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 1 is an introduction to nutrition in emergencies. The objective of the module is to provide participants with a basic overview of nutrition emergencies, and how to assess and respond to them. Participants don’t need to have a high level of technical nutrition knowledge to benefit from Module 1 but they need to be familiar with emergency operations in general. For more detailed information on nutrition emergency assessment and response, please refer to the other modules.

This module is recommended at the start of a training course on nutrition in emergencies or as an introduction to the subject.

Navigating your way around the guide

The trainer’s guide is divided into five 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 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 (1 from Asia, 1 from the Middle East, 1 from Sub-Saharan Africa and 1 from Latin America) that can be used to get participants to think by using real-life (or adapted real-life) scenarios.
CONTENTS

1. Tips for trainers

2. Learning objectives

3. Testing knowledge
   - Exercise 1: What do you know about nutrition in emergencies?
   - Handout 1a: What do you know about nutrition in emergencies?: Questionnaire
   - Handout 1b: What do you know about nutrition in emergencies?: Questionnaire answers

4. Classroom exercises
   - Exercise 2: Classifying nutrition emergencies
   - Handout 2a: Classifying nutrition emergencies
   - Handout 2b: Classifying nutrition emergencies: Model answer
   - Exercise 3: Where, what and who?
   - Handout 3a: Quiz questions for trainer Case studies
   - Exercise 4: Determining gaps, appropriate nutrition assessment and response in differing scenarios
   - Handout 4a: Case study I: Nutrition assessment and response in Lebanon 2006
   - Handout 4a (Answer): Case study I: Nutrition assessment and response in Lebanon 2006: Model answer
   - Handout 4c: Case study III: Food Crisis in Aguacala and nutrition response (Hypothetical)
   - Handout 4c (Answer): Case study III: Food Crisis in Aguacala and nutrition response
   - Handout 4d: Case study IV: Bandula emergency and nutrition response (Hypothetical)
   - Handout 4d (Answer): Case study IV: Bandula emergency and nutrition response
1. Tips for trainers

Step 1: Do the reading!

- Read Parts 1 and 2 of this module.
- Familiarise yourself with the technical terms from the glossary.
- Read through the following key documents (see full reference and how to access them in Part 4 of this module):

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 nutrition in emergencies?
  - Could participants with 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 introduction.
  - A half-day classroom-based training can provide an overview and include a practical exercise.
  - A one-day classroom-based training can provide a more in-depth understanding of nutrition in emergencies and include a number of practical exercises and/or one case study.
  - A one-day classroom plus field-based training can provide theoretical and practical experience.
- 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 conduct a trial run¹.
  Time yourself!

- 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.

- Find the appropriate equipment for the session, such as calculators.

- 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
  - Handouts including Parts 1 and 2 of this module plus exercises as required
  - 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.

¹ UNICEF and other organisations have developed various powerpoint presentations based on the Harmonized Training Package, check with the Global Nutrition Cluster for additional powerpoint resources.
2. Learning objectives

Below are examples of learning objectives for a session on introducing nutrition in emergencies. 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 aware of the different classification systems and the thresholds for response to nutrition emergencies.
- Know where most nutrition emergencies occur.
- Understand what causes nutrition emergencies.
- Know which groups are most nutritionally vulnerable in an emergency.
- Be aware of the different types of malnutrition that arise in emergencies.
- Be aware of different types of emergency nutrition assessments and when they are appropriate.
- Be aware of the range of emergency nutrition responses and when they are appropriate.
- Have a better understanding of the operational challenges in nutrition in emergencies.
### 3. Testing knowledge

This section contains one exercise which is an example of a questionnaire that can be used to test participants' knowledge of nutrition in emergencies 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 or country context.

**Exercise 1: What do you know about nutrition in emergencies?**

<table>
<thead>
<tr>
<th>What is the learning objective?</th>
</tr>
</thead>
<tbody>
<tr>
<td>To test participants' knowledge about nutrition in emergencies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>When should this exercise be done?</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Either</em> at the start of a training session to establish knowledge level.</td>
</tr>
<tr>
<td><em>Or</em> at the end of a training session to check how much participants have learned</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How long should the exercise take?</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 minutes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What materials are needed?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Handout 1a:</strong> What do you know about nutrition in emergencies?: Questionnaire</td>
</tr>
<tr>
<td><strong>Handout 1b:</strong> What do you know about nutrition in emergencies?: Questionnaire answers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What does the trainer need to prepare?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familiarize yourself with the questionnaire questions and answers.</td>
</tr>
<tr>
<td>Add your own questions and answers based on your knowledge of the participants and their knowledge base.</td>
</tr>
</tbody>
</table>

**Instructions**

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

**Step 2:** Give participants 10 minutes to complete the questionnaire working alone.

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

**Step 4:** Give participants 5 minutes to mark their own questionnaires and clarify the answers where necessary.
Handout 1a: What do you know about nutrition in emergencies?: Questionnaire

Time for completion: 15 minutes

Answer all the questions

1. Why is nutrition an important area during emergencies? Write true or false after each sentence.
   a) Protecting the nutritional status of vulnerable groups affected by emergencies is crucial because individuals who suffer from undernutrition are more likely to become sick and to die.
   b) People affected by an emergency always require food aid.

2. How is a nutrition emergency defined? Circle the correct answer.
   a) When levels of global acute malnutrition reach 20 per cent.
   b) There are several classification systems for food and nutrition emergencies, all with slightly different thresholds; experts agree that classification and response should be determined based on the context.
   c) When the food supply is disrupted due to a disaster.

3. Are the following statements true or false? Write true or false after each sentence.
   a) Most nutrition emergencies are chronic and ‘invisible’.
   b) Africa has suffered more famines than any other continent.
   c) Famine has now been eradicated.

4. Which continent has the highest levels of acute malnutrition? Circle the correct answer.
   a) Asia
   b) Africa
   c) Europe
   d) Latin America and the Caribbean

5. Which form of undernutrition is of the most concern during an emergency? Why? Write your answer.

6. What are macronutrients? Write your answer.

7. What are micronutrients? Write your answer.

8. The objectives of a rapid nutrition assessment include which of the following? Circle the correct answers.
   a) To identify trends in nutrition status.
   b) To verify the existence or threat of a nutrition emergency.
   c) To establish immediate needs.
   d) To establish the prevalence of malnutrition.

9. Are the following statements true or false? Write true or false after each sentence.
   a) It is particularly important to support Infant and Young Child Feeding (IYCF) in emergencies because of the higher risk of disease in young children as a result of population displacement, overcrowding, food insecurity, poor water and sanitation and an overburdened health care system.
   b) Priority IYCF interventions in emergencies include widespread distribution of fortified foods to all infants and children under 5 years.
   c) Non-breastfed infants and infants that are partially artificially fed are especially at risk of disease in emergencies.
10. Name three types of interventions that are commonly used to respond to nutritional emergencies? *Write your answers.*
   a) 
   b) 
   c) 

11. Which sector receives the biggest share of global humanitarian expenditure? *Circle the correct answers.*
   a) Health
   b) Shelter
   c) Food
   d) Water and Sanitation
Handout 1b: What do you know about nutrition in emergencies? (Answers)

1. a) True  
   b) False

2. b)

3. a) True  
   b) False  
   c) False

4. a)

5. Acute malnutrition is most important because it is a reflection of inadequate dietary intake or disease in the short-term and is closely associated with death.

6. Macronutrients are required by the body in large amounts and include protein, carbohydrates and fats.

7. Micronutrients are required in very tiny amounts and include vitamins and minerals.

8. b), c)

9. a) True, b) False, c) True

10. There are a lot of interventions to choose from (see Section 2) that include: 
    a) Health interventions to reduce common diseases (diarrhoea, malaria, ARI etc.)
    b) Promotion and support of IYCF
    c) Micronutrient fortification and supplementation
    d) Support for livelihoods (food aid, income support, production support, market support)

11. c)
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: Classifying nutrition emergencies

**What is the learning objective?**
- To be aware of the different classification systems and the thresholds for response to nutrition emergencies

**When should this exercise be done?**
- After classification systems and thresholds for response have been introduced

**How long should the exercise take?**
- 40 minutes

**What materials are needed?**
- **Handout 2a:** Classifying nutrition emergencies
- **Handout 2b:** Classifying nutrition emergencies: Model answer

**What does the trainer need to prepare?**
- Prepare two or more case examples for areas that are familiar to the participants based on the template Handout 2a.

**Instructions**
- **Step 1:** Give each participant a copy of Handout 2a.
- **Step 2:** Give participants 20 minutes to read the case study and complete the table.
- **Step 3:** Allow 20 minutes of discussion in plenary.
Handout 2a: Classifying nutrition emergencies


Time for completion: 20 minutes

Read the following two case examples.

For each case example, fill in the boxes.
Classify each case example in terms of severity using Table 1: Summary of food crises and famine classification systems with thresholds for mortality, acute malnutrition and stunting.
Note how easy/difficult it is to use the classification systems and add any comments.

Chad 2007

Violence in Eastern Chad has caused 150,000 people to be displaced. Many of the displaced are living in camps and receive regular food distributions. Access to potable drinking water and adequate sanitation seems to be a major constraint in some of the camps. An outbreak of hepatitis E has spread to Eastern Chad. A survey was conducted in May 2007 in four camps. Most of the families (76.5 per cent) had arrived in the camps between one month and one year previously and 21.3 per cent arrived more than one year before the survey.

Survey results: May 2007

<table>
<thead>
<tr>
<th>Health Indicators</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMR</td>
<td>1.79/10,000/day</td>
</tr>
<tr>
<td>U5MR</td>
<td>4.07/10,000/day</td>
</tr>
<tr>
<td>Wasting (&lt;-2SD Weight-for-Height) and oedema</td>
<td>19.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification system</th>
<th>Level</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN thresholds 2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ODI level and type of food security 2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howe and Devereux famine magnitude scale 2004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSAU/FAO Integrated food security phase classification 2007</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2 For details on how to calculate mortality rates refer to Part 2 of Module 8.
Nepal 2007

An interim coalition government was formed at the beginning of April 2007. However, clashes and disruption of official activities were still reported throughout the country. Although no reliable figures exist, about 200,000 people were estimated to have been displaced. A mission of experts on the human right to food described hunger and food insecurity across the country as widespread due to prolonged drought, hailstorms and flooding in the most agriculturally productive areas. A nutrition survey was conducted in the eight most vulnerable Village Development Committees of Bahjang district in the Far-West region in December 2006. The survey was conducted before the traditional hunger-gap period between February and June.

Survey results: December 2006

<table>
<thead>
<tr>
<th>Classification system</th>
<th>Level</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMR</td>
<td>Under control</td>
<td></td>
</tr>
<tr>
<td>U5MR</td>
<td>Under control</td>
<td></td>
</tr>
<tr>
<td>Wasting (&lt;-2SD Weight-for-Height) and oedema</td>
<td>11.0%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification system</th>
<th>Level</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN thresholds 2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ODI level and type of food security 2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howe and Devereux famine magnitude scale 2004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSAU/FAO Integrated food security phase classification 2007</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 1: Summary of food crises and famine classification systems with thresholds for mortality, acute malnutrition and stunting

<table>
<thead>
<tr>
<th>Classification system</th>
<th>Level</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN thresholds 2000</strong></td>
<td>Serious</td>
<td>Wasting 10-14% (&lt;-2SD WHZ)</td>
</tr>
<tr>
<td></td>
<td>Critical</td>
<td>Wasting &gt;15% (&lt;-2SD WHZ)</td>
</tr>
</tbody>
</table>
| **ODI level and type of food security 2003** | Chronic (or periodic) food insecurity | CMR 0.2-1/10,000/day  
Wasting 2.3-10% (<-2SD WHZ)  
Stunting >40% |
|                       | Acute food crisis | CMR 0.2-2/10,000/day  
Wasting 2.3-10% or increases (<-2SD WHZ) |
|                       | Extended food crisis | CMR 1-2/10,000/day  
Wasting 15-30% (<-2SD WHZ) |
|                       | Famine | CMR > 2/10,000/day  
Wasting > 25% (<-2SD WHZ) or dramatic increases |
| **Howe and Devereux famine magnitude scale 2004** | Food security conditions | CMR <0.2/10,000/day and  
Wasting <2.3% (<-2SD WHZ) |
|                       | Food insecurity conditions | CMR ≥0.2 but <0.5/10,000/day and/or  
Wasting ≥2.3 but <10% (<-2SD WHZ) |
|                       | Food crisis conditions | CMR ≥0.5 but <1/10,000/day and/or  
Wasting ≥10 but <20% (<-2SD WHZ) and/or oedema |
|                       | Famine conditions | CMR ≥1 but <5/10,000/day and/or  
Wasting ≥20% but <40% (<-2SD WHZ) and/or oedema |
|                       | Severe famine conditions | CMR ≥5 but <15/10,000/day and/or  
Wasting ≥40% (<-2SD WHZ) and/or oedema |
|                       | Extreme famine conditions | CMR ≥15/10,000/day |
| **FSAU/FAO Integrated food security phase classification 2007** | Generally food secure | CMR <0.5/10,000/day  
Wasting¹ <3% (<-2SD WHZ)  
Stunting <20% (<-2SD HAZ) |
|                       | Moderately/Borderline Food Insecure | CMR <0.5/10,000/day  
USMR < 1/10,000/day  
Wasting¹ >3% but <10%  
Stunting 20-40% (<-2SD HAZ), increasing |
|                       | Acute food and livelihood crisis | CMR 0.5-1/10,000/day  
USMR 1-2/10,000/day  
Wasting¹ 10-15% (>2SD WHZ), > than usual, increasing |
|                       | Humanitarian emergency | CMR <1-5/10,000/day, >2x baseline rate, increasing  
USMR > 2-10/10,000/day  
Wasting¹ >15% (>2SD WHZ), > than usual, increasing |
|                       | Famine/Humanitarian catastrophe | CMR > 2/10,000/day (e.g., 6,000/1,000,000/30 days)  
Wasting¹ >30% |

¹ And/or oedema
# Handout 2b: Classifying nutrition emergencies: Model answers

## Chad 2007

<table>
<thead>
<tr>
<th>Classification system</th>
<th>Level</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN thresholds 2000</td>
<td>Severe</td>
<td>CMR doesn’t always have the same level of severity as wasting rate. All suggest that there is a serious crisis. Information suggests that it may be as much a health crisis as a food crisis. These classifications emphasise food needs more than health needs, however.</td>
</tr>
<tr>
<td>ODI level and type of food security 2003</td>
<td>Extended food crisis</td>
<td></td>
</tr>
<tr>
<td>Howe and Devereux famine magnitude scale 2004</td>
<td>Food crisis conditions</td>
<td></td>
</tr>
<tr>
<td>FSAU/FAO Integrated food security phase classification 2007</td>
<td>Humanitarian emergency</td>
<td></td>
</tr>
</tbody>
</table>

## Nepal 2006

<table>
<thead>
<tr>
<th>Classification system</th>
<th>Level</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN thresholds 2000</td>
<td>Severe</td>
<td>Mortality and wasting rates do not equate so difficult to classify, but mortality rate is stable. It is important to understand the trends in the nutritional situation for this population, to identify if this represents an increase. Also it is important to take account that the hunger season will soon arrive and the potential risks to undernutrition caused by displacement.</td>
</tr>
<tr>
<td>ODI level and type of food security 2003</td>
<td>Acute food crisis</td>
<td></td>
</tr>
<tr>
<td>Howe and Devereux famine magnitude scale 2004</td>
<td>Food crisis conditions</td>
<td></td>
</tr>
<tr>
<td>FSAU/FAO Integrated food security phase classification 2007</td>
<td>Acute food and livelihood crisis</td>
<td></td>
</tr>
</tbody>
</table>
Exercise 3: Where, what and who?

What is the learning objectives?
- To know where most nutrition emergencies occur
- To know which groups are most nutritionally vulnerable in an emergency
- To be aware of the different types of malnutrition that arise in emergencies

When should this exercise be done?
- After the sections on where, what and who

How long should the exercise take?
- 30 minutes

What materials are needed?
- Handout 3a: Quiz questions for trainer
- Coloured cards
- Paper board for recording points

What does the trainer need to prepare?
- Write one question on each bit of coloured card. Each colour denotes a number of points, e.g., red card = 20 points, orange card = 10 points, green card = 5 points

Instructions
- **Step 1:** Stick all the question cards onto the wall.
- **Step 2:** Divide the participants into groups of (maximum) five people.
- **Step 3:** Ask a member of one group to pick a coloured card.
- **Step 4:** Read out the question.
- **Step 5:** Give the group one minute to confer and answer the question.
- **Step 6:** If the group is unable to answer the question correctly, allow other groups to give an answer.
- **Step 7:** Award points appropriately.
Handout 3a: Quiz questions for trainer

Time for completion: 30 minutes

20 points
1. Name three countries with acute malnutrition (wasting) rates of over 10 per cent.
2. What was the cause of the 1958-1962 great Chinese famine?
3. Why are young children under five particularly nutritionally vulnerable during an emergency?
4. Why are internally displaced persons particularly nutritionally vulnerable during an emergency?
5. Why are the elderly nutritionally vulnerable during an emergency?
6. What are the typical micronutrient deficiency diseases found in emergency affected populations?

10 points
1. How has climate change increased the vulnerability of populations to emergencies?
2. Name the two largest famines of the 20th century.
3. What type of undernutrition is of most concern in emergencies?
4. What are the two forms of acute malnutrition?
5. What is the difference between acute and chronic malnutrition?
6. Name three factors that make a population vulnerable to a nutrition emergency.

5 points
1. Name a recent natural disaster that has resulted in a nutrition emergency followed by an international humanitarian response.
2. Name a recent complex emergency that has resulted in a nutrition emergency followed by an international response?
3. What are macronutrients?
4. What are micronutrients?

THE ANSWERS TO ALL QUESTIONS CAN BE FOUND IN PART 2 OF MODULE 1.
5. Case studies

Case studies are presented in this section. These present a range of emergency situations that differ in character. The purpose is to demonstrate the different types of emergencies that arise and the differing nutrition issues that result. 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. The final case study is the most comprehensive.

Exercise 4: Determining gaps, nutrition assessment and response in differing scenarios

What are the learning objectives?
- To be aware of different types of emergency nutrition assessments and when they are appropriate
- To be aware of the range of food and non-food emergency nutrition responses and when they are appropriate
- To have a better understanding of the operational challenges in nutrition in emergencies

When should this exercise be done?
- As part of a longer in-depth training

How long should the exercise take?
- Each case study will take at least 1 hour (for 2 groups, more time if more groups)

What materials are needed?
- Handout 4a: Case study I: Nutrition assessment and response in Lebanon 2006
- Handout 4a (Answer)
- Handout 4b (Answer)
- Handout 4c: Case study III: Bandula emergency and nutrition response
- Handout 4c (Answer)
- Handout 4d: Case study IV: Food Crisis in Aguacala and nutrition response
- Handout 4d (Answer)

What does the trainer need to prepare?
- Familiarise yourself with the case studies already prepared or prepare similar case studies based on the templates

Instructions
- **Step 1**: Give each participant a copy of the selected handout.
- **Step 2**: Divide the participants into groups of (Maximum) five people
- **Step 3**: Give the groups 30-40 minutes to read a case study, answer the questions and prepare a presentation of their answers.
- **Step 4**: Give each group 10 minutes for feedback in plenary.
Handout 4a: Case study II: Nutrition assessment and response in Lebanon 2006


Time for completion: 30 minutes

There are two parts to this case study. Read Part I and address the questions before going on to Part II. Prepare a brief presentation of your discussion.

Lebanon is a small upper-middle-income country with a population between 4 and 4.6 million, of whom 88 per cent live in urban areas. More than one third of the population is concentrated in Beirut and its suburbs. The average family size is 4.8 people, but there are significant regional and social differences and 11 per cent of families have more than eight members.

Lebanon has a service-oriented economy, based on trade, construction and tourism, with a weak agricultural sector that only employs 9 per cent of the country’s labour force. The Lebanese economy is therefore highly dependent on remittances (e.g., sums of money) from Lebanese people working abroad. It is estimated that remittances total between $5 and $8 billion per year. The socio-demographic context is marked by four important and interconnected factors:

• **Rapid urbanisation.** The massive exodus from rural areas triggered by poverty and conflict has led to a rapid growth of urban slums in the southern slums in Beirut.

• **Mass emigration into foreign countries.** The population has migrated from both urban and rural areas. Up to 1.3 million people have left the country, mainly professionals and skilled workers looking for better opportunities and leaving a population relying heavily on remittances.

• **Large number of immigrant workers.** Estimated to be more than 1 million, mainly Syrian labourers and female Asian and East-Asian domestic workers.

• **Palestinian refugees.** There are 405,000 officially registered Palestinian refugees who live in 12 refugee camps throughout the country.

Lebanon has struggled to recover from two decades of devastating civil war (1975-1990) and Israeli occupation (1977-2000). As a result, the country’s infrastructure and the physical assets in all principal sectors were destroyed or severely damaged. Administration public institutions were also severely affected. The income level in 1991 was one third of what it was in 1975 and one quarter of the population was displaced.

The main staple food in Lebanon is bread; hence wheat is one of the major food imports since Lebanon only produces 10 per cent of its consumption requirements. Agricultural production remains an important source of income in rural areas. Crops cultivated include: wheat, barley and maize for animal feed, vegetables, potatoes, fruit, olives, tobacco and minor amounts of cash crops such as flowers and avocado. Goats, cattle and sheep are the main types of livestock raised in Lebanon. An estimated 8,000 families rely on fishing.

The traditional Lebanese diet is a typical Mediterranean diet rich in grains, cereals, fruit, vegetables and olive oil. As processed foods and items high in sugar and fat content become widely available, affordable and aggressively promoted by the food industry, they are being absorbed into the traditional diet, especially among youth. The prevalence of obesity among adults is at more than 15 per cent. Childhood obesity is also increasing.

The basic health and nutrition statistics in the country are shown in Table 1. There are large gaps between rural and urban areas.
Table 2: Lebanon basic statistics

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under-5 mortality rate, 2005 (per 1,000 live births)</td>
<td>30</td>
</tr>
<tr>
<td>Infant mortality rate, 2005 (per 1,000 live births)</td>
<td>27</td>
</tr>
<tr>
<td>% of infants born with low birthweight, 1998-2005</td>
<td>6</td>
</tr>
<tr>
<td>% of children (1996-2005) who are exclusively breastfed until 6 months</td>
<td>27</td>
</tr>
<tr>
<td>% of children (1996-2005) who are: breastfed with complementary food (6-9 months)</td>
<td>35</td>
</tr>
<tr>
<td>% of under-fives (1996-2005) suffering from: wasting, moderate and severe</td>
<td>5</td>
</tr>
<tr>
<td>% of under-fives (1996-2005) suffering from: stunting, moderate and severe</td>
<td>11</td>
</tr>
<tr>
<td>% of under-fives (1996-2005) suffering from: underweight, moderate and severe</td>
<td>4</td>
</tr>
<tr>
<td>% national immunization coverage</td>
<td>96</td>
</tr>
</tbody>
</table>


Part I: Humanitarian crisis

In July 2006, a military offensive over Lebanon by the Israeli Defence Forces in retaliation for the kidnapping of two Israeli soldiers by Hezbollah began. Heavy shelling lasted almost five weeks and was directed at southern Lebanon and the southern suburbs of Beirut. These areas had the highest poverty indicators in the country.

Over 1,000 people were killed and 4,000 injured in the conflict while an estimated 900,000 people (almost one quarter of the Lebanese population) fled their homes. Most of them found refuge with family and friends living in more secure areas of the country. However, stocks of vital supplies, such as food and medicine, were severely stretched. For host families, supporting additional family and friends placed significant strain on dwindling resources. Reports indicated that some 40,000 people had taken shelter in schools and public gardens. Overcrowding was a serious concern.

Access to health services was in serious jeopardy, particularly in the south, where military activity was intense. Health facilities were damaged or destroyed and emergency medical supplies in short supply. Overcrowding in buildings housing internally displaced persons (IDPs) put an enormous strain on water and sanitation facilities, creating ideal breeding grounds for infectious diseases. One of the country’s power plants was damaged and there were serious concerns about reliable electricity for hospitals, schools and water and sewage treatment plants.

The areas that were hardest hit by the conflict were also the poorest areas. The most affected populations were daily wage labourers and people working in the coastal fishing and agricultural sectors, due to loss of income.

The country was increasingly being put in a state of complete isolation, with access to humanitarian aid being denied through air, sea and land.

YOU ARRIVE IN THE LEBANON WITH AN INTERNATIONAL AID AGENCY AND HAVE TO ASSESS THE IMMEDIATE NUTRITION NEEDS.

1. What type of information would you try to obtain in order to assess potential nutrition needs?
2. What information sources and/or assessment methods would you use to gather the information?
3. Which groups do you think are likely to be nutritionally vulnerable?
4. What kinds of nutrition responses would be appropriate within the first few weeks of the crisis?
Part II: Humanitarian response

Assessments

A sector-wide United Nations Flash Appeal was launched based on rapid assessment findings including food aid, nutrition and food security needs within 10 days of the start of the crisis. Save the Children (United Kingdom) carried out their own food security assessment of the hard hit rural areas in the south in August and the World Food Programme carried out a rapid needs assessment in August to reassess food and nutrition needs. No nutrition surveys were carried out. The Government of Lebanon launched a recovery assessment report within one month, specifying all sector needs. Whereas food security and health featured prominently, nutrition did not. Non-governmental organizations (NGOs) concerned with infant feeding practices carried out separate assessments.

Responses

A. Food aid

Food aid rations were distributed as part of the emergency response. These were very diverse in terms of quantity and quality and were directed at the IDPs in collective centres or at the population trapped in the conflict area and cut off from their normal supplies. Immediate response included ad hoc food parcels based on local food purchases being distributed by local civil society groups and NGOs. The bulk of these were being distributed in the collective centres, where over 150,000 IDPs had gathered, and also informally to host families.

The Government of Lebanon's High Relief Commission distributed a family food basket and an infant food basket through its own purchase and in-kind donations from various countries based on the following rations:

**Food basket for a family of 5 persons (per week):**
- Rice 3 kg, sugar 2 kg, tea 0.5 kg, cheese 2 kg, tuna cans 185 g, meat 500 g, spaghetti 3 rolls, peas 2 kg, ghee 1 kg, oil 1.5 L, jam 2 kg, milk 1.8 kg

**Children's basket for 1 child under 2 years (per week):**
- Children milk 3 small cans, Cerelac (infant formula) 2 cans, 1 baby milk bottle, 1 biscuit box, pampers 1 bag, children powder 1 can, underwear 2 sets, 2 pairs of socks, children soap 2 bars.

WFP began a three-month emergency response operation in Lebanon within the first two weeks of the conflict in order to provide food supplies to the affected population. United Nations humanitarian convoys were prioritized towards southern Lebanon to reach those most in need by the time the ceasefire was agreed five weeks after the hostilities began. The cessation of hostilities led to a mass return of IDPs to their places of origin in southern Lebanon and the southern suburbs of Beirut. However, access to these areas was still hampered by the presence of unexploded ordinances (bombs) and the presence of the Israeli military along the border towns. Humanitarian aid followed the returnees. WFP rapidly expanded its caseload, delivering enough food to municipalities to cover 15-day rations for 500,000 people.

Milk and milk products were distributed widely (mostly milk powder, infant formula and some UHT milk). None of these distributions came with caution messages or handling tips.

B. Supplementary feeding and therapeutic feeding

None of the assessments warranted this type of nutrition response.

C. Food security interventions

A small number of agencies implemented programmes to restore livelihoods and access to food.

**YOU ARE ASKED TO ASSESS THE NUTRITION RESPONSE ON BEHALF OF AN INTERNATIONAL AID AGENCY.**

1. Were the nutrition interventions implemented appropriate? If not, why and what alternatives could you suggest?

2. Were all nutritionally vulnerable groups adequately targeted?
Handout 4a (Answer): Case study I: Nutrition assessment and response in Lebanon 2006

Part I: Humanitarian crisis

1. What type of information would you try to obtain in order to assess potential nutrition needs?

   It is important to try to obtain information on the existing prevalence and type of malnutrition, and the potential factors (immediate and underlying) that may be contributing to malnutrition both pre-crisis and any changes as a result of the crisis.

   **Undernutrition**
   - Wasting in <5 year children – prevalence, differences in prevalence by age group and geographical area, socio-economic group, rural/urban.
   - Stunting and/or underweight in <5 year children
   - Malnutrition in adults and older children
   - Micronutrient deficiencies – what types, prevalence
   - Trends in numbers of acutely malnourished cases from health centres, hospitals

   **Immediate causes**
   - Disease prevalence – especially infectious diseases such as measles, ARI, worms
   - Food intake – diet and number of meals per day

   **Underlying causes**
   - Food security – access to staple food, market prices, access to remittances, sources of income, coping strategies
   - Health and a healthy environment – access to health services, water and sanitation, MCH services especially vaccination rate (for measles), iron and vitamin A supplementation protocols
   - Care – prior breastfeeding practices, prior infant and young child feeding practices, existing breastfeeding support services to women

2. What information sources and/or assessment methods would you use to gather the information?

   Security concerns and lack of time means that it will be difficult to collect primary data so you will have to rely largely on secondary data from a range of sources:
   - Ministry of Health – data from health surveillance system on health and nutrition situation, health statistics on access to services. Survey data such as UNICEF’s Multiple Indicator Cluster Surveys (MICS) or any Demographic and Health Surveys (DHS).
   - Ministry of Agriculture – data on food security
   - UN agencies (WFP, FAO, WHO, UNICEF) – emergency needs assessments reports, background reports
   - Local and international NGOs – health, nutrition and food security information from local surveys or nutrition programme statistics

3. Which groups do you think are likely to be nutritionally vulnerable?

   Physiologically vulnerable groups such as infants, young children, pregnant and lactating women, the elderly and chronically ill.

   Geographically vulnerable groups – especially those living in the south

   Economically vulnerable – subsistence farmers, agricultural labourers, urban poor and those heavily dependent on remittances

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8 Given that this is a middle income country, this information may not be readily available in national surveys and there may be very few NGO nutrition surveys to draw from
4. **What kinds of food and nutrition responses would be appropriate within the first few weeks of the crisis?**
   - General food distribution for displaced, returnees and other vulnerable groups
   - Livelihoods support - cash for work, cash transfers
   - IYCF support, e.g., support of breastfeeding, complementary feeding for young child 6 months to 2 years, appropriate management of artificial feeding (including adherence to the CODE of marketing of breastmilk substitutes, and the cessation of the distribution of dry milk powder and baby milk bottles)

**Part II: Humanitarian response**

1. **Were the nutrition interventions implemented appropriate? If not, why and what alternatives could you suggest?**
   
   It is very inappropriate to provide children with bottles and infant formula as this increases the risk of illness in infants due to a variety of reasons including a poor quality water supply often found in emergencies, lack of ability to properly wash these with clean water and soap, etc.

   Instead there should have been support for breastfeeding and complementary feeding for young child 6 months to 2 years, appropriate management of artificial feeding (including adherence to the CODE of marketing of breastmilk substitutes, and the cessation of the distribution of dry milk powder) as well as counselling and messages on how to ensure safe artificial feeding.

2. **Were all nutritionally vulnerable groups adequately targeted?**
   
   It is difficult to say with the above information however, it is noted that people in the more vulnerable area (the south) were targeted but infants and young children were not.
Introduction to nutrition in emergencies

MODULE 1

TRAINER’S GUIDE

Handout 4b: Case study II: Nutrition assessment and response in the Democratic People’s Republic of Korea 1997

Time for completion: 30 minutes

There are two parts to this case study.
Read Part I and address the questions before going on to Part II.
Prepare a brief presentation of your discussion.

The Democratic People’s Republic of Korea (DPRK) has an estimated 23 million inhabitants and shares borders with South Korea, China and Russia. Around 60 per cent of the population lives in urban areas and 20 per cent of land is suitable for farming. Life expectancy is 74.5 years and adult literacy is apparently 100 per cent. DPRK has a centralised socialist economic system. Often referred to as a uniquely closed political system, the state has a very strong control over the population, the economy and information.

The economy, farming and people’s entitlement to food, goods and basic needs are centrally controlled by the state. Cereals are distributed to the population by the public distribution system at subsidised prices, after the collective farms have kept their part. Society is apparently organized based on a classification of people within three broad strata, the ‘hostile’ class, the ‘basic mass’ (middle class) and the ‘core mass’ (upper class).

Part I: Humanitarian crisis

An economic crisis and related food shortages are thought to have begun in the late 1980s and intensified with the collapse of the former Soviet Union in the early 1990s that ended aid and subsidized trade with DPRK. The economic crisis was compounded by heavy floods in 1995 and 1996, which damaged crops and infrastructure. In 1995, DPRK requested humanitarian aid for the first time in its history and foreigners were allowed into the country.

As many as 70 per cent of factories, mines, schools, hospitals and other institutions had stopped functioning by 1997. There was a decline in agricultural production in the 1990s with low crop yields due to lack of fertiliser. Only 20 per cent of tractors were operational due to shortages of fuel and spare parts.

The ability of the government to supply medicine and maintain the medical infrastructure seems to have collapsed with the economic crisis. The incidence of infectious diseases, such as diarrhoea, ARI and tuberculosis, rose and the public distribution system collapsed.

YOU ARRIVE IN THE DPRK WITH AN INTERNATIONAL AID AGENCY AND HAVE TO ASSESS THE IMMEDIATE NUTRITION NEEDS.
1. What type of information would you try to obtain in order to assess potential nutrition needs?
2. What information sources and/or assessment methods would you use to gather the information?
3. Which groups do you think are likely to be nutritionally vulnerable?
4. What kinds of nutrition responses would be appropriate?
Part II: Humanitarian response

Assessments

The secretive nature of the Government of DPRK and its suspicion of foreigners meant that very few outsiders were allowed into DPRK and travel within the country was severely restricted. Less than half the country was easily accessible to foreigners in 1997. A nutrition assessment was attempted in August 1997. However, the government did not allow a random survey to be carried out and instead selected 40 kindergarten classes where children could be measured. A total of 3,984 children under seven years of age were measured. Additional information was obtained on institutional access to food and on the care, treatment and parental support of a sub-sample of severely malnourished and non-malnourished children. The prevalence of acute malnutrition (wasting), based on weight-for-height Z score of less than -2, varied from 0 to 32.7 per cent among institutions, and the prevalence of chronic malnutrition (stunting), based on height-for-age less than -2 Z score varied from 0.6 to 74.1 per cent. Anecdotal reports from people fleeing the country indicated that there was a serious breakdown in all systems, terrible food shortages and famine.

Responses

A. Food aid

DPRK first requested humanitarian aid in 1995, leading to a widespread response from countries, United Nations agencies and NGOs. The WFP mounted a massive food aid operation to meet about 20 per cent of the country’s minimum needs. The food was distributed by the government and no end-monitoring of the food was allowed.

B. Therapeutic care

UNICEF began training on the care of severely malnourished children in hospitals and also provided therapeutic foods.

There was also some support in other sectors, such as support to health infrastructure, agriculture and water and sanitation.

YOU ARE ASKED TO COMMENT ON THE NUTRITION SITUATION AND RESPONSE ON BEHALF OF AN INTERNATIONAL AID AGENCY.

1. What conclusions can be drawn about the nutrition situation?
2. Were the nutrition interventions implemented appropriate? If not, why and what alternatives could you suggest?
3. Were nutritionally vulnerable groups adequately targeted?

Part I: Humanitarian crisis

1. What type of information would you try to obtain in order to assess potential nutrition needs?
   It is important to try to obtain information on the existing prevalence and type of malnutrition, and the potential immediate and underlying causes of malnutrition both pre-crisis and any changes as a result of the crisis.
   
   Malnutrition
   - Wasting in <5 year children – prevalence, differences in prevalence by age group and geographical area, socio-economic group, rural/urban.
   - Stunting and/or underweight in <5 year children
   - Malnutrition in adults and older children
   - Micronutrient deficiencies – what types, prevalence
   
   Immediate causes
   - Disease prevalence – especially infectious diseases such as measles, ARI, worms
   - Food intake – diet and number of meals per day
   
   Underlying causes
   - Food security – access to staple food, market prices, access to remittances, sources of income
   - Health and a healthy environment – access to health services, water and sanitation, MCH services especially vaccination rate (for measles), iron and vitamin A supplementation protocols
   - Care – breastfeeding practices and support to women

2. What information sources and/or assessment methods would you use to gather the information?
   There is little likelihood that you will be allowed any access to collect primary data so you will have to rely largely on secondary data from a range of sources:
   - Government sources – data on the health and nutrition situation, health statistics on access to services, data on food security. All of this data may be unreliable however, and needs to be treated with caution
   - UN agencies – needs assessments reports, background reports. Again, lack of access may mean that these are limited and based on uncertain facts.
   - Local and international NGOs – health, nutrition and food security information from local surveys or nutrition and health programmes. Again with limitations

3. Which groups do you think are likely to be nutritionally vulnerable?
   - Physiologically vulnerable groups, such as infants, young children, pregnant and lactating women, the elderly and chronically ill
   - Politically vulnerable groups
   - Economically vulnerable – subsistence farmers, agricultural labourers, urban poor

4. What kinds of nutrition responses would be appropriate within the first few weeks of the crisis?
   - Advocacy to carry out a random nutrition survey and/or set up nutrition surveillance
   - General food distribution to targeted groups (but may be problems with government demanding to do distribution)
   - Blanket supplementary feeding for at-risk groups (children under 5, pregnant and lactating women, maybe elderly/disabled/chronically ill)
Part II: Humanitarian response

1. **What conclusions can be drawn about the nutrition situation?**
   
   The nutrition situation conducted was not representative of the population, however the range of acute malnutrition and stunting document highlight the fact that both are of concern in some regions of the country.
   
   Given the fact that the government selected the classes to be surveyed, it could be that they selected what they thought would be the most well nourished classes and if so, the situation in the general population might be significantly worse.

2. **Were the nutrition interventions implemented appropriate? If not, why not and what alternatives could you suggest?**
   
   It is difficult to know but it would appear that the food aid response could have started smaller with attempts made to control distribution and set up monitoring systems rather than implement such a huge response immediately.
   
   Additionally, continued advocacy to work with nutrition professionals directly and to do some kind of objective nutrition assessment.

3. **Were nutritionally vulnerable groups targeted?**
   
   Limited information is provided in the case study but malnourished individuals in hospitals seem to be targeted due to the provision of supplies and training for treatment by UNICEF.
Handout 4c: Case study III: Aguacala food crisis (hypothetical case study, based on real events in a Latin American country)

**Time for completion:** 30 minutes

**Read the case study and answer the questions at the end in groups. Prepare a brief presentation of your discussion.**

**Background**

Aguacala is a small, low-income country in Latin America. In the third quarter of 2011, Aguacala continued to be severely affected by erratic rains and the loss of agricultural crops due to the return of El Chico, which occurs every two to five years. The El Chico phenomenon – possibly the second strongest ever recorded in the region causes irregular rains and unusually high temperatures which negatively affect crop production and, subsequently, food security and nutrition levels.

El Chico, combined with the impact of the international economic crisis, has led to a recent sharp rise in unemployment, drop in household incomes, food shortages, and disease. Particularly vulnerable are the rural poor who live in the most affected area – the Dry Corridor of the country.

Recent reports from the Ministry of Health also attribute the erratic rains to an increase in the prevalence of preventable childhood diseases – mainly acute malnutrition, diarrhoea and acute respiratory infections – especially in the Dry Corridor. The effects of El Chico are expected to escalate and last beyond the northern hemisphere winter season (March/April 2011), and make 2011 the warmest year ever in the region.

An inter-agency rapid assessment estimated that in 8 of the 22 departments in the country, 60,000 families are at extremely high risk of food and nutrition insecurity, and a further 300,000 families estimated to be at high risk.

On 25 September the government formally issued an appeal to the international community for an amount of US$ 200 million, in order to respond to the emergency.

**HEALTH AND NUTRITION**

**Key issues**

With the evolving drought, agricultural crop losses, international economic crisis and the resulting loss of family income, a strong negative impact is expected. Background information collected on the situation (secondary data) on the affected areas indicates the following:

- Current crop damage will result in a 40% reduction of the availability of staple crops
- Food prices for staple crops have already increased by 30% since this time last year
- Unemployment in drought affected areas is increasing, and now stands at 15%
- Pre-drought exclusive breastfeeding rate reported at 21%
- High levels of anaemia in children <5 and women were recorded in the DHS conducted 3 years ago
- Nestle has signed an agreement with the Ministry of Social and Womens’ Affairs to exclusively provide powdered breast milk substitutes to the drought affected population to support infant feeding in this emergency and to meet the demand in non-emergency affected areas
- Average family size is 5.7 people
- Percentage of children under 5 in the population is 22%
- There are no selective feeding programmes in the affected areas
- There was no data available from the National Ministry of Health on growth monitoring for the previous 3 months
The initial inter-sectoral rapid assessment reveals the following:

- Drought has dried up the good quality water sources in the affected area and people are now accessing water from the local river. As the primary water source for the population this is being used for washing clothes, cleaning animals, bathing and drinking water.

- The main food available to most families affected by the drought is maize however family stores of this range between 1-2 months.

- Significant numbers of health facility staff have left their posts to return to their families in other parts of the country as they have not received their salaries for 3 consecutive months and with food prices increasing they cannot afford to stay in this drought affected area.

A rapid nutrition assessment conducted in 12 out of 32 communities reveal the following:

- 18% (216) of children assessed had a MUAC <125mm.

- 4% (48) of children assessed had a MUAC <115mm.

- Understanding of good young child feeding practices was limited- mothers reported saving and spending limited cash from the family on pre-packaged, sweet biscuits to feed young children as they felt that this was providing the best they could for their children.

- Local blended flours are available on the market. They consist of a mixture of soya and maize only, there are no added micronutrients.

**RESPONSE**

The Nutrition Cluster has just established itself and they are seeking your advice on the following:

1. Are there any outstanding information gaps?

2. How would you suggest that the Nutrition Cluster obtain further information?

3. What response options would you suggest based on current information?
Handout 4c (Answer): Case study III: Aguacal food crisis

What are there any outstanding information gaps?

- While the results from the rapid assessment indicates a potential severe situation in terms of acute malnutrition, we do not know the prevalence of acute malnutrition, U5MR or CMR. This information would be useful to know. This information should be triangulated with others such as the results of available nutrition surveys and reported cases of acute malnutrition at health facilities.

- We know a little bit about infant and young child feeding practices, including the exclusive breastfeeding rate but we do not have information on existing support services for mothers and infants. We also do not have any information on the percentage of the population that has been vaccinated or received vitamin A in the past year.

How would you suggest that the Nutrition Cluster obtain further information?

- Suggest that available nutrition surveys are reviewed to determine the most recent prevalence of acute malnutrition for the affected area. Additionally, anthropometric nutrition surveys could be conducted by the Ministry of Health and agencies working in the affected area. For information on support services for breastfeeding and vaccination status, the Ministry of Health and UNICEF should be contacted to see what is currently in place.

What response options would you suggest based on current information?

- Based on current information it seems that there is a need to support the following:
  a. Therapeutic care- depending on the number of children affected in these communities, the results of the rapid assessment point to the need for establishing treatment for acute malnutrition though the number of children affected needs to be confirmed.
  b. Infant and young child feeding (IYCF) including support for early and exclusive breastfeeding for infants 0-6 months and appropriate complementary feeding for children 6-24 months. It is also crucial to uphold the provisions of the Operational Guidance for Infant Feeding in Emergencies and the International Code of Marketing of Breastmilk substitutes and ensuring that distribution of infant formula by Nestle does not take place.
  c. Due to the high prevalence of anaemia in the population, micronutrient supplementation should be considered for vulnerable groups including pregnant and lactating women, and children. Multiple micronutrient supplementation through powders could be a feasible and appropriate option.
  d. Food security and livelihood interventions to support employment and access to food such as general food distribution to vulnerable households, food for work and production support.
  e. Increase access to health services by ensuring that health staff are available at health facilities- advocate with the government to pay the salaries of health staff and encourage their immediate return to their posts.
  f. Need to increase access to safe water supplies and ensure appropriate, clean sanitation.
Handout 4d: Case study III: Bandula emergency and nutrition response (hypothetical case study, based on real events in a Sub-Saharan country)

Time for completion: 40 minutes

Read the scenario as it unfolds and answer the accompanying questions.

Background:
Bandula is a landlocked, semitropical, middle income country in sub-Saharan Africa. In the last 10 years, migration from rural areas to the capital and provincial level capitals has increased. Urban community leaders often complain that the water and sanitation, shelter, and employment opportunities have not expanded adequately, but the government has not allocated resources to address these shortfalls.

Urban women are often employed in the informal sector, while rural women have to spend considerable amounts of time collecting cooking fuel and water, leaving both with little other option than to leave older siblings in charge of younger siblings during the day. Sweet maize based cookies are cheap and found in most markets, and are usually fed to children under five during the day. Distribution of social services such as health and education across the country is uneven, with a concentration in urban areas. Children under two generally experience 4 episodes of diarrhoea during the year.

The El Chico phenomenon, which occurs every two to five years, has contributed to sporadic rains this year. The El Chico effect, combined with the impact of the international economic crisis, has led to a sharp rise in unemployment, and a drop in household incomes. The effect has been more pronounced in rural households, which represent 70% of the population. It is expected that:

- Current crop damage will result in a 40% reduction of the availability of staple crops
- Food prices for staple crops have already increased by 30% since this time last year
- Unemployment in drought affected areas is increasing, and now stands at 15%

Development efforts in the East have been limited because of repeated clashes over the past 2 years with the neighbouring country and inter-clan conflict over resources. An estimated 250,000 people have been displaced westward into the country as a result of insecurity. Half of them are living in specific camps for internally displaced persons (IDPs), while the other half is being hosted by the community.

1. Based on the description above there are several issues affecting the overall nutrition situation.
   The conceptual framework of undernutrition outlines basic, underlying and immediate causes of undernutrition. Based on this framework, select the underlying causes of undernutrition in this situation from the list below.
   (Choose all that apply)
   a) Number of episodes of diarrhoea in under fives
   b) Crop damage
   c) Reliance on inexpensive low quality food for under fives
   d) Insecurity and internal displacement
   e) Increasing food prices
   f) Poor distribution of health services across country
   g) Limited resources in the East
   h) Inadequate health services in urban areas
   i) Increasing unemployment
   j) Mothers leaving siblings in charge of care for younger siblings because of work obligations
In July, you arrive to take up your post as Nutritionist in Bandula, responsible for the implementation of your agency’s nutrition programme across the country. Through additional background reading prior to arrival, you know that:

• The national level demographic health survey (DHS) from three years ago reported 20% of children were underweight, and 22% were stunted.

• Pre-drought exclusive breastfeeding rate in infants under 6 months was reported at 30%.

• Complementary foods are commonly introduced at the age of four months. The main food provided at this stage is a maize based porridge.

• Anaemia in children under five years and women is high

• Iodized salt can be found in all of the markets, as well as tomatoes, dark leafy green vegetables and fruit.

• Health services are provided for children under 3 years of age free of charge by the government in an effort to promote routine immunization. Even so, the DHS reported only 60% of children received complete vaccination

2. **What essential piece of information have you not yet read about the nutrition situation?**

   a) Number of staff working in therapeutic care
   b) Prevalence of acute malnutrition
   c) Cultural taboos towards feeding of pregnant women
   d) Coverage of vitamin A programmes

As a result of the drought and conflict, emergency nutrition programmes have been established. Upon arrival, your supervisor gives you an overview on the nutrition response to the emergency.

• School feeding has been established in provinces where the El Chico effect has been greatest.

• Seasonal blanket supplementary feeding programmes have provided support to 45,000 children under five in the north and northwest of the country.

• General food rations have been distributed in the IDP camps. There has been no general food distribution to host communities.

• In-patient therapeutic care is available through government health facilities in all provinces except in the three eastern provinces where ICRC and three international NGOs are implementing community based therapeutic care.

3. **Given the range of nutrition responses often employed to respond to nutrition emergencies, which ones were not mentioned by your supervisor? (Choose all that apply)**

   a) Resettlement programmes
   b) Food for work
   c) Livelihood support
   d) Cross border trade negotiation
   e) Infant and young child feeding support
   f) IDP camp management
   g) Health, water and sanitation support
   h) Micronutrient supplementation

The mid-term report on the Consolidated Appeal Process (CAP) for this year showed that only 12 out of the 25 therapeutic care programmes in the country met the Sphere minimum standards for performance indicators (e.g. % recovery, % default, % mortality). One of the donors begins to criticise the nutrition response as being inadequate.
4. Do you have enough information to assess the quality of the overall nutrition response?
   a) Yes
   b) No

5. You respond this way because: (Choose all that apply)
   a) Sphere minimum standards in nutrition are always possible to achieve in emergencies
   b) Sphere minimum standards in nutrition can be challenging to achieve in some emergencies
   c) Therapeutic care is just one aspect of the nutrition response

In August, the El Chico effects resulted in heavy flooding in the eastern part of the country where there has been limited government investment due to conflict. The flooding is concentrated near the border area, where no IDP camps have been able to be established due to insecurity. NGOs working in the three provinces have tried to fill the gap by providing some health and nutrition services. However, the day after the floods, all programmes are suspended because staff cannot travel to the clinics due to flooding.

The Humanitarian Coordinator has called for an inter-cluster meeting between the nutrition, water and sanitation, health, and food security clusters in response to the situation. The nutrition cluster coordinator asks you to attend with her.

You are asked to present a summary of available information on the nutrition situation in the flooded area at this inter-cluster meeting as part of the wider assessment and analysis in order to define appropriate action.

6. Which pieces of information from the list below would you want in order to prepare the nutrition situation analysis for the meeting about the flood emergency? (Choose all that apply)
   a) Cross border trade volumes for the staple food commodity
   b) Prevalence of acute malnutrition (wasting)
   c) Food security- availability, access, utilization
   d) Competencies for certification of nutritionists
   e) Public health services available in the area
   f) Common morbidities (illnesses)
   g) Emerging infant and young child feeding issues
   h) Care practices
   i) The political affiliation of leaders in the affected area

In the meeting you also present additional data from what you have gathered from the Ministry of Health and international agencies, including:

• An anthropometric survey report that was carried out in February in 2 of the 3 flood and conflict affected provinces highlighted that 17% of the children were stunted.

• The annual health report from the Ministry of Health shows that 20% of the children who attend growth monitoring in the previous year were classified with moderate or severe acute malnutrition in these provinces.

• Vitamin A supplementation for children 6-59 months takes place every 6 months and reaches 95% coverage nationally. Province level coverage, however, varies from 60% to 100%.
7. **After you present this secondary information to the inter-cluster meeting, the Humanitarian Coordinator states that this is a nutrition emergency since undernutrition is above 10% and there are aggravating factors. Is this analysis correct?**
   a) Yes
   b) No

It was decided in the inter-cluster meeting that additional information was needed to fully assess the nutritional status of the population. However, since access was an issue due to the flooding and insecurity, it was decided that an interagency rapid assessment would be conducted four days later.

8. **Which nutrition index and/or measurement would you suggest for use in the rapid assessment?**
   a) Weight for height percentage of the median
   b) MUAC
   c) BMI
   d) BMI for age
   e) Weight for height Z score

Based on the rapid assessment findings, it was determined that the key priorities for the nutrition cluster in this emergency nutrition response are:

- Micronutrient supplementation
- General food distribution that includes a fortified food
- Screening and treatment of micronutrient deficiency disorders
- Programming to support infant and young child feeding that includes skilled breastfeeding counselling and support

Media coverage from the first few days after the floods reported the challenging situation for the flood affected population. Unsolicited donations of infant formula are piling up at the port. The labels are not in the local language. The Ministry of Health would like to distribute to all flood affected families in order to support infant health as part of the general food distribution, and the Ministry of Social and Women’s Affairs is lobbying with the president’s wife to ensure that the infant formula is not destroyed.

9. **Would you recommend distribution of the infant formula to the flood affected population?**
   a) Yes
   b) No

10. **What is the basis for this recommendation? (Choose all that apply)**
   a) It would be a poor use of resources not to distribute the infant formula
   b) Artificial feeding is very risky in the current environment
   c) Caregivers won’t be able to read the use label and may use the formula inappropriately
   d) Everyone knows how to use infant formula, so the label language is not a problem
   e) Exclusive breastfeeding was low already and may decline
   f) Women are traumatised and will have insufficient breast milk
   g) An untargeted distribution is a violation of the International Code, Sphere standards and the Operational Guidance on IFE
Handout 4d (Answer): Case study IV: Bandula emergency and nutrition response

1. b), e), f), h), j)
2. b)
3. b), c), e), g)
4. b)
5. b), c)
6. b), c), e), f), g), h)
7. b)
8. b)
9. b)
10. b), c), e), g)