

# PART 3: TRAINER'S GUIDE

The trainer's guide is the third of four parts contained in this module. It is NOT a training course. This guide provides guidance on how to design a training course by giving tips and examples of tools that the trainer can use and adapt to meet training needs. The trainer's guide should only be used by experienced trainers to help develop a training course that meets the needs of a specific audience. The trainer's guide is linked to the technical information found in Part 2 of the module.

Module 11 is about planning, implementing and monitoring general food distributions (GFDs). The module can be used to provide a practical training for field workers involved in setting up and carrying out GFD. It can also provide a short practical briefing on different aspects of GFD for senior managers.

### Navigating your way round the guide

The trainer's guide is divided into six sections:

1. **Tips for trainers** provide pointers on how to prepare for and organize a training course.
2. **Learning objectives** set out examples of learning objectives for this module that can be adapted for a particular participant group.
3. **Testing knowledge** contains an example of a questionnaire that can be used to test participants' knowledge of EFSA either at the start or at the end of a training course.
4. **Classroom exercises** provide examples of practical exercises that can be done in a classroom context by participants individually or in groups.
5. **Case studies** contain examples of case studies (one from Africa and one from another continent) that can be used to get participants to think by using real-life scenarios.
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# 1. Tips for trainers

## Step 1: Do the reading!

- Read Parts 2 of this module.
- Familiarize yourself with the technical terms from the glossary.
- Read through the following key documents (see full references and how to access in Part 4 of this module):
  - ENN&SCUK. (2004). *Targeting Food Aid in Emergencies*. Special supplement. ENN and SCUK.
  - The Sphere Project. (2011). *Sphere Handbook*, Minimum Standards in Food Security and Nutrition. Geneva: The Sphere Project.
  - International Committee of the Red Cross (2008), *Nutrition Manual for Humanitarian Action*. Geneva: ICRC
  - World Food Programme. (2005). *Food and Nutrition Handbook*. Rome: WFP.

## Step 2: Know your audience!

- Find out about your participants in advance of the training:
  - How many participants will there be?
  - Do any of the participants already have experience/knowledge of general food distributions?
  - Could participants with general food distributions experience be involved in the sessions by preparing a case study or contribute through describing their practical experience?

## Step 3: Design the training!

- Decide how long the training will be and what activities can be covered within the available time. In general, the following guide can be used:
  - A **90-minute** classroom-based training can provide a basic overview of general food distributions.
  - A **half-day** classroom-based training can provide an overview of general food distributions and include some practical exercise.
  - A **one-day** classroom-based training can provide a more in-depth understanding of general food distributions and include a number of practical exercises and/or one case study.
  - A **three- to eight-day** classroom plus field-based training can provide a full training in order to carry out a general food distribution for a particular context. This would include case studies and field exercises.
- Identify appropriate learning objectives. This will depend on your participants, their level of understanding and experience, and the aim and length of the training.
- Decide exactly which technical points to cover based on the learning objectives that you have identified.
- Divide the training into manageable sections. One session should generally not last longer than an hour.
- Ensure the training is a good combination of activities, e.g., mix PowerPoint presentations in plenary with more active participation through classroom-based exercises, mix individual work with group work.

### Step 4: Get prepared!

- Prepare PowerPoint presentations with notes (if they are going to be used) in advance and do a trial run. Time yourself! Recommended PowerPoint presentations that can be adapted from existing sources include (see full references and how to access in Part 4 of this module):

#### Existing PowerPoints for a session on GFD

	Author	Specific session
1.	WFP&Feinstein International Famine Centre, T. U. (2001). WFP Food and Nutrition Training Toolbox.	
2.	The Sphere Project. (2004). Humanitarian Charter and Minimum Standards in Disaster Response: Nutrition training modules.	Nutrition Module, Session 3: General Nutrition Support: All groups and at Risk Groups

- Prepare exercises and case studies. These can be based on the examples given in this trainer's guide but should be adapted for the particular training context.
- Prepare a 'kit' of materials for each participant. These should be given out at the start of the training and should include:
  - Timetable showing break times (coffee and lunch) and individual sessions
  - Parts 1 and 2 of this module
  - Pens and paper

#### REMEMBER

People remember 20 per cent of what they are told, 40 per cent of what they are told and read, and 80 per cent of what they find out for themselves.

People learn differently. They learn from what they read, what they hear, what they see, what they discuss with others and what they explain to others. A good training is therefore one that offers a variety of learning methods which suit the variety of individuals in any group. Such variety will also help reinforce messages and ideas so that they are more likely to be learned.

## 2. Learning objectives

Below are examples of learning objectives for a session on GFD. Trainers may wish to develop alternative learning objectives that are appropriate to their particular participant group. The number of learning objectives should be limited; up to five per day of training is appropriate. Each exercise should be related to at least one of the learning objectives.

### Examples of learning objectives

At the end of the training, participants will:

- Be familiar with typical food aid commodities.
- Be able to calculate the nutritional composition of food rations.
- Be familiar with food composition tables.
- Be aware that GFD objectives and programmes should be based on assessed needs and be familiar with types and approaches.
- Be aware of the objectives of GFD.
- Know how to plan an appropriate and nutritionally adequate general ration.
- Know when to implement a GFD and the most appropriate distribution method to adopt.
- Be able to suggest practical recommendations to adapt the GFD in order reduce the risk of MDD.
- Understand the overall aim of food aid targeting and the key factors to consider when implementing a successful targeting system.
- Know the key factors to consider for successful implementation of a GFD.
- Know components of a GFD monitoring system.
- Understand the challenges that may arise during the implementation of GFD.

## 3. Testing knowledge

This section contains one exercise which is an example of a questionnaire that can be used to test participants' knowledge of general food distributions either at the start and/or at the end of a training session. The questionnaire can be adapted by the trainer to include questions relevant to the specific participant group.

### Exercise 1: What do you know about general food distributions?

#### What is the learning objective?

- To test participants' knowledge about GFD

#### When should this exercise be done?

- *Either* at the start of a training session to establish knowledge level
- *Or* at the end of a training session to check how much participants have learned

#### How long should the exercise take?

- 20 minutes

#### What materials are needed?

- **Handout 1a:** What do you know about general food distributions?: Questionnaire
- **Handout 1b:** What do you know about general food distributions?: Questionnaire answers

#### What does the trainer need to prepare?

- Familiarize yourself with the questionnaire questions and answers.
- Add your own questions and answers based on your knowledge of the participants and their knowledge base.

#### Instructions

**Step 1:** Give each participant a copy of Handout 1a.

**Step 2:** Give participants 15 minutes to complete the questionnaire working alone.

**Step 3:** Give each participant a copy of Handout 1b.

**Step 4:** Give participants five minutes to mark their own questionnaires and clarify the answers where necessary.

**Handout 1a: What do you know about general food distributions?: Questionnaire**

**Time for completion:** 15 minutes

**Answer all the questions**

1. When planning a general food ration what are the calorie, protein and fat requirements most frequently used for an average population? *Circle the correct answer.*
  - a) Average energy requirements for most of the population are 2100 kcals and protein should provide between 10 to 12 per cent of the energy and fat should provide at least 17 per cent of the energy.
  - b) Average energy requirements 1900 kcals and protein should provide at least 21 per cent of the energy and fat should provide at least 25 per cent of the energy.
  - c) Average energy requirements 2100 kcals and protein and fat should provide at least 15 per cent of the energy.
  - d) Average energy requirements 1500 kcals and protein should provide at least 12 per cent of the energy and fat should provide at least 17 per cent of the energy.
  
2. What are the three main food commodities that commonly make up the GFD and which one makes up the bulk of the ration?
  - a)
  - b)
  - c)
  
3. True or false? Write true or false after each sentence.
  - a) Energy requirements may vary according to ethnic background.
  - b) Energy requirements will increase if all the population in need are only women and children.
  - c) Nutrient requirements remain the same during pregnancy.
  - d) Vitamins and minerals are not important nutritional considerations.
  
4. Are populations that are dependent on a GFD more likely to suffer from MDDs than populations with access to a diverse range of food commodities? *Write yes or no.*
  
5. Give two practical suggestions how the general food distribution may be modified in order to minimize the risk of MDD among a population dependent on food aid.
  - a)
  - b)
  
6. Give two examples of distribution methods for GFDs.
  - a)
  - b)

7. True or false? *Write true or false after each sentence.*

- a) General food distributions are only necessary in order to save lives.
- b) General food distributions may be implemented to restore or maintain nutritional well being.
- c) The energy requirements for a population are established according to the amount of food available in the pipeline.
- d) There are alternative methods for distributing food aid to the general population such as food for work and voucher programs
- e) Changes in anthropometric data quantify the impact of the general food distribution.
- f) Government officials are always the most appropriate structures to use to identify vulnerable households.
- g) Targeting is always appropriate regardless of community vulnerability.
- h) Ensuring there is sufficient food in the pipeline will ensure a successful general food distribution.
- i) Food is fortified in order to increase the intake of micronutrients, thereby improving micronutrient status and therefore reducing the risk MDD.
- j) GFD objectives are established and do not depend on the context or needs.

8. Give two of the reasons why the established planning figure of 2,100kcal/person/day may be adjusted up or down.

- a)
- b)

9. State two purposes of targeting.

- a)
- b)

10. True or false? *Write true or false after each sentence.*

- a) Monitoring is not essential for GFD programmes.
- b) It is only important to monitor in order to determine if the most vulnerable received food aid.
- c) Post distribution monitoring enables the coverage of a GFD program to be evaluated.
- d) It is not important to monitor the vulnerability of non-beneficiaries during GFD.



**Handout 1b: What do you know about general food distributions?:  
Questionnaire answers**

1. a)
2. **Cereals, pulses and oils. Cereals usually make up the bulk of the ration.**
3. a) **False**  
b) **False**  
c) **False**  
d) **False**
4. **Yes**
5. a) **Addition of fresh fruit/vegetables to the ration**  
b) **Provision of fortified blended food**  
c) **Addition or exchange of a particular food aid commodity with relatively high micronutrient content**  
d) **Use of micronutrient powders or sprinkles**
6. a) **Distribution of a take-home (dry) ration.**  
b) **Distribution of a cooked (wet) ration through large scale cooked food programmes**
7. a) **False**  
b) **True**  
c) **False**  
d) **True**  
e) **False**  
f) **False**  
g) **False**  
h) **False**  
i) **True**  
j) **False**
8. a) **Age and structure of the population**  
b) **Nutrition and health status of the population**  
c) **Physical activity levels**  
d) **Environmental temperature**  
e) **Access to alternative and complementary food sources**

9. a) **Targeting helps to define the objective of the GFD.**  
b) **Targeting aims to maximize coverage and minimize inclusion error.**  
c) **To ensure food aid is received on the basis of need**  
d) **To maximize the impact of food aid**  
e) **To limit the negative impact of food aid, e.g., dependency, reducing market prices for food producers**
10. a) **False**  
b) **False**  
c) **True**  
d) **False**

## 4. Classroom exercises

This section provides examples of practical exercises that can be carried out in a classroom context by participants individually or in groups. Practical exercises are useful between plenary sessions, where the trainer has done most of the talking, as they provide an opportunity for participants to engage actively in the session. The choice of classroom exercises will depend upon the learning objectives and the time available. Trainers should adapt the exercises presented in this section to make them appropriate to the particular participant group. Ideally, trainers should use case examples with which they are familiar.

### Exercise 2: Identifying food groups and food aid commodities

#### What is the learning objective?

- To be familiar with food groups and typical food aid commodities

#### When should this exercise be done?

- After an introductory session on the nutrient requirements and content of food aid commodities

#### How long should the exercise take?

- 25 minutes

#### What materials are needed?

- **Handout 2a:** Identifying food groups and food aid commodities
- **Handout 2b:** Identifying food groups and food aid commodities: Model answers

#### What does the trainer need to prepare?

- Prepare a case study for an area that is familiar to the participants based on the template in Handout 2a or use a similar handout.

#### Instructions

**Step 1:** Give each participant a copy of Handout 2a or similar one and food tables.

**Step 2:** Give participants working in pairs 10 minutes to read one of the case studies and complete the table.

**Step 3:** Allow 15 minutes of discussion and feedback in plenary.

#### Discussion points for feedback in plenary

- ➔ Discuss why milk products are not part of the general food aid ration.
- ➔ Discuss how rations may vary according to context and availability of food products, e.g., dates as part of the general ration in eastern Sudan.

## Handout 2a: Identifying food groups and food aid commodities

*Time for completion: 25 minutes*

*Allow 5 to 10 minutes for this task and 10 to 15 minutes for feedback. Participants may work in pairs.*

*For each of the foods on the list below:*

- 1. Identify the food group to which it belongs: cereal grains; roots and tubers; oils and fats; legumes; fruit and vegetables; animal products; blended foods.*
- 2. Tick the box if it is a common general food aid commodity.*

	Food	Food group	General food aid commodity
1	Teff		
2	Cassava		
3	Horse beans		
4	Cassava leaves		
5	Noodles		
6	Locusts		
7	Butter oil		
8	Dates		
9	Salt		
10	Carrots		
11	Infant formula		
12	Soy fortified sorghum grits		
13	Millet		
14	Spaghetti		
15	Corn soy blend		
16	Whole milk		
17	Polished rice		
18	Tinned cheese		
19	Dried fish		
20	Lentils		
21	Onions		
22	Instant bouillon		
23	Dried milk powder		
24	Mangoes		
25	Red palm oil		

**Handout 2b: Identifying food groups and food aid commodities: Model answers**

	Food	Food group	General food aid commodity
1	Teff	Cereals (Teff is grown in the highlands of Ethiopia and is the preferred cereal.)	No
2	Cassava	Roots and tubers (Tubers, such as cassava and potatoes, are not a food aid commodity as they contain large amounts of water and are liable to spoilage.)	No
3	Horse beans	Legumes	Yes
4	Cassava leaves	Fruit and vegetables	No. Indigenous vegetables, like cassava leaves, are an important source of micronutrients (vitamin A and C).
5	Noodles	Cereal grains	Yes
6	Locusts	Animal products	No
7	Butter oil	Oils and fats	Yes. Vegetable oils tend to be more common.
8	Dates	Fruit and vegetables	Yes. Eastern Sudan
9	Salt	Salt contains essential minerals and is essential as a condiment.	Yes. All WFP salt is iodized.
10	Carrots	Fruit and vegetables	No
11	Infant formula	Animal product	No. In some situations milk formula will be distributed to women through health services, but it is not distributed as part of the general ration.
12	Soy fortified sorghum grits	Blended food	Yes. SFSG are fortified with a range of micronutrients
13	Millet	Cereal grains	No
14	Spaghetti	Cereals	Yes
15	Corn soy blend	Blended foods	Yes. CSB is a type of blended food, which is a pre-cooked flour made from a combination of cereals and pulses, and fortified with micronutrients.
16	Whole milk	Animal products	No
17	Polished rice	Cereals	Yes
18	Tinned cheese	Animal products	Yes. Occasionally
19	Dried fish	Animal products	Yes. Occasionally
20	Lentils	Legume	Yes
21	Onions	Fruit and vegetables	No. But onions have been included in rations for Bhutanese refugees.

## Identifying food groups and food aid commodities: Model answers (continued)

	Food	Food group	General food aid commodity
22	Instant bouillon	It does not fall within the food groups given.	No. This has been given in the past but is not a regular food aid commodity.
23	Dried milk powder	Animal products	No
24	Mangoes	Fruit and vegetables	No
25	Red palm oil	Fats and oils	No. However, in Great Lakes beneficiaries swap their vegetable oil in order to buy red palm oil.

**Exercise 3: Planning and calculating levels of nutrients and energy in the ration****What are the learning objectives?**

- To be able to calculate the nutritional composition of food rations
- To be familiar with food composition tables

**When should this exercise be done?**

- After an introductory session on the nutrient requirements and content of food aid commodities

**How long should the exercise take?**

- 30 minutes

**What materials are needed?**

- **Handout 3a:** Planning and calculating levels of nutrients and energy in the ration
- **Handout 3b:** Planning and calculating levels of nutrients and energy in the ration: Model answers
- **Handout 3c:** WFP food composition table

**What does the trainer need to prepare?**

- Prepare a case study for an area that is familiar to the participants based on the template in Handout 3a or use the given handout. Ensure there are sufficient calculators and enough copies of the WFP food composition tables and examples of WFP food rations.

**Instructions**

**Step 1:** Give each participant a copy of Handout 2a or similar and the food composition tables.

**Step 2:** Give participants working in pairs 10 minutes to read one of the case studies and complete the table.

**Step 3:** Allow 20 minutes of discussion and feedback in plenary.

**Discussion points for feedback in plenary**

- ➔ Which ration has the lowest energy value? The Ethiopian ration (1923kcal).
- ➔ Which ration has the most grams of protein? The Bosnia ration – 62.4g protein.
- ➔ Which ration has the most grams of fat? The Bosnia ration.
- ➔ This illustrates the higher quality of the Bosnia ration, even though it does not have the highest energy level.

### **Handout 3a: Planning and calculating levels of nutrients and energy in the ration**

*Time for completion: 30 minutes*

*Allow 15 to 20 minutes for this task and 10 to 15 minutes for feedback. Participants may work in pairs. Each pair should address questions from one of the two case-scenarios.*

- 1. Calculate the nutritional composition of one of the following rations.*
- 2. Look up the nutritional value of the food (per 100g) in Handout 3c on the WFP food composition table.*
- 3. Use a calculator to calculate the energy, protein and fat provided by the amount of each food in the ration.*
- 4. Calculate the total amount of energy (kcal), protein (in grams) and fat (in grams).*
- 5. Calculate the percent of total energy provided by protein and fat.*



## EXAMPLES OF WFP FOOD RATIONS

## 1. BOSNIA, 1994

Food commodity	Amount (g)	Energy (kcal)	Protein (g)	Fat (g)
Wheat flour	400			
Vegetable oil	25			
Sugar	20			
Red kidney beans	40			
Corned beef	40			
Iodized salt	5			
TOTAL				
% Energy				

## 2. NEPAL BHUTANESE REFUGEES 1994

Food commodity	Amount (g)	Energy (kcal)	Protein (g)	Fat (g)
Parboiled rice	430			
Lentils	60			
Vegetable oil	25			
Wheat soy blend	40			
Sugar	20			
Salt	7			
TOTAL				
% Energy				

## 3. TANZANIA 1997 (BURUNDIAN REFUGEES)

Food commodity	Amount (g)	Energy (kcal)	Protein (g)	Fat (g)
Maize flour	350			
Kidney beans	120			
Vegetable oil	20			
Corn soy blend	30			
Iodized salt	5			
TOTAL				
% Energy				

## 4. ETHIOPIA 1997 (SOMALIA REFUGEES)

Food commodity	Amount (g)	Energy (kcal)	Protein (g)	Fat (g)
Whole wheat grain	400			
Vegetable oil	25			
Iodized salt	5			
Sugar	20			
FAMIX	30			
TOTAL				
% Energy				

### Handout 3b: Planning and calculating levels of nutrients and energy in the ration: Model answers

#### 1. BOSNIA, 1994

Food commodity	Amount (g)	Energy (kcal)	Protein (g)	Fat (g)
Wheat flour	400	1,400.00	46.0	6.00
Vegetable oil	25	221.25	0	25.00
Sugar	20	80.00	0	0
Red kidney beans	40	134.00	8.0	0.48
Corned beef	40	88.00	8.4	6.00
Iodized salt	5	0	0	0
TOTAL		1,923.00	62.4	37.50
% Energy			13.0%	17.50%

#### 2. NEPAL BHUTANESE REFUGEES 1994

Food commodity	Amount (g)	Energy (kcal)	Protein (g)	Fat (g)
Parboiled rice	430	1,548.00	30.1	2.15
Lentils	60	204.00	12.0	0.36
Vegetable oil	25	221.25	0	25.00
Wheat soy blend	40	148.00	8.0	2.40
Sugar	20	80.00	0	0
Salt	7	0	0	0
TOTAL		2,201.30	50.1	29.91
% Energy			9.1%	12.23%

#### 3. TANZANIA 1997 (BURUNDIAN REFUGEES)

Food commodity	Amount (g)	Energy (kcal)	Protein (g)	Fat (g)
Maize flour	350	1,260	31.50	12.25
Kidney beans	120	402	24.00	1.44
Vegetable oil	20	177	0	20.00
Corn soy blend	30	114	5.40	1.80
Iodized salt	5	0	0	0
TOTAL		1,953	60.90	35.49
% Energy			12.47%	16.35%

## 4. ETHIOPIA 1997 (SOMALIA REFUGEES)

Food commodity	Amount (g)	Energy (kcal)	Protein (g)	Fat (g)
Whole wheat grain	400	1,320.00	49.20	6.00
Vegetable oil	25	221.25	0	25.00
Iodized salt	5	0	0	0
Sugar	20	80.00	0	0
FAMIX	30	114.00	5.40	1.80
TOTAL		1,735.30	54.60	32.80
% Energy			12.59%	17.01%

**Handout 3c: WFP food composition table**

	Nutritional value/100g		
	ENERGY (Kcal)	PROTEIN (g)	FAT (g)
<b>CEREALS</b>			
Wheat	330	12.3	1.5
Rice	360	7.0	0.5
Sorghum/millet	335	11.0	3.0
Maize	350	10.0	4.0
<b>PROCESSED CEREALS</b>			
Maize meal	360	9.0	3.5
Wheat flour	350	11.5	1.5
Bulgur wheat	350	11.0	1.5
Parboiled rice	360	7.0	0.5
<b>BLENDED FOODS</b>			
Corn soy blend (CSB)	380	18.0	6.0
Wheat soy blend (WSB)	370	20.0	6.0
Soy-fortified bulgur wheat	350	17.0	1.5
Soy-fortified maize meal	390	13.0	1.5
Soy-fortified wheat flour	360	16.0	1.3
Soy-fortified sorghum grits	360	16.0	1.0
Famix	380	18.0	6.0
<b>DAIRY PRODUCTS</b>			
Dried skim milk (enriched) (DSM)	360	36.0	1.0
Dried skim milk (plain) (DSM)	360	36.0	1.0
Dried whole milk (DWM)	500	25.0	27.0
Canned cheese	355	22.5	28.0
Therapeutic milk (TM)	540	14.7	31.5
<b>MEAT&amp;FISH</b>			
Canned meat	220	21.0	15.0
Dried salted fish	270	47.0	7.5
Stockfish	–	–	–
Canned fish	305	22.0	24.0

WFP food composition table (continued)

	Nutritional value/100g		
	ENERGY (Kcal)	PROTEIN (g)	FAT (g)
<b>OIL&amp;FATS</b>			
Vegetable oil	885	–	100.0
Butter oil	860	–	98.0
Edible fat	900	–	100.0
<b>PULSES</b>			
Beans	335	20.0	1.2
Peas	335	22.0	1.4
Lentils	340	20.0	0.6
<b>MISCELLANEOUS</b>			
Sugar	400	–	–
Dried fruit	270	4.0	0.5
Dates	245	2.0	0.5
Tea (black)	–	–	–
Iodized salt	–	–	–

**Exercise 3.1: Calculating levels of nutrients and energy in the ration****What are the learning objectives?**

- To be able to calculate the nutritional composition of food rations
- To be familiar with NutVal spreadsheet application for the planning, calculating and monitoring of food rations

**When should this exercise be done?**

- After an introductory session on the nutrient requirements and content of food aid commodities

**How long should the exercise take?**

- 60 minutes

**What materials are needed?**

- **Handout 3.1a:** Calculating levels of nutrients and energy in the ration
- **Handout 3.2b:** Calculating levels of nutrients and energy in the ration: Model answers

**What does the trainer need to prepare?**

- Prepare access to computers with NutVal installed (or access to internet for instant downloading). Ensure that the computing facilities are adequate and there is technical support so that extraordinary time is not used sorting out the logistics of the exercise.

**Instructions**

**Step 1:** Give each participant a copy of Handout 3.1a

**Step 2:** Give participants working in pairs 10 minutes to read the handout and set up NutVal on their shared screen.

**Step 3:** Allow 30 minutes to complete exercise

**Step 4:** Give 20 min for discussion and feedback in plenary.

**Discussion points for feedback in plenary**

- ➔ Which features of NutVal would you find most useful?
- ➔ How does this compare to calculating a ration by hand?

## Handout 3.1a: Calculating levels of nutrients and energy in the ration

*Time for completion: 45 minutes*

*Allow 25 to 30 minutes for this task and 15 to 20 minutes for feedback. Participants should work in pairs with one computer. Each pair should run through both the exercises and be prepared to feed back their experience in plenary.*

### Exercise 1 – Using the Database

1. Open NutVal and ensure Excel is set to allow macros to work – very important!
2. Click on the button to go to the Food and Nutrient Database
3. Sort the list to find out which food has the highest energy content
4. Tell the database to display only 'Cereals' and sort the list to find out which cereals contains the most and least protein
5. Tell the database to display only 'Blended Foods' and sort the list to find out which contains the most fat

### Exercise 2 – Using the Calculation Sheet

1. Go back to the menu page and then click the button to go to the calculation sheet
2. Display a typical maize-based ration by clicking the button at the bottom left of the screen. Which nutrients are too low in these rations?
3. View the pie chart of energy sources and see what proportion of energy is coming from carbohydrate?
4. Do the figures for the proportion of energy coming from fat and protein agree with the figures on the main calculator page?
5. How much do you need to increase the fat by to meet the energy target?
6. View the other ration examples based on rice and wheat. What do you notice about the macronutrient adequacy of these rations?
7. Now select the maize based ration example and change the beneficiary group from a general ration to adolescents. What happens to the energy requirement? Now also look at the elderly beneficiary group.



**Exercise 4: Assessing and developing appropriate targeting strategies****What is the learning objective?**

- To be aware of the objectives of GFD
- To understand the overall aim of food aid targeting and the key factors to consider when implementing a successful targeting system

**When should this exercise be done?**

- After the objectives of a general food rations and the objectives and methods of successful targeting systems have been introduced

**How long should the exercise take?**

- 25 minutes

**What materials are needed?**

- **Handout 4a:** Assessing and developing appropriate targeting strategies – two case studies
- **Handout 4b:** Assessing and developing appropriate targeting strategies – two case studies: Model answers

**What does the trainer need to prepare?**

- Prepare a case study for an area that is familiar to the participants based on the template Handout 4a or use the given handout.

**Instructions**

**Step 1:** Give each participant a copy of Handout 2a.

**Step 2:** Give participants working in pairs 10 minutes to read the case studies and answer the questions.

**Step 3:** Allow 15 minutes of discussion and feedback in plenary.

**Discussion points for feedback in plenary**

- ➔ Would you modify the agencies activities/strategies and if so how and why?

## Handout 4a: Assessing and developing appropriate targeting strategies – two case studies

*Time for completion: 25 minutes*

*Allow 5 to 10 minutes for this task and 10 to 15 minutes for feedback. Participants may work in pairs. Each pair should address the questions at the end of each case study.*

### Case study A: Livelihood assessment following the Orissa cyclone in India 1999

Source: Taylor and Seaman (2002) Targeting food aid in emergencies. ENN Special supplement.

#### Background information

Source: IFRC April 2000. India Orissa Cyclone. Situation Report No. 8

A violent cyclone hit India's eastern coast on 29 October 1999. Winds lasting for over 36 hours caused a 7-metre tidal wave which swept more than 20 km inland and brought massive destruction and death to coastal districts in the State of Orissa.

According to the Government of Orissa, more than 10 million people in 12 coastal belt districts were affected by the cyclone. At least 10,000 people died in the disaster, while tens of thousands of families from the worst-affected coastal districts of Balasore, Bhadrak, Kendrapara, Jagatsinghpur, Puri and Ganjam were forced to evacuate their damaged or destroyed homes.

Orissa is one of the poorest states in India and is wholly dependent on agriculture. The coastal districts account for 2 million hectares of Orissa's total 6.5 million hectares of crop area. About 99 per cent of the agricultural area in these coastal districts is under paddy cultivation. The farmers in Orissa experienced severe crop losses when the cyclone devastated the kharif crop (autumn harvest) and the prospects of a good rabi (summer) harvest are marred by pests, crop diseases, damaged irrigation and a shortage of power supply facilities. Fish production in Jagatsinghpur is likely to be reduced by over 40 per cent this year due to the large-scale devastation, including pollution of ponds. There was destruction of coconut, cashew nut and mango trees and animals were starving due to an acute scarcity of fodder.

A shortage of drinking water was also reported in certain areas of the cyclone-affected districts as wells were destroyed.

After the Orissa cyclone Oxfam conducted a needs assessment in the areas affected by the cyclone and the following were the key conclusions:

- a) Market prices were too high for the poorest.
- b) Share croppers became indebted due to their failed harvest.
- c) Wage labourers were left with no income source.
- d) Fishermen lost their means of production and access to agricultural labour.
- e) Scheduled castes and tribes no longer had access to agricultural labour.
- f) Food assistance was erratic and did not reach the remote villages. Lower caste people were often the last in the queue for assistance. Political bias due to impending elections may have influenced the targeting of relief assistance, and international agencies concentrated their relief in areas with high media coverage.

#### **Answer the questions.**

- 1. What would you recommend for the objective of an emergency response based on the background information and the key conclusions of Oxfam's assessment?**
- 2. Briefly describe the different food aid interventions that you would implement, how these would fit in with other interventions and who the intervention would target.**
- 3. List the potential difficulties with introducing a targeted food distribution in this area and how these difficulties may be overcome.**

## Case study B: Family ration targeting system

Source: Taylor and Seaman (2002) Targeting food aid in emergencies. ENN Special supplement.

Mandera is one of three districts in a northeastern province of Kenya. It is an area prone to drought and food insecurity and has a population of 131,000, with 37,900 (some of these were displaced and refugees/returnees) reported as living in central Mandera. The district is geographically isolated and has weak links with other districts. Its people are ethnic Somalis who are traditionally nomadic pastoralists but now increasingly fall into the category of agro-pastoralists as they practise some cultivation of staple crops, including maize and beans. During the severe drought of 1991 and 1992, livestock holdings were drastically reduced so that many families became destitute and were forced to migrate to central Mandera.

Between 1994 and 1996 there were three successive rain failures in the district. However, despite a worsening food security situation in the district, the Kenyan government was reluctant to declare an emergency.

In May 1996, MSF recorded a 32.4 per cent prevalence of malnutrition in Mandera. In response to the deteriorating situation in Mandera, MSF took the decision to step outside its usual mandate and to implement a general food distribution programme. An MSF team already present in the area was given the task of designing and implementing the programme although they had no prior experience of this type of intervention. It was hoped that this would encourage other organizations, with experience of general food distribution, to take over the programme.

It was apparent in central Mandera that not everybody was equally affected by the drought and there were different levels of food insecurity among the households. MSF targeted ration cards for general distribution to families with a malnourished child in one of the feeding centres (although it was recognized that this may not necessarily target the most food-insecure families as malnutrition may be related to disease or poor care practices).

The total 3000 family ration cards, which corresponded to a population coverage of 18,000 (approximately 50 per cent of the population). MSF targeted a 50 per cent family ration to households with at least one member in a feeding centre. The first distribution was carried out at the end of November 1996. The distribution points were the supplementary feeding centres and were carried out once a month. To prevent families trying to collect the food at more than one feeding centre, the distribution was carried out in all three centres at the same time. In view of the fact that it would be easy to exaggerate numbers in a family, a standard ration card for six members was distributed to beneficiaries. Feeding centre staff did the distribution. However, as they were part of the community they were prone to giving more food to members of their own tribe.

The Government of Kenya requested emergency food aid in February 1997.

### **Answer the questions.**

- 1. What do you expect the consequences of the above targeting system to be?**
- 2. What targeting strategy for the general food distribution would you have adopted and why?**

## Handout 4b: Assessing and developing appropriate targeting ration strategies: Model answers

### Case study A: Livelihood assessment following the Orissa cyclone in India 1999

1. Objectives as set out in Oxfam programme.

To meet the immediate and medium term needs, and restore or protect the livelihoods of vulnerable marginalized groups, e.g., the scheduled tribes and castes.

2. Food aid interventions and their target group as designed by the Oxfam programme.

A food and cash programme was recommended to replace lost employment for agricultural labourers and was implemented in areas that had received little or no assistance.

Free food was provided to the estimated 5 per cent of households that could not find labour opportunities.

These interventions must be integrated and coordinated with other longer and medium-term food security interventions in the area. Monitoring would be important to ensure those with the greatest vulnerability were receiving assistance. Given the scale of the disaster it might be expected that not all humanitarian needs could be met at the initial phase. Good coordination is very important especially in the initial phases to ensure agencies are not just implementing activities in areas where there is the greatest press coverage but also in areas that may be less accessible and less assistance is being provided.

3. Potential difficulties with introducing a targeted food distribution system in this area.

Those from the lower castes are often the most vulnerable and may be deliberately under-represented during the process of identification of vulnerable households. The impending election could also cause governments to favour certain areas for intervention which may be more related to winning votes rather than areas of greatest need.

To minimize these difficulties it would be important for the implementing agency to be aware of the caste system and the impact of the impending elections on identifying areas of greatest vulnerability. The implementing agency would have to make greater effort to seek out those from lower castes and ensure they were adequately represented within the distribution system. The implementing agency would ensure their information concerning the impact of the cyclone came from a variety of sources and all information should be triangulated in order to obtain the most comprehensive overview of the situation.

### Case study B: Family ration targeting system

1. A substantial increase in the numbers of children admitted in the centres – this caused a deterioration in the quality of care that could be offered to each child, leading to increased rates of defaulting. In addition, increased admissions heightened the risks of cross-infection.

Or

A substantial increase in the pressure experienced by feeding centres staff to admit children who did not meet the entry criteria which, ultimately led to inclusion errors.

Or

High levels of re-admissions and double registration in the programme because the ration provided a resource for the whole family. There was some evidence that children were intentionally underfed to ensure access to food.

The strategy soon had to be abandoned as the numbers escalated out of control.

2. MSF recognized that not all households were equally vulnerable to food insecurity for this reason targeting food to the most vulnerable would be an important element of a food distribution system. MSF also acknowledged targeting households with a child in the feeding centre may not necessarily mean the most food insecure households would receive food aid assistance. An alternative targeting strategy would have been to have adopted a community based targeting and distribution system. Given the dispersed and mobile nature of much of the population in central Mandera a community distribution committee may be better able to represent all groups within the population. However, given the frequent insecurity in the area it would be vital sufficient time was invested in establishing a representative, transparent and accountable committee otherwise unintentionally the food aid intervention could increase local tensions. The community distribution committee would be responsible for identifying the most food insecure households in their area and be responsible for distributing the food. Time would have to be invested to ensure marginalized groups were represented in the distribution lists. During the distribution advocacy for recognition of the need for widespread emergency food aid interventions at the central level – Nairobi – would be important.

## 5. Case studies

A case study from Nepal is presented in this section. Case studies are useful for getting participants to think through real-life scenarios. They also provide an opportunity for participants to work in a group and develop their analytical and decision-making skills. Trainers should develop their own case studies which are contextually appropriate to the particular participant group. Ideally, trainers should use scenarios with which they are familiar.

### Exercise 5: Assessing and addressing micronutrient deficiency diseases

#### What are the learning objectives?

- To know when and how to assess the risk of MDD among a population
- To be able to suggest practical recommendations to adapt the GFD in order reduce the risk of MDD

#### When should this exercise be done?

- As part of a longer in-depth training or after micronutrient deficiency diseases have been introduced

#### How long should the exercise take?

- 90 minutes

#### What materials are needed?

- **Handout 5a:** Case study I: Addressing MDDs in Bhutanese refugees in Nepal 1990
- **Handout 5b:** Case study I: Addressing MDDs in Bhutanese refugees in Nepal 1990: Model answers

#### What does the trainer need to prepare?

- Prepare a case study from a context familiar to the participants based on the template Handouts 5a and 5b or use handouts.

#### Instructions

**Step 1:** Give each participant a copy of Handout 5a.

**Step 2:** Divide the participants into groups of (maximum) five people. In each group a rapporteur and a spokesperson should be nominated to provide feedback to the other groups.

**Step 3:** Give the groups 60 minutes to read the case study and answer the questions and prepare a presentation of their answers. Each group must imagine they are part of the 1994 assessment mission.

**Step 4:** Give each group five minutes for feedback in plenary.

**Step 5:** Give each participant a copy of Handout 5b.

#### Discussion points for feedback in plenary

- ➔ The difficulties of providing a nutritionally balanced diet when there are strong population food preferences
- ➔ How logistical constraints can influence the quality of the diet
- ➔ How could the outbreak of MDDs have been prevented?

## Handout 5a: Case study I: Addressing MDDs in Bhutanese refugees in Nepal 1990

*Time for completion: 90 minutes*

*Participants should be organized into groups of (maximum) five and given 15 minutes to read the case study. Groups should then answer the following questions and present back to plenary.*

- 1. What were the probable factors contributing to the outbreak of micronutrient deficiency diseases?*
- 2. Why does it appear that the percentage of cases declines when refugees have stayed for more than 24 months in the camps?*
- 3. What are your recommendations for addressing this outbreak of micronutrient deficiency diseases through the general food distribution? Justify your recommendations.*

### Population

After October 1990, the first refugees began arriving in southeast Nepal from southern Bhutan. Most refugees arrived after a three-day journey from Bhutan in lorries and buses. Camps began to develop in 1991, but the peak influx of refugees occurred during May 1992. By July 1992, over 50,000 refugees had been registered. By January 1997, there were 91,801 refugees registered in seven camps, with several thousand more living and working in Nepal but not registered as camp residents. Demographic data collected during this period showed that 50 per cent of the population was below 18 years of age, and 13 per cent was below five years of age.

### Local environment

The narrow strip of land, which adjoins India along Nepal's southern border, is known as the Terai. It is only a few hundred feet above sea level, and until the 1950s and 1960s was covered by tropical jungle vegetation. The area had been sparsely inhabited since it was considered to be a zone with high levels of malaria. The Jhapa district, where the camps are located, was cleared of jungle and is now one of the most densely populated areas in eastern Nepal and has the highest proportion of area under cultivation.

### Other sources of food and income

The Terai is well served with commercial buses and cycle rickshaws. Access to towns and markets is not a problem in terms of distance. There is ample seasonal opportunity for casual daily work. However, there is a significant number of landless Nepali citizens in the Terai who depend on such labour opportunities for their daily subsistence. Since the refugees receive a full ration at the camp, they are willing to work for less pay compared to the Nepali citizens. This has led to a policy that aims to limit the numbers of refugees moving in and out of the camps to seek casual daily labour. In this sense, the camps are officially 'closed' but there are no physical barriers to enforce this policy.

### Leadership structures

For purposes of camp management and organization, each camp is divided into sectors and sub-sectors, with an average of 80 houses in each sector. Each sector has a sector leader, and a male and a female sub-sector head represents each sub-sector. The functions of this camp management structure are distribution of resources, administration, and maintaining peace and security. The structure resembles the administrative 'block' system, which the refugees had in Bhutan. The Bhutanese are familiar with leaders having a strong influence over their daily life.

### Malnutrition

At the onset of the refugee influx the malnutrition rate was reported to be 20 per cent (weight-for-height median less than 80 per cent). During the emergency phase, the main nutritional concerns focused on preventing and addressing acute wasting, iron deficiency anaemia and vitamin A deficiency. By the end of 1992, the prevalence of acute malnutrition and the mortality rates in the camps was considered to have decreased to 'acceptable' (5 per cent) levels.

## Food assistance and other essential services

WFP provided all food commodities except vegetables, which were provided by UNHCR. The food basket (see below) was adequate in terms of calories and protein. Water and sanitation conditions as well as health delivery systems in the camps are considered to be better than other refugee camps in the developing world.

The composition and size of the planned general ration:

Food item	Per person per day (g)
Polished rice	430
Pulses	60
Vegetable oil	25
Sugar	20
Salt	7.5
Vegetables	100-150

During a food-basket monitoring exercise implemented in 1993, the actual average amounts received was calculated as follows:

Food item	Per person per day (g)
Polished rice	401
Pulses	57
Vegetable oil	25
Sugar	19
Salt	4.5
Vegetables	96-125

Refugees preferred polished rice to any other cereal. Most refugee women would normally wash their rice more than once before cooking, sometimes throwing this water away. Fortified blended food was provided in supplementary feeding programmes for moderately malnourished children (less than 80 per cent weight-for-height) and for pregnant and lactating women.

The refugees wanted to consume meat once a week and milk (especially in the form of yoghurt) once or twice a week. The exchange rate for the refugees' food aid (usually pulses) commodities to purchase meat and/or yoghurt in the local market was unfavourable. Therefore the energy and protein content of the refugee food basket was affected negatively during the exchange.

Furthermore trading was restricted as there was concern that the local markets would be undercut if there was a substantial amount of food aid appearing in the market.



### Micronutrient deficiencies

In September 1993, an outbreak of suspected *beri-beri* became apparent when an increasing number of patients with neurological symptoms were presenting at the health centres. From October, a surveillance system for *beriberi* and other micronutrient diseases was established. While the numbers of cases varied significantly between the camps, it became evident that there was a close association between the duration of stay in the camps and the proportion of cases of *beriberi*, as shown in the table below.

Time spent in camps (months)	Percentage of cases (%)
<6	5.4
6-11	18.5
12-17	41.5
18-23	23.1
24-29	3.1
30+	8.5

Within a short time of establishing the surveillance system, cases of pellagra and scurvy were also reported.

## Handout 5b: Case study I: Addressing MDDs in Bhutanese refugees in Nepal 1990: Model answers

*There are no definitive answers for the questions posed in this case study.  
A range of answers could be explored as part of this exercise.*

1. What factors may have contributed to the outbreak of micronutrient deficiency diseases?
  - a) The consumption of polished rice. Bhutanese refugees prefer polished rice. In view of this food preference polished rice was supplied in the general ration. However, polished rice contains far less thiamine than parboiled rice.
  - b) It was difficult for UNHCR to provide fresh vegetables as these are perishable. The vegetables provided often had depleted micronutrient levels. It was also difficult for UNHCR to provide a variety of vegetables.
  - c) The unfavourable exchange rates for general ration commodities. The exchange of pulses for foods containing less thiamine (and other B vitamins), or for non-food items. Due to the poor exchange rate a significant quantity of the ration had to be exchanged thereby depleting the calorie, protein and micronutrient content of the ration.
  - d) The ration was monotonous and deficient in micronutrients compared to the one formerly enjoyed by the population before leaving Bhutan.
  - e) The loss of water-soluble vitamins, such as thiamine and other B vitamins, due to washing rice and prolonged boiling of food in water.
  - f) The restrictions on trade and employment for the refugees, which severely affected their own capacities for food acquisition

2. Why does it appear that the percentage of cases declines when refugees have stayed for more than 24 months in the camps?

This is probably a statistical artefact as the surveillance was established at a time when only a small proportion of refugees will have been in the camps for more than two years.

3. What are your recommendations for addressing this outbreak of micronutrient deficiencies through the general ration distribution? Justify your recommendations.

- a) Provide parboiled rice instead of polished rice. (Parboiled rice is richer in thiamine than polished rice)
- b) Provide a fortified blended food as part of the general ration. (rich in micronutrients)
- c) Use the general food distribution as an opportunity to provide a few key education messages with regards to the cause of micronutrient deficiency diseases, e.g.,  
Changes in cooking practices, e.g., using water from boiled rice  
Benefits of parboiled rice  
Use of foods rich in thiamine and other B vitamins

(By raising awareness, food preparation and consumption habits may be altered thereby leading to a decrease in MDD)

- d) Initiate vulnerable group feeding (identify those most at risk and when they are most at risk), e.g., school feeding using fortified blended food. (rich in micronutrients)
- e) Support and promote indigenous food preparation practices (sprouting of whole beans known as '*kinema*', and fermentation of green leafy vegetable '*gundruk*' (which is well known to refugees and part of their diet in Bhutan); (Germination and fermentation increase the micronutrient content of the commodities – especially vitamin C.)
- f) Provide part of ration as whole beans (as opposed to split lentils), such as chickpeas or green peas, to make sprouting possible.
- g) Adapt the composition of the vegetable basket to ease logistical constraints, e.g., cannot include green leafy vegetables since these are highly perishable. Therefore weekly vegetables basket could include: 300g potato, 50g onion, 20g green chilli, 300g cabbage, pumpkin or green banana (seasonal and therefore rotated) and 20g dry garlic and 10g turmeric provided on a monthly basis.

All the above modifications to the general food ration aim at increasing the levels of micronutrients in the diet.

**Exercise 6: Planning a nutritionally adequate food aid rations****What is the learning objective?**

- To know how to plan an appropriate and nutritionally adequate general ration

**When should this exercise be done?**

- As part of a longer in-depth training

**How long should the exercise take?**

- 50 minutes

**What materials are needed?**

- **Handout 6a:** Case Study II: Planning food aid rations for Burundian refugees in Tanzania 1997
- **Handout 6b:** Case Study II: Planning food aid rations for Burundian refugees in Tanzania 1997: Model answers

**What does the trainer need to prepare?**

- Prepare a case study from a context familiar to the participants based on the template in Handouts 6a and 6b or use similar handouts.

**Instructions**

**Step 1:** Give each participant a copy of Handout 6a.

**Step 2:** Divide the participants into groups of (maximum) five people. In each group nominate a rapporteur and a spokesperson to provide feedback to the other groups.

**Step 3:** Give the groups 40 minutes to read the case study and answer the questions and prepare a presentation of their answers. Each group must imagine they are part of the UNHCR/WFP food assessment mission.

**Step 4:** Give each group five minutes for feedback in plenary.

**Step 5:** Give each participant a copy of Handout 5b.

**Discussion points for feedback in plenary**

- ➔ Highlight there is no correct answer but compromises have to be made between the preference of the refugees, the cost of the operation and the logistical constraints.
- ➔ Discuss the advantages and disadvantages of establishing mills at different levels.

## Handout 6a: Case study II: Planning food aid rations for Burundian refugees in Tanzania 1997

*Time for completion: 60 minutes*

*Participants should be organized into groups of five (maximum) and given 10 minutes to read the case study. Groups should then answer the following questions and present back to plenary.*

- 1. How might the composition of the ration affect fuel requirements? How can these be minimized?*
- 2. Given the refugees food preferences, how would you plan a nutritionally balanced ration that to goes some way to meeting these preferences?*
- 3. What arrangements would you recommend for milling the cereals and why?*

### Background

In 1972 and 1993 there was an influx of Burundian refugees into Tanzania. Most of these refugees returned home following the 1994 genocide in Rwanda. There was another major influx that reached its peak in November 1996. These refugees went to new camps in the Kibondo district and Kasulu district in the Kigoma region and some also joined existing camps.

Many of the new arrivals had a history of internal displacement within Burundi for months before they crossed the border. Small numbers (9,700) of Burundian refugees in the Democratic Republic of the Congo (DRC) were crossing Lake Tanganyika and arriving in the town of Kigoma in Tanzania between November 1996 to April 1997.

In July 1997, UNHCR conducted a registration of the refugees in the Kigoma region. There was an approximate 30 per cent reduction in the official statistic used as a working figure until then. These Burundians were of Hutu ethnicity, but varied in terms of educational levels and political allegiances, with particular distinctions being made between lowlanders and highlanders. The majority came from rural areas, particularly the border areas, where food supplies were affected by the sanctions placed on Burundi by the international community.

### Local environment and food security

The camps in the Kigoma region are all located on either side of the main road linking Kasulu, Kibondo and Ngara towns. There are small markets in some camps (Muyovosi and Mtabila). Local villages a few kilometres away hold small markets on some days.

The Kigoma region is considered one of the poorest regions in Tanzania. The districts of Kasulu and Kibondo are suitable for the cultivation of a wide variety of food and cash crops, including maize, cassava, beans, groundnuts, tobacco and cotton. In the higher areas with greater rainfall, the soils are suitable for coffee, bananas, pineapples, maize beans and cassava. These features are similar to the agricultural situation in Burundi.

In contrast to the older camps, where the plot size is around 40 x 40 metres, the plot size in the new camps are only 15 square metres, allowing only a very small vegetable garden area. This means refugees will be dependent on food aid assistance as farming land is not available to them.

A limit is applied to all camps whereby refugees should not go outside the camp more than four kilometres in any direction. Even though this is not easy to enforce, it affects the refugees' ability to complement their food with income-generating activities and food production. Environmental degradation as a result of refugees searching for firewood has been a major concern in the camps to the north, but not in the Kigoma region until recently. A range of environment protection initiatives is being considered.

## Leadership structures

The refugees are divided into 11 zones, which were 'cleared' from the thick bush that previously covered most of Muyovosi site. Refugees were allocated to zones largely on a chronological basis of time of arrival. Each zone has a zone leader, elected by the people of that zone. The 11 leaders were all men while all but one of their assistants were also male. Each week the zone leaders and camp authorities gather at a formal meeting to discuss operational issues in the camp. NGO implementing partners are also present at this meeting.

## Nutritional status

Although there appears to have been little documentation of malnutrition and mortality rates in the early months when the camp was being set up, it was generally recognized that the Burundian refugees that arrived at the end of 1996 and in early 1997 were in a poor nutritional state, having spent several weeks hiding in the border areas in Burundi before arriving at the camps.

## Refugees' food preferences

The refugees preferred staples are beans, plantains, cassava and sweet potatoes. They are unaccustomed to eating maize.

White maize grain is a staple cereal in Tanzania and it can be readily bought or sold on local markets. There is no market for locally milled white maize grain.

If the refugees have to receive maize grain, then they overwhelmingly prefer the local (white) maize grain to the imported (yellow) whole maize grain. Maize meal is also available for distribution, some of this is yellow imported maize meal, and the rest is locally milled white maize. The yellow maize meal, which is imported from the United States, has a much finer texture than the more coarsely ground white maize. If given a choice between the yellow and white maize meal, the refugees overwhelmingly prefer the yellow maize meal to the white meal. In general the two most preferred options were; white maize grain, followed by yellow maize meal.

## Food preparation and milling

In Tanzania, whole white cereal grain is used to make *ndete*. This is pounded maize, boiled and mixed with beans or lentils. This takes three hours or more to cook. If beans are old they can take several hours and must be partially cooked before adding to the pounded maize. To reduce cooking time of the beans some refugees add bicarbonate of soda or ash from the fire to the cooking broth. Refugees were not accustomed to eating *ndete*, but had started cooking it when they first came to the camp because they could not afford to mill, and/or milling facilities were not yet established.

Maize meal was used to make *ubugali*, a stiff porridge, which can be made from cassava flour as well. Water is brought to the boil, then flour is added, and it is stirred continuously for about 10 minutes, depending on the amount.

*Umusululu* is a thinner porridge and in the refugee camps it is made with corn soy blend (a pre-cooked fortified blend of cereals and soybeans) which was often eaten for breakfast by all family members.

In Burundi, most households took their cereal grains to the mills. Very few milled at home, and no refugees had the stones with them necessary for milling. They were however accustomed to pounding their grain for *ndete*. There are no camp level mills run by WFP in Kasulu district. There are four commercially run mills in Muyovosi camp, which are owned and run by refugees as a business venture. The machines were bought in Tanzania and spare parts are available locally.

## Handout 6b: Case study II: Planning food aid rations for Burundian refugees in Tanzania 1997: Model answers

*There are no definitive answers for the questions posed in this case study. A range of answers could be explored as part of this exercise.*

### Ration composition and fuel requirements

The composition of the ration affects the amount of fuel required for its preparation. In this example, whole grain maize takes several hours to cook, while maize meal is prepared in 10 minutes from the time the water comes to the boil.

The quality of the beans affects how long they take to cook; older beans take longer and therefore require more cooking fuel.

The following initiatives may reduce fuel requirements or increase fuel efficiency:

1. Environment protection initiatives:
  - controlling firewood collection
  - use of fuel efficient stoves
  - distribution of kerosene/or kerosene stoves
2. Centralized/communal kitchens. This would be a short term response only.
3. Communicate and inform refugees about appropriate fuel-saving strategies, e.g.:
  - Cut foods up in small pieces.
  - Always use an appropriate size pot, and use a lid.
  - Soak beans prior to cooking reduces cooking time.
  - Discourage use of traditional soda as this reduces the micronutrient content of the cereal.

### Meeting food preferences

The case study clearly states that the refugees preferred staples are beans, plantains, cassava and sweet potatoes, not maize. As far as being practically feasible, depending on cost considerations and also availability, the level of beans relative to cereal should be increased.

Studies are needed to investigate the local trading of food aid commodities. Are refugees getting value for money when they trade their ration commodities for their preferred food items?

Maize and maize meal are clearly quite different in terms of how they are used at the household level. Find out from the refugees which balance of meal versus whole cereal they would prefer and try to meet this preference as much as possible.

A local purchase of a recent crop of beans is desirable as this would be fresher and need less cooking time.

### Arrangements for milling the cereals and why?

The food assessment mission to the Great Lakes Region in 1996 recommended that 'considering the preferences of the refugees and also in an attempt to save energy in food preparation, the target of maize flour versus maize grain should be 50 per cent for each commodity'. This balance would allow for sale of grain, which has a higher market value than flour.

### For discussion of advantages and disadvantages of establishing mills at different levels

1. Distribution of maize cereal (whole grain)
 

The advantages of distributing whole grain are:

  - Less expensive for WFP and the donor
  - Easier to store and clean
  - Longer shelf life
  - May be used as whole grain to prepare certain dishes
  - Possibly higher extraction rate among cereals milled traditionally in the home, which means more of the original grain is retained, including valuable vitamins and minerals

The disadvantages of providing whole maize cereal are:

- Its lower digestibility
- Difficulty of processing in the home – lack of grinding stones and unaccustomed to milling at home
- Labour intensive, particularly for women
- Costs (time and money) of taking to the commercial mill
- Loss of part of the ration during milling

## 2. Milling maize into maize meal at camp level mills.

Advantages

- Enables the implementing agency to distribute whole grain which is cheaper and easier to handle
- Camp level mills operated and managed by refugees, which has the advantage that they know the milling preference (in terms of coarseness of flour) of the population, and this means the agency responsible for food distributions do not have to become involved in the milling operation
- Mills more likely to be financially sustainable if run as a commercial venture
- Refugees to choose what proportion of their cereal they wanted milled

Disadvantages

- Refugees to pay for milling in cash or in kind, which raises issues of cost and affordability
- Access to mills possibly unavailable for the entire population
- Potential problems with the capacity of local mills, the regularity of opening, maintenance and repair (availability of spare parts)
- Possibility that mills operated in camps may have an impact on the commercial viability of local mills
- Greater logistical and management challenges establishing milling at camp level

## 3. Milling at regional level

Advantages

- Reduces dependency on local level mills, which may be expensive or unreliable (depending on availability of fuel and spare parts)
- Depending on the capacity and type of national level milling operation, may offer an opportunity for local fortification
- Less logistical and management challenges establishing milling at regional level.

Disadvantages

- Additional transport and processing stage introduced, as the cereals must be transported in bulk to the mills, milled and the flour re-bagged for onward transportation to the extended delivery points

## 4. Milling in the country of origin and the distribution of imported milled flour.

Advantages

- Provides an opportunity for fortification and, in this case study, the imported maize meal was actually preferred to the locally milled maize
- Easier to prepare than whole grain cereal.

Disadvantages

- Additional cost of transport of bagged flour
- Shorter shelf life

## 6. Field-based exercises

The section outlines ideas for exercises that can be carried out in the classroom as well as with a field visit. Field visits require a lot of preparation. An organization that is actively involved in general food distribution has to be identified to 'host' the visit. This could be a government agency, an international NGO or a United Nations agency. The agency needs to identify an area that can be easily and safely visited by participants. Permission has to be sought from all the relevant authorities and care taken not to disrupt or take time away from programming activities. Despite these caveats, field based learning is probably the best way of providing information that participants will remember.

### Exercise 7: Evaluation of a general food distribution

#### What are the learning objectives?

- To know the key factors to consider for successful implementation of a GFD
- To know how to monitor programmes and assess programme performance and impact
- To understand the challenges that may arise during the implementation of GFD
- To become familiar with what a GFD looks like in practice

#### When should this exercise be done?

- As part of an in-depth course and after all teaching sessions have been completed

#### How long should the exercise take?

- 12 hours (excluding travel) over a three-day period

#### What materials are needed?

- **Handout 7a:** Evaluation of a general food distribution

#### What does the trainer need to prepare?

- Prepare the briefing document and work with participants to develop questions for:
  - a) analysis of distribution monitoring data, e.g., planned ration versus actual ration
  - b) key informant interviews with community members implementing the food distribution and interviews with implementing agency staff
  - c) focus group discussions with beneficiaries
- The trainer will need to identify a suitable organization and area for the field visit and organize all logistics (transport, fuel, meals, etc.) for the visit. It is essential that the trainer visits the field site in advance of the visit in order to set up focus groups and identify key informants, and to identify potential problems. It will also be important to ensure that monthly distribution monitoring data can be made available in an utilizable form. Discussion of the exercise should take place back in the classroom on day 3.



**Exercise 7: Evaluation of a general food distribution** (continued)**Instructions**

**Step 1:** Give each participant a copy of Handout 7a.

**Step 2:** Divide participants into three groups: key informant interview, focus group discussion, analysing general distribution monitoring data

**Step 3:** On morning of day 1, groups read Handout 7a and have opportunities to ask questions. Groups then discuss what are the essential elements in a monitoring and evaluation visit. They prepare a list of questions for key informant interviews and focus group discussions while the monitoring group revisit Sphere standards for general food distributions and familiarize themselves with the objectives of the general food distribution and the likely outcome indicators.

**Step 4:** Day 2 participants travel to the project and spend all day in the field conducting interviews and collecting and analysing monitoring data. Efforts should be made to incur as little opportunity cost to either distribution staff or beneficiaries.

**Step 5:** Participants travel back home.

**Step 6:** Day 3 participants reconvene in class and prepare the presentation of their findings and engage in group debriefing. Presentations and results are relayed back to host agency for their information and use.

**Discussion points for feedback in plenary**

- ➔ Triangulate the information from all the groups. Are there any contradictions? Who needs to be asked what to sort out the contradictions? Are there any gaps in the information? Who needs to be asked what to fill the gaps?
- ➔ Discuss any difficulties in obtaining the information from reports, group discussions and key informants.
- ➔ If the exercise was to be repeated what would you do differently?

## Handout 7a: Evaluation of a general food distribution

**Time for completion:** 12 hours over 3 days

**Three groups are needed for this exercise.**

**Each group should first read the prepared briefing paper about the emergency general food distribution and then prepare a checklist of questions for their respective tasks.**

**Group 1** will conduct key informant interviews with staff implementing the general food distribution as well as community members responsible for assisting with the implementation of the programme, in order to gauge views on programme performance with a special focus on targeting, redistribution and the planned versus the actual ration.

**Group 2** will conduct a series of focus group discussions with beneficiaries in order to gain their views of the programme, with a special focus on targeting, redistribution and the planned versus the actual distribution.

**Group 3** will collect monthly reporting data and analyse these data.

**Each group will then return home and prepare a presentation to the plenary group on day 3.** They will provide feedback of their findings in the field to those responsible for implementing the general food distribution.

**It is advisable that each group nominates an individual to ask questions in each of the interview sessions and at least two other individuals in the group to take notes of the answers. Another individual could take notes on dynamics of the interview, e.g. if it was dominated by one individual or if observers may have inhibited responses, etc.**

### Sample checklist of questions for each group:

#### Group 1:

- What were the objectives of the GFD?
- What was the planned ration and how did that meet the objectives?
- What was the actual ration? If there is a difference why is there a difference?
- Do you inform the beneficiaries of any changes? If so, when and how?
- What are the criteria to receive food aid?
- Who decided these criteria?
- How was this criteria decided?
- How do you identify the eligible households?
- What proportion of households should have received food?
- What proportion of households actually received food? If there is a difference, why? Was this modification to the system discussed with anyone? Who?
- Once the beneficiaries receive the food how is it used? Sold, consumed exchanged, shared with non-beneficiaries, tax payments, repay loans, etc.?
- Do community members who assist with the general food distribution receive payment in kind (food aid)? If so, how much? Has this been agreed upon with the implementing agency?
- What are the main challenges you are facing?
- What changes have you made to the programme since starting? If so, why have you made these changes?
- Do you plan to make any further programme changes?
- Are there adequate numbers of staff running this programme?
- If you were faced with the same situation again would you implement a general food distribution system any differently? If so, how?
- What are the coverage rates and inclusion/exclusion error?

## Implementing agency only

- How has the implementation of the GFD met the programme objectives?
- What has the monitoring data shown you? Do you share the monitoring data with the community? If so, what information is shared?
- Do you have an exit strategy for the programme and what is it?

## Community members only

- What support have you received from the implementing agency? Would you make any changes to the level of support you have received? If so, what?
- What monitoring data do you collect?
- Does the implementing agency share their monitoring data with you? If so, what data and what does it tell you?
- When do you think the general food distribution should end?
- Have there been any negative impacts of the food aid?

**Group 2:**

- What were the objectives of the GFD?
- What are the criteria for selecting those eligible to receive food aid?
- How were these criteria agreed/developed and by who?
- Would you make any changes to the criteria?
- What is the ration you receive? Has this changed? How? When?
- If the ration changes are you informed? How? By who?
- Are you happy with the food commodities you receive? If not, what changes would you make?
- What do you do with the ration? Exchange, sell, consume, pay debts, share with others, etc.?
- Are you happy with the way the programme is being implemented? If not, what changes would you like to see?
- Has the programme been explained properly to you?
- Is the food ration adequate? If not, what changes would you make?
- How is the food distribution organized (well, adequately or badly)?
- How much time does it take to collect your food ration? Does this create any conflicts for you?
- How far do you have to carry your food ration home? How do you manage to transport/carry your ration home? At what cost?
- Do you ever assist with distributing the food aid? Do you receive payment for this?
- Have there been any negative impacts of the food aid?

**Group 3:**

- What were the objectives of the GFD?
- What food commodities have been distributed and in what quantities?
- How does the food distribution meet the objectives of the GFD?
- Compare planned distribution quantities with actual quantities distributed. Explain differences.
- How many beneficiaries received food aid?
- Compare actual beneficiaries with planned beneficiaries. Explain differences.
- Have there been any changes in anthropometric data since the implementation of the general food distribution? If so, what are the reasons for change?
- Have there been any changes in the food security situation since the implementation of the general food distribution? How was this assessed? If changes did occur, what are the likely reasons for change?
- How does the programme compare with the Sphere standards?
- What changes have been made to the programme? Have these affected any of the programme outcome data?
- Are there data on programme coverage and inclusion/exclusion error? How were these obtained and what is their likely accuracy?
- If it is not possible to make some of these calculations, what data or reporting procedures are missing?
- Have there been any negative impacts of the food aid?

