MODULE 12

Management of moderate acute malnutrition

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 12 is about the management of moderate acute malnutrition (MAM) with an emphasis on emergency supplementary feeding programmes (SFP) and their implementation. The module describes the different types of SFPs and when, where and how to implement programmes. Management tips and methods of monitoring and evaluation are also covered. The module highlights the need for flexible programming in different emergency contexts as well as the challenging and controversial aspects of SFP programming.

Navigating your way round these materials

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 SFPs 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.
6. **Field-based exercises** outline ideas for field visits that may be conducted during a longer training course.

CONTENTS

1. Tips for trainers

Step 1: Do the reading!

- Read Parts 1 and 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 them in Part 4 of this module):
  - Action Contre La Faim/Prudhon, Claudine (2002) *Assessment and Treatment of Malnutrition in Emergency Situations. Manual of Therapeutic Care and Planning for a Nutritional Programme*. Paris: ACF.
  - ENN (2009). *Minimum Reporting Package for Emergency Supplementary Feeding Programmes: Guidelines*. London: ENN (Draft).
  - The Sphere Project. *Humanitarian Charter and Minimum Standards in Disaster Response: Chapter 3*. Geneva: The Sphere Project.
  - UNHCR/WFP (2009). *Guidelines for selective feeding: the management of malnutrition in emergencies*. Geneva: UNHCR/WFP
  - WHO (2000) *The management of nutrition in major emergencies* Geneva. WHO.

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 of implementing SFPs in either an emergency or stable context?
  - Could participants with experience in the management of MAM or SFPs 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 SFPs.
  - A **half-day** classroom-based training can provide an overview of SFPs and include some practical exercises.
  - A **one-day** classroom-based training can provide a more in-depth understanding of SFPs and include a number of practical exercises and multiple case studies.
  - A **one-day** classroom including field-based training can provide a full training in order to implement an SFPs although trainees would still need considerable on-the-job training before they were proficient in SFP implementation. This would include case studies and practical work, but would need to be a four to five day training if it includes the 2 day evaluation of an SFP in the field.
- 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 'chunks'. One session should generally not last longer than an hour.
- Ensure the training is a good mix of activities i.e. mix power-point 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 them in Part 4 of this module):
  - FANTA (2008). *Training guide for community-based management of acute malnutrition (CMAM)*. Washington DC. FANTA.
  - University of Nairobi, FSAU & FAO (2005). *Training Package of Materials for the Course Food and Nutrition Surveillance and Emergency (Unit I through III)*. Nairobi: FSAU.
  - The Sphere Project (2004). *Humanitarian and Minimum Standards in Disaster Response. Nutrition training module. Session 4. Moderate Malnutrition*.
- Prepare exercises and case studies. These can be based on the examples given in this trainer's guide but should be adapted to be suitable 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 management of MAM. 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:

- Understand the objectives and basic design features of SFPs in emergencies.
- Know when to implement SFPs and eligibility criteria.
- Know when to close down SFPs.
- Have knowledge of basic medical regimes in SFPs.
- Have an understanding of basic management practices involved in programming.
- Know how to monitor programmes and assess programme performance and impact.
- Understand the need for, and context where, flexible programming may be necessary.
- Understand the types of challenge that may arise in SFP implementation.
- Know how to evaluate the design and implementation of an SFP.

3. Testing knowledge

This section contains one exercise which is an example of a questionnaire that can be used to test participants' knowledge of SFPs either at the start 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 the management of moderate acute malnutrition in emergencies?

What is the learning objective?

- To test participants' knowledge about SFPs

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 the management of moderate acute malnutrition in emergencies?: Questionnaire
- **Handout 1b:** What do you know about the management of moderate acute malnutrition in emergencies?: Questionnaire answers

What does the trainer need to prepare?

- Familiarise yourself with the 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: Go through the responses in plenary and have participants mark their own questionnaires and clarify the answers where necessary.

Handout 1a: What do you know about the management of moderate acute malnutrition in emergencies?: Questionnaire

Time for completion: 15 minutes

Answer all the questions

1. What is/are two main differences between targeted and blanket SFPs?

   a)

   b)

2. What are the advantages of take-home rations over on-site rations? *Circle the correct answers.*

   a) Less opportunity cost to mother/carer
   b) Less risk of ration sharing
   c) Does not require set up of large scale kitchens
   d) Less risk of cross-infection
   e) Do not have to provide a ration for carers

3. Under what circumstances might on-site feeding be appropriate? *Circle the correct answers.*

   a) When the population has no cooking or food preparation resources
   b) When there are no epidemics
   c) At the time of year when there is limited agricultural work
   d) When there are high levels of insecurity

4. Under what circumstances would you implement a targeted SFP? *Circle the correct answers.*

   a) When levels of wasting are between 5-9 per cent without aggravating factors
   b) When levels of wasting are expected to rise due to aggravating factors like poor general ration or epidemics or imminent hungry season
   c) When levels of wasting are above 10 per cent
   d) When levels of wasting are above 5 per cent with aggravating factors

5. What are the eligibility criteria for a targeted SFP? *Circle the correct answers.*

   a) Children 6-60 months with weight for height less than -2 Z score and greater than or equal to -3 Z-scores based on the 2006 WHO Growth standard
   b) Children 6-60 months with MUAC of less than 12.5cm (125mm) and greater than or equal to 11.5cm (115mm)
   c) Referrals from a therapeutic feeding programme
   d) Children 6-60 months with a weight for height less than -3 Z scores
   e) Adults with BMI greater than 18
   f) Pregnant and lactating women and nursing mothers with MUAC of less than 21cm

6. List five potential target groups for SFPs.

   a)

   b)

   c)

   d)

   e)

7. What is the normal caloric range for onsite and take-home rations for targeted SFPs? *Circle the correct answer.*

   a) 500-700 kcals onsite and 700-1000 kcals take-home

   b) 700-900 kcals onsite and 900-1100 kcals take-home

   c) 500-1000 kcals onsite and 1000-1200 kcals take-home

   d) 500-700 kcals onsite and 1000-1200 kcals take-home

8. Which of the following are standard medical treatments as part of targeted SFP? *Circle the correct answers.*

   a) Oral rehydration solution for diarrhoea

   b) Anti-helminthic treatment

   c) Diphtheria vaccination

   d) Measles vaccination

   e) Iodine supplementation

   f) Vitamin A supplementation

   g) Malaria prophylaxis

9. What are the target levels for the three main indicators used for monitoring programme performance of targeted SFPs? *Circle the correct answers.*

   a) recovery rate > 90%

   b) recovery rate >75%

   c) death rate < 10%

   d) death rate < 3%

   e) defaulting rate < 15%

   f) defaulting rate < 5%

10. How would you assess programme impact?

11. How would you assess programme coverage?

12. What are three weaknesses and criticisms of supplementary feeding programmes in emergencies?

Handout 1b: What do you know about the management of moderate acute malnutrition in emergencies?: Questionnaire answers

1. Targeted SFPs target moderately malnourished individuals while blanket SFPs target all those in 'at risk groups' regardless of nutritional status.

   Or

   Targeted SFPs are meant to be implemented in conjunction with adequate general rations while blanket SFPs are often implemented when GFDs have not been established or are inadequate.

   Or

   The objectives of targeted SFPs are primarily curative, while the objectives for blanket SFPs are primarily preventive.

2. **a), c), d), e)**

3. **a), b), c)**

4. **c), d)**

5. **a), b), c), f)**

6. **a) Children under five**
   b) Pregnant and lactating women
   c) Malnourished adults
   d) The elderly
   e) Adolescents

7. **d)**

8. **a), b), d), f)**

9. **b), d), e)**

10. Programme impact can be assessed by comparing results of nutrition surveys before and after the intervention but accounting for seasonal factors, changes in general food security and disease patterns. Programme impact can also be assessed by looking at programme indicators, e.g., recovery, death and default in conjunction with coverage data.

11. Programme coverage can best be assessed by adding a question to nutrition surveys to determine what percentage of children identified as malnourished in the survey are enrolled in the supplementary feeding programme e.g. the çdirecté method.

    The 'indirect' method compares the estimated number of children with MAM in the population based on malnutrition rates reported in the anthropometric survey to the actual number of children attending the programme. Increasingly a new methodology know as Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) is being used as an on-going monitoring tool to look a barriers to uptake in selective feeding programmes.

12. i) May be difficult to implement in conflict situations. Sphere targets may be unattainable.
    ii) Requires considerable resources to allocate small quantities of food.
    iii) Default rates may be high in many contexts. Reasons for default are not always well understood.
    iv) May not impact levels of wasting at population level unless coverage is high.
    v) Need to combine with other interventions but limited documentation of best practice and effectiveness of these linkages.
    vi) RUSFs or commercial products may lead to better outcomes but use of such products raises issues of sustainability.

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: Assessing the adequacy of a ration

What is the learning objective?

- To know how to assess the adequacy of a ration

When should this exercise be done?

- After ration levels and ration adequacy have been introduced

How long should the exercise take?

- 40 minutes

What materials are needed?

- **Handout 2a:** Assessing ration adequacy – two case studies
- **Handout 2b:** Assessing ration adequacy – two case studies: Model answers
- **Handout 2c:** Nutrient value per 100g
- Hand-held calculator

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 the given handout.

Instructions

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

Step 2: Give participants working in pairs 15 minutes to read one of the case studies and complete the table.

Step 3: Allow 25 minutes of discussion and feedback in plenary.

Discussion points for feedback in plenary

➡ Compare and contrast the two rations particularly with regard to how they are adapted or not adapted to the context

➡ Explore issues of ration sharing and substitution effect

➡ Highlight the importance of information on the general ration in terms of setting ration levels

Handout 2a: Assessing ration adequacy – two case studies

Time for completion: 40 minutes

Allow 15 minutes for this task and 25 minutes for feedback. Participants may work in pairs. Each pair should address questions from one of the two case studies.

Case study A: Wet feeding in Kuito, Angola

During October 1994, an SFP providing on-site feeding (çwet feedingé) was established in Kuito town. Both government (UNITA) and rebel (MPLA) forces were present within the city. The security situation was extremely poor and therefore mothers did not like to leave their other children at home for long periods. A wet SFP provided only one meal per day for the children so that they could return home quickly. The meal consisted of one cup (300ml) of high-energy milk (1kcal/1ml) and one traditional meal (60g rice, 30g beans and 10ml oil)).

Answer the questions.

1. Calculate the energy value (kcal) of the ration provided per person per day.
2. Comment on its suitability and identify possible weaknesses in the SFP programme.

	Energy kcal
300mls high-energy milk	
60g rice	
30g beans	
10ml oil	
TOTAL PER DAY	

Case study B: Dry SFP feeding in Bahr el Ghazal in southern Sudan

From September 1998 to January 1999, a decentralized SFP programme was established in Aweil West in southern Sudan. Families were dispersed across a huge area. In order to reach the beneficiaries, food was transported by boat to the smaller villages that were difficult to reach. A two-week dry 'pre-mix' was provided to these families. It consisted of the following commodities: 2100g CSB, 280g oil and 210g dried skim milk (DSM).

Answer the questions.

1. Calculate the energy value (kcal) of the ration provided per person per day.
2. Comment on its suitability and identify possible weaknesses in the SFP programme.

	Energy kcal
2100g CSB	
280 g oil	
210g DSM	
TOTAL (over 14 days)	
TOTAL PER DAY	

Handout 2b: Assessing ration adequacy – two case studies: Model answers

Case study A: Wet feeding in Kuito, Angola

1. The energy value (kcal) of the ration provided per person per day is 705 kcal.

	Energy kcal
300ml high-energy milk	300.0
60g rice	216.0
30g beans	100.5
10ml oil	88.5
TOTAL PER DAY	705.0

2. Comment on its suitability and identify possible weaknesses in the SFP programme.
   - Distribution of cooked food is often more appropriate in an insecure situation as it is less likely to be misappropriated by rival factions, e.g., it is consumed directly by the beneficiaries. At the same time, there may be security risks in gathering mothers and young children in one place to eat cooked food.
   - The food is suitable from a nutritional point of view; a combination of high-energy milk and a normal meal of rice and beans.
   - It is likely that as it is a meal rather than a snack it will substitute and not supplement the meals at home.
   - This is a large meal for a young child, and it is unlikely that the child would consume it all. It is more likely to be shared with the mother or other caregiver.
   - Access to food or the general ration is not mentioned. This is vitally important in assessing the contribution of a food supplement. The foods in the supplementary ration may be similar to those given out in general rations, and therefore more likely to used as a substitute for the general ration.

Case study B: Dry SFP feeding in Bahr el Ghazal in southern Sudan

1. The energy value (kcal) of the ration provided per person per day is 801 kcal.

	Energy kcal	Protein g	Fat g
2100g CSB	7980	378.0	126.00
280 g oil	2478	0.0	280.00
210g DSM	756	75.6	2.10
TOTAL (over 14 days)	1,1214	453.6	408.10
		16.2%	32.8%
TOTAL PER DAY	801	32.4	29.15

2. Comment on its suitability and identify possible weaknesses in the SFP programme.
   - The use of a premix ensures that all commodities are consumed in nutritionally balanced proportions.
   - Pre-mixing prevents the re-sale of individual high value commodities such as sugar and oil.
   - In these circumstances wet feeding would not have been possible given the difficulties of access, and distributed population.
   - The daily value of the supplementary ration of 801 is on the low side if it is assumed that approximately 50 per cent of this will be shared.
   - The fat content at nearly 30 per cent and protein over the 15 to 25 grams per day is adequate.
   - The mode of transport by boat takes advantage of the waterways, in what appears to be an otherwise difficult area to access.
   - The shelf life of pre-mix should be limited to two weeks, as food spoilage is likely to occur after this time.
   - Sugar may be needed to improve palatability of the pre-mix.
   - Access to food or the general ration is not mentioned. This is vitally important in assessing the contribution of a food supplement.

Handout 2c: Nutrient values per 100g

Nutrients per 100 grams of raw portion

Food Type	Food Commodities	Energy (kcal)	Protein (g)	Fat (g)	Calcium (mg)	Iron (mg)	Iodine (µg)	Vit. A (µg RE)	Thiamine (mg)	Riboflavin (mg)	Niacin (mg NE)	Vit. C (mg)
Pulses&oilseeds	Beans, black (USA)	341	21.6	1.4	123	5.0		5	0.80	0.19	6.2	0
Pulses&oilseeds	Beans, blackeye/ cowpeas (USA)	336	23.5	1.3	110	8.3		15	0.90	0.20	6.2	2
Pulses&oilseeds	Beans, dried	335	20.0	1.2	143	8.2		0	0.50	0.22	6.2	0
Pulses&oilseeds	Beans, great northern (USA)	339	21.9	1.1	175	5.5		1	0.70	0.20	6.3	5
Pulses&oilseeds	Beans, kidney, all types (USA)	333	23.6	0.8	143	8.2		2	0.50	0.20	6.6	5
Pulses&oilseeds	Beans, navy/ pea beans (USA)	335	22.3	1.3	155	6.4		1	0.65	0.23	6.5	3
Pulses&oilseeds	Beans, pink (USA)	343	21.0	1.1	130	6.8		0	0.80	0.20	6.0	0
Pulses&oilseeds	Beans, pinto (USA)	340	20.9	1.1	121	5.9		2	0.60	0.20	5.6	7
Pulses&oilseeds	Beans, small red (USA)	350	22.0	1.0	150	7.0		0	0.70	0.20	6.2	0
Pulses&oilseeds	Beans, soya	416	36.5	19.9	277	15.7	6	7	0.87	0.87	10.4	6
Miscellaneous	BP-5 compact food	458	14.7	17.0	600	10.0	100	470	0.52	0.52	6.5	40
Pulses&oilseeds	Chickpeas	364	19.3	6.0	105	6.2		20	0.48	0.21	4.6	4
Blended foods	Corn soy blend (WFP specs.)	400	18.0	6.0	181	12.8	2	501	0.44	0.70	10.0	50
Blended foods	Corn soy blend, (USA)	376	17.2	6.9	831	17.5	56.9	784	0.53	0.48	6.2	40
Blended foods	Corn soy masa flour (USA)	365	9.3	3.8	110	2.9		662	0.44	0.26	3.5	0
Blended foods	Corn soy masa flour, instant (USA)	363	11.4	3.7	110	2.9		662	0.44	0.26	3.5	0
Blended foods	Corn soy milk (USA)	375	21.4	6.8	1,020	17.5	56.9	785	0.59	0.71	6.4	41
Blended foods	Corn soy milk, instant (ICSM)	380	20.0	6.0	900	18.0	56.9	510	0.80	0.60	8.0	40
Milk&products	Dried skim milk (DSM)	348	36.1	0.6	1,280	0.3	0	9	0.38	1.63	9.5	13

Nutrients per 100 grams of raw portion (continued)

Food Type	Food Commodities	Energy (kcal)	Protein (g)	Fat (g)	Calcium (mg)	Iron (mg)	Iodine (µg)	Vit. A (µg RE)	Thiamine (mg)	Riboflavin (mg)	Niacin (mg NE)	Vit. C (mg)
Milk&products	Dried skim milk (DSM), fortified	360	36.0	1.0	1,257	1.0	0	1,500	0.42	1.55	9.5	0
Milk&products	Dried whole milk (DWM)	500	25.0	27.0	912	0.5		280	0.28	1.21	6.8	0
Blended foods	Famix (Ethiopia)	402	14.7	7.0	100	8.0			0.10	0.40	5.0	30
Pulses&oilseeds	Groundnuts, dry	567	25.8	49.2	92	4.6	20	0	0.64	0.14	16.2	0
Miscellaneous	High energy biscuits (WFP specs.)	450	12.0	15.0	250	11.0	75	250	0.50	0.70	6.0	20
Pulses&oilseeds	Lentils	338	28.1	1.0	51	9.0		12	0.48	0.25	6.8	6
Cereals	Maize grain, white	350	10.0	4.0	7	2.7		0	0.39	0.20	2.2	0
Cereals	Maize grain, yellow	350	10.0	4.0	13	2.7		141	0.39	0.20	2.2	0
Cereals	Maize meal, fortified (WFP specs.)	366	8.5	1.7	110	5.3		141	0.83	0.46	5.5	0
Cereals	Maize meal, fortified (USA)	366	8.5	1.7	110	2.9		662	0.44	0.26	4.8	0
Cereals	Maize meal, white, degermed	360	8.5	1.7	5	1.1		0	0.14	0.05	1.3	0
Cereals	Maize meal, white, whole grain	360	9.0	3.5	6	2.4		0	0.39	0.20	2.0	0
Cereals	Maize meal, yellow, degermed	360	8.5	1.7	5	1.1		124	0.14	0.05	1.3	0
Cereals	Maize meal, yellow, whole grain	360	9.0	3.5	6	2.4		141	0.39	0.20	2.0	0
Vegetables	Maize, fresh	86	3.2	1.2	2	0.5		84	0.20	0.06	0.9	7
Oils and fats	Oil, vegetable (WFP SPECS.)	885	0.0	100.0	0	0.0		900	0.00	0.00	0.0	0
Oils and fats	Oil, vegetable, Unfortified	890	0.0	100.0	0	0.0		0	0.00	0.00	0.0	0
Oils and fats	Oil, vegetable, Vit. A fortified (USA)	884	0.0	100.0	0	0.02		1,800	0.00	0.00	0.0	0
Oils and fats	Palm oil, red	875	0.0	98.9	6	0.0		6,000	0.01	0.02	0.0	0
Pulses&oilseeds	Peas, dried	341	24.6	1.2	55	4.4	2	45	0.70	0.20	2.9	2

Nutrients per 100 grams of raw portion (continued)

Food Type	Food Commodities	Energy (kcal)	Protein (g)	Fat (g)	Calcium (mg)	Iron (mg)	Iodine (µg)	Vit. A (µg RE)	Thiamine (mg)	Riboflavin (mg)	Niacin (mg NE)	Vit. C (mg)
Pulses&oilseeds	Peas, dried, split	341	24.6	1.2	55	4.4	2	45	0.70	0.20	2.9	2
Cereals	Rice, lightly milled, parboiled	364	7.0	0.5	7	1.2		0	0.20	0.08	4.9	0
Cereals	Rice, polished	360	7.0	0.5	9	1.7		0	0.10	0.03	5.6	0
Blended foods	Rye soy blend	400	19.5	7.5	535	8.0		528	0.33	0.53	6.0	30
Sugar and salt	Salt	0	0.0	0.0	0	0.0	0	0	0.00	0.00	0.0	0
Sugar and salt	Salt, iodised (WFP specs.)	0	0.0	0.0	0	0.0	6,000	0	0.00	0.00	0.0	0
Cereals	Sorghum	335	11.0	3.0	26	4.5		0	0.34	0.15	5.0	0
Pulses&oilseeds	Soya bean meal, defatted	339	45.0	2.4	244	13.7		12	0.69	0.25	13.5	0
Pulses&oilseeds	Soya beans	416	36.5	19.9	277	15.7	6	7	0.87	0.87	10.4	6
Cereals	Soya flour, full fat, raw	436	34.5	20.7	206	6.4		36	0.58	1.16	12.7	0
Blended foods	Soya fortified bulgur wheat (USA)	350	17.0	1.5	110	2.9		662	0.44	0.26	3.5	0
Blended foods	Soya fortified maize meal (USA)	390	13.0	1.5	110	2.9		662	0.44	0.26	3.5	0
Blended foods	Soya fortified rolled oats	380	20.0	6.0	81	5.3		0	0.74	0.14	4.0	0
Blended foods	Soya fortified sorghum grits (USA)	360	16.0	1.0	110	2.9		662	0.44	0.26	3.5	0
Blended foods	Soya fortified wheat flour	360	16.0	1.3	211	4.8		265	0.66	0.36	4.6	0
Sugar and salt	Sugar	400	0.0	0.0	0	0.0	0	0	0.00	0.00	0.0	0
Cereals	Wheat flour, fortified (USA)	364	10.3	1.0	110	4.4	662	0.76	0.44	8.7	0	
Cereals	Wheat flour, fortified (WFP specs.)	350	11.5	1.5	15	4.1		0	0.56	0.30	6.9	0
Cereals	Wheat flour, white	350	11.5	1.5	15	1.2		0	0.12	0.04	3.4	0
Blended foods	Wheat pea blend (Danaert)	425	15.0	6.0	100	8.0		500	0.13	0.45	4.8	48

Nutrients per 100 grams of raw portion (continued)

Food Type	Food Commodities	Energy (kcal)	Protein (g)	Fat (g)	Calcium (mg)	Iron (mg)	Iodine (µg)	Vit. A (µg RE)	Thiamine (mg)	Riboflavin (mg)	Niacin (mg NE)	Vit. C (mg)
Blended foods	Wheat soy blend (USA)	355	21.5	5.9	842	17.9	56.9	697	0.54	0.50	8.2	40
Blended foods	Wheat soy blend (WFP specs.)	400	20.0	6.0	159	12.0	1	600	0.41	0.66	7.9	49
Blended foods	Wheat soy blend (WSB)	370	20.0	6.0	750	20.8	498	1.50	0.60	9.1	40	
Blended foods	Wheat soy milk (USA)	357	25.1	5.8	1,031	17.9	56.9	699	0.60	0.73	8.3	41

Source: Nutval 2006

Exercise 3: Assessing targeted SFP performance in relation to Sphere minimum standards

What is the learning objective?

- To know how to calculate and interpret targeted SFP performance statistics and coverage

When should this exercise be done?

- After monitoring and indicators of programme effectiveness have been introduced

How long should the exercise take?

- 45 minutes

What materials are needed?

- **Handout 3a:** Assessing targeted SFP performance in relation to Sphere minimum standards
- **Handout 3b:** Assessing targeted SFP performance in relation to Sphere minimum standards: Model answers
- Hand-held calculator

What does the trainer need to prepare?

- Prepare a case study similar to the one below or use the given handout.

Instructions

Step 1: Give each participant a copy of Handout 3a or a similar one.

Step 2: Give participants working in pairs 30 minutes to read the exercise and complete the table.

Step 3: Discuss the importance of recording data separately for different demographic groups.

Discussion points for feedback in plenary

➡ Discuss the weaknesses in estimating coverage based on assumptions about the percentage of under-fives in the population and what may be a better means of assessing coverage.

➡ Explore reasons why death and default may not meet expected targets.

➡ Discuss the importance of recording data separately for different demographic groups.

Handout 3a: Assessing targeted SFP performance in relation to Sphere minimum standards

Time for completion: 45 minutes

Allow 30 minutes for this task and 10 to 15 minutes for feedback. Participants may work in pairs.

Every month the supplementary feeding programme attendance book should be used to compile a monthly reporting form. See example below. Complete the monthly reporting form, by calculating key indicators and inserting on the form.

1. Calculate the total new admissions — D =
2. Calculate the total admissions — F =
3. Calculate the total discharged — K =
4. Calculate the new total at the end of the month — L =
5. Calculate the percent of exits recovered — G/K x 100 =
6. Calculate the percent of exits died — H/K x 100 =
7. Calculate the percent of exits defaulted — I/K x 100 =
8. Calculate the percent of exits non response — J/K x 100 =
9. How does this compare with the SPHERE indicators?
   - Target percent of exits recovered — = > 70%
   - Target percent of exits died — = < 3%
   - Target percent of exits defaulted (there is no target for non-response at this time) — = < 15%
10. Calculate the coverage of the feeding programme.

    The prevalence of acute moderate malnutrition based on anthropometric survey results for children 6-59 months is 20 per cent. The estimated population of children 6-59 months is 1300 (20 per cent of total population). This means that the target population for supplementary feeding is approximately 260 children who are moderately malnourished.

    Coverage = (New total (L)/Target population) x 100 =

Explanation and key to figures:

A. The total at the end of last month is taken from last month's reporting form.

B. Total number of new admissions based on WFH and MUAC (for children 6-59 months)

C. Total number of new admissions based on other criteria

D. Total new admissions is the sum total of all NEW admissions B + C.

E. Children who were previously registered in the programme and re-admitted should be recorded separately.

F. Total admissions = D + E

A review of the children leaving the programme (EXITS) is useful for evaluating performance and identifying potential problems. The exits are categorised as either;

G. Recovered

H. Deaths

I. Defaulters (failed to attend)

J. Non-responder (did not meet discharge criteria but has reached the maximum time limit for treatment)

K. The total number of EXITS = G + H + I + J

The number of exits in each category; E, F and G are calculated as a percent of the total exits.
This gives:

Percent of exits recovered	G/K x 100 =	(target > 75%)
Percent of exits died	H/K x 100 =	(target < 3%)
Percent of exits defaulted	I/K x 100 =	(target < 15%)
Percent of exits non responder	J/K x 100 =	(no target established)

I. The new total at the end of this month = A + F - K

Reporting form: targeted supplementary feeding programme

COUNTRY: LOCATION:
AGENCY: PERIOD:

TOTAL POPULATION: 6500 UNDER (<) 5 POPULATION: approx. 1300
MODERATE MALNUTRITION RATE: 20% Target population < 5 (Moderate Malnutrition Prevalence x < 5 POP.): 260

COVERAGE < 5 (new total (L)/target population) *100 =

	CATEGORIES					
	6-59 months	> 5 years	Pregnant women	Lactating women	TOTAL	
Total at end last month (A)	80	7	12			
New admissions:			1			
WFH ≥ -3 Z score and < -2 Z score (2006 WHO) or MUAC ≥ 115mm and < 125mm (B)	14					
Other criteria (C)	2					
Total new admissions (D)						
Re-admissions (E)	3					
Total admissions (F) = D + C						
Discharged in this period:						TARGETS AS A PER CENT OF EXITS For < 6-59 months
Discharges (G)	20					Recovered > 75% G/K * 100 =
Deaths (H)	1					Deaths < 3% H/K * 100 = (,3%) (< 3%)
Defaulters (I)	3					Defaulters < 15% I/K * 100 = (< 15%)
Non-responder (J)	1					Non-responders J/K * 100 =
Total discharged (K) = G + H + I + J						
New total at month end (L) = A + F - K = A + D - H						

Handout 3b: Assessing targeted SFP performance in relation to Sphere minimum standards: Model answers

1. Total new admissions — D = **16**
2. Total admissions — F = **19**
3. Total discharged = total exits — K = **25**
4. New total at the end of the month — L = **74**
5. Percent of exits recovered — G/K x 100 = 20/25 x 100 = **80%**
6. Percent of exits died — H/K x 100 = 1/25 x 100 = **4%**
7. Percent of exits defaulted — I/K x 100 = 3/25 x 100 = **12%**
8. Percent of exits non-responder — J/K x 100 = 1/25 x 100 = **4%**
9. How does this compare with Sphere targets?

   The centre is exceeding the target for recovered children, although the percentage of children dying is too high as it exceeds the target of 3 per cent. The percentage of defaulters below the cut off of 15%, however the staff at the SFP should aim to identify the reasons why children are defaulting and address the cause of the problem. While there is no target for non-response, the staff at the SFP should review the specific cases in order to review case management and ensure that potential underlying causes of non-response were identified.
10. Calculate the coverage of the feeding programme.

    COVERAGE < 5 (new total (L)/target population) *100 =
    = **74/260** = **28.5%**

    Coverage is low, no matter in which context this targeted SFP is operating.

Reporting form: supplementary feeding programme

TOTAL POPULATION: 6500
UNDER (<) 5 POPULATION: 1300
MODERATE MALNUTRITION RATE: 20%
TARGET < 5 (MODERATE MALNUTRITION RATE * < 5 POP.): 260

THEORETICAL COVERAGE < 5 (NEW TOTAL (I)/TARGET) x 100 = **28.5%**

	CATEGORIES					
	6-59 months	> 5 years	Pregnant women	Lactating women	TOTAL	
Total at end last month (A)	80	7	12			
New admissions:			1			
WFH ≥ -3 Z score and < -2 Z score (2006 WHO) or MUAC ≥ 115mm and < 125mm (B)	14					
Other criteria (C)	2					
Total new admissions (D)						
Re-admissions (E)	3					
Total admissions (F) = D + C						
Discharged in this period:						TARGETS AS A PER CENT OF EXITS For < 6-59 months
Discharges (G)	20					Recovered > 75% G/K * 100 =
Deaths (H)	1					Deaths < 3% H/K * 100 = (,3%) (< 3%)
Defaulters (I)	3					Defaulters < 15% I/K * 100 = (< 15%)
Non-responder (J)	1					Non-responders J/K * 100 =
Total discharged (K) = G + H + I + J	25					
New total at month end (L) = A + F - K = A + D - H	74	7	13			

Exercise 4: Criteria for admission into a targeted SFP

What is the learning objective?

- To know when to implement programmes and eligibility criteria

When should this exercise be done?

- After eligibility criteria have been introduced

How long should the exercise take?

- 30 minutes

What materials are needed?

- **Handout 4a:** Criteria for admission to a targeted SFP
- **Handout 4b:** Criteria for admission to a targeted SFP: Model answers
- **Handout 4c:** Simplified field tables for girls and boys 2006 WHO Growth Standards

What does the trainer need to prepare?

- If there are nutrition survey data from the area of participants or that participant have brought along then use these data and pre-prepare answers. Otherwise use the handouts provided.

Instructions

Step 1: Give each participant a copy of Handout 4a or similar one, and Handout 4c.

Step 2: Give participants working in pairs 20 minutes to identify Z score range and identify which children are eligible for admission into a targeted SFP.

Step 3: Give handout 4b and allow 10 minutes to feedback in plenary.

Discussion points for feedback in plenary

➡ Children with bilateral oedema whose weight-for-height makes them eligible for SFP should be admitted to therapeutic feeding.

➡ The new WHO growth standards classify two to four times more children < -3SD compared to the previously recommended NCHS reference.

Handout 4a: Criteria for admission to EFSP

Time for completion: 30 minutes

Allow 20 minutes for this task and 10 minutes for feedback. Participants may work in pairs.

1. ***Using the 2006 WHO Growth Standards simplified field tables, classify the nutritional status (Z score) range for the children in the table below.***
2. ***Based on all of the available information, identify which children should be admitted into the targeted SFP.***

Name	Age in months.	Sex 1=M 2=F	Weight (kg)	Height (cm)	Oedema 1=Y 2=N	MUAC (mm)	(1) Weight for height Z score range	(2) Entry into SEP? Yes or no
Ahmed	50	1	10.5	94.0	2	116		
Ildephonse	35	2	11.5	82.0	2	128		
Marie	36	2	10.8	80.1	1	114		
Chantal	28	1	8.5	82.0	2	121		
Victoria	54	2	13.5	88.5	2	120		
Mary	12	2	6.0	67.5	2	118		
Jhumur	7	2	5.8	65.0	2	118		
Thea	54	2	9.1	87.0	2	113		
Emile	44	1	10.4	83.0	2	130		
Christine	37	2	11.5	81.8	1	129		
Vicky	16	2	8.0	80.0	2	121		
Mukaretta	18	1	8.0	75.0	2	116		
Kampundu	34	1	11.3	82.0	2	130		
Haruna	41	2	11.3	92.2	2	127		
Ali	13	2	6.0	71.0	2	114		

WHO 2006 Growth Standards Weight-height index Z score (http://www.who.int/childgrowth/standards/en/)

Simplified field tables

Weight-for-length BOYS Birth to 2 years (z-scores)

World Health Organization

CM	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
45.0	1.9	2.0	2.2	2.4	2.7	3.0	3.3
45.5	1.9	2.1	2.3	2.5	2.8	3.1	3.4
46.0	2.0	2.2	2.4	2.6	2.9	3.1	3.5
46.5	2.1	2.3	2.5	2.7	3.0	3.2	3.6
47.0	2.1	2.3	2.5	2.8	3.0	3.3	3.7
47.5	2.2	2.4	2.6	2.9	3.1	3.4	3.8
48.0	2.3	2.5	2.7	2.9	3.2	3.6	3.9
48.5	2.3	2.6	2.8	3.0	3.3	3.7	4.0
49.0	2.4	2.6	2.9	3.1	3.4	3.8	4.2
49.5	2.5	2.7	3.0	3.2	3.5	3.9	4.3
50.0	2.6	2.8	3.0	3.3	3.6	4.0	4.4
50.5	2.7	2.9	3.1	3.4	3.8	4.1	4.5
51.0	2.7	3.0	3.2	3.5	3.9	4.2	4.7
51.5	2.8	3.1	3.3	3.6	4.0	4.4	4.8
52.0	2.9	3.2	3.5	3.8	4.1	4.5	5.0
52.5	3.0	3.3	3.6	3.9	4.2	4.6	5.1
53.0	3.1	3.4	3.7	4.0	4.4	4.8	5.3
53.5	3.2	3.5	3.8	4.1	4.5	4.9	5.4
54.0	3.3	3.6	3.9	4.3	4.7	5.1	5.6
54.5	3.4	3.7	4.0	4.4	4.8	5.3	5.8
55.0	3.6	3.8	4.2	4.5	5.0	5.4	6.0
55.5	3.7	4.0	4.3	4.7	5.1	5.6	6.1
56.0	3.8	4.1	4.4	4.8	5.3	5.8	6.3
56.5	3.9	4.2	4.6	5.0	5.4	5.9	6.5
57.0	4.0	4.3	4.7	5.1	5.6	6.1	6.7
57.5	4.1	4.5	4.9	5.3	5.7	6.3	6.9
58.0	4.3	4.6	5.0	5.4	5.9	6.4	7.1
58.5	4.4	4.7	5.1	5.6	6.1	6.6	7.2
59.0	4.5	4.8	5.3	5.7	6.2	6.8	7.4
59.5	4.6	5.0	5.4	5.9	6.4	7.0	7.6
60.0	4.7	5.1	5.5	6.0	6.5	7.1	7.8
60.5	4.8	5.2	5.6	6.1	6.7	7.1	8.0
61.0	4.9	5.3	5.8	6.3	6.8	7.4	8.1
61.5	5.0	5.4	5.9	6.4	7.0	7.6	8.3
62.0	5.1	5.6	6.0	6.5	7.1	7.7	8.5
62.5	5.2	5.7	6.1	6.7	7.2	7.9	8.6
63.0	5.3	5.8	6.2	6.8	7.4	8.0	8.8
63.5	5.4	5.9	6.4	6.9	7.5	8.2	8.9
64.0	5.5	6.0	6.5	7.0	7.6	8.3	9.1

CM	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
64.5	5.6	6.1	6.6	7.1	7.8	8.5	9.3
65.0	5.7	6.2	6.7	7.3	7.9	8.6	9.4
65.5	5.8	6.3	6.8	7.4	8.0	8.7	9.6
66.0	5.9	6.4	6.9	7.5	8.2	8.9	9.7
66.5	6.0	6.5	7.0	7.6	8.3	9.0	9.9
67.0	6.1	6.6	7.1	7.7	8.4	9.2	10.0
67.5	6.2	6.7	7.2	7.9	8.5	9.3	10.2
68.0	6.3	6.8	7.3	8.0	8.7	9.4	10.3
68.5	6.4	6.9	7.5	8.1	8.8	9.6	10.5
69.0	6.5	7.0	7.6	8.2	8.9	9.7	10.6
69.5	6.6	7.1	7.7	8.3	9.0	9.8	10.8
70.0	6.6	7.2	7.8	8.4	9.2	10.0	10.9
70.5	6.7	7.3	7.9	8.5	9.3	10.1	11.1
71.0	6.8	7.4	8.0	8.6	9.4	10.2	11.2
71.5	6.9	7.5	8.1	8.8	9.5	10.4	11.3
72.0	7.0	7.6	8.2	8.9	9.6	10.5	11.5
72.5	7.1	7.6	8.3	9.0	9.8	10.6	11.6
73.0	7.2	7.7	8.4	9.1	9.9	10.8	11.8
73.5	7.2	7.8	8.5	9.2	10.0	10.9	11.9
74.0	7.3	7.9	8.6	9.3	10.1	11.0	12.1
74.5	7.4	8.0	8.7	9.4	10.2	11.2	12.2
75.0	7.5	8.1	8.8	9.5	10.3	11.3	12.3
75.5	7.6	8.2	8.8	9.6	10.4	11.4	12.5
76.0	7.6	8.3	8.9	9.7	10.6	11.5	12.6
76.5	7.7	8.3	9.0	9.8	10.7	11.6	12.7
77.0	7.8	8.4	9.1	9.9	10.8	11.7	12.8
77.5	7.9	8.5	9.2	10.0	10.9	11.9	13.0
78.0	7.9	8.6	9.3	10.1	11.0	12.0	13.1
78.5	8.0	8.7	9.4	10.2	11.1	12.1	13.2
79.0	8.1	8.7	9.5	10.3	11.2	12.2	13.3
79.5	8.2	8.8	9.5	10.4	11.3	12.3	13.4
80.0	8.2	8.9	9.6	10.4	11.4	12.4	13.6
80.5	8.3	9.0	9.7	10.5	11.5	12.5	13.7
81.0	8.4	9.1	9.8	10.6	11.6	12.6	13.8
81.5	8.5	9.1	9.9	10.7	11.7	12.7	13.9
82.0	8.5	9.2	10.0	10.8	11.8	12.8	14.0
82.5	8.6	9.3	10.1	10.9	11.9	13.0	14.2
83.0	8.7	9.4	10.2	11.0	12.0	13.1	14.3
83.5	8.8	9.5	10.3	11.2	12.1	13.2	14.4

Simplified field tables

Weight-for-length BOYS Birth to 2 years (z-scores)

World Health Organization

CM	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
84.0	8.9	9.6	10.4	11.3	12.2	13.3	14.6
84.5	9.0	9.7	10.5	11.4	12.4	13.5	14.7
85.0	9.1	9.8	10.6	11.5	12.5	13.6	14.9
85.5	9.2	9.9	10.7	11.6	12.6	13.7	15.0
86.0	9.3	10.0	10.8	11.7	12.8	13.9	15.2
86.5	9.4	10.1	11.0	11.9	12.9	14.0	15.3
87.0	9.5	10.2	11.1	12.0	13.0	14.2	15.5
87.5	9.6	10.4	11.2	12.1	13.2	14.3	15.6
88.0	9.7	10.5	11.3	12.2	13.3	14.5	15.8
88.5	9.8	10.6	11.4	12.4	13.4	14.6	15.9
89.0	9.9	10.7	11.5	12.5	13.5	14.7	16.1
89.5	10.0	10.8	11.6	12.6	13.7	14.9	16.2
90.0	10.1	10.9	11.8	12.7	13.8	15.0	16.4
90.5	10.2	11.0	11.9	12.8	13.9	15.1	16.5
91.0	10.3	11.1	12.0	13.0	14.1	15.3	16.7
91.5	10.4	11.2	12.1	13.1	14.2	15.4	16.8
92.0	10.5	11.3	12.2	13.2	14.3	15.6	17.0
92.5	10.6	11.4	12.3	13.3	14.4	15.7	17.1
93.0	10.7	11.5	12.4	13.4	14.6	15.8	17.3
93.5	10.7	11.6	12.5	13.5	14.7	16.0	17.4
94.0	10.8	11.7	12.6	13.7	14.8	16.1	17.6
94.5	10.8	11.8	12.7	13.8	14.9	16.3	17.7
95.0	110.	11.9	12.8	13.9	15.1	16.4	17.9
95.5	11.1	12.0	12.9	14.0	15.2	16.5	18.0
96.0	11.2	12.1	13.1	14.1	15.3	16.7	18.2
96.5	11.3	12.2	13.2	14.3	15.5	16.8	18.4
97.0	11.4	12.3	13.3	14.4	15.6	17.0	18.5
97.5	11.5	12.4	13.4	14.5	15.7	17.1	18.7
98.0	11.6	12.5	13.5	14.6	15.9	17.3	18.9
98.5	11.7	12.6	13.6	14.8	16.0	17.5	19.1
99.0	11.8	12.7	13.7	14.9	16.2	17.6	19.2
99.5	1109	12.8	13.9	15.0	16.3	17.8	19.4
100.0	12.0	12.9	14.0	15.2	16.5	18.0	19.6
100.5	12.1	13.0	14.1	15.3	16.6	18.1	19.8
101.0	12.2	13.2	14.2	15.4	16.8	18.3	20.0
101.5	12.3	13.3	14.4	15.6	16.9	18.5	20.2
102.0	12.4	13.4	14.5	15.7	17.1	18.7	20.4
102.5	12.5	13.5	14.6	15.9	17.3	18.8	20.6
103.0	12.6	13.6	14.8	16.0	17.4	19.0	20.8
103.5	12.7	13.7	14.9	16.2	17.6	19.2	21.0

CM	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
104.0	12.8	13.9	15.0	16.3	17.8	19.4	21.2
104.5	12.9	14.0	15.2	16.5	17.9	19.6	21.5
105.0	13.0	14.1	15.3	16.6	18.1	19.8	21.7
105.5	13.2	14.2	15.4	16.8	18.3	20.0	21.9
106.0	13.3	14.4	15.6	16.9	18.5	20.2	22.1
106.5	13.4	14.5	15.7	17.1	18.6	20.4	22.4
107.0	13.5	14.6	15.9	17.3	18.8	20.6	22.6
107.5	13.6	14.7	16.0	17.4	19.0	20.8	22.8
108.0	13.7	14.9	16.2	17.6	19.2	21.0	23.1
108.5	13.8	15.0	16.3	17.8	19.4	21.2	23.3
109.0	14.0	15.1	16.5	17.9	19.6	21.4	23.6
109.5	14.1	15.3	16.6	18.1	19.8	21.7	23.8
110.0	14.2	15.4	16.8	18.3	20.0	21.9	24.1

Simplified field tables

Weight-for-length GIRLS Birth to 2 years (z-scores)

World Health Organization

CM	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
45.0	1.9	2.1	2.3	2.5	2.7	3.0	3.3
45.5	2.0	2.1	2.3	2.5	2.8	3.1	3.4
46.0	2.0	2.2	2.4	2.6	2.9	3.2	3.5
46.5	2.1	2.3	2.5	2.7	3.0	3.3	3.6
47.0	2.2	2.4	2.6	2.8	3.1	3.4	3.7
47.5	2.2	2.4	2.6	2.9	3.2	3.5	3.8
48.0	2.3	2.5	2.7	3.0	3.3	3.6	4.0
48.5	2.4	2.6	2.8	3.1	3.4	3.7	4.1
49.0	2.4	2.6	2.9	3.2	3.5	3.8	4.2
49.5	2.5	2.7	3.0	3.3	3.6	3.9	4.3
50.0	2.6	2.8	3.1	3.4	3.7	4.0	4.5
50.5	2.7	2.9	3.2	3.5	3.8	4.2	4.6
51.0	2.8	3.0	3.3	3.6	3.9	4.3	4.8
51.5	2.8	3.1	3.4	3.7	4.0	4.4	4.9
52.0	2.9	3.2	3.5	3.8	4.2	4.6	5.1
52.5	3.0	3.3	3.6	3.9	4.3	4.7	5.2
53.0	3.1	3.4	3.7	4.0	4.4	4.9	5.4
53.5	3.2	3.5	3.8	4.2	4.6	5.0	5.5
54.0	3.3	3.6	3.9	4.3	4.7	5.2	5.7
54.5	3.4	3.7	4.0	4.4	4.8	5.3	5.9
55.0	3.5	3.8	4.2	4.5	5.0	5.5	6.1
55.5	3.6	3.9	4.3	4.7	5.1	5.7	6.3
56.0	3.7	4.0	4.4	4.8	5.3	5.8	6.4
56.5	3.3	4.1	4.5	5.0	5.4	6.0	6.6
57.0	3.9	4.3	4.6	5.1	5.6	6.1	6.8
57.5	4.0	4.4	4.8	5.2	5.7	6.3	7.0
58.0	4.1	4.5	4.9	5.4	5.9	6.5	7.1
58.5	4.2	4.6	5.0	5.5	6.0	6.6	7.3
59.0	4.3	4.7	5.1	5.6	6.2	6.8	7.5
59.5	4.4	4.8	5.3	5.7	6.3	6.9	7.7
60.0	4.5	4.9	5.4	5.9	6.4	7.1	7.8
60.5	4.6	5.0	5.5	6.0	6.6	7.3	8.0
61.0	4.7	5.1	5.6	6.1	6.7	7.4	8.2
61.5	4.8	5.2	5.7	6.3	6.9	7.6	8.4
62.0	4.9	5.3	5.8	6.4	7.0	7.7	8.5
62.5	5.0	5.4	5.9	6.5	7.1	7.8	8.7
63.0	5.1	5.5	6.0	6.6	7.3	8.0	8.8
63.5	5.2	5.6	6.2	6.7	7.4	8.1	9.0
64.0	5.3	5.7	6.3	6.9	7.5	8.3	9.1
64.5	5.4	5.8	6.4	7.0	7.6	8.4	9.3
65.0	5.5	5.9	6.5	7.1	7.8	8.6	9.5

CM	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
65.5	5.5	6.0	6.6	7.2	7.9	8.7	9.6
66.0	5.6	6.1	6.7	7.3	8.0	8.8	9.8
66.5	5.7	6.2	6.8	7.4	8.1	9.0	9.9
67.0	5.8	6.3	6.9	7.5	8.3	9.1	10.0
67.5	5.9	6.4	7.0	7.6	8.4	9.2	10.2
68.0	6.0	6.5	7.1	7.7	8.5	9.4	10.3
68.5	6.1	6.6	7.2	7.9	8.6	9.5	10.5
69.0	6.1	6.7	7.3	8.0	8.7	9.6	10.6
69.5	6.2	6.8	7.4	8.1	8.8	9.7	10.7
70.0	6.3	6.9	7.5	8.2	9.0	9.9	10.9
70.5	6.4	6.9	7.6	8.3	9.1	10.0	11.0
71.0	6.5	7.0	7.7	8.4	9.2	10.1	11.1
71.5	6.5	7.1	7.7	8.5	9.3	10.2	11.3
72.0	6.6	7.2	7.8	8.6	9.4	10.3	11.4
72.5	6.7	7.3	7.9	8.9	9.5	10.5	11.5
73.0	6.8	7.4	8.0	8.8	9.6	10.6	11.7
73.5	6.9	7.4	8.1	8.9	9.7	10.7	11.8
74.0	6.9	7.5	8.2	9.0	9.8	10.8	11.9
74.5	7.0	7.6	8.3	9.1	9.9	10.9	12.0
75.0	7.1	7.7	8.4	9.1	10.0	11.0	12.2
75.5	7.1	7.8	8.5	9.2	10.1	11.1	12.3
76.0	7.2	7.8	8.5	9.3	10.2	11.2	12.4
76.5	7.3	7.9	8.6	9.4	10.3	11.4	12.5
77.0	7.4	8.0	8.7	9.5	10.4	11.5	12.6
77.5	7.4	8.1	8.8	9.6	10.5	11.6	12.8
78.0	7.5	8.2	8.9	9.7	10.6	11.7	12.9
78.5	7.6	8.2	9.0	9.8	10.7	11.8	13.0
79.0	7.7	8.3	9.1	9.9	10.8	11.9	13.1
79.5	7.7	8.4	9.1	10.0	10.9	12.0	13.3
80.0	7.8	8.5	9.2	10.1	11.0	12.1	13.4
80.5	7.9	8.6	9.3	10.2	11.2	12.3	13.5
81.0	8.0	8.7	9.4	10.3	11.3	12.4	13.7
81.5	8.1	8.8	9.5	10.4	11.4	12.5	13.8
82.0	8.1	8.8	9.6	10.5	11.5	12.6	13.9
82.5	8.2	8.9	9.7	10.6	11.6	12.8	14.1
83.0	8.3	9.0	9.8	10.7	11.8	12.9	14.2
83.5	8.4	9.1	9.9	10.9	11.9	13.1	14.4
84.0	8.5	9.2	10.1	11.0	12.0	13.2	14.5
84.5	8.6	9.3	10.2	11.1	12.1	13.3	14.7
85.0	8.7	9.4	10.3	11.2	12.3	13.5	14.9
85.5	8.8	9.5	10.4	11.3	12.4	13.6	15.0

Simplified field tables

Weight-for-length GIRLS Birth to 2 years (z-scores)

World Health Organization

CM	-3 SD	-2 SD	-1 SD	Median	1 SD	2 SD	3 SD
86.0	8.9	9.7	10.5	11.5	12.6	13.8	15.2
86.5	9.0	9.8	10.6	11.6	12.7	13.9	15.4
87.0	9.1	9.9	10.7	11.7	12.8	14.1	15.5
87.5	9.2	10.0	10.9	11.8	13.0	14.2	15.7
88.0	9.3	10.1	11.0	12.0	13.1	14.4	15.9
88.5	9.4	10.2	11.1	12.1	13.2	14.5	16.0
89.0	9.5	10.3	11.2	12.2	13.4	14.7	16.2
89.5	9.6	10.4	11.3	12.3	13.5	14.8	16.4
90.0	9.7	10.5	11.4	12.5	13.7	15.0	16.5
90.5	9.8	10.6	11.5	12.6	13.8	15.1	16.7
91.0	9.9	10.7	11.7	12.7	13.9	15.3	16.9
91.5	10.0	10.8	11.8	12.8	14.1	15.5	17.0
92.0	10.1	10.9	11.9	13.0	14.2	15.6	17.2
92.5	10.1	11.0	12.0	13.1	14.3	15.8	17.4
93.0	10.2	11.1	12.1	13.2	14.5	15.9	17.5
93.5	10.3	11.2	12.2	13.3	14.6	16.1	17.7
94.0	10.4	11.3	12.3	13.5	14.7	16.2	17.9
94.5	10.5	11.4	12.4	13.6	14.9	16.4	18.0
95.0	10.6	11.5	12.6	13.7	15.0	16.5	18.2
95.5	10.7	11.6	12.7	13.8	15.2	16.7	18.4
96.0	10.8	11.7	12.8	14.0	15.3	16.8	18.6
96.5	10.9	11.8	12.9	14.1	15.4	17.0	18.7
97.0	11.0	12.0	13.0	14.2	15.6	17.1	18.9
97.5	11.1	12.1	13.1	14.4	15.7	17.3	19.1
98.0	11.2	12.2	13.3	14.5	15.9	17.5	19.3
98.5	11.3	12.3	13.4	14.6	16.0	17.6	19.5
99.0	11.4	12.4	13.5	14.8	16.2	17.8	19.6
99.5	11.5	12.5	13.6	14.9	16.3	18.0	19.8
100.0	11.6	12.6	13.7	15.0	16.5	18.1	20.0
100.5	11.7	12.7	13.9	15.2	16.6	18.3	20.2
101.0	11.8	12.8	14.0	15.3	16.8	18.5	20.4
101.5	11.9	13.0	14.1	15.5	17.0	18.7	20.6
102.0	12.0	13.1	14.3	15.6	17.1	18.9	20.8
102.5	12.1	13.2	14.4	15.8	17.3	19.0	21.0
103.0	12.3	13.3	14.5	15.9	17.5	19.2	21.3
103.5	12.4	13.5	14.7	16.1	17.6	19.4	21.5
104.0	12.5	13.6	14.8	16.2	17.8	19.6	21.7
104.5	12.6	13.7	15.0	16.4	18.0	19.8	21.9
105.0	12.7	13.8	15.1	16.5	18.2	20.0	22.2
105.5	12.8	14.0	15.3	16.7	18.4	20.2	22.4
106.0	13.0	14.1	15.4	16.9	18.5	20.5	22.6
106.5	13.1	14.3	15.6	17.1	18.7	20.7	22.9
107.0	13.2	14.4	15.7	17.2	18.9	20.9	23.1
107.5	13.3	14.5	15.9	17.4	19.1	21.1	23.4
108.0	13.5	14.7	16.0	17.6	19.3	21.3	23.6
108.5	13.6	14.8	16.2	17.8	19.5	21.6	23.9
109.0	13.7	15.0	16.4	18.0	19.7	21.8	24.2
109.5	13.9	15.1	16.5	18.1	20.0	22.0	24.4
110.0	14.0	15.3	16.7	18.3	20.2	22.3	24.7

Handout 4b: Criteria for admission to a targeted SFP: Model answers

Name	Age in months.	Sex 1=M 2=F	Weight (kg)	Height (cm)	Oedema 1=Y 2=N	MUAC (mm)	(1) Weight for height Z score range	(2) Entry into SEP? Yes or no
Ahmed	50	1	10.5	94.0	2	116	<-3 Z score	No- SAM by WFH
Ildephonse	35	2	11.5	82.0	2	128	> median weight and < +1 Z score	No- no MAM
Marie	36	2	10.8	80.1	1	114	≥-2 and <-1 Z score	No- bilateral oedema so has SAM, also by MUAC
Chantal	28	1	8.5	82.0	2	121	≥-3 and <-2 Z score	Yes- By WFH and MUAC
Victoria	54	2	13.5	88.5	2	120	-2 Z score	Yes- by MUAC
Mary	12	2	6.0	67.5	2	118	≥-3 and <-2 Z score	Yes- by MUAC and WFH
Jhumur	7	2	5.8	65.0	2	118	≥-3 and <-2 Z score	Yes- by WFH and MUAC
Thea	54	2	9.1	87.0	2	113	<-3 Z score	No- SAM by WFH and MUAC
Emile	44	1	10.4	83.0	2	130	>-2 Z score and < median weight	No- no MAM
Christine	37	2	11.5	81.8	1	129	> median weight and < +1 Z score	No- bilateral oedema so has SAM
Vicky	16	2	8.0	80.0	2	121	≥-3 and <-2 Z score	Yes- by MUAC and WFH
Mukaretta	18	1	8.0	75.0	2	116	≥-3 and <-2 Z score	Yes- by MUAC and WFH
Kampundu	34	1	11.3	82.0	2	130	> median weight and < +1 Z score	No- no MAM
Haruna	41	2	11.3	92.2	2	127	≥-2 and <-1 Z score	No- no MAM
Ali	13	2	6.0	71.0	2	114	<-3 Z score	No- SAM by WFH and MUAC

5. Case studies

Two case studies, one from Ethiopia and one from Kenya, are 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: Evaluating a targeted SFP in Ethiopia

What is the aim?

- To know how to evaluate the design and implementation of a targeted SFP

When should this exercise be done?

- As part of a longer in-depth training

How long should the exercise take?

- 90 minutes

What materials are needed?

- **Handout 5a:** Case study I: Evaluating a targeted SFP in Ethiopia
- **Handout 5b:** Case study I: Evaluating a targeted SFP in Ethiopia: 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 b or use existing handouts.

Instructions

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

Step 2: Divide the participants into groups of (maximum) five people.

Step 3: Give the groups 60 minutes to answer the questions and prepare a presentation of their answers.

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 programme departs from standard practice in a number of ways.
- ➡ Nutritional assessment of impact and effectiveness is critical.
- ➡ Difficulty of combining this type of programme with standard emergency supplementary feeding when acute emergency.
- ➡ Lack of linkage to relief rations (GFD) will undermine impact due to sharing.
- ➡ Nation-wide coverage is a significant achievement even though programme impact and effectiveness is unproven.

Handout 5a: Case study I: Evaluating a targeted ESFP in Ethiopia

Time for completion: 90 minutes

Trainees should be organized into groups of five and given 60 minutes to read the case study and prepare a presentation. The case study is based on extracts from an evaluation of the programme commissioned by WFP. Groups should then answer the following questions and present back to plenary.

1. ***How does this programme depart from normal targeted supplementary feeding programme practice in emergencies?***
2. ***What are the potential weaknesses of this programme?***
3. ***What recommendations would you make to strengthen the programme?***

Background

Ethiopia has unacceptably high levels of malnutrition. Among children 6-59 months, the prevalence of wasting (low weight-for-height) is 10.5 per cent, stunting (low height-for-age) is 47 per cent and underweight (low weight-for-age) stands at 38 per cent. The enhanced outreach strategy (EOS) and targeted supplementary feeding (TSF) programme was initially piloted in the Southern Nations and Nationalities People's Regional State (SNNPR) of Ethiopia in April 2004. The programme is considered to be unique in terms of scale, design, and range of activities. The EOS/TSF programme is a component of the Government's child survival initiative (CSI). It is intended that it will provide a bridge for the implementation of a key component of the CSI, the health extension package (HEP),[1] which is being implemented nationwide.

Programme activities

Those women and children who are found to have a MUAC below the cut-off point of 21.0 cm and 12.0 cm, respectively, are given a ration card and referred to the TSF programme and, (where available) those with a MUAC below 11.0 cm and/or with oedema, for treatment of severe malnutrition. The TSF beneficiaries receive two monthly food supplements, which provides 25 kg of micronutrient fortified corn (or wheat) soy blend (CSB) and 3 litres of fortified vegetable oil. This is a nutrition supplement equal to 1690 kilocalories, 55g of protein and 15g of fat per day. At the end of six months, they automatically leave the programme.

The MUAC screening and TSF referral takes place every six months at designated EOS sites while the TSF distribution takes place every three months at TSF designated sites. The overall aim of the combined components of the EOS/TSF is to reduce morbidity and mortality in children under five.

The EOS and TSF have separate specific objectives. EOS objectives relate to the delivery of the maternal and child health inputs while the TSF objectives are nutritional and are as follows:

- To prevent the nutritional deterioration of children under age five and pregnant and lactating women
- To prevent those moderately malnourished from becoming severely malnourished
- To rehabilitate moderately malnourished children and people living with HIV and AIDS through the provision of fortified supplementary food
- To promote key nutrition messages

[1] The HEP aims to train two health extension workers in each *kebele* to provide preventive and promotive services from *kebele*-level health posts to the local community.

Over a one-and-a-half-year period the TSF expanded from just one region and 10 *woredas* in April 2004 to 264 *woredas* in 10 regions by the end of 2006. The programme delivers a targeted food supplement to malnourished children and pregnant and lactating women (P&LW) at 2246 food distribution centres (FDCs) through a network of 4492 trained food distribution agents (FDAs) and aims to "deliver the food directly to the door of the people." A unique and impressive feature of the TSF is the substantial network of trained local women who are responsible for overseeing all aspects of the food distribution and also for providing nutrition education.

In spite of the considerable programme implementation achievements, delays are arising at virtually all stages of the food distribution process, although generalizations about the magnitude and extent of the problem cannot be made. This is because each region is at a different stage of programme implementation and each is facing differing constraints.

The reasons for delays are numerous. For example, EOS staff face considerable time pressure during the EOS screening sessions and may not have time to compile the MUAC screening information at the end of the sessions, instead producing the information some two to three days or even one week later. Poor intersectoral communication between DPP and MOH staff at the *woreda* level can result in lengthy delays in handing over MUAC data for estimating food requirements. Delays also arise with the food transport tendering process, which can take considerable time especially when the contracts only cover one round of TSF at a time.

At the community level, there are examples of *kebele* leaders failing to inform the target group of the food distribution dates, which creates delays. This may arise due to a lack of understanding about the programme approach, e.g., targeted food supplements. It was reported that mobilization is difficult in situations where the TSF targets those who are 'better off' with malnutrition rather than those who are poorer but who do not have malnutrition. In areas where poverty is equated with food aid entitlement, the TSF approach, results in confusion and conflict if its intentions are not well communicated.

Delays also arise in providing the FDAs with the beneficiary register, which lists all the beneficiaries and is essential for the FDAs to identify and cross-check those on the register with the information on their ration cards. Recently, in recognition of this problem, a new register has been designed to ensure that a copy of each page is available for health and DPP staff as well as for the FDAs. In 2006, WFP staff carried out an analysis of 2005 monitoring data to help identify key programme achievements.[2] It was found that around half (52 per cent) of all target TSF beneficiaries were preparing the ration and consuming the ration correctly. Furthermore, the majority (88 per cent) of beneficiaries indicated that they received the correct amount of CSB and oil and that almost all (98 per cent) of FDAs were promoting key nutrition messages during the food distribution sessions.

Despite some efforts, evidence of the impact on nutritional status of children enrolled in the programme is not available. However, during evaluations it was apparent that there is a general perception at regional, *woreda* and community level that the TSF is conferring nutrition benefits. Statements, such as "children are getting stronger", were made and that hospital admissions for therapeutic feeding have declined.

The target group for the programme is children under age five, while the entry criteria to the EOS is actually based on those children whose height falls below 110 cm because of the difficulty of establishing age of children at the field level. This means that children above the age of five years who are stunted with a low MUAC are being admitted. Questions about the accuracy of MUAC measurements have been raised throughout the life of the programme as measurement errors are being detected. However, the extent of these errors is unknown.

[2] The data analysed was based on non-representative information gathered in 2005 from approximately 500 completed checklists.

A significant proportion of beneficiaries reported sharing the food among family members (particularly other children) and the food lasting on average six weeks as opposed to twelve weeks. Sharing is unsurprising in view of the fact that the TSF component is operating in an environment of high levels of chronic and acute food insecurity, declining provision of a general ration and, in some areas, a traditional practice of sharing resources. It is very likely that there is a seasonal dimension to the practice of sharing with higher levels of sharing when food is in short supply. The ration provides around 1600 kcals per person per day which is 400 kcals higher than the ration recommended for a traditional take home SFP. The extra provision was designed to mitigate the sharing of the ration.

The EOS screening identifies very large numbers of severely malnourished children but, as the treatment of severe malnutrition is not yet a routine part of the health system, there is only minimal capacity in Ethiopia to treat these children. There are non-government organizations (NGOs) supporting capacity for treatment (inpatient and community-based treatment) but these are few. For example, while the EOS is operating in 325 *woredas*, NGOs are in just 10 per cent of the *woredas* in the country where the EOS/TSF is being implemented.

Theoretically, all cases of severe malnutrition will be screened by the EOS and enrolled onto the TSF and it is likely that, in some instances the TSF will be the only source of additional food for these children. The outcome for this group given the time delay between screening and food distribution which at best occurs within 21 days is not known as individual cases are not followed up by the health sector staff.

There is a lack of clarity as to the role of traditional SFPs in the context of the EOS/TSF. It is reported that situations have arisen where the EOS/TSF has been viewed as a replacement for traditional SFP in situations where child wasting levels have substantially increased. For example, in June 2005 in SNNPR, NGOs were unable to implement SFPs because the *woreda* staff saw the TSF as a replacement for an SFP.

There is no clearly articulated exit strategy for the TSF component although the overall EOS/TSF programme is expected to phase out as the national HEP expands. It is unclear how long the planned HEP expansion will take although considerable progress is being made in training HEW and in constructing health posts.

Handout 5b: Case study I: Evaluating a targeted ESFP in Ethiopia: Model answers

Examples of recommendations following a WFP evaluation

i) Given the significant investment in the EOS/TSF programme and the significant departure from normal SFP practice, it is vital that robust nutritional impact data are generated. If, as is clearly stated, the programme has nutritional objectives, then nutritional impact must be assessed.

Key areas of weakness which may undermine programme impact are:

a) Delays between identifying malnourished children and provision of food

b) Food sharing at household level

c) Lack of close monitoring of children – only measured at six monthly interval

d) Loss to programme after six months and no follow up

e) No specific provision for treatment of severely malnourished

f) Poor quality MUAC screening

The impact study will need to be carefully designed with the full support of a statistician. It is likely to involve conducting studies on a representative sample of a cohort of children to assess nutritional outcome (e.g., the percentage of children who recover from moderate malnutrition) with a comparison group made up of children who only receive the EOS inputs (e.g., not the TSF). An alternative would be a cohort study to examine efficacy of the programme in terms of percentage of children who recover in relation to cost of inputs (material and human). The study should also include programme coverage indicators to understand what levels of exclusion and inclusion error are arising, the accuracy of the ration card distribution and where possible, what access EOS/TSF beneficiaries have to other relief and development programmes.

ii) Children who are stunted but above five years of age are enrolled onto the programme. While this is not in itself a problem, as older stunted and wasted children should benefit from the programme, it may create a problem in the way EOS programme coverage is estimated. Currently EOS under-five coverage is over-estimated due to the inclusion of this older group by a factor of around 20 per cent and this will need to be addressed in all future coverage estimates.

iii) There are situations where the TSF has been viewed as a replacement for traditional SFP. Guidance must therefore be developed on when additional supplementary food response is needed to respond to 'hot spots'. This is necessary to ensure that where emergency nutrition situations arise, the presence of the TSF does not inhibit an appropriate and adequate response.

A major limitation of the programme is that while thousands of severely malnourished children are detected, there is a lack of capacity for treating these children. It is therefore recommended that all programme partners as well as NGOs mount an advocacy strategy to persuade donors and government of the need for resourcing the mainstreaming of treatment within the health system and support for community-based treatment approaches. In order to support such advocacy this it would be useful to map the case load of SAM identified by EOS/TSF for each region and *wereda* and compare this to the regional capacity for treatment.

Exercise 6: An analysis of high default rates in Wadjir, Kenya

What is the learning objective?

- To analyse reasons for default and to devise solutions
- To emphasize the importance of having an on-going dialogue with target communities

When should this exercise be done?

- As part of a longer in-depth training

How long should the exercise take?

- 90 minutes

What materials are needed?

- **Handout 6a:** Case study II: An analysis of high default rates in Wadjir, Kenya
- **Handout 6b:** Case study II: An analysis of high default rates in Wadjir, Kenya: Model answer

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. Read Handout 6b carefully before convening the plenary feedback session.

Instructions

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

Step 2: Divide the participants into groups of (Maximum) five people.

Step 3: Give the groups 60 minutes to answer the questions and prepare a presentation of their answers.

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

Step 5: Give each participant a copy of Handout 6b.

Discussion points for feedback in plenary

➡ Where default rates are high it is critically important to talk with beneficiaries to understand why this is and to come up with practical solutions.

➡ In some situations it may be difficult to address certain constraints or factors which lead to high default. Where this is the case and monitoring shows consistently high levels of default it may be appropriate to explore other means of addressing mild and moderate malnutrition.

Handout 6a: Case study II: An analysis of high default rates in Wadjir, Kenya

Time for completion: 90 minutes

Trainees should be organized into groups of five and given 15 minutes to read the case study and a further 45 minutes to prepare answers. The case study is based on the experiences of MSF in Kenya. Groups should then answer the following questions and present back to plenary.

1. ***What are the main factors contributing to high default rates?***
2. ***Can you find solutions for each constraint and how would these be implemented?***

Feeding programmes in Wadjir, Kenya: Some reasons for low coverage and high defaulter rate

Wadjir in Kenya is a district capital and borders Ethiopia and Somalia. The district's population is estimated at between 200,000 and 300,000. Wadjir town has about 60,000 inhabitants, if the 12 peripheral villages (bullas) are included. The bulla population is approximately 52,000 with 12,000 children under five years. Almost 80 per cent of the population are nomadic pastoralists of Somali ethnic origin who depend on livestock for both consumption and income. The semi-arid climate is not conducive to crop production. The community is organized into clans and sub-clans that are governed by elders who administer local customs and laws.

Since 1990, the area has been affected by droughts (1991 to 1992 and 1996) which resulted in significant livestock losses and settlement of destitute pastoralists in the bullas of Wadjir town. The population of the bullas live off petty trading and small livestock.

In November 1997, the El-Niño phenomenon caused severe flooding resulting in further loss of livestock (caused by epidemics) and population movement. Food relief was organized by the Government of Kenya and NGOs. The situation was aggravated at the beginning of 1998 by a major outbreak of malaria killing many people. A nutritional survey carried out in February 1998 showed a high prevalence of malnutrition, 25.3 per cent (< -2 Z scores or oedema) and of severe malnutrition 3.7 per cent (< -3 Z scores or oedema). A retrospective mortality survey found an alarming crude mortality rate of 9.3/10,000/day and an under-five mortality rate of 28.4/10,000/day. This mortality rate covered a two-month period from January 1998 to March 1998.

MSF began working in Wadjir in April 1997 on a sanitation programme (rehabilitation of water points throughout the district). Following the flooding, the programme was extended to include epidemiological surveillance and cholera preparedness measures. When the malaria outbreak occurred, mobile malaria clinics were set-up. In April 1998 the programme included a nutrition component. This involved setting up two therapeutic feeding centres and two supplementary feeding programme centres for the population of the 12 peripheral villages near Wadjir town.

Problems encountered in the nutritional programme

Three weeks after the start of the nutrition programme, the coverage was only 24.5 per cent in the TFCs and 40.4 per cent in the SFCs. Few mothers turned up for the screening of their children and many of those referred by the home visitors did not come to the centre. Of the 116 children admitted to the TFCs, 25 defaulted. Many children left the centres several days before they reached the discharge weight. Tracing was carried out, but the home visitors reported that mothers were reluctant to come for clan-related reasons, e.g., they did not want to attend feeding centres that employed staff from other bullas/clans. The elders complained about this and also said the feeding centres were too far away. In the TFCs, mothers complained about the fact that they were not given tea.

Investigation of the problem

To get a clearer understanding of the underlying reasons for poor coverage and high default rates, MSF conducted focus group discussions with women in the *bullas* at the end of April. The main points discussed were:

- Main problems faced by families, and in particular children, in the area
- Women's perception of the role of health and feeding centres for children
- Reasons for not coming to the feeding centre

The main problems in the area were described by most as hunger, poverty and housing, followed by unemployment and lack of latrines. For the children, the main problems were malnutrition and not being able to afford school fees. The women seemed knowledgeable about signs of illness in their children. Preventive measures against diseases were known (ORS, mosquito avoidance, hygiene). When a child was sick, the first strategies were generally praying and use of local traditional medicines (roots, herbs and camel's urine). A visit to health facilities was seen more as a second option. Mothers were aware of the opening of the feeding centres and it seemed that the centres had a good reputation. Nevertheless, admission criteria were unclear and some mothers thought that the centres were only for anaemic children.

A number of reasons were given to explain reluctance to come to the centres. The main ones were:

- Mothers were too busy to come – especially for therapeutic feeding.
- They felt a loss of dignity if they had to go to another bulla (where another clan lived) for help and food.
- They could not accept their children being measured in front of everybody. There was a belief that a child would die if another person saw them being measured.
- They do not like the height measurement being taken with the child lying down, as the child looks like he/she is already dead.
- They were afraid about the risk of infections in the feeding centres and also mentioned a lack of hygiene as the trousers (in which the children are placed for the weighing) are not washed from one weighing to the next.
- Many children were sent to distant pastoral areas where there is more milk available.

Informal discussions emphasized how important clan-related factors were in preventing attendance at the feeding centres. Mothers were asked about the distance to the centres from their houses. A large majority of the population lived less than half an hour away.

Handout 6b: Case study II: An analysis of high default rates in Wadjir, Kenya: Model answers

Below are the main strategies employed by MSF to address problems of default. These measures were taken based on the findings of focus group discussions to improve acceptability of the programmes.

The main strategy to improve programme coverage was to provide better information. Discussions with elders were held to better explain the purpose of the programme, the criteria for employing staff and the admission criteria for children. The logistical, human and financial constraints that would arise by opening one feeding centre in each *bulla* were also discussed. Elders were asked to help explain all this and to convince their communities of the need to attend the feeding centres. A decision was taken to publicize the programme more within the bullas through the use of home visitors and to explain to mothers that if they could not come themselves then they could send another accompanying person.

A second measure was to improve the screening of children by setting up a mobile screening team, going into each *bulla* to check the weight and height of children at risk (MUAC < 125 mm). This reduced the likelihood of mothers having to come to the feeding centre for nothing.

The third measure involved improving the services delivered in the centres. Screens were installed for the weight-for-height measurements, ensuring greater privacy, hygiene was improved in the centres and tea with sugar was provided for accompanying mothers in the TFCs.

A fourth measure was to discharge children earlier from the TFC and to refer them to the SFP. At the end of May (the ninth week of the feeding programme), 9253 children had been weighed and measured with 1186 (12.8 per cent) admitted to the SFCs. Of the 1186 admitted, 79 per cent were discharged (cured), 19 per cent defaulted and 2 per cent were transferred.

Even though there was no formal evaluation of the impact of these new measures to improve the acceptability of the programme, mothers were pleased that these measures had been taken. MSF found that the default rate decreased, while programme coverage remained more or less the same.

The number of weekly admissions remained below the expected number of beneficiaries based on the results of the nutritional survey conducted in March 1998.

6. Field based exercises

The section outlines ideas for exercises that can be carried out as part of a field visit. Field visits require a lot of preparation. An organization that is actively involved in programming or nutrition surveillance 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 an SFP

What is the learning objective?

- To understand the objectives and basic design features of an SFP
- To know when to implement programmes and eligibility criteria
- To understand the types of challenge that may arise in SFP implementation

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?

- Two days excluding travel

What materials are needed?

- **Handout 7a:** Briefing document on SFP. This should cover how and why programme was established, programme design and major developments during implementation.

What does the trainer need to prepare?

- Prepare the briefing document and work with participants to develop questions for:
  a) Analysis of monitoring data, e.g., what is recovery rate over a defined period
  b) Key informant interviews
  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 identify potential problems. It will also be important to ensure that monthly monitoring data can be made available in a utilizable form. Discussion of the exercise should take place back in the classroom.

Exercise 7: Evaluation of an SFP (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 monitoring data.

Step 3: On morning of day 1, groups read Handout 7a and have opportunities to ask questions. Groups then prepare a list of questions for key informant interviews and focus group discussions while the monitoring group revises protocols for monitoring and a case study on how to calculate programme outcomes, e.g., recovery, death and default.

Step 4: Participants travel to location near the project site to stay overnight and possibly take a look at project site.

Step 5: Participants spend all day in the field conducting interviews and collecting and analysing monitoring data. Where necessary, questions and clarifications about monitoring data can be directed at programme staff.

Step 6: Participants travel back home.

Step 7: Participants reconvene in class and prepare the presentation of their findings.

Handout 7a: Briefing document on SFP

Time for completion: 2 days

Three groups are needed for this exercise.

Each group should first read the prepared briefing paper about the emergency supplementary feeding programme which will be evaluated.

Group one will conduct key informant interviews with staff implementing the emergency supplementary feeding programme, e.g. medical staff, nutritionist, kitchen staff, other auxiliary staff, in order to gauge views on programme performance.

Group two will conduct a series of focus group discussions with programme beneficiaries in order to gain their views of the programme.

Group three will collect monthly reporting data and analyse these data. They will provide feedback of their findings in the field to the programme coordinator/SFP centre manager and discuss their findings.

Each group will then return home and prepare a presentation to the plenary group on day 2.

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 one:

- What are recovery rates?
- On average, how long do children stay in the programme and what is their weight gain?
- Do you have any problems with default?
- What are the main challenges you are facing?
- Are there many relapses or re-admissions?
- What are the coverage rates?
- Do you believe ration-sharing or meal substitution is a problem?
- Is your programme linked to health or other activities in the area?
- 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?
- What has the monitoring data shown you?
- Do you have an exit strategy for the programme? What is it?
- If you were faced with the same situation again, would you run the programme any differently? If so, how?
- Was the choice to run an onsite/take-home programme the appropriate one?

Group two:

- How did you hear about the programme?
- How many weeks/months have you been enrolled in the programme?
- How is your child doing?
- Are you satisfied with the programme? 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 ration would you like?
- What medical treatments has your child received?
- How is the food distribution organized (well, adequate or badly)?
- What will happen to your child when he or she is discharged from the programme, e.g., risk of relapse?
- What have you learned since being enrolled on the programme?
- How much time does it take to participate in the programme? Does this create any difficulties for you?

Group three:

- What are the monthly recovery rates?
- What are the monthly death rates?
- What are the monthly default rates?
- What are the monthly non-response rates?
- What are the weight gains and average duration of stay?
- How do these vary monthly/seasonally and can you provide an explanation for this variation?
- How do the outcome data compare to 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? How were these obtained? What is their likely accuracy?
- If it is not possible to make some of these calculations, what data or reporting procedures are missing?