Emergency Food Security Assessment Handbook

WFP
World Food Programme

First Edition

ODAN

.:: emergency needs assessment branch

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Methodological guidance for better assessments

First Edition-June 2005

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Emergency Food Security Assessment Handbook – First Edition

United Nations World Food Programme
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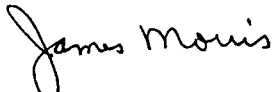
FOREWORD

Whenever a food security crisis develops, the World Food Programme is at the forefront of efforts to assist those who are affected. Good assessments are key to our ability to make well-informed decisions that lead to appropriate food-related responses in these situations. Each year, we do more than 100 assessments in partnership with governments, United Nations agencies, national and international non-governmental organizations, and donor representatives.

WFP is committed to excellence and providing leadership in the assessment of emergency food security needs. In 2003 we launched a major initiative to strengthen our assessment methods and augment related staff capacities. The WFP Emergency Food Security Assessment (EFSA) Handbook will support this goal by providing staff with the essential tools and tips they require in a range of emergency situations. It should also help ensure transparency of the methods we use, leading to more effective partnerships. The guidance provided in the handbook builds on best practices distilled from decades of WFP experience in food-security related assessments, recent experience in vulnerability analysis and mapping (VAM), and a series of consultations with our main partners and WFP staff. The generous support of the United Kingdom's Department for International Development (DFID) made all this possible.

In the past, many assessments have focused primarily on estimating food aid needs. This handbook provides guidance for a broader approach in line with WFP's strategic priorities - to save lives and protect livelihoods in emergencies, while also addressing nutritional problems, supporting continued access to education and strengthening local capacities. The guidelines on food security analysis, for example, take market concerns into account, with a view to determining what would be the most appropriate response (food and/or non-food) to meet immediate needs, while at the same time contributing to rebuilding food security and increasing the resilience of poor households to shocks.

This is a challenging task and we plan to refine these guidelines following comprehensive field testing, action research on selected issues, and further work on food security monitoring and vulnerability analysis in 2005 and 2006. We also look forward to further inputs from our staff and partners. As our assessments continuously improve in quality and credibility, we will be able to better serve those who need us the most.



James T. Morris

ACKNOWLEDGEMENTS

This Handbook was made possible by the generosity of the United Kingdom's Department for International Development, including their support to a series of technical consultations. The first two meetings assisted in establishing the overall direction to be followed by WFP to strengthen its needs assessments, while the next two meetings provided input to and refined the initial draft, respectively. For details on these consultations and the participants, please refer to the following documents available at www.wfp.org/operations/Emergency_needs/ : *Report on the Proceedings of the Expert Consultation on Emergency Needs Assessments* (November 2002); *Report on the Proceedings of the WFP-Partner Consultation on Emergency Needs Assessment (ENA): Food* (March 2003); *Key Issues in Emergency Needs Assessments: Report of the Technical Meeting* (October 2003, Vols. I and II) and *Strengthening Emergency Needs Assessments: EFSA Handbook & Draft Implementation Plan, Report on the WFP-Technical Meeting (July 2004).*

Throughout this process, constructive contributions were received from technical experts from a number of governments, United Nations agencies, non-governmental organizations or institutions. Particular thanks are due to staff from: Emergency Nutrition Network, European Commission, FEWSNET, Food and Agriculture Organization of the United Nations, Food Economy Group, International Federation of Red Cross and Red Crescent Societies, Oxfam-GB, Save the Children UK, TANGO International, United States Agency for International Development, and the World Bank.

Inputs were also received from: Action Contre La Faim, Australian Agency for International Development, CARE, DFID (UK), Feinstein International Famine Center, German Agro Action, German Technical Cooperation (GTZ), International Committee of the Red Cross, INTERSOS, Karolinska Institute (Sweden), London School of Hygiene and Tropical Medicine, Netherlands Ministry of Foreign Affairs, Norwegian Refugee Council, Office for the Coordination of Humanitarian Affairs, Overseas Development Institute, the Permanent Inter-State Committee on Drought Control in the Sahel (CILLS), the Southern Africa Development Community (SADC), Swedish Ministry of Foreign Affairs, Swiss Agency for Development and Cooperation, United States Centers for Disease Control, United Nations Children's Fund, United Nations High Commissioner for Refugees, and World Health Organization.

Also, much valuable input was provided by WFP staff from Headquarters—especially the Vulnerability Analysis and Mapping (VAM) Branch, the Emergency Preparedness and Response Branch, and the Emergency and Transitions, Nutrition and Gender units of the Policy, Strategy and Programme Support Division—as well as from VAM and programme staff from several Regional Bureaux and country offices.

All these contributions are gratefully acknowledged although responsibility for the present text, including any errors, remains with WFP-ODAN:
WFP extends special thanks to Ron Ockwell for his determination and skill in consolidating the inputs from these experts into a useful operational tool.

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Acronyms

ALITE	Augmented Logistics Intervention Team for Emergencies (WFP)
BMI	Body mass index
CAP	Consolidated appeal process
CAP-NAF	Consolidated appeal process needs analysis framework
CARE	Cooperative for Assistance and Relief Everywhere, Inc.
CD	Country Director (WFP)
CFSAM	Joint FAO/WFP crop and food supply assessment mission
CFSVA	Comprehensive food security and vulnerability analysis
CHAP	Coordinated humanitarian action plan
CO	Country office
DO	Designated Official for security (U.N. at country level)
EFSA	Emergency food security assessment
EMOP	Emergency operation (WFP programme category)
EWS	Early warning system
FAO	U.N. Food and Agriculture Organization
FEWSNET	Famine Early Warning System Network (USAID)
FFW	Food for work
FOB	Free-on-board (cost of goods loaded on transport for departure)
GAM	Global acute malnutrition
GIS	Geographic information system (computer software)
GPS	Global positioning system
HH	Household
HIV/AIDS	Human immunodeficiency virus/acquired immune deficiency syndrome
HPG	Humanitarian Policy Group
HQ	WFP headquarters (Rome)
IASC	Inter-Agency Standing Committee
ICT	Information and communications technology
IFRC	International Federation of Red Cross and Red Crescent Societies
ILO	International Labour Organization
IR-EMOP	Immediate response EMOP
ITSH	Internal transport storage and handling
JAM	Joint assessment missions (WFP-UNHCR)
KI	Key informant
LCA	Logistics capacity assessment
LTSH	Landside transport, storage and handling
MOSS	Minimum operating security standards (U.N.)
MOU	Memorandum of understanding
MUAC	Mid-upper arm circumference
NGO	Non-governmental organization

OCHA	U.N. Office for the Coordination of Humanitarian Affairs
OD	Operations Department
ODA	Analysis, Assessment and Preparedness Service
ODAN	Emergency Needs Assessment Unit (WFP)
ODAP	Emergency Preparedness and Response Unit (WFP)
ODTL	Logistics Service (WFP)
OVC	Orphaned and vulnerable children (in the context of high HIV/AIDS prevalence)
PCNA	Post-conflict needs assessment
PRRO	Protracted relief and recovery operation (WFP programme category)
RB	Regional bureau
SADC	Southern African Development Community
SAT	Security awareness training
SBA	Stand-by agreements
SFP	Supplementary feeding programme
SMT	Security management team
TFP	Therapeutic feeding programme
TOR	Terms of reference
U.N.	United Nations
UNCT	United Nations Country Team
UNDAC	United Nations Disaster Assessment and Coordination (Team)
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children Fund
UNJLC	United Nations Joint Logistics Centre
UNRC	U.N. Resident Coordinator
USAID	United States Agency for International Development
VAM	Vulnerability analysis and mapping
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization

Purpose of this handbook

This handbook is intended for use in any emergency situation or protracted humanitarian crisis, whether due to a sudden natural disaster, drought, disease or economic collapse (a slow-onset crisis) or conflict, and to address the needs of both resident and internally displaced persons. It is addressed to WFP programme staff and VAM officers, but it is hoped that the handbook will also be useful for the governmental, UN and NGO partners with whom WFP collaborates in emergency food security assessments (EFSAs) whenever possible. Indeed, it is hoped that it will provide a basis for enhanced collaboration.

It aims to provide sufficient guidance for programme staff who have some experience and relevant training to: (i) plan and organize an 'initial investigation' or a 'rapid' assessment, and (ii) draw up the terms of reference for and commission an 'in-depth' assessment. The latter includes knowing when to ask for technical support but not relying on such support for everything. Examples are provided in many sections to help users understand what is intended and to enable them to benefit from 'lessons learned'.

This 'provisional' version will be further developed and improved during 2005/06 on the basis of field testing and other work being undertaken within the framework of the ongoing Strengthening Emergency Needs Assessment Capacity in WFP (SENAC) project. It is hoped that the next version of this handbook will provide both enhanced guidance and additional practical examples and lessons.

For WFP, an **emergency** is defined as an urgent situation in which there is clear evidence that an event or series of events has occurred which causes human suffering or imminently threatens human lives or livelihoods.

In such situations, the focus for WFP – and the focus of this handbook – is on threats to life due to hunger and malnutrition, and threats to food security due to the erosion or undermining of livelihoods.

In case of ***refugees***, WFP undertakes assessments jointly with UNHCR (and the government and other partners) within the framework of the *UNHCR-WFP Joint Assessment Guidelines*, UNHCR & WFP 2004. Specific guidelines also exist for joint FAO-WFP ***crop and food supply*** assessment missions (CFSAMs). The guidance in this handbook complements those joint guidelines providing, in particular, more detailed guidance in relation to assessing household food access. It also complements the guidelines that exist for ***inter-agency*** assessments, providing the basis for WFP's contribution in relation to food security and livelihoods.

This handbook, in turn, is complemented by WFP-VAM guidelines on comprehensive food security and vulnerability analysis (CFSVA) which are relevant both to establishing a country-level knowledge base as part of preparedness – the pre-crisis data on which emergency assessments can draw – and for in-depth assessments.

Monitoring the food security situation is essential in any ongoing emergency or immediate post-crisis situation. Guidelines for such monitoring are provided separately in the WFP Programme (Design) Manual and are not included in this handbook. However, every EFSA will be expected to define the aspects that monitoring should focus on during the subsequent months, and any EFSA undertaken in the context of an ongoing operation will draw on the findings of monitoring up to that time.

Structure of this handbook

The handbook comprises six 'parts':

Part I presents an overview and the basic principles of assessment that everyone who is concerned about food security and involved in commissioning, undertaking or using the results of an EFSA should understand. *Chapter 1* provides an overview of the different types and phases of EFSAs, the linkages with other information collection and planning processes, and outlines the activities in planning and undertaking an EFSA. *Chapter2* summarizes the core principles of EFSA, the importance of partnerships and some of the other aspects that are essential to ensuring a quality assessment.

Part II describes how food security, livelihoods and nutrition are analysed in an EFSA. *Chapter 3* outlines the analysis framework and process that underlies the guidance provided in the rest of the handbook. *Chapters 4, 5 and 6* describe how the three main themes of an EFSA – food availability and markets, livelihoods and food access, food utilization and nutrition – are analysed. *Chapter 7* outlines how key aspects of the overall context are analysed, including social, institutional and security aspects. ***The material in these chapters is expected to be substantially refined and elaborated during 2005/06.***

Part III describes how to undertake an '*Initial investigation*' following a sudden-onset emergency or a slow-onset crisis (*Chapter 8*).

Part IV provides step-by-step guidance on how to plan and undertake a '*Rapid' assessment*'. *Chapter 9* describes how to get started, including establishing the objectives. Guidance on designing and planning the assessment is in *Chapter 10*: this is arguably the most important stage of the whole process, but often given insufficient attention. *Chapter 11* describes how to collect data in the field, while *Chapter 12* deals with how to analyse data in order to identify the problems that need to be addressed and the magnitude of any requirements for assistance. *Chapter 13* provides guidance on how to determine which response options – food aid, cash and/or other non-food responses – could be appropriate and feasible, and how to formulate recommendations. Finally, *Chapter 14* describes how to prepare and disseminate the report.

Part V provides guidance on how to organize an '*In-depth assessment*' – how to prepare for, draw up the terms of reference, select appropriate experts or institutions, and monitor their work (*Chapter 15*).

The **annexes** provide supplementary notes and tools for various aspects of emergency planning and EFSAs. The complementary CD-ROM includes additional annexes as well as a web-based version of the handbook and documents from WFP and other sources that are referred to in the text and may be useful sources of further information on specific topics. It also includes printable versions of some formats and worksheets. References in the text to annexes C6 to D7 are to documents on the CD-ROM.

How to use this handbook

Everyone participating in an EFSA must be familiar with the 'essentials' in chapters 1 to 3.

Anyone making decisions in relation to an EFSA must be familiar with the 'essentials' in chapters 1 to 3 before making any such decisions.

The table below suggests how different users may use the other parts of the handbook.

Type of user	Chapters to be referred to
Anyone organizing or participating in an *initial investigation*	Chapter 4 to 7 and 8.
Anyone organizing or contributing to the design and planning of a *rapid assessment*	Chapters 4 to 7, 9 and 10, and the related annexes.
Anyone participating in data collection	Chapter 11 and the related annexes.
Anyone contributing to data analysis	Chapters 4 to 7, 12 and 13 and the related annexes.
Anyone contributing to report preparation or	Chapter 14.

dissemination	
Anyone planning or contributing to an *in-depth assessment*	Chapter 15.

Chapter 1

Overview of EFSAs – types, roles and activities

This chapter provides a brief overview of the essential features of emergency food security assessments (EFSAs). It explains:

It explains their purpose, when they are undertaken, and how they link with other information and analysis processes. The final section outlines the activities involved in planning and undertaking an EFSA.

- the purpose and scope of EFSAs, and when they are undertaken, see → section 1.1
- who participates in EFSAs and the role of WFP, see → section 1.2
- the 3 types (phases) of EFSAs, see →section 1.3
- how EFSAs link with other assessment and related processes, see →section 1.4
- the main activities in planning and undertaking an EFSA, see →section 1.5

1.1 What is the purpose and scope of an EFSA?

Purpose

An emergency food security assessment (EFSA) is undertaken following an event (natural or human-induced), or a series of events, that negatively affects food production, food supply systems and/or people's livelihoods, their access to food and/or their nutritional status. It is a process of data collection and analysis undertaken to inform decisions on action to be taken, or a conscious decision to take no action, and support the mobilization of resources, when required.

The purpose of an EFSA is to determine:

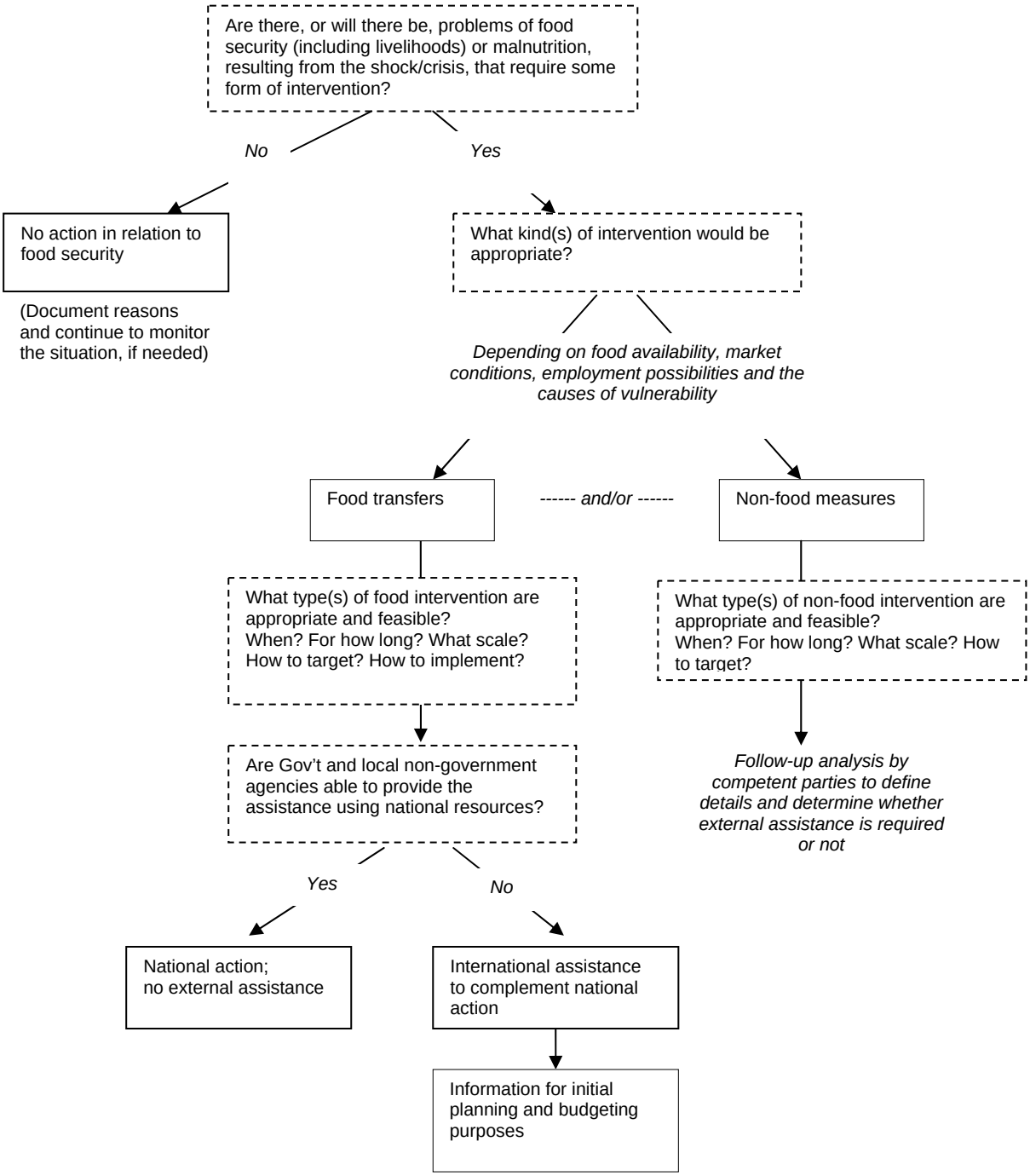
- whether, as a result of the shock/crisis, there is, or will be, a food security or nutritional problem that the affected people and communities cannot cope with and recover from unaided; and, *if so*,
- what kind of assistance is needed by whom, how much, where and when, and how it should be provided – what types of intervention and how they should be implemented; and
- whether the government and other national organizations and resources can cover the needs or international assistance is required.

Because EFSAs provide the foundation for the design and targeting of WFP relief and recovery operations, WFP policy underscores the importance of accurate, transparent and credible needs assessments[1]. Specifically, WFP offices are requested to produce a separate report for all major emergency needs assessments and make them publicly available after clearance by the WFP Regional/Country Director (Operational Directive 2004/003). This includes assessment reports prepared in partnership with other agencies if they include sufficient information on the emergency food security situation and related food needs.

The decisions that an EFSA must inform are indicated in Figure 1a. The EFSA must provide specific information to inform these decisions in a timely manner and enable a coherent and comprehensive assistance strategy to be formulated to save lives and protect livelihoods. A 'perfect' assessment that produces information too late for an effective emergency response by decision-makers and project designers is not useful. On the other hand, a hasty assessment that provides misleading information can lead to inappropriate decisions and unnecessary suffering or a waste of resources. The challenge in each situation is to get the balance right between timeliness and accuracy – to ***adapt the assessment approach to the needs of the situation*** and, when presenting the results of the analysis at each stage, explain the method(s) used and any ***limitations*** on the data available and the conclusions that can be drawn.

[1]WFP 2004. *Emergency Needs Assessments*. WFP/EB.1/2004/4-A.

Figure 1a Fundamental decisions that an EFSA must inform



The ***output*** of an EFSA should be a concise report that:

- presents the findings of the analysis including the principal causes of food insecurity and the measures taken by households and communities to cope with the situation;
- identifies and quantifies the unmet needs (outstanding problems), if any, and the prospects and future risks for food security;
- provides one or more planning scenarios – sets of assumptions – describing the present situation and how it can be expected to evolve; and
- presents response options, with the pros and cons of each, and a recommendation.

Throughout this handbook the expression '**shock/crisis**' is used to describe the event(s) that caused the emergency. This includes both sudden 'shocks' (e.g. due to a flood or conflict) and 'crises' that develop progressively (e.g. due to drought or economic collapse).

Table 1-A provides the standard outline for an EFSA report, which may be adapted to the needs of the particular situation. The report should provide a basis for informed decision-making on interventions (food and/or non food interventions). When there is great uncertainty as to how the situation will evolve or when access to some affected populations is limited and there are serious information gaps, the report should present two or more scenarios.

The key concepts of food security, availability, access and utilization, and livelihoods, are defined and explained in Chapter 3, which also describes the analytical framework used in an EFSA to examine these themes.

Table 1-A

Standard Format for an EFSA Report

Executive summary (<1 page)

1. Objectives and methodology of the assessment
- objectives of the assessment;
- how primary data were collected, the number and distribution of the sites visited and community groups/households interviewed, and how they were selected;
- secondary data sources used;
- approach/methods used to analyse the data; and
- limitations of data and basis for generalizing from the sample to the population; uncertainty/confidence in the data and consequent conclusions; recommendations for follow-up data collection and analysis, if appropriate.

2. Socio-economic background – pre-crisis conditions in the affected areas
- population and livelihood groups, their typical food security profiles and vulnerabilities;
- the macro-economic situation, production systems, trade patterns, fiscal and other policies affecting food security; and
- political and social structures: social support systems, how they operate, who they do/do not cover; power structures and their implications for the food security of different groups.

3. General and demographic impact
- the nature of the shock/crisis; its general effects on population and infrastructure in different areas;
- death toll; households without breadwinners; unaccompanied minors, etc.; and
- numbers displaced; expected duration of displacement; whether those displaced have lost all means of livelihood.

4. Food availability and markets

- impacts on local and national food stocks, and on food production forecasts; changes in expected levels of imports; action taken by government and other to increase supplies; and
- impacts on prices and market integration; logistic bottlenecks or administrative regulations inhibiting the movement of goods; action by government, traders or others to repair infrastructure and facilitate market functioning; capacity of the market to meet the demand for food now and in the future.

5. Livelihoods and households' access to food

- impacts on the local economies, employment opportunities, demand for local produce and services; action being taken to restore economic activity; seasonal considerations; when and to what extent activity and the demand for local produce and services are expected to recover;
- *for each distinct population group*: impacts on livelihood assets, sources of food and income (including entitlements from social networks/political allegiances) and obligatory expenditures (including rent, fuel, water, shelter, health, loan repayments, etc.); trade-offs between food and non-food needs; the type and sustainability of coping strategies adopted; when and to what extent livelihoods are expected to recover; present food access shortfalls and how they are expected to evolve; and
- action taken by government and others to enable households to access sufficient food; how long those actions will continue with available resources.

6. Food consumption, utilization, nutritional and health status

- impact on the diets of each distinct population group; their ability to prepare food;
- present nutritional status and nutritional risks; disease-related mortality rates; water, sanitation and other public health concerns that threaten lives and nutritional status; and
- action taken by government and others to address problems of food use and consumption, malnutrition and the main public health risks.

7. Current and future problems and risks for food security and livelihoods; assistance required

- synthesis of the current situation, likely evolution and risks for food supplies, markets, livelihoods, household food access shortfalls, and nutritional status;
- scenario(s) for the next 6 to 12 months;
- numbers of people requiring assistance in different areas/population groups; the levels of assistance required; the periods during which assistance will be required; and
- what would happen in the absence of any response or an inadequate response within the critical specified period.

8. Response and targeting options

- possible food and non-food responses to problems of food supply/availability (if any), markets, household food access, malnutrition, and long-term food security (livelihoods); the advantages and disadvantages of each of the possible responses;
- social, political, security, logistic constraints; potential negative effects of current and possible future assistance strategies; and
- capacities (including resources) of communities, NGO, local authorities and the government to provide assistance or to implement externally-supported programmes.

9. Recommendations and proposed assessment follow-up

- recommended 'package' of responses to most appropriately address the identified problems, with reasons;
- *for any food aid*: types and quantities of commodities, when required, proposed sources (local purchase or other), targeting and implementation arrangements; and
- specific aspects/indicators to be monitored during the next 3/6/12 months; arrangements (or recommendations) for follow-up assessments, if needed).

Annexes

Map of the affected areas
Assessment instruments used
Seasonal calendar (and any other significant summary diagrams)
Schedule of the assessment activities and site visits
Members of the assessment team

Scope of an EFSA

To inform the fundamental decisions shown in Figure 1a, the assessment must examine:

- the ***nature*** and ***causes*** of any perceived food insecurity and malnutrition in order to determine whether food and/or non-food interventions would be appropriate;
- the ***present situation***, how it is expected to evolve and any ***future risks*** for food security, in order to determine programme options and the period during which assistance may be needed and provide a basis for contingency planning;
- the ***capacities*** of people, communities, the government and other organizations to help themselves and/or to contribute to the planning and management of externally assisted interventions, in order to determine the most appropriate type(s) of assistance and indicate possible implementation modalities.

Food aid is an appropriate response in some emergency situations but not in all. In conducting an EFSA, the first questions must always be: "How has the crisis affected the availability of food in the country and people's ability to gain access to adequate food?" and "What type of intervention would be appropriate?" (not "How many people need food aid?").

When food aid is found to be appropriate, the assessment team must consider the ***options*** available – types of food intervention, targeting arrangements if appropriate, possible implementation modalities, etc. – and specify the ***period*** during which it is needed. This includes specifying any non-food inputs and other complementary measures necessary to enable the food to be delivered and distributed and the recipients to make effective use of the commodities provided or otherwise available to them. This may include logistic support and non-food inputs and measures to: (i) ensure that people are able to store, prepare and cook the food they have, and appropriately feed young children and other dependent individuals including sick and elderly people; and (ii) address public health problems that negatively affect nutritional status. An assessment at the beginning of an emergency must also provide basic information for the ***design and initial planning and budgeting*** of any food aid interventions found to be appropriate.

When non-food interventions are found to be appropriate to address food security problems, the assessment team should list available ***options***, specify ***when*** they would need to be implemented, and suggest ***who*** should complete the detailed assessment and prepare specific proposals.

N.B. In many cases, a combination of food and non-food interventions will be needed.

1.2 Who participates in an EFSA? What is the role of WFP?

Whenever possible, an EFSA should involve:

- relevant government entities;
- national or international institutions that have specific relevant expertise (e.g. in market analysis or nutrition assessments, including assessment of micronutrient deficiencies when appropriate);
- WFP and other UN agencies that have personnel on the ground with relevant experience and expertise (which may include FAO, UNICEF, UNHCR, UNDP, WHO, ILO);
- NGOs (national and international) with experience and expertise in food security and nutrition and/or extensive knowledge of the areas concerned; and
- donors that have personnel on the ground with relevant experience and expertise.

Ideally, the EFSA process is led/facilitated by the responsible government entity or jointly by that entity and WFP within the framework of arrangements agreed in advance (in the context of joint contingency planning). When necessary, WFP should take the initiative mobilize potential partners and foster the establishment and consolidation of partnerships for assessment purposes (and for subsequent implementation). See section 2.2, *Partnerships*.

WFP's role depends on the situation and on existing national plans and capacities for emergency food security assessments:

- WFP may ***support*** or ***co-lead***: Where there are well-established arrangements for EFSAs to be undertaken collaboratively by the relevant national authorities and all the main food security partners, WFP collaborates with the government and other partners in undertaking an effective, timely and well-coordinated assessment.
- WFP may ***lead***: Where national plans and capacities are not well developed or are over-whelmed, or where there is no effective government, WFP will take the initiative – take the lead – in organizing the assessment and engage relevant government entities and other partners as much as possible and appropriate in the circumstances. This includes partners with the experience and expertise necessary to look into non-food response options.

In general, it is the role and responsibility of WFP to:

- provide advice and assistance to the government in: assessing the food-security situation including the impact on livelihoods; mobilizing partners with expertise in food, nutrition and related non-food needs; and determining how best to address food security problems and protect livelihoods;
- collaborate with the UN resident/humanitarian coordinator, OCHA and other UN partners (within the framework of the UN country team and established UN mechanisms and inter-agency agreements) in assuring a coordinated UN system assessment and response;
- determine whether international food aid is required, if it is determined that food transfers would be appropriate; and
- define the particular types and quantities of food that WFP should seek to mobilize and provide for specific interventions, and when and how the food should be delivered and distributed, if it is determined that food aid is required.

In all cases, the aim should be to achieve ***consensus*** on the analysis and conclusions among all concerned parties (stakeholders), including the government, other concerned authorities, UN agencies, NGOs and donors. When consensus *cannot be achieved*, the report should reflect the differences of opinion and the reasons.

1.3 The 3 types (phases) of EFSAs

Types of assessment

WFP distinguishes three types (or phases) of assessment, namely:

- initial investigations
- 'rapid' assessments/EFSAs
- 'in-depth' assessments/EFSAs

An ***initial investigation*** is a preliminary enquiry undertaken following a sudden disaster or the receipt of a report of a new crisis. Its purpose is to determine whether there is, or could be, a food security problem meriting an immediate life-saving response and/or an assessment of the situation and to provide preliminary indications of the type and scale of external assistance, if any, that might be needed. It relies primarily on secondary data, i.e. existing reports and contacts with observers in the area, together with a few rapid field visits.

A ***rapid EFSA*** is an assessment in which the assessment team visits a number of sites to collect primary (new) data through key informant and group interviews and, sometimes, questionnaires addressed to a limited number of households. Its purpose is to gain a sufficient understanding of the situation to decide on the type, scale and timing of response needed, if any. A rapid EFSA would normally produce a report within a maximum of 6 weeks (when the area or population affected is a large or heterogeneous), sometimes within a week (when the area is small and/or the population homogeneous).

An ***in-depth EFSA*** is an assessment that is undertaken using either: (i) a combination of rapid appraisal methods and a household survey based on probability sampling, or (ii) rapid appraisal methods including multiple in-depth interviews with small groups of people representing distinct subgroups within the affected population. The aim in both cases is to generate a household economic profile for each distinct subgroup within the population and a detailed understanding of the food security situation, the causes of food insecurity and malnutrition (if any), and the prospects for recovery for each subgroup.

The characteristics of these assessment types and the circumstances in which each is undertaken are summarized in Table 1-B. The 'typical durations' indicated in column 2 include the whole process, i.e. the total time for planning, data collection, analysis and reporting. The duration will vary depending on the amount and quality of the background (pre-crisis) data available and the quality and relevance of contingency planning undertaken in advance as well as the nature of the situation itself.

In a conflict situation where access to some areas is restricted, arrangements may be made for very rapid 'flying visit' assessments in localities that suddenly become accessible. In some protracted crises, assessments may be undertaken regularly in each distinct operational area in order to obtain up-to-date information as a basis for planning the next cycle of distributions. Both of these can be considered as short, localized rapid EFSAs.

Scenarios and follow up

The development and progressive refinement of scenarios is a key feature of the assessment process, synthesizing and complementing the substantive outputs indicated in the fourth column of Table 1-B:

- The initial investigation should produce a ***preliminary 'working' scenario*** representing a first 'best guess' concerning the impact of events and how the situation could developed. It is based on: the contingency plan, if any; what is known about the typical effects of this type of event; the preliminary information available concerning the impact and the extent of the area affected, and background (pre-crisis) information available on the area. It provides a basis for specifying the terms of reference for a follow-on rapid EFSA and initiating the mobilization and delivery of initial life-saving relief, if required. See section 8.4.
- The first step in a rapid EFSA is to review and, if additional information has been received in the meantime, refine the output of the initial investigation to establish a ***'working scenario'*** for the

planning the rapid assessment, including determining where to go, who, to talk with, and the information to be collected. See section 9.5.

Table 1-B **Types of Assessment – When, Why and How They are Undertaken**

Assessment type	*When*	*Typical duration*	*Purpose – main outputs*	*Main methods used*	*Knowledge and skills needed*
Initial investigation (***see Chapter 8***)	Onset of a new emergency New crisis or access to a new area during an ongoing operation	2-5 days	Preliminary determinations of the areas, population groups and numbers (rough estimates) of people affected, and the likely impact on food security. Recommendations for: immediate life-saving assistance, if needed; the localities and priority topics on which a follow-on rapid assessment should focus, if required; and the type and scale of external assistance, if any, that might be needed.	Rapid secondary data review Contacts with key informants at national and local levels A few site visits, if possible, with purposive sampling: • observation • key informant interviews	Knowledge of the area and the effects of such events Skills in interviewing and analysing secondary data
Rapid assessment (***see Chapters 9 to 14***)	Following an initial investigation of a new sudden-onset emergency Following a major change or new crisis in an ongoing operation, or access becomes available to a previously inaccessible area	2-6 weeks	Analyses of the impact of the shock/crisis, the present situation, how it is expected to evolve and future risks in relation to: • food availability (supplies and markets); • livelihoods and the access that households in distinct socio-economic groups have to food, and the sustainability of their coping strategies; • the use that households in different groups make of food and their nutritional status. Recommendations on: • measures (food and/or non-food) that could: (i) ensure that people will have access to adequate food, and (ii) protect livelihoods and promote recovery; • what needs to be monitored and the contingencies to be planned for. A *rapid EFSA* early in an operation will define the geographic extent of the shock/crisis; provide the best possible overview of the situation and needs given the data and time available; and provide basic information for planning a response. An *in-depth EFSA* will provide a more detailed and comprehensive analysis of the situation and causes. It may cover all aspects or be focused on specific topics identified as being of particular concern.	Secondary data review Visits to all relevant administrative centres and logistic hubs Visits to a sample of sites (often purposive sampling): • key informant and community group interviews • a few subgroup interviews *or* a quick household survey Quick market review	Local knowledge Experience in similar situations Skills in: survey design; sampling; facilitating group and household interviews; food security and economic/market analysis; analysis of qualitative data; simple quantitative analysis.
In-depth assessment (***see Chapter 15***)	In response to early warnings of a slow-onset crisis when needs are not urgent When a situation has stabilized and more detailed understanding is required to improve targeting or programming Prior to preparing a new PRRO	1-3 months		Thorough secondary data review Extensive site visits • key informant and community group interviews • household survey with probability sampling *or* multiple in-depth subgroup discussions Nutrition survey Market survey	Skills in: survey design and management; food security, livelihood, economic/market and nutrition analyses; data management; statistical analysis of quantitative data; qualitative data analysis

- A key output of the rapid EFSA (and any in-depth EFSA) is a ***'planning scenario'***, or alternative planning scenarios, which provide(s) the basis for selecting and designing response options. The most likely scenario is defined based on the analysis of all the data collected concerning the present situation, its causes, and how it is expected to evolve. When there is uncertainty concerning the evolution, additional (e.g. best and worst case) scenarios are defined. See section 12.3.

Possible WFP programme action following each stage of assessment is indicated in Table 1-C.

Table 1-C
Possible WFP Programme Action Following Different Types/Phases of Assessment

Assessment type	*When*	*Possible WFP programme action*
Initial investigation (*see Chapter 8*)	Onset of a new emergency	No WFP action Immediate response EMOP EMOP Outline (preliminary appeal)
	New crisis or access to a new area during an ongoing operation	Allocations from available in-country resources
Rapid assessment (*see Chapters 9 to 14*)	Following an initial investigation of a new sudden-onset emergency	No WFP action EMOP
	Following a major change or new crisis in an ongoing operation, or access becomes available to a previously inaccessible area	Allocations from available resources Refinement of implementation agreements EMOP/PRRO budget revision or new PRRO, if needed
In-depth assessment (*see Chapter 15*)	In response to early warnings of a slow-onset crisis when needs are not urgent	No WFP action Initial EMOP in certain slow-onset situations
	When a situation has stabilized and more detailed understanding is required to improve targeting or programming	EMOP revision, if needed
	Prior to preparing a new PRRO	New PRRO EMOP/PRRO revision, if needed

Phases and sequencing of assessments, and links to response

The assessment process must always be adapted to the urgency of the situation, whether at the beginning of a crisis or as the situation and needs evolve in a continuing crisis.

Following a sudden-onset crisis:

- An initial investigation should normally be completed within one to two days.
- A follow-on rapid EFSA, when needed, should be completed within two to six weeks.
- An in-depth assessment may be needed once the situation has stabilized if it becomes clear that a more detailed understanding is required in order to improve the targeting of assistance and/or design responses to promote recovery and sustainable livelihoods. Otherwise, regular monitoring can check on the continued relevance of the ongoing operation and lead to adjustments if needed.

Initial investigations and rapid assessments build on information available from early warning systems and are conducted as foreseen in contingency plans, when such exist.

The process is illustrated in Figure 1b. The same process is applicable in all sudden crises, whether caused by a natural disaster (e.g. flood, cyclone, earthquake or landslide) or conflict. When the crisis results in population displacement, special attention is given to the displaced people but the situation and needs of the resident population must also be considered.

In case of a slow-onset crisis:

- When there are early warning signs of a possible food crisis in a particular area, an initial investigation (normally lasting between four to five days) will normally be conducted to determine whether a crisis is indeed imminent and, if so, to define what kind of follow-on assessment is needed and what it should focus on.
- If there has already been a substantial deterioration in the food security situation, a rapid assessment will be undertaken to determine the severity of the situation, the capacities of different population groups to cope, and the likely evolution. However, if time permits and resources are available, an in-depth assessment may be undertaken straight away to identify possibilities to protect livelihoods while also ensuring that the most vulnerable households will have access to adequate food.

The process is illustrated in Figure 1c. The same process is applicable in all slow-onset crises, whether due to drought, crop failure or economic collapse.

Examples of Sudden- and Slow-Onset Emergencies

	Sudden onset	Slow onset
Natural	Flood	Crop failure due to drought
	Cyclone/hurricane/typhoon	Crop failure due to pests
	Earthquake/tsunami	Livestock production failure due to drought or disease
	Landslide	
Human-made	Conflict	Economic collapse
	Forced population displacement	Protracted low-level conflict

Figure 1b: Assessment and Response following a Sudden-Onset Crisis

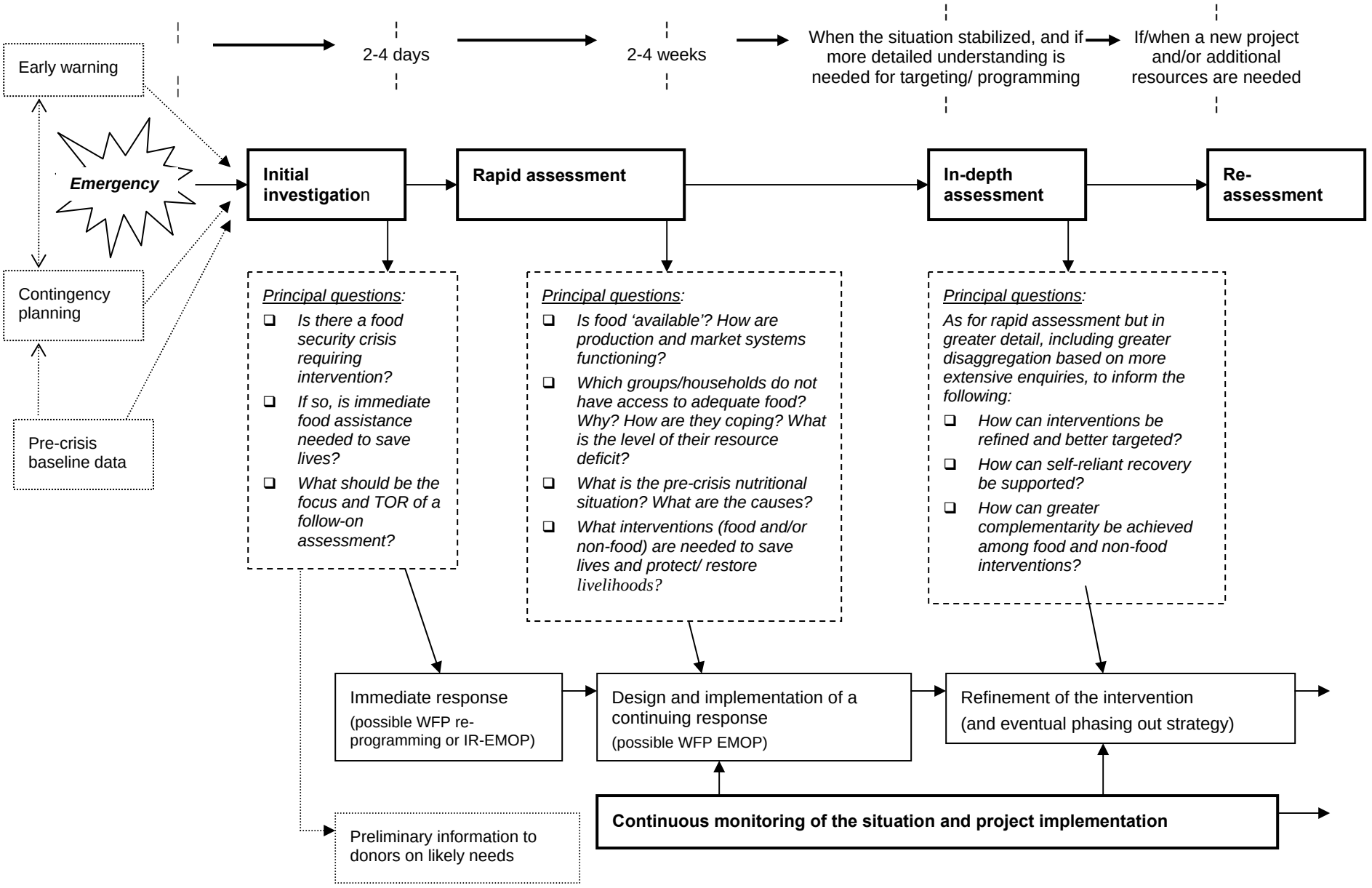
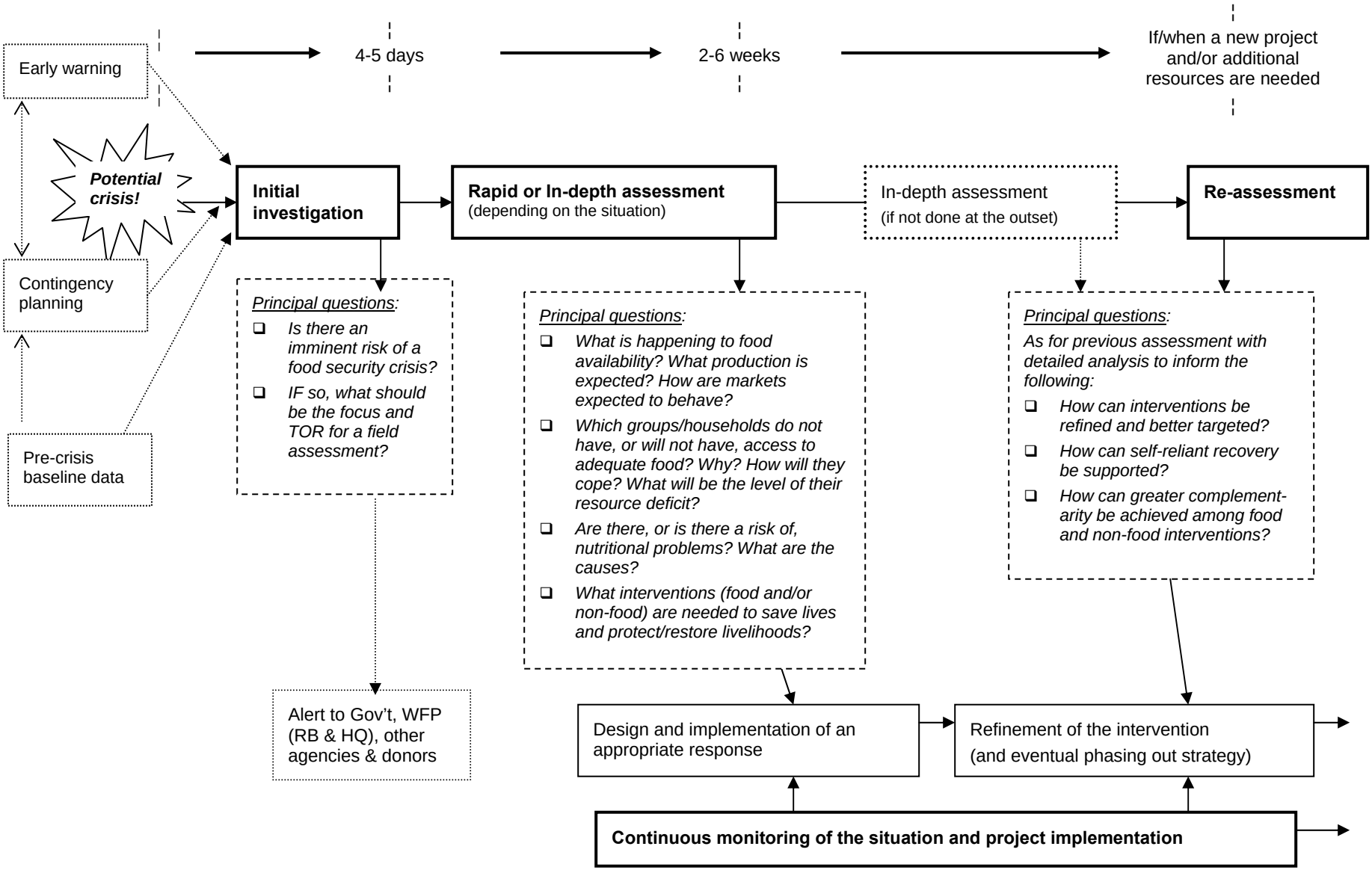


Figure 1c: Assessment and Response in case of a Slow-Onset Crisis



1.4 Links with early warning, contingency planning and monitoring

Figure 1d shows how information is – or should be -- shared among an EFSA, an early warning system, contingency planning processes and monitoring systems, and how all should build on the accumulated 'knowledge base' of data on the situation in country.[2]

In the early stages of a crisis, initial investigations and rapid EFSAs should draw on pre-crisis data in:

- existing agro-ecological or livelihood zone maps, food security profiles (including food habits and normal and exceptional coping strategies), population statistics, VAM studies (including data on the impacts of previous crises and post-crisis interventions)
- logistics capacity assessments;
- national and regional[3] early warning systems, and in early warning reports from international sources (e.g. those available on the WFP EPWeb);
- contingency plans (including plans for undertaking assessments).

In the later stages of a crisis EFSAs should draw on:

- the findings of ongoing monitoring at community level;
- pre-crisis data;
- early warning systems highlighting potential further risks and contingency plans drawn up to deal with them.

At the same time, EFSAs should identify:

- indicators that ongoing situation monitoring should focus on; and
- potential further crises for which contingency plans may need to be prepared.

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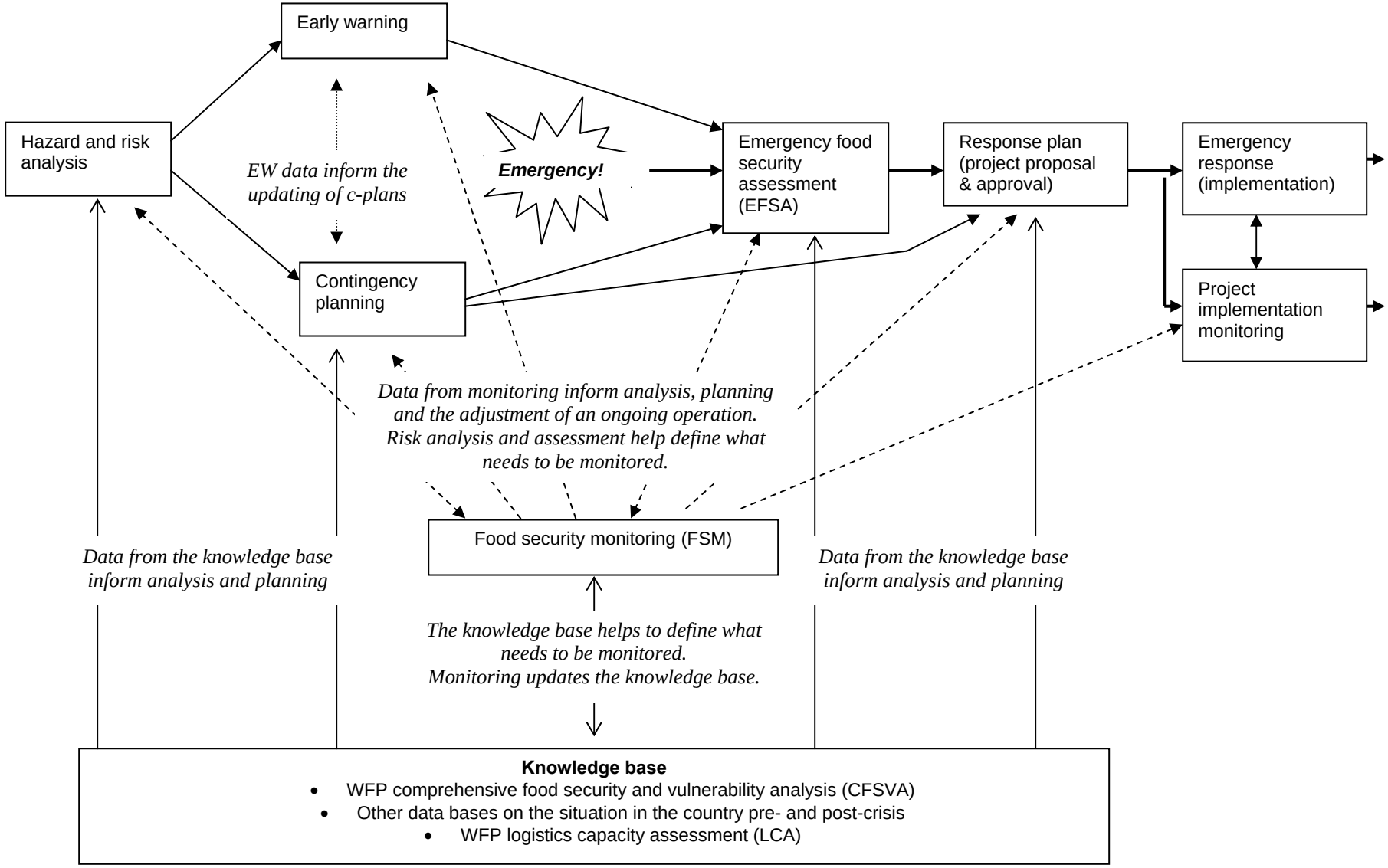
2 A common, shared database for all these information collection, analysis and storage processes would be ideal, but is rarely achieved.

3 Regional early warning systems relevant to food security risks currently function in West and Southern Africa.

Figure 1d: Information Links among the components of Emergency Preparedness, Assessment and Response



1.5 Main activities in planning and undertaking an EFSA

Planning and undertaking an EFSA involves 15 main activities, as shown in Figure 1e, which shows the general sequence. However, several of the activities will be undertaken in parallel.

Chapters 9 to 14 provide guidance on these activities for a ***rapid EFSA*** under six broad headings as follows:

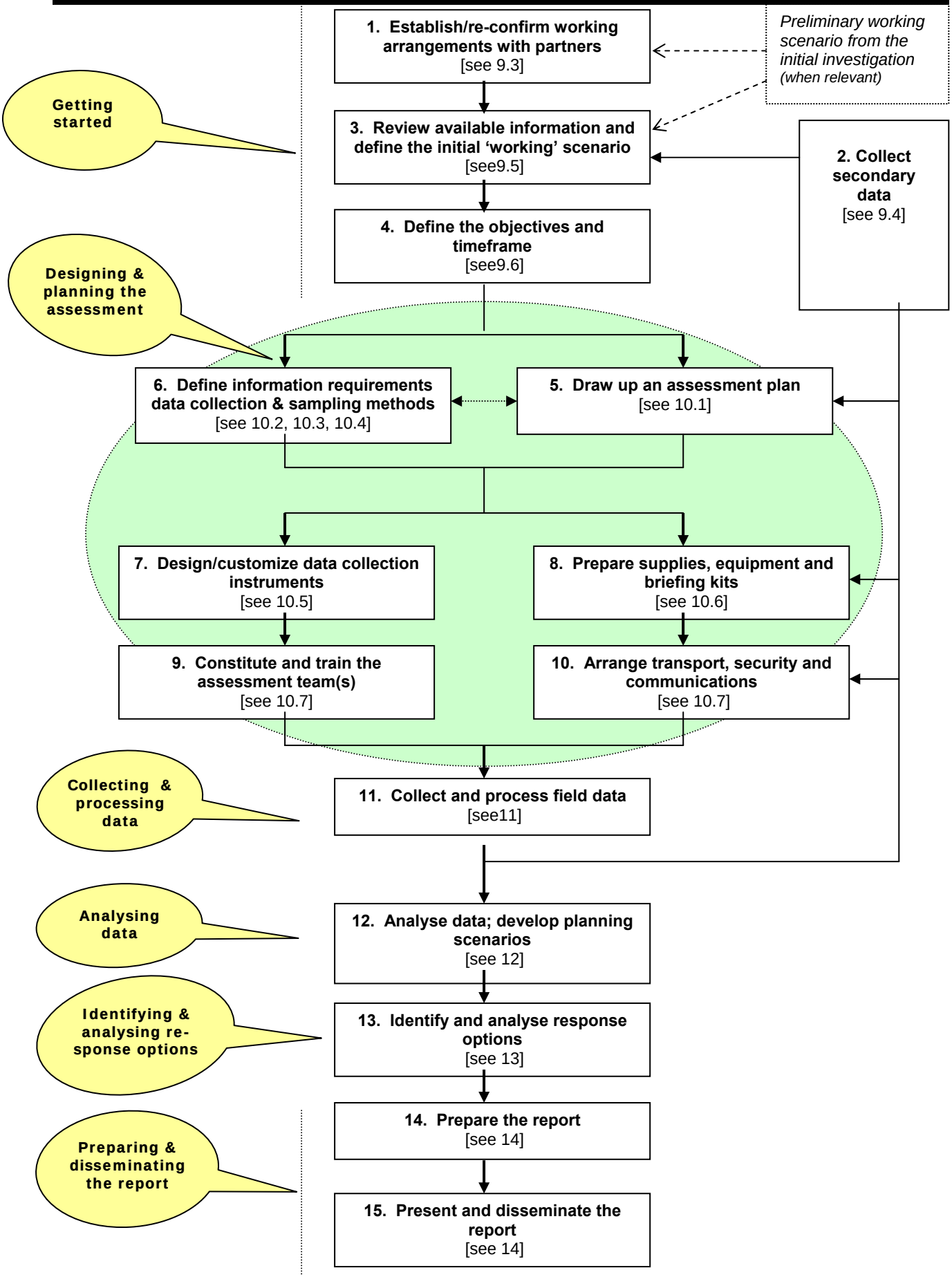
- *getting started* [activities 1-5] → Chapter 9
- *designing and planning the assessment* [activities 6-10] → Chapter 10
- *collecting and processing field data* [activity 11] → Chapter 11
- *analysing data* [activity 12] → Chapter 12
- *identifying and evaluating response options* [activity 13] → Chapter 13
- *preparing and disseminating the report* [activities 14 and 15] → Chapter 14

The design and planning stage is crucial, but often given inadequate attention. The quality of the outputs will, to a large extent, depend on the effort that is put into designing and planning the assessment. The whole process requires good management and experience in planning field surveys, as well as food security expertise.

An ***initial investigation*** is a compressed version of the above process, as described in Chapter 8.

An ***in-depth assessment*** follows the above process but in many cases will actually be implemented by a team of assessment experts from WFP headquarters (ODA) or another organization, or by consultants engaged for the purpose. The guidance provided in Chapter 15 in relation to an in-depth assessment concentrates on preparing the assessment (activities 1-4) and on managing the implementation by experts of the rest of the process.

Figure 1e **Activities in Planning and Undertaking an EFSA**



Chapter 2

Principles and partnerships for EFSAs

This chapter:

- summarizes the key guiding principles that help to ensure good, high quality assessments, see → section 2.1; and
- explains the importance of partnerships and how to foster partnerships for EFSAs, see → section 2.2.

The final section lists the various types of formal joint assessments that WFP participates in and summarizes some of the advantages and disadvantages of multi-sectoral assessments, see → section 2.3.

2.1 Guiding principles: how to ensure a high quality EFSA

Principles relating to planning and organizing an EFSA

✓ ***Timeliness: organize EFSAs to provide timely but reliable information and recommendations***

An initial investigation and rapid assessment should be initiated as soon as possible after the shock or initial reports of a crisis, and be completed quickly, so that appropriate assistance can be provided in time to reduce suffering, prevent life-threatening outcomes and protect livelihoods, when necessary. Subsequent assessments should be completed in time to support proposals for the continuation or expansion of assistance, when needed, taking account of lead times for the approval of projects and the delivery of commodities.

Information that does not reach decision-makers in time to inform (influence) the decisions that have to be taken is not useful. There may be trade-offs between accuracy and timeliness: get the balance right. Tell decision-makers how much time will be needed to provide reliable information. If data are uncertain due to lack of time, say so.

✓ ***Promote broad participation and coordination***

Involve a broad range of stakeholders, if possible. Whenever possible, government and humanitarian agencies should undertake joint or complementary assessments. This can help to ensure that effective use is made of available expertise and other assessment resources and lead to agreed conclusions and coordinated responses. Joint contingency planning prior to a crisis can help to ensure collaboration in assessment. (The global memoranda of understanding (MOUs) signed between WFP and its major international NGO partners provide for collaboration in assessing food needs through joint assessments if feasible otherwise through the exchange of information.)

✓ ***Establish clear, agreed objectives***

Establish objectives for the assessment that are appropriate (tailored to the local situation), clear, realistic, written down, and agreed among all stakeholders participating in the EFSA. The objectives should specify the scope of the assessment, the outputs required and the period within which the assessment is to be completed and the report presented.

✓ ***Mobilize the required skills, experience and other resources for field assessments***

The quality of the assessment depends largely on the skills and experience of the personnel involved – including good management skills to manage the whole assessment process – and the adequacy of the transport and other resources mobilized for field assessment activities. The resources for the field assessment should correspond to the scale and complexity of the situation. The technical expertise required may vary with the assessment context: in some situations economic and nutrition expertise may be the priority while in other contexts anthropological experience may be critical, particularly with regard to understanding the social and political context and identifying the underlying causes of food insecurity and, therefore, appropriate interventions. Ensure that each individual assessment team going to the field has the necessary range of skills and experience and is gender balanced.

✓ ***Promote inter-sectoral perspectives and coordination/synchronization***

Collaborate with and promote inter-sectoral coordination and synchronization of assessments in order to facilitate the development of a comprehensive inter-sectoral response strategy that integrates food and related non-food responses in a broader framework, as and when appropriate. Narrow sectoral approaches can overlook crucial inter-sectoral influences and inter-relationships, and lead to inappropriate recommendations. An effective inter-sectoral body/mechanism at the country level is needed to coordinate the overall assessment process.

✓ ***Regional coordination***

Assessment design and analysis should be coordinated at the regional level when a crisis affects a number of neighbouring countries and a regional inter-governmental body exists to coordinate information and policies among those countries. This should include agreement on common standards, assessment strategies and reporting formats in order to permit inter-country comparisons. Governments and agencies should cooperate in seeking appropriate harmonization. However, recommendation and responses should be developed to meet the particular needs and circumstances of each country individually, avoiding inappropriate standardization of response interventions across countries.

✓ ***Strengthening national (and regional) capacities***

Whenever possible, national and regional capacities should be developed/strengthened as part of and prior to the assessment process.

Table 2-A

Some prerequisites for a high quality assessment

For an EFSA to produce quality outputs and enable appropriate programme interventions to be planned and implemented in a timely manner:

- the objectives and terms of reference must be appropriate, realistic and agreed;
- the assessment process must be carefully planned and managed, including preparatory work as well as field work;
- assessment team members must have relevant skills and experience, and work together as a team;
- optimal use must be made of information that is already available including pre-crisis data and, in the case of an ongoing operation, monitoring data; and
- the preliminary findings, conclusions and recommendations must be thoroughly discussed with all main stakeholders, and the final versions be widely disseminated.

There is always a trade-off between speed and accuracy including depth of understanding of the situation. In addition, while every effort must be made to mobilize the resources for a thorough assessment, the scope and depth of an assessment sometimes has to be tailored to the resources and time available. In all cases, close attention to the above aspects is essential to get the most out of the resources and time available.

The following are essential for any EFSA:

- technical capacity to design and supervise the assessment;
- a seasoned and capable team leader for each assessment team;
- the administrative capacity to manage the assessment logistics;
- the material and financial resources to carry out the assessment; and
- the collaboration of relevant administrative and security bodies and arrangements for coordination with other key partners.

When external assistance is needed, request support from the regional bureau or ODAN (Rome headquarters), or engage external consultants in consultation with the regional bureau or ODAN.

Principles relating to data collection and analysis

✓ ***Make optimal use of available information; be focused in primary data collection***

Build on information that is already available in pre-crisis baselines, other data bases, and from secondary sources, after rapidly checking its present validity and relevance. Focus primary data collection on what is needed to complement or check the continuing validity of available secondary data in order to be able to analyse and draw conclusions about the food security situation and livelihoods. Know how you will use data before you plan to collect them.

✓ ***Use multiple sources and methods; triangulate***

In order to achieve an adequate and accurate understanding quickly and economically:

- use both qualitative and quantitative methods and information;
- use both secondary data (existing reports) and primary data (new data specifically collected for the assessment);
- consult women, men, youth and elderly people; *and*
- compare (triangulate) information from different sources to get as complete and balanced a picture as possible, including an understanding of different perspectives and interests.

✓ ***Ensure transparency (and provide feedback)***

Follow agreed standardized procedures for data collection and ensure that community leaders, local officials and other concerned agencies understand the data collection process, the analytical approaches used and, therefore, the basis for the conclusions. Share tentative conclusions with these groups as well as with other partners in the assessment process. Whenever possible, make the raw data available to other stakeholders to enable replication of conclusions, encourage further analysis and build trust. (In some situations, however, some sensitive information may need to be withheld.)

Provide feedback to all interlocutors on the assessment findings and recommendations, and keep them informed about decisions taken as a result of the assessment.

✓ ***Seek consensus but respect and record differences of opinion***

Seek to build consensus among all stakeholders, including the government, local authorities, and other concerned agencies and NGOs, on the findings, the interpretation of data and the conclusions. When consensus is not possible, record the different opinions (especially those of local stakeholders) in a respectful, mutually acceptable and constructive manner.

✓ ***Be seen to be objective; consider the accuracy of data and be sensitive to possible biases***

Being objective – and being seen to be objective and consistent in your approach – is essential in order to build and maintain respect trust. Measure (compare) the situation against accepted standards. Collect information from a broad range of people representing all the different groups in the population, including women and the poor. Consider – estimate, when possible – the likely margin of error in data and its significance for the conclusions being drawn or the calculations being made. If data are only approximate, say so and specify a range rather than an absolute figure. Be aware of possible biases in people's perceptions and reports, including those of assessment team members.

✓ ***Differentiate and disaggregate: be cautious about generalizing***

Examine separately the situations of distinct (socio-economic) population groups and geographic areas where the severity of the effects of the shock/crisis has been different. Consider both direct effects and indirect effects, especially on livelihoods. The situation and needs may vary considerably between different locations as well as among different groups. Look out for groups and individuals with special needs/vulnerabilities. Record the specific areas or groups to which particular data relate. Distinguish, as much as possible, the effects of the shock/crisis from chronic conditions that already existed.

✓ ***Understand the causes and dynamics of the situation; generate scenarios***

Collect data (both quantitative and qualitative) on changes, trends and the reasons for them as well as on the current situation and its underlying causes. Consider seasonal factors and what other events could affect the evolution of the situation. Generate one or more scenarios for at least the next 6 to 12 months.

✓ ***Respect your interlocutors; be sensitive to their situation; don't jeopardize their safety***

Respect the right of people to not to answer questions if they so choose. Take up as little of their time as possible. Avoid asking unnecessary questions, especially of people who have recently experienced a traumatic event. Be aware of the political and security context and take care not to increase the risks to which people are exposed. Copy any important data from documents found in the field: don't take the originals away from their owners.

✓ ***Record sources***

Take care to record the sources of all data collected.

Principles relating to reporting and following up on an EFSA

✓ ***Provide feedback to all stakeholders***

Present and discuss findings and tentative recommendations to all the main stakeholders *before* finalizing the report. Provide them with the final report as quickly as possible after that – within a few days, if possible.

✓ ***Ensure that the report itself meets minimum standards***

The report must be clear and as precise and concise as possible. Maximum use should be made of tables, charts and maps. Assumptions and any gaps, uncertainties or potential biases in data should be clearly stated and the implications for the conclusions and recommendations explained. The methods used must be described. The format in Table 1-A (in Chapter 1) should be adapted to the needs of the situation.

✓ ***Ensure that recommendations are specific, justified and prioritized***

Recommendations for responses (and any follow-up assessment) must be specific and clearly linked to the data and analyses presented. They should be prioritized and the report show clearly how they fit into a coherent overall assistance strategy with other sectors.

Table 2-B

Sphere Standards relevant to EFSAs [1]

Common Standard 2: Initial Assessments

"Assessments provide an understanding of the disaster situation and a clear analysis of threats to life, dignity, health and livelihoods to determine, in consultation with the relevant authorities, whether an external response is required and, if so, the nature of the response."

Key indicators include:

- Information is gathered using standardised procedures and made available to allow for transparent decision-making.
- Through consultation, the assessment takes into account the response of the local and national authorities and other actors and agencies.
- Local capacities and strategies to cope with the disaster, both those of the affected population and the surrounding population, are identified.
- The assessment takes into account the responsibility of relevant authorities to protect and assist the population on the territory over which they have control, and takes into account national law, standards and guidelines applicable where the affected population is found, as they conform with international law.
- The assessment includes an analysis of the operating environment, including factors affecting the personal safety and security of the affected population and of humanitarian staff.
- Estimates of population numbers are cross-checked and validated with as many sources as possible, and the basis of the estimate made known.
- Assessment findings are made available to other sectors, national and local authorities and representatives of the affected population. Recommendations are made on the need for external assistance, and on appropriate response that should be linked with exit or transition

[1] The Sphere Project (2004). *Humanitarian Charter and Minimum Standards in Disaster Response*.

strategies.

Food Security Assessment and Analysis Standard 1

"Where people are at risk of food insecurity, programme decisions are based on a demonstrated understanding of how they normally access food, the impact of the disaster on current and future food security and hence the most appropriate response."

Key Indicators:

- Assessments and analyses examine food security in relevant geographic locations and livelihood groupings, distinguishing between seasons, and over time, to identify and prioritise needs.
- The assessment demonstrates understanding of the broader social, economic and political policies, institutions and processes that affect food security.
- The assessment includes an investigation and analysis of coping strategies.
- Where possible, the assessment builds upon local capacities, including both formal and informal institutions.
- The methodology used is comprehensively described in the assessment report and is seen to adhere to widely accepted principles.
- Use is made of existing secondary data, and the collection of new primary data in the field is focused on additional information essential for decision making.
- Recommended food security responses are designed to support, protect and promote livelihood strategies, while also meeting immediate needs.
- The impact of food insecurity on the population's nutritional status is considered.

2.2 Partnerships in EFSAs

Why partnerships?

Partnerships are important for a number of reasons, including:

- to achieve shared understandings of the situation and needs, and shared ownership of the conclusions;
- to enhance the quality of the assessment and speed up completion by taking advantage of the skills and other resources that are available in different organizations and institutions;
- to permit a comprehensive assessment, and increase confidence in findings and the interpretation of data, by creating conditions for cross-checking data from different sources, perspectives and sectors; and
- to increase transparency.

The meaning of 'partnership'

A true partnership involves:

- shared goals, mutual respect and trust – this includes respecting differences and emphasizing complementarities;
- shared ownership of the activity including responsibility for its success or failure;
- joint design and joint decision-making about implementation – this includes a willingness to be flexible and respect the resources and strengths that each organization brings;
- willingness to give up a certain amount of independence to pursue the joint activity; and
- commitment to transparency and accountability to all stakeholders, including the affected population.

A written agreement helps to clarify responsibilities and roles.

[Adapted from *The NGO Partnership Framework*, see WFP PDM]

What forms of partnerships?

Partnerships may take different forms depending on the technical skills, experience and other resources that each partner brings:

- A 'core' group of partners should form a taskforce to organize the whole assessment process including design and planning, implementation, analysis and reporting.
- Other partners may be involved in particular stages or for specific aspects,[2] for example:
  - Design and planning – e.g. national statistics offices/institutes; national or international institutions and NGOs with particular expertise in survey design.
  - Field data collection – e.g. government entities and NGOs already working in certain of the areas to be covered and/or having survey/assessment experience.
  - Data analysis – e.g. national statistics offices/statistical institutes; institutions and NGOs with particular expertise and capacity for data processing and analysis.
  - Markets – government entities and organizations with specific economic and markets study expertise.
  - Nutrition – institutes and organizations with specific expertise in nutrition, including surveys or biochemical analysis (to test for micronutrient deficiencies).

Whenever possible, each partner should commit resources to the assessment and, to the extent possible, to following up on the final recommendations. When necessary, WFP or another organization or donor may pay the expenses of personnel from national institutions or organizations. In some cases, a specialist organization may be contracted to undertake specific tasks. Whatever the arrangements, all partners must be ready to work together for the agreed objective in line with the principles outlined in the box above and avoid the kind of problems illustrated in the box below.

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[2] This may include organizations with which WFP has 'stand-by' agreements at the international level, see WFP *Emergency Field Operations Pocketbook*, 10.7.

Examples of problems that can arise in partnerships

"Disagreements occurred with various WFP partners over differences on: methodological issues; timelines; definition of 'most vulnerable'; interpreting conclusions; the level/duration/type of assistance needed (e.g., the question of 'number in need' was often debated), as well as what information to include in the final report."

[From the summary of WFP staff responses to a questionnaire concerning experience with assessments, 2003]

Broad-based EFSA partnerships

For an EFSA, the ideal is a *broad-based*, ***joint food security assessment*** that:

- is conducted on the basis of a previously-agreed protocol concerning methods, standards, roles and responsibilities; and
- involves all relevant government entities, international agencies, NGOs and donors as 'core' partners.

Normally, such a process should be led by a taskforce convened by the government with the support of WFP and the other partners. The advantage of such a process is that it provides an opportunity to reach consensus on the interpretation and analysis of data, which, in turn, provides a basis for cooperation in implementing whatever responses are found to be required. Both the process and the product are jointly owned. Prerequisites for a broad-based, joint assessment are:

- an effective standing (permanent) coordination arrangement that brings the main food security partners together regularly;
- a detailed joint plan for organizing assessments as and when needed (see Annex A1 on assessment preparedness); and
- mutual respect and a commitment by all partners to work together in the pursuit of the common objective and to find practical, pragmatic solutions to the problems that will inevitably arise.

For practical reasons the partnership should not be *too* broad. It should be limited to groups and individuals that have a specific contribution to make to the assessment and/or to decision-making based on the findings and recommendations.

Example of an arrangement for broad-based joint assessments

The Kenya Food Security Steering Group (which is convened by the Office of the Prime Minister and includes a range of government ministries and agencies, WFP, UNICEF, USAID-FEWSNET and a few key NGOs) has drawn up procedures for conducting rapid food security assessments triggered by deterioration in early warning indicators.

Under these procedures, contained in a *Field Assessment Handbook,* teams comprising national- and district-level government officials, and representatives of WFP, UNICEF, operational NGOs in the area and donor organizations undertake assessments following a clearly defined methodology and using a standard report format/data collection instrument.

(For details, see *Rapid Food Security Assessment Missions in Kenya*)

WFP-led or jointly-led EFSAs with partners

When arrangements are not in place to enable a broad-based joint assessment to be organized rapidly, WFP takes the initiative – on its own or together with one or two governmental or other organizations – to organize the assessment and involve relevant government entities and other partners as much as possible and appropriate in the circumstances. In this case, WFP (with the other 'lead' agencies, if any) is responsible for the assessment and its conclusions but actively seeks the participation of others who have relevant skills and local experience, respects and acknowledges their contributions, and tries to ensure transparency in the process and production of the outputs.

Examples of WFP- and jointly-led partnerships

1) *Darfur, Sudan*: For an in-depth assessment of the food and nutrition situation resulting from the conflict in Darfur, WFP joined with the US Centres for Disease Control to conduct coordinated food security and nutrition assessments.

2) Sri Lanka: Following the tsunami disaster (December 2004), WFP joined with ILO, UNICEF and the Medical Research Institute to conduct a rapid household and nutrition survey, and undertake a quick market analysis.

Regional partnerships

In case of an emergency (e.g. a major drought) that affects a number of neighbouring countries, coordination of the assessments within the different countries will be important to enable comparisons to be made.

- Where a ***regional organization*** exists and is able to facilitate such coordination (e.g. SADC in Southern Africa or CILLS in West Africa), that organization will be a key partner, and WFP and other international partners should work with them to facilitate coordination in the design and implementation of assessments in the individual countries.
- Where no regional organization is able to ensure such coordination, the ***WFP regional bureau***, working with other international partners and the WFP country directors, should endeavour to achieve the maximum possible level of coordination in the design and implementation of assessments in the individual countries.

Table 2-C

How to foster effective partnerships

Serve as a facilitator. Provide leadership when necessary, but emphasize that the assessment is a joint effort. Don't expect others to "support WFP". The following are some basic do's and don'ts:

- Draw up a table summarizing the expertise and capacities that each partner can bring to the assessment, their particular interests, and where they are working. Share it with everyone and use it as a basis to discuss and agree who should do what, when and where.
- Encourage frank and open discussions, and keep everyone informed of progress and any issues that may arise, but avoid too many large meetings.
- Get everyone to agree on objectives.
- Form small groups to follow up on specific technical issues, such as sampling methods and the design of data collection instruments, and prepare agreed-upon guidance notes. Ensure that everyone receives copies.
- Secure realistic commitments concerning the personnel and other resources everyone will provide for the assessment, when and for what period they will be available.
- Write it all down – who will be responsible for what within what time period – and give/send copies to everyone rapidly.
- Organize briefing and training sessions, when needed.
- Be sensitive to the expectations (and agendas) of different individuals/ organizations, and to possible conflicts of interest.
- Ensure that the process of analysing the data and preparing recommendations is transparent.
- Ensure that contributions are acknowledged.
- Stick to what has been agreed. Avoid unilateral actions (going it alone).

Table 2D

How deal with problems in partnerships

When a problem arises, address it quickly and openly:

- Take a problem-solving approach; avoid confrontation.
- Focus on what can be agreed and try to find a mutually acceptable compromise that respects the essential objectives and objectivity of the assessment.
- If the problem is fundamental to the whole assessment, ensure that it is thoroughly discussed among all partners and seek the broadest possible consensus on how to proceed.
- If no resolution or acceptable compromise can be found, agree that a 'joint' assessment is not possible but that both parties will continue to exchange information and coordinate their assessment activities.

Consult the regional bureau and HQ if necessary (ODAN or PDPN, as appropriate).

2.3 EFSAs and other (joint) assessment processes

In addition to the three types of EFSA described in 1.3, WFP and other food security partners may be called on to participate in multi-sectoral assessments organized by the government, the UN Country/Disaster Management Team or the UN Office for the Coordination of Humanitarian Affairs (OCHA). In addition, WFP collaborates with UNHCR and FAO in the formal joint assessments. These various assessment processes are listed in Table 2-E, which also indicates the specific guidance material that should be used during such assessments in conjunction with the present EFSA handbook.

Table 2-E
Joint Assessments in which WFP ParticipateS

Type of joint assessment	Guidance
UN Country Team and *UNDAC-assisted* inter-agency assessments of major natural disasters.	See 5.1 and *TOR for UNDAC teams*
OCHA-led Consolidated Appeal Process (CAP) inter-agency assessments in case of major or complex emergencies.	*CAP Guidelines* and *CAP Needs Analysis Framework (NAF)*, IASC 2004/5
UNHCR-WFP Joint Assessments (JAMs), in refugee situations (and in some situations involving internally displaced persons (IDPs), when UNHCR is involved at the request of the UN Secretary General).	*UNHCR-WFP Joint Assessment Guidelines*, UNHCR and WFP 2004
FAO-WFP Crop and Food Supply Assessment missions (CFSAMs) in case of major crop failures due to natural disasters (including pest attacks) or conflict.	*Guidelines for Crop and Food Supply Assessment missions*, FAO-GIEWS 1996 (expected to be updated in 2005)
UN-World Bank Post-Conflict Assessments (PCNAs), sometimes called *Joint Assessment Missions*.	*Multilateral Needs Assessments in Post-Conflict Situations*, UNDP-WB-UNDG, 2004
Note The CD-ROM includes the guidelines for the joint assessment processes listed above. All these are, or will be, compatible with the guidelines in this handbook, which are also consistent with the 'Sphere' standards.[3]	

The principal opportunities and limitations associated with ***multi-sectoral assessments*** are summarized in Table 2-F. An alternative to a multi-sectoral assessment is to have coordinated sectoral assessments within the same general time period (the same season). Provided each sector assessment uses the same geographical area breakdowns when collecting information and/or the same breakdowns among distinct population groups, cross-sectoral analysis will be possible.

[3] The 'Sphere standards' are those laid out in: *The Sphere Project – humanitarian charter and minimum standards in disaster response*, 2004 edition. The Sphere Project is a collaborative effort of several NGO coordinating groups at the international level, ICRC and IFRC (which hosts the project secretariat). WFP and other UN agencies contributed to the development of the standards, many NGOs have signed up to them and some donors make their funding of NGOs conditional on respect for the Sphere standards.

Table 2-F
Opportunities and Limitations of Multi-sector Assessments

Opportunities	Limitations
• Analysis of different sectoral outcomes is simultaneous, enabling results to be correlated and analysed in relation to each other. • Multi-sectoral expertise on the same team allow for better problem analysis and prioritisation of sectoral needs. • Allows for planning and response strategies to be coordinated across sectors.	• Staff without sector specific expertise may collect sector data. • The assessment may lose focus and become unwieldy. • The time and effort required to coordinate across sectors may delay the whole assessment process. • The unit of analysis and sampling requirements may vary by sector.

Chapter 3

The EFSA analysis framework and assessment methods

This chapter outlines the overall approach to analysing the various aspects of food security and nutrition in an EFSA and the methods used, as follows:

- The 3 main themes of an EFSA – food availability and markets; livelihoods and food access; food utilization and nutrition; see → 3.1.
- How each of the 3 themes is addressed – 7 steps analysing impact, reaction, unmet needs/risks, causes and opportunities and, finally, response options; see → 3.2.
- The data collection and sampling methods used in EFSAs; see → 3.3.

Specific guidance on analysing each of the three themes is provided in Chapters 4, 5 and 6.

3.1 The 3 main themes of an EFSA

Food security comprises three elements: ***availability***, ***access*** and ***utilization***. In an emergency situation, any or all of these elements may be disrupted. Typically, people's means of ***livelihood*** are disrupted with substantial short- and long-term effects on their access to food. ***Nutritional status*** may also be affected by changes in food consumption and/or other public health conditions and care practices. The highlighted terms and concepts are explained, briefly, in Tables 3-A, 3-B and 3-C.

To address the questions outlined in section 1.1 the EFSA must examine: (i) the impact of the events on all the elements listed above; (ii) the extent to which the people and communities affected and the food supply systems on which they depend, are able to cope with and recover from the situation. This, in turn, depends on the political, social, economic, security, physical and environmental conditions in the area and the country as a whole. These ***contextual factors*** influence the ***capacities*** of the government, the market system, communities and households to cope and recover, and may pose ***constraints*** on their abilities to act. These factors also influence the ways in which international assistance may be provided, when needed.

Therefore, an EFSA must focus on the following three main themes, which constitute the principal lines of enquiry and analysis and are pursued simultaneously:

1. food ***availability*** – supplies and ***markets*** – in the area, and in the country as a whole;
2. households' ***access*** to food, their ***livelihood*** activities, and their actual food consumption; and
3. the ***utilization*** of food by households and the ***nutritional situation*** and risks resulting from changes in food access or use, social and environmental care, or public health-related factors.

The analysis of each theme must consider the underlying as well as the immediate ***causes*** of problems, take account of ***seasonal*** factors, and examine the general ***context***, ***capacities*** and ***constraints*** relevant to those problems and actions that might be considered to address them.

Table 3-A

Food 'availability', 'access' and 'utilization'

For the purposes of this Handbook, these terms are defined as follows:

- **Food availability** *is the amount of food that is physically present in a country or area through all forms of domestic production, commercial imports and food aid.*

Food availability in an emergency affected area or the country as a whole depends on: (i) the *stocks* and current *production* within the area; (ii) the capacity of the *market* – i.e. the willingness and ability of traders – to bring supplies in from elsewhere; and (iii) the stocks held and supplies brought into the area by the government and aid agencies. Sufficient food may be available in the country but not in the area if logistic or security constraints prevent the movement of supplies into the area from other parts of the country, or if traders have no incentive to bring supplies in due to a lack of purchasing power in the area, or if conflicting parties purposefully prevent food reaching a population group.

- **Food access** *is the households' ability to regularly acquire adequate amounts of food through a combination of their own stock and home production, purchases, barter, gifts, borrowing or food aid.*

Households access food through a combination of: their own production (of crops, livestock or fish farms); hunting, fishing or gathering wild foods; foods received through social networks; receipts from government or NGO distributions or food for work projects; barter exchange or purchases from the market. Cash for purchases may come from one or more of: sale of crops (food or cash crops); sale of livestock or livestock products; paid employment; casual labour; trading; the sale of collected products (e.g. fish, wild foods, firewood); sale of artisan or other non-agricultural household products.

- **Food utilization** *refers to: (a) households' use of the food to which they have access, and (b) individuals' ability to absorb nutrients – the conversion efficiency of food by the body.*

Food utilization by households depends on: (i) the *facilities* they have for food storage and processing; (ii) their *knowledge* and *practices* in relation to food preparation, the feeding of young children and other dependent individuals including sick and elderly people, (which may be impaired by a lack of appropriate nutrition knowledge, and/or culturally prescribed taboos that affect access to nutritious food according to age or gender); (iii) how food is *shared* within the household (whether according to the needs of individual members); and (iv) the state of *health* of each individual (which may be impaired by disease, poor hygiene, sanitation and health care).

Note: The definitions above are used by WFP in the specific context of assessments that examine: (i) the food supply situation in an area, (ii) what food households have access to (from all sources), and (iii) how they use and benefit from that food. Some other institutions use slightly different definitions for these terms, and refer to availability, access and utilization at national, community and individual levels, with utilization referring only to biological absorption.

Table 3-B

Livelihood

For the purposes of this Handbook:

A livelihood *comprises a household's capabilities, assets and activities required to secure basic needs – food, shelter, health, education and income.*

A livelihood is sustainable if it can successfully manage and mitigate the effects of external stresses and shocks, maintain or enhance its capabilities and assets, and provide for future generations. A household's livelihood depends on:

(i) the range of ***assets*** available to the household, such as natural assets (land, forests, water resources), physical assets (tools, etc.), human assets (health, skills), social assets (e.g. kinship networks), financial assets (e.g., income, savings, access to credit), and political assets;

(ii) the political, economic, social, legal and power structures in the society, which can be considered as '***enabling systems'***; and

(iii) the ***choices*** made by the household within the limits of the opportunities and constraints due to (*i)* and (*ii)*.

The assets may include both assets owned by the household (e.g. land, tools, skills, savings, health = ability to work) and communal assets to which the household has access (e.g. forests, rivers, wells, markets, communal food storage, microfinance services).

Livelihood is closely linked to food access in that it encompasses the ***household's production and means of acquiring income***. Access to shelter, health and education, also influence food access through the demands they place on cash resources in the short-term and their influence on production and earning capacity in the long-term.

Table 3-C

Nutritional situation

- '***Nutritional situation***' is used in this Handbook to refer to *the presence or risk of protein-energy malnutrition and/or micronutrient deficiencies*.
- ***Malnutrition***, in the context of WFP's work, refers to *a state of undernutrition, either resulting from inadequate intake of protein, energy or micronutrients, or from disease. This state may be characterized by a variety of symptoms such as wasting, stunting or other clinical signs*.

An assessment of the nutritional situation normally involves (i) anthropometric surveys and (ii) assessment of the presence or risks of micronutrient deficiencies.

- ***Anthropometric surveys*** *are sample surveys in which specific body measurements are taken of particular groups – usually 5 to 59 months of age – and compared with standard reference values to measure the prevalence of protein-energy malnutrition in a given population. Strict probability sampling procedures must be used*.

The usual measures of nutritional status in an acute emergency are weight-for-height for young children, mid-upper arm circumference for pregnant women and body-mass-index for other adults. In a protracted crisis, height-for-age and weight-for-age are also used for young children, see 14.1.

Protein-energy nutritional status is affected by food intake and the ability of the body to absorb and retain nutrients, which is affected by disease. These immediate determinants depend in turn on: (i) households' access to food; (ii) environmental health risks and the availability and use of health services; and (iii) care within the household, which includes food preparation and feeding practices. Health and care factors must therefore be included in the analysis of the nutritional situation (household food access already being a core element of the EFSA).

- ***Micronutrient deficiencies*** *arise when an individual absorbs insufficient quantities of the vitamins and minerals that are essential for growth and health*.

Micronutrient deficiencies can have serious consequences for the development of children and the health of individuals of all ages. The deficiencies most often of concern are anaemia, vitamin A deficiency and iodine deficiency (goitre). Assessments must also look out for evidence or risks of pellagra, beriberi, scurvy and ariboflavinosis (vitamin B2 deficiency), see 14.4. There is a risk of micronutrient deficiencies whenever a population does not have regular access to fresh foods, which may include wild foods, and particularly among a population largely dependent on food aid rations unless adequate quantities of fortified foods are included.

3.2 Addressing the 3 themes

After initially describing the event and identifying the geographic areas and population groups affected, the basic analytical process is as follows:[1]

Food security analysis, applied to each of the three themes

(i) ***Impact***: determining what has changed compared with the pre-crisis situation as a direct result of the event(s) and the reasons for the changes.

(ii) ***Reaction***: determining what is being done (by households, communities, traders, the government and others) in response to the crisis-induced changes, and the extent to which those measures compensate for the changes.

(iii) ***Unmet need and risks***: defining the nature and scale of present and foreseeable unmet needs resulting from the impact and reaction, and any possible further risks.

Response options analysis, applied across the three themes (bringing them together)

(iv) ***Causes, opportunities and constraints***: identifying the immediate and underlying causes of the problems (unmet needs and risks), the opportunities to address them and the constraints. This includes determining the capacities available and the importance of contextual factors that favour, or limit, the feasibility and probable effectiveness of different types of response.

(v) ***Response options***: determining the types of response (and targeting) that could be appropriate and feasible to address the identified problems (unmet needs and risks), the advantages and disadvantages of each option, and the most appropriate response or combination of responses.

You can think of the process as one of completing the boxes of the matrix shown in Figure 3a, working from left to right for each theme.

[1] This process, including a first version of figure 3b, was developed during a WFP staff workshop in 2004. The food security analysis part relating to food access and livelihoods is similar to the framework used by Save the Children UK and the Food Economy Group in their Household/Food Economy Analyses.

Figure 3a: **How to think about the EFSA analysis process**
(entries for illustrative purposes only)

	Food security analysis ----------→			*Response options analysis --→*	
Theme	**Impact =>**	**Reaction =>**	**Unmet need & risks =>**	**Causes, opportunities and constraints =>**	**Response options**
Food availability, including markets	*E.g. 20% reduction in aggregate supply;* *trade into the area interrupted.*				
Food access and livelihoods	*E.g. tools lost;* *50% reduction in household food production;* *20% reduction in cash income.*				
Food utilization and nutrition	*E.g. cooking utensils lost;* *nutritional status of children declining.*				
	Why? Why? Why? Context, capacities and limits				

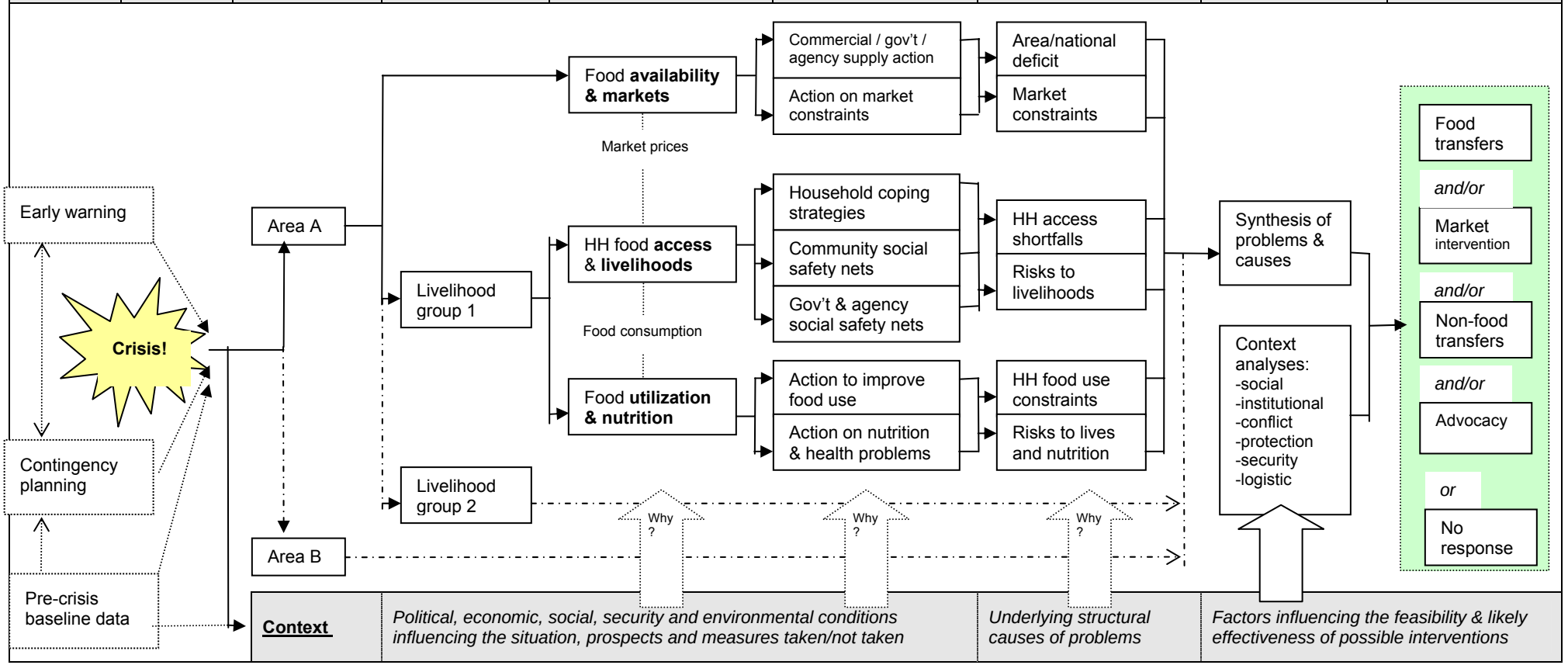
Figure 3b outlines the process in more detail, including the initial steps (1 and 2) of characterizing the event and defining the areas and populations affected. It shows the analysis process for one area and one livelihood group in that area, including the principal sub-components of 'reaction' and 'unmet need and risks' (steps 4 and 5). The same process is repeated for each geographic area and population group for which the impact of the event and the ability to cope are believed to be significantly different.

The context, capacities and limits have to be considered when asking the question "Why?" in relation to impact, reaction and unmet need/risk for the each of the three themes. The same considerations are central to the response options analysis (step 6).

Figure 3b: **The EFSA analysis process –7 Steps**

Food security analysis ----------→ *Response options analysis* ----------→

Steps	**1** → Trigger event	**2** → Area and population identification		**3** → Impact	**4** → Reactions to date	**5** → Unmet needs & risks	**6** → Causes, opportunities and constraints	**7** Response options
Main questions	*What's happened?* *What effects are expected?*	*Which areas are affected?* *Where to assess?*	*Pre-crisis characteristics: which groups are more or less at risk?*	*What's changed?* *What will change? (What season is it?)*	*What measures have been taken?* *What more are planned?*	*What's the present situation and prognosis?* *What are the present and future problems?* *What further risks?*	*What are the opportunities?* *What constraints?* *What implications?*	*What are feasible response & targeting options?* *What are the pros & cons of each?*



The following paragraphs explain the seven steps shown in Figure 3b. Sections 3.3 to 3.5 briefly outline the process for each of the three themes. More detail is provided in Chapter 8 and part V (chapters 12 to 14).

N.B. Figures 3a and 3b show the sequential process of analysis, but the data required for all steps in the analysis will be collected simultaneously during field visits.

An ***initial investigation*** will complete step 1. If it is determined that assistance could be needed, the initial investigation will also complete step 2 and make very rough, preliminary judgements for steps 3 to 7, based on available (mainly secondary) data, in order to generate an initial working ('best guess') scenario. That scenario will provide a basis for planning a follow-on EFSA and making initial projections concerning possible assistance needs, to be shared with the government and potential donors.

The ***EFSA*** will then revisit and refine step 2 and complete steps 3 to 7 on the basis of systematic data collection and analysis to produce a planning scenario (or scenarios) and detailed recommendations on response options.

Step 1: Characterizing the event and its likely effects

The first step, undertaken during the *initial investigation*, consists of:

- ***verifying*** that a 'shock' has indeed occurred or that a crisis is imminent;
- confirming its ***nature***, e.g. flood, crop failure, civil conflict, possibly a combination, and whether population displacement has occurred or is likely to occur; and
- anticipating the ***likely effects*** and whether assistance could be needed and, therefore, an assessment be necessary. This will be based on knowledge of the effects of previous similar events on people, food production, infrastructure and the economy, and on information immediately available concerning the present situation. For guidance, see 4.1.

Step 2: Identifying the areas and population groups to be assessed

The next step is to determine:

- the ***geographic areas*** where there has been an impact on food production, markets, livelihoods and access to food or where such impacts are likely to be felt in the coming months and, within those general areas, zones where the impacts on livelihoods may be different (see Table 3-D); and
- the ***population groups*** that are likely to be significantly affected. The groups will be identified on the basis of socio-economic characteristics (their principal means of livelihood and/or their wealth) in many cases, but of social or ethnic characteristics in a situation of conflict or social repression (see Table 3-E).

During the *initial investigation*, a preliminary determination will be made on the basis of available pre-crisis data, previous experience of such events, and information immediately available concerning the present situation. For guidance, see section 8.1. During the subsequent *EFSA*, a more precise determination will be made on the basis of a detailed analysis of both secondary data and primary data collected during the field assessment, see section 12.2.

Table 3-D

Distinguishing geographic zones

Geographic zones are identified to differentiate areas where the impact of the shock/crisis is expected to be significantly different due to the terrain and/or the predominant economic activities.

Existing 'livelihood zone' or 'agro-ecological zone' maps should be used, whenever available:

- A *livelihood zone* is an area that is reasonably homogeneous and distinct from neighbouring areas in terms of main food production and income activities, cultural practices and hazards affecting food security.
- An *agro-ecological zone* is a land resource mapping unit, defined in terms of climate, land and soils, and/or land cover, and having a specific range of potentials and constraints for land use.[2]

However, it may be necessary to add in *urban* zones (which may be missing from maps that focus on agriculture and rural livelihoods), and to superimpose geographic considerations relating to the *severity of physical impact* (e.g. distance from the path of the eye of a cyclone, distance from the coast in case of a tsunami, or the levels of fighting and insecurity in a conflict situation).

If no suitable zone maps exist, the EFSA team must decide on the most relevant characteristics, identify zones together with local experts and officials, and prepare their own maps (see annex B3).

Table 3-E

Distinguishing population groups

Population groups are identified to differentiate groups who, within any geographic area, may be differently affected by the shock/crisis and have different vulnerabilities – face different levels of risk – in the present situation.

In many cases, livelihood (or more general socio-economic) characteristics are relevant. In situations of conflict or repression, ethnic or religious characteristics may predominate.

Step 3: Analysing the direct effects on each of the 3 themes

'Direct effects' refer to changes resulting from the shock/crisis *before* any measures are taken to compensate for those changes (which are considered at step 4). At this step, the analysis must determine the nature and magnitude of these effects, now and in the coming months, on each theme as follows:

- food ***availability*** in the area – effects on food stocks, production, supply systems and ***markets***;
- ***livelihoods, households' access to food*** and food ***consumption*** – effects on (i) households' own production, income, purchasing power, receipts (transfers) from other sources and livelihood assets, and (ii) what people, including specifically vulnerable individuals, actually eat each day;
- ***households' use of food*** – effects on households' abilities to store, prepare and cook the food they have – and on ***nutritional status***.

The analysis must compare the present situation and prospects with what would be normal at this time of year in the area(s) concerned. An in-depth EFSA must analyse the underlying as well as immediate causes of food insecurity and any nutrition problems. A rapid EFSA should also seek to identify probable underlying causes but may not be able to analyse them in detail and draw specific conclusions.

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2 *Agro-ecological Zoning Guidelines* – FAO, 1996.

Step 4: Analysing reactions – the counter measures already taken or planned

The analysis must now determine the extent to which the crisis-induced changes are compensated for – both now (at the time of the assessment) and during the next 6 to 12 months – by measures already taken or planned. It must consider the present and future results of:

(*for food availability*)

- action taken or planned to increase ***food supplies*** and improve the functioning of ***markets*** in the area or serving the area. This includes action by the government, traders or aid agencies.

(*for livelihoods* and *households' access to food*)

- the ***coping strategies*** adopted by households to acquire food and protect their productive assets, and the sustainability and social acceptability of those strategies (see Table 3-F);
- action to provide food or other food-security related assistance to the most needy households through ***community solidarity*** (for example, some wealthier members of the community or those less affected by the shock/crisis may make food available to those who have lost access to their normal food sources);
- action taken or planned to provide food or other food-security related assistance through government or other ***safety net*** programmes.

(*for food utilization and nutrition*)

- action to help households make effective and efficient ***use*** of food. This may include action by the community, government or NGOs;
- action to prevent or correct ***malnutrition*** or ***micronutrient deficiencies***, including measures to address possible non-food causes of malnutrition (i.e. measures relating to health, water, sanitation and social care, where relevant). This may include action by the community, government, NGOs or other agencies.

Table 3-F

Coping (and 'distress') strategies

- **Coping strategies** *are activities that people resort to in order to obtain food, income and/or services when their normal means of livelihood have been disrupted*.

Some coping strategies may evolve into regular livelihood strategies during a protracted crisis or displacement while others remain as temporary activities that are resorted to only when normal means of livelihood are disrupted.

When analysing coping strategies in a particular situation, it is important to distinguish between:

- ***viable coping strategies*** that are sustainable and preserve future means of livelihood, dignity and nutritional status; and
- ***distress strategies*** that undermine future means of livelihood, dignity or nutritional status, increase long-term vulnerability, or are illegal or not socially acceptable.

The classification of particular strategies as being 'viable' or 'distress' strategies must be made on a case-by-case basis with the community concerned.

Step 5. Analysing unmet needs and risks

This step must answer the following questions in relation to each of the three themes:

- what is the outcome – the unmet needs, if any, resulting from the direct impact and the reactions (the counter-measures taken);
- what are the current and foreseeable (future) problems and further risks.

(for food availability)

- Whether there is or will be an abnormal ***food supply*** deficit in the area and the country. The magnitude of any such deficit and when it will be felt. The contingencies (possible future events) that could change the expected deficit and by how much might they increase or decrease the deficit. Possibilities for local purchases of food, in case food transfers could be needed (and there is not a deficit in the country as a whole).
- The extent to which ***markets*** can meet the demand for food now and in the coming months. The constraints, if any, that inhibit market functioning. The contingencies that could enhance or further inhibit the capacity of markets to meet the demand.

(for livelihoods and households' access to food)

- The areas or population groups within which households will experience a ***food access shortfall*** (see Table 3-G), when, and the magnitudes of the shortfalls. The contingencies that could increase or decrease food access for households in different areas or population groups, when and by how much. What people are consuming now and how might that change. This includes, in any area of chronic food insecurity, differentiating transient acute food insecurity from chronic food insecurity.
- Which ***livelihoods*** have been undermined and where. The livelihood assets that have been lost and not yet been replaced. The factors affecting the viability of particular livelihoods that have changed. Contingencies that could accelerate or further constrain the recovery of those livelihoods.

(for food utilization and nutrition)

- The areas or population groups within which households are (or will be) unable to make effective ***use of food*** including providing appropriate care for children and elderly and sick individuals. The contingencies that could change the abilities of households in different areas or population groups to use food effectively.
- The nature, severity and causes of any problems of ***malnutrition*** (nutritional status or micronutrient deficiencies). Any risks of such problems. The areas and population groups concerned. Contingencies that could result in changes to the nutritional situation or risks.

A key output from this analysis will be the generation of one or more ***scenarios*** concerning the present situation and how it is expected to evolve. A 'most-likely' scenario must be developed in all cases. (This will provide the basis for analysing possible response options and making recommendations at steps 6 and 7.) Additional scenarios – e.g. best- and worst-case scenarios – may be developed if there is considerable uncertainty about particular critical aspects or contingencies have been identified that could give rise to situations radically different from the 'most-likely' scenario.

Table 3-G

Household food access shortfall

- Household food access shortfall is the difference between food consumption requirements and what households are able to provide for themselves without adopting distress strategies.

'Food consumption requirements' refers to the intake of sufficient, safe and nutritious food which meets people's dietary requirements and food preferences for an active and healthy life. For further explanation, see Chapter 4.

Step 6. Analysing causes, opportunities and constraints

If the analysis at step 5 has revealed the existence of crisis-induced food security or nutrition problems or risks that communities cannot cope with unaided, the next step is to identify:

- the immediate and underlying ***causes*** of the various problems and risks;
- the ***contextual factors*** – political, social (including gender aspects), economic, security, physical and environmental conditions in the area and the country as a whole – which influence the feasibility and the appropriateness of the various assistance interventions (response options) that might be considered;
- the ***capacities*** available to implement different types of intervention/ response and the ***vulnerabilities*** that must be considered;
- the ***constraints*** which could inhibit implementation of different types of intervention/response; and
- any ***protection*** concerns and the possibility that certain types of response may have harmful side effects.

Step 7. Analysing response and targeting options

Building on the outputs of steps 5 and 6, this final step determines:

- which response and targeting options could be ***appropriate*** and ***feasible***;
- the ***advantages*** and ***disadvantages*** – including the likely effectiveness and possible unintended side-effects – of each of these options; and
- the ***most appropriate*** response or combination of responses and why.

The key outputs will be: (i) a matrix listing the response and targeting options that could be appropriate and feasible with their advantages and disadvantages; and (ii) a specific recommendation for what is judged to be the most appropriate response(s). These should be prepared in consultation and collaboration with experienced programme planners from the principal operational stakeholders (relevant government entities, WFP programme staff, partner UN agencies and NGOs).

3.3 Data collection and sampling methods used in EFSAs

Data collection: a combination of methods

All assessments use a combination of ***secondary data*** (i.e. data in existing reports and documents), and ***primary data*** (new data) collected by the assessment team(s) during carefully planned ***field visits*** to administrative (e.g. provincial and district) headquarters in the affected area and a sample of affected communities (e.g. villages, displaced persons camps, urban neighbourhoods). A basic principle of all assessments is that:

- maximum use should be made of available secondary data; and
- primary data collection should focus on filling information gaps, verifying the current validity of specific secondary data, where necessary, and learning about the perspectives and current priorities of the people themselves.

Primary data may be collected using rapid appraisal techniques only or a combination of rapid appraisal techniques and a household survey. Table 3-H shows the types of methods that are usually used in the various types of EFSA. No one approach is appropriate for all assessments. In each case, a combination of data collection techniques and an appropriate sampling procedure must be chosen taking account of:

- the information required, which in turn depends on the analytical frameworks being used, and the (secondary) data already available;
- the time available – the urgency with which findings must be made available to decision-makers;
- the human and other resources available for the assessment; and
- any practical (e.g. security and logistic) constraints, including constraints on access.

Depending on the circumstances and the methods being used, purposive and/or probability (random) sampling techniques will be used, see below.

Table 3-H
Main methods used to collect food security data in different types of EFSA

	Initial investigation	Rapid assessment	In-depth assessment	Nutrition survey [1]
Secondary data collection and review	√	√	√	√
Rapid appraisal (RA) techniques				
Key informant interviews	√	√	√	√
Community group interviews	a few	√	√	√
Subgroup interviews	-	some	-	-
In-depth subgroup interviews	-	-	(√)[2]	-
Household (questionnaire-based) sample survey	-	sometimes	(√)[2]	√

[1] During a nutrition survey, community group discussions are held and brief household questionnaires are administered while anthropometric measurements are taken of children.

[2] In-depth assessments use household sample surveys or multiple in-depth subgroup interviews.

When ***access*** to certain areas is restricted, notably in a conflict situation, the assessment can draw firm conclusions only for the areas that are accessible (and for which the data collected are believed to be representative). However, data for non-accessible areas can sometimes be collected from key informants in the places visited.

Sampling: the need for a careful, systematic approach

In all cases, a careful and systematic approach is essential when selecting the sites to be visited and the key informants, groups and/or households to be interviewed. This is necessary in order to reduce bias and obtain data that can be considered to be in any way representative.

The sampling methods that are usually used in association with particular data collection methods are shown in Table 3-I. Annex C8 provides explanations of the various sampling terms and methods. Guidance on choosing a sampling procedure for a rapid EFSA is provided in 10.4.

The main factors that determine the sampling approach and the sample size required are:

- the homogeneity of the population of concern – whether it is believed to be reasonably homogeneous in socio-economic terms or not; and
- the evenness of the impact of the shock/crisis – whether the severity of impact is believed to be more-or-less similar in all areas or not.

The more heterogeneous the population and the more uneven the impact, the more sophisticated the sampling approach needs to be and the greater the total sample size in order to be able to confidently draw conclusions concerning the population as a whole and any differences among different groups or areas. The initial investigation should provide reasonable indications concerning homogeneity and evenness, enabling an appropriate sampling design to be drawn up for a follow-on rapid assessment.

In practice, the time and resources available (especially for a rapid assessment) may limit the sample size. If this is the case, you cannot assume that the findings are representative of the population as a whole and great care must be exercised in drawing conclusions.

Table 3-I

Sampling methods usually used with particular data collection methods

	Rapid appraisal techniques				Household survey	
	Selecting sites	**Selecting groups**	**Selecting key informants**	**Spot-check household visits**	**Selecting sites or sub-sites**	**Selecting households**
Probability sampling						
• Simple random, systematic random or two-stage sampling [1]	√	-	-	√	√√	√√
Non-probability sampling						
• Purposive sampling	√√[2]	√√	√√	√	√[2]	-
• Snowball sampling	-	-	√	√[3]	-	-

√√ = sampling method most frequently (or always) used.

√ = sampling method sometimes used.

[1] The particular method of probability sampling used depends on what is known about the population of interest – see 10.3 and annex C9.

[2] Purposive sampling is used for the first stage of a two-stage sampling process when the area and/or the population is heterogeneous or the impact of the crisis is different in different areas and you need to ensure that all types of area or population group are included or want to be able to distinguish and compare them.

[3] Snowball sampling may be used for spot-check visits to households when the purpose is to find specific examples of particular coping strategies, for instance. It should *not* be used when the purpose is to gain a general impression of conditions and cross-check what groups have told you.

Chapter 4

Analysing Food Availability and Markets

This chapter provides a very rough, preliminary outline of how food availability and markets are analysed during an EFSA. The text will be improved and more detailed guidance developed during 2005/06. In the meantime, contact WFP headquarters, PDPE, for guidance and support.

> ***The objective*** is to find out: (i) whether there is, or will be, a crisis-induced food availability problem – a shortage of food supplies in the area and the country – and if so, its magnitude, when and for how long it will be experienced; (ii) whether there are problems of local food availability or household food access that could be reduced, and food security recovery hastened, by measures to improve the functioning and efficiency of markets; and (iii) what food stocks could be drawn on or what food could be available for local purchase, when and in what quantities, in case food aid would be appropriate.
>
> ***The decisions to be informed*** are: what types of food and/or non-food response would be appropriate; and, if food aid might be appropriate, from where should it be supplied.

The key steps are:

- Determining whether there is or will be an abnormal food supply deficit as a result of the shock/crisis and, if so, the size of the crisis-induced deficit.
- Estimating the extent to which the government and private traders are able to import food to make up the crisis-induced deficit.
- Estimating the capacities of markets to meet the demand for food in the crisis-affected areas and identifying any constraints.
- Identifying possible future events or decisions that could change the expected deficit, and estimating the amount by which by they might increase or decrease the deficit.
- Foreseeing the possible effects on markets of humanitarian food or other resource transfers.
- Determining whether local purchases of food could be possible without unduly disturbing the market and, if so, when, where and in what quantities.

This requires an understanding of the food supply systems in the affected area and the country as a whole, the macro-economic situation, how markets functioned previously and how they are functioning at present. These are aspects that joint FAO/WFP crop and food supply assessment missions (CFSAMs) assess in detail. If a CFSAM has recently been undertaken, the findings and conclusions of that mission will be used.

If there has not been a recent CFSAM, the EFSA team must:

- examine key ***food supply*** data using available secondary data and talking to key informants;
- examine key ***macro-economic*** indicators using available secondary data and talking to a few key informants; and
- observe conditions in ***markets*** in the affected area, and talk with traders and other key informants at all levels.

The EFSA team may also recommend whether and when a full CFSAM, or specific in-depth assessments of particular aspects (e.g. markets), should be undertaken. When reliable data are available, you should obtain and present the best available information and judgements, and highlight the aspects that are not fully covered in your report or for which only provisory conclusions can be drawn.

At the time or writing (May 2005) work is in progress on guidance for analysing food availability and linkages with markets. For the time being, this chapter presents some initial material as follows:

Understanding the issues: food supplies, macro-economic and policy aspects, see → section 4.1.

Analysing impact on food availability and markets, see → section 4.2.

Analysing market response, see → section 4.3.

Analysing likely effects on markets and possibilities for local purchase, see → section 4.4.

Tools to help organize and analyse market-related data, see → section 4.5.

N.B. In this chapter, the concern is with *food* markets. Labour markets and other markets are important for household incomes and must be considered in relation to analysing livelihoods and household access to food (chapter 5).

4.1 Understanding the issues: food supplies, macro-economic and policy aspects

Key questions – Is there or will there be a food supply deficit in the area and the country, what will be the magnitude of the deficit and when will it be felt? What are the contingencies (possible future events) that could change the expected deficit and by how much might they increase or decrease the deficit? Are there possibilities for local purchases of food, in case food transfers could be needed (assuming that there is not a deficit in the country as a whole)?

- Is there a food supply deficit in the markets you have surveyed? Can you compare market availability and the prices of major commodities and livestock with the situation in the past (i.e. before the shock)?
- What is the current food availability based on latest crop production information and what has changed as compared to past times (and which crops were most affected)? Where livestock or fishing are important food sources, what has changed in those sectors?
- Does the macroeconomic policy environment present an opportunity or constraint to addressing the supply problem?

Food supply issues

The need is to:

- determine the nature and severity of the impact of the 'event' on domestic food production[1] in different regions, on imports, exports and in-country trade flows, and on in-country food stocks; [2]
- estimate current in-country food stocks; and
- compare the current production, trade and stock situations with those in recent years and what would be normal for this time of year. Do this for both the affected area and the country as a whole, if possible.

This is particularly important if there has been, or will be, a food production failure, e.g. due to *drought* or *conflict*, or a reduction in food imports or increase in food exports due to an *economic crisis*. In other situations (e.g. following an earthquake or refugee influx), only a quick review will be required to confirm that there has *not* been any significant change in food availability.

During an ongoing operation, use the findings of a recent CFSAM, or a previous assessment if there is no reason to believe that the situation has changed in the meantime. Otherwise compile a table and charts showing the data for the last few (e.g. 5) years and current estimates, or projections. On this basis, determine: whether there is, or will be, a shortage of supplies in the area and the country; what food stocks could be drawn on; whether food would be available for local purchase (by the government, WFP and other agencies), if needed.

Macro-economic and policy aspects

If it is determined that there is an increased overall food deficit as a result of the shock/crisis, a quick analysis of macro-economic conditions is required

- identify trends in overall economic indicators, including foreign exchange policy (and reserves if data are available), especially in a slow-onset or protracted crisis;
- make informed judgements concerning the nature and severity of the impact of the 'event' on the national economy and on government expenditures and budget allocations for the food sector; and
- identify the effects of government policies, especially any recent changes in policy, on food production and trade.

This is particularly important in case of an *economic crisis* or when there has been, or will be, a severe *food or cash crop production failure*, e.g. due to *drought* or *conflict*. It could also be important following a *major earthquake* affecting important cities and industrial centres. In other situations (e.g. flash flood or refugee influx), only a quick review will be required to confirm that there has *not* been any significant change in macro-economic indicators.

The analysis may be undertaken by compiling a table and charts showing the data for the last few (e.g. 5) years and current estimates, or projections.

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1 Note: it can be difficult to estimate the impact on certain crops, especially root crops.

2 Data on in-country food stocks need to be looked at with care and, if necessary verified by physical inspection.

Table 4-A **Analysis and information requirements for a rapid EFSA**				
Theme	**Food availability including markets: (i) Food supplies**			
Possible types of analysis	Comparison of current stock levels, harvest prospects and import plans with what would be normal. [Drawing up food balance sheets would normally be done only by an in-depth assessment or CFSAM.]			
Possible information requirements		**Possible sources of data** 1 = pre-crisis; 2 = current & forecasts		
Pre-crisis data	**Current situation & forecast**	1	2	Sources
Last 5 years data on: • in-country food stock levels • cultivated area, yields & production of main crops • imports (government, commercial, food aid) of main food items • macro-economic factors and policy changes that have influenced food production, imports or exports	Current situation: • In-country food stocks Forecasts (including seasonal variations) for: • cultivated area, yield & production • imports (government, commercial, food aid)	√		National & provincial statistics offices
		√	√	Ministries of food, agriculture, commerce, trade
		√	√	Major donors: USAID/FEWSNET and EU food security units
		√	√	Import/export traders; forwarding agents
		√	√	District officials
			√	Local traders and observation (for informal cross-border trade)
		√	√	Extension workers (for local production)

Summarise your findings in a table as below:

Analysis of Food availability		
Direct impact	**Reaction (compensatory action)**	**Outcome (problems and risks)**
E.g.: *Estimated change in production prospects* *Estimated quantity of stocks destroyed* *Estimated change in gov't imports/ exports* *…*	*E.g.:* *Expected increase in commercial imports*	*E.g.:* *Estimated net change in food availability due to the shock/ crisis.* *Period(s) when supplies will be inadequate.*

Food market system and prices

Key questions – To what extent can the market meet the demand for food now and in the coming months? What are the constraints, if any, that inhibit market functioning? What contingencies could enhance or further inhibit the capacity of markets to meet the demand?

- What are the changes/ trends in terms of trade/ purchasing power of the crisis-affected group? If there is a food supply deficit, and will it drive up prices?
- Is there potential for local traders to make transfers from food surplus areas to deficit areas given the existing infrastructure and storage capacity and barriers to trade inflows?
- What is the potential of local actors to fill any food deficit through in-country transfers or imports (local producers, government, traders) given current trade policy and traders perceptions of government action and food markets?

The analysis of markets must:

- determine the impact of the 'event' on markets in the area and on the movement and trading of commodities in the country as a whole;
- compare how markets are functioning now with what would be normal for the time of year; and
- determine whether – to what extent – the market is able to meet the demand for food now and in the coming months (which depends in large part on whether markets in the affected area are integrated into the wider market system in the country).

This is particularly important in case of an *economic crisis* or *conflict* and in the immediate aftermath of a major disaster that has *destroyed infrastructure* over a large area, e.g. a major earthquake or cyclone.

The analysis may be facilitated by preparing: (i) maps showing the usual food trade flows within the country and seeing how (if at all) these have changed; and (ii) a diagram showing the usual flow of food commodities among producers, traders and consumers, and identifying how those flows have changed.

In case of a major influx of *displaced people*, it is important to examine the impact on *local* markets.

In case of *production failure* (e.g. due to drought), it will be important to analyse *price changes* but only a quick review will be required to confirm that there has not been any significant change in market capacities.

For the analysis it will be useful to:

- Map the links (integration) and competitiveness among markets.
- Compare trade flows to, from and within the area with what would be normal, for key food items.
- Compare local market prices and turnover with what would be normal, for key food items and a few other essential commodities.
- Consolidate the perspectives of traders and relevant authorities.
- Map areas where people no longer have access to functioning markets, and the reasons.

This may be done using data collected from: the ministries of food, agriculture, commerce, trade; district officials; market observations; interviews with traders; NGOs working in the crisis area; community leaders; subgroups from different population groups who may face particular problems in accessing markets (in situations of conflict or repression).

Why markets are important

Markets move food to ensure that surpluses are transferred to areas where there is unmet demand – both nationally and internationally. Thus markets help to determine local food availability. The cost of trading (buying, storing, moving, selling) plus profit margins determines the price of food. Therefore markets have a strong impact on food access.

The market analysis during a rapid EFSA will focus on the ***short-term changes*** in the affected area as a result of the shock/crisis and on the market for the ***main staple food(s)***. Longer-term changes, a more comprehensive analysis of macro-economic implications, and a broader range of food commodities would be included in a more detailed, in-depth follow-up study, such as a Crop and Food Supply Assessment Mission (CSFAM).

Table 4-B
Analysis and information requirements for a rapid EFSA

Theme	**Food availability including markets: (ii) Markets**
Possible types of analysis	Mapping the links (integration) and competitiveness between markets. Comparison of trade flows to, from and within the area with what would be normal, for key food items. Comparison of local market prices and turnover with what would be normal, for key food items, livestock, productive assets and inputs, and a few other essential commodities. Consolidation of the perspectives of traders and relevant authorities. Mapping of areas where people no longer have access to functioning markets, and the reasons.

Possible information requirements		**Possible sources of data** 1 = pre-crisis; 2 = current & forecasts		
Pre-crisis data	**Current situation & forecast**	1	2	Sources
Normal trade flows for main food items (map). Volumes of food commodities traded into/out of (i) the areas now in crisis and (ii) the country Prices of main food items and other essential items in markets, including seasonal variations	Current data on: • estimated volumes of food moving into/out of (i) the areas now in crisis and (ii) the country • prices of main food items and other essentials in markets • areas where there is no longer any exchange of goods with other areas Forecasts (including expected seasonal changes) for: • trends in trade flows • trends in prices • perspectives of traders and relevant authorities	√		Ministries of food, agriculture, commerce, trade
		√	√	District officials
			√	Market observations
			√	Interviews with traders
			√	NGOs working in the area
			√	Community leaders
			√	Local population

Types and sources of data

Use ***secondary sources*** to obtain data on food supplies, production, imports and exports, pricing and trade policies and the macroeconomic situation. Get countrywide or regional data from the ministries of agriculture, finance and commerce, or national statistics office, CFSAM reports, VAM Unit documents, European Union food security documents, World Bank documents, and USAID-FEWSNET.

Collect ***local market information*** through key informant interviews with government staff, traders, and NGO field staff. These interviews will help you to determine market accessibility, terms of trade, market demand, and changes in the functioning in the flow of markets as a result of the shock[3]. Market observations will help you find out what goods are available as well as their prices. Be sure to get, and anticipate, seasonal price changes, which can have a huge impact on food access for people who rely on market purchases for most of their food.[4]

[3] Market networks can be disrupted by conflicts as well as natural calamities such as floods, earthquakes or hurricanes.

[4] For example, price fluctuations were one of the main reasons why food insecurity dramatically increased in Malawi in 2002-2003.

Use ***community group interviews*** to gather data on access to markets, seasonal food shortages, changes in terms of trade, price fluctuations, and credit terms used by traders. Use a historical timeline in these gatherings try to capture major changes — for example, changes due to climatic variations, policy shifts, conflicts, macroeconomic shifts or demographic trends — that have occurred in the context of the community and affected food and livelihood security.

***Triangulation and interpretation*:** The information you obtain from group interviews and key informant interviews can be triangulated with observations in multiple markets. However, bear in mind that macroeconomic factors — inflation and currency devaluation — will affect prices and complicate the task of analysing market data.

Summarise your findings in a table as below:

Analysis of Markets		
Direct impact	**Reaction (compensatory action)**	**Outcome(problems and risks)**
E.g.: *Transport routes cut* *Purchasing power reduced* *…*	*E.g.:* *Traders not increasing flows due to lack of demand, but would be able to increase*	*E.g.:* *Local food availability problem due to lack of incentive for traders*

4.2 Analysing impact on food availability and markets

A market analysis begins with understanding food availability at a national level during normal times and then analyses the effects of the crisis on availability both at a national and local levels. The questions to be answered are:

- Do markets in normal times work well to ensure food availability at national and local levels?
- What has been the effect of the crisis on food availability nationally and in crisis-affected areas?

Four aspects need to be considered:

- **Supply:** understanding food production and trading patterns (especially for the most important staple foods)
- **Demand:** the factors market demand (e.g. household incomes and purchasing power, consumption preferences)
- **Prices:** market price trends and seasonality
- **Market functioning:** factors influencing private trader behaviour, including government regulation and market interventions.

The data you need and how to collect it is summarised in the sections below. This complements the main EFSA process. Some of the data may not available as "hard, quantified" data – rather focus on getting general levels/percentage shares/or best guesses.

Pre-crisis food availability

These data should already be available either in the WFP Country Office or with a leading partner in the agricultural sector such as the Ministry of Agriculture, FAO, or the World Bank. For some countries much of this data can be found in the latest FAO/WFP Crop and Food Supply Assessment. Check internet sources, agricultural research institutes, and WFP or European Union procurement officers for price data and information on traders.

Concentrate on getting the big picture on trends in demand and supply (seasonal trends and regional differences) and a general idea of how markets work in the country. It should take about 2 days to compile existing data. If you are short of time, focus on getting a "briefing" from an agricultural expert in FAO/World Bank, etc, and a procurement officer, if available. To some extent pre-crisis and current crisis data can be collected simultaneously but you will need an overview of the staple market and food availability at a national level in order to guide interviews with key informants.

Supply	Demand	Market prices	Market system
• National production (planted area & yields) • Marketable surpluses • Imports and exports (government & commercial) • Commodity flows (within the country and across borders) • Typical supply chain • Stocks including government reserves	• National food consumption (Food Balance Sheet) • How do people, particularly the vulnerable, normally access food? • Do any groups in the affected area have poor access to the market?	• Typical commodity prices and normal price seasonality • Prices in selected surplus and deficit markets *(this information may not be easily available)*	• Barriers and regulations • Market-related infrastructure • Private sector trading versus government /food aid distribution • Management of government reserves

Effect of shock on availability

These data can only be collected through key informant interviews, initial assessment reports and market place interviews. Visiting markets in the crisis-affected area is essential for a market analysis. At least one to two weeks should focus on collecting and analysing in-crisis data.

During the early stages of a crisis, access to people and information may be limited – therefore scan widely among government sources, UN agencies (including the UNDAC team, when present), NGOs, the internet, research organisations, donor agencies, etc to find people with relevant data and understanding.

Supply	Demand	Market prices	Market system
• Changes in expected harvest quantities • Changes in commodity flows and stock levels • Changes in imports and exports • Release of government reserves	• Observable shifts in consumption levels & market basket • Wage changes, distress sales volumes, consumption loans • National or external changes affecting incomes: trade restrictions (e.g. livestock export ban) or changes in international prices for cash crops (e.g. coffee price collapse)	• Change in price levels, particularly retail prices in affected areas • Changes in relative prices among markets (e.g. wages, cash crops, food crops, livestock)	• Change in market operation; outlets in crisis area • State of market infrastructure • Traders' plans in response to changes in the market

4.3 Analysing market response

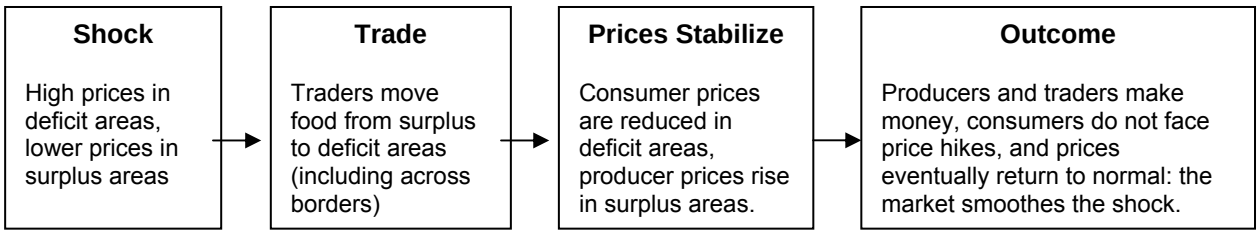
The questions to be answered are: To what extent can the market meet the demand for food now and in the coming months? What are the constraints, if any, that inhibit market functioning? What contingencies could enhance or further inhibit the capacity of markets to meet the demand?

If markets are functioning properly, they will respond to effective demand (i.e. the purchasing power to buy food) and increase supply as prices rise, as illustrated in Figure 4a. However, as prices rise, this may reduce access to food for vulnerable households. In practice, markets may not function properly if there are trade barriers, significant damage to infrastructure or high insecurity, or if markets are not integrated within the country or are not competitive. This will increase the food gap between what is needed and what the market is able to supply.

The questions to be answered are:

- What will be the probable change in commercial trade flows into the affected region?
- Is there a significant reduction in vulnerable household purchasing power?
- What is the estimated food supply deficit?

Figure 4a: **An ideal market response to a food supply shock**



What will be the probable change in commercial trade flows into the affected region?

***Objective*:** to understand to what extent markets can cover the demand during the crisis by providing adequate supplies of food at affordable prices.

Using the data collected on market functioning, both in normal times and during the crisis, estimate the likely ability of the market to respond to food needs in the crisis region. The probable change in commercial imports will depend on the scale of the crisis (the rise in real demand for food from the market) relative to normal market capacity and an assessment of the market's responsiveness to changes in price (how supply and demand change with price).

The following analysis tools are provided in 4.5:

- Food availability trends
- Food balance sheet
- Market structure diagram
- Graph of price trends.

When projecting likely market responses, you may assume that in a well-functioning market the private sector will not be able to increase import capacity in the short-run by more than about 20% on highest level of imports in recent years, or in-country trade flows by more than about 50%.

Is there a reduction in vulnerable household access to food?

***Objective*:** to understand to what extent vulnerable households will lose access to adequate food as a result of the crisis.

During a crisis, poor households can lose their access to food through the market either because prices are too high or because they have lost their income sources. Four basic scenarios may be distinguished, as shown in Table 4-C.

Possible changes in access are:

- **Scenario 1:** Markets are working but the purchasing power of poor households is eroded by high prices: potential problems in food access for the poor and people whose income has been reduced, or increased debt to pay for food.
- **Scenario 2:** Markets are not working well and prices are high: definite problem of food access for the poor and potentially also for other members of the community.
- **Scenario 3:** Markets are working well and stabilising prices: may be continued problems of food access for chronically poor families who are normally outside of the market, particularly if they have lost own production or stocks. Otherwise, unlikely to be a significant food access problem.
- **Scenario 4:** Markets are not working well: low prices suggest an income shock or could be an area where effective demand is normally low and traders are not willing to increase supply even after the crisis (expectations of a food aid response may be factored into traders' response in some countries) – problem of food access for the poor is highly likely.

When market functioning is poor (scenarios 2 and 4), look for ways to stimulate the market, but without causing inflation if prices are already high (scenario 2). When prices are high (scenarios 1 and 2), look for ways to moderate prices.

Table 4-C

A simple matrix to analyze market scenarios

		Market Functioning	
		Good	**Poor**
Prices	**High**	**<u>Scenario 1</u>** **High prices** **Good market functioning** <u>Evidence:</u> Many households have adequate purchasing power. Number of traders is relatively high. Availability of key commodities is high and the demand for them is high (many households competing for purchases). Commodity movement into impacted markets (transport costs may be driving prices upward). Poor recent harvest. Coming out of hunger season.	**<u>Scenario 2</u>** **High prices** **Poor market functioning** Worst case! <u>Evidence:</u> Absence of traders, or fewer traders in particular commodities. Diminished purchasing power of households. High prices or rapidly increasing prices of key commodities. Not many consumers in the market. Limited commodity movement or movement out of the area.
	Low	**<u>Scenario 3</u>** **Low prices** **Good market functioning** Best case! <u>Evidence:</u> Many (but not all) households have adequate purchasing power. Number of traders is relatively high. Availability of key commodities is high. Commodity movement into affected markets. Recent harvest. Coming out of hunger season. Good mix of available commodities.	**<u>Scenario 4</u>** **Low prices** **Poor market functioning** <u>Evidence:</u> Low purchasing power of households. Low mix of commodities on the market. May be high number of traders relative to market activity. Distress sales that flood market and drive down prices. Limited commodity movement or movement out of the area.

Estimating the food supply deficit

***Objective*:** to estimate the approximate amount of food needs that will *not* be met by the market.

***At national level*:** Estimate availability over the next 6 to 12 months using information on current (projected) production in the main production areas, expected commercial (private sector) monthly imports and exports, and stocks. Compare this with total requirements including per capita consumption requirements, stocks, non-food uses of cereals (animal feed, industrial use, etc.), losses, and minimum operating/reserve stock requirements. Take account of export commitments that may have to be honoured in spite of local crop failures.

***In the crisis-affected areas*:** using information collected on affected households, estimate how many have lost access to food due to market failure or price increases. This estimate should take into consideration changes over time (the projected time of the assistance or over a year) factoring in harvests, new livelihood opportunities and medium-term market responses (where markets function well, they should be able to respond to new demand in a 3-6 month timeframe). When estimating total food needs in the affected area, include the full consumption requirement of households even when in non-crisis situations poor households typically under-consume.

4.4 Analysing likely effects on markets and possibilities for local purchase

Likely impact of interventions on markets

You need to understand the possible market implications of the planned assistance interventions, including local procurement. This is important because humanitarian interventions may have substantial impacts on the market, especially as markets are weakened in crisis and interventions are often large compared to typical transactions in local markets.

Analysis should focus on summarising the key market-related intervention types and their expected impacts on the different markets. Some key questions to evaluate intervention options from market point of view are suggested below. Several of these analyses require economic analysis skills:

- What is the maximum extent to which increase in food supply – as a result of the different interventions (e.g. in kind, cash, local purchases) – can take place without introducing substantial market distortions (e.g. discouraging flows from surplus areas to deficit areas)?
- What are the estimated price impacts of planned humanitarian interventions (helpful to have an overview of price changes in earlier large-scale market transactions and humanitarian interventions)?
- How existing market linkages would be impacted as a consequence of humanitarian interventions?
- Can the planned exit strategies guarantee to minimise long-term impacts?
- Is there a possibility to design a portfolio of interventions (instead of a single large intervention) with partners based on a range of interventions to minimise drastic impact of a single large commodity-based intervention? (e.g. food aid complemented along with cash transfers and policy measures)

Is local purchasing a viable option?

This analysis helps to determine whether local purchasing (or private sectors imports) can play a role in response options (Step 7 in the EFSA process). The need is to understand what commodities and services can be procured locally for providing food for the people lacking purchasing power.

In general, a good opportunity for local market procurements exists if:

- there are large stocks in poor storage conditions (e.g. over-stocked granaries, stocks in the open), low stock turnover, and other signs of unmoved stocks;
- traders are absent or there are signs that they are unable to move stocks out of the crisis affected areas (e.g. roads are blocked);
- the price is acceptable – at, or below import parity (represented by the total cost of importing commodities from the nearest surplus market items, including discharge and port charges);
- the market is competitive without distortions due to dominant players;
- WFP and other humanitarian organisations have a low original market share.

Key questions to be answered include:

Commodity and service needs and availability

- What quantities of different commodities could be needed for the humanitarian interventions of WFP and other humanitarian players?
- Is it possible to coordinate procurements among humanitarian agencies?
- What is the current and expected availability of the required commodities and services on the local and adjacent markets, including formal and informal markets?

Prices and terms of trade

- What are the current and expected prices at required quantity/quality levels for humanitarian organisations and private businesses?
- Is it cost-effective to buy the commodities and services locally taking account of total costs?

Impact on local markets

- What would be the market share of the humanitarian organisations?
- What are the maximum quantities that could be purchased without distorting the local market? (This analysis requires technical expertise and knowledge of price elasticities)
- Possibilities to avoid creating a dominant buyer position by diversifying purchases into several connected markets and spreading purchases over time?

Local purchasing as tool to facilitate local production and market flows

- Possibilities of targeted purchases to revitalise flows among markets, e.g. increase commercial in-flows into deficit markets.

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4.5 Tools to help organize and analyse market-related data

The following are some tools that are useful in organising and analysing data that has been collected for market analysis. Use these tools in conjunction with the data needs specified in the preceding sections (the market analysis guideline). Table 4-G at the end of the chapter provide a general check-list that will be refined in the next version.

Analysing trends in food availability

Obtain or compile a table summarizing the availability of the principal staple foods in the country during the last 3 to 5 years. Table 4-D provides an example of such a summary table. You must prepare a table adapted to the country and the data that are available including the degree of integration or segmentation of the national market. For example, in Sri Lanka the market is fully integrated and an analysis at national level is appropriate whereas in Mozambique the northern province is essentially isolated from the rest of the country but trades extensively with neighbouring countries so separate analyses are essential for that province and the rest of the country.

What to look for in a food availability table:

- Have there been fluctuations/falls in food availability at the national level? Were they due to changes in domestic production or changes in imports or exports?
- How stable are imports? Is there an explanation for high variability or drops? Any foreign exchange problems? Any import barriers, e.g. taxes, licenses?
- Does availability meet domestic consumption requirements? Is there significant consumption of other, non-staple food items – e.g. beans, animal products (for pastoralists), fish (for fishing communities)?
- Are there substantial exports of cereals, even when domestic requirements are not met? Are significant quantities of cereals used for industrial (e.g. brewing) purposes?

Look for changes in both the quantities for the various items and the relative importance of each.

Table 4-D
Example of a table showing trends in the availability of staple foods
(in thousand MT)

Commodity	2000	2001	2002	2003	2004
Domestic staple production					
Maize	632	658	720	726	674
Sweet potato	840	860	850	845	820
Sorghum	436	468	481	497	505
Other cereals	130	145	140	140	135
Total domestic production	**2 110**	**2 264**	**2 403**	**2 352**	**2 240**
Cereal net imports [a]	250	210	110	125	140
Food aid imports	60	30	15	15	25
Total staple availability	**2 440**	**2 524**	**2 543**	**2 507**	**2 420**
Domestic consumption requirements [b]	**2 490**	**2 490**	**2 520**	**2 520**	**2 550**

[a] Net imports are equal to imports minus exports. FAO should have these data.

[b] National consumption requirements are estimated by FAO based on population size, a food intake requirement of 2100 kcals/person/day, and the proportion of staples in the normal diet (usually about 80%).

***Warning*:** Food supply information generated at the macro-level is not always reliable, and this is especially true for production statistics as they are easily manipulated for political purposes. For example, the Government of Zimbabwe stated that the crop production in 2004 would be a bumper crop and there would not be a food shortage that year.

Table 4-E shows an illustrative balance sheet for a national-level food supply assessment.

Table 4-E
Country X: Total grain supply/demand balance, January–December 2004 ('000 tonnes)

Domestic availability	**12,800**
Opening stocks	500
Production	12,300
Total Demand	**13,800**
Food use	10,950
Feed use	300
Seed use	650
Losses	1,400
Exports	50
Closing stocks	450
Import requirement	**1,000**
Commercial imports	300
Food aid in pipeline and pledged	100
Uncovered deficit	**600**

Analysing per capita availability and nutritional value

Data on per capita food availability (including all main food items) and corresponding per capita nutritional value are available on the FAO website. Data for more recent years may be available from the Government Statistics Office (or equivalent), and from the 'Food Balance Sheets' prepared by FAO and available on the FAO website. Table 4-F provides an illustrative, incomplete example. These data may be available only as national averages and, when this is the case, must be used with care as pre-crisis data when assessing the situation of particular population groups. Refer to sub-national level household survey data, when available. However, in the absence of such data, national figures can give an idea of the relative importance of different food and nutrient sources and enable you to judge the potential significance of one of them being reduced and what substitutes may be available locally (e.g. whether increased use of beans might temporarily assure protein intake following a loss of fish production).

What to look for in a food balance sheet:

- The total per capita daily calorie availability is a national average. If it is close to the 2100 kcal intake required for a healthy and active life and there is a significant amount of poverty/inequality, it can be expected that the calorie intake of vulnerable population groups will be significantly lower. If a recent Household Income and Expenditure Survey has been undertaken, this will provide further information on consumption levels among the poorest groups.
- Consider the main sources of energy, protein and fat. For the affected population, has there been a disruption in their access to one or more food groups?

Table 4-F
Example of a national food consumption overview (per capita nutrient availability)

Commodity	Per capita availability 2002			Per capita availability 2003		
	calories per day	protein grams/day	fat grams/day	calories per day	protein grams/day	fat grams/day
Cereals	1308	29.4	2.6	13230	29.9	2.7
Sugar	344	0.0	0.0	313	0.0	0.0
Pulses & nuts	74	5.3	0.9	67	4.7	0.8
Fruits & vegetables	55	2.4	0.3	57	2.5	0.3
Meat (all products)	22	3.9	0.7	23	4.1	0.8
Fish (all products)	57	10.0	1.7	55	9.6	1.6
Oils & fats	339	2.9	31.8	336	3.1	31.3
Total	**2363**	**59.2**	**43.2**	**2359**	**59.39**	**43.0**

The FAO/WFP Crop and Food Supply Assessment approach:

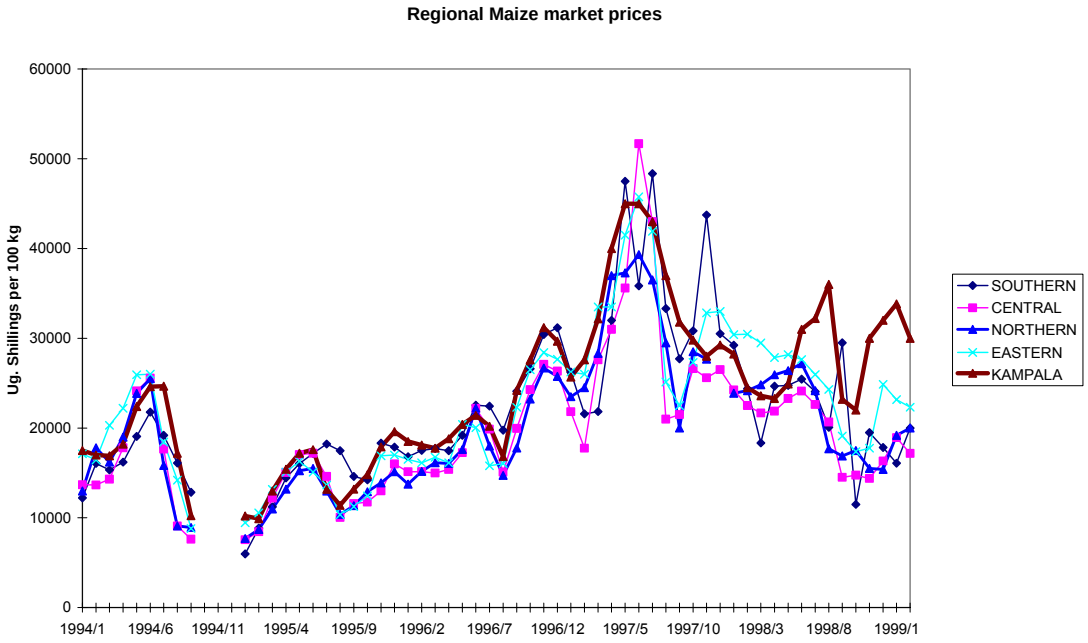
- provides a picture of a country's food supply and distribution over the course of a specified period;
- shows the potential amount of food available for human consumption at national level, the sources of food supply and utilization;
- indicates trends in the overall national food supply and identify changes that may have taken place in the types of food consumed – i.e., the pattern of the diet - and reveal the extent to which the food supply of the country is adequate in relation to nutritional requirements;
- provides statistics primarily based on commercialized major food crops. Subsistence and non-commercial production is usually excluded resulting in underestimation of the food availability for a country and per capita food availability.

Analysing food price movements

Price movements are best shown using graphs, such as the one shown in Figure 4b.

- If you can get price data over five years that would be ideal; otherwise at least prices over the last year or two
- If data are available, plot the price of one commodity in different parts of the country (different regional markets), as shown in the example in Figure 4b.
- If only central market price data are available, plot aggregated prices for different commodities on one graph.

Figure 4b – Plot of main cereal prices



What to look for in a price graph:

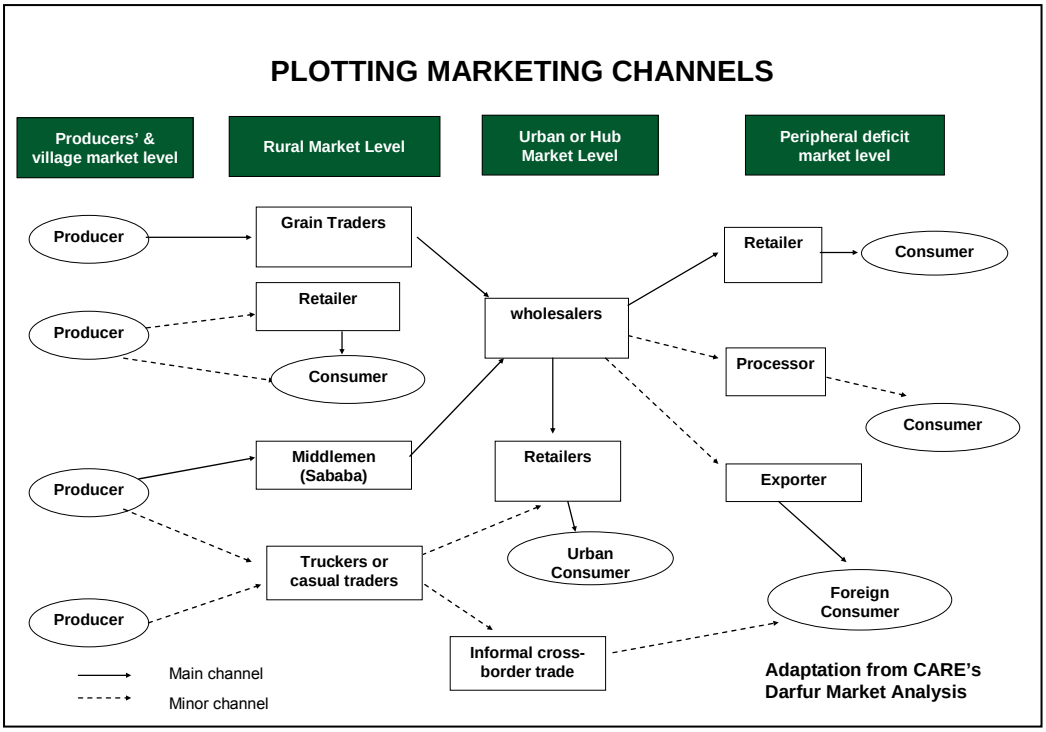
- How do prices change seasonally? Have there been additional fluctuations/hikes in cereal prices in main markets?
- How closely do the prices in different markets follow each other? Is the difference related to transport cost between surplus and deficit markets or another reason? (E.g. in the example above, the Northern market became disconnected from the main market in Kampala due to insecurity. The Southern market was strongly influenced by cross-border demand in Kenya and Rwanda.)
- Prices between different cereals should generally follow consumption preferences and international prices. Are there very different consumption preferences between regions? Are the prices in line with international prices?

Analysing market structure and flows

Preparing a market ***structure*** diagram is an important first step to understanding how a market normally functions and what may have changed as a result of the shock/crisis. Figure 4c provides an example. Information will come from a combination of key informant interviews at national, provincial and district levels, FAO, WFP and European Union procurement officers, and market visits.

When finding out about market channels, try also to get a feel for where food ***flows***: where are the surplus areas? where are the deficit areas? where are the main points of exchange (hub markets) where traders sell to suppliers serving deficit areas? which surplus area supplies which deficit area? The main flows can usefully be shown on a map of the country. Include flows across the border to and from neighbouring countries, when relevant. Figure 4c provides an example of such a market flow map. Try to get estimates for the proportions of domestic production and imports marketed through the various channels.

Figure 4c – Example of a market structure diagram[5]



N.B. In the above diagram: 'Traders' purchase and move food from producers (or middlemen) to wholesalers in the same or different areas, food processors (including millers), or for export. 'Wholesalers' are traders who supply (sell to) retail outlets. 'Middlemen' are typically small-scale, usually informal, 'petty traders' who pick up produce directly from the farmer, often extend short-term credit, and enable food to moved into the market chain. They sometimes act on behalf of a specific trader or wholesaler – or else have a group of "clients" – usually inter-regional traders or wholesalers.

What to look for in a market channel diagram:

- How dependent are farmers on middlemen?
- How many layers of middlemen/wholesalers are there between producer and consumer?
- How well are people in the crisis-affected area normally served by markets? Are there many traders? Retailers? Do they have secure links to wholesalers/processors?
- Which links have been affected by the shock/crisis and now operate less well than normal? Have any new links emerged?
- *In a conflict situation*: Has a predatory 'war economy' emerged and, if so, what is its impact on food trade flows and other markets on which people's livelihoods depend?

In addition, you should answer the following questions:

- How does food normally flow into, out of and within the crisis-affected area (from where to where)? Is it a surplus or deficit market? If it is a deficit market, are there any seasonal gaps (e.g. the rainy season) when traders do not come? How far do people have to travel to buy or sell food?

A market flow diagram can also be used to trace and present price differentials as commodities pass from producers through middlemen, traders and retailers to consumers. This can help to identify where market bottlenecks exist and pinpoint any inefficiencies (or corruption) in the market system including hoarding.

[5] Adapted from '*Rationale for a Possible Market Support Programme in Darfur, Sudan; A brief Look at Markets and Food Security*', commissioned by the USAID and implemented by CARE, August-September, 2004

Table 4-G

Check-list market-related data to collect (draft)

I. Price Monitoring

A. Wholesale Prices

- The price in the main markets of a 50 or 100kg bag or typical quantity traded between districts. Monthly data is preferable for approximately 2-3 years to obtain the trend.

B. Import Parity (official & parallel)

- The price, usually per ton, to import a cereal from the nearest surplus market.
- This price equals the price of the commodity plus the costs of delivering the food into the main domestic market (usually encompassed as cost, insurance and freight or "c.i.f." in statistics). This should be valued at the official exchange rate and at the parallel (black market) exchange rate.

C. Exchange Rates

- The nominal exchange rate is the current market rate on the official and parallel foreign exchange markets.
- The real exchange rate is the nominal exchange rate adjusted for the relative price levels between countries – this exchange rate is calculated by economists to assess a country's purchasing power over time.
- The parallel, or 'street' exchange rate can be obtained at least on a daily basis from traders or money changers.

II. Commodity Flows

A. Spatial flow

- What is the geographic flow of food around the country (from surplus areas to the main markets and to deficit areas) and across the country's borders?
- This should take into account formal flows (by private sector traders, officially declared) and informal and cross-border flows (by traders that are undeclared, by people on a direct exchange basis like farmers markets, or unrecorded trade across the border).
- Barriers to trade inflows (roads/bridges damaged, insecurity, loss of backhauling transport capacity)

B. Logistics of Flows

- Who is moving food and how? (e.g., formal traders in big trucks, informal traders on small trucks or mules, farmers carrying bags)
- Trader transport capacity and costs into affected area (frequency of trucks arriving, size of trucks, haulage rates)
- Storage capacity in affected area (avg. size of trader stores, proportion of traders in main local market with storage capacity)
- Quantity of flows: net import levels (on a monthly basis) and if possible some assessment of the quantity of food moving between main markets internally.

III. Macro-Economic

- Does the country have a national food security reserve or any strategic grain reserves?
- What is government policy towards the use of these reserves?
- What is the government policy regarding food procurement to stabilize markets?
- What are trader perceptions on the transparency and predictability of government actions?
- What is the private sector capacity to import?

- What is the capacity to earn foreign exchange to adjust to any change in the food import bill?
- What is the macro-economic position of the country and its financial ability to import food? This is reflected through its trade balance, its balance of payments, the extent of foreign exchange reserves, and the terms of trade for food, the availability of supporting financial mechanisms like an IMF draw-down facility
- Exchange Rate (control policies, foreign exchange reserves, movement of nominal and real exchange rates, parallel rates, domestic inflation)
- Balance of Payments constraints (access to capital markets, relative prices of food, food terms of trade)
- Other macro issues (has their been a national income shock? fiscal policy, regional trade & economies, domestic trade/commodity mix)

IV. Policy

- Are there any tariffs, taxes or other restrictions that would act as a hindrance for traders to move food from one place to another (internally or import/export)? What are the traders' perceptions?
- Are there governmental subsidies for food items and tow what degree do they act as a disincentive to private traders, local millers etc. What are the consequences to ending the subsidies and to what extent have alternatives been put in place (e.g. social markets)?
- Are there disincentives and market insecurity for private traders due to political pressure to keep prices low?
- Are market liberalization policies or an increase in global market processes affecting food availability for poor households?

IV. Market Behaviour

- Has there been a production shock?
- Have there been any regional shocks affecting normal import levels?
- Is there any shock affecting the amount of production that is marketed?
- Has there been any household income shock?
- What does the livelihoods analysis reveal about the Terms of Trade of the crisis-affected group?
- What proportion of households has too low a purchasing power to meet their basic food needs?

A. Performance

- market information available to different types of market stakeholders
- level of market concentration (number of large traders, medium traders, etc)
- degree of social capital/institutions determining where traders do business
- transaction costs (including high transport/storage costs)
- profitability of trading in staple food vs. alternative crops/products
- availability of credit and risk insurance

B. Risks

- potential security risks, trader business risk perceptions (security, transport, profitability)
- perceptions of government/agency intervention in markets, particularly market interventions by a grain marketing board, free distribution or subsidized sale of food aid stocks

C. Supply

- Staple food production in surplus & deficit areas
- Structure of farms producing staple foods (commercial, small-holder, subsistence)

- Import levels

D. Demand

- Who are the most vulnerable groups (female headed households, landless farm workers) and what is the purchasing power of vulnerable groups?
- To what extent do they depend on markets for their livelihoods and access to food?
- What proportion of households normally has weak access to markets?
- What proportion of household incomes is spent on basic food (this allows for estimates of the impact on purchasing power of a rise in food prices)?
- What proportion has secure access to markets?

Chapter 5

Analysing household food access and livelihoods; estimating shortfalls

This chapter provides a very rough, preliminary outline of how household food access and livelihoods are analysed during an EFSA, and the methods used to estimate household food access shortfalls resulting from a shock/crisis. The text will be improved and more detailed guidance developed during 2005/06. In the meantime, contact WFP headquarters, ODA, for guidance and support.

> ***The objective*** is to find out: which, if any, population groups do not have, or will not have, safe access to adequate food as a result of the shock/crisis; why; how their livelihoods have been affected; what can be done to protect and restore sustainable means of livelihood; by how much their access to food has been reduced; to what extent they are able to cope and how sustainable their coping strategies are; for what period they will not have adequate access to food; and what might change their situation for better or worse in the coming months.
>
> ***The decisions to be informed*** are: what, if any, measures are required and what type of assistance is needed by whom (which population groups); where (in which geographic areas); how much; and when (during what period), in order to protect and restore livelihoods and enable people to have safe access to adequate food in the meantime.

The key steps are:

- Determining how the shock/crisis has ***impacted*** on households' means of livelihood and their access to food, see → 5.1.
- Determining what households are doing to ***cope*** with the situation, what others are doing to help households to cope, the sustainability of those strategies, and the extent to which they compensate for any reduction in household food access due to the shock/crisis, see → 5.2.
- Estimating the magnitude of the ***shortfall*** (if any) in households' access to food compared with the normal situation and their needs – separate estimates for population groups that are differently affected or face different risks, see → 5.3.
- ***Forecasting*** how the shortfalls will evolve taking account of seasonal and other factors – and thus defining the period (if any) during which measures are required to enable households in particular population groups to access additional food – and identifying ***risks*** that could prolong or increase the shortfalls, see → 5.4.
- Estimating the ***numbers*** of people requiring assistance and calculating ***aggregate*** food access shortfalls, see → 5.5.

There is no single, agreed method for assessing access and estimating shortfalls in all contexts. Three types of method are described:

- Judgement-based classification of changes in household food access, see → 5.6
- Statistical analysis of indicators of food consumption and other data – 'food security profiling,' see → 5.7.
- Quantitative analysis of households' food sources, income and expenditures, see → 5.8.

The circumstances in which each type of method may be appropriate are indicated in section 5.3. The assessment team must decide on an appropriate method or combination of methods taking account of the nature of the situation and the skills and time available. That choice – in particular whether a household survey will be conducted or only rapid appraisal techniques be used – will also influence the way other data relevant to household food access (and utilization) are collected.

The estimates of the crisis-induced shortfalls faced by households in specified population groups and/or geographic areas provide a basis for determining whether and what magnitude of food or other resource transfers are needed to enable households to have safe access to adequate food, and the period during which such assistance may be needed. The analysis of food utilization and nutrition (Chapter 6) will determine whether additional responses may be needed to address problems of malnutrition and/or the special nutritional needs of particular groups of individuals, such as young children or pregnant and lactating women.

5.1 Determining impact on livelihoods and access to food

What needs to be analysed: the components of livelihoods and household food access

Households' access food by various means and the livelihood activities that sustain them depend on a range of assets and 'enabling systems,' as described in Chapter 3 (Tables 3-A and 3-B). A shock/crisis typically impacts on a number of those means, assets and systems. Household react (adapt) by drawing on reserves, if they have any, expanding those livelihood activities that can be expanded at least temporarily, and adopting other coping strategies that are available to them. The analysis must seek to understand – describe and, to the extent possible, quantify – these impacts and reactions and their likely short- and long-term effects, while also identifying the underlying causes of the impacts (vulnerability) for the various distinct population groups.

To understand the impact of the shock/crisis on how households in various population groups access food and the cash they need to buy both food and essential non-food supplies and services, you must collect and analyse both pre-crisis and current data on:

- ***livelihoods*** – the *livelihood assets* (natural, physical, human, social, financial and political) and the *enabling systems* (political, economic, social, legal and power structures) on which particular livelihood activities depend;
- ***food consumption*** – patterns of food consumption indicated by the proxies of diet diversity and food frequency;
- ***sources of food*** – the relative importance of different sources of food – usually a combination of one or more of market purchases, own production (crops, livestock, fish farming), harvesting from the natural environment (gathering, hunting, fishing), and food receipts (including gifts, loans, food aid programmes) – and the seasonal and other future changes that can be expected;
- ***sources of income*** – the relative importance of difference sources of income – usually a combination of one or more of the following: sale of crops (food or cash crops); sale of livestock or livestock products; employment; sale of natural products (e.g. fish, wild foods, firewood); sale of other, non-agricultural household products; trading; cash receipts (gifts, remittances, loans) – and the seasonal and other further changes that can be expected; and

- ***cash expenditures*** – patterns and levels of household expenditures on food and other essential items and services, and the seasonal and other further changes that can be expected. Essential non-food requirements include rent, water, health care, children's education, cooking fuel, and debt repayments.

The above requires an understanding of seasonal calendar(s) for the areas and livelihoods concerned and, for a slow-onset or protracted crisis, the historical timeline of events that have influenced the food security situation.

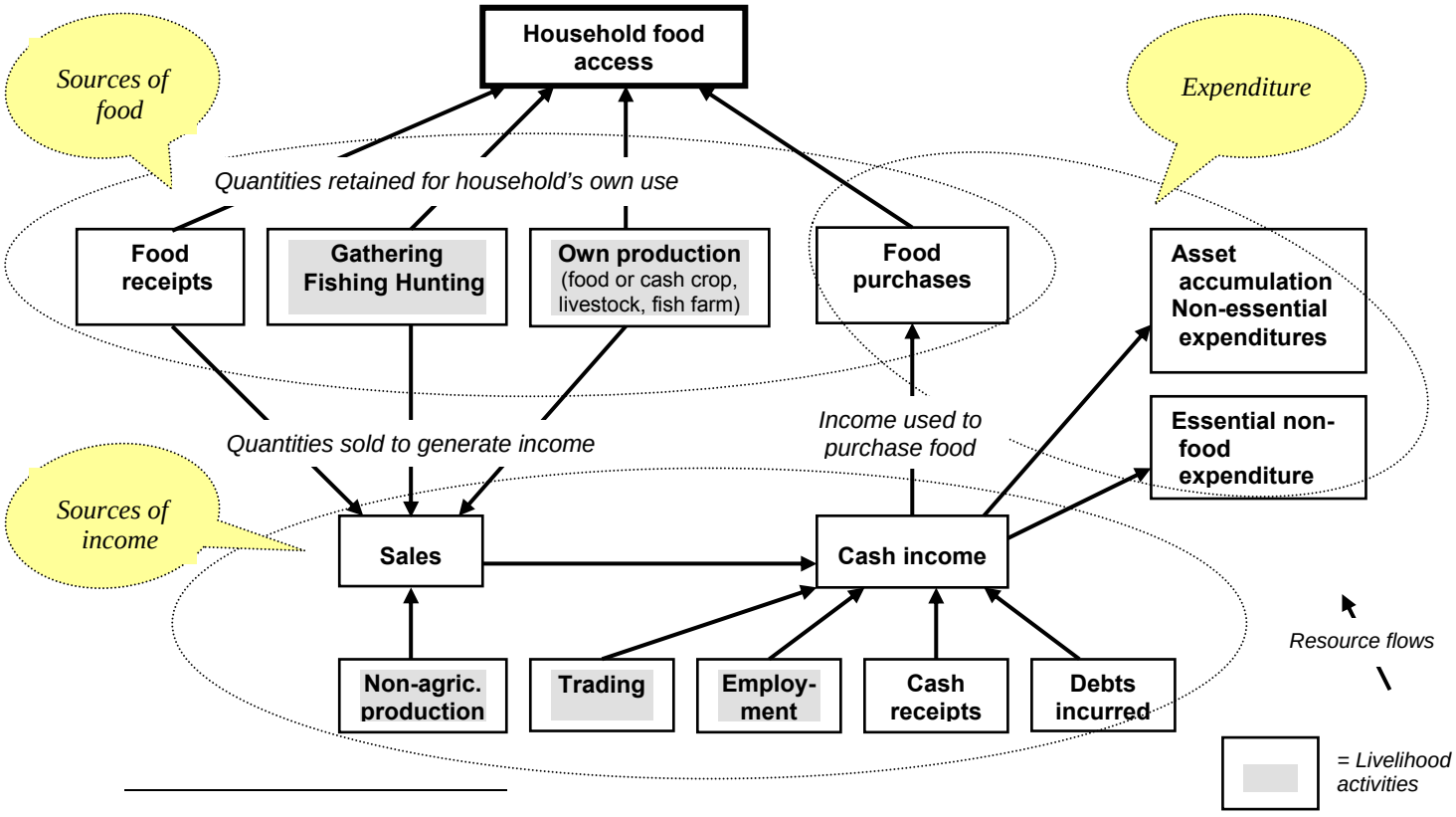
This analysis of impact will be complemented by analysing ***coping reactions*** – the coping strategies adopted by households and the community-based and other safety nets that help crisis-affected households to meet their food and essential non-food needs – as described in section 5.2.

This approach recognizes that a household is, amongst other things, an ***economic unit*** that: (i) earns, produces or receives cash, food and other in-kind transfers; (ii) consumes, spends, gives away or accumulates cash, food and other assets; and (iii) incurs and has to repay debts. Depending on its combination of livelihood activities,[1] a household may have one or more sources of food and one or more sources of income from which to buy food and other necessities, maintain (or better still, enhance) its productive assets, and fulfil social obligations within the community.

Figure 5a illustrates the various means by which households access food and essential non-food supplies and services. It highlights:

- how livelihood activities, shown as shaded boxes, contribute to food sources and income;
- how households' food production, what they gain from gathering, etc. and what they receive as gifts or transfers from various sources can either be used for consumption or sold to generate income. In practice, food from they are often divided between the two uses; and
- how income has to be shared between purchasing food items and meeting essential non-food needs, i.e. the trade-offs – the choices households have to make – between food consumption and non-food requirements, including investing in .

Figure 5a **How households access food and use resources**



[1] The combination of livelihood activities adopted is sometimes referred to as the household's 'livelihood strategy'.

The analysis must lead to an understanding of what has changed in the various elements of households' livelihood activities and food access systems. It must also take account of protection and environmental concerns – any risks to the safety and security of the population and the environment – and try to distinguish between chronic and transitory food insecurity (see Table 5-A).

Table 5-A

Chronic and transitory-acute food insecurity

Chronic food insecurity is a situation in which people and households are persistently unable to meet their food consumption needs.

Chronic food insecurity is closely linked with chronic poverty – typified by lack of access to land, other productive assets or regular employment, high dependency ratios, chronic sickness and/or social barriers. In a given context, the chronically food insecure may be very heterogeneous – their demographic characteristics and the causal factors that led to destitution may vary considerably.

Transitory-acute food insecurity is the situation of people and households who, following a shock, are temporarily unable to meet their food intake needs without sacrificing livelihood assets.

How to collect data

Information on the ***pre-crisis*** situation will normally come from secondary data and be complemented (completed) by interviews with key informants and community groups, when necessary. The secondary data will come from the WFP comprehensive food security and vulnerability analysis (CFSVA) database, other VAM reports, and databases and the Government and other organizations, see Annex A4.

Information on the ***current situation*** and what has changed as a result of the shock/crisis will come from key informants, interviews with community groups, current secondary sources (Government, other agency and news media reports) and *either* in-depth interviews with subgroups representing the various population subgroups *or* a household survey. Guidance on this important choice is provided in sections 3.3 and 10.3.

When only ***rapid appraisal techniques*** are used to collect data at community level, data are collected for different *wealth groups* in order to understand the effects of the shock/crisis on the food access of households that have different types and levels of assets. The criteria for differentiating wealth groups are defined by the communities themselves.

If time permits, separate interviews are organized with subgroups representing each of the various wealth groups within the community. If not, interviews may be organized with only the poorest two groups – those who are likely to be facing the greatest food access problems – or with a mixed group including people from different subgroups and community-level key informants such as teachers, health workers, extension workers and religious leaders. Table 5-B provides a sample of community-derived wealth group characteristics (indicators). For guidance on conducting a wealth ranking exercise, see → Annex C19.

When a ***household survey*** is undertaken, such ranking is unnecessary and inappropriate. Questions on assets will be included in the questionnaire and the data on food sources, income and expenditures cross-tabulated against asset holdings and other household characteristics.

For guidance on how field assessment teams should proceed in collecting data, see → Chapter 11.

Table 5-B **Sample indicators of wealth rank**

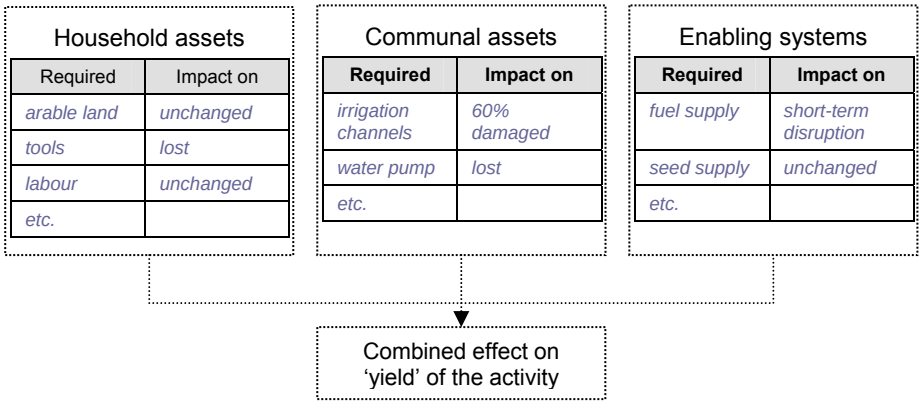
Indicator	Poor households	Middle households	Better-off households
Household size	*6*	*7-8*	*8 -10*
Cattle	*0-2*	*4 - 6*	*6-10+*
Goats	*0-2*	*0-5*	*0-20*
Land Cultivated	*.50 – 1.5 hectares*	*2 – 4 hectares*	*4 to 10 hectares*

Analysing the impact on livelihoods

Objective	To determine which livelihood activities have been undermined by the shock/crisis, the extent to which households' food production or cash income has been reduced as a result, and when (if at all) those livelihoods may recover.
How the information will be used	To contribute to analysing the impact on households' food access; and To help to identify measures that may be needed to protect remaining livelihood activities and to promote the recovery of those that have been undermined.
Data collection techniques	Interviews with key informants, community groups and either subgroups (rapid appraisal techniques) or households (a survey).
Analytical tools	Matrices.

Based on an understanding of pre-crisis livelihoods, the analysis should determine how the main livelihood assets and enabling systems have been impacted, the consequent changes in production and income, and what further changes may be expected. Figure 5b illustrates one way of doing this, using irrigated crop production as an example. The estimate of the effect on the 'yield' of the activity will feed into the analysis of ***access*** in the coming months and the longer-term future. The analysis of changes in assets and 'enabling' systems also helps to identify measures that could help to ***restore livelihoods***.

Figure 5b **Example of analysing the impact on a livelihood activity**
(entries for illustrative purposes only)



Current data on assets may be collected through a household survey or through in-depth interviews with subgroups. Data on enabling systems and likely future changes in livelihood activities in the coming months will be collected through interviews with key informants and sub-groups. Data requirements will vary considerably depending on the livelihood activities, local production systems, and the natural resource base and must be defined for each area and livelihood group. Table 5-C suggests some on the information that may be required and possible sources.

Additional information on the macroeconomic context, related markets like labour markets (e.g. wage changes), cash commodity markets (e.g. coffee, tobacco, etc), and credit markets are useful as well to estimate households' access to food on the market.

When considering household assets, you should include the influence of demographic changes and chronic illness on the human resources available

Table 5-C
Analysis and information requirements for a rapid EFSA

Theme	**Food access and livelihoods: (i) Livelihoods**
Possible types of analysis	Estimation of changes in livelihood asset endowments either directly or using selected proxy indicators. Estimation of changes in employment opportunities and the resources and systems on which livelihoods depend.

Possible information requirements		**Possible sources of data** 1 = pre-crisis; 2 = current & forecasts		
Pre-crisis data	**Current situation & forecast**	1	2	Sources
• Normal food and income sources of different population subgroups. • Livelihood assets of different population subgroups. • Main sources of paid employment in the area. • The natural resource base on which livelihoods depend. • Markets and trade patterns on which livelihoods depend.	Current situation: • Changes in livelihood assets of different population subgroups and the reasons. • Changes in employment opportunities, the natural resource base, markets and trade patterns on which livelihoods depend. Forecasts (including seasonal variations) for: • Replacement (or further loss) of livelihood assets • Employment opportunities	√ √ √	 √ √	Ministries of labour, trade. Local Chambers of Commerce. Local businessmen. Plus the same sources listed in Table 5-F for household food access

.

An example of the importance of analysing demographic trends

"The ability to maintain a year-round garden and to do shelter repairs depended on the support of an able-bodied male, and current statistics showed that there was one man aged 20-59 years among six refugees, i.e. one per typical household size. However, over the previous year the percentage had dropped from one among five refugees, and the population trends due to repatriation and entry of new refugees from Liberia forecasted further reduction."

[Source: *Assessing refugee self-reliance: a food economy assessment: Kountaya and Telikoro refugee camps, Kissidougou, Guinea,* B Reed, UNHCR Dec 2002]

Analysing the impact on food access and consumption

The analysis considers indicators of food consumption and data on the sources of food, income and expenditures:

- Dietary diversity and food frequency are used as proxy indicators for food consumption and access (see Annex B1). Data are collected current dietary patterns, usually based on 7-day recall, and compared with pre-crisis patterns.
- Data are collected on the relative importance of different sources of food (usually using proportional piling), and compared with pre-crisis patterns.
- Data on income are also usually collected in terms of the relative importance of different sources, not in absolute figures (as people almost invariably under-report and the data are not reliable). Rough estimates of earnings from daily labouring, however, may be obtained by asking for how many days people find work in a month and, separately, enquiring in the local market about daily wage rates.
- Data on food and non-food expenditures are collected in terms of both relative importance and estimates based on monthly recall, to allow for different patterns of expenditure of different households during the month, but food expenditures may be based on 7-day recall if respondents have difficulty in remembering back over a month.

Table 5-D provides an example of the kind of synthesis that may be useful of the impact of a shock/crisis on different population groups.

Table 5-E provides an example of how a matrix can be used to examine: (i) the impact of a shock/crisis on households' normal sources of food and income; and (ii) how the impact varies among different socio-economic (wealth) groups within the same community. It is a simplified example. In practice, if the poor normally rely on labouring for better-off households and purchasing food from them, then their total losses are even greater.

Table 5-F suggests some on the information that may be required and possible sources.

For an example of a set of analysis tools (together with data collection instruments and guidance notes for field teams), see → Sierra Leone *Food Security Analysis Field Kit*, WFP-Food Economy Group technical support unit, Sierra Leone 2002 (on the CD-ROM).

For additional guidance, see → *VAM Analytical approach thematic guidelines, household food security profiles*, WFP-ODAV 2005.

Table 12-D

Example of a summary matrix of direct impact on food access impact

(area affected by drought and an influx persons displaced by civil conflict)

Key EFSA information	Livelihood groups			
	Displaced persons	**Farming communities (hosts)**	**Pastoralists**	**Fishing communities**
% total HH	*15%*	*30%*	*35%*	*20%*
Total population	*13,500*	*27,000*	*31,500*	*18,000*
Dominant pre – shock livelihood activity	*Cash croppers*	*Cereal growers*	*Cattle herders*	*Fishing*
Sources of food	*1. Purchase* *2. Own crop* *3. Poultry*	*1. Own crop* *2. Purchase* *3. Wild Foods*	*1. Livestock* *2. Purchase* *3. Fishing* *4. Own crops* *5. Wild foods*	*1. Fishing* *2. Purchase* *3. Wild foods* *4. Own crops*
Main sources of income	*Coffee* *Beans* *Eggs* *Petty Trade*	*Maize* *Beans*	*Livestock* *Milk and Meat* *Skins*	*Fish* *Tobacco* *Blacksmithing*
Shock experienced	*Raiding* *Plantations burnt*	*Drought*	*Drought*	*Drought*
Secondary effects of the shock	*No capital for diversifying income*	*Population pressure from displaced*	*Worsening terms of trade*	*Worsening terms of trade*
Main immediate effects on livelihoods	*Lost everything (all stocks)* *Forced to move to a new area*	*60% production loss*	*25% herd died* *50% reduction in milk yields*	*50% rivers dry* *fish buyers are now displaced*
Direct impact on household food access and consumption	*Cannot cover 80% of needs* *Significant decrease in dietary diversity and number of meals*	*Cannot cover 60% of needs* *Decrease in dietary diversity*	*Cannot cover 25% of needs* *Slight reduction in dietary diversity*	*Cannot cover 15% of needs* *Little change in dietary diversity*

Table 5-E

Example of the impact of a reduction in crop production on food and income sources

If a shock were to lead to a 75 percent reduction in crop production for all groups and the reduced harvest is used solely for consumption, the impact on the level of food and income for each group would be as follows

	Poor HH		Middle HH	
	Typical year	**Effect of a 75% reduction in crops**	**Typical year**	**Effect of a 75% reduction in crops**
Harvest (less seed)	*800 kgs cereal*	*200 kgs*	*1,200 kgs cereal*	*300 kgs*
Amount consumed	*600 kgs*	*From own production 200 kgs, i.e. a loss of 400 kgs*	*800 kgs*	*From own production 300 kgs, i.e. a loss of 500 kgs*
Amount sold	*200 kgs*	*0 kgs*	*375 kgs*	*0 kgs*
Amount paid for labour	-	-	*25 kgs*	-
Food sources	*own crops = 50%* [1] *purchase = 30%* *labour = 15%* *wild foods = 5%*	*400 kgs loss* *= 33% of needs*	*own crops = 65%* *purchase = 30%* *fishing = 5%*	*500 kgs loss* *= 40% of needs*
Income sources	*crop sales = 40%* *labour = 40%* *baskets = 20%*	*40% loss* *(the share of normal income from crop sales)*	*crop sales = 50%* *petty trade = 40%* *dried fish = 10%*	*50% loss* *(the share of normal income from crop sales)*

Table 5-F
Analysis and information requirements for a rapid EFSA

Theme	Food access and livelihoods: (ii) Household food access
Possible types of analysis	Comparison of current consumption, sources of food, sources of income, and essential expenditures with what would be normal, for households in distinct areas and population subgroups. Determination of the sustainability of the coping strategies adopted. Estimation of household food access shortfalls (using judgement, selected proxy indicators, or quantitative economic analysis). *In the days following a sudden catastrophe*: Comparisons of what households are able to provide for themselves with average minimum nutritional requirements (2100 kcal/person/day adjusted for local conditions).

Possible information requirements		Possible sources of data (1 = pre-crisis; 2 = current & forecasts)		
Pre-crisis data	**Current situation & forecast**	1	2	Sources
• Normal diets/food habits, food and income sources, essential expenditures of different population subgroups; proportion of income spent on food. • Usual coping strategies of different population subgroups at times of stress.	Current situation: *To estimate shortfalls based on comparison with normal or food consumption indicators*: • Diet diversity and meal frequency; sources of food and income; expenditure levels; proportion of income spent on food; • Coping strategies adopted. *To estimate shortfalls based on quantitative/economic analysis*: • Quantified changes in food and income sources and essential expenditures of different population subgroups. Forecasts (including seasonal variations) for: • Qualitative changes in food and income sources and essential expenditures of different population subgroups; • The limits on coping strategies, and their sustainability; • Prospects for household food production, employment, other income generation activities, food or cash receipts. • The relative importance given by households to food, non-food essentials, and asset protection.	√		VAM and other pre-crisis food security baselines/ profiles.
		√		Ministries of food, agriculture, rural/ community development
		√		National nutrition and social research institutions
		√		USAID/FEWS-NET and EU Food Security Units
		√	√	Anthropologists
		√	√	NGOs working in food security and development
		√	√	Local extension workers and public health officers
		√	√	Farmers' associations
		√	√	Cooperatives and other local associations
		√	√	Community leaders and other key informants
		√	√	Community members (through community interviews and subgroup interviews or household survey)
			√	Observation

Summarise your findings in a table as below. Note that this example includes aspects relevant to coping strategies and the household food access shorfall, which are discussed in sections 5.2 and 5.3 below:

Analysis of Household Food Access and livelihoods		
Direct impact	**Reaction (compensatory action)**	**Outcome (problems and risks)**
E.g.: *Changes in food and income sources* *Estimated losses in food and income (direct estimate or by proxy indicators)* *Change in obligatory expenditures* *Productive assets lost/damaged* *…*	*E.g.:* *Livelihood activities expanded, if any* *Other coping strategies adopted and their sustainability* *Extent to which safety nets are making up the shortfall* *…*	*E.g.:* *Estimated current access shortfall for specific population groups* *How the shortfall is expected to evolve* *Factors that favour or constrain the recovery of livelihoods or the effectiveness of compensatory actions* *Measures that could support livelihood recovery* *Events that could further undermine food access* *When livelihoods may recover with/without assistance* *…*

5.2 Analysing coping (reactions)

When livelihoods are negatively affected by a shock/crisis, households may rely initially on three types of mechanisms to cope with reduced or declining access to food:

- temporary, short-term household coping strategies to acquire food while seeking to protect their livelihoods;
- community-based and other traditional, informal social safety nets that provide food or other resources to households severely affected by the shock/crisis, or allow such households to borrow food or cash;
- safety net and other resource transfer programmes of the Government, NGO or WFP.[2]

The analysis must examine all these aspects, their effectiveness and their sustainability, as outlined below in the remainder of this section.

In a protracted crisis, households may adapt their livelihood strategies permanently – some coping strategies may evolve into regular livelihood strategies while others remain as temporary activities to which households resort only when their normal means of livelihood are disrupted by a new crisis.

[2] In principle, such 'outside' intervention should be a last resort when households and communities cannot cope with the effects of the shock by themselves without undermining their future livelihoods.

Analysing household coping strategies

Objective	To identify the types of coping strategy used by households in different population groups affected by the shock/crisis, and determine the effectiveness and sustainability of those strategies.
How the information will be used	To help reach conclusions/judgements concerning the extent to which households can meet their own essential food and non-food needs, and what may need to be done to support coping strategies that are viable and to replace those that are not; and To contribute to identifying areas and population groups that are suffering more severe food access problems than others and to determining the timing and duration of any transfers needed to enable particular population groups to have safe access to adequate food in the coming months.
Data collection techniques	Interviews with key informants, community groups and either subgroups (rapid appraisal techniques) or households (a survey); seasonal calendars; time lines; ranking.
Analytical tools	Matrices; seasonal calendars.

Households react to disruption of their livelihoods and access to food by seeking to increase those production and income opportunities that remain viable, reducing expenditures and/or borrowing (taking on increased debt). Table 5-G provides examples of some common household coping strategies. The adoption of strategies lower down the lists is generally indicative of increasingly severe problems of food access. Lists must be developed for each distinct population group, and ranking be specified by the groups themselves.

Table 5-G
Examples of household coping strategies

Strategies in the ***early stages*** of a crisis	Distress strategies in ***later stages*** of a crisis
• diversifying sources of income (including sending individuals to work in other areas) • purchasing cheaper, less preferred foods • seeking and consuming wild foods • reducing food intake (the number and size of meals) • seasonal migration • selling non-productive assets	• taking children out of school • selling productive assets • begging • theft • prostitution or transactional sex • permanent migration of some household members • household break up

Collecting data on household coping

Information on coping strategies generally used by different population groups during hard times and those used in past crises will hopefully be available in existing food security profiles and other secondary data. Data on the current situation are best collected through dialogue in ***subgroup interviews*** (see Annex C3) by asking:

- what strategies respondents used month-by-month[3] during the last few (e.g. six) months and how that compares with: (i) the strategies they usually employ during the same period in a normal year – i.e. in comparison with a ***seasonal calendar*** (see Annex C13), and (ii) strategies adopted during earlier crises; and
- what strategies they think they will have to use in the next few months and why.

[3] Asking about strategies adopted progressively during specific periods/months will yield more useful information than general questions concerning strategies adopted.

The various strategies can be ranked in order of severity using ***pair-wise ranking*** (see Annex C16) or ***ranking and scoring*** (see Annex C20). By comparing against a ***time line*** for events that have affected the community in the last year-or-so (see Annex C14), the resort to abnormal coping strategies may be linked to specific changes in production, income, market availability, prices, insecurity and other factors associated with the crisis.

The ***sustainability*** of the various strategies should be discussed in relation to the availability of the natural resources used; the environmental conditions; the expected level of economic activity in the area and the consequent demand for labour and whatever people are selling; and social, safety and security concerns.

If a ***household survey*** is conducted, questions about coping strategies currently used will be included in the household questionnaire, and questions about the significance and sustainability of various strategies be discussed in the community group interview.

In all cases it will be important to triangulate the information from group and household interviews with that from ***key informants,*** and to rely primarily on the latter for information about the use of illegal and socially unacceptable strategies, which the people themselves may be reluctant to talk about.

Analysing the data

The analysis of the data will start during the interviews by comparing the strategies adopted by each population group with those in a normal year, and during previous crises and with the severity rankings established by the groups themselves. It will be completed by summarizing in a table (matrix) the strategies adopted by different groups together with their relative severity and sustainability.

A population group is considered acutely food insecure and at risk for their current and future livelihoods if either: a) a large proportion of the population is using marginal or unsustainable coping strategies; or b) people are using distress strategies that are damaging their livelihoods in the long term or are illegal, socially unacceptable or involve risky behaviour.

Warning: You may find it difficult to compare coping strategies across groups from different livelihood systems. For example, animal sales for agriculturalists may be valued differently than animal sales for pastoralists, and the sale of female animals rather than male animals is a more telling sign of vulnerability.

Analysing community/traditional coping mechanisms

Objective	To determine whether informal safety nets function within the community and related kinship networks that they cover, the level of support they provide, their sustainability, and who is not covered.
How the information will be used	To help reach conclusions/judgements concerning the extent to which community-based mechanisms enable households in different population groups, to compensate for crisis-reductions in their access to food and essential non-food needs now and in the coming months.
Data collection techniques	Interviews with key informants, community groups, and either subgroups (rapid appraisal techniques) or households (a survey).
Analytical tools	Matrices.

Informal safety nets based on traditional associations or exchange networks (including kinship networks) are critical in protecting vulnerable families affected by shocks/crises. These mechanisms, particularly local community-based mechanisms, however, tend to break down following repeated shocks, such as three consecutive years of drought, or during a major crisis (such as HIV/AIDS, protracted civil conflict or economic collapse) placing the entire community under severe stress.

Information on traditional mechanisms within the various population groups will hopefully be made available in existing food security profiles and other secondary data. Data on the current situation are best collected from ***key informants,*** in dialogue with community groups and subgroups (see annex C3). For each population group, collect data on:

- the type of social network to which they belong (if any);
- what support they normally provide at times of crisis and the criteria or conditions applied;
- whether the network is functioning now, and, if not, why;
- the type and level of support currently provided to households that are unable to meet their food and other essential needs;
- the type and level of support expected to be provided in the coming months; and
- the factors (contingencies) that could increase or decrease the level of support provided in the coming months.

This is sometimes referred to as '***social network mapping***.' It will be important to check on the recent history of crises, and determine the extent to which repeated shocks have eroded the support provided through such networks and undermined community solidarity.

Warning: Communities may be reluctant to discuss the exclusion of marginalized groups; you may need to rely on key informants for this information.

The ***analysis*** will be completed by summarizing the data for each population group in a table (matrix). This will aid in forming a judgement concerning the capacities of the various networks, to identify and provide support to households that are least able to meet their food and other essential needs, and to identify population groups that are not covered by any existing social support network.

Analysing Government safety nets and other food security-related programmes

Objective	To determine the type and levels of assistance provided by existing safety nets and other food security-related programmes of the Government, WFP and other organizations to those population groups and households that, as a result of the shock/crisis, are unable to meet their food and essential non-food needs; and To identify possibilities for maintaining or expanding existing programmes and/or establishing new programmes to assure necessary assistance to all population groups and households in the coming weeks and months (complementing community mechanisms).
How the information will be used	To help determine (with other information) the current food access shortfalls of households in specific crisis-affected population groups, and the mechanisms that may be available to deliver necessary assistance to those groups in the coming weeks and months (complementing community mechanisms).
Data collection techniques	Interviews with key informants (including staff involved in all the safety net and other programmes), community groups, and either subgroups (rapid appraisal techniques) or households (a survey).
Analytical tools	Matrices.

Ongoing Government/WFP/NGO safety nets and related food security programmes are important mechanisms for mitigating the effects of shocks and crises on livelihoods and food security in a number of countries. Additional and expanded programmes are required to deal with any major shock/crisis affecting a large population. Information on Government safety nets and other well-established programmes serving populations within the affected areas should be available in existing food security profiles and other secondary data. Data on the present functioning of those programmes and any new ones are best collected from key informants, especially staff involved in implementing the programmes in the field, and cross-checked with data from community groups, subgroups and households.

You will need to collect data from ***programme managers*** on:

- the geographic coverage of each programme;
- the types and quantities of assistance provided and the selection criteria applied; and
- the period during which the programme expects to provide assistance and whether they have any plans, and capacity, to expand their operations if needed.

Data will also need to be collected from ***community-level key informants*** and community members on:

- who actually receives what; and
- when the beneficiaries received the assistance and their perceptions of its value.

Venn diagrams (see Annex C17) may be used in community and subgroup interviews to capture information about all programmes and organizations providing assistance to the community, or to specific groups within the community, and the relative importance of each one.

The ***analysis*** will be completed by summarizing the data for each population group in a table (matrix) and considering:

- which, if any, of the programmes are able to respond effectively to the current shock/crisis by providing appropriate support to those households that are least able to meet their food and other essential needs (considering their selection and targeting processes, and the nature of the support provided); and
- which, if any, of the programmes have the capacity to manage and assure effective distribution and monitoring of resources on the required scale.

This should enable you to form a judgement concerning the appropriateness and capacity of the various programmes in the current situation.

5.3 Estimating household food access shortfalls

Objective	To estimate the difference between food consumption requirements and what households in the various population groups are able to provide for themselves without adopting distress strategies.
How the information will be used	To determine the level of assistance (resource transfers) required by households in each distinct population group and the periods during which such assistance is required.
Data collection techniques	Interviews with either subgroups (rapid appraisal techniques) or households (a survey), complemented by interviews with key informants.
Analytical tools	Various, depending on the analytical approach chosen.

Food purchases typically represent between 50 and 80% of the total expenditures of poor households (50% in urban areas, 80% in rural areas), but meeting minimum food needs is not the only survival requirement of households. Determining households' abilities to satisfy the basic nutritional/consumption needs of their members therefore involves consideration of both food and other essential needs, and any food access shortfall is indicative of the multi-faceted total ***resource gap***. Household income and food production are insufficient if together they meet minimum food needs but not other essential needs such as shelter, health care and basic education. An appropriate response to the resource gap normally involves a mix of responses, rarely food aid alone. (In some cases, food aid may not be appropriate, see Chapter 13.)

Estimating shortfalls has two elements, which are described in the next subsections:

1. estimating current access to food; and
2. forecasting how households' access to food – and therefore any shortfalls – will change in the coming months.

Food access shortfall

The food access shortfall is the difference between food consumption requirements and what people are able to provide for themselves without adopting distress strategies.[4]

'Food consumption requirements' refers to the intake of sufficient, safe and nutritious food, which meets people's dietary requirements, and food preferences for an active and healthy life.

For assessment and planning purposes in emergencies, the food access shortfall for households in a particular geographic area or population group is the difference between:

(i) the nutritional value of the food those households are able to provide for themselves without adopting distress strategies; and

(ii) what they need to assure an average intake of 2,100 kcal/person/day – adjusted for temperature, activity level and extreme health/nutrition conditions, when necessary, and for age/sex distribution, when data are available. The food intake should also provide an appropriate proportion of calories from protein (10-12%) and fat (minimum 17%) and adequate amounts of micronutrients (vitamins and minerals). [5]

Estimating current household food access and shortfalls

An estimate is required of the quantity of food to which households have access and a description of the types of food, see Table 5-H. The shortfall in quantity (energy content) determines the scale of the assistance (food or other resource transfers) that households might need. The types of food they have determines the quality of the diet, and particularly whether there is a shortage of protein or fat that would need to be compensated for in the design of rations, if food transfers were to be found to be appropriate. The likelihood of micronutrient deficiencies must also be considered as part of analysing the nutritional situation, as described in Chapter 6.

Table 5-H
What results should an analysis of household food access shortfalls provide
(for each distinct population group)

Quantity of food	
The ideal: An estimate of the per capita ***nutritional energy*** (i.e. kcal) that households can provide for themselves compared with the standard planning figure of 2,100 kcal/person/day adjusted, if necessary,. The estimated shortfall is expressed as a proportion of average per capita energy requirements.	**The minimum:** A rough categorization of the severity of households' food access shortfall representing the proportion of their food consumption needs that households cannot meet, e.g. 25 or 50%.
Types of food	
Whether: • the foods people can provide for themselves include any ***protein-rich*** items (legumes or animal products), and ***fat*** or ***oil***; • the main staple they have is a ***cereal*** or ***root/tuber*** (roots and tubers contain much lower proportions of protein and fat than cereals, and less energy per kg of food); and • they consume regular and significant amounts of ***fresh vegetables or fruits***, which are important sources of micronutrients.	

[4] Distress (or negative coping) strategies are activities that undermine future means of livelihood, dignity or nutritional health, increase long-term vulnerability, or are illegal or not socially acceptable.

[5] These are the average minimum nutritional requirements established for planning purposes by WHO and adopted by WFP, UNHCR, UNICEF, most other organizations, and the Sphere minimum standards for disaster relief.

Per capita energy requirements

According to established humanitarian norms, the average minimum nutritional/food consumption requirement for a typical developing country population undertaking light physical activity in a warm climate is 2,100 kcal/person/day. For a population engaged in heavy physical work activity, 350 kcal are added to give a total of 2,450 kcal/person/day. In many developing countries, a significant proportion of the population is chronically food insecure, with usual access to less than 2,100 kcal/person/day. Humanitarian assistance is nevertheless provided on the basis of the standard humanitarian norm, thus providing those emergency-affected households that are chronically food insecure with more resources than they normally have, assisting them to better overcome the crisis and build resilience to future shocks.

Methods for estimating the food access shortfall range from classifications based on personal judgement to quantitative estimates. The following approaches are the main options:

a) ***Judgement-based classification of changes in household food access*** – a judgement of the severity of the decline in food access of different groups based on data from changes in household food and income sources; and purchasing power and expenditures as compared to a normal or reference year. The data – some quantitative, some qualitative – are collected using rapid appraisal techniques and combined with data from secondary sources including pre-crisis information.

b) ***Classification based on statistical analysis of indicators of food consumption and other data – 'food security profiling'*** – classification resulting from the analysis of data on household diet diversity and food frequency; and sources of food and other indicators, collected through a household survey together with secondary data on the pre-crisis situation.

c) ***Quantitative analysis of households' food sources, income and expenditures*** – an analysis of quantified estimates of changes as compared to "normal" or other references (e.g. "worst situation in memory" or "best situation in memory") in households' food sources, income and expenditures, and the sustainability of the coping strategies adopted. Data are collected through in-depth subgroup interviews and combined with secondary data on the pre-crisis situation.[6] Household balance sheets are prepared or net changes in food and cash income and expenditures calculated.

Sections 5.6 to 5.8 provide brief explanations of each of the three approaches. Table 5-I suggests the circumstances in which each may be appropriate. All require specific skills. Those based on statistical or economic analysis also require considerable time, especially when the area is large and the population heterogeneous.

For purposes of response planning, the analysis should try to distinguish between households with pre-existing inadequate consumption even before the shock or crisis, but not directly affected by it, and those with a crisis-induced reduction in food access. Chronic food insecurity is best addressed through interventions that reduce the structural causes of food insecurity.

[6] These methods are based on or adapted from the household (food) economy method pioneered by Save the Children UK.

Table 5-I

Methods for estimating current food access shortfalls in different contexts

Situation	*Methods that may be appropriate*	*Skills needed*
During initial investigations	An informed guess based on secondary data, the extent of the area affected, and the observations of a few expert key informants.	Detailed local knowledge and experience of previous crises; in-depth understanding of food security
Rapid assessment during the early stages of a crisis	Judgement-based classification of changes in household food access compared with a 'normal'/reference year. [*Data from secondary sources and rapid appraisal techniques*.]	Local knowledge (pre-crisis); in-depth understanding of food security; basic skills and experience in data analysis
Rapid or in-depth assessment during a protracted crisis	One or more of the following, depending on the time and skills available: • Judgement-based classification of changes in household food access compared with a 'normal'/reference year and examining trends over recent months. [*Data from secondary sources and rapid appraisal techniques*.]	Local knowledge (pre-crisis); in-depth understanding of food security; basic skills and experience in data analysis
	• Classification based on statistical analysis of indicators of food consumption and other data. [*Data from a household survey and secondary sources*.]	Good skills in food security analysis and statistical techniques
	• Quantitative analysis of households' food sources, income and expenditures [*Data from secondary sources and intensive rapid appraisal techniques*]	Good skills in food security analysis and statistical techniques, or experience with the Household (Food) Economy Approach

In an ***ongoing assistance operation***, the extent to which the assistance provided covers the shortfall can be gauged by analysing: (i) changes and trends in the use households make of resources; and (ii) the economic and nutritional outcomes – whether households are loosing or accumulating assets and whether nutritional status is improving or declining. This can usefully cross-check the findings of the approach that was used to estimate households' food access shortfalls.

5.4 Forecasting shortfalls, their duration and identifying risks

Forecasts of how households' access and shortfalls will evolve in the coming months are based on examination of trends, seasonal factors, the opinions of key informants and the strategies adopted by households in the different population subgroups. Of particular importance are the expected evolution of prices and the availability of food in the area as well as anticipated changes in household production and income.

The evolution of household food access in the next 6 to 12 months depends on: (ii) changes in people's livelihoods; and (ii) changes in the overall food availability and prices. The analysis of availability and markets (Chapter 4) should provide forecasts concerning availability and prices. Forecasts for changes in livelihoods, and in particular changes in households' food production and cash income, will be based on the review of secondary information and interviews with key informants and community groups or subgroup.

The timeframe for which a shortfall is forecast, will depend on the local situation and may range from a few months (if a new harvest will be taken in and/or employment opportunities be re-established within that period) to a year or more (if a whole year's crop production has been disrupted, the recovery of employment on the required scale will take time, or the productive/income base of people have been disrupted through displacement, destruction of infrastructure, etc.).

The main factors determining changes in livelihoods in most situations are:

- the yields of households' own food production;
- changes in the labour market (the availability of work opportunities and daily wage rate);
- changes in market prices as a result of modifications in the demand/supply (e.g. for livestock, cash crops, agricultural and other inputs etc.); and
- prevalence of HIV/AIDS and risks of adults (wage earners) permanent disability or death.

These in turn depend on:

- the security situation;
- the availability of productive inputs (seeds, fertilizer, irrigation, raw materials for artisan products, small-scale credit, etc.); and
- the policies of the Government and other formal or informal authorities.

Draw up a list of the factors that will determine, directly and indirectly, how households' access to food will develop in your situation, and then specify the most likely scenario and, if necessary, the best- and worst-case scenarios, for each factor. It may be useful to summarize this in a matrix such as the one shown in Table 5-J.

Table 5-J
How factors influencing household food security may evolve
(forecast for the next 6 to 12 months, entries for illustrative purposes only)

Factors affecting the evolution of household food security	Most likely scenario	Worst-case scenario	Best-case scenario
E.g. … employment opportunities			
daily wage rates			
market prices for basic foods			
prevalent health situation, HIV/AIDS			
security situation			
climate (rainfall)			
…etc.			

5.5 Estimating numbers and calculating aggregate food access shortfalls

Estimating numbers

Estimates for the numbers of people affected by a shock/crisis and the numbers in need of food or related assistance can be contentious, so a careful, systematic approach is needed. Every effort must be made to understand the origins of any differences in estimates from different sources and to reach the broadest possible consensus on planning figures for each distinct geographic area and population group. The more agreement there is on numbers and the basis of them, the more useful the results are likely to be for all subsequent purposes.

Annex B2 provides brief guidance on estimating population numbers in various contexts:

- large area resident populations – estimates based on census or other official figures that are cross-checked against other data and discussed to reconcile differences and agree on planning figures;
- displaced populations who are on the move – counting the numbers passing selected points and extrapolating;
- large numbers of displaced people spread over a large area – aerial photography or satellite images and quick ground surveys;
- displaced populations in camp situations and other populations in clearly defined localities – estimates based on sample surveys initially, then registration as soon as feasible; and
- displaced populations who are dispersed among the local (host) population – estimates based on cross-checking reports from local officials and assistance agencies initially, then registration as soon as feasible.

The number of people in the various population subgroups and the number requiring food or related assistance, will be based on the population estimate for a particular population group or geographic area multiplied by the proportion of households in that group or area that have been determined to be facing a particular level of household food access shortfall, and therefore in need of a particular type and level of assistance.

Any enumeration exercise for ***displaced*** people should be planned and conducted with care and, wherever possible, in collaboration with local authorities and community leaders. Whatever method is used, a number of literate and numerate interviewers will be needed, preferably from the community itself. Discuss and agree with the other stakeholders on the most suitable methodology to use, and involve them in the estimation exercise. Registration should then be organized as soon as feasible.

For guidance on registration, see

→ *Food distribution guidelines*, Chapter 2 *Registration*, WFP-OHA 2002

→ *Handbook for registration*, UNHCR 2003

Calculating aggregate food access shortfalls

Whatever method is used to estimate household access shortfalls, you will produce estimates for households in various population groups (socio-economic, livelihood, wealth and/or ethnic groups depending on the situation and the homogeneity of the population), and/or geographic areas (when the impact on food security varies between areas). The overall, regional or national food access shortfall is the weighted sum of the shortfalls of all the different groups/areas that have been distinguished and for which estimates have been made.

Table 5-K provides an example of calculating the aggregate access shortfall. It is based on household income and expenditure balance sheets for three different population groups and expressed in cereal equivalents.

Table 5-K
Example of an aggregate food access shortfall estimate

Socio-economic group	Yearly HH shortfalls (kg)	Number of households	Total food access shortfall (metric tons of cereal equivalents)
Coastal fishing households	200	4,000	800
Highland coffee farmer households	150	6,000	900
Highland subsistence households	400	10,000	4,000
Total:		**20,000**	**5,700**

Note that analysis of the situation of different socio-economic (or other) groups should help in targeting assistance, but for this to be realized in the actual distribution of assistance, it must be operationally and politically feasible to allocate different rations/quantities of assistance – or to provide assistance for different lengths of time – to different groups of households living in the same area.

For each group you must also estimate the period during which assistance will be needed. For this, you must forecast how the access shortfalls of different groups will evolve – i.e. forecast when and to what extent they will be able to recover from the effects of the shock/crisis and their production, income and expenditures will change.

5.6 Judgement-based classification of changes in household food access

The basis of the method	Population subgroups are classified according to the perceived severity of crisis-induced food insecurity and households' food access shortfalls based on changes from normal in ***a range of indicators.***In slow-onset and ongoing protracted crises, trends are examined.
What the method requires	• Good ***pre-crisis data*** and a thorough understanding of the food security and nutritional situations prior to the crisis including seasonal variations, variations among different geographic areas and population groups, and the social, economic and other causes; • The efficient collection, using ***rapid appraisal techniques***, of data that are particularly relevant to the livelihood characteristics of the population groups concerned; • Specific skills both to identify sites for the inquiry that are broadly representative of the various affected population groups and areas and to conduct community group interviews; • (*In a slow-onset or ongoing protracted crisis*) A good food security monitoring system; and • A combination of local knowledge, food security expertise and analytical skills to judge the implications and importance of those changes, identify inter-relationships, and make ***informed judgements*** concerning the severity of the impact of the shock/crisis on the livelihoods and food security of particular areas and groups.
Strengths	It includes checking the consistency of a range of indicators ("triangulation") and can be used in any context and provide information ***rapidly***, but the quality and reliability of the output/conclusions will be low if time is too limited. It can be useful following a sudden on-set disaster that destroys food reserves and severely affects livelihoods and in situations of massive crop loss or population

	displacement due to conflict or natural causes.
Weaknesses	The analysis is based on the judgement (and prior knowledge and experience) of the analysts, not on specific data concerning the actual decrease in the amount and types (diversity) of food consumed. Conclusions concerning the levels of assistance that might be needed and the composition of rations, if food aid is considered to be the best response, are essentially ***subjective***. The lack of objective measures and defined thresholds make comparisons among different areas and assessors difficult.

With good knowledge of the pre-crisis situation of the affected populations and local expertise, rough estimates of household food access shortfalls can be made on the basis of changes (compared with the normal situation) and trends in key indicators such as:

- Reduction/loss of sources of livelihood (e.g. the scale/proportion of reduction/losses of household production, income, productive assets, terms of trade [especially for livestock owners and artisans]);
- Changes in market prices and supply of food (e.g. the scale/proportion of price rises and/or reduction in volumes of market trade or areas served by functioning markets);
- Changes in the types of food consumed (e.g. the extent of any increased reliance on wild foods, or the reduction in diet diversity [e.g. increased reliance on staples]);
- Reduction in the number of meals per day (e.g. the proportion for households that have reduced the number of meals to 1 or 2 instead of 2 or 3 per day);
- Changes in sources of food (e.g. unusually high dependence on purchases, borrowing, begging);
- Changes in levels of household food stocks (the extent to which farming households' stocks are below the seasonal norm);
- Changes in prevalence of malnutrition (most frequently among children <5 years) and mortality rates compared with the seasonal norms; and
- Adoption of distress – unsustainable coping – strategies (e.g. the proportion of households that are selling productive livelihood assets, engaging in distress migration, incurring unusually high levels of debt and/or defaulting on debt repayments, and the number of such strategies being adopted).

Although none of the above indicators can immediately be converted into a measure of food shortfall, several of them triangulated together (cross-checking) should permit classification of households, or population subgroups, into broad ***categories of severity*** of food insecurity and access shortfalls, such as: [7]

- No or limited food access shortfall;
- Significant food access shortfall; and
- Severe food access shortfall.

Baseline consumption and income levels may be obtained from pre-crisis data (e.g. CFSVAs, other VAM studies and other baselines) or through household interviews combined and compared with other data sources, such as district-level crop production and trade figures.

In a few countries, this approach of comparing the actual with the normal situation has been used to build a "coping strategy index". Knowledge about household behaviour in crisis situations provides an indication of the need for external assistance.

[7] Some guidelines, e.g. those of the Kenya Food Security Steering Group, draft 2004, suggest making judgments as to the proportions of households that are facing shortfalls of 25, 50, 75 and 100% of their consumption needs.

In an ***ongoing operation***, examination of the indicators suggested above (especially trends in coping strategies and prevalence of malnutrition) may be complemented by examining:

- how households are using the resources available to them and, in particular, the amounts going for 'non-essential' expenditures and the amounts contributing to the accumulation of assets; and
- whether debts incurred for consumption purposes are increasing or decreasing.

On this basis you can judge whether recent levels of food and related assistance matched the need (shortfalls) or not.

5.7 Statistical analysis of indicators of food consumption and other data – 'food security profiling'

The basis of the method	This method uses ***dietary diversity*** and ***food consumption frequency*** as proxy indicators of households' access to food and examines how these indicators compare with normal household food consumption patterns for this time of year. Households are classified according to different patterns of diet diversity and these ***current consumption profiles*** are combined with other household food security indicators such as number of meals per day, household assets and coping strategies, changes in sources of food and household characteristics.
What the method requires	• Good ***pre-crisis data*** on food habits and normal food and income sources of different population groups and geographic areas, including seasonal variations; • A ***household survey*** using a well-designed and tested questionnaire, and appropriate probability sampling procedures with an adequate sample size; and • A combination of local knowledge, food security expertise and ***statistical skills*** to analyse the data, identify a number of distinct food consumption profiles, classify households accordingly, identify correlations/inter-relationships with other food security related indicators and socio-economic characteristics, and make ***informed judgements*** concerning the severity of food access shortfalls of households in each of the food consumption profile categories. ***Expertise must be mobilized from ODA-VAM (WFP HQ) or the regional bureau to advise on the design of the questionnaire and assist in the analysis of the data.***
Strengths	The data collected are relatively robust: the risk of inaccuracy and respondent bias is low compared to a survey that tries to collect data on household incomes and expenditures.
Weaknesses	Time is required to organize and conduct a survey covering an adequate number of households, and statistical skills, time and resources are required to analyse and interpret of the data. The analysis is based on respondent ***recall*** of what they consumed. Conclusions are based on informed ***judgements*** concerning the severity of food access shortfalls of households represented by each of the food consumption profile categories, not on specific data concerning the actual decrease in the amounts of different types of food consumed.

The International Food Policy Research Institute (IFPRI) has undertaken pioneering work on food diversity, and the basis for using diet diversity and meal frequency as proxy indicators for household food access is presented in Annex B1. The approach, as described below, has been further developed by WFP-VAM and is being refined on a continuous ongoing basis. Contact ODAV (WFP HQ) for up-to-date information and guidance.

This method provides a snapshot of the situation at the time of data collection. Forecasting how the situations of the various groups will evolve in the coming months requires a separate analysis as outlined in 5.5, and this depends heavily on information from key informants.

The main steps are outlined below including what needs to be done as part of the assessment design, and a brief outline of how the analysis is conducted.

As part of the assessment/survey design

There are three steps at the preparatory stage:

Preparatory step 1: List the 6 to 10 most important ***food items*** known to be consumed by households in the area in normal times and at present (including relief foods if distributions are already underway), and the normal main ***sources*** of food.

Preparatory step 2: Prepare a suitable household ***questionnaire*** to collect data on the number of days that each main food item was consumed during a 7-day recall period, and the sources of each item. Table 5-K provides an example of the kind of module that may be included in the questionnaire.

Table 5-K
Format to collect data on households' consumption of main food items and principal food sources

No. [2]	Food item	Days consumed (0 – 7)	Main food sources over the 7-day period considered *(code)* [1]	
1a	Main cereal (e.g. maize)			
1b	Other cereals			
1c	Other staples: roots & tubers (e.g. cassava)			
2a	Beans (or pulses/legumes)			
2b	Meat (red meat, poultry, fish, bush meat)			
2c	Milk / milk products			
2d	Eggs			
3	Cooking oil (and/or animal fats)			
4	Vegetables, fruits (cultivated)			
5	Wild foods (herbs, fruits, nuts, leaves)			
6	Sugar (where culturally important)			

[1] Examples of food source codes*: 1 = Own production; 2 = Purchase; 3 = Traded; 4 = Kinship/gift; 5 = Food aid*

[2] In the serial numbering of the food items, staples (cereals roots and tubers) are grouped together, protein-rich foods are grouped together, and oil and fats are grouped together. This is to facilitate the analysis in which items within each of these three main food groups are combined, see Tables 5-D and 5-E.

Preparatory step 3: Establish a minimum basic diet diversity/food consumption ***benchmark*** by: (i) grouping the individual food items into the 3 main food groups – staples, protein-rich foods, and fats/oil – and specifying a basic, minimum consumption pattern for the population concerned (see box below); and (ii) assigning scores corresponding to the number of days on which food items in that basic consumption pattern would normally be consumed during a 7-day period. The total of these scores is taken as the benchmark.

Establishing the benchmark

The basic consumption pattern for many populations would be to eat one food item from each of the 3 main food groups every day, i.e. 7 times a week. The benchmark score would then be 3×7 = 21 as shown in Table 5-M.

In some specific country situations it may be determined that the basic consumption pattern is composed of more food items. Referring to Table 5-M, if it is determined that consumption of sugar (e.g. in tea)[8] at least 3-4 times a week is a constant feature and should be an element of the basic consumption pattern, the benchmark score would be 24.5.

Table 5-L
Defining the normal food consumption benchmark

#	Food group	8 and more	7 times	5 or 6	3 or 4	1 or 2
1	Cereals/tubers		Score 7			
2	Protein-rich foods		Score 7			
3	Oils, fats		Score 7			
4	Vegetable, fruits					
5	Wild foods					
6	Sugar				Score 3.5	

Total (basic consumption benchmark) score: 7 + 7 + 7 = 21

If sugar (e.g. in tea) 3-4 times a week were to be included the score would be 21 + 3.5 = 24.5

Note: A frequency of "3 or 4" is given a score of 3.5.

The fundamental assumption of this method is that the basic minimum consumption pattern meets minimum consumption requirements (approximating to 2,100 kcal/person/day, etc) for each member of the household. The limits of the method are related in great part to this initial assumption.

Data analysis

There are six steps in the analysis:

Analysis step 1: From the completed questionnaires, calculate the ***current consumption score*** for each household by adding up the number of days on which individual items from each food group were reported to have been consumed during the 7-day period. The number for any individual food item will be between 0 (not eaten at all) and 7 (eaten very day). The total for a food group may be more than 7, if at least one item from the group was consumed every day and two (or more) items on some days: for example, maize on 4 days, other cereals on 4 days, and tubers on, 2 days would give a total score of 10.

Analysis step 2: Calculate the ***difference*** between actual and basic benchmark consumption score for each household. The difference may be negative (corresponding to a shortfall) or positive (corresponding to more than the normal minimum). The example in Table 5-K shows a household with a severe food consumption problem: the score for actual consumption is 12.75, giving a consumption score shortfall of 8.25 (or 39%) if the benchmark is 21. The shortfall would be 11.75 (or 48%) if the benchmark were 24.5.

[8] Sugar is an important item in some local diets and provides a significant number of kilocalories.

Table 5-M
Example of a consumption profile indicating a severe food consumption problem

#	Food group	8 and more	7 times	5 or 6	3 or 4	1 or 2
1	Cereals/tubers		Score 7			
2a	Legumes					Score 1.5
2b	Animal products					
3	Oils, fats					
4	Vegetable, fruits			Score 5.5/2=2.75 [1]		
5	Wild foods					
6	Sugar					Score 1.5

Food consumption score: 7 + 1.5 + 1.5 + 2.75 = 12.75
Shortfall compared with a benchmark of 21: 21 – 12.75 = 8.25
Shortfall as a percentage of basic benchmark: 8.25 / 21 = 39%
Note: [1] The score for vegetables and wild foods is reduced by half in view of their generally low calorific value.

Note: In this example, cereals and tubers have been combined. In practice, where tubers are widely consumed, it can be useful to separate them. A diet that depends heavily on tubers is likely to be severely deficient in protein and fat and it will be important to check the consumption of legumes and animal food, as these would be the only foods providing protein and fat in the absence of cereals.

Analysis step 3: Group households according to their ***food consumption profiles*.** A rigorous method for doing this is a Principal Component Analysis (PCA) combined with a household clustering based on current consumption scores. PCA enables to identify the underlying relationship among variables and optimise them[9] in order to better group households by their pattern of consumption. This is relevant because the same consumption score may be achieved through different patterns. In the case of borderline scores the severity of the access problem (and the need for assistance) can be determined, based on whether or not the score was achieved with a pattern that includes consumption of foods rich in nutrients (protein, minerals, vitamins) such as meat. However, PCA requires very good statistical skills. If those skills are not available, ask ODA-VAM for technical support. If this is not feasible, an alternative is to rank households based on thresholds for various actual score levels. This analysis will not be as rigorous as one using PCA but can still provide useful consumption profiles as well as identifying types of food that are missing from the diets of certain groups.

[9] See *Household Food Security Profiling Guidelines*, WFP-VAM 2005

Example

Household food consumption profiles distinguished in the EFSA in Darfur in 2004

a) Households with a consumption score shortfall of more than 30% were considered to have a serious food consumption problem. Their diet is severely compromised in terms of both minimum caloric and nutrient content. [*Substantial assistance needed to prevent households sacrificing remaining productive assets and foregoing essential non-food expenditures, e.g. basic health services, education, in order to survive.*]

b) Households with a shortfall of 10 to 30% were considered to have inadequate food consumption. These households have to make harmful choices between (i) getting nearly sufficient calories from staple foods; and (ii) maintaining a minimum necessary nutritional diversity in terms of protein, fat and micronutrients. Their diet tends to be particularly compromised in terms of nutrient content. [*Assistance may be needed, perhaps for part of the year and/or in the form of specific nutritious food items.*]

c) Households with a shortfall of less than 10% below the minimum were considered to have borderline food consumption. [*These households may require assistance if their food access is expected to deteriorate in the coming months.*]

d) Households with no consumption score shortfall (a score equal to or higher than the minimum requirement) were considered to have adequate food consumption.

Analysis step 4: ***Cross-tabulate*** household food consumption groups with ***number of meals per day*** to compare the distributions of these two parameters. Typically, consumption score shortfalls of 30% or more would correlate with a significant proportion of households eating only one meal a day. Shortfalls between 10 and 30% typically correspond to nearly all households eating not more than two meals a day. Further cross-tabulation with household ***demographic*** and ***economic data*** will shed additional light on the characteristics of the households falling into the different food consumption categories.

Take care when interpreting the reported number of meals per day. A "meal" may mean different things to different groups. A household eating once a day a large meal composed of a variety of food (meat, cereals, sauce rich in fat and vegetables) may be much better off from a nutritional viewpoint than a household eating 3times-a-day just bread and sweetened tea.

Analysis step 5: ***Cross-tabulate*** household food consumption groups with ***food sources*** to obtain an indication of the sustainability of current food consumption levels, as illustrated in Table 5-N. A predominance of food aid or borrowing among food sources indicates a dependence on continued transfers. An unusually high share of food purchases, compared to the normal or reference situation for the same period of the year, may suggest that current food consumption levels are unlikely to be sustained unless the households belong to better off wealth categories, which should be checked against basic ***asset*** and, if available, ***expenditure data***.

Table 5-N
Food consumption groups by degree of shortfall and sources of food

Food consumption groups	Total	Households receiving food aid*	Households mainly purchasing food*
Acceptable Consumption score shortfall <10%	53%	*7%*	*46%*
Borderline Consumption score shortfall 10 to 30%	38%	*12%*	*26%*
Severe Consumption score shortfall >30%	9%	*1%*	*8%*

No shading = no assistance needed
Light shading = may require some assistance
Darker shading = need substantial assistance

[Adapted from *Emergency Food Security and Nutrition Assessment in Darfur, Sudan,* provisional report, WFP October 2004]

Analysis step 6: When food aid is being provided, the analysis of the food sources for various household food consumption groups also informs on the ***targeting effectiveness*** of the programme. For example, households with severely inadequate food consumption but who are not receiving food aid represent an exclusion error, while households with acceptable and better food consumption who are recipients of food aid represent an inclusion error at least to some degree. This analysis, however, should be made with caution since reverse causality cannot be excluded, i.e. that households are able to maintain acceptable or better food consumption mainly because they can receive food aid.

5.8 Quantitative analysis of household food sources, income and expenditures

The basis of these methods	These analyses begin by developing baselines for the *pre-crisis* situation that satisfactorily explain how people in each subgroup usually survive. Data are then collected on *current* food and cash income and expenditures for each subgroup after the shock/crisis and compared with the baselines to provide estimates of food access shortfalls resulting from the shock/crisis for each subgroup. Allowance is then made for any compensation households are able to make by expanding livelihood activities that have not been impacted or through non-damaging coping strategies, to produce an estimate of the remaining shortfalls. Simplified versions focus on estimating only changes.
What the methods require	• Good ***pre-crisis data*** and a thorough understanding of the food security and nutritional situations prior to the crisis including: seasonal variations; variations among different geographic areas and population groups; and social, economic and other causes; • The collection, using ***rapid appraisal techniques***, of detailed data from groups formed to represent specific population subgroups, and on-the-spot cross-checking/initial analysis of those data; and • A combination of local knowledge, food security expertise and analytical skills to judge the implications and importance of those changes, identify inter-relationships, and make ***informed judgements*** concerning the severity of the impact of the shock/crisis on the livelihoods and food security of particular areas and groups.
Strengths	Skilled interviewers are able to get an understanding of the livelihoods of the groups interviewed, make quantitative estimates of their shortfalls and provide specific forecasts for different scenarios during the coming months. The 'full' household (food) economy analysis incorporates extensive cross-checking to ensure that the data provided by particular groups interviewed add up.
Weaknesses	Considerable time and skill are required and it is difficult to cover and draw conclusions for a large and heterogeneous population.

There are several variations of the economic analysis approach. This section provides very brief descriptions of the original household food economy approach, streamlined (simplified) versions of that approach, and an outline of the balance sheet method. Each variant tries to generate estimates, directly or indirectly, for all significant food and cash 'income', basic food needs and all significant cash expenditures, and compare the totals of each. To do this, it is necessary to express all 'income' and required expenditures in a standard unit. Some methods use the cash value (which is particularly appropriate in a cash economy, especially for urban populations), others use cereal-equivalents (which can be appropriate in a subsistence farming economy), and others use kilocalories.

In all cases, judgements have to be made about the type of coping activities to be allowed for on the income side and the types and levels of non-food expenditure to be considered as 'essential.' In general, coping activities that deplete productive livelihood assets, are not sustainable or not socially acceptable should not be included. Expenditures that are necessary to sustain health and other productive livelihood assets should be included.

Even in the context of an undeveloped rural economy in which people have only a very limited range of options for acquiring income, it is notoriously difficult to collect useful data on *incomes*. Rather than seeking figures for income directly, it is usually best to obtain data for items from which you can impute income at a later stage. For example, ask people the number of days they find and undertake paid work each week or month, and find out about wage rates by asking in the local market.

The original household/food economy approach

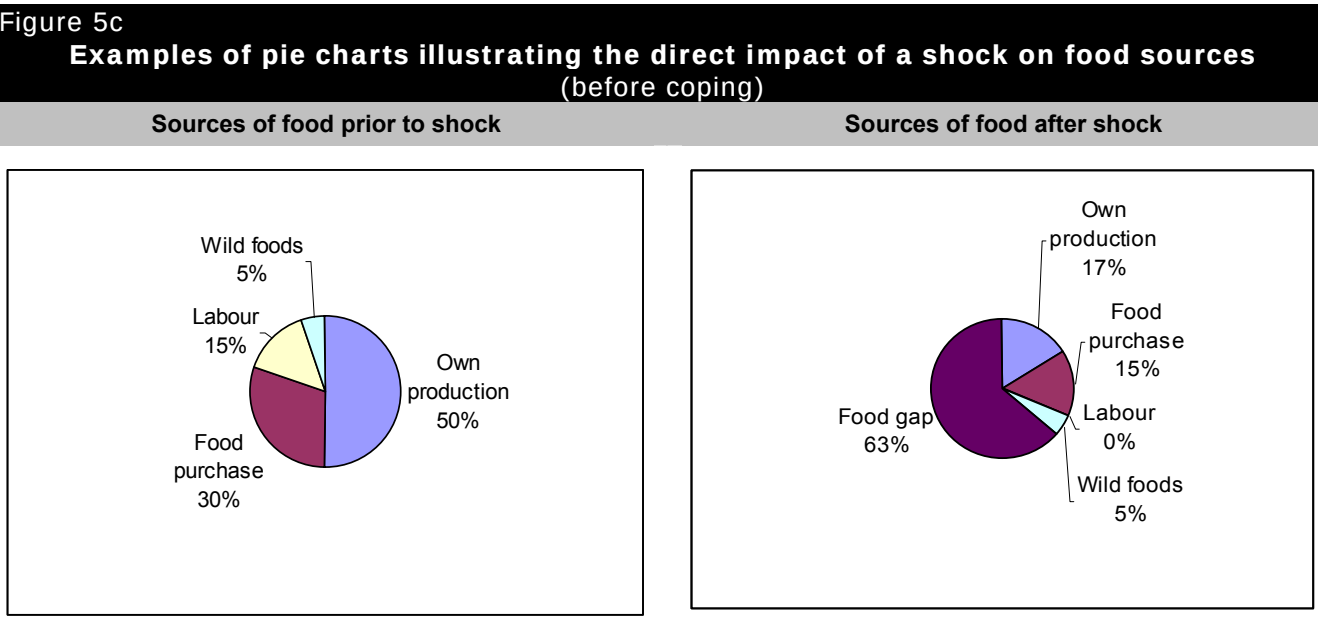
The original household/food economy approach pioneered by Save the Children UK gathers detailed data through in-depth interviews with subgroups representing all the important socio-economic subgroups within the community, usually different wealth groups within each livelihood group. The data include quantified estimates for the amounts of food and cash households obtain from different sources, and their essential expenditures. Typically, four different wealth groups are distinguished – very poor, poor, middle, and better-off – according to criteria defined by the communities themselves. (See Annex C19 for guidance on wealth ranking.) All food and cash income and expenditures are converted into ***kilocalorie equivalents,*** and attention is given to making sure that everything adds up and provides a consistent picture of economic activity at the household level and within the community. Pie charts are used to illustrate changes, as shown in Figure 5c.

This requires considerable skill and time, e.g. 10-14 days for experienced interviewers trained in the methodology to cover one livelihood zone, visiting 8-12 communities, depending on circumstances on the ground. For details of this approach, see the following:

→ *The Household Economy Approach: a resource manual for practitioners*, Save the Children UK, London (2000); or

→ *Guide to Rapid Food Needs Assessment*, The Food Economy Group (expected 2005).

Figure 5c
Examples of pie charts illustrating the direct impact of a shock on food sources (before coping)



Streamlined (simplified) version of the economic analysis approach

A streamlined version of the economic analysis approach involves collecting data only on the relative importance of the households' different sources of food, income and expenditure (e.g. through proportional piling), and then quantified estimates for just one or two food, income and expenditure items for which the most reliable estimates can be obtained. Based on those estimates and the relative proportions of the various items, the amounts for the other items are then imputed (calculated) rather than attempting to obtain separate estimates for all items. This enables a rough estimate to be made of the crisis-induced change in household food access for each population subgroup.

This requires considerable skill but less time than the 'full' household economy approach. Data collection may be further streamlined by collecting data for only those socio-economic groups that are believed to be particularly vulnerable to the effects of the shock/crisis, e.g. the 'poor' and 'very poor'. For details and an example of this kind of approach see:

→ *Food security analysis Field Kit*, WFP-Food Economy Group Technical Support Unit, WFP Sierra Leone (2002)

Household income and expenditure balance sheet

Exceptionally, in case of a disaster-induced crop loss among predominantly subsistence farmers, or when a sudden onset disaster has destroyed food reserves, it may be possible to draw up a balance sheet, as presented in Table 5-L, expressed in ***cereal equivalents***, for each distinct socio-economic group within the population. This would normally be done for a 1-year period, but may also be done for a shorter period of time. Data on income and expenditures would be collected through key informant and subgroup interviews, secondary sources, and market visits.

The weakness of this method is the difficulty of adequately capturing comprehensive data on sources and levels of income, for households that engage in more complex livelihood strategies. In addition, it does not provide information on quantities and types of food actually consumed, which limits the possibilities to extrapolate information on possible amounts of food aid required, if food aid is considered an appropriate response option. It also does not provide information on seasonal changes.

A quality of this method is that it spells out and factors in explicitly the essential non-food expenditures that a household must incur to sustain its livelihoods, including for health, shelter, clothing, and fuel.

The key steps in drawing up a balance sheet and calculating any food access shortfall are: [10]

1. Establish average minimum ***household food requirements*** in cereal equivalents:

> **Minimum household food/consumption requirements in cereal equivalents**
>
> The basic consumption requirement is taken as 2,100 kcal/person/day adjusted for temperature, activity level, age/sex distribution, or extreme health/nutrition conditions, if necessary.
>
> Dividing the consumption requirement (say 2,100) by the average caloric value of cereals (350 kcal/100 g) gives a requirement of 600 g of cereal-equivalents/person/day, or 600×30/1000 = 18 kg of cereal-equivalents/person/month.
>
> If the average household size is 5.0, the average household consumption requirement would be
>
> 18×5 = 90 kg/household/month, or 90×12 = 1,080 kg/household/year.

2. Estimate current food and cash ***income*** for a typical household in terms of cereal equivalents. Include all food produced by households, both that which they consume themselves and that which they sell or exchange, as well as cash income from all sources, including wages, gifts and remittances.

[10] This description of the balance sheet method is derived from *Emergency Needs Assessment guidelines*, WFP 1999.

Converting food and cash 'income' into cereal equivalents

For cereals and pulses that are produced and eaten, simply record the quantities kept and consumed.

For root crops and plantain/bananas that are produced and eaten, convert them into approximate cereal equivalents by dividing the quantities by 3.5. (About 3.5 kg of these items are needed to provide the same nutritional energy – kcal – as one kg of cereals.)

For food and other produce that households sell or exchange, calculate the quantity of cereals that would be obtained in exchange (either directly or through sale and purchase) on local markets.

For cash income, convert the amounts into cereal equivalents by dividing by the average local market cost of one kg of the cereal that is most widely available and purchased.

3. Estimate the level of ***required expenditures*** for a typical household in cereal equivalents – the expenditures that the average household would have to incur to meet their food consumption and other essential needs.

Converting food and cash 'income' into cereal equivalents

Insert the minimum household food/consumption requirement defined at step 1.

Include the quantity of grain that should normally be kept for seed.

Include an estimate for storage losses (actual quantities for cereals, quantities divided by 3.5 for root crops).

For cash expenditures, convert the amounts into cereal equivalents by dividing by the average local market cost of one kg of the cereal that is most widely available and purchased.

4. Calculate the difference between actual income and required expenditures.

Keep in mind that income data rarely reconcile with expenditure data (typically income is under-reported). In many cases good probing techniques are required to elicit all income sources such as in-kind transfers (common with social networks), remittances, petty trading, etc.

A hypothetical household 'balance sheet' is presented in Table 5-O.

Table 5-O

Household income and expenditure balance sheet

(example for a household of 5 persons requiring 10 500 kcal/day or 1 080 kg cereal-equivalents/year)

	In cash value per year	In cereal equivalents per year	In kilocalories per day
Average household income			
Food produced and consumed	$ 140	400 kg	3 900 kcal
Food produced and sold	$ 35	100 kg	970 kcal
Cash crop sales	$ 35	100 kg	970 kcal
Livestock sales	$ 105	300 kg	2 920 kcal
Off-farm cash income	$ 35	100 kg	970 kcal
Remittance income	$ 18	50 kg	480 kcal
Draw down on savings	$ 18	50 kg	480 kcal
Debts incurred	..	..	..
Total Income:	**$ 386**	**1,100 kg**	**10 690 kcal**
Required household expenditures			
Min. food/consumption requirement	$ 378	1,080 kg	10 500 kcal
Cereal seeds	$ 35	100 kg	970 kcal
Cereal storage losses	$ 24	70 kg	690 kcal
School fees	$ 18	50 kg	480 kcal
Medical expenses	$ 35	100 kg	970 kcal
Clothing	$ 18	50 kg	480 kcal
Cooking/heating fuel	$ 18	50 kg	480 kcal
Debt repayments	..	..	..
Rent and essential transportation	..	..	..
Total requirements:	**$ 526**	**1,500 kg**	**14 570 kcal**
Balance / unmet need	**$ 140**	**400 kg**	**3 880 kcal**

Chapter 6

Analysing food utilization and the nutrition situation

This chapter provides a very rough, preliminary outline of how food utilization and nutritional aspects are analysed during an EFSA. The text will be improved and more detailed guidance developed during 2005/06. In the meantime, contact WFP headquarters, ODAN and PDPN, for guidance and support.

> ***The objective*** is to find out: (i) whether households are able to make effective use of food and prepare food suitable for young children and elderly and sick people – whether they have adequate water, utensils, cooking fuel and knowledge; and (ii) whether the prevalence of global acute malnutrition is abnormally high or likely to increase, or there is a risk of micronutrient deficiencies, and the causes of malnutrition.
>
> ***The decisions to be informed*** are: what measures, if any, are needed to improve food utilization or correct or prevent malnutrition; whether supplementary or therapeutic feeding programmes are necessary; whether specific measures are needed to address micronutrient deficiencies; what nutrition education and other measures may be needed.

The key steps are:

- Determining the impact of the shock/crisis on food utilization and the nutritional situation, see → 6.1.
- Coordinating or combining the collection of nutrition data and food security data, see → 6.2.
    - Key nutrition indicators for an EFSA, see → 6.3.
- Analysing the general nutrition situation and risks, see → 6.4.
- Interpreting nutrition survey data, see → 6.5.
- Analysing micronutrient deficiency problems and risks, see → 6.6.

Nutritional aspects should be considered when the presence or risks of malnutrition are important. For more detailed information, technical guidance and support on nutrition issues:

→ see the WFP *Food and Nutrition Handbook*; and

→ contact WFP headquarters, PDPN.

6.1 Determining the impact on food utilization and the nutritional situation

Food use at household level

Food is of little use if people are unable to prepare and cook it in a manner that enables all household members, including young children and sick and elderly people, to ingest and digest it. Moreover, even if there is enough food and it is adequately prepared, the nutritional needs of all household members will not be met if the food is not shared equitably within the household.

The abilities of households to store, prepare and cook the food they have, and assure appropriate food preparation and care for vulnerable individuals – young children, sick and elderly people – is assessed by a combination of observation at the household level and interviews with key informants and community groups and subgroups.

Particular attention is often needed to the availability of ***cooking fuel***, especially when people are displaced and congregate in camps or there is extensive damage in an urban area. See annex B8 for guidance on issues relating to domestic fuel (including both cooking and domestic heating) requirements.

Key questions are:

- Are all households able now, and will they be able in the coming months, to make effective and efficient use of the food they have?
    - What are their normal food habits: what items are usually consumed and how are they normally prepared for: (i) the family in general; (ii) young children; (iii) sick and elderly people;
    - What has been the impact on household food storage, preparation and cooking facilities: do households still have cooking utensils and stoves;
    - What access do households have to cooking fuel.
- If not, in which areas or population groups are households unable (or will households be unable) to make effective use of the food they have or prepare food suitable for all household members? Why?
- What contingencies could change the abilities of households in different areas or population groups to use food effectively in the coming months.

Table 6-A suggests the kind of information required and possible sources.

Table 6-A
Analysis and information requirements for a rapid EFSA

Theme	**Food utilization and nutrition: (i) Food utilization**
Possible types of analysis	Comparison of the food that households currently have and are able to prepare with (i) their normal food habits, and (ii) recommended feeding practices for young children and sick and elderly people. Care and feeding practices.

Possible information requirements		**Possible sources of data** 1 = pre-crisis; 2 = current & forecasts		
Pre-crisis data	**Current situation & forecast**	1	2	Sources
• Normal food storage and preparation habits, and any taboos. • Normal feeding practices for young children and sick and elderly people.	Current situation: • The quantity and quality of water available to households for cooking and domestic hygiene purposes. • The utensils, cooking stoves and cooking fuel available to households. • If cooking facilities and fuel are scarce, the appropriateness of shared or communal cooking facilities. • Changes in feeding practices for young children and sick and elderly people.	√		VAM and other pre-crisis food security baselines/ profiles
		√		Ministry of health
		√		National nutrition and public health research institutions
		√	√	NGOs working in nutrition and public health
		√	√	Local extension workers and public health officers
		√	√	Women's associations
		√	√	Community leaders
		√	√	Community members (through community interviews and subgroup interviews or household survey)
			√	Observation

Summarize your findings in a table such as the one below:

Analysis of food utilization		
Direct impact	**Reaction** (compensatory action)	**Outcome** **(problems and risks)**
E.g.: …	E.g.: …	E.g.: …

Nutrition (and health) situation

It is important to have an idea of the ***nutrition*** situation, especially that of nutritionally vulnerable individuals (mainly children under 5 years and their mothers), in order to determine the need for selective feeding programmes, design rations for all types of food distribution, and monitor the situation over time. Information on ***health*** conditions and the availability and use of health care services is necessary to understand the relationship among malnutrition, consumption and disease, especially diarrhoea, measles and intestinal parasites.

Key questions are:

- Are there any problems of malnutrition (protein-energy malnutrition and/or micronutrient deficiencies) or is there a risk of such problems?
- If so, what are the problems, how severe are they, which areas and population groups are concerned?
- What contingencies could result in changes to the nutritional situation or risks?

The prevalence of malnutrition (wasting) is determined through ***anthropometric surveys*** that collect, at a minimum, weight, height and gender data on children between 6 and 59 months of age. Typically these surveys are conducted by NGOs or other partners, sometimes coordinated by WFP or UNICEF. In addition to body measurement data, some basic public health and food security data are collected to permit analysis of the causes of any observed malnutrition. These data, collected through community group and household interviews, typically include food frequency and diversity; cooking, feeding and hygiene practices; coverage of measles vaccination and vitamin-A distributions. The survey, and in particular the anthropometric measurements, must be conducted in accordance with internationally-accepted standards relating to indices (weight-for-height for children, body mass index for adults), cut-off points, sampling procedure, and arrangements to ensure accurate measurements and recording (see 6.5).

Data from anthropometric surveys are needed to determine:

- the need for supplementary or therapeutic feeding programmes and, if so, the type of programme(s) needed to correct unusually high levels of malnutrition or to prevent deterioration of existing nutritional status;
- whether an increase in the general ration would be feasible to address malnutrition in a situation where widespread supplementary feeding may not be practical;
- the type of public health interventions that may be needed (e.g. water, sanitation, or social communication on feeding practices) especially at the beginning of a crisis if the prevalence of malnutrition is unusually high compared with the seasonal pattern or international standards.

Data from anthropometric surveys are also needed within a few weeks (or months) of any assistance operation to establish a baseline for monitoring and reporting purposes.[1]

Micronutrient deficiencies can be a problem in emergencies whenever people have little or no access to fresh foods. Data on the presence and risks of micronutrient deficiency diseases may come initially from clinical observations and analysis of current diets, and later from surveys and biological testing. They are needed to:

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[1] Once the baseline has been established, data are required at regular intervals for monitoring purposes (at seasonally relevant periods) and reporting (usually annually). Ad hoc local nutrition surveys may also be needed to assess the situation when monitoring or other credible reports indicate deterioration.

- identify any current micronutrient deficiencies of public health concern, and/or any risks of such deficiencies developing; and

- provide recommendations concerning the design of general rations (where planned) and/or other public health measures to combat such deficiencies.

The situation and risks should be monitored on an ongoing basis for any modifications that may call for a change in the ration composition (or other interventions) especially in situations where people are heavily dependent on food aid rations for an extended period.

Cross-correlation of data on nutritional status, socio-economic characteristics and the severity of food insecurity, when available for the same households, can provide insights into the relationships between these three types of critical elements and enable the design and targeting of interventions to be refined.

Table 6-B suggests the kind of information required and possible sources.

Table 6-B Analysis and information requirements for a rapid EFSA				
Theme	**Food utilization and nutrition: (ii) Nutritional situation**			
Possible types of analysis	Comparison of malnutrition (and mortality) rates with what would be expected at this season and against international standards. Examination of (i) data from the health information system, and (ii) diets and ration composition, to identify the presence, or risks, of micro-nutrient deficiencies.			
Possible information requirements		**Possible sources of data** 1 = pre-crisis; 2 = current & forecasts		
Pre-crisis data	**Current situation & forecast**	1	2	Sources
• Usual rates of global acute malnutrition and seasonal variations. • Endemic micronutrient deficiencies, if any. • Causes of malnutrition. • Epidemiology of the area – normal disease patterns and seasonal variations.	Current situation: • Global and severe acute malnutrition rates. • Clinically diagnosed micronutrient deficiencies. • Diets and any associated risks of micronutrient deficiencies. Data for forecasting (including seasonal changes): • Intra-household sharing of food. • Water and sanitation conditions	√		VAM and other pre-crisis food security baselines/ profiles
		√		Ministry of health
		√		National nutrition and public health research institutions
		√	√	NGOs working in nutrition and public health
		√	√	Local public health officers
		√	√	Women's associations
		√	√	Community leaders
		√	√	Household survey

Summarize your findings in a table such as the one below:

Analysis of the nutritional situation and risks		
Direct impact	**Reaction** (compensatory action)	**Outcome (problems and risks)**
E.g.: …	E.g.: …	E.g.: …

Assessing and analysing morbidity and public health information

The concern is with public health conditions that could contribute to increased malnutrition and/or mortality and that would need: (i) to be addressed to ensure that food security and nutrition interventions would be effective; and (ii) to be taken into account when analysing the effectiveness of such interventions during an ongoing operation. In that context, EFSAs must obtain and review data on:

- any existing, seasonal or predicted ***outbreaks of disease*** that could contribute to increased malnutrition and/or mortality, notably diarrhoeal diseases (including cholera and shigellosis), measles, malaria, dengue fever, and acute respiratory infections (ARI);

- ***environmental health risks*** that increase the likelihood of such outbreaks, notably inadequate water supplies (insufficient water for hygiene purposes and/or a lack of safe water for drinking), inadequate arrangements for the disposal of excreta and other solid and liquid waste, and crowded living conditions;

- rates of ***HIV/AIDS*** and ***tuberculosis*** that limit households' capacities to produce food or earn income;

- the effectiveness of ***primary health care*** services – the coverage of preventive measures (especially measles vaccination and vitamin A supplement distribution, and de-worming treatment), and the access that people have to, and the use they make of, health services.

EFSA teams will rely on secondary data for all these aspects, seeking data – and professional interpretation of those data – from the Ministry of Health, local health (including environmental health) authorities, NGOs managing health programmes in the area, as well as WHO and UNICEF. It may be useful for EFSA teams to summarize the data and their implications in a matrix format similar to that shown in Table 6-C.

Table 6-C
Summarizing public health concerns

Public health area of concern	Available data (including comparison with international standards, where relevant)	Implications and risks for food security, malnutrition and mortality
Outbreaks of communicable disease		
Environment health risks		
HIV/AIDS, Tuberculosis		
Public health centers coverage, access and use		

N.B. A single case of measles, cholera, shigellosis or viral haemorrhagic fever triggers outbreak control measures by public health authorities and agencies. For other diseases, incidence rates are compared with the seasonal pattern for the area and populations concerned.

The availability of water supplies and sanitation facilities are compared with the widely accepted international standards presented in annex B9, particularly for displaced populations and urban areas where sanitation is often a major problem.

Mortality

Mortality data are generally collected through surveillance systems – from religious authorities or funeral associations responsible for burial, grave counting, or lists of deaths registered by local authorities, clinics or hospitals. In the absence of such systems, or if those data are considered to be wholly unreliable, a cross-sectional retrospective mortality survey is conducted to collect data on mortality over a specified recall period (e.g. "the last month") from a representative sample of households.

Biases can occur in both approaches because:

- Data from *surveillance systems* may not include the poorest households who cannot afford referral to a hospital or a proper burial (but grave counting *may* include them).

- Data from *retrospective mortality surveys* may underestimate figures in cultures where death is a taboo subject (so that asking any questions related to death is difficult) or where a population is traumatised after an emergency. They may be manipulated (overestimated) when a population is well acquainted with receiving humanitarian aid.[2]

Retrospective mortality data may be collected at the same time as anthropometric data using the same sampling methodology, but mortality data must be collected from all households, not just those with children aged 6-59 months. Mortality data may also be collected at the same time as food security data in an EFSA that uses a household survey based on probability sampling.

Global classifications are often used to interpret mortality data. A crude mortality rate (CMR) of >1/10,000 persons per day is taken to indicate an emergency situation, while rates of >2/10,000 persons per day indicate a severe situation. The thresholds for under-five mortality rates (U5MR) are 2/10,000 children per day and 4/10,000 per day respectively. The Sphere Project handbook (2004) provides region-specific CMR

[2] Save the Children UK (2004). *Emergency Nutrition Assessment: Guidelines for field workers.*

and U5MR averages and emergency thresholds, dividing the world into 8 regions, hence providing greater specificity beyond that given in the global classifications.

6.2 Coordinating or combining the collection of nutrition data and food security data

It is very useful to collect data on household food security, socio-economic and demographic characteristics and nutritional status from the same households in order to better analyse and understand the inter-relationships among these factors. This leads to better design and targeting of responses.

In most instances, nutrition surveys are conducted independently of food security assessments for a variety of reasons. However, it is important to try to integrate these activities as much as possible in order to better understand the relationship between household food security and malnutrition and, therefore, to be able to plan the most appropriate interventions in the right locations. There are three principal options:

1. Food security and nutrition assessments are conducted separately, either in parallel or at different times within the same general population.

2. A joint (combined) food security and nutrition assessment is undertaken using a common sampling strategy, and food security information is collected from households where children are being measured.

3. A nutrition survey and a food security assessment are conducted simultaneously and in coordination using different but overlapping sampling schemes.[3]

Table 6-D suggests when it may be appropriate to consider/use each of theses options. For the joint and coordinated options, technical guidance must be obtained from the regional bureau, ODAN-headquarters (which will coordinate with PSPN) or a competent national institute to design the sampling strategy and determine the sample size(s).

If a joint food security and nutrition assessment with an agreed sampling approach and sample size is not feasible in a situation where malnutrition is a concern, food security assessment teams may collect data on nutritional status during their household visits/interviews. These data may be used to identify any relationships (correlations) between nutritional status and food security indicators but *not* to calculate prevalence rates.

[3] This is what was done in the EFSA Darfur in 2004 undertaken jointly by WFP and the US Centres for Disease Control (CDC).

Table 6-D
Coordinating/combining food security (FS) and nutrition (N) assessments in different contexts

Approach	When to use it	How it might be done
Separate FS & N assessments: same population but not necessarily at the same time	Sudden-onset crisis where levels of malnutrition were not high before the shock/crisis. Data on malnutrition collected for establishing a baseline and reporting purposes, not for decisions on interventions.	• Initial 'Rapid' EFSA conducted in order to determine the food security situation and to calculate needs. • Nutrition surveys undertaken separately, usually by or in collaboration with partners
Joint FS & N assessment with a common sampling frame and strategy	Following a traditional nutrition survey approach, an in-depth assessment of an ***on-going*** operation or of a slow-onset emergency where the population is relatively ***homogenous*** and/or contained in a ***well-defined geographic*** area.	Joint FS & N teams: • Agree on a ***single sampling strategy*** (usually randomized multi-stage cluster sample) and together, undertake data collection. For sampled ***communities***: • Key informant interviews to learn more about the effects of the shock/event on food availability, access and impact on nutritional status of vulnerable groups. For sampled ***households***: • Collect anthropometric and health/mortality data on children < 5 years (and sometimes mothers) • Assess possible micronutrient deficiencies of vulnerable groups through observation and/or biochemical measures • Administer a short household questionnaire with modules on demography, socio-economic situation and household dietary diversity/food frequency.
Coordinated FS & N assessments with overlapping but complementary samples	In-depth assessment in a ***new*** crisis or re-assessment of an ***ongoing*** operation when populations are ***heterogeneous*** (diverse) and/or ***differently affected*** and there is a need to better understand differences in the food security situation of these populations.	FS & N teams: • Develop a sampling strategy that is ***overlapping and complementary*** – usually broader coverage for FS sample. • Jointly conduct community-based interviews to better understand the static or dynamic impact on food security and nutrition of affected populations. • Coordinated analysis of data and reporting results. The ***Nutrition*** teams (for core sample): • Collect anthropometric and health data on children < 5 years (and sometimes mothers) • Assess possible micronutrient deficiencies of vulnerable groups through observation and/or biochemical measures The ***FS*** teams (for core & expanded sample): • Administer a short household questionnaire with modules on demography, socio-economic situation and household dietary diversity/food frequency.

Sampling for joint (or coordinated) food security and nutrition assessments

There are difficult sampling issues for any joint or coordinated food security and nutrition assessments, and there are not yet any agreed guidelines. However, statistical representativeness is essential for the nutrition (anthropometric) survey. The following are some of the issues:

- Nutrition surveys are normally based on 30×30 two-stage cluster sampling following internationally agreed guidelines, although a smaller sample size may be used *if* an estimate is available for the

prevalence of malnutrition in the population.[4] It is important to maintain standards in, and ensure comparability among, nutrition surveys undertaken by different organizations.

- Food security assessments are mostly based on purposive sampling, often following stratification.

- For 'joint' assessments, agreement will have to be reached on a single/common sampling strategy, or coordinated, overlapping sampling strategies, that ensure acceptable representativeness and provide data from which useful conclusions can be drawn for programme planning purposes as well as valid prevalence rates for malnutrition. This might be possible when indications of the prevalence of malnutrition are available and a sample size less than 900 (30×30) can be shown to be appropriate.

Consideration also needs to be given to the possible need for – usefulness of – nutrition data that enable comparisons to be made between different areas and/or population groups.

6.3 Key nutrition indicators for an EFSA

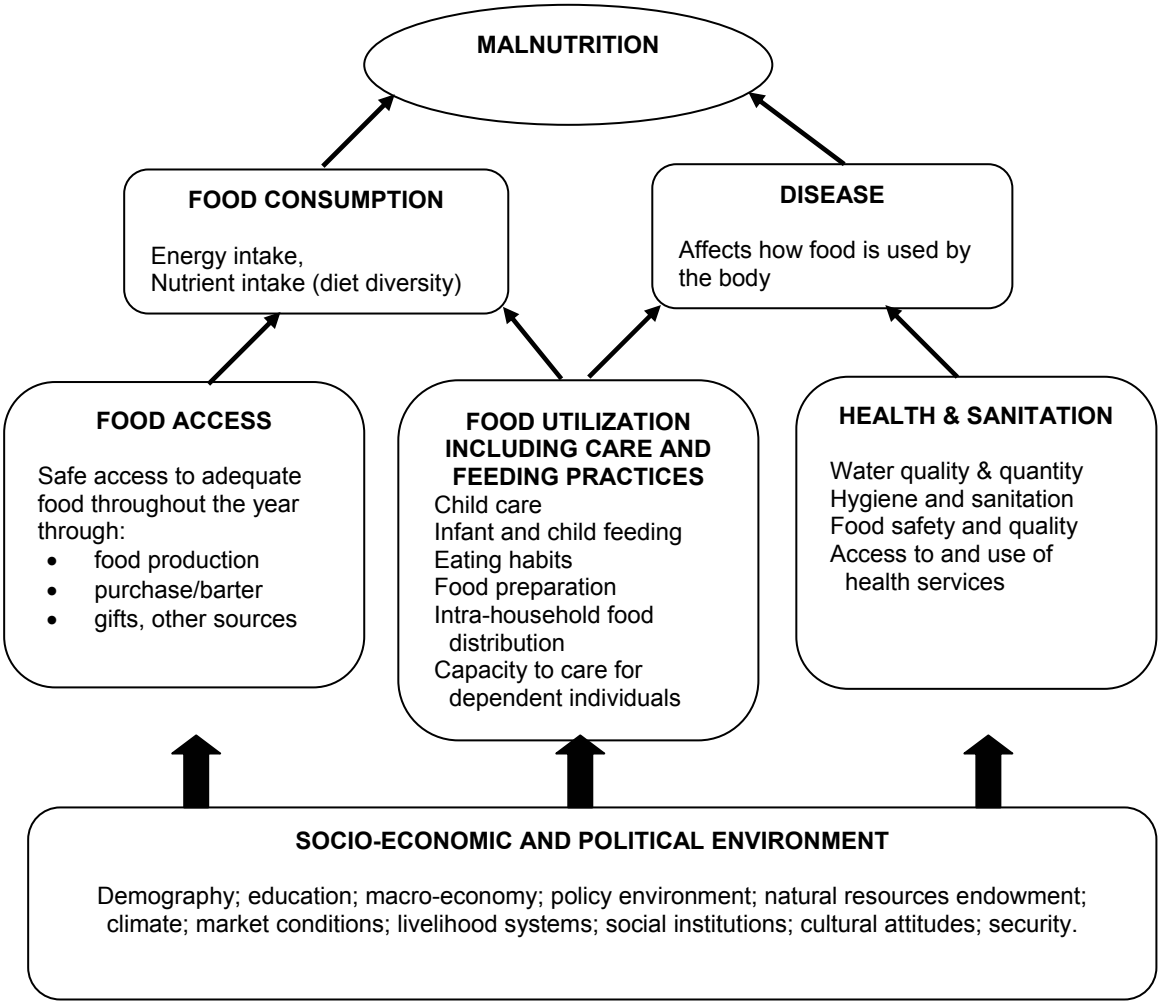
When looking at data on the prevalence and distribution of malnutrition, it is important to look simultaneously at information on the various factors that influence nutritional status. The underlying factors contributing to child malnutrition are outlined in the conceptual framework in figure 6a. These are:

- household food access;
- food utilization and care, including feeding practices;
- health and sanitation.

[4] The standard 30 × 30 sample size for two stage cluster sampling assumes a prevalence of 50%. If the prevalence is known to be less than that, a smaller sample size is sufficient to provide a result with the required precision (±5%).

Figure 6a Why are people at risk of malnutrition?

(Adapted from draft FAO *Technical Module for emergency needs assessment in Food and Nutrition*, expected 2005)



The key nutrition indicators are shown in Table 6-E.

Table 6-E

Key nutrition indicators

Indicators for WFP Strategic Programme-1 reporting purposes:

- % children < 5 years malnourished (<-2 Z-scores weight-for-height) broken down by gender and age in months
- Crude and under-5 mortality rates

Other indicators useful for assessment purposes (and relevant for Strategic Programme-3):

- Mid upper arm circumference (MUAC) for pregnant women
- Prevalence of anaemia *(Hemoglobin levels)*
- % newborn babies of low birth weight (<2.5 kg)
- Presence of micronutrient deficiencies (MND):
  - *Epidemic MND:* no outbreak
  - *Endemic MND*: rates below WHO cut-offs for public health concern
- Chronic malnutrition rate (height-for-age) [5]
- Severe acute malnutrition rate (% children <5 years <-3 Z-scores weight-for-height and/or oedema) [6]

The checklists provided below give some guidance on what to look for when reading nutrition information. These data can be found in existing survey reports, monitoring reports, focus group discussions, discussions with community groups, etc.

6.4 Analysing the general nutrition situation and risks

Changes in the factors that cause malnutrition as a direct result of the crisis

In relation to food access – see Chapter 5.

In relation to care, including feeding practices

- mothers' time (or the time of any other principal carer);
- numbers of unaccompanied children, single-parent headed, or child-headed households;
- proportions of able-bodied adults available to fulfil essential household functions;
- prevalence of HIV/AIDS affecting care practices in the household;
- access to and cost of adequate water supply;
- breastfeeding practices;

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5 For refugee situations, UNHCR has established a standard of ≤20% in any situation.

6 For refugee situations, UNHCR has established a standard of ≤2% during an acute emergency phase and ≤1% in a stable situation.

- community and/or family support for pregnant and lactating women, and for families with large numbers of children, sick or disabled family members.

In relation to health and sanitation

- access to latrines;
- recent disease outbreaks (e.g. measles, acute diarrhoeal disease, malaria, acute respiratory infections , etc);
- measles vaccination coverage of the population;
- HIV/AIDS or tuberculosis;
- access to and quality of health care services.

Action by households and others to compensate for the crisis-induced changes

In relation to food

- data on food access (from food security assessments);
- data on the quantity and quality of the population's diet (diet diversity);
- data on food available through various food assistance programmes.
- the coverage of supplementary and therapeutic feeding programmes and any other measures taken to correct malnutrition; the reasons for success or failure.

In relation to care

- changes in the roles, responsibilities and work patterns in the household have changed because of the crisis;
- risks associated with personal, domestic and environmental hygiene practices that are adopted because of the crisis;

In relation to health

- risk of disease outbreaks because of over-crowding, poor sanitation, contaminated water, seasonal diseases;
- vitamin A supplementation along with measles vaccination and the estimated coverage;
- prevalence of parasite infections and whether de-worming treatment has been received recently.

Synthesizing – the outcome and net risks for nutrition

From the information above (and after reviewing it with health professionals, social scientists and communities themselves whenever possible), you should be able to determine/make judgments concerning:

- ❑ whether the prevalence of malnutrition and mortality rate is 'typical' for the population in the current season;

- the probable causes of malnutrition, the severity of the situation, the likely importance of the various causes, whether an intervention is required and hence the priority actions that would be most effective in reducing malnutrition;

- whether changes and trends in rates of acute malnutrition (and stunting, in a protracted operation) could be explained by changes in the rations distributed, in public health conditions, and/or in the overall situation/context, by epidemics etc.;

- the groups (e.g. age and gender) suffering the highest rates of malnutrition and the possibility of targeting specific preventive and corrective measures to them;

- any need for additional information and social communication in relation to food preparation, feeding, hygiene and health care practices;

- any need for additional nutrition information, education and training for relevant professionals, care givers and organizations on infant and child feeding practices (possibly including training in re-lactation).

What is the capacity for implementing nutrition interventions?

- any formal and informal local structures currently in place through which potential interventions could be channelled;

- capacities of the Ministry of Health, religious organisations, infant feeding support groups, NGOs present in the area;

- any nutrition interventions or community-based support already in place organised by local communities, NGOs, government institutions, religious organisations, etc.; their willingness and capacity to expand activities to include affected groups while maintaining necessary standards of service and performance.

6.5 Interpreting nutrition survey data

How to check the reliability of nutrition survey data

Survey data can be considered reliable only if standard methods and procedures were systematically applied. Check the points listed in Table 6-F:

Rates of malnutrition should be examined/analysed as follows, whenever possible: [7]

- *Different age groups*: Ideally, data on children under 5 years may be disaggregated into one-year age groups if the sample is large enough for the separate estimates would be statistically valid (6-11 months, 12-23 months, 24-35 months, 36-47 months, 48-59 months), or by height ranges, to identify any significant differences and to pinpoint the children at particular risk within the under-5 age group. See → *The Management of Nutrition in Major Emergencies*, p 50, WHO 2000.

[7] Adapted from *The management of nutrition in major emergencies*, chapter 3, p 49, the WFP *Emergency Field Operations Pocketbook*, 6.2, and Sphere 2004

- *Usual patterns and trends*: How do the present rates compare with the rates previously found in the same population?

- *Seasonal fluctuations*: Could normal seasonal fluctuations account for changes in observed malnutrition rates?

- *Differences among different population subgroups*: Are there significant differences in the rates reported from different surveys which represent different socio-economic groups? Do these differences correlate with other known differences (in rations distributed, times since arrival, vaccination rates, feeding practices, etc.)?

- *Host population*: Have levels of malnutrition in the host population changed in a similar manner to that in the displaced population?

Table 6-F

Reliability check for survey results [8]

Points to check	What you need to know – standards that should be met
❑ *Nutritional indices* – were they appropriate for the objectives of the survey?	The recommended indicators for acute malnutrition are: o for children – weight-for-height (WFH) and / or oedema o for adults – body mass index (BMI) *(see comment on pg 2)* In a protracted operation, both acute and chronic malnutrition for children – WFH and/or oedema and height-for-age (HFA)
❑ *Cut-off points* – were appropriate cut-offs used?	As in Table 6-G.
❑ *Sample population* – was it appropriately defined?	*For children*: children 6 to 59 months of age (or children 65 to 100 cm in height/length) and, when needed, 6 to 9.9 years of age. *For adults*: 20 to 59.9 years.
❑ *Sampling procedure and sample size* – was a random sampling methods used? Was the sample size appropriate?	One of the following: o *Two-stage cluster sampling*: At least 30 clusters selected using strict random procedures from a list of all identifiable units/zones; the number of children is calculated according to sample size o *Systematic/interval sampling*: Dwellings numbered on a plan of the site; sample size determined to give an appropriate confidence level (usually 95%); sampling interval calculated accordingly and strictly applied. o *Simple random sampling*: About 450 selected from a list of the entire population using a random number table. Comparisons among different groups within the total population will only be valid if the sample size was adequate for each distinct group.
❑ *Sample bias* – might the sample have been biased?	Sample bias can arise if standard procedures are not strictly applied everywhere: o all selected households must be visited, none missed out; no other households included; o all subject members of each selected household must be measured/interviewed, none missed due to temporary absence from the home. o the information on the sampling frame must be as up-to-date and accurate as possible. o The sampling frame represents the whole population.
❑ *Measurement error* – might there be any systematic measurement error?	Systematic error can arise if measuring equipment, techniques or recording is faulty: o scales should be accurate and read to 0.1 kg; o height/length boards should be well made and read to 0.5 cm.
❑ *Measures taken to reduce bias and error* – were staff employed for the survey already competent or appropriately trained? Was supervision adequate?	In order to minimize bias and error: o all survey personnel should have been trained following standard procedures and good practice guidelines, including adequate supervised practical field training; o trainers must be competent and experienced; o supervisors should verify the standard measuring and recording by surveyors. o equipment should be checked each day of the survey.

[8] Adapted from WFP *Food and Nutrition Handbook* and *Emergency Field Operations Pocketbook*

Table 6-G
Classification of malnutrition – standard indicators (cut-offs) [9]

	Moderate	Severe	Total malnutrition
Children 6 to 59 months (and, exceptionally, 6 to 9.9 years)			
Oedema	No	Yes	yes
Weight-for-height (WFH) *acute malnutrition*	-3 to <-2 Z-scores or 70% to <80% median	<-3 Z-scores or <70% median and/or oedema	<-2 Z-scores or <80% median and/or oedema
Height-for-age (HFA) *chronic malnutrition* [stunting]	-3 to <-2 Z-scores or 85% to <89% median	<-3 Z-scores or <85% median	<-2 Z-scores or <89% median
Weight-for-age (WFA)[10] [underweight]	-3 to <-2 Z-scores or 60% to <80% median	<-3 Z-scores or <60% median	<-2 Z-scores or <80% median
Adults 20 to 59.9 years (excluding pregnant women and disabled people)			
Body mass index (BMI)[11] *Again, see previous note*.	16 to <17	< 16	< 17

Pregnant women: There are no internationally agreed cut offs categorizing malnutrition among pregnant women, but the following mid-upper-arm circumference (MUAC) cut offs are suggested in the *Sphere handbook* 2004, chapter 3, appendix 5 *Measuring acute malnutrition*, as screening criteria for admission of pregnant women to targeted selective feeding:

MUAC < 23 cm = moderate risk of growth retardation for the foetus

MUAC < 20.7 cm = severe risk of growth retardation for the foetus

Caution when comparing nutrition survey results!

Results obtained at different times will show trends in the nutritional status of the population *if* the surveys used standardized survey methods and sampling techniques and covered the same population. However, comparisons must be interpreted with caution:

- Many severely malnourished children die in a nutritional emergency leaving fewer children to be counted as malnourished in later surveys. A declining malnutrition rate may thus be due to a high death rate among the severely malnourished rather than to any improvement in the nutritional situation.

- Similarly, improvements in nutritional conditions might be the result of seasonal or short-term economic factors, not evidence of an effective feeding programme or a sustainable improvement of any of the factors influencing nutritional status.

The findings of a series of nutritional surveys must always be compared with mortality data gathered between the survey dates and with other available information relevant to health (such as morbidity data, especially during an epidemic) and socio-economic conditions.

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9 Cut-offs provided in *The management of nutrition in major emergencies*, WHO 2000.

10 Weight-for-age is not used in the analysis of the nutrition situation but only for reporting against the U.N. Millennium Development Goals.

11 James et al (1988). *Definition of chronic energy deficiency in adults*. Eur J.Clin, Nutr: 42, 969-81.

6.6 Analysing micronutrient deficiency problems and risks

Three deficiencies are of particular concern – iron deficiency anaemia, vitamin A deficiency and iodine deficiency (goitre). Assessments must also look out for evidence, or risks, of pellegra, beriberi, scurvy and vitamin B2 deficiency. There is a risk of micronutrient deficiencies whenever a population is largely dependent on food aid rations and do not have regular access to fresh foods (including wild foods.)

Obtain information on micronutrient deficiency risks

Examine:

- the epidemiological profile of the local, host area (from local health authorities and personnel);
- the epidemiological profiles of the areas of origin, in the case of displaced people (from reports and any trained health workers among the displaced);
- the diet available to beneficiaries (including the food basket and items to which they have access locally) and their consumption habits.

On that basis, identify the deficiencies that can be expected.

Obtain information on current micronutrient deficiency problems

Examine:

- reports of any micronutrient surveys conducted among the population;
- data on any clinical signs reported from of health clinics/agencies (from clinic reports and discussions with health workers).

On that basis, determine the extent of:

- anaemia
- vitamin A deficiency
- goitre

and whether there are any cases/outbreaks of:

- pellagra
- beriberi
- scurvy
- ariboflavinosis

If/when it is considered necessary to undertake a specific survey using biochemical testing (e.g. to determine the prevalence of anaemia, vitamin A deficiency or iodine deficiency), seek specialist advice and assistance from WFP-PDPN.

Review the composition of the ration and the diet of the affected population

Determine whether people have regular access to the following:

- fresh foods (vegetables, fruits, wild foods)
- fortified blended food
- fortified cereal flour
- fortified oil
- iodised salt

and whether, as a result:

- the ration/diet is likely to be deficient in any specific micronutrients (see table below).

On that basis, determine whether action is needed to reduce the risks of specific micronutrient deficiencies.

Obtain data on the distribution of vitamin supplements

Determine whether there is:

- regular administration of iron (and folic acid) tablets to pregnant women
- administration of vitamin A capsules to all children 1-5 years every 6 months and lactating women after deliveryadministration of de-worming treatment to:
    - all children 1 to 5 years
    - school-age children

What deficiencies to anticipate? What measures to take?

If the affected population is in, or from, an area where anaemia, vitamin A deficiency or goitre (iodine deficiency) is endemic, counter-measures should automatically be implemented.

When a population is largely dependent on rations:

- a varied food basket including pulses and a fortified cereal or fortified blended food is essential;
- the cultivation and consumption of fruits and vegetables should be promoted wherever possible and, in the meantime, fresh items should be supplied whenever feasible.

In all situations:

- beneficiaries should be encouraged, through health/nutrition education and social communication, to avoid long storage, over-washing or over-cooking of foods, all of which reduce the micronutrients content of all food items; and

- public health action should be taken to reduce the incidence of diseases – especially acute respiratory infections, parasitic infections, malaria and diarrhoea – that deplete micronutrients stores.

A single case of scurvy, pellagra or beriberi is probably indicative of a population-wide problem and population-wide counter-measures should be initiated. However, such deficiencies should be avoided if a fortified blended food is included in the ration.

Table 6-H
Micronutrient deficiency risks and counter-measures [12]

Risks	Action whenever signs are present or there is a public health risk
Anaemia (the bioavailability of iron is low in rations composed largely of cereals and legumes; anaemia also results from parasite infections)	Include fortified cereals, blended foods or pulses (e.g. lentils) in the ration. Promote the cultivation of leafy green vegetables. Administer iron and folic acid supplements to pregnant and lactating women. Administer de-worming treatment to children and pregnant and lactating women. Promote the use of bed nets and vector control measures to reduce the incidence of malaria. Administer malaria prophylactics to pregnant women in line with ministry of health guidelines.
Vitamin A deficiency (all food rations are likely to be deficient in vitamin A unless fortified foods are included)	Distribute vitamin A capsules at 6-month intervals to all children and post-partum pregnant women.[13] Promote the cultivation of tomatoes, carrots, etc. Include fortified vegetable oil, fortified flour, blended food or sugar in the ration.
Iodine deficiency (goitre)	Provide iodized salt and promote public awareness.
Pellagra (Niacin / vitamin PP deficiency)	Include pulses, groundnuts, fortified blended food or dried fish. Administer supplements in case of an outbreak.
Riboflavin (vitamin B2) deficiency	Include fortified food in the ration. Encourage vegetable production and the sprouting of pulses. Administer supplements in case of an outbreak.
Beriberi – thiamine deficiency (is likely among populations who consume polished rice)	Provide parboiled rather than polished rice. Include pulses, nuts and/or fortified blended food in the ration. Promote the production and consumption of vegetables and eggs. (Brewers yeast is also a good source of thiamine and is readily available where cereals are fermented.)
Scurvy – vitamin C deficiency (is found among populations with no access to fruits or vegetables)	Include fortified blended food in the ration. Promote the cultivation and consumption of fresh fruit and vegetables. Provide vitamin C supplements.

For further detail, see → *The Management of Nutrition in Major Emergencies*, chapter 2, WHO 2000.

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[12] Adapted from *WFP Food and Nutrition Handbook*, WFP 2000, and *Micronutrient Malnutrition – detection, measurement and intervention: a training package for field staff*, version 1.1, UCL-ICH/UNHCR 2003

[13] Capsules may be distributed in conjunction with measles vaccination and/or blanket supplementary feeding.

Chapter 7

Analysing causes and context

This chapter provides a very rough, preliminary outline of how to synthesize the conclusions of the analyses of the three main themes, develop 'problem statements', undertake a preliminary analysis of the underlying causes of those problems, and identify the main contextual factors that will determine the likely effectiveness as well as the feasibility of different responses. The text will be improved and more detailed guidance developed during 2005/06. In the meantime, contact WFP headquarters, ODA, for guidance and support.

The principal aspects that need to be considered are:

- the causes of food security problems, and risks, see → section 7.1
- the physical and economic context, see → section 7.2
- the social, political and security context, see → section 7.3
- the interests and capacities of the various institutions and stakeholders involved, see → section 7.4
- logistic capacities and constraints, see → section 7.5
- opportunities to enhance food security, see → section 7.6

All data on the three main food security themes must be interpreted, and response options considered, in light of the social, political and security context. This context analysis is therefore critical and a preliminary analysis should be completed early in the assessment process.

7.1 Analysing the causes of food security problems, and future risks

Objective	To understand the underlying causes of food insecurity including food availability problems (if any), why households in particular population groups are experiencing crisis-induced food access shortfalls or problems of food utilization, and the causes of malnutrition (if any); and identify the events (contingencies) that could prolong or further increase those problems.
How the information will be used	To determine the most appropriate types of assistance for different groups; To identify complementary measures that may be needed to ensure that the assistance is effective and that people are able to re-establish sustainable livelihoods; and To provide a basis for contingency planning and to take, or advocate for, measures to reduce the known risks.
Data sources	Existing (pre-crisis) vulnerability analyses; the outputs of the analyses described in chapters 4 to 6; and interviews with key informants, community groups and subgroups.
Analytical tools	Causal analysis; hazard/risk analysis.

Having completed the analysis of each of the three themes you must now put the whole picture together. Drawing on the analyses of the three themes, you must summarise the problems identified, their causes and additional future risks, and identify inter-relationships among them. . For each theme, it may be useful to undertake a rudimentary causal analysis and prepare a 'problem tree' showing the factors (underlying causes) that contribute to the present situation and any further risks. This will enable you to:

- clarify the underlying causes of the impact;
- identify factors that have influenced decisions (at household, community and government levels) on compensatory actions and the effectiveness of those actions; and
- determine the responses that are likely to be most appropriate and effective.

You must then examine the political, economic, social, institutional, security and environmental conditions that will need to be considered when deciding on what kind of responses would be appropriate and feasible in the current situation, as described in the remainder of this chapter. In any situation of conflict or repression, this must also include a conflict analysis.

Table 7-A
Analysis and information requirements for a rapid EFSA

Theme	**Causes and contextual factors**
Possible types of analysis	Political economic analysis; social analysis and gender analysis; conflict analysis; 'Do No Harm' analysis; logistics analysis.

Possible information requirements		**Possible sources of data** 1 = pre-crisis; 2 = current & forecasts		
Pre-crisis data	**Current situation & forecast**	1	2	Sources
• Human and other productive resources of households in different livelihood/ population groups. • Social structures and relationships, including underlying ethnic or social tensions, if any. • Gender roles. • Logistics capacity.	Current situation: • Changes in the human and other productive resources of households in different population groups (e.g. if household members have been sent out to work, or called back to the household). • Social structures and relationships, including ethnic or social tensions, if any. • Changes in gender roles and the effects of this on livelihoods and food security. • Current logistics capacity. Data for forecasting (including seasonal changes): •	√		VAM and other pre-crisis baselines/ profiles
		√		Social research institutions
		√	√	Anthropologists
		√	√	NGOs working in community development
		√	√	Local extension and health workers
		√	√	Community leaders
		√	√	Religious leaders
		√	√	Community members (through community interviews or subgroup interviews)
		√		Logistic capacity assessments

7.2 Analysing the physical and economic context

What is the physical and economic environment?

- *physical* characteristics of the area – whether agricultural (rain-fed or irrigated?), pastoral, arid or predominantly urban; whether homogeneous or separated into distinct zones by hills, rivers or other features;
- *climatic* conditions – present day- and night-time temperatures and rainfall; normal seasonal variations to be expected;
- *economic* characteristics of the area – whether part of a thriving economic area, well-connected to other areas and markets, or isolated; the main economic activities and trading links; general level of economic activity and standards of living in the area and in the country as a whole;
- *site* characteristics of the various settlements – space, topography, soil conditions, availability of water and shelter/shelter materials, physical access, availability of electricity, telecommunications, health and other services, any physical risks (e.g. prone to flooding or landslides); and
- what are the *implications* of these conditions for the vulnerable population in the short and long terms? What is being done, or could be done, to improve general conditions?

Environmental considerations are especially important in the case of drought or population displacements in rural areas.

7.3 Analysing the social, political and security context

You must consider the possible implications of these aspects and risks for decisions about: the type(s) of response, including whether food and/or non-food transfers would be appropriate; targeting and distribution arrangements; the choice of partners for implementation; and the choice of commodities, if food aid is found to be appropriate.

What is the political and social environment?

- *government policy and regulations*: whether vulnerable populations are granted freedom of movement and access to land, employment and markets, and permitted to establish businesses; whether they are encouraged, or allowed, to participate in local development activities and receive training;
- *local attitudes*: the extent to which any legal restrictions are actually enforced; the relationship between the displaced persons / refugees and host communities; whether local authorities or non-state actors have a positive attitude towards the displaced persons, or impose their own restrictions; and
- what are the *implications* of these policies and attitudes for the vulnerable population in the short and long terms? What is being done, or could be done, to strengthen positive policies and attitudes, and to reduce negative ones?

What is the general security situation? What present and potential conflicts must be considered?

- *security and risks in the area*: whether the area in general is affected by armed conflict, social tensions and/or widespread crime and banditry; whether the vulnerable populations in particular are targeted for ethnic, political, military or criminal reasons; whether the presence of displaced persons or refugees and assistance operations could exacerbate local conflicts and insecurity;
- *conflicts within the population*: whether there are conflicts among different population groups;
- *conflict analysis*: whether a conflict analysis been undertaken by the UN country team or another group; what risks need to be considered when planning interventions (see box below); and
- what are the *implications* of these security conditions and potential conflicts for the vulnerable population and for the design of programme interventions?

Social and gender analysis

Social and gender analysis focuses on the social factors that distinguish groups within the society who have been differently affected, account for differences in impact and coping ability, and influence the feasibility of targeting assistance to those who need it most.

People always live within a network of social and economic relations, often hierarchical, which governs their access to vital resources and their control over them. Such differences will be seen not only between households (e.g. between a landless household and a small farmer household, or between a small farmer household and a large farmer household) but also within households (e.g., between men and women, girls and boys, children and adults).

Social and gender analysis involves answering the following types of questions:

- Which principal factors account for socio-economic differences within the intervention area (among regions and ethnic groups, among villages and households, and within households by gender)? For example, is the size of landholdings the critical distinguishing factor? Is it access to irrigation water, or prevailing land tenure arrangements and land use patterns? Is it adequate access to labour, technology, equipment, markets?
- Which population groups in the intervention area (i) are poorest, (ii) might participate in interventions, (iii) might benefit from intervention outputs?

Are good mechanisms available for reaching the vulnerable? Give particular attention to the potential for improving the outreach capacity of institutions and delivery mechanisms.

For guidance on gender analysis, see → *Socio-economic and gender analysis (SEAGA) for emergency and rehabilitation programmes*, module 7, FAO/WFP 2005

Risks to beneficiaries' safety and security

You must:

- identify and analyse the specific types of safety and security risks faced by different population groups; and
- consider how assistance operations to address food security problems could be affected by these risks and either increase or reduce particular risks for beneficiaries.

This is particularly important in a situation involving conflict, systematic discrimination or repression of particular socio-economic, ethnic or religious groups, or displaced populations. The risks may include indiscriminate violence, targeted violence and criminality. Table 7-B suggests a format that may be useful.

Table 7-B
Example of a table analysing potential risks to beneficiary population groups
(with hypothetical examples)

Type of risk	Populations at risk and why	Measures that could reduce/limit beneficiaries' exposure to risk
Indiscriminate violence due to conflict	E.g. *All groups in areas A, B and C.* Why*: shelling, bombing.*	E.g. *Infrequent distributions. Large numbers of small dispersed sites.* *Avoiding beneficiaries having to go to, or pass through, locations where risks are known to be particularly high or at times when risks are high.*
Targeted violence directed against particular socio-economic, ethnic or religious groups	E.g. *Ethnic group X and religious group Y.* Why*: historic animosity heightened by political manipulation.*	E.g. *Adequate security and crowd control measures at and around sites serving the groups at risk.* *Avoiding beneficiaries having to go to, or pass through, locations where they would be particularly at risk.* *Negotiating with the groups initiating the violence to respect the right of the victimized groups to receive humanitarian assistance.*
Sexual violence	*Women and girls.* Why*: breakdown of social cohesion.*	E.g. *Adequate security at and around distribution and works sites. Social mobilization for increased protection of women and girls.* *Completion of distribution and other activities early in the day to enable women and girls to be home before dark. Allowing women to designate men to collect rations on their behalf.* *Providing commodities that require less water and cooking, and encouraging fuel-efficient cooking practices, to reduce the time women and girls spend collecting fuel and water.*
Widespread theft, looting, banditry focused on theft of: *e.g. cash, specific foods (e.g. rice), and domestic assets.*	E.g. *Areas D and E, especially peri-urban areas and villages near main roads.* Why*: economic conditions and breakdown of law and order.*	E.g. *Frequent distributions to reduce the quantities that beneficiaries have to carry and store, and reduce the likelihood of bandit attacks on distribution sites.* *Distribution sites as close as possible to beneficiaries.* *Providing less attractive commodities.*
Petty theft	E.g. *IDP camps.* Why*: breakdown of social cohesion, law and order.*	E.g. *Frequent distributions to reduce the quantities that beneficiaries have to store.* *Providing less attractive commodities.*

Risks to the safety and security of assistance operations

The assessment must also take account of any specific safety and security risks that are (or will be) faced by WFP and other organizations and personnel involved in implementing food-related assistance interventions, and the risks of theft, looting or misappropriation of food, other supplies, vehicles, equipment and cash. This is particularly important in a situation involving conflict, political tension, systematic discrimination or repression of particular population groups, or population displacement. In addition to risks arising from a general state of insecurity, the assistance operations and personnel of WFP and partners may be at specific risk due to:

- humanitarian objectives (for certain population groups) that may be in conflict with the aims of certain political factions or armed groups;
- the handling of a resource (food) that is highly fungible and may be of strategic importance in the ongoing conflict; or
- their own identity or perceived association with a particular ethnic or religious group (for local staff) or international policies (for international staff and organizations).

The analysis of security risks for WFP and partners should normally be undertaken by WFP or UN field security officers, in consultation with field programme and logistic staff. The same security officers will make

recommendations concerning measures to ensure the safety of WFP personnel and supplies. The assessment team in consultation with the security officers and programme and logistic staff should consider the implications for programme activities and include that in the analysis of response options. Table 7-C suggests a format that may be useful for analysing these risks.

Note that food – the deliberate denial of access to food – is often used as a weapon in conflicts. It is also a strategic resource for fighting forces while the sale of stolen goods can help to finance conflict operations. The possibility of negotiating with armed factions to permit civilian populations to receive humanitarian assistance – and to allow WFP and partners to have access to those populations for assessment and monitoring purposes – depends on a range of factors. Table 7-C provides a checklist of aspects to consider.

For more detailed discussion of these issues and risks, see:

→ *Recurring challenges in the provision of food assistance in complex emergencies*, full report, WFP-OEDE 1999.

→ *Food aid in conflict workshop report,* WFP 2002. This includes (in chapter 1 and annex 1) an outline of the *Do No Harm* approach and the associated peace and conflict analysis framework, which can be particularly valuable when designing activities at the local, community level.[1]

Table 7-C
Example of a table analysing potential risks to assistance operations
(with hypothetical examples)

Type of risk	Who/what is at risk and why	Measures that could reduce/limit risks
Indiscriminate violence due to conflict	*E.g. All personnel, premises, supplies and equipment in areas A, B and C.* Why*: shelling, bombing.*	*E.g. Keep numbers of staff down to a necessary minimum and avoid posting staff in high risk areas and posting staff individually – assign them in teams for mutual support together with field security officers, where needed* *Security training of all staff and regular briefings* *Communications equipment meeting MOSS standards* *Protective equipment (body armour and helmets) for all staff, if needed* *Construction of shelters, blast resistant film on all glass* *Virtual offices: work from residence in time of crisis to reduce the amount of exposure of staff travelling to the office.*
Sexual violence	*Female staff*	*E.g. Special security training for female staff.* *Avoid female staff living or travelling alone.*
Widespread theft, looting, banditry focused on theft of: *e.g. cash, specific foods, vehicles, equipment*	*E.g. All personnel, premises, supplies and equipment in areas D and E. Rice, as a much sought-after commodity.* Why*: economic conditions and breakdown of law and order.*	*E.g. Make sure warden system is operating and every one knows the security plan for evacuation/relocation.* *Staff numbers; non essential and essential staff list.*
Deliberate obstruction or targeted violence directed against particular staff, programme activities or organizations	*E.g. Operations in favour of ethnic group X and religious group Y. Organizations/ individuals associated with particular ethnic groups or countries. The "U.N."* Why: *political and military objectives of parties to the conflict; their perception that the U.N. is biased (not neutral)*	*E.g. Seek assurances of safety and protection from the host government and other non-state authorities.* *Support the humanitarian coordinator in negotiating for safe access to civilian populations, and issue clear instructions to all staff on negotiating access at local level where necessary (see Emergency Field Operations Pocketbook, 11.1).* *Arrange security guards and escorts in line with agreed local inter-agency policy.* *Maintain strict impartiality in dealings with all parties, emphasizing WFP's humanitarian objectives.* *Careful selection and training of all staff, international and national, and partners.*

[1] The *Do No Harm* approach was developed by Mary Anderson and the Collaborative for Development Action (CDA) Inc., Boston USA. See http://www.cdainc.co/dnh.

Conflict analysis

Conflict analysis:

- helps in understanding political and social conflicts, their causes and impacts, and the risks of conflict and violence;
- enables programme activities to be designed to minimize the risks of exacerbating conflicts or being negatively impacted by them; and
- may indicate activities, or approaches to the implementation of activities, that could help to reinforce factors that lessen or reduce risks of conflict.

The analysis is done on the basis of secondary data and discussions with key informants and groups representing as many as possible of the stakeholders – the parties to the conflict and those who suffer, or benefit from, the consequences of the conflict. Data are best presented in matrices and diagrams rather than text. Table 7-D outlines the elements of a conflict analysis.

This kind of analysis should ideally be undertaken as a joint effort of the UN country team and then be used by WFP as well as other agencies. For further details, Contact WFP-HQ ODAN for further guidance , or see:

→ *Framework for conflict* analysis, UNDG/ECHA Working Group on Transition (November 2004), which including suggested matrices.

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Table 7- D

Framework for conflict analysis

Conflict analysis typically involves:

1. Analysing the nature, causes and dynamics of the conflict(s)

- describing the conflict(s) and analysing the immediate (proximate) and underlying (structural) ***causes*** – historical, political, economic, social and other causes;
- analysing the interests and positions of the various ***actors*** or '***stakeholders***' (both internal and external), the relationships among them and influences on them;
- identifying '***capacities for peace***' – the structures, mechanisms, processes and institutions in the society that peacefully and constructively manage conflicts; and
- identifying '***potential spoilers***' – elements that tend to worsen conflict and possible events (contingencies) that could precipitate a new crisis.

2. Analysing the effects of ongoing programmes and initiatives on the conflict(s)

- assessing the overall impact of local and international programmes and initiatives on the security, political, economic and social dynamics and consequences of the conflict(s), including relationships with peace capacities and spoilers.

3. Drawing conclusions for programming

- specifying the main factors that must be taken into account – built on or avoided – to enable programme activities to be pursued without being negatively affected by, or having an adverse effect on, conflict dynamics; and
- identifying opportunities for programme activities to contribute positively to reducing conflict and the risks of conflict, when possible.

7.4 Institutional/stakeholder analysis

Institutional and stakeholder analyses focus on internal and external capacities (human, financial and material) and level of interest to implement specific activities and absorb inputs such as training.

Institutional analysis focuses on the capacity of potential institutional partners to collaborate in project implementation, and respective roles and responsibilities of collaborating agencies. For example, during an emergency needs assessment analysis of issues surrounding child malnutrition, WFP assessment staff identifies a local health clinic as a key stakeholder and potential partner in an intervention. Therefore, the team decides to conduct a thorough assessment of the clinic to identify particular assets of the agency, or institutional capacities that may need strengthening to ensure project achievement. In this example, the assessment becomes part of the analysis process, but in practice an institutional assessment may be more practical once the project strategy becomes defined, so that it is clear which institutions need to be considered.

The following tools are most commonly used to conduct an institutional analysis:

- **Trends analysis and historical timelines**: Who are the key groups or institutions that have influenced the issues, problems or opportunities) over time? What are their relationships with the target population and how have they changed over time?
- **Institutional mapping**: Who are the organizations involved in addressing key issues and problems? What do they do? Where do they work? How do they interact with the target population? Where are the overlaps? Where are the gaps? What are the strengths and weaknesses of the institutions? What are the organizational profiles/typologies?

Stakeholder Analysis

A stakeholder analysis is used to determine the individuals, groups and institutions that will have an interest in the activities developed by WFP, and whose interests must be taken into consideration, since they can impact an intervention's outcome, either positively or negatively.

A stakeholder analysis draws upon social and institutional analyses and places these analyses into a common framework that can inform project design. The analysis involves a three step process:

Figure 7a: Example of a Stakeholder Table

Step 1: Construct a stakeholder table

- Identify and list potential stakeholders
- Identify the interests a stakeholder has in relation to the problems identified in the needs assessment
- Assess the impact (positive or negative) these interests may have on an intervention addressing a particular problem
- Prioritize stakeholder interests

Stakeholders (Primary & Secondary)	Interests	Potential Project Impact (+/-)	Relative Priorities of Interest

Step 2: Assess each stakeholder's power and influence and how this will impact an intervention

- Identify the stakeholder's expectations of the intervention
- Determine what benefits will exist for stakeholders
- Assess what resources stakeholders may be willing (or not willing) to commit.
- Identify other interests a stakeholder may have that could conflict with an intervention
- Evaluate the relationships between a particular stakeholder and other stakeholders on the list.

Step 3: Identify risks and assumptions which will affect the success of an intervention

- What assumptions must be made regarding a stakeholder's role or response to an intervention for that project to be successful?
- Determine if roles of stakeholders are plausible and realistic.
- What negative responses could be possible?
- What impact would negative responses have on an intervention?
- Are these negative responses likely, and if so, do they represent major risks?
- What realistic assumptions regarding stakeholders either support or may undermine the success of an intervention?

7.5 Logistical Analysis[2]

This section outlines the logistics aspects that need to be covered in rapid assessments. It indicates how logistic aspects need to be incorporated in the overall analysis to define the measures and actions to be taken to ensure that beneficiaries have access to adequate food and related non-food items.

The logistics component of the rapid emergency food security assessment must:

- determine how needed supplies – food and non-food items –can be delivered to specific areas, where the supplies can be stored, and the measures that may be needed to secure (and where necessary to increase) transport, storage and handling capacities on existing supply routes and/or to open new routes to assure the delivery of supplies;
- define – get agreement on – roles and responsibilities in logistics management for food and non-food items, and on measures to strengthen logistics/supply management capacity, where needed;
- identify any specific logistic constraints that must be taken into account in the overall analysis of the situation and in the design of food aid and related assistance interventions;
- estimate transport, storage and handling costs for food and non-food items;
- identify measures that could enhance the ability of the commercial transport market to assure the delivery of supplies and/or support local markets and hence the possibilities for the local population to gain income from whatever they may have to sell; and
- foresee how the logistics situation may evolve, and identify risks that may call for pre-emptive (preventive) measures or specific contingency planning (including buffer stocks and plans for alternative supply routes) to avoid losses or pipeline interruptions.

The logistics assessment should be an integral part of the overall assessment. At the onset of a crisis, information gathering should start at the same time as the other components of the overall assessment and be tailored to take account of the types and quantities of supplies that may need to be moved to and stored in different areas as estimates become available and are refined.

The logistics part of the assessment should be undertaken, or coordinated, by a competent logistics officer and benefit from the knowledge and experience of local logisticians. When data need to be collected from a number of widely separated locations, the senior logistician should:

- Define the particular logistic information that other assessment team members should collect from specific locations; and
- Provide guidance on how that information should be collected, cross-checked, recorded and reported.

[2] Source: UNHCR/WFP JAM Guidelines (draft), 2004.

When collecting data on *costs*, any recent changes in rates, and any changes expected in the immediate future, should be recorded in addition to current rates (per ton).

Specific information is required on:

- transport and storage possibilities within the areas where the beneficiaries are located;
- the entry points – ports, land border crossings and airports – through which supplies could be imported for delivery to the affected areas (if imports are likely to be required);
- the locations of in-country stocks that may be made available or purchased and need to be moved into the affected areas (if in-country stocks of suitable items exist);
- all potential means and routes for getting supplies into the affected area(s) from those entry points and/or in-country locations: this may include road, rail, sea, river, air, animal carts, head-loads, etc.;
- national regulations, customs and other formalities relating to the importation or in-country purchase and movement of food and other supplies;
- the capacity of the government and other partners – their own transport and storage capacity, and their ability to manage a logistic operation and opportunities to strengthen that capacity;
- transport, storage and handling costs; and
- foreseeable risks (e.g. insecurity, natural or man-made disasters) that could disrupt specific transport routes or the use of particular transhipment or storage locations.

If a recent WFP logistics capacity assessment (LCA) is available, the emergency assessment needs only to determine what has changed in relation to the points listed above. If no recent LCA is available, a full logistics capacity assessment must be undertaken covering all aspects of the points listed above. In all cases:

- Use as a guide the checklist in WFP *Emergency Field Operations Pocketbook,* 9.1 *Assessing logistics capacity*, and refer to the LCA guidelines in the WFP Transport Manual for further details; and
- Use the checklist in WFP *Emergency Field Operations Pocketbook,* 9.3 *Collecting data for LTSH cost estimates* as a guide when collecting cost data for food and any non-food items to be supplied by WFP.

7.6 Opportunity Analysis

The opportunity analysis tries to identify existing programming activities being carried out either by the government, NGOs or UN agencies or the private sector, through which WFP resources can be channelled. For example, if effective general feeding programs, supplementary feeding programs or FFW activities are already being implemented by other agencies, WFP can work closely with these implementing agencies to scale up the programme.

Chapter 8

Undertaking an initial investigation

This chapter outlines what you need to do immediately following a sudden-onset natural disaster or any other sudden crisis (such as an outbreak of fighting), or on receipt of reports that a slowly deteriorating situation (such as a drought or economic crisis) has reached a point at which emergency intervention may become necessary.

The process for an initial investigation is a much compressed version of that presented in Figure 1e (in Chapter 1) and can be summarized as follows:

- coordinating with partners and consolidating secondary data, see section → 8.1
- identifying the areas and population groups of concern, see section → 8.2
- planning and undertaking a few rapid field visits, see section → 8.3
- drawing up an initial working scenario and deciding on follow up action see section → 8.4

This may lead to the preparation of a WFP immediate response EMOP (IR-EMOP) or an EMOP outline, when necessary.

A format for an initial working scenario is provided in Table 8-A at the end of this chapter. This can be used to structure to approach to data collection during the initial investigation.

In case of an influx of ***refugees***, WFP will undertake an assessment jointly with UNHCR, the government and other partners, and you should follow the guidance in *UNHCR-WFP Joint Assessment Guidelines*, UNHCR & WFP 2004, Chapter 2, *Assessment at the onset of a new emergency/refugee influx*.

In case of an ***inter-agency*** assessment at the onset of a sudden crisis – e.g. one organized by the UN country team with or without the assistance of a UN disaster assessment and coordination (UNDAC) team or an OCHA coordination team – you should use the guidance in this chapter to provide WFP's contribution to the assessment during the first few days. This would include the contribution to preparing a 'flash appeal' prior to the preparation of a comprehensive consolidated appeal (CAP), in case of a major or complex emergency.

The purpose of an immediate investigation – the required final outputs

Preliminary determinations of the areas, population groups and numbers (rough estimates) of people affected, and the likely impact on food security.

Recommendations for: immediate life-saving assistance, if needed; the localities and priority topics on which a follow-on rapid assessment should focus, if required; and the type and scale of external assistance, if any, that might be needed.

8.1 Coordinating with partners

Required output: Maximum collaboration among partners in undertaking a rapid investigation, coordination with other sectoral assessments.

Why?	To provide a basis for planning a few joint or coordinated rapid field visits and preparing an initial ('best guess') working scenario.
When?	Within the first day.
By whom?	WFP and partners participating in the investigation.
How?	Activate the contingency plan, if any. Telephone round to key government officials at national and local levels and WFP's traditional partners, and organize a quick meeting.

If a detailed contingency plan exits, rapidly review whatever may have been agreed in relation to conducting joint or coordinated assessments, including specific food security assessments and/or multi-sectoral assessments. Follow the agreed procedure.

However, ***don't assume that all elements of a contingency plan are immediately applicable***. A well-thought-out contingency plan will provide a framework for collaboration among partners and a starting point for planning the assessment and thinking about the kind responses that *may* be required. But even the best contingency plan will need to be adapted to the actual situation, which will *never* correspond exactly to the scenario assumed in the plan.

If there is no joint contingency plan, take the initiative to:

- invite potential partners and interested parties to a meeting the same day: include all relevant governmental and other entities;
- invite the most relevant government entity to co-chair the meeting, if possible;
- propose that the group work together to collect and consolidate information at least during this initial investigation phase.

*In all cases, c*ontinue to encourage the maximum collaboration and coordination, or at least sharing of information.

8.2 Identifying the areas and population groups of concern; consolidating secondary data

Required output: Preliminary maps showing the area(s) affected including zones to be distinguished, lists of distinct population groups concerned, information available concerning their vulnerability to situations such as the present shock/crisis and a first synthesis of the data available on the effects of the shock/crisis.

Why?	To provide a basis for planning a few joint or coordinated rapid field visits and preparing an initial ('best guess') working scenario.
When?	Within the first day.
By whom?	WFP and partners participating in the investigation.
How?	Consolidate and review available information on the nature of the shock/crisis, the geographic areas affected, and secondary data available on those areas including the various population groups in those areas.

Consolidate information available on the ***nature*** of the shock/crisis, the geographic ***areas*** affected and the severity of the ***impact***:

- In the case of a *sudden-onset disaster* information may be available from: relevant government entities (Prime Minister's office; national disaster management authority; provincial and district authorities; meterological office; agencies with personnel in the area; news media; satelite images and aerial photographs, etc.).
- For a *slow-onset crisis* information may be available from early warning systems; government statistics and other offices; agencies with personnel in the area; news media; satelite images.
- In case of *conflict*, information may be available from U.N. and embassy sources.

Based on such information, and in collaboration with partners, draw contours on a ***map*** showing the areas reported to be most severely affected and those less affected. This may reflect the depth of flood water, the extent of physical damage, the intensity of fighting, etc.

Having identified the area(s) affected, seek secondary data on the normal situation in those areas and the impacts of previous similar events, if any. Obtain, or rapidly construct from secondary data with the help of key informants:

- data on the distinct ***population groups*** living in the area(s), their characteristics and numbers;
- livelihood and/or agro-ecological ***zone maps*** for the areas affected;
- a ***seasonal calendar*** including *normal* crop cycles, food stock levels, employment opportunities, other ***livelihood activities***, and any periods when access to particular areas is difficult and trade and aid flows are likely to be interrupted;
- a ***time line*** showing the major events that have affected the whole area, or particular sub-areas or population groups, in the last few years and how those events may have affected any or all of the 3 EFSA themes either directly or indirectly through changes in contextual factors; and
- information on the effects of ***previous shocks/crises*** in those areas and the lessons from the responses to those events.

In case of ***displaced populations***, focus on:

- their locations and what is known about the physical environment and resources in the localities where they are or towards which they are moving;
- their characteristics, leadership structures, ethnic/social divisions and demography – whether they are whole families or predominantly women, children and old people, for example;
- their numbers at present and the rate at which people are arriving; and
- whatever may be known about their general condition and the resources (if any) they have brought with them.

8.3 Planning and undertaking a few rapid field visits

Required output: Consolidated and analysed data from visits to a few sites.

Why?	To provide a basis, together with secondary data, for preparing an initial ('best guess') working scenario.
When?	Within 1 to 4 days.
By whom?	WFP and partners participating in the investigation.
How?	Determine what transport means (vehicles, boats, aircraft, helicopters) are available, and select a few sites in order to try to identify areas where immediate life-saving assistance may be needed while at the same time getting first impressions concerning the situation throughout the whole affected area.

Selecting the sites to visit in the first few days

When possible, your sampling should strike a balance between identifying the most vulnerable areas that are in need of immediate assistance and getting a representative overview of the entire population affected by the shock/crisis. You must adopt a sampling (including stratification) strategy to maximize the degree to which both of these objectives can be achieved simultaneously. One option may be to plan one or more itineraries that bisect at least one of each of the different types of zone.

When lives are at immediate risk, there is an argument for prioritizing data collection and analysis in geographic strata that are presumed to be the most affected by the emergency over the establishment of a representative overview. Other areas and groups may then be assessed in a subsequent stage of data collection. This may be justified in some cases but remember that: (i) initial reports can sometimes be misleading, and (ii) the investigation has to provide a basis for an informed guess as to the situation and potential needs in the whole affected area as well as action to save lives.

If you choose to prioritize the assessment of some areas over others, you must have a defendable rationale for doing so. Where this rationale does not exist or is questionable, a representative overview of the entire area affected by the emergency is a critical pre-requisite to identifying the most vulnerable areas and sub-populations.

How to proceed

The data to collect during field visits will depend on the nature of the crisis (sudden onset natural disaster, displacement) and the gaps in the information you have from secondary sources. The goal is to refine and cross-check the available information and gain insights into the current situation and how it may evolve in

relation to each of the 3 main themes: food availability and markets; household food access and livelihoods; and food utilization and the nutritional situation.

You should try to compare the current situation to the pre-crisis baseline and get a rough idea of the nature and severity of: (i) the change in the situation of each of the main livelihood groups; and (ii) the impact on food supplies, market systems and prices.

For this purpose you will need to:

1. ***Visit a few key provincial/district headquarters*** to:
    - meet with the administrative head (or deputy); the local disaster management committee (or equivalent) and/or relevant sectoral specialists – such as those responsible for the departments of agriculture, livestock, fisheries, water resources, labour, economy, transport, roads, social welfare, health – NGOs and other agencies working in the affected area(s); and
    - visit markets and talk with traders.
2. ***Visit a few selected communities*** (villages, urban neighbourhoods and/or displaced persons camps) to:
    - observe conditions;
    - meet with (interview) mixed groups of community-level key informants – such as community leaders, religious leaders, teachers, health and extension workers – and women and men from the various subgroups within the community; and
    - visit the local market, observe what is (and is not) offered for sale and talk with buyers and sellers.

For guidance on the information to be collected during these meetings, see Tables 10-K, 10-L and 10-M in section 10.5. Your enquiries during the initial investigation will cover fewer sites than a rapid EFSA, but the topics of concern are the same.

For general guidance on how to proceed during visits to provincial/district headquarters, see section 11.2.

For guidance on conducting community group discussions, see Annex C3 and section 11.3. If the situation involves conflict or social repression, be guided by the advice provided in Table 11-A in section 11.3.

What data to collect

For ***resident populations***, try to identify:

- market availability and market prices of main food items;
- effects on the livelihoods and productive assets of different population groups;
- the effects on sources of food and income, including their access to markets, taking account of seasonal patterns of food security;
- the coping strategies adopted, their sustainability and potential negative effects;
- whether households have the means to prepare and cook food, and are able to maintain
- the significance of the timing of the shock/crisis and how the situation may evolve;
- leadership structures and ethnic/social divisions;
- different impacts of the crisis on subgroups, including specific concerns of women and children; and
- if possible, present the health, nutritional and mortality situation compared with the norm based on judgements of experienced observers.

For ***resident populations***, try to identify:

- numbers, arrival and departure rates and demographics;
- the general health and nutritional condition;
- what means they have to prepare and cook food; and
- whether they still have access to their farms and/or any sources if income;
- etc.

Refer to Annex A3 for additional suggestions on possible information requirements and key sources.

For suggestions concerning the specific data to collect at district and community levels, see *UNHCR/WFP Joint Assessment Guidelines*,UNHCR & WFP 2004, section 8.1 *What information to gather from local officials*, section 8.2 *What information to gather from key informants in a camp/settlement*, section 8.4 *What information to gather from groups of refugees*.

8.4 Drawing up an initial working scenario; deciding on follow up action

Required output: (i) An informed guess as to the current food security situation and how it will develop in the coming months. (ii) A recommendation concerning any need for immediate life-saving assistance, the need for a follow up assessment (rapid EFSA) and, if appropriate, a preliminary estimate of the type, duration and scale of assistance that could be needed in the next 6 to 12 months.

Why?	To enable immediate life-saving assistance to be rapidly delivered and distributed, if needed, and provide a basis for initiating the mobilization of resources for any assistance needed in the next 6-12 months (through an IR-EMOP and/or an EMOP outline).
When?	Within a maximum of 5 days.
By whom?	WFP and partners participating in the investigation, together with teams assessing the situation and needs in other sectors, if possible.
How?	Make a rapid analysis of available data and draw on the experience of locally knowledgeable experts.

Developing an Initial Working ('best-guess') Scenario

Review:

- the contingency plan, if any; (ii)
- what is known about the typical effects of this type of event – see Annex A1;
- the preliminary information available concerning the impact and the extent of the area affected, and
- background (pre-crisis) information available on the area.

On that basis, imagine:

- the numbers of people who have probably been affected;
- the likely effects on food availability (including markets), livelihoods and access, and food utilization and the nutritional situation, taking account of the time of year; and

- the options (coping strategies) that households, communities and local authorities are likely to be employing to cope with the situation.

The process is illustrated in Figure 8a. Table 8-A provides a format for compiling a scenario.

Based on this *initial* w*orking (best guess) scenario*, specify the areas and aspects that the follow-on assessment, if needed, should focus on.

Figure 8a **Developing an Initial Working ('best-guess') Scenario**

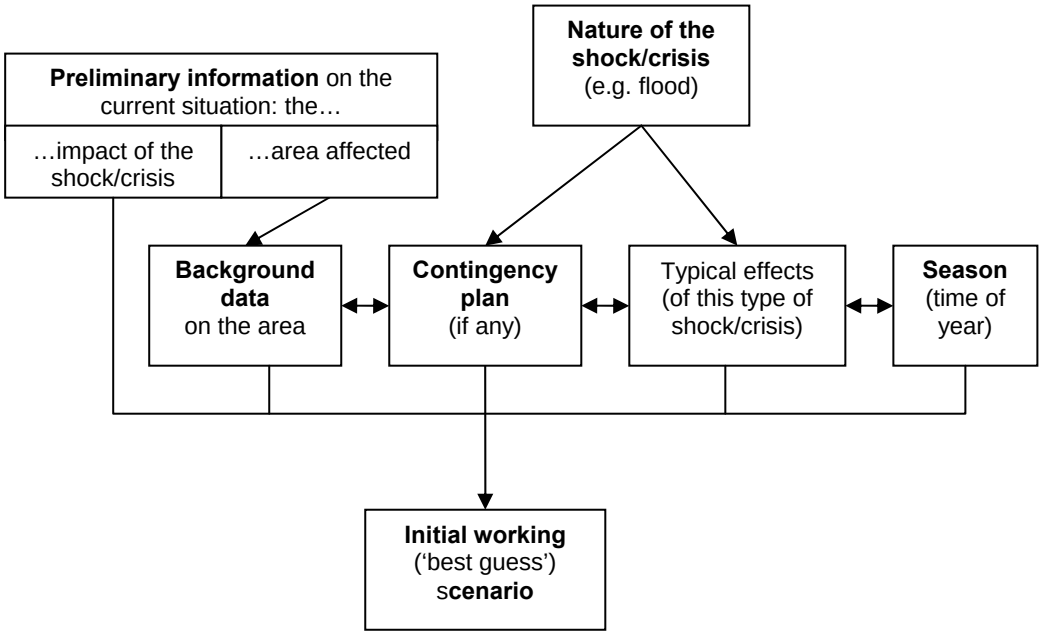

Table 8-A
Format for a Scenario

Analytical component	'Working' scenario
Shock/nature of the crisis	*Cyclone and associated storm surge caused heavy damage in coastal belt and flooding inland*
Geographic area(s) affected	*Districts A, B qnd C, and valleys in D and E*
Ethnic and livelihood groups in the area(s); their vulnerabilities	*Fishing communities on the coast and rivers. Small farmers and daily labourers in the valleys*
Population numbers – total and broken down by area and population group, if available	*Total: 650,000;* *120,000 in district A; …*
Food availability (and markets)	
Likely impact on food supplies (and demand)	*Standing crops and household and commercial stocks in the areas destroyed; little impact on national production*
Likely impact on markets (prices and systems)	*Etc.*
Probable compensatory reactions by the government, traders and others	
Probable net effects (unmet needs and risks)	
Livelihoods and household food access	
Likely impact on livelihoods and households' access to food	
Probable coping strategies of households	
Probable role of traditional/community safety nets and solidarity	
Probable role and effectiveness of existing government and other programmes	
Probable unmet needs and risks	
Food utilization and nutrition	
Likely impact on food utilization	
Current nutritional situation and likely effects	
Probable net effects (unmet needs and risks)	