

■ Part V
**Assessing Household
Food Security and
Emergency Needs**

13 Assessing and analysing current and expected household

food security and needs

This chapter outlines how a CFSAM team might go about analysing household food security among populations in the affected areas and any ongoing programmes of assistance.

CFSAM teams are advised to refer to the WFP needs assessment website for the latest WFP guidance in relation to assessing household food security.

What the CFSAM report might include (in chapter 6 introduction)

Overview: Short introductory paragraph explaining the main factors determining the food security of households in different population groups and the principal livelihood activities (and normal coping strategies) that have, and have not, been affected.

The types, levels and targeting of ongoing food-security assistance.

Explanation of the approach and method(s) used to assess household food access, and the sources of data on nutritional status and health.

13.1 Tasks in relation to household food security

The challenge is to generate the best possible **understanding** of the elements listed in Panel 13-1 and **quantified estimates for** the numbers of people that will require assistance and the levels of assistance needed. Assistance requirements should be expressed in terms of the **months** during which the different groups will need assistance and the **proportion of their consumption requirements** that should be covered during those months.

N.B. The household food security analysis will provide estimates for “assistance” requirements. The response options analysis described in chapter 15 will determine whether that assistance should be provided in the form of food aid, cash and/or other non-food transfers taking account of the findings of the household analysis *plus* the market analysis, the food balance sheet and other factors.

Panel 13-1

What the household food security analysis is required to produce

What must be understood and estimated	How the information will be used
<ul style="list-style-type: none"> The numbers and characteristics of people and households that will be food insecure - will be unable to access adequate food without adopting damaging coping strategies - in different areas/zones; <i>and</i> 	<p>To determine the number of people/households that will need assistance.</p> <p>To establish profiles for those people/households as a basis for selection and targeting assistance.</p>

<ul style="list-style-type: none"> • The nature, causes and severity of food insecurity in different population groups including the periods during which particular types of people/ households will be unable to access adequate food during the coming 12 months as a result of the crisis and the levels of assistance they will require. 	<p>To determine the type(s) of assistance - food and/or non-food - that could be appropriate depending on the causes of food insecurity and whether it is transitory or chronic.</p> <p>To define the quantities of assistance that different population groups might need during specific periods.</p>
<ul style="list-style-type: none"> • The prevalence of malnutrition (acute malnutrition and micronutrient deficiencies) in different areas and among different population groups, the causes of that malnutrition, and the implications for humanitarian response. 	<p>To identify any specific nutritional problems within particular population groups and determine the implications (if any) for food-security-assistance programmes, and what other kinds of intervention might be needed.</p>
<ul style="list-style-type: none"> • The appropriateness and effectiveness of current and planned food-security-related assistance programmes and other options for providing and targeting assistance to those who will need it. 	<p>To make recommendations concerning the continuation or adaptation of existing or planned food-security assistance programmes or the planning and implementation of new types of programme [to be determined in the response options analysis described in chapter 15].</p>

This will be done on the basis of a careful, critical review of the reports of recent food security assessments and nutritional surveys, programme monitoring and evaluation reports, and other secondary data including pre-crisis (baseline) data, together with observations and findings during field visits and discussions with key informants at all levels.

Your enquiries and visits are intended to cross-check and complement existing data. Your report is expected to present your independent analysis of all the data available to you and the conclusions and recommendations you draw from them at the end of the mission. Where necessary, one recommendation may be for a follow-up, detailed household food security assessment. CFSAM teams are not expected - and do not have the time or resources - to conduct thorough, independent, household food security field assessments/surveys of their own.

The specific tasks are summarized in Panel 13-2.

Panel 13-2

Tasks in relation to household food security (and links to the CFSAM report)

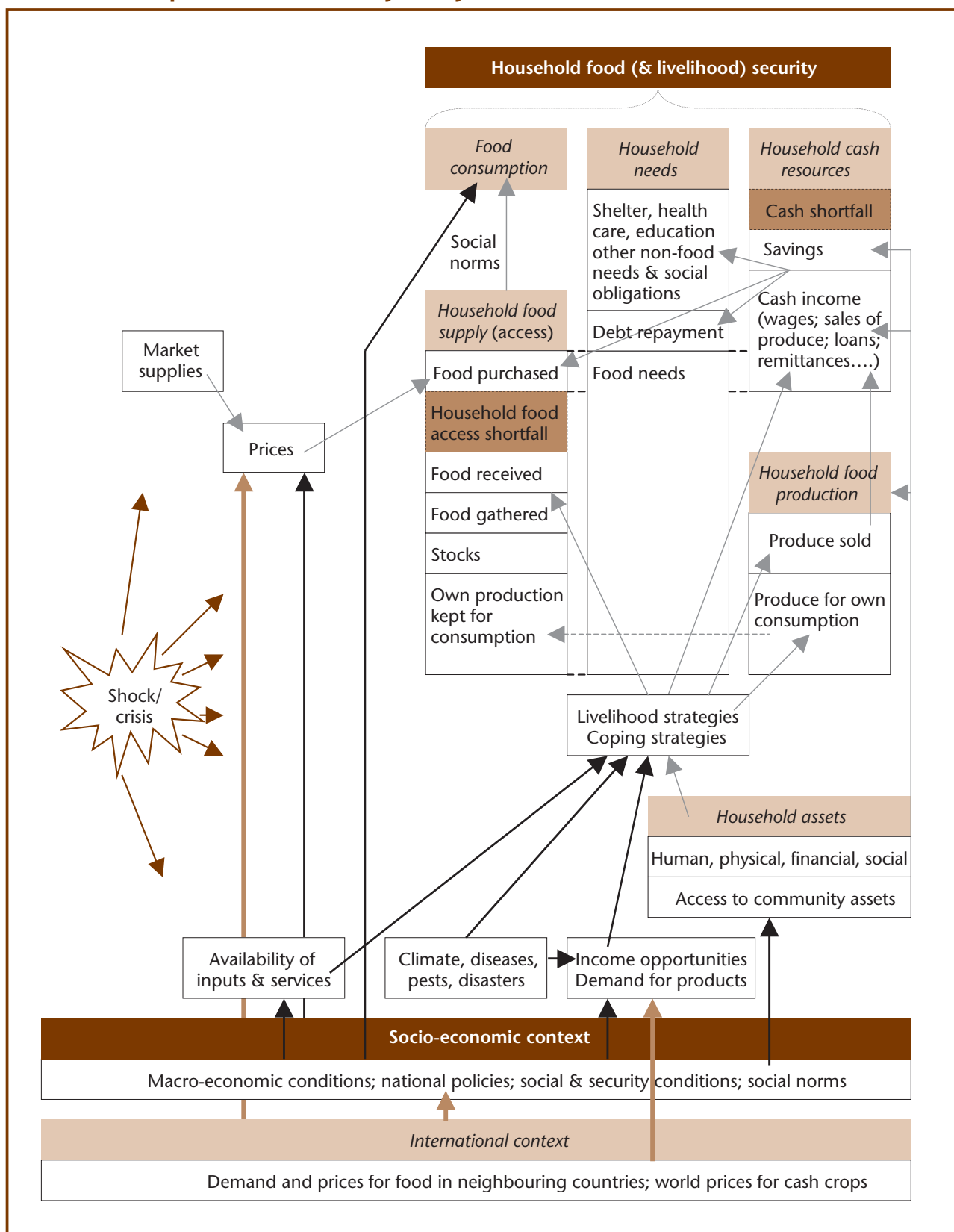
Principal tasks	Report chapters	
<p><i>During the first few days in the capital</i></p> <ul style="list-style-type: none"> • Critically review the methods, findings and conclusions of all recent household-level assessments that are available. • Triangulate the information available from different sources to identify convergence and any inconsistencies or gaps. (Include all available household food security and nutritional status data, and data concerning agricultural production and markets.) <p>Review the reports of and plans for food-security-assistance programmes of the government and all concerned agencies.</p> <ul style="list-style-type: none"> • Finalize data collection instruments and the selection of zones for field visits, and train sub-team members. 	6 Household food security	
<p><i>During field visits</i></p> <ul style="list-style-type: none"> • Gather data on the selected indicators from key informants and households at purposively selected sites in each zone. 		
<p><i>During final analysis</i></p> <ul style="list-style-type: none"> • Triangulate all data to draw conclusions concerning the situation and food security assistance needs of different population groups in different zones (and specify any remaining information gaps). (Include: the present nature and distribution of food insecurity and how the situation is expected to evolve; expected household food access shortfalls; the periods during the coming 12 months when specific population groups will need assistance, their numbers, and the levels of assistance required.) • Analyse information on the nature, causes, severity and distribution of mortality and malnutrition, and the implications for food security assistance and special nutritional support. • Estimate aggregate needs for food-security-related assistance in the coming 12 months. 		
<ul style="list-style-type: none"> • Analyse the appropriateness of ongoing food-security-related assistance programmes and targeting arrangements for the coming 12 months. 		
<ul style="list-style-type: none"> • Analyse the appropriateness of ongoing food-security-related assistance programmes and targeting arrangements for the coming 12 months. 		7 Response options

Figure 13a (extracted from Figure 3a) illustrates the principal factors that determine household food security. You need to understand the impact of the crisis on households' own food production, their income and expenditures, their ability to purchase from markets and obtain food from other sources, and their coping strategies (those they are using and others available to them). Based on that understanding, you need to estimate the resulting impact on households' food access, the shortfalls they will face and when. There are two distinct elements:

1. **assessing the present situation** at household level - a "situation analysis" including the nature, causes and present severity of food insecurity of different population groups; *and*
2. **forecasting** how the food security situation at household level will evolve in the coming 12 months taking account of present trends and any foreseeable opportunities or shocks that could influence that evolution. Opportunities might include a good harvest or cessation of a conflict while further shocks might include new floods or a renewal of fighting, for example.

Information on the present situation will come from recent assessments and reports, discussions with key informants, and your own observations and enquiries during field visits. Forecasting will be based largely on discussions with key informants together with your analysis of trends.

Figure 13a Household food (& livelihood) security and related elements of the crop and food security analysis framework



Panel 13-3 suggests the main topics that typically need to be addressed in your analysis and therefore during interviews with key informants, groups and individual households. After adaptation to the local situation - and taking account of gaps identified in

the analysis of secondary data and any items that need to be specifically cross-checked (see section 13.3) - the points in Panel 13-3 may form the basis of checklists/guides for your enquiries during field visits.

Panel 13-3

Typical focus of CFSAM household food security enquiries

[Topics that typically need to be asked about and discussed during field visits, and on which data need to be synthesized and analysed during the end-of-mission process of analysis and drawing conclusions]

- Note the livelihood and other important characteristics of the household(s) concerned.

Concerning own food production:

- Ask about/Synthesize data on:
 - expected quantity of staple foods from own production this year;
 - per capita staple food from own production (to be calculated based on family size);
 - how this staple food production compares with previous years;
 - how household reserve stocks compare with previous years;
 - expected own production of other foods (especially protein-rich and vitamin-rich foods).
- Discuss/Analyse:
 - how many months of self-sufficiency their own production supplied in previous years;
 - how many months it will supply this year - when own supplies will run out;
 - how production of other foods compares with previous years.
- Cross-check against agricultural production data and existing household food security assessments.

Concerning market purchases and other sources of food:

- Ask about/Synthesize data on:
 - how much staple food the household(s) bought from the market in previous years and when;
 - how much they expect to buy this year and when;
 - what food they received from other sources in previous years;
 - what they expect to receive from other sources this year.
- Discuss/Analyse:
 - how current staple food prices compare with previous years;
 - how the types and quantities of food available in markets now compare with previous years.
- Cross-check against market data.

Concerning food sources in general:

- Discuss/Analyse:
 - the relative importance of different sources of food now and how it compares with previous years at the same season;
 - how the relative importance of different sources is expected to change in the coming months due to seasonal and other factors;
 - the months when these households expect to face a critical deficit during the coming year.
- Cross-check against existing household food security assessments.

Concerning income sources/cash resources:

- Ask about/Synthesize data on:
 - wage rates;
 - how wage rates and expected income from employment or casual labour compare with previous years;
 - the terms of trade for sales/exchange of livestock and other produce against staple foods;
 - how the quantities of food received in exchange for livestock is expected to compare with previous years;
 - farm gate prices for cash crops;
 - how income from the sale of cash crops is expected to compare with previous years;
 - how income from petty trading is expected to compare with previous years;
 - how remittance income (e.g. from relatives abroad) is expected to compare with previous years.
- Discuss/Analyse:
 - how overall income during the coming year is expected to compare with previous years.
- Cross-check against existing household food security assessments.

Concerning expenditures:

- Ask about/Synthesize data on:
 - the proportion cash income spent on food, and how it compares with previous years at the same season;
 - the amounts spent each month on other essential items (rent, health care, fuel, schooling, etc.) and how it compares with previous years.
- Discuss/Analyse:
 - how essential non-food expenditures are expected to change in the coming year.
- Cross-check against existing household food security assessments.

Concerning coping strategies:

- Ask about/Synthesize data on:
 - how the household(s) intend(s) to try to make up for their food deficit;
 - the coping strategies they are using now;
 - the strategies they are planning to use during the coming year, and when.
- Discuss/Analyse:
 - how sustainable the various coping strategies are and whether productive assets are being, or are likely to be, sacrificed.
- Cross-check against existing household food security assessments.

Concerning food consumption:

- Ask about/Synthesize data on:
 - how many meals people are eating each day and how that compares with previous years at the same season;
 - what range of foods people are eating now and how that compares with previous years at the same season;
 - how the size of meals eaten now compares with previous years at the same season.
- Discuss/Analyse:
 - the reasons for any changes in consumption compared with previous years.
- Cross-check against existing household food security assessments.

13.2 Reviewing existing assessment reports

As part of the preliminary analysis prior to planning the field visits you must:

- Critically review the methods, findings and conclusions of whatever recent household-level assessments are available. Judge the reliability and representativeness of the existing assessments and identify any gaps in coverage of areas in which households' food security may have been affected. Give particular attention to:
 - the areas and population groups covered by the available assessments, and the basis for the disaggregation of population;
 - the range of data collected and used, and the depth of the analysis undertaken including cross-tabulations among variables; *and*
 - the basis for the estimates of current food access shortfalls (or classifying the severity of food insecurity), and the basis for forecasting gaps and hence assistance needs in the next 12 months.
- Whatever methods have been used, note any limitations and concerns in your report along with a brief discussion of how you addressed them in verifying or adjusting the final estimates of food access shortfalls (gaps) and the numbers involved.

Existing household-level assessments and estimates of need are likely to be based on one or more of the following approaches:

- household survey using proxy indicators of food consumption (diet diversity and food frequency), access (food and income sources) and/or a coping strategies index;
- “household economy approach” (HEA) rapid appraisal; *or exceptionally*
- a “food poverty” (purchasing power) approach.

Annex 16 provides brief explanations of these methods, their strengths and weaknesses, and references to documents where further details can be found. Note that some methods (especially those using proxy indicators) provide valuable descriptions of the impact of the crisis on food security but rely heavily on professional judgment when it comes to estimating the actual magnitude of the resulting household food access shortfalls and therefore the level of assistance required.

As a starting point, it may be useful to develop, on the basis of the team’s own preliminary understanding of the situation, a short list of the data items that seem to be most critical in the current situation and use that as a basis on which to judge the adequacy of the data collection and analysis undertaken by the existing assessments.

Reviewing assessments based on household surveys and proxy indicators

These methods use the strategies that affected households adopt in order to try coping with a food crisis as proxies for their levels of food insecurity. Data are gathered through household surveys based on *probability sampling*. Two principal methods for classifying households in this way are in use:

- **diet diversity** combined with **food frequency** (DDF), which may be converted into **food consumption scores** (FCS), together with data on **food sources** and **income sources**; and
- a locally-derived **coping strategies index** (CSI) representing a number of coping strategies.

The second edition of the WFP *Emergency Food Security Assessment Handbook*, expected early 2008, describes a methodology that combines all of the above.

Changes in these proxy indicators reflect changes in levels of food security - and the severity of food insecurity. They identify variations in the severity of crisis impact on different communities and areas. DDF scores in themselves do not provide estimates of food access shortfalls. Thresholds are established based on the degree of deviation from a benchmark taken as representing adequate consumption, and judgments are made to link particular DDF, FCS or CSI scores with specific levels of food insecurity and assumed ranges of food access shortfalls. In both cases the statistical data should be interpreted in the light of complementary qualitative data from community group interviews and key informants.

- If any such assessments are available, examine the data and reports, keeping the questions shown in Panel 13-4 in mind.

Panel 13-4

Questions to ask when reviewing assessments using household surveys and proxy indicators

If assessments based on household surveys and **dietary diversity and other proxy indicators** are available, review the reports and examine the data with a view to answering the following questions:

- Do the thresholds established for different levels and severity of food insecurity adequately reflect the nature of the humanitarian emergency or livelihood crisis?
- Are deviations measured - comparisons made - in relation to an already food-insecure situation (chronic food insecurity) or a previously food-secure situation?
- Is account adequately taken of seasonal variations in consumption habits?
- What method was used to group and classify households in relation to the chosen thresholds, and how might conclusions differ if the data were analysed in a different way?

(In the WFP assessment in Darfur in 2005, principal component analysis and cluster analysis produced different results from the same dataset: see 🌐 WFP & UNICEF, *Emergency food security and nutrition assessment in Darfur*, Sudan 2005.)

- What other data were used and on what basis were conclusions drawn concerning the magnitude of food access shortfalls during the coming year - and the levels of assistance required - for different population groups?

If assessments based on a **coping strategies index** are available, you should review the reports, examine the data and answer the same questions as above plus:

- What weightings were assigned to the various indicators to calibrate the index for the community/ies concerned, what was the basis for those weightings, and how would the classifications and conclusions change if different weightings were used?

In **both cases**:

- Carefully review the areas and population groups covered in the surveys and differentiated in the analysis: Is coverage adequate? Are populations disaggregated in a manner that reflects important distinctions among the population groups and can be used for targeting assistance?
- Give special attention to whether any distinction has been attempted between chronic and transitory food insecurity, and the estimation of crisis-related food access shortfalls (gaps); *and*
- Verify the plausibility of the conclusions through your own interviews with key informants, community groups and a few purposively selected households.

Reviewing assessments and estimates based on Household Economy rapid appraisals

The *Household Economy Approach* (HEA) developed by Save-the-Children (UK) examines food access in the context of changes in households' livelihood and coping strategies, their incomes and expenditures. It uses a variety of rapid appraisal methods to

build up a picture of the economy of households in a defined population group and generate, amongst other things, quantitative estimates of the decline in household food access due to a shock. Assessments using this approach are undertaken at three different levels of detail and sophistication, and probable reliability -comprehensive, simplified and rapid - but the same level of specific HEA training and experience is required of assessors and interviewers in all cases.

- If any such assessment is available, be sure you have a good understanding of the method used and then critically evaluate:
 - the representativeness of the groups interviewed;
 - the techniques used to derive quantitative estimates to establish what are essentially household balance sheets expressed in terms of calorie equivalents; *and*
 - the projection of price impacts on the household economy in situations where relevant price and income elasticities are not available from household food consumption/expenditure surveys.

Reviewing assessments and estimates based on “food poverty” (purchasing power) or household income/expenditure survey data

- If an assessment had used the average deviation of food **expenditures** from the cost of a minimum **food basket** to approximate a food access gap, check whether account was taken of:
 - the type of foods on which the expenditures were made; *and*
 - the amount of food consumed from own production, which reduces the amount that needs to be purchased.
- If, exceptionally, data are available from a recent household income/expenditure survey based on probability sampling, examine whether they are **relevant to the current crisis** period and, if so, examine:
 - the methodology, especially the sampling method, used in the survey;
 - whether key food security variables were included to enable calorie consumption to be estimated;
 - whether data are broken down according to the socio-economic groups that may be differently affected by the crisis and that the CFSAM needs to distinguish, such as agriculturalists, herders, labourers, women-headed households, etc.

Annex 16 includes suggestions how income/expenditure survey data might be used *if* they appear to be relevant to the current situation.

13.3 Reviewing secondary data and identifying gaps and what needs to be cross-checked

- Review, in addition to recent assessment reports, other secondary data including:
 - pre-crisis baselines;

- agricultural production data (see chapter 7);
- market data (see chapter 8); *and*
- reports - progress, monitoring, evaluation reports - on and plans for assistance programmes.
- Triangulate *all* secondary data (those listed above plus assessment data) to identify:
 - elements on which there is convergence among different sources and in which you can probably have confidence;
 - any data gaps in relation to specific topics or geographic areas, issues relating to individual assessments, or inconsistencies among data from different sources that need to be cross-checked; *and*
 - any issues arising from programme reports that need to be followed up to enable you to formulate your own recommendations for assistance.

A format such as the one in Panel 13-5 may be useful to compile the key information from secondary data. It can help to identify any gaps or inconsistencies. Separate tables may be prepared for each distinct zone/area. Information concerning different livelihood groups may be indicated within each cell.

Panel 13-5				
Sample template for compiling secondary data and determining what needs investigation				
Topic	Source 1	Source 2	Source 3	Gaps, inconsistencies
Assessment data				
Method, sampling and reliability of data				
Principal livelihood groups distinguished				
Food sources (own production, market purchases, other)				
Income and essential non-food expenditures				
Coping strategies and their sustainability				
Food consumption				
Estimated food access shortfalls/Severity of food insecurity				

Topic	Source 1	Source 2	Source 3	What needs to be cross-checked
Food-security assistance				
Type of assistance and its appropriateness				
Targeting methods and their effectiveness				
Operational issues				

13.4 Preparing for enquiries during field visits

- Finalize the interview guides/data recording formats.
- Finalize the selection of zones and the itineraries for the multidisciplinary field teams, ensuring that they will enable you to fill gaps while getting an overview of the household food security situation.
- Define procedures for selecting sites - villages, urban neighbourhoods, etc. - for visits within zones.
- Draw up indicative lists of key informants that all field sub-teams should seek to meet in order to obtain the required information.
- Ensure, through the pre-field-visit training, that all members are familiar with methods and questionnaires.

Guides and recording formats for semi-structured interviews with **key informants** and **community groups** should be developed by adapting the list in Panel 13-2 to the local situation and including items required to fill gaps or cross-check items identified in the triangulation process described in section 13.3.

The multidisciplinary interview guide and recording format for **household interviews** (in **Annex 17**) should be similarly adapted to local conditions and gap-filling and cross-checking needs.

A standard procedure for selecting the **sites/communities** to be visited within zones is important for ensuring comparability among the findings of different sub-teams. Estimate the number of sites you expect to be able to visit in each zone; plan to visit one or maximum two “typical” less-affected communities and divide the remaining number of communities that you can visit between moderately-affected and severely-affected communities according to the relative proportion of both groups within the zone, privileging the worst affected. For further guidance, see 📍 Technical Guidance Sheet No.8, *Initial Emergency Food Security Assessments*, WFP/Food Security Analysis Service 2007.

If a substantial scaling-up of current assistance operations could be needed, or if assistance operations may need to be extended to new areas or new population groups, take that into account when listing key informants and include corresponding issues of **institutional and operational capacity** in the interview guides.

13.5 Gathering household food security data in the field

Initial meetings at zonal headquarters/administrative centres

- Inform the relevant local authorities immediately upon your arrival and arrange meetings with all concerned government officials, NGO staff involved in relief or development programmes in the affected areas (see Panel 5-1 in chapter 5), others on the indicative list of key informants, and any other entities or individuals involved in or knowledgeable about the food security situation and related assistance operations.
- In consultation with the local specialists: select districts/sites/localities to visit representing as many as possible of the different livelihood and other population (ethnic) groups, and identify any areas of special interest/concern. Coordinate plans for visits within the zone with the agriculture specialist team members.


If you do not already have it in secondary data, it may be useful to obtain or develop a list of all the principal localities in the zone categorized according to the perceived degree of severity of the crisis impact on food security: severely affected/food insecure; moderately affected/food insecure; less-affected/food insecure. That will then enable you to purposively select a number of sites from each category according to the agreed procedure (see section 13.4 above).

Gathering data at field sites

- Gather data through semi-structured interviews with community development, agricultural and health extension workers; community groups; community sub-groups representing different livelihood groups; NGO staff and others involved in relief or development programmes in the locality.
- Gather data on a few selected indicators from a sample of **households** at each site visited, in each zone, including urban as well as rural sites.
- For all interviews, use the agreed multi-disciplinary interview guide/recording format (see above).
- Give particular attention to:
 - cross-checking/obtaining information concerning the likely evolution of the situation and risks during the **coming 12 months**; and
 - assessing the mechanisms available for identifying the people in need of assistance, the capacity of effective **targeting**, and any limitations and weaknesses that could lead to significant inclusion or exclusion errors, especially if a substantial scaling-up of current assistance operations could be needed, or if operations may need to be extended to new areas or new population groups in the zone.
- Ask whether the households that are now food insecure were also food insecure in previous years, to get an idea on whether their food insecurity is chronic or transitory.
- Be on the look out for additional, unanticipated information.

Gather data from 5 or 10 randomly or purposively selected households representing each main livelihood group at each site for an overall total of 100 to 200 households.

Figure 13a indicates some of the main linkages among the various elements that contribute to and influence household food security. In discussions and in the analysis of data you should try to explore those and other possible linkages and influences in order to understand who is food insecure (which groups) and why. This is essential for the analysis of response options and targeting possibilities (chapter 15).

For general guidance on gathering data in the field, see section 5.3. For detailed guidance on conducting interviews and related data-gathering activities in the field, see: **Annex 9** *How to get the most out of field trips and interviews*, and the  WFP *EFSA Handbook*.

Where a baseline **CSI** already exists but no CSI-based assessment has yet been completed, it *may* be feasible to conduct a sufficient number of meetings (e.g. purposive selection of 2-3 communities representing different expected levels of crisis impact in each zone) to get a rough idea of the situation of different groups - see **Annex 16**.

At the end of the visits within each zone, summarize your findings in relation to household food security together with those in relation to production and markets using a format similar to that in Panel 5-3 (in section 5.3).

Summarizing information for each zone

At the end of the visit to each zone, prepare a **summary** noting:

- Critical contextual factors;
- Main livelihood groups;
- How the current conditions have affected food access (production, markets, income, etc) and consumption for the different livelihood/population groups;
- Prospects for the coming year taking account of trends, opportunities, risks, and the vulnerabilities of different population groups;
- Estimation of population requiring assistance during particular periods; *and*
- Key recommendations and observations

These summaries will facilitate the task of putting together the overall picture when back in the capital.

13.6 Analysing the distribution, severity and nature of food insecurity

What the CFSAM report might include (in chapter 6)

Brief description of the impact of the crisis on different population groups (normally livelihood groups but possibly ethnic) in different crisis-affected areas, their coping strategies and current food security/access status, their prospects and vulnerabilities.

Estimates of the levels of food insecurity - the household food access shortfalls - of different groups in different areas and the expected duration of the crisis-induced/enhanced shortfalls. Explanation of the basis for the estimates (or categorizations).

Map showing the geographic distribution of different levels of food insecurity.

Factors that could positively or negatively affect the food security/access of the different groups in different areas.

The extent to which currently-observed food insecurity is chronic or transitory, and the implications for assistance strategies.

Using information from your initial analysis of secondary data and the data you gathered during your field visits, and comparing with the pre-crisis situation:

- Decide on a classification system and thresholds for different levels of food insecurity and corresponding levels of food-security assistance that the households concerned might require.
- Define the profiles of households that are experiencing, or will experience, particular levels of food insecurity (e.g. severely food-insecure, moderately food-insecure, less food-insecure) corresponding to specific estimated, or assumed, levels of assistance needs.
- Determine the causes of the food insecurity for each group and distinguish households that were already chronically food insecure from those that are newly and transitorily food insecure.
- Identify any remaining gaps or inconsistencies in the available data.

Profiles should be defined - and households distinguished - in ways that will be able to be used for selection and targeting of assistance, whenever possible. The possible effects of HIV/AIDS should be considered, amongst other factors.

The **classification system** may be based on cross-tabulations of indicators of proxy, indicators of food consumption and food access from a household survey, or specific estimates of food and cash shortfalls from a rapid appraisal household economy assessment (HEA) or, perhaps less satisfactorily, simple classifications of poor, average or good food access proposed by community groups in semi-structured interviews. Whatever the basis, you will have to:

- define the **periods** during which particular households will not be able to acquire sufficient food through self-provisioning - from own production and purchases using available income - and thus the periods during which they will need assistance;
- link the chosen classifications to particular **levels** of required **food-security assistance**: e.g. "equivalent to 50 percent - or 75 percent - or 100 percent - of household food needs"; and

- explain the rationale for the levels of assistance proposed and the duration in your report.

Panel 13-6 provides an example. In that case, it was judged that the households concerned required a full ration of staple food (equivalent to 13.5 kg) for the specified periods. Choose periods that are relevant and appropriate to the local situation. Specify the numbers of people and assistance requirements for each zone separately, see the example in Panel 13-7.

Panel 13-6

Example of estimated assistance needs (Table reproduced from Lesotho CFSAM report 2007)

	Jul-Sept	Oct-Dec	Jan-Mar	Total
Number of people	138 200	202 900	401 200	401 200
Cereals (tonnes)	5 600	8 200	16 200	30 000
Other food (tonnes)	1 300	1 800	3 600	6 700

Panel 13-7

Specifying assistance needs in particular periods (Example from Zimbabwe CFSAM report 2007)

In [region 1], a semi-arid zone, livelihoods are earned from a combination of crop and livestock farming ... during the current marketing year production is “poor” or “near-total-loss” ... the mission estimates that up to 40 percent of households are likely to run out of own production starting in July. The remaining 60 percent are expected to meet their food requirements up to the end of September. From October onwards, the population in need will increase to about 60 percent...

In [region 2], a rain-fed agricultural area with intensive crop production and livestock farming on a large scale ... food shortages will be experienced in [...] districts due to poor food and cash crop production. An estimated 45 percent of households in [...] will require assistance from July/August while 35 percent in [...] and 30 percent in [...] will need assistance by October.

The household analysis and the **profiles** of food insecure households may be based on livelihood groups (e.g. subsistence farmers, cash-crop producers, daily labourers), residency status (residents, displaced), household characteristics (e.g. with no able-bodied adult), or some combination. They should be “operational” such that they can be used for targeting assistance, if selection will be needed within communities. Profiles may be identified through cross-tabulation associations of survey data among the various factors found to affect household food security and the various population groups, or

through discussions with community groups and key informants - see 🌐 WFP *EFSA Handbook*.

To the extent that estimates of present consumption levels are available or possible, those levels should be compared with (i) the international *normative* reference of 2100 kcalories/person/day; and (ii) a local *pre-crisis* reference - the average consumption in kcalories/capita/day observed prior to the crisis among households that are now affected by the crisis:

- Comparison of current and projected consumption levels with the pre-crisis reference level gives a measure of the impact of the shock on food consumption. It helps to understand the impact on those who were previously either food secure (new entrants to food insecurity due to the shock) or food-insecure (deepening of chronic food insecurity), see section 3.7.
- Comparison with the normative reference indicates the “gap” that nationally and/or internationally supported assistance should seek to address.
- The difference between the two sets of figures can then be considered when comparing and reconciling the findings from the food balance sheet, which is based on pre-crisis levels (see section 11.1) and the household-level analysis.

Note that, strictly speaking, the normative reference of 2100 kcals should be adjusted for demography, temperature, activity level and the general health and nutritional status of the population as outlined in Panel 15-6 (in section 15.1) but, in practice, this is normally done only for refugee and some displaced populations.

Taking account of market disruption and price changes

You need to understand how people’s access to food has been affected by changes in market functioning or conditions either directly through prices and/or lack of availability or indirectly through effects on livelihood activities and hence purchasing power.

- Identify the areas where:
 - markets have been disrupted and no longer assure previous trade patterns in food and non-food supplies that are essential for food security;
 - people no longer have physical access to their normal markets;
 - markets never supported any significant level of trade.
- Foresee how prices may change and the impact such changes will have on household food access among different population groups.

Anticipating the effects of price changes is difficult but you may:

- Examine pre-crisis distribution of income, consumption and vulnerability;
- Anticipate seasonal variations in prices during the coming year;
- Assume that households will respond to and try to cope with price fluctuations in the same manner as in normal years although the quantities purchased will be lower due to their reduced purchasing power;

- Identify population groups that will and will not be able to cope with the high prices and estimate their numbers; estimate the proportion of the population that will not have access to sufficient food at different price levels, if possible - see, for example, [the report of the Malawi VAC \(Vulnerability Assessment Committee\) 2006](#);
- Consider carefully - and state explicitly - your assumptions regarding incomes, expenditures, effective demand and commodity substitutions for different population groups.

Detailed price forecasting is difficult but scenarios can be developed based on particular sets of assumptions. In your report, present the most likely scenario together with your assumptions and notes indicating how the situation and needs might be expected to vary if conditions and prices evolve differently. See:

- The [Shock-response analysis tool](#) on the WFP Market and Economic Analysis website, which may be helpful in analysing the effects of market shocks on food consumption.
- The Wholesale-Retail [price analysis tool](#) on the WFP Market and Economic Analysis website, which may be helpful in foreseeing the effects of price changes.

Determining whether food insecurity is chronic or transitory¹⁵

- Examine information about the situation *before* the crisis to determine the nature, extent and severity of food insecurity pre-crisis, and which population/livelihood groups were concerned. How different was this from the current situation?
- Consider the responses to questions as to whether households that are now food insecure were also food insecure in previous years.
- Analyse the population-consumption curve as described in Panel 3-5 (in section 3.7), if data are available.
- If the pre-crisis situation is not well documented, try to compile a retrospective picture of pre-crisis food insecurity through community group discussions and key informant interviews. Questions that you might ask in this connection are:
 - Who was food insecure before the crisis, using locally adapted terminology and concepts to define “food insecure”? What coping strategies were used, and by whom?
 - If pre-crisis food insecure groups are similar to those that are currently food insecure, have the proportions and/or numbers of food-insecure people increased?
 - If pre-crisis food-insecure groups were different from those that are currently food insecure, what are the reasons for this?

¹⁵ Adapted from WFP EFSA Handbook, second edition, draft July 2007

13.7 Analysing the severity, distribution and causes of malnutrition

What the CFSAM report might include (in chapter 6)

Brief summary of the health and nutritional situation in the different affected areas and among different population groups, including the most likely causes of poor health and malnutrition.

The implications for food security assistance and special nutritional support.

- Examine available reports from recent nutritional status surveys: check their coverage and reliability as well as the severity, rates and distribution of malnutrition reported.
- Distinguish acute malnutrition (indicated by wasting - low weight-for-height or low MUAC) and chronic malnutrition (indicated by stunting - low height-for-age).
- Make your own observations of any obvious clinical signs of malnutrition at sites visited (but do not attempt to calculate malnutrition rates on that basis!).
- Discuss the nutritional situation, trends, comparisons with seasonal norms with health personnel and agencies at all levels; also discuss the probable causes of malnutrition - whether inadequate food availability, food access, food utilization, care practices and/or health-related factors.
- Examine the nature, capacities and effectiveness of any nutrition interventions already being implemented by the Ministry of Health, other government institutions, NGOs and communities.
- On that basis determine:
 - how malnutrition is distributed among the different population groups and zones;
 - whether the prevalence of malnutrition (and mortality) is “typical” for the population in the current season;
 - what might explain changes and trends in rates of acute malnutrition;
 - whether and how general food-security assistance might need to be adapted and/or what other measures (e.g. selective feeding) may be needed to address specific nutritional problems; *and*
 - what other measures (health, sanitation or public education) may be needed to address those problems.

Note that data from a nutritional survey can be considered reliable - and compared with other such data - only if standard methods and procedures were systematically applied, see Panel 13-8. For detailed guidance on checking the reliability of nutritional survey data and interpreting such data, see:

- *Measuring and interpreting malnutrition and mortality*, CDC/WFP 2007
- *The meaning and measurement of acute malnutrition in emergencies*, H Young & S Jaspers, ODI 2005
- *Protecting and promoting good nutrition in crisis and recovery*, FAO 2005

Panel 13-8

Reliability check for survey results

[Reproduced from UNHCR/WFP Joint Assessment Guidelines, 2004;
adapted from WFP Emergency Field Operations Pocketbook, 2003]

Points to check	What you need to know - standards that should be met
<ul style="list-style-type: none"> <i>Nutritional indices</i> - were they appropriate for the objectives of the survey? 	<p>The recommended indicators for <i>wasting</i> (acute malnutrition) are:</p> <ul style="list-style-type: none"> - for children - weight-for-height (WFH) - for adults - body mass index (BMI) <p>In a protracted operation, both <i>wasting</i> and <i>stunting</i> (chronic malnutrition) for children - WFH and height-for-age (HFA)</p>
<ul style="list-style-type: none"> <i>Cut-off points</i> - were appropriate cut-offs used? 	As in the table below.
<ul style="list-style-type: none"> <i>Sample population</i> - was it appropriately defined? 	<p><i>For children:</i> 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.</p> <p><i>For adults:</i> 20 to 59.9 years.</p>
<ul style="list-style-type: none"> <i>Sampling procedure and sample size</i> - were random sampling methods used? Was the sample size appropriate? 	<p>One of the following:</p> <ul style="list-style-type: none"> - <i>Two-stage cluster sampling:</i> At least 24, preferably 30, clusters selected using strict random procedures from a list of all identifiable units/zones; 30 children randomly selected from within each cluster. - <i>Systematic/interval sampling:</i> Dwellings numbered on a plan of the site; sample size determined to give an appropriate confidence level (usually 95 percent); sampling interval calculated accordingly and strictly applied. - <i>Random sampling:</i> 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.
<ul style="list-style-type: none"> <i>Sample bias</i> - might the sample have been biased? 	<p>Sample bias can arise if standard procedures are not strictly applied everywhere:</p> <ul style="list-style-type: none"> - all selected households must be visited, none missed out; no other households included; - all subject members of each selected household must be measured/interviewed, none missed due to temporary absence from the home.

<ul style="list-style-type: none"> • <i>Measurement error</i> - might there be any systematic measurement error? 	<p>Systematic error can arise if measuring equipment, techniques or recording is faulty:</p> <ul style="list-style-type: none"> - scales should be accurate and read to 0.1 kg; - height/length boards should be well made and read to 0.5 cm.
<ul style="list-style-type: none"> • <i>Measures taken to reduce bias and error</i> - were staff employed for the survey already competent or appropriately trained? Was supervision adequate? 	<p>In order to minimize bias and error:</p> <ul style="list-style-type: none"> - all survey personnel should have been trained following standard procedures and good practice guidelines, including adequate supervised practical field training; - trainers must be competent and experienced; - supervisors should verify the standard measuring and recording by surveyors.

13.8 Estimating numbers and aggregate food-security assistance requirements

What the CFSAM report might include (in chapter 6)

Estimated numbers of people in need of food security assistance: The number of food-insecure people in each (livelihood) group in each area, and the proportion/number in specific categories of acute, crisis-induced or crisis-enhanced, food insecurity now and in coming year.

Explanation of how the estimates were arrived at and any issues involved.

Aggregate emergency food security assistance needs: The aggregate of the team's estimates for the needs of different population groups including the periods when food security assistance would be needed at household level.

Factors that could increase or decrease the overall needs (shortfall estimates).

Existing assessments should estimate the proportions of people experiencing, or expected to experience, particular levels of food insecurity and who are therefore in need of specific levels of food-security assistance. This will be done by statistical analysis in case of an assessment based on a household survey, or (normally) by proportional piling in case of an assessment using rapid appraisal methods. In both cases, the percentage would be used to extrapolate to estimate total numbers.

- Cross-check the validity of those proportions for the zones and population groups concerned and the extent to which they may, or may not, be representative of the whole affected population through discussions with key informants and your own findings at the sites visited; establish proportions for each zone and/or livelihood group, as appropriate
- Establish population estimates for each zone and/or livelihood group, as appropriate, from figures obtained at national level (see section 6.2) and adjusted, if necessary, on the basis of information gathered during the field visits.

- Calculate the numbers of food insecure people in need of assistance in each area or livelihood group, and the overall total.
- Explain in your report the triangulation process by which you arrived at your final estimates. This may include observations on your perceptions of over-estimation or under-estimation in existing assessments and how you made adjustments using your own findings.

The format in Panel 13-9 may be useful as a worksheet to compile and present the data from different zones and to derive an aggregate estimate of food security assistance needs.

Panel 13-9							
Composite estimate of the affected population and food security shortfalls:							
Name of agro - ecological zone/ livelihood zone/ geographic area	Total Population	Food-insecure affected population	Food access shortfall (per capita cereal equiv)		Total food security gap of affected population		Period (No. of hunger months)
			Normative reference	Pre-crisis reference	Normative reference	Pre-crisis reference	
1.							
2.							
3.							
...							
Total							(average)

13.9 Analysing ongoing food-security-assistance programmes and targeting

What the CFSAM report might include (in chapter 1, crisis background)

Brief summary of the nature and impact of food-security-related assistance to date.

While providing an input to the food security crisis background in chapter 1 of the CFSAM report, the analysis of ongoing programmes and targeting arrangements of all food aid (multilateral and bilateral), cash or other non-food transfer programmes, is an essential input to the response options analysis - see chapter 15.

- Carefully review the project documents, periodic reports, and the reports of any evaluations of ongoing food-security assistance programmes (food and/or cash transfers or other programmes such as market support).
- Give particular attention to: the areas and population groups covered; targeting and selection mechanisms and criteria; and the levels, timing and duration of the assistance.
- Discuss with a range of key informants who are not directly involved in the programmes, and with community groups concerned:

- the impacts and the effectiveness of targeting and implementation arrangements of the various programmes; *and*
- any ideas they may have for changes or other programmes to better meet the needs in the coming year.
- Discuss with representatives of the organizations involved:
 - the objectives and effectiveness of the programmes, the operational and other problems faced, their plans for the coming year; *and*
 - the extent to which they would be able (if at all) to increase their implementation capacity and coverage, in case that should be required; *and*
 - any logistic or other constraints that might limit their capacity sustain or increase their activities (or the possibility of other organizations to complement their efforts).
- Triangulate the information from all sources to draw conclusions concerning the effectiveness of the ongoing programmes, their relevance for addressing needs during the coming year, and the capacity available for similar or alternative programmes during the coming year.

Do some (rudimentary) mapping of existing and planned food security interventions - the areas and beneficiaries covered and the type and duration of assistance. The table in Panel 13-10 may provide a useful format. This kind of listing of on-going and planned activities can be useful to: (i) avoid duplication of assistance; and (ii) judge the scope for scaling up and need for improvements.

Panel 13-10

Compilation of ongoing or planned response interventions
(An example adapted from WFP EFSA handbook second edition, draft Nov 2007)

Actors	Type of intervention ongoing or planned	Type and number of beneficiaries	Place of intervention	Duration of intervention (start-end)
Ministry of social affairs	Subsidized food	?	- Area B - Area D	One-off food delivery in
WFP	General food aid distributions of full ration	“Vulnerable” households including: - have less than 1 ha - women-headed households - “the poorest” as identified by leaders Total: ~ 50,000 people	- Area A - Area B - Area C - Area D	From ... to ...
	Supplementary feeding: • Ration for child • Take-home full ration for household	Moderately malnourished children Total: ~ 3,500 children ~ 500 households	- Area B - Area D	From ... to ...
Church	Targeted food aid distributions: ~ 3/4 th ration	“Vulnerable” households as identified by community	- Area B - Area C - Area D	From ... to ...
NGO...	Cash-for-work	Landless households	- Area C	From ... to ...
.....