aid being distributed. This was an extremely sensitive and volatile issue. To minimize double registration of individuals, camp authorities planned to complete all the registration in one day. This required involvement from a large number of staff from many agencies on the day of registration and considerable time was invested in planning the details of the day-long event.

The registration day started at dawn. Once registered, refugees had their hand dipped in gentian violet to prevent double registration. Some refugees did their best to remove the gentian violet and tried to register more than once. No doubt some were successful in this endeavour. By dusk, registration was halted (partly due to security concerns) even though there were still queues of refugees waiting to be registered. It was generally accepted that refugees still queuing at the close of registration had already been registered earlier in the day and that no further registration needed to take place the following day. The overall number registered was less than the original refugee registered case load but still greater than the number of refugees that UNHCR believed to be living in the camp.

Source: Maxwell, Simon, personal communication.

Take Home Rations

GFD programmes are most frequently implemented using take home rations that consist of large distribution of commodities for preparation at the household level. Take home rations are handed out at centralized distribution points for which registration and proper organization are key factors in ensuring success.

Registration or estimation of beneficiaries

All GFD systems require information on the number of beneficiaries that meet the eligibility criteria. One means of obtaining this information is by having the community themselves or external agencies register beneficiaries. External registration needs careful planning by all interested parties and is resource intensive in terms of time, staff, and construction materials.

When registration is not possible, the minimum requirement is to identify socially excluded or politically marginal groups, for example, displaced populations with no agreed community leaders. In this way, they can be prioritized during distribution, and/or their food receipts monitored.

Registration data needs to be regularly updated due to births, deaths and population movements. Distribution days may provide an opportunity to update registration figures. During an emergency it is common for communities to record influxes of displaced persons. However, it is less common for communities to record and report an exodus of people from their community, as the amount of their food aid entitlement would have to decrease in accordance with the reduction in population. This phenomenon has often resulted in an inflation of beneficiary numbers. A related problem has been over-regis-

Challenge 6: Registration and the need to play the system

Food aid is more than just a consumable commodity; it is at times a highly desirable asset and one that can be used to wield power and influence. In many situations it is also a life-saving commodity. Where populations face starvation and destitution and when relief programmes provide at best only the bare minimum for survival often in the most inhospitable of environments, it is hardly surprising that those affected by a crisis endeavour to maximize resources that may be available to them. This has inevitably led to protracted disagreements and conflict between those implementing the GFD and the recipients of food aid, with regards to the actual number of people requiring food aid assistance and ways to resolve discrepancies. Where such conflicts arise, it may prove very difficult to find easy solutions. Pragmatic compromise may be required by the key stakeholders in order to agree on the numbers of recipients requiring food aid. While registration can certainly be planned to minimize risk of 'cheating', implementing agencies can also do much to reduce pressures within a population to want to cheat, i.e., ensure regular and timely delivery of a full food basket and ensure basic non-food needs are met. Where intractable registration or 'number' issues do arise and donors begin to cut food aid resources, implementing agencies can play a key monitoring and advocacy role by setting up systems to monitor any potentially negative effects of food aid reductions on nutritional status and mortality.

Food distribution agencies should reduce the risk of 'cheating' by ensuring regular and timely delivery of a full food basket and ensuring that basic non-food needs are met. Systems should be set up to monitor the potentially negative effects of food aid reductions on nutritional status and mortality.

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tration among refugees or IDPs. In these instances, refugees or IDPs register more than once at different registration sites or at the same site using different members of the household. See **Challenge 6**. In some instances, it has been estimated that the registered population has been twice the actual number of refugees. In the past, such problems have proven quite intractable and difficult to resolve. See **Case example 7**.

Ration cards or recipient lists

Households that fall within the agreed eligibility criteria may receive a ration card. The ration card has information on family size and address (village, camp sector). It also usually has sets of numbers to indicate the distribution periods for when food has been received. Alternatively, recipient lists established by the community GFD committee or village leaders may be sufficient to record those enrolled in the GFD programme.

Scooping

Scoops, or measures, are made for each of the food aid commodities to correspond to the ration size for a particular commodity, for a household and for a specific length of time. This saves time at the distribution site, as commodities do not have to be weighed out. If ration sizes are altered then new scoops should be made to correspond with the new ration size. Recipients should be made aware of the number of scoops they are entitled to for a given food commodity. However, manipulation is still possible by over- or under-filling the scoop or by using the wrong size scoop. An alternative to scooping used in some situations involves distribution to groups of households. In this method, groups of households are informed of their ration entitlement. A number of individuals from the group then receive the group amount and divide this up amongst themselves. Group distribution is faster than systems using scoops and there is a greater chance that the correct ration will be received.

Distribution cycle

Rations may be distributed weekly, bi-weekly or monthly. The distribution cycle depends on the type of population served, the context, and food resources available. For dispersed or mobile populations, it is usually most appropriate to distribute food on a monthly basis as this reduces the time spent collecting the ration. If the rainy season usually reduces accessibility (e.g., impassable roads), then it may be better to distribute a two-month ration prior to the onset of the rains. In refugee or IDP camp situations where access is easy, food could be and is often distributed twice a month. In conflict situations, where the risk associated with carrying or keeping large quantities of food needs to be taken into account, it may be more appropriate to only distribute small quantities of food at each distribution, thereby necessitating shorter distribution cycles. Once the distribution cycle has been determined, it is crucial to inform beneficiaries and maintain the schedule, in order to keep the confidence of the recipient population. If irregularities are anticipated, the population must be informed so they can plan accordingly.

Number of distribution points

In general, distribution points should be located as close to recipients as possible and the number of recipients attending one distribution point at any one time should be minimized. Registering recipients and distributing food from nearby distribution sites on the same day reduces the chance of recipients receiving double rations, as they would have to be in two places on the same day. UNHCR recommends at least one distribution site per 20,000 refugees and that the distance people have to travel should not be more than 5 to 10 kilometres for dispersed populations.

Distribution staff

Staff profiles depend on the type of distribution system adopted. A community-based distribution system requires less salaried staff than an agency-managed system. See **Challenge 7**. However, sometimes the GFD committee and helpers during the distribution receive payment (officially or unofficially) in kind, using the food aid. The types of staff required during a distribution include:

- Distribution monitors
- Distribution supervisors, field co-ordinators and logistics officers
- Distributors
- Cooks and cleaners in the case of cooked distributions
- Storekeepers, guards

Large-scale cooked food distributions

A GFD in the form of large scale distribution of cooked food is only an option in quite specific circumstances such as the following: when people do not have the means to cook for themselves (they lack the necessary space or materials such as cooking utensils and fuel; where insecurity would put recipients of take-home rations at risk; individuals at risk of becoming malnourished must temporarily be targeted, until such a time as the entire population can be assisted in the form of take-home GFD rations; or for emergency school feeding). See **Case example 8** for an example of an effective large scaled cooked food GFD.

Distributing cooked food can be advantageous because it can guarantee access to food for the politically vulnerable, reduce the risk of food rations being “taxed” for safe passage, doesn’t always require a registration card and addresses problems of lack of fuel, utensils, and/or water. However, distributing cooked food encourages population concentrations, which may increase the risk of attack, spread of diseases and/or military recruitment. Such programmes should only be considered as a short-term measure to be phased out when people have the necessary resources to prepare food at home and/or when security permits. There are also health risks associated with over-crowding:

Challenge 7: Payment for GFD committee members and helpers

There is no policy consensus on whether GFD committee members and other helpers from the community that assist with the distribution should receive payment in kind (food aid) for their work and time. This can result in ad hoc and in some instances 'underhanded' practices occurring. The savings made where village GFD committees implement programmes should be considered in conjunction with the amount of time the GFD committee members are spending carrying out their responsibilities when deciding if payment is necessary. An alternative to direct payment is to establish arrangements and practices whereby those in a community, who are not involved in the committee and distribution, pledge time for certain agreed domestic or agricultural tasks for those involved in GFD implementation who may have less time to do their own work. These arrangements can be established when setting up the committees and planning distributions.

Payment of GFD committee members and helpers needs to be considered in the planning stage of a GFD.

Case example 8: Cooked Food Distributions in Mogadishu

Mogadishu, the historical capital of Somalia, has been at the heart of instability in the country for 19 years. As a result of conflict in 2007 between the Transitional Federal Government (TFG) and local factions an estimated 1.5 million people were displaced, with 500,000 in critical need of lifesaving assistance. In 2007 the World Food Programme (WFP) could no longer safely deliver general dry food distributions to recipients in Mogadishu – deliveries were being looted, riots were occurring with increasing frequency, and people were being killed as a result. SAACID, an indigenous Somali NGO founded and directed by Somali women, developed and designed a food kitchen programme to cater for the vacuum created by the breakdown in WFP food distribution. SAACID established 10 large scale cooked food centres to provide one cooked meal per day to those wanting a meal throughout Mogadishu and conducted a 2-day mobilisation workshop for 120 key community leaders. The workshop resulted in local Mogadishu communities taking full ownership of the initiative, and identifying and agreeing upon the 10 sites within the city. Critically, the community agreed with the core principle of the programme – free life-saving meals for anyone needing such a meal – without prejudice to clan, gender or age.

The programme was expected to run for only 6 to 12 months but in reality, the security context continued to decline throughout the implementation with no possibility of the cooked food programme transitioning back to dry food distributions. A long list of threats – worsening security, increasing inflation, a deepening drought, an international financial crisis, and systemic attacks on public markets – only increased dependency on the kitchens by the most vulnerable in the city. As markets were systemically attacked, and the economy flat-lined, alternative livelihoods also dried up. More and more families came to rely exclusively on the kitchen network. Officially, SAACID provided 80,000 meals of 2000 kcal every day however it appeared that the average number of people accessing one 2,000 calorie meal was 4.5 people – or more than 321,320 people per day. At the time of writing the programme is in its fifth year phase.

The operational deployment of the food kitchen network was expensive compared to dry food distributions however it worked because of strong community ownership, the transparency in the equality of resource and the clans represented in each district, the assured consistency and reliability of delivery to recipients, the relatively small amounts of food held on site at any one time and the fact that the food is cooked – limiting the value of looting by potential factional or free-lance militias, or even the public, who were desperate for food. The key defining feature for initial and ongoing support for the large scaled cooked food initiative was the paucity of viable alternatives for feeding the vulnerable and food insecure in Mogadishu City. Another factor for continuing support was the ability of the programme to deliver to a concentrated population cluster in a high profile city. The cooked food distribution probably provided the safety net that prevented a major famine from occurring.

Source: *Field Exchange Issue 37, 2009*

- Hygiene within the kitchens is difficult to ensure.
- Outbreaks of food borne diseases are frequent in mass feeding situations.
- Distributing cooked food is expensive due to the high number of staff and materials required.
- The food for cooking must also be stored and has the potential to be stolen.
- It is difficult to meet the energy and nutritional needs of young children within the two or three meals provided per day.

Box 8: Political, military and security-related problems in food distribution**1. Theft**

Taking food against someone's will e.g. theft of food by militia or soldiers, before, during or after distribution.

2. Looting and pillage

Organised and violent confiscation/stealing of large quantities of food, household and productive assets by local authorities, leaders or militia. For example, looting of food aid from warehouses or food convoys.

3. Attack

Attack on staff to force distribution according to attacker's wishes (which is against agency criteria). Attack on convoys or at distribution points to deny food to intended beneficiaries or for personal gain.

4. Taxation

Imposed or unimposed levies by authorities for feeding troops, paying local administration, or for providing security, including food aid. Can occur before or after distribution.

5. Diversion

Powerful individuals within communities or within agencies, taking shares larger than their entitlements. For example, elders, local authorities or village committees.

6. Manipulation**6.1 Of information**

Inflation of beneficiary numbers to benefit powerful groups, either within the beneficiary population or by those administering assistance. E.g. by creating fake beneficiaries or villages, inflating family size. Exclusion of marginal groups, or those seen to support the enemy, from assessments.

6.2 Of beneficiaries

Deliberately creating displaced groups or maintaining malnourished groups to attract resources. Exclusion of displaced and other politically vulnerable groups.

6.3 Of agencies

Playing agencies off against each other. E.g. making use of a lack of consistency in agency principles for withdrawal.

7. Coercion/extortion

Forcing agencies to do something against their will by issuing threats. E.g. imposing regulations on staff and vehicle hire.

Source: Susanne Jaspars. 'Solidarity and Soup Kitchens: A review of Principles and Practice for Food Distribution in Conflict', *HPG Report 7*, ODI. 2000.

- Food intakes are often lower than intended, as incorrect amounts of food are allocated when relief workers are confused by differences between weights or volumes of dry and cooked food.

However, the nutritional content of cooked food rations can be optimised when fresh foods are used and/or micronutrient powders/pastes are added.

Implementation constraints

Access to a population may be blocked due to security issues, government action or environmental conditions such as flooding. Some of the challenges facing food distribution programs are highlighted in **Box 8**. Unfortunately, populations that are difficult to access frequently have the greatest need for assistance, especially food aid.

The following are examples of the constraints in implementing a GFD when there is limited or no access to the population:

- A needs assessment is not possible or is very hurried and cursory.
- Little time for planning the GFD and little opportunity to inform and prepare the beneficiaries, meaning the windows of opportunity that need to be used to implement a GFD are sacrificed.
- Distributions are irregular, making it difficult for beneficiaries to depend on the food aid and/or plan for their future food needs.
- Support and capacity building are provided for local leaders or local GFD committees in a very limited manner.
- Opportunities for monitoring the distribution are restricted.

Other forms of General Food Distribution

Donors and aid agencies are increasingly using the term food assistance as an alternative to food aid in response to the changing landscape of global food insecurity and recognition that a broadened approach to food insecurity could improve the efficiency of the response. In general, food based responses still dominate in emergency settings however increasingly food assistance instruments might include direct food based transfers (such as general feeding rations, food-for-work, etc.), food subsidies, cash transfers and vouchers and agricultural and livestock support. For example, WFP's Strategic Plan for 2008-2013 offers an expanded set of food assistance tools for addressing hunger, and thereby promoting growth and development within a rapidly changing global environment. Under the plan, WFP's interventions should be provided in ways that meet hunger needs, strengthen local markets, fosters small farmers' productivity, and build national capacities. Therefore efficiency can no longer be simply viewed through the narrow lens of success of a general food distribution program, but should be viewed more widely as to whether the right instrument is being employed to address the identified problem. Food-for-work and voucher programs are of most relevance in an emergency setting where food support is considered a requirement. For more details please see the Livelihoods Module (Module 16).

Food-for-work (FFW)

In a FFW programme, recipients receive a household ration in exchange for undertaking some form of work. It is usually implemented to ensure that only those in need receive food aid and also acts as a means of generating national and community level assets (often for the public 'good'), like roads, schools or ponds. Such programmes are, however, often difficult to implement at the onset of a crisis. The assumption made is that only the poorest and most needy will accept this type of work which involves payment of food in lieu of wages. For self-targeting to be successful, an appropriate wage (in terms of food) must be established and the system must have the capacity to employ those who want to work. However, sometimes FFW plans exclude the most vulnerable like the disabled, chronically ill, mothers with small children and those who are malnourished (where possible, governments and implementing agencies will register such individuals and their families for free distribution). Furthermore, it is sometimes problematic to establish appropriate (e.g., to ensure the work is necessary and useful from a community perspective) FFW plans on a large enough scale to ensure that sufficient numbers of vulnerable people can receive assistance in areas affected by a particular shock. In some situations, governments prefer FFW as opposed to free handouts of food aid (GFD) and believe that such programmes carry less risk of creating a dependency culture.

Cash or Commodity Vouchers

Voucher transfers are assistance to persons or households in the form of paper or electronic entitlements which can be exchanged in shops for specific types and/or quantities of food in order to meet household food needs. Commodity voucher programmes encourage traders to bring food and other commodities to local markets. Vouchers allow more choice than direct distribution of commodities, but can still be applied towards the purchase of certain commodities. See **Case example 9**. Both types of voucher can be exchanged only for food; recipients cannot claim cash. The two main types of vouchers are:

- **Commodity voucher:** exchanged for fixed quantities of specified foods
- **Cash voucher:** exchanged for a choice of specified food items with the equivalent cash value of the voucher

Some reasons for using vouchers are:

- **Access versus availability:** Food is available in markets but beneficiaries lack the resources to access it.
- **Food plus effect:** In addition to meeting the needs of beneficiaries, the local economy or host population benefits from the injection of cash into the market system.
- **Choice and dignity:** Beneficiaries have greater choice and avoid queuing for food handouts. (However, handing in food/cash vouchers can also have a negative impact on dignity as those that 'pay' with vouchers can be easily identified as being 'poor').
- **Mitigating unintended effects of food transfers:** Avoids beneficiaries selling food from a GFD to purchase other desirable complementary food items. Cash/ vouchers can also supplement general food distributions in order to meet needs of specific beneficiary groups.
- **Cost efficiencies:** In some cases cash/vouchers are more efficient than in-kind food assistance. Even when they are more costly, other benefits of cash/vouchers may outweigh cost efficiency considerations. This may require cost-benefit analysis.
- **Hand-over strategy:** In some cases it may be easier to develop cash and voucher programmes with national authorities and then hand them over.
- **Coherence with agricultural seasonal cycle:** Cash/ vouchers can be alternated with food, ensuring transfer modalities are matched to agricultural seasonal cycle.
- **Faster response time:** The use of cash/vouchers may allow faster response. As an example, when direct transfer of food to affected areas is hindered by political, logistical, security or other reasons, but local markets are functioning, cash/vouchers might be faster.

Case example 9: Swaziland Cash and Food Transfer Program

Severe drought in Swaziland during the 2007/2008 agricultural season caused a 60% drop in national maize production, resulting in the lowest harvest on record. This was exacerbated by forest fires in the high yield region of the country, which damaged the forestry industry and resulted in many lost labour opportunities. The combined shocks of drought and forest fires impacted heavily on an already vulnerable food security context. The national poverty rate in Swaziland at that time was 43%, while HIV prevalence was 26%, believed to be the highest in the world. This has significantly contributed to the reversal of human development indicators which had been rising until the mid-1990s.

Agencies in Swaziland have routinely responded to food and income shortage with a standard food parcel of cereal, pulses and vegetable oil. A detailed market feasibility assessment for using cash transfers provided the foundation for action, as it confirmed that local and national markets would support an increased demand for (largely food) products and suggested the inflationary effect would be insignificant. A cash transfer safety net programme was therefore designed by Save the Children (SC) to support beneficiary households with access to food and other basic items to meet immediate humanitarian food and non-food needs, while also protecting and promoting livelihoods. SC distributed a combination of food aid (50% ration) and cash (market value of a half food ration) to 6,200 households each month for 6 months. Beneficiary households were identified using nationally agreed vulnerability criteria from SC operational areas. Cash was transferred to private bank accounts or through Post Office accounts. Considerable investment in a comprehensive monitoring and evaluation system generated useful data before and during the intervention (market feasibility study, baseline survey, monthly monitoring of disbursements markets and households, final evaluation survey).

The key findings from the project were:

- Cash improved nutrition and dietary diversity.
- Cash enabled purchases of essential non-food items.
- Cash was invested in assets and livelihoods.
- Women were empowered by receiving cash.
- Cash delivery systems were appropriate, timely, safe, well targeted and scalable

It was determined that in this situation cash transfers had a greater positive impact on children's diet than food distribution only and in such a fragile and vulnerable context, predictable safety net transfers must be designed as part of a broader Government social protection system. A range of long term safety net programmes, including a monthly unconditional cash transfer to the most vulnerable households, which could be scaled up to meet the additional needs during a drought year, would support the existing development efforts by the Government.

Source: Jackson, Rosie, 'Swaziland Cash and Food Transfer Programme', *Field Exchange* Issue 36, July 2009.

Monitoring and evaluation of GFD programmes

Monitoring of the GFD system is important. The main type of monitoring practised by agencies implementing GFDs relates to logistical performance and a number of process indicators such as food basket monitoring. While this type of monitoring information is critical, there has been a general lack of impact monitoring of GFD programming or comparative evaluation and monitoring of different ways of delivering general rations, such as administrative versus community-based targeting.

A good monitoring system should determine:

- **Appropriate targeting:** whether the decision to target food within a certain geographical area is appropriate.
- **Verify if the most vulnerable received the food aid:** whether the groups in greatest need were identified in the assessment and received the food aid.

- **Realistic objectives:** whether the objectives of the GFD were achievable and realistic.
- **Effects:** whether (and to what extent) adverse effects of food assistance were avoided and whether asset depletion of households were halted

Monitoring should ensure that food effectively reaches intended beneficiaries in the agreed quantities and measure its impact on food security and nutrition. It should also allow for a review of the system itself. At the onset of programming it must be agreed who has to collect what information, the appropriate format to use and how to analyse the data and report on the information. This will ensure all stakeholders are collecting comparable and agreed data. Reporting on abuse and food diversions, and on high inclusion and exclusion errors should be actively encouraged in order for the GFD system to be strengthened and improved.

The key components of a monitoring system for a GFD programme are described below.

Case example 10: Food basket monitoring among Rwandan refugees in the Democratic Republic of the Congo: 1994

The mean intake (quantity of food distributed divided by the number of refugees) of the Rwandan refugees in 1994 in Goma, Democratic Republic of the Congo suggested a more-or-less satisfactory picture. However, with the introduction of food basket monitoring, it was apparent that distributions within the camps were often highly inequitable, with some groups receiving general rations that were quite inadequate. For example, a mid-October survey in Kibumba found that 40 per cent of households received less than 2000 kcal/capita, whilst 13 per cent received more than 10,000 kcal/capita. A review of surveys undertaken in the four main camps found that the percentage of families receiving less than 1000 kcal/capita was 32 per cent in Kahindo, 29 per cent in Kibumba, 9 per cent in Katala and 19 per cent in Mugunga. Such inequities were often reflected in high rates of malnutrition in certain camps and for certain groups.

Source: Core Team Overseas Development Institute, 'The international response to conflict and genocide lessons from the Rwandan experience', Study 3, Humanitarian Aid and effects, *Journal of Humanitarian Assistance*, 6 May 1996.

Anthropometric monitoring

If malnutrition rates decline it cannot be assumed to have been due to the impact of the GFD, as other factors will also play a role. At the same time, any decline in nutritional status during implementation of a general ration indicates that the GFD was not effective (especially if malnutrition due to epidemics is excluded) or was poorly implemented.

Food basket monitoring

Food basket monitoring is done to see whether recipients have received the planned ration. This involves checking the rations received by a sample of households exiting the distribution site. They are selected at random, their rations are weighed and the results are then compared with the planned ration for the household, (based upon family size on the recipient document or ration card). See **Case example 10**. Food basket monitoring cannot reveal inequalities due to inadequate or inaccurate registration (exclusion or inclusion errors).

Distribution reporting

Distribution reports should be completed for each distribution cycle or other agreed-upon period (e.g., monthly). The following minimum information is required:

- Number of actual beneficiaries for the particular distribution period (checked against the number of registered beneficiaries)
- Food balance at the start of the distribution period
- Quantity of each commodity distributed, losses, damages
- Food balance at the end of the distribution period

This information should be analysed for over- or under-distributions and to determine whether the recommended rations were distributed. The distributing agency should ensure that losses are minimized and accounted for and they are able to identify at what level of the distribution process problems occur, in order to address bottlenecks. The information should include food supply and delivery to the end distribution point, as well as food storage and handling of data.

Post distribution (or end-use) monitoring

Post distribution monitoring is usually conducted through household visits and/or market surveys. During household visits the following information should be collected: the quantity of food received the use of food aid (e.g. possible sale/exchange of food aid commodities), acceptability and quality. Household visits are necessary to determine whether there are some households that have been left out of the distribution altogether or whether some households or groups have been under- or over-registered (inclusion and exclusion error). This could be carried out on a random sample. Using knowledge of social and political divisions within the recipient population, it should be possible – without a random sample – to identify vulnerable groups that are likely to have been left out of the distribution and ensure that such households are visited as part of the monitoring. Household visits will enable the coverage of the GFD to be calculated, e.g., the proportion of eligible households who were expected to receive food aid and did receive food in practice.

Market surveys should collect information concerning the commodities and quantity of food aid for sale in the market. This will help to determine the impact of food aid on the market, identify food aid commodities frequently sold by the beneficiaries and the potential impact of the food on their diet. Such information may demonstrate a need to revise the food basket.

Monitoring non-beneficiaries

Monitoring changes in the vulnerability of non-beneficiaries is important in case their vulnerability increases and they become eligible for inclusion in the programme. See **Annexes 7 and 8** for an overview of monitoring targeting systems and the different types of monitoring that may be adopted within a targeting system.

Challenge 8: Impact-monitoring of GFD programming

There are several reasons why there has been a lack of impact and effectiveness monitoring of GFD programming;

- a) Agency reluctance to collect such information out of fear that findings will demonstrate limited impact
- b) Lack of clarity regarding objectives and outcomes of interventions, making it difficult to identify appropriate impact information
- c) Impact assessments are expensive (but often relatively cheap compared to overall programme costs), require careful planning and are time-consuming, and therefore may not be a priority at the onset of an emergency.
- d) The lack of technical capacity within an agency to implement an impact-monitoring system, compounded by the lack of agreed practitioner guidelines for establishing an impact monitoring system
- e) Difficulty of attributing impact to intervention, given other factors that may impact food security and nutritional status
- f) Ethical issues around establishing a control group in order to try and quantify the impact of an intervention.

Those involved in GFD programming should commit to doing impact assessment of GFD programming and agree on the minimum impact information that must be collected as well as the most appropriate systems to collect, analyze and disseminate impact information. A greater commitment towards assessing relative cost effectiveness of different types of GFD and different means of addressing food insecurity in emergencies is also required.

Impact monitoring

Monitoring impact of the GFD is determined by the objectives of the GFD. Unfortunately, over the years, impact monitoring of GFDs has largely been inadequate and unable to establish effectiveness. A review³ found a lack of published studies assessing the impact and effectiveness of GFD programmes. The limited studies that were available do not provide evidence of impact. In addition there was no comparative information on cost and effectiveness of different methods for implementing GFD, for example, comparing community-based targeting with administrative targeting.

The limited information on impact monitoring is a concern given the many constraints which can undermine GFD implementation, including new approaches like community-based targeting being rolled out on the basis that it is a more effective alternative than administrative targeting.

Given the considerable investment required for GFD programming, it is worrying that the donor community has not made greater demands on implementing agencies to provide systematic impact and effectiveness information about the general food aid distribution systems. Even without donor requirements, implementing agencies should take steps to ensure impact data is routinely collected, in order to be able to demonstrate effectiveness of their interventions. See **Challenge 8**.

It is also important to monitor the social impact of the distribution system adopted. Recipient views are critical to understanding the social impact.

Where women are designated recipients of food aid, the percentage of women amongst those coming to collect food should be monitored. If women are not attending the distribution, the reasons for this should be investigated. Women should be interviewed specifically regarding their views on the distribution system, how food is used at the household level and how their involvement in collection of food affects their ability to care for children and perform their other domestic responsibilities.

Adverse Effects of GFD

GFD can induce negative side effects. Agencies must be aware of potential pitfalls and anticipate them as much as possible: negative effects may be limited or avoided if all stakeholders are well informed of the operation and comply with assistance modalities. **Table 3** below describes the most common negative side effects and the means to avoid or reduce them.

In addition to the adverse effects of implementation of GFD programmes as a whole, controversy exists around the potential negative effects of distributing genetically modified (GM) food commodities. GM foods are generally based on seeds (soybeans, maize, canola) that have been produced through modern recombinant DNA methodologies. There is no evidence of any adverse health effects of consumption of GM foods⁴; however, there are concerns about introduction of GM commodities that might end up affecting local food production. Food aid must, from a legal perspective, adhere to the same laws and international agreements that apply to commercial agricultural trade. In the case of GM food, there are no

³ Review of published literature on the impact and cost effectiveness of six nutrition-related interventions, *Field Exchange*, 24, March 2005

⁴ WHO (2005). 'Modern food biotechnology, human health and development: an evidence-based study'. Geneva: WHO.

Table 3: Negative side effects of GFD and the means to avoid them

Negative Effects	Remedy
Attracting an excessive number of victims and concentrating them in a limited area.	Scattering delivery points in order to avoid excessive population concentrations.
Maintaining dependency on (foreign) assistance.	Rehabilitating means of production and strengthening livelihoods.
Discouraging the trade of the national food production.	Purchasing at least part of the GFD food domestically.
Ill-considered local purchases may deplete national reserves and contribute to the rise of market food prices.	Understanding the national surplus production capacity and balancing GFD food sources through imports accordingly.
A sudden influx of food aid might lower prices of similar commodities therefore undermining livelihoods of surrounding farmers.	Understand the food markets beforehand and conduct regular post distribution monitoring of markets to assess impact of food aid on markets and livelihoods.
Undermining local micro-economic coping and survival mechanisms.	Understanding the critical thresholds beyond which the survival of victims is threatened, and beyond which GFD is called for.
Recipients may be exposed to looting and abuse.	Ensuring the security of recipients at home, in transit, and at distribution points beforehand. Taking appropriate measures through dialogue with relevant authorities.
Recipients may be exposed to adverse acts on the part of authorities (e.g. political propaganda, police surveillance, conscription, taxation, forced displacement).	Informing relevant authorities of the necessary conditions for the GFD beforehand; obtaining their formal commitment to these.
GFD may fuel conflict by indirectly supplying armed groups with food.	Informing armed groups of the necessary conditions for the GFD to proceed beforehand; obtaining their formal commitment to these.
Threatening the profit of speculators and of those who control the food market which can be dangerous for recipients and implementing agencies alike.	Understanding the food market beforehand, including the forces that control it, maintaining a thorough information policy in terms of assistance operations, obtaining the commitment of all stakeholders and allowing for threats, and negotiating with those who issue them.
Developing the assistance syndrome.	Defining the criteria for GFD termination (as done in formulating exit strategies) in consultation with the recipients.
Recipients may sell food rations.	Adapting food and non-food assistance to needs.

Source: Adapted from International Committee of the Red Cross, *Nutrition Manual for Humanitarian Action*, 2008

internationally agreed upon standards. WFP⁵, as the largest general food aid distributor, continues to accept and distribute GM foods in agreement with national guidelines of the recipient country (meaning if a country has national protocols prohibiting GM import of products then WFP must supply non-GM foods). There are no internationally agreed rules on labelling of GM foods and WFP addresses this issue on a country-

by-country basis. Where GM commodities are not labelled it is virtually impossible for the end user to be aware of the GM status of the commodity. The import and distribution of unlabelled GM seeds are of particular concern due to the potentially negative agricultural effects of planting GM seeds alongside native/non-GM crops. This risk is particularly high for GM food assistance if provided as whole grains (that subsequently

⁵ WFP (2004). 'Operational Guidelines on the Donation of Foods Derived from Modern Technology'. Rome: WFP.

can be used as seeds for planting). Potential negative effects are that GM crops could pose a threat to crop biodiversity, especially if grown in areas that are centres of origin of that crop. In addition, GM crops could compete with and substitute traditional farmers' varieties and wild relatives that have been bred, or evolved, to cope with local stresses⁶. Significantly, sterile GM seeds and international property rights laws means that seeds can only be used for one planting which can have a direct and dramatic effect on small scale farmer's productivity. Means of preventing the use of GM foods for planting include; breaking/milling the GM whole grains and/or providing seeds for planting.

GFD Termination

The two criteria for the termination of a GFD are set during its planning phase: its objectives must have been achieved, and the implementation criteria must no longer apply (as demonstrated in monitoring and evaluation findings). In some circumstances however, GFD must be terminated earlier because unexpected negative effects have appeared, because security conditions no longer permit its continuation, or because monitoring and evaluation have revealed new parameters that require a thorough review of the rationale underlying the current GFD.

⁶ FAO 'Weighing the GMO Arguments: Against' <http://www.fao.org/english/newsroom/focus/2003/gmo8.htm>

Annex 1: Energy requirements of emergency-affected populations

Sources: (1) Energy requirements derived from Report of a Joint FAO/WHO/UNU Expert Consultation Technical Report Series No. 724.
(2) Population data (mid-1995): United Nations Population Division, New York

Developing country profile kilocalories per day

Age/sex group (years)	Male ^a		Female ^a		Male & Female ^a	
	% of total population	Energy requirement per caput	% of total population	Energy requirement per caput	% of total population	Energy requirement per caput
0	1.31	850	1.27	780	2.59	820
1 ^b	1.26	1,250	1.20	1,190	2.46	1,220
2 ^b	1.25	1,430	1.20	1,330	2.45	1,380
3 ^b	1.25	1,560	1.19	1,440	2.44	1,500
4 ^b	1.24	1,690	1.18	1,540	2.43	1,620
0-4	6.32	1,320	6.05	1,250	12.37	1,290
5-9	6.00	1,980	5.69	1,730	11.69	1,860
10-14	5.39	2,370	5.13	2,040	10.53	2,210
15-19	4.89	2,700	4.64	2,120	9.54	2,420
20-59 ^c	24.80	2,460	23.82	1,990	48.63	2,230
60+ ^c	3.42	2,010	3.82	1,780	7.24	1,890
Pregnant			2.4	285 (extra)	2.4	
Lactating			2.6	500 (extra)	2.6	
Whole Population ^c	50.82	2,250	49.16	2,010		2,070

^a Adult weight: male 60 kg, female 52 kg.

^b Population estimates for years 1, 2, 3 and 4 are not available from the United Nations. Estimates for these years were made by interpolation between the figures given by United Nations for 0 years and 5 years.

^c The figures given here apply for light activity level (1.55 x BMR for men, 1.56 x BMR for women). (The BMR – basal metabolic rate – is the rate of energy expenditure of the body when at complete rest, e.g., sleeping.) Adjustments for moderate and heavy activity: see Annex II.

Note: The requirements as expressed above do not take into account the varying fibre content, digestibility and complex-carbohydrate composition of the diet. In developing countries, a relatively high proportion of fibre and less-available carbohydrate is usually present. The carbohydrate content of foods may be expressed in terms of its various components (starches, sugars, fibre, cellulose, lignins, etc.) or simply as the calculated difference between the total weight and the sum of the other components (fat, protein, minerals and water). This issue is discussed in WHO Technical Report Series No. 724, Section 7.1. If the Atwater factor (4 kcal per gram) is applied to carbohydrate by difference, the real energy available in the food should be decreased by 5 per cent or the requirement for this type of diet increased by 5 per cent; which, for this table, means an increase of +100 kcal in the energy requirement indicated.

Annex 2: Nutritional content of food aid commodities

Source: World Food Programme and Feinstein International Famine Centre, *WFP Food and Nutrition training tool box*, Rome, 2001 with CSB+/++ from 2010

Approximate nutritional values of commodities per 100-gram edible portion

COMMODITY		ENERGY (Kcal)	PROTEIN (g)	FAT (g)
CEREALS	Wheat	330	12.3	1.5
	Wheat flour	350	11.5	1.5
	Bulgur wheat	350	11.0	1.5
	Maize	350	10.0	4.0
	Maize meal	360	9.0	3.5
	Sorghum	335	11.0	3.0
	Rice	360	7.0	0.5
	Rolled oats	380	13.0	7.0
BLENDED FOODS	Instant corn soy blend	365	12.2	4.0
	Corn soy blend	380	18.0	6.0
	Wheat soy blend	370	20.0	6.0
	Soy-fortified bulgur wheat	350	17.0	1.5
	Soy-fortified corn meal	360	13.0	1.5
	Soy-fortified rolled oats	375	21.0	6.0
	Soy-fortified wheat flour	360	16.0	1.3
PULSES	Dried peas and beans	335	22.0	1.5
	Groundnuts	330	15.0	25.0
MILK, CHEESE AND EGGS	Dried skim milk	360	36.0	1.0
	Dried whole milk	500	26.0	27.0
	Cheese	355	22.5	28.0
	Dried eggs	575	45.5	43.5
MEAT AND FISH	Canned meat	220	21.0	15.0
	Dried salted fish	270	47.0	7.5
	Canned fish in oil	305	22.0	24.0
	Fish protein concentrate	390	75.0	10.0

Approximate nutritional values of commodities per 100-gram edible portion (continued)

COMMODITY		ENERGY (Kcal)	PROTEIN (g)	FAT (g)
OILS AND FATS	Vegetable oil	885	0	100
	Butter oil	860	0	98.0
	Margarine	735	0	100
	Edible fat	900	0	0.5
FRUIT AND BEVERAGES	Dried fruit	270	4.0	0.5
	Dates	245	2.0	0.5
	Jam	265	0	0
	Tea	0	0	0
	Coffee	0	0	0
MISCELLANEOUS	Sugar	400	0	0
	Iodized salt	0	0	0
	Pasta	365	12.5	1.2
	Freeze-dried meat	480	65.0	25.0
	Minestrone	500	22.5	27.0
	Protein-enriched ration	450	16.7	15.5
	Milk biscuits (whole milk)	470	23.4	10.4
	Milk biscuits (skim milk)	375	24.0	1.5
	High-protein biscuits	450	50.0	20.0

Annex 3: WFP guidelines on the use of dried milk powder

Source: World Food Programme, *Food and Nutrition Handbook*, Rome, 2005.

Dried milk powder is not distributed as part of a general food distribution. This is because of the danger of it being used as a breastmilk substitute and the risk of high levels of microbial contamination when prepared with unclean water or in unsanitary conditions. These risks are greatly increased in an emergency setting.

Milk powder can be used safely in the following ways:

- As an ingredient in High Energy Milk (or porridge), prepared under strict control and in hygienic conditions in a supervised environment for on-the-spot consumption (well managed supplementary and therapeutic feeding)
- As an ingredient in porridge pre-mix, prepared from cereal flour, oil, sugar and DSM. This should be prepared centrally under strict control and hygienic conditions for distribution in dry supplementary feeding programmes
- As an ingredient in the local production of processed foods, for example, blended foods, noodles, or biscuits, although the high cost of milk powder may mean this is an inefficient use of resources

Use of breastmilk substitutes

If a breastmilk substitute (BMS) is considered essential, for example, among an emergency-affected population accustomed to bottle-feeding, then they may be provided with it as long as certain precautionary measures are followed. BMS should only be available to mothers who have been identified by health workers as needing it, through specially designed, supervised programmes. BMS should never be distributed through the general ration programme.

WFP supports the policy of the World Health Organization concerning safe and appropriate infant and young child feeding, in particular, by protecting, promoting and supporting breastfeeding, and encouraging the timely and correct use of complementary foods.

Storage

Microbial contamination is the major problem in using reconstituted milk powders, so high energy milk must only be prepared and consumed under strict control and in hygienic conditions.

During storage, as long as the product is kept clean and dry, the low moisture content of the product will not allow microbial growth. Milk powders are packaged in expensive plastic lined bags, which must be handled carefully, so as not to damage the packaging, stored away from direct sunlight and kept cool.

Most WFP-supplied milk powder can be stored for 6 months to 2 years, depending on the temperature:

- In a cold climate (4°C) 24 months
- In a tropical climate (21°C) 18 months
- In a very warm climate (32°C) 6 months

Annex 4: Policy statements on infant feeding and infant formula

Source: World Food Programme, *Food and Nutrition Handbook*, Rome, 2005.

In April 1999, a revised Joint Policy Statement on Infant Feeding in the Balkan Region signed by UNHCR, UNICEF, WFP and WHO was circulated in Macedonia in April 1999. A revised statement re-circulated in June 1999.

The following is a summary of the key recommendations:

- Exclusive breastfeeding is protected, supported and promoted for all infants until about six months, with continued breastfeeding also encouraged through the second year of life.
- Donations of infant formula displaying brand names are not accepted.
- In very exceptional circumstances, infant formula, provided in generic, non-brand formula, may be used.
- If artificial feeding is required as a last resort, cups and not feeding bottles should be used.
- Local produce (e.g., fruit and vegetables) and basic food aid commodities (e.g., rice, beans and lentils) are recommended as complementary infant foods. The use of specialized, manufactured complementary products is discouraged because of a potential dependency.
- The Joint Statement refers to the distribution of supplementary food commodities such as dried milk powder and biscuits to children from birth to 5 years of age. It states that dried milk must not be used to feed infants.
- An education component should be an integral part of every project where supplementary food commodities (especially infant formula and commercial complementary foods) are distributed.

The International Code (WHO, 1981) and subsequent relevant resolutions of the World Health Assembly (4, 5). The Code sets out the responsibilities of national governments, companies, health workers and concerned organizations in ensuring appropriate practice in the marketing of breastmilk substitutes, feeding bottles and teats. The Code has the following aim:

To contribute to the provision of safe and adequate nutrition for infants by the protection and promotion of breastfeeding and by ensuring the proper use of breastmilk substitutes when these are necessary on the basis of adequate information and through appropriate marketing and distribution.

The Code has a series of articles covering a number of possible avenues that could be used by companies and others to market breastmilk substitutes:

- No donations of free or subsidized supplies of breastmilk substitutes, bottles or teats should be given to any part of the health care system (WHA 47.5). Donations may be made to institutions outside the health care system for infants who have to be fed on breastmilk substitutes and when these are distributed outside the institution supplies should be continued for as long as the infants concerned need them (Article 6, The Code).
- No facility of a health care system should be used for the purpose of promoting infant formula or other products covered by the Code including the display of these products or posters or placards concerning these products.
- Breastmilk substitutes, bottle and teats should only be given if all the following conditions apply (WHA 47.5):
 - Infants have to be fed on substitutes according to agreed criteria
 - The supply is continued for as long as the infants concerned need it
 - The supply is not used as a sales inducement
- Manufacturers and distributors of infant formula responsible for marketing the products have to ensure certain labelling requirements are met, e.g., that the label is in an appropriate language and include instructions for appropriate preparation and does not include any picture or text which idealizes the use of infant formula (Article 9, The Code).

The Joint Policy Statement recommends that it is the responsibility of the Ministries of Health and local authorities to ensure that relief agencies comply with the International Code and subsequent WHA resolutions. UNICEF is a member of the local authority involved in developing and implementing the Code in Macedonia. Draft legislation incorporating the Code is before the Macedonian parliament but not currently incorporated into the country's legislation. UNICEF has been involved in the writing of this draft legislation in close cooperation with the Macedonian Breastfeeding Interest Group of which UNICEF is a member.

Annex 5: Specifications for fortified blended foods

Source: World Food Programme, *Food and Nutrition Handbook*, Rome, 2005 and World Food Programme, Technical Specifications for the Manufacture of CSB Plus and CSB Plus Plus, Rome 2010

Blended foods are a mixture of milled cereals and other ingredients, such as, pulses, dried skimmed milk, and possibly sugar and or some kind of vegetable oil. Blended foods are produced either by:

- Dry blending of milled ingredients;
- Toasting or roasting, and milling of ingredients;
- Extrusion cooking, which results in a 'pre-cooked' product

The final product is usually milled into powder form and fortified with a vitamin mineral premix.

A range of 'blended' foods is available worldwide for a variety of purposes. Some blended foods were originally designed to provide protein supplements for weaning infants and younger children, or for low-cost weaning foods in developing countries.

Guidelines on Formulated Supplementary Foods for Older Infants and Young Children have been developed by the FAO Codex Alimentarius Commission (1991). These guidelines refer to blended foods suitable for infants from six months of age up to the age of three years, for feeding young children as a supplement to breastmilk, and as breastmilk substitutes. They are intended to provide those nutrients, which either are lacking or are present in insufficient quantities in the basic staple foods. As of 2010 WFP has developed two new versions of corn soya blend to meet the additional energy density and micronutrient needs of some population subgroups. CSB+ is a product for children two years of age and older, adolescents, pregnant/lactating women, adults and other vulnerable groups such as those with chronic illnesses. CSB++ is for children 6-23 months. Both of these new CSBs contain an improved micronutrient formulation.

Blended food should be produced in accordance with the 'Code of Hygienic Practice for Foods for Infants and Children' and 'Code of Sound Manufacturing Practices' of the Codex Alimentarius. There are numerous manufactures of blended foods including the USA, WFP, IFRC/ICRC and national locally produced blended foods.

It is a mixture of the following ingredients:

- Cereal, like maize, sorghum, millet, wheat or combination, providing carbohydrates and protein;
- Pulses (chickpeas) or soy beans as an additional source of protein;
- Oilseeds (groundnuts, dehulled sunflower seeds, sesame seeds), soy bean or stabilized vegetable oil as an additional source of oil;
- Vitamin/mineral supplement;

If required, sugar can be included in the recipe; it replaces an equivalent amount of cereal

It is manufactured according to the following recipe:

- Whole maize: 80 per cent, by weight
- Whole soy beans: 20 per cent, by weight
- Vitamin/mineral premix (as specified below)

It should be manufactured by use of extrusion or roasting/milling. It should be fortified by adding to each MT of finished product 1kg of vitamin premix and 3kg of mineral premix (obtained from La Rote Ltd. Switzerland, or its local authorized dealer).

Micronutrient specifications (per 100gm dry finished product)

	CSB WFP	CSB plus WFP	CSB plus plus WFP	WSB ex-USA	CSB ex-USA
Vit. A	1,664 i.u.	1,664 i.u.	1,664 i.u.	1,658 i.u.	1,700 i.u.
Vit. B1 (thiamine)	0.128 mg	0.128 mg	0.128 mg	1.49 mg	0.7 mg
Vit. B2 (riboflavin)	0.448 mg	0.448 mg	0.448 mg	0.59 mg	0.5 mg
Vit. B3 (niacin)	4.8 mg	4.8 mg	4.8 mg	9.1 mg	8.0 mg
Folate	60 microgram	60 microgram	60 microgram		
Vit. C	48 mg	100 mg	100 mg	40 mg	40 mg
Vit. B12	1.2 microgram	2.0 mcg	2.0 mcg	4.0 microgram	4.0 microgram
Iron	8.0 mg (as ferrous fumarate)	4.0 mg (ferrous fumarate) 2.5 mg (iron-sodium EDTA)	4.0 mg (ferrous fumarate) 2.5 mg (iron-sodium EDTA)	20.8 mg	18 mg
Calcium	100 mg (as calcium carbonate)	130 mg	130 mg	749 mg (? not as calcium carbonate)	800 mg (? not as calcium carbonate)
Zinc	5.0 mg (as zinc sulphate)	5.0 mg	5.0 mg	4.6 mg	3.0 mg
Vit. B6	–	1.70 mg	1.70 mg	0.52 mg	0.70 mg
Iodine	–	40 mcg	40 mcg	50 microgram	50 microgram
Magnesium	–	–	–	202 mg	100 mg
Selenium	–	–	–	–	–
Potassium	–	400 mg	400 mg	624 mg	700 mg

TECHNICAL NOTES

WFP fortification specifications for different commodities

	Vitamins/minerals	Amount	Remarks
Vegetable oil	Vitamin A	30,000 I.U./kg = 9000 µg RE vitamin A/kg	
	Vitamin D	3.000 I.U./kg = 75 µg vitamin D/kg	
Salt	Iodine	20-40mg of Iodine/kg salt or 33-66mg potassium iodate (KIO ₃ /kg salt)	Assuming average salt intake of 10g/day; Assuming 20% iodine loss from production site to household; Assuming another 20% loss during cooking
Wheat and maize flour	Thiamine (vitamin B1)	4.4 mg/kg flour	Not less than not more than twice the amount indicated
	Riboflavin (vitamin B2)	2.6 mg/kg flour	Not less than not more than twice the amount indicated
	Niacin	35 mg/kg flour	Not less than not more than twice the amount indicated
	Folic Acid	0.4 mg/ kg flour	Not less than not more than twice the amount indicated
	Iron	29 mg/kg flour (as reduced iron)	Not less than not more than twice the amount indicated
Blended foods (provisional)	Vitamin A	1664 I.U./100g finished product	
	Thiamine	0.128 mg/100g finished product	
	Riboflavin	0.448 mg/100g finished product	
	Niacin	4.8 mg/100g finished product	
	Folate	60 µg/100g finished product	
	Vitamin C	48 mg/100g finished product	
	Vitamin B12	1.2 µg/100g finished product	

WFP fortification specifications for different commodities (continued)

	Vitamins/minerals	Amount	Remarks
Blended foods (provisional)	Iron ++ (as ferrous fumarate)	8 mg/100g finished product	
	Calcium ++ (as Calcium carbonate)	100 mg/100g finished product	
	Zinc ++ (as Zinc Sulphate)	5 mg/100g finished product	
High Energy Biscuits (provisional)	Vitamin A	250 µg RE/100g biscuit	
	Thiamine	0.5 mg/100g biscuit	
	Riboflavin	0.7 mg/100g biscuit	
	Niacin	6 mg/100g biscuit	
	Folic Acid	80 µg/100g biscuit	
	Vitamin C	20 mg/100g biscuit	
	Vitamin B12	0.5 µg/100g biscuit	
	Iron	11 mg/100g biscuit	
	Calcium	250 mg/100g biscuit	
	Magnesium	150 mg/100g biscuit	
	Iodine	75 µg/100g biscuit	
	Panθοthenic Acid	3 mg/100g biscuit	
	Vitamin B6	1 mg/100g biscuit	
	Vitamin B12	0.5 µg/100g biscuit	
	Vitamin D	1.9 µg/100g biscuit	
Vitamin E	5 µg/100g biscuit		

Annex 6: Examples of GFD rations

Source: World Food Programme, *Food and Nutrition Handbook*, Rome, 2005 and International Committee of the Red Cross, *Nutrition Manual*, Geneva, 2008

Food item	Amount in grams per person per day				
	Ration 1 ICRC 2,253kcal/s	Ration 2 ICRC 2,240kcal/s	Ration 3 WFP 1,900kcal/s	Ration 4 WFP 1,869kcal/s	Ration 5 WFP 2,226kcal/s
Cereal	400	420	Maize flour 350	Wheat flour ^a 400	Parboiled rice 430
Oil ^b	30	40	20	25	25
Pulses ^c	33.3	30	120	40	60
Canned meat				40	
Canned fish	50				
Blended food ^d	66.7	60	30		40
Sugar	16.7	20		20	20
Salt ^e	5	5	5	5	7
Yeast				4	
Fresh vegetables ^f	150	150			100
Spices	1-2	1-2			
Tea or Coffee	5-10	5-10			

^a Wheat flour fortified with calcium and B vitamins

^b Oil fortified with vitamin A

^c Types of pulses: Tanzania = red haricot, Bosnia = red haricot, Nepal = red lentils

^d Types of blended foods: Tanzania = corn-soy blend, Nepal = wheat-soy blend

^e Salt fortified with iodine

^f Fresh vegetables: Nepal = onions

Annex 7: Overview of monitoring targeting systems

Source: Taylor, Anna and John Seaman, 'Targeting food aid in emergencies', *ENN Special supplement*, July 2004.

	1	2	3	4	5
	Assessing and defining needs	Setting objectives	Determining eligibility	Distribution	
Key questions for monitoring	<ul style="list-style-type: none"> Were the needs accurately described? 	<ul style="list-style-type: none"> Were food aid target groups those in greatest need? 	<ul style="list-style-type: none"> Did criteria adequately identify the target group? Were the criteria clear and usable by those responsible for using them? 	<ul style="list-style-type: none"> Did the target group receive the right quantity and quality of food at the right time? 	<ul style="list-style-type: none"> Did the targeted group use the food to achieve the objective set?
Possible methods	<ul style="list-style-type: none"> Food security monitoring Monitoring the prevalence of malnutrition 		<ul style="list-style-type: none"> Process monitoring and evaluation Food basket monitoring Household profile monitoring Post distribution monitoring: non-recipient monitoring Results from complaints mechanisms 	<ul style="list-style-type: none"> Food basket monitoring Post distribution monitoring: non-beneficiary monitoring Coverage surveys Process monitoring and evaluation 	<ul style="list-style-type: none"> Food usage monitoring Market surveys
Key factors which lead to exclusion and inclusion errors	<ul style="list-style-type: none"> Type of assessment The involvement of the community in the definition of need Taking into account the resource context 		<ul style="list-style-type: none"> Political context Transparent and accountable systems for identifying the eligible 	<ul style="list-style-type: none"> Geographical coverage Information about programme in the community Could it be transported? Diversion by powerful people 	<ul style="list-style-type: none"> Sharing within households Redistribution by the community Diversion by powerful people

Annex 8: Different types of monitoring that can be used in targeting systems

Source: Taylor, Anna and John Seaman, 'Targeting food aid in emergencies', *ENN Special supplement*, July 2004.

Types of monitoring	Where and when it is done	Purpose
Process monitoring (including appeal mechanisms)	Ongoing with beneficiaries, non-beneficiaries, leaders and authorities	To assess the quality of the implementation and how it is perceived by the population
Food basket monitoring	At the distribution point through interviews with beneficiaries	Determines whether the ration received at the distribution point matches the entitlement on ration card
Household profile monitoring	At the distribution point through interviews with beneficiaries	Monitoring of beneficiary household profile relative to eligibility criteria
Food usage surveys	Post distribution through home interviews with beneficiaries	Determines how recipient households use the food and how long it could last
Market surveys	At markets post distribution	To monitor sales and prices of food aid
Non-beneficiary monitoring	Post distribution through home interviews with non-beneficiaries	Monitoring perceptions among non-beneficiaries regarding fairness of the targeting and distribution process
Coverage surveys	During a targeted feeding programme	To determine the proportion of the eligible population who are registered for feeding and the proportion who are not.
Food security monitoring	On an ongoing basis among the whole population	To determine whether the targeting objectives are appropriate/have been achieved
Nutrition monitoring	Periodically among the whole population	To determine whether the targeting objectives are appropriate/have been achieved