# Comprehensive Food Security & Vulnerability Assessment (CFSVA) Guidelines



## Annexes

CFSVA Guidelines – Annexes April 16, 2008

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## Annex 1: Example of a Topical Outline for Use in Qualitative Assessments<sup>1</sup>

#### I. Contextual Information

Access to Infrastructure (Transects, community maps and group interviews)

- Condition of existing infrastructure? (roads, schools, drinking water, transport, irrigation, communication, sanitation)
- Who benefits from this infrastructure?
- Do people pay fees or taxes to use this infrastructure?
- Distance to the administrative capital and time required to travel.

#### Historical Information (focus group)

- What shocks (environmental, economic, social, political) have affected the community during last ten years?
- Have there been any changes in women's status or decision-making power over the last 10 years? What are these changes?

**Social Information** (Venn Diagrams, Wealth Ranking and focus groups)

- What is the level of participation of women and of poorer households in social gatherings, community meetings and in development activities?
- Describe cultural/social trends (marriage, land renting, etc.).
- Do women have ownership or usufruct (right of using and enjoying all the advantages and profits of the property of another without altering or damaging the substance) rights?
- What are the inheritance practices relating to men and women? Do boys and girls get equal treatment under the same cultural environment.
- Who are the most vulnerable groups in the community? Who are the most vulnerable individuals?
- Do women have control over the income they earn?
- Inequalities in work load, wage rate, access to economic resources, between women and men.
- Are there socio-cultural practices that work against women, children, minorities and the underprivileged?
- What are the different types of the organizations that work in the community? What are their activities? Who benefits? Describe any impact from these activities.
- What are the community-based groups currently operating? What are their activities? Who benefits? Describe any impact from these activities.

#### Economic Information (focus group)

- What are the major occupations or livelihoods in the area currently? What were the major occupations/livelihoods 10 years ago?
- Describe differences in wages and labour by gender.
- With the same amount of money are people able to buy more goods and services now compared to last year?
- What are the types of livestock owned by different groups within the community?
- Has there been a significant loss of livestock over the last 10 years? What was the cause? Have the stocks recovered?
- Are there are current threats to livestock? What is being done to protect livestock against these threats?

<sup>&</sup>lt;sup>1</sup> From the Monitoring and Evaluation Manual for ADRA International, Annex 9.

- Describe the fisheries resources in the area?
- Describe the migration trends over the last 10 years.
- What are the major agricultural crops produced locally?
- Are there local market facilities? If not, where do people sell/buy their products?
- What types of financial institutions exist to support the economic activities of people?
- Access to loan, sources, costs, and terms.
- In the past 10 years, have there been any economic changes or shocks that have affected your employment opportunities? If so, what were these changes and how did it affect your income earning opportunities?

#### II. Access to Resources

Natural Resource Information (Transects, maps and focus groups)

- Where do you get the drinking water? Are they are protected from pollution? Who is responsible for getting it? What is the time required?
- What water-borne diseases are prevalent in the community? (Guinea worm, Diarrhoea, etc.)
- Land type, soil fertility, hazards (flooding, drought, etc.)
- Patterns in access to land, water resources, pastures, and other community resources.
- Land tenure system.
- Trends in land availability.
- Constraints and opportunities for getting access to natural resources
- What changes have occurred in the household access to agriculture land and agriculture wages opportunities during the last ten years?

#### III. Access to Institutional Structures and Organizations

**Relationship with Local Government**, **Community Based Organizations** (focus groups)

- Do you or your family participate in any food assistance programs? If so please describe these?
- Is it adequate?
- What is needed? Or not being provided?
- Any ideas about why services are not being delivered?

#### IV. Livelihood Strategies

Livelihood Strategies (focus groups, seasonal calendar)

- What are the main sources of income and work available for each livelihood group?
- What opportunities exist in the community for livelihoods?
- What are the major risks associated to the different livelihood strategies perused by different occupation groups.
- What is the seasonality of work/income generating activities?
- What are the gender differences in access to work, types of work, and income generating activities?
- Do people migrate for work? If so what do they do and where do they go? Which household members migrate? How long are they gone? How important are remittances to household income?
- Are the current patterns of migration normal for this time of year?
- What are the major risks to the livelihood in the community, and how will these risks be managed?

#### **Coping Strategies** (focus groups, seasonal calendar)

- How do people cope when their income or agricultural production is not enough?
- Which months are the leanest times in terms of food and income?
- What happens to consumption patterns during the lean season? (Adjustment of meals, types of food eaten, etc.)
- What are substitute foods when food is in short supply?
- When food is in short supply, do some family members receive preference in food access? Who and why?

#### V. Well Being or Livelihood Outcome Information

#### Food Security Situation (focus groups, seasonal calendar)

- How do you manage getting access to food in times of scarcity?
- How many months can you meet your own consumption from your own production or from your own cash?
- What do you think the food security situation will be in the next 6 months? Is this normal for your community?
- What are the priorities for your community to improve food security?

#### Human Capital - Education (focus groups, some household case studies)

- What types of schools does the community have access to? (both public and private)
- What is the highest education level attainable in the schools?
- Tell us about the quality of education.
- Is there any informal education?
- What sorts of skills are found in the community? Where do people go to get these skills?
- Describe local levels of literacy, dropout rates noting gender differences
- Are there certain times of the year when dropout rates are more likely? When are they? Who is most likely to drop out and why?

**Human Capital - Health** (focus groups, seasonal calendar, some household case studies)

- Describe the types of diseases experienced by the community over the last one year. Is this normal for your community?
- Describe the seasonal variations in disease and illness.
- Does the community have access to a health clinic? What types of health facilities are available locally? Who has access to these services? What are the costs to seeking care (time included)?
- Where do you go when you are sick?
- What could be done to improve the health situation in your community?
- What sanitation facilities most of the people have access to (toilet, hand washing, garbage disposal)?

#### Human Capital – Social (focus groups)

- Do people get social support when they run out of food or income? If so, from whom and in what form?
- Do some groups have more social support than others?
- Has the level of social support changed over the last 10 years?

#### Shelter (focus groups)

- What is the quality of the housing in the community? Does this vary by social group? (floor, walls, roof)
- What are the sanitary conditions of the houses?

CFSVA Guidelines – Annexes April 16, 2008 **Environment** (focus groups, seasonal calendar)

- What is the status of water access for household consumption (quality, distance)? What are the seasonal variations?
- What is the status of water access for consumption by livestock (quality, distance)? What are the seasonal variations?
- Have the community sanitary conditions gotten better or worse in the past 10 years? Why?
- Describe the rainfall pattern over the last year. Is this different from that of the previous 10 years?
- Where do most people dispose human waste? How do people dispose of waste water and other solid wastes?

#### VI. Risks and Vulnerability

**Hazards** (Open-ended questions: focus group, key informant interviews, visual inspection)

- Can you provide a list of factors that increases your vulnerability?
- How frequent your community expose to those shocks and how severe they are? How long do they last?
- What types of occupational groups or social groups are likely to be affected most for each of these shocks?
- What types of Early Warning Systems does the community have to mitigate the effects of these disasters/catastrophes?

HIV/AIDS (Open-ended questions: focus group, key informant interviews)

- What do people know about HIV/AIDS and STIs?
- Do you know anyone with these diseases or anyone who has died from these diseases?
- How people in this community get information about HIV/AIDS and STIs?
- What do most people think the modes of transmission are?
- Is HIV/AIDS curable?
- What do people think about the causes of these diseases?
- How do community members behave towards people known to be infected and affected?

**Conflict** (Open-ended questions: focus group, key informant interviews)

- Is there a history of conflict in this community? (intra and extra community)
- What are the types of conflicts? (Chieftaincy, religious, ethnic and crossethnic, generational)
- How the current conflict situation is different compared to past.
- Are there tradition systems for conflict resolution? What institutions are involved in conflict resolution?

## Annex 2: Examples of Participatory Tools for Livelihood Analysis

The annex suggests participatory tools that can be used to identify main livelihood strategies during a focus group.

Researchers are not obliged to undertake all the steps proposed below. However, the exercises do follow a logical order (e.g., step 2 can be undertaken only after step 1).

During the focus groups the facilitator and note taker are expected to take notes and summarize the findings.

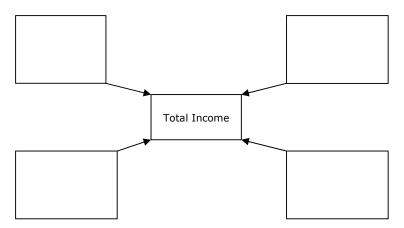
#### Step 1: Identification of livelihood strategies

Estimated time: 20 minutes

**Material needed:** pens, flipchart, and standard template for the summary of the discussion

The identification of livelihood strategies (i.e., main sources of income) can be facilitated through boxes. Boxes help visualizing the key issue (i.e., total income) and classifying specific answers into broader categories. The following procedure is recommended:

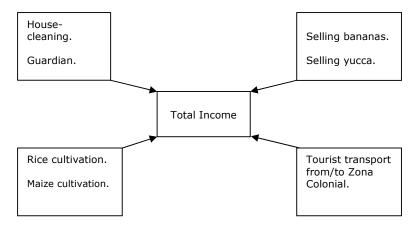
1. Draw the following:



- Ask the participants to think about the major income sources (i.e., economic activities) they had in the past year.<sup>2</sup> Have them report as many examples as possible (either individually or through discussion and consensus).
- 3. Report examples in the boxes. Place similar examples in the same box. For instance, selling bananas and selling yucca are similar activities. They should therefore fall into the same category/box (selling food). By doing so, specific examples will be automatically classified into broader categories. Create new boxes, if needed. Categories should be large enough to include a number of specific similar activities, but they should not be too broad as they have to reflect context-specific activities.

<sup>&</sup>lt;sup>2</sup> Participants may be asked to report on the main income-generating activities either by taking into account their situation or the general situation of the community. CFSVA Guidelines – Annexes April 16, 2008

#### Notes from the discussion may appear as follows:



#### Summary of the discussion

As soon as the discussion on the topic is over, facilitators are suggested to summarize the discussion into a standard template. The summary may appear as follows:

| Source of<br>Income | Description (examples)                     |
|---------------------|--|
| Agriculture         | rice cultivation                           |
| Agriculture         |  |
|                     | maize cultivation                          |
| Taxi Driver         | Driving tourists to and from Zona Colonial |
| Food Vendor         | Selling yucca and bananas                  |
| Domestic Help       | Cleaning Houses                            |
|                     |  |
|                     | Guardian                                   |
|                     |  |

For each category the table reports the examples mentioned during the discussion. At this stage, categories are not ranked for their contribution to the total income.

#### Step 2: Ranking of livelihood strategies

#### Estimated time: 10 minutes

**Material needed:** pens, flipchart, and standard template for the summary of the discussion. Beans are also needed if ranking is done through proportional piling.

Step 2 can be undertaken only after step 1. The following procedure is recommended:

- 1. List all the income sources reported during step 1. Mention the broader categories, not the specific examples.
- Ask the group to identify the 5 most important sources and to rank them from a scale of 1-5 (1 being most important).<sup>3</sup> Ranking can be done in several ways. Forced ranking and proportional piling are two possible options.

<sup>&</sup>lt;sup>3</sup> If there is not enough time available, it is suggested to focus on a lower number of livelihood strategies (e.g., ranking the 3 most important).
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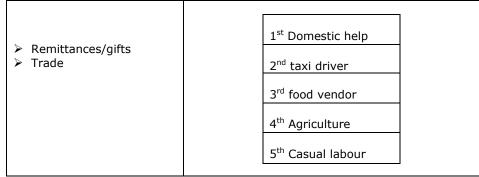
#### 2a. Ranking

• Take a sheet of paper. List the reported income sources on the left-hand side of the paper and draw a 5-level scale on the right-hand side (see picture).

| <ul> <li>Agriculture</li> <li>Domestic help</li> <li>Casual labour</li> <li>Food vendor</li> <li>Taxi driver</li> <li>Remittances/gifts</li> <li>Trade</li> </ul> |  | 1 <sup>st</sup><br>2 <sup>nd</sup><br>3 <sup>rd</sup><br>4 <sup>th</sup><br>5 <sup>th</sup> |  |
|---|--|---|--|
|---|--|---|--|

 Ask the participants to fill-in the levels of the scale by putting the most important source at the top of the scale and the 5<sup>th</sup> at the bottom. Only 5 income sources can be located – one for each level of the scale. If the group identified more than 5 sources during exercise 1, the least important sources will be left out from the scale.

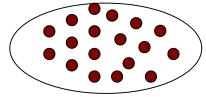
Notes from the discussion may appear as follows:



2b. Proportional piling:

- Write down all income sources reported during step 1 on sheet of paper (see table)
- Ask the participants to think about how each income source contributed to their total income in the past year.
- Put on the ground 100 beans/counters. Explain that the 100 beans/counters represent the total income (100%) of the community in the last year. Their task is to place them under each income source category (see table).
- Explain that the number of beans placed under each category represents the contribution of each income source to total income and that all the beans must be used. For example, if 25 beans are placed under casual labour, this means that 25% of total income came from this activity. Demonstrate the exercise yourself as a way of getting the process started.

|  | domestic<br>help | taxi<br>driver | food<br>vendor | agriculture | casual<br>labour | remittance | Trade | total<br>income |
|--|------------------|----------------|----------------|-------------|------------------|------------|-------|-----------------|
| Average<br>importance<br>of each<br>activity | ?                | ?              | ?              | ?           | ?                | ?          | ?     | 100             |



• Ask participant to discuss and undertake the exercise. During the activity make sure that the participants use all the beans they received.

| Notes from the exercise ma | ay appear as follows: |
|----------------------------|-----------------------|
|----------------------------|-----------------------|

|  | domestic<br>help | taxi<br>driver | food<br>vendor | agriculture | Casual<br>labour | remittance | Trade   | total<br>income<br>for each<br>participant |
|--|------------------|----------------|----------------|-------------|------------------|------------|---------|--|
| Average<br>importance<br>of each<br>activity | 38 beans         | 19 beans       | 18 beans       | 7 beans     | 7 beans          | 5 beans    | 5 beans | 100 beans                                  |

#### Summary of the discussion:

As soon as the exercise is over, facilitators are suggested to summarize the piling into a table. The summary may appear as follows:

| Source of Income | ranking | Contribute to the total income (average percentage) |
|------------------|---------|---|
| Domestic help    | 1st     | 38%   |
| Taxi driver      | 2nd     | 19%   |
| Food vendor      | 3rd     | 18%   |
| Agriculture      | 4th     | 7%  |
| Casual labour    | 5th     | 7%  |

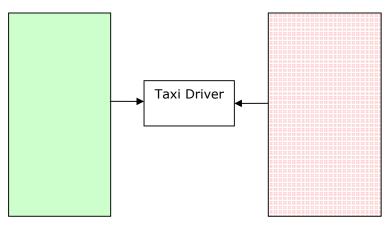
It is possible to report the contribution of each activity to the total income only if activities are ranked using proportional piling. Otherwise, we can only report the order of importance.

#### Step 3: Identification of Livelihood Contributions and Constraints

#### Estimated time: 30 minutes

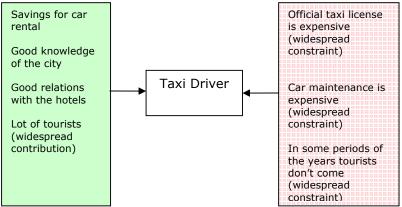
**Material needed:** pens, flipchart, and standard template for the summary of the discussion

1. Take into consideration one of the 5 income sources mentioned during exercise 2 (e.g. taxi driver) and draw the following:



- 2. In the green box on the left-hand side, ask participants to indicate factors that increase their success the income-generating activity. In the red boxes on the right hand side, ask participants to indicate constraints to the success of the activity.
- 3. Record any contributions and constraints identified during the discussion. Exhort participants to report only the key inputs and constraints. For each input and constraint, ask participants if the input / constraint is widespread among all the community members engaged in the activity.

Notes may appear as follows:



 Repeat exercise with the remaining income sources. If there is not enough time available, livelihood inputs and constraints analysis can be done on a smaller number of income activities (e.g., the 3 most important incomegenerating activities).

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**Summary of the discussion:** As soon as the exercise is over, facilitators are suggested to summarize discussion into a standard template. Summary may appear as follows:

| Source of<br>Income | Contributions                  | Comments                | Constraints                          | Comments                 |
|---------------------|--------------------------------|-------------------------|--------------------------------------|--------------------------|
| Agriculture         |                                |                         |                                      |                          |
| Domestic Help       |                                |                         |                                      |                          |
| Casual Labour       |                                |                         |                                      |                          |
| Food Vendor         |                                |                         |                                      |                          |
| Taxi Driver         | Saving for renting a<br>car    |                         | Expensive car<br>maintenance         | Widespread<br>constraint |
|                     | Good knowledge of the city     |                         | Official taxi driver<br>is expensive | Widespread<br>constraint |
|                     | Good relations with the hotels |                         | Tourism affected by seasonality      | Widespread<br>constraint |
|                     | Lots of tourists               | Widespread<br>advantage |                                      |                          |

## Annex 3: Examples of Participatory Tools for Risk Analysis

Researchers are not obliged to undertake all the steps. However, the steps do follow a logical order. For instance, step 2 can be undertaken only after step 1.

If focus groups are used to study the consequences of a specific shock, it is not necessary to identify and rank the shocks. The discussion can start suggesting the participants to talk about the specific shock under study. Steps 1 and 2 (identification and ranking of shocks) can therefore be ignored.

As a general rule, a focus group on a specific shock can be planned properly only if researchers are aware that a relevant shock affects the communities under survey. This reminds of the importance to undertake a comprehensive situation analysis, a review of secondary data and to dialogue with the country office and partners prior to use the following tools.

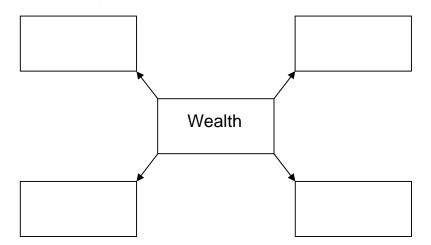
#### Step 1: Identification of shocks

Estimated time: 20 minutes

#### Material needed: pens, flipchart

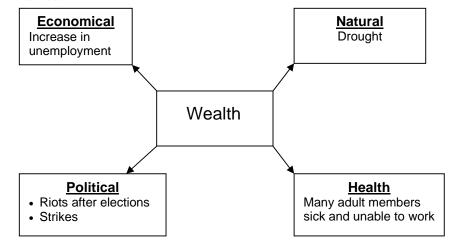
The identification of shocks can be facilitated through boxes. They help with visualizing the key issue (i.e., wealth / food security) and classifying the specific shocks into broader categories. The following procedure is recommended:

- 1. Have the participants discuss on the concept of wealth. Within the context of Food Security and Vulnerability Analysis, it is important to highlight that in a wealthy household all members are expected to have enough food to satisfy members' needs; to live in a hygienic and safe environment and to be able to educate children.
- 2. Draw the following:



3. Ask the group to think about the shocks that they have faced over the past year (period of time can be changed). Ask them to list all of the natural, social, political, life cycle, health, and economic shocks. Emphasize that you would like to know of the shocks that have already taken place, not the shocks that people feel <u>might</u> take place. Add new boxes, if needed. Whenever possible put similar shocks into the same box.

Notes may appear as follows:



#### Ranking of shocks

Estimated time: 10 minutes

**Material needed:** pens, flipchart, and a standard template for the summary of the discussion

Step 2 can be undertaken only after step 1. The following procedure is recommended:

 List all the shocks reported during step 1. Ask the group to identify the 5 most important shocks and to rank them from a scale of 1-5 (1 being the shock with the most severe impact). Ranking of shocks can better done through forced ranking (see Livelihood Analysis step 2 – option 2b).

#### Summary of the discussion:

As soon as the step is over, facilitators are suggested to summarize ranking into a standard template. The summary may appear as follows:

| Risk                           | Ranking         |
|--------------------------------|-----------------|
| Adult members too sick to work | 1 <sup>st</sup> |
| Increase in price              | 2 <sup>nd</sup> |
| Recurrent drought              | 3 <sup>rd</sup> |
| Riots and strikes              | 4 <sup>th</sup> |
| Increase in unemployment       | 5 <sup>th</sup> |

#### Step 3: Impact on the community

#### Estimated time: 10 minutes

**Material needed:** pens, flipchart, and a standard template for the summary of the discussion

It is important to identify groups that are particularly hit by the shocks as well as the main effects of the shocks on household livelihoods. Ideally, this exercise

CFSVA Guidelines – Annexes April 16, 2008 should be undertaken for all the shocks mentioned during step 1. If there is not enough time available, focus the discussion on some of them (e.g., the 3 most dangerous shocks).

- 1. Ask whether these shocks affected the community equally (e.g., were all households affected equally by drought or were some households more prone than others?).
- 2. If "no", ask them to identify the characteristics of households that are more affected. To facilitate and record the discussion, report answers in a standard template. Give participants the possibility to describe how the shocks affected household livelihood.

**Key characteristics of the most affected households: focus on livelihood** If researchers want to identify patterns linking shocks to livelihood groups, we suggest proposing a broad list of activities and asking participants to select the livelihood activities that the households most affected by the shock typically undertake (ask to report one or two option/s maximum).

If facilitators focus the discussion on income-generating activities, there is the possibility to link shocks and livelihoods. Nonetheless, some shocks affect a specific group of households not because of their livelihoods, but because of the demographic profile or geographic location. For instance, the focus group may report that AIDS (shock) is higher among truckers (livelihood) and households living at the border (geographic location).

#### Summary of the discussion

As soon as the discussion is over, facilitators are suggested to summarize it into a standard template. The summary may appear as follows:

| Shocks   | Ranking         | Characteristics<br>Of Households Most<br>Affected | Effects of shocks<br>on household<br>livelihood |
|--|-----------------|---|---|
| Adult members too sick to work<br>(likely because of AIDS) | 1 <sup>st</sup> | Truckers  |   |
| Increase in price  | 2 <sup>nd</sup> | Farmers using fertilizers and<br>buying seeds     |   |
| Drought  | 3 <sup>rd</sup> | All farmers                                       |   |
| Riots and strikes  | 4 <sup>th</sup> | Employed in tourism sector                        |   |
| Unemployment   | 5 <sup>th</sup> | Employed in tourism sector                        |   |

#### Step 4: Community response

Estimated time: 20 minutes

Material needed: pens, flipchart, and a standard template for the summary of the discussion

- Ask participants to think about their responses to the shocks (e.g., I would like to know what the households did in order to solve the problem. Please, report all the strategies you have adopted. If you did nothing to solve the problem, we put "nothing". This answer is acceptable). Participants can mention as many strategies as they want. However, at the end of the discussion they have to rank the strategy/ies (maximum 3) that are more frequently used. (see forced ranking under the livelihood analysis).
- 2. For the most important strategies, ask the participants to report the objective of the coping strategies; if the strategies have been effective in solving the problem and if they caused other problems or negative consequences.

#### Summary of the discussion

As soon as the discussion is over, facilitators are suggested to summarize the discussion into a standard template. The summary may appear as follows:

| Shocks   | Ranking | Response   | Objective  | Effectiveness of the Response  |
|--|---------|--|--|--|
| Adult members too sick to work<br>(likely because of AIDS) | 1       | Children retired from school and asked to work                           | Maintain the same level of income as in the past             | Effective but children are behind with the education                                       |
| Increase in price  | 2       | Cultivate different kind of<br>crops (requiring less<br>expensive seeds) | Maintain the same level of crop<br>production as in the past | Not effective as the new crop production has a poorer quality and less power on the market |
| Drought  | 3       | Casual labour  | Maintain the same level of income as in the past             | Effective: livestock has been a good alternative activity for the farmers                  |
| Riots and strikes  | 4       | Stayed home  | Safety   | Save but we lost working days  |
| Unemployment   | 5       | Casual labour  | Maintain the same level of income as in the past             | Not effective – not qualified for jobs similar to tourism.                                 |

#### Step 5: Institutional analysis

#### Estimated time: 10 minutes

Material needed: pens, flipchart, and standard template for the summary of the discussion

1. Ask the group to think about the organizations / institutions that are active in the community and the service they provide. Report the answers in a table to facilitate the discussion and document the responses (see example):

| Name of Organization | Туре (1) | Services Provided<br>by the Organization |
|----------------------|----------|--|
|                      |          |  |
|                      |          |  |
|                      |          |  |
|                      |          |  |

(1) Types of organizations include Government, national and international ONG, community-based organization, Faith-based organization, other (specify).

If no organization is active in the community, report it in the table. Do not leave the table blank.

2. Ask the group whether any of these organizations are/were present in assisting the community's respond to the shocks identified during the previous discussions. If so, ask how they helped and for how long. Report the answers in a table to facilitate the discussion and document the responses (see example).

| Event/Risk        | Name of<br>Organization | Type of<br>Organization | Type of<br>Assistance | Duration of<br>Assistance | Targeted beneficiaries |
|-------------------|-------------------------|-------------------------|-----------------------|---------------------------|------------------------|
| Adult members     |                         |                         |                       |                           |                        |
| too sick to work  |                         |                         |                       |                           |                        |
| Increase in price |                         |                         |                       |                           |                        |
| Drought           |                         |                         |                       |                           |                        |
| Riots and strikes |                         |                         |                       |                           |                        |
| Unemployment      |                         |                         |                       |                           |                        |

#### Step 6: Wealth ranking

#### Estimated time: 20 minutes

Material needed: pens, flipchart, and standard template for the summary of the discussion

- 1. Describe the purpose of the *Wealth* or *Well-being Ranking*. If community mapping has been done, the map can be used to discuss the different areas in which people live, relative to their wealth or well-being.
- 2. Discuss and come to an agreement on a common definition of what a household is within the community.
- 3. Draw up a list of all households with the participants. Write the name of each household on a separate card or piece of paper.
- 4. Split the participants into groups if necessary, and ask each group to conduct the exercise individually. If working with three to five people, do the exercise individually.
- 5. Ask each group/participant to take cards, one by one, and to form piles representing the different levels of wealth/well-being. The group/participant decides on the number of piles. (If any of those taking part cannot read, the facilitator can read out the names written on each card while the participants allocate each household to a pile.)
- 6. Once the card sorting is completed, read off the cards in each pile and allow the participants to make corrections if they wish to do so.
- 7. Then discuss with participants why they have put particular households in particular piles. This will give a good understanding and description of the different social strata in the community.
- 8. Record the results, i.e. the indicators of wealth suggested by the participants in each group and the names of the households in each group. You might finish off by producing a simple graph of well-being and wealth for the community, and comparing this with the normal "curve" found in most communities: some very poor households, most households falling somewhere in the middle, and some rich.

| Figure 1: Example of Wealth | ۱ Ranking |
|-----------------------------|-----------|
|-----------------------------|-----------|

|                         | Category 1<br>Very poor  | Category 2<br>Poor   | Category 3<br>Better off  | Category 4<br>Well-to-do   |
|-------------------------|--|--|---|--|
| Food/diet               | Maize husks,<br>okra, wild<br>vegetables,<br>meals once per<br>day.  | Nsima, beans, fish,<br>vegetables, meals once<br>per day.  | Nsima beans, fish,<br>vegetables, meals twice<br>per day.       | Nsima, tea, rice porridge<br>for breakfast, meat, fish,<br>eggs, vegetables, meals<br>twice a day.               |
| Clothing                | Wear rags.   | Have one set of<br>clothing.<br>One piece of cloth   | Change clothes.<br>Wash clothes with soap.                      | Change clothing frequently.  |
| Livestock               | None   | Usually have small chicken.  | One goat,<br>one chicken.                                       | Usually have cattle, goats,<br>pigs, chicks, sheep,<br>pigeons.  |
| Education               | No education.<br>Not gone to<br>school.                              | Very little education.<br>Standard 4/5.  | Usually reached<br>Standard 8.                                  | Usually reached Form 4<br>and are working.   |
| House<br>structure      | Live in<br>abandoned<br>house.<br>No kitchen, toilet<br>or bathroom. | Thatched houses with<br>grass.<br>One room to sleep in.<br>No kitchen, toilet or<br>bathroom.                        | Houses have kitchen,<br>toilet and bathroom.                    | Roofed with iron sheets.<br>Maintained with cement.<br>Kitchen, bathroom and<br>toilet.                          |
| Bedding                 | Usually cover<br>themselves with<br>meal sacks.                      | Usually cover<br>themselves with one<br>chitenge which is also<br>worn during the day.                               | Have at least one blanket.                                      | Sleep on a bed with a<br>mattress and enough<br>blankets to keep warm.   |
| Access to<br>water      | Use a clay pot.<br>Get water from<br>where pigs<br>bathe.            | Use a watering can with<br>hole to collect water.<br>Have to mend can<br>using mud. Take water<br>from shallow well. | Draw water using good<br>buckets.<br>Wells are personal.        | Drink water from a<br>borehole.<br>Personal boreholes.<br>Locked up when not in use.                             |
| Size of field           | Fields usually<br>less than 1 acre.                                  | Usually have fields that are between 1-2 acres.  | Usually have fields that are between 2-3 acres.                 | Large piece of land.<br>Have farm, and<br>lots of tools.<br>Have husks to give to the<br>poor.                   |
| Yields from<br>crops    | No yield.  | A bit or very little.  | Harvest one granary of maize per season.                        | Harvest a variety of crops.<br>Three granaries of maize.   |
| Types of<br>crops grown | No seed.<br>Grow nothing.  | Grow a bit of maize and<br>g/nuts.<br>No fertilizer.   | Grow maize, tobacco,<br>soya beans.<br>Have a vegetable garden. | Grow maize, tobacco,<br>g/nuts, beans, soya, sweet<br>potatoes, vegetable and a<br>variety of other crops.       |
| Possessions<br>(assets) | Have a clay pot.<br>A few plates.                                    | Have two plates.<br>One cooking pot<br>(small).  | Two cooking pots.<br>At least four mats.                        | Beds for all the family.<br>Ox –cart, buckets,<br>cupboard, table, plates,<br>bicycle, other household<br>items. |
| Employment              | Piecework e.g.<br>working on<br>someone's farm,<br>pounding maize.   | Piecework similar to<br>category 1, but more<br>regular.   | Look after house e.g.<br>sweeping and farming.                  | Several workers, and house servant.  |
| Food stocks             | Have no food.  | Same as category 1.  | Have very small granary.<br>Eat grasshoppers.                   | Have 2-3 granaries full of<br>maize. Have g/nuts,<br>tobacco, cowpeas, soya<br>beans, and others in store.       |

## Annex 4: Examples of Analysis of Participatory Tools

During analysis of participatory tools, the researcher pulls together all the summaries from the focus groups, arranges them in an effective way, looks at the occurrences and comes up with a global picture. We suggest undertaking the following actions:

a) For each focus group separately: **pull into one table the summaries** of the discussions undertaken during the focus groups. The table below comprises summaries from the livelihood analysis (see annex 2). Comments for the inputs and constraints to livelihood activities are not reported in this example. In particular, source of income and description come from step 1; rank and contribution to total income come from step 2; columns reporting inputs and constraints come from step 3.

| Village | Area    | Source<br>Income | Rank            | Average<br>Contribution<br>to total<br>income | Description                      | Input 1                           | Input 2                  | Input 3                                    | Input 4          | Constraint<br>(Const) 1              | Const 2                          | Const 3          |
|---------|---------|------------------|-----------------|---|----------------------------------|-----------------------------------|--------------------------|--|------------------|--------------------------------------|----------------------------------|------------------|
|         |         | Domestic<br>help | 1 <sup>st</sup> | 38%   | Guardian,<br>cleaning<br>houses  |                                   |                          |  |                  |                                      |                                  |                  |
|         |         | Taxi driver      | 2 <sup>nd</sup> | 19%   | Driving<br>tourists              | Saving<br>for<br>renting<br>a car | Knowledge<br>of the city | Good<br>relationship<br>with the<br>hotels | Many<br>tourists | Expensive<br>car<br>mainten-<br>ance | Official<br>license<br>expensive | Season-<br>ality |
| Machi   | Caprivi | Food vendor      | 3 <sup>rd</sup> | 18%   | Selling yucca<br>and bananas     |                                   |                          |  |                  | +                                    |                                  |                  |
|         |         | Agriculture      | 4 <sup>th</sup> | 7%  | Rice and<br>maize<br>cultivation | +                                 |                          |  |                  | +                                    | <u>+</u>                         | +                |
|         |         | Casual labour    | 5 <sup>th</sup> | 7%  | Road<br>reconstruct-<br>tion     |                                   |                          |  |                  |                                      |                                  |                  |

- b) **Read all the tables and recode the answers:** give the same label to similar answers. For instance, if one focus group reported "food vendor" and another reported "vegetable vendor" recode these answers by using the same label (e.g., "food vendor" for both).
- c) <u>For each table separately</u>: arrange the rows so that **all the responses are on the same line** (see example below, due to lack of space not all the columns are reported). Do this exercise for all the tables (focus groups). At

the end, all the tables should be transformed in lines and we should have as many lines as the number of focus groups.

| Village | Source           | Rank            | Average<br>Contribute<br>to total<br>income | Inputs | Constraints | Source         |                 | Average<br>Contribute<br>to total<br>income |                                   | Constraints                      | Source<br>Income | Rank            | Average<br>Contribute<br>to total<br>income | Inputs | Constraints |
|---------|------------------|-----------------|---|--------|-------------|----------------|-----------------|---|-----------------------------------|----------------------------------|------------------|-----------------|---|--------|-------------|
| Machi   | Domestic<br>help | 1 <sup>st</sup> | 38%   |        |             | Taxi<br>driver | 2 <sup>nd</sup> | 19%   | Saving<br>for<br>renting<br>a car | Expensive<br>official<br>license | Food<br>vendor   | 3 <sup>rd</sup> | 18%   |        |             |

d) Pull together all the lines. We develop a matrix with the villages on the rows. (see example below)

| Village | Area    | Source           | Rank            | Average<br>Contribute<br>to total<br>income | Inputs | Constraints | Source         | Rank            | Average<br>Contribute<br>to total<br>income | Inputs  | Constraints                      | Source<br>Income | Rank            | Average<br>Contribute<br>to total<br>income | Inputs | Constraints |
|---------|---------|------------------|-----------------|---|--------|-------------|----------------|-----------------|---|---------|----------------------------------|------------------|-----------------|---|--------|-------------|
| Machi   | Caprivi | Domestic<br>help | 1 <sup>st</sup> | 38%   |        |             | Taxi<br>driver | 2 <sup>nd</sup> |   | renting | Expensive<br>official<br>license | Food<br>vendor   | 3 <sup>rd</sup> | 18%   |        |             |
| Chipa   | Lubombo |                  |                 |   |        |             |                |                 |   |         |                                  |                  |                 |   |        |             |
| Kiwi    | Lubombo |                  |                 |   |        |             |                |                 |   |         |                                  |                  |                 |   |        |             |
| Ghyia   | Caprivi |                  |                 |   |        |             | l              |                 |   |         |                                  |                  |                 | <u></u>                                     |        |             |

- e) **Examine the results**: the approach is similar to one commonly used in the analysis of data from a household questionnaire. It is crucial to report:
  - The sources of livelihood in order of importance (use "source" and "contribute to total income" columns)
  - (for the most important sources) report the more recurrent inputs and constraints (use "inputs" and "constraints" columns)
  - Identify differences across the country (use "village and "area" columns).

f) Link with the quantitative information: most of the time, results from the focus group discussions are reported at the community / village level. This is evident in the example above (see point e), where each line reports the results of one village. The community-level information can be easily aggregated at a higher level (i.e., the region, livelihood zone, etc.) as required. In the household dataset, each household is linked to a region or livelihood zone of residence. It is therefore easy to link the two datasets.

Community-level information can be used to contextualize and enrich the household level data. The figure below visualizes the action of linking the 2 sets of information.

|         |                  |                 | Average    |         |                 | 🗰 Swaz    | iland H  | IH R9.sav - S         | SPSS Data Ed | itor                         |       |         |       |         |         |      |
|---------|------------------|-----------------|------------|---------|-----------------|-----------|----------|-----------------------|--------------|------------------------------|-------|---------|-------|---------|---------|------|
|         |                  |                 | Contribute |         |                 | File Edit | View     | Data Transfo          | orm Analyze  | Graphs Utilities Window Help |       |         |       |         |         |      |
| A       | C                | David           | to total   | Turusha | Com atura insta | <b>~</b>  | <b>e</b> |                       | <b>1</b>     | <u>* i = = = = </u>          |       |         |       |         |         |      |
| Area    | Source           | Rank            | income     | Inputs  | Constraints     | 23 : re   | gion     |                       | 4            |                              |       |         |       |         |         |      |
| Caprivi | Domestic<br>help | 1 <sup>st</sup> | 38%        |         |                 |           | HHID     | date_of_in<br>terview | country      | region                       | CSI   | roof    | floor | water   | sanit   | land |
|         | Taxi             |                 |            |         |                 | 1         | 1184     | 20071004              | Swaziland    | Lubombo                      | 222.0 | thatch  | Concr | Boreh   | None (  | yes  |
| Lubombo |                  | $1^{st}$        | 50%        |         |                 | 2         | 817      | 20070928              | Swaziland    | Lubombo                      | 164.0 | thatch  | mud/s | Pond,   | None (  | no   |
|         | <u> </u>         | <u></u>         |            |         |                 | 3         | 736      | 20070927              | Swaziland    | Lubombo                      | 143.0 | thatch  | mud/s | Pond,   | None (  | yes  |
|         |                  |                 |            |         |                 | 4         |          | 20071002              | Swaziland    | Lubombo                      |       |         | mud/s |         | · ·     | no   |
|         |                  |                 |            |         |                 | 5         |          | 20070928              | Swaziland    | Lubombo                      |       |         | mud/s |         |         | yes  |
|         |                  |                 |            |         |                 | 6         |          | 20070926              | Swaziland    | Lubombo                      |       |         | mud/s |         |         | yes  |
|         |                  |                 |            |         |                 | 7         |          | 20070927              | Swaziland    | Lubombo                      |       |         | Concr |         | · ·     | yes  |
|         |                  |                 |            |         |                 | 8         |          | 20070927              | Swaziland    | Lubombo                      |       |         | mud/s |         | · ·     | no   |
|         |                  |                 |            |         |                 | 9         | 758      | 20070927              | Swaziland    | <b>→</b> bombo               |       |         | Concr |         |         | yes  |
|         |                  |                 |            |         |                 | 10        | 836      | 20070928              | Swaziland    | Lubombo                      | 91.0  | Concr   | Concr | Public  | None (  | yes  |
|         |                  |                 |            |         |                 | 11        | 1237     | 20071005              | Swaziland    | Lubombo                      |       |         | Concr |         |         | yes  |
|         |                  |                 |            |         |                 | 12        | 752      | 20070927              | Swaziland    | Lubombo                      | 88.0  | thatch  | Concr | Pond,   | None (  | yes  |
|         |                  |                 |            |         |                 | 13        | 1135     | 20071004              | Swaziland    | Lubombo                      | 87.0  | thatch  | mud/s | Unprot  | Pit Lat | yes  |
|         |                  |                 |            |         |                 | 14        | 621      | 20070926              | Swaziland    | Lubombo                      | 86.0  | thatch  | Concr | Pond,   | Pit Lat | yes  |
|         |                  |                 |            |         |                 | 15        | 480      | 20070924              | Swaziland    | Lubombo                      | 85.0  | galvani | Concr | Public  | Open    | yes  |
|         |                  |                 |            |         |                 | 16        | 995      | 20071002              | Swaziland    | Lubombo                      | 82.0  | plastic | Concr | Pond,   | Pit Lat | yes  |
|         |                  |                 |            |         |                 | 17        | 637      | 20070926              | Swaziland    | Lubombo                      | 78.0  | galvani | Concr | Pond,   | Ventili | yes  |
|         |                  |                 |            |         |                 | 18        | 632      | 20070926              | Swaziland    | Lubombo                      | 78.0  | thatch  | Concr | Boreh   | None (  | yes  |
|         |                  |                 |            |         |                 | 19        | 889      | 20071001              | Swaziland    | Lubombo                      | 75.0  | plastic | Concr | Public  | Pit Lat | yes  |
|         |                  |                 |            |         |                 | 20        | 475      | 20070924              | Swaziland    | Lubombo                      | 75.0  | galvani | Concr | Piped i | Ventili | yes  |

## Annex 5: Example of Key Informant Questionnaire

This example is a compilation of most of the sections that may be needed for a key informant interview, including close-ended and open-ended questions. In most cases some of this information already exists and therefore does not need to be collected again. This tool is flexible and can be adapted for any country where a CFSVA is undertaken.

| SECTI | on 1 – demographic infori  | MATION – ASK THE O       | FFICI | AL IN | CHAF | RGE            |  |  |  |  |  |
|-------|--|--------------------------|-------|-------|------|----------------|--|--|--|--|--|
| 1.1 - | What is the total population in this v   | rillage / camp?          |       |       |      |                |  |  |  |  |  |
| 1.2 - | What is the total number of households in this village / camp?   |                          |       |       |      |                |  |  |  |  |  |
| 1.3 - | What is the total number of female I this village / camp?  | headed households in     |       |       |      |                |  |  |  |  |  |
| 1.4 - | Comments   |                          |       |       |      |                |  |  |  |  |  |
|       |  |                          |       |       |      |                |  |  |  |  |  |
| SECTI | ON 2 – CONTEXT – ASK THE C   | OFFICIAL IN CHARGE       |       |       |      |                |  |  |  |  |  |
| 2.1 - | Over the <u>last 20 years</u> , have you ob movements in this village?   | eserved large population | 1     | Yes   | 2    | No → Section 3 |  |  |  |  |  |
| 2.2 - | What were the causes of those<br>movements? Specify if the cause<br>created in- or out-migration                                 | Out-migration            |       |       |      |                |  |  |  |  |  |
|       | (record all, write clearly)  | In-migration             |       |       |      |                |  |  |  |  |  |
| 2.3 - | What is the proportion of the popula the village in the last <u>20 years</u> ? Use   |                          |       | _ %   |      |                |  |  |  |  |  |
| 2.4 - | What is the proportion of the population that migrated into the village in the last 20 years? Use proportional piling         _% |                          |       |       |      |                |  |  |  |  |  |
| 2.5 - | Comments   |                          |       |       |      |                |  |  |  |  |  |

## SECTION 3 – TRANSPORTATION – ASK OFFICIAL IN CHARGE

| 3.1- | What type is most important road in your village?   | 1      | Tarmac               |   |    |
|------|---|--------|----------------------|---|----|
|      |   | 2      | Trunk road           |   |    |
|      |   | 3      | Feeder road          |   |    |
|      |   | 4      | Community road       | 1 |    |
| 3.2- | Has the maintenance of the road improved over the LAST YEAR?  | 1      | Yes                  | 2 | No |
| 3.3- | How far from this village is the nearest feeder road?<br>Record both time in minutes and distance in km to access<br>road.<br>Write 99 if don't know, 00 if on location |        | _ Minutes<br>_ .  Km |   |    |
| 3.5- | What is the mode of transportation used by most people in this village?   | 1<br>2 | On foot<br>Donkey    |   |    |
|      |   | 3      | Bicycle              |   |    |

|               |   | 4 | Motorbike |
|---------------|---|---|-----------|
| 3.5<br>(cont) | What is the mode of transportation used by most people in this village? | 5 | Bus / car |
| 3.6-          | Comments  |   |           |
|               |   |   |           |
|               |   |   |           |

| <b>F</b> an aa | h of the fallowing a second  | ationa mlaar   | ATION – ASK OF  | a a malana a a al                                |         |                                  | Deinu             |  |  |  |  |  |
|----------------|------------------------------|----------------|---|--|---------|----------------------------------|-------------------|--|--|--|--|--|
| dry sea        | ch of the following que      | n the grey are | eas.  | en rainy and                                     | Dr      | ry Season                        | Rainy<br>Season   |  |  |  |  |  |
| 4.1-           | What is the main se          | ource of wate  | er in this village?   |  |         |                                  |                   |  |  |  |  |  |
|                | 1 = Public tap/pip           | ed water       | 5 = Pond, lake, riv<br>stream   | ver or   |         |                                  |                   |  |  |  |  |  |
|                | 2 = Tubewell/bore<br>pump    | hole with      | 6 = Rain water  |  |         |                                  |                   |  |  |  |  |  |
|                | 3 = Protected dug<br>spring  | well or        | 7 = Mobile tanker   |  |         |                                  |                   |  |  |  |  |  |
|                | 4 = Unprotected v            |                |   |  |         |                                  |                   |  |  |  |  |  |
| 4.3-           | Which of the follow          | 0              | of water?   |  |         |                                  |                   |  |  |  |  |  |
|                | 1 = Sufficient and           | •              |   |  |         |                                  | 1.1               |  |  |  |  |  |
|                | 2 = Insufficient bu          | •              |   |  |         | 11                               | II                |  |  |  |  |  |
|                | 3 = Insufficient an          | 8              |   |  |         |                                  |                   |  |  |  |  |  |
| 4.4            | following types of la        | atrines by oro | ne questions on the<br>der of importance, sta<br><i>importance. Use the</i> | arting with the r                                | nost fr | equently use                     |                   |  |  |  |  |  |
|                |                              | Rank           | % of pop. using this type of latrine  | Why is this ty<br>of latrine used<br>vs. others? |         | Average dista<br>latrine to wate |                   |  |  |  |  |  |
|                | Flush latrine                |                | %   |  |         |                                  | Minutes<br> .  Km |  |  |  |  |  |
|                | Traditional pit latrine      |                | %   |  |         |                                  | Minutes<br> .  Km |  |  |  |  |  |
|                | Open pit (no<br>walls)       |                | %   |  |         |                                  | Minutes<br> .  Km |  |  |  |  |  |
|                | Mobilets – Mobile<br>toilets |                |   |  |         | Minutes<br> .  Km                |                   |  |  |  |  |  |
|                | None / bush,<br>stream       |                |   |  |         | Minutes<br> .  Km                |                   |  |  |  |  |  |
| 4.5 -          | Comments                     |                | ·   |  |         |                                  |                   |  |  |  |  |  |
|                |                              |                |   |  |         |                                  |                   |  |  |  |  |  |

| SECTION<br>CHARG |  | - EDUCATION — A   | SK S               | СНОС              | DIR               | ECTOR                    | ? / те                     | ACH                        | ER OR O            | THER O          | FFIC               | AL IN |
|------------------|--|---|--------------------|-------------------|-------------------|--------------------------|----------------------------|----------------------------|--------------------|-----------------|--------------------|-------|
| 5.1 -            | i  | e a primary school in   | the vi             | lage / c          | amp?              |                          |                            | 1                          | Yes → :            | 5.3             | 2                  | No    |
| 5.2 -            | How fa<br>Record   | tr is the nearest prim<br>both time in minute<br>of if don't know, 00 if  | ary scl<br>s and ( | nool?<br>distance |                   | to scho                  | ol.                        | <br>                       | Minutes<br>  .  Km | 5               |                    |       |
| 5.3 -            |  | s the proportion of bo  | oys and            | d girls a         | t go              |                          | boys                       |                            | Girls              |                 |                    |       |
|                  | to prim  | ary school?   |                    |                   |                   |                          |                            |                            | _ %                | \<br>\          | I                  | %     |
| -                |  | on 100 boys (girls) I   |                    |                   |                   |                          |                            |                            |                    |                 | I                  |       |
| 5.4 -            |  | e following table to h<br>se ranking  | elp yo             | u rank t          | he reas           | sons wh                  | y childr                   | en d                       | o not go to        | school.         |                    |       |
|                  | importa<br>vs. Wc<br>code o<br>two ap<br>the end<br>score l<br>numbe<br>matchi<br>(e.g. in | hich reason is more<br>ant (e.g. Sickness<br>ork). Record the<br>f the answer in the<br>propriate boxes. At<br>d, compute the<br>by counting the<br>er of responses<br>ing the line heading<br>hine A. Sickness,<br>the number of As) | A. Sickness        | B. Work           | C. Household work | D. Take care of siblings | E. Long distance to school | F. No money for school fee | G. Insecurity      | H. Refuse to go | I. Others, specify | SCORE |
|                  | A. Sick  | iness   |                    |                   |                   |                          |                            |                            |                    |                 |                    |       |
|                  | B. Wor   | k   |                    |                   |                   |                          |                            |                            |                    |                 |                    |       |
|                  | C. Hou   | sehold work   |                    |                   |                   |                          |                            |                            |                    |                 |                    |       |
|                  | <u></u>  | e care of siblings  |                    |                   |                   |                          |                            |                            |                    |                 |                    |       |
|                  | E. Lon   | g distance to   |                    |                   |                   |                          |                            |                            |                    |                 |                    |       |
|                  | F. No r  | money for school  |                    |                   |                   |                          | ·                          | 1                          |                    |                 |                    |       |
|                  | fees<br>G. Inse  |   |                    |                   |                   |                          |                            |                            |                    |                 |                    |       |
|                  |  | use to go   |                    |                   |                   |                          |                            |                            |                    |                 |                    |       |
|                  |  | rs, specify   |                    |                   |                   |                          |                            |                            |                    |                 |                    |       |
| 5.5 -            | In orde  | r of importance, what   | t are t            | he mair           |                   | ems / ne                 | eds in                     | term                       | s of educat        | ion in th       | is villa           | de?   |
| 0.0 -            |  | read options, write r   |                    |                   |                   |                          |                            |                            |                    |                 |                    | go:   |
|                  | 1  |   |                    |                   | 2                 |                          |                            |                            | 3                  |                 |                    |       |
| 5.6 -            | Comm   | ents  |                    | i                 | ·                 |                          |                            |                            | · ·                |                 |                    |       |

| SECTI     | on <mark>6</mark> –            | HEALTH – ASK DC  | CTOR /           | <b>NURSE</b>                           |                                  | R OFF        | ICIAL IN CHA         | RGE             |           |  |  |
|-----------|--------------------------------|--|------------------|--|----------------------------------|--------------|----------------------|-----------------|-----------|--|--|
| 6.1-      | Is there                       | e a health centre in the v   | 1                | Yes <u>→ 6.3</u>                       | 2                                | No           |                      |                 |           |  |  |
| 6.2-      |                                | r is the nearest health co<br>d both time in minutes ar                            |                  | ce in km to a                          | access                           | _<br>  _     | _ Minutes<br>_ .  Km |                 | •         |  |  |
|           |                                | 99 if don't know, 00 if on   | location         |  |                                  |              |                      |                 |           |  |  |
| 6.3-      | Is it fur                      | nctioning regularly?   |                  |  |                                  | 1            | Yes                  | 2               | No        |  |  |
| 6.4-      | Is it fre                      | e or do you have to pay?   | ?                |  |                                  | 1 Free 2 Pay |                      |                 |           |  |  |
| Collect i | nformati                       | on from the health centre  | entre            |  |                                  |              |                      |                 |           |  |  |
| 6.5-      | Numbe                          | er of doctors  | Num              | ber of nurses                          | _                                | _            |                      |                 |           |  |  |
| 6.7-      | What is                        | s the cost of a basic hea  | lth consu        | ltation?                               |                                  | _            | _     Io             | cal m           | oney      |  |  |
| 6.8-      |                                | s the cost of antenatal co   |                  |  |                                  | _            |                      | cal m           | oney      |  |  |
| 6.9-      | Probe                          | r of importance, what ar<br>to make sure this is in or<br>ed cause in order of imp |                  |  |                                  |              | nt of the            |                 |           |  |  |
|           |                                | A. Malaria   | exually<br>d     |  | I. Tuberculo                     | sis          |                      |                 |           |  |  |
|           |                                | B. Diarrhoea   |                  | J. Problems<br>pregnancy               | J. Problems related to pregnancy |              |                      |                 |           |  |  |
|           | C. Respiratory G. Malnutrition |  |                  |  |                                  |              | K. Others, s         | pecify          | /         |  |  |
|           |                                | D. HIV/AIDS  |                  | H. Cholera                             |                                  |              | L. Others, s         |                 |           |  |  |
| 6.10-     | Probe                          | r of importance, what ar<br>to make sure this is in or<br>ed cause in order of imp | rder of in       |  |                                  |              |                      |                 | nt of the |  |  |
|           |                                | A. Malaria   |                  | E. Other se<br>transmitted<br>diseases |                                  |              | I. Tuberculo         | I. Tuberculosis |           |  |  |
|           |                                | B. Diarrhoea   |                  | F. Skin dis                            | eases                            |              | J. Others, sp        | pecify          |           |  |  |
|           |                                | C. Respiratory<br>infections   | _                | G. Malnutri                            | tion                             |              | K. Others, s         | pecify          | /         |  |  |
|           |                                | D. HIV/AIDS  |                  | H. Cholera                             |                                  |              | L. Others, s         |                 |           |  |  |
| 6.11-     | Probe                          | r of importance, what ar<br>to make sure this is in or<br>ed cause in order of imp | rder of im       |  |                                  |              |                      |                 |           |  |  |
|           |                                | A. Lack of<br>infrastructure   |                  | drugs                                  |                                  | G. Others, s | pecify               | /               |           |  |  |
|           |                                | B. Infrastructure not<br>functioning   | st of            |  | H. Others, s                     | pecify       | /                    |                 |           |  |  |
|           |                                | C. Lack of health professionals  | ality of<br>ices |  | I. Others, sp                    | ecify        |                      |                 |           |  |  |
| 6.12-     | Comm                           | ents   |                  |  |                                  |              |                      |                 |           |  |  |
|           |                                |  |                  |  |                                  |              |                      |                 |           |  |  |

| SECTI | on 7 –          | - Market Information   |        |                            |         |          |          |                  |                            |             |           |
|-------|-----------------|--|--------|----------------------------|---------|----------|----------|------------------|----------------------------|-------------|-----------|
| 7.1-  | Is there        | e a market in this village / cam   | p?     |                            |         |          | 1        | Yes              | <u>→ 7.3</u>               | 2           | No        |
| 7.2-  | Record<br>road. | ar is the nearest market?<br>d both time in minutes and disi<br>99 if don't know, 00 if on location  |        | e in km to ac              | cess    | \$       | _<br>  _ |                  | utes<br> Km                |             |           |
| 7.3-  |                 | ften does the market take plac   | 1      | Dail                       | V       |          |          |                  |                            |             |           |
|       |                 |  | 2      | Wee                        |         |          |          |                  |                            |             |           |
|       |                 |  | 3      | 1                          | nonthly |          |          |                  |                            |             |           |
|       |                 |  | 4      | Mon                        |         |          |          |                  |                            |             |           |
| 7.4-  | For ea          | ch of the following, please tell ntly  | me i   | f they are av              | ailat   | ole at   | the v    |                  | ,                          | l how       |           |
| a-    |                 | ood products   | Ofte   | en                         | 3       | Seldom   | 4        | Never            |                            |             |           |
| b-    | "Impor          | ted" food products   | ən     | 3                          | Seldom  | 4        | Never    |                  |                            |             |           |
| C-    | Local o         | cash crop products   | 1      | Always                     | 2       | Ofte     | ən       | 3                | Seldom                     | 4           | Never     |
| d-    | "Impor          | ted" cash crop products  | 1      | Always                     | 2       | Ofte     | ən       | 3                | Seldom                     | 4           | Never     |
| e-    |                 | non-food products  | 1      | Always                     | 2       | Ofte     | ən       | 3                | Seldom                     | 4           | Never     |
| f-    |                 | ted" non-food products   | 1      | Always                     | 2       | Ofte     | en       | 3 Seldom 4 Never |                            |             |           |
| 7.5   | Where           | do people usually sell their ag  | gricul | tural produc               | tion?   |          | 1        | Villa            | ge market                  |             |           |
|       |                 |  |        |                            |         |          | 2        | Mar              | ket in neart               | y vill      | ages      |
|       |                 |  |        |                            |         |          | 3        |                  | ant markets                |             |           |
|       |                 |  |        |                            |         |          | 4        |                  | commercial<br>le village   | agen        | ts coming |
|       |                 |  |        |                            |         |          | 5        |                  | commercial<br>earby villag |             | ts coming |
|       |                 |  |        |                            |         |          | 6        | Othe             | er, specify                |             |           |
| 7.6-  |                 | ople in this village have proble<br>tural production?  | ms s   | elling their               |         |          | 1        | Yes              | 2 1                        | lo <u>→</u> | 7.14      |
| 7.7-  | Probe           | er of importance, what are the<br>to make sure this is in order o<br>ed cause in order of importance | f imp  |                            |         |          |          |                  |                            |             | nt of the |
|       |                 | A. Not enough buyers   |        | D. Lack of n               | none    | ey       |          |                  | G. Thef                    | t, loo      | ting      |
|       |                 | B. Price offered too   | oorta  | tion                       |         | H. Othe  | rs, sp   | pecify           |                            |             |           |
|       |                 | C. Problem of storage  | e to   |                            |         | I. Other | s, sp    | ecify            |                            |             |           |
| 7.8-  |                 | er of importance, what are the to make sure this is in order o                                       |        | ortance. Do                | not     | read     |          |                  |                            |             |           |
|       |                 | A. Banks   |        | C. Informal<br>institution | cred    | it       |          |                  | E. None                    | ;           |           |
|       |                 | B. Other formal credit   |        | D. Family, fr              | iend    | ls       |          |                  | F. Othe                    | rs, sp      | ecify     |

| 7.9- | Probe |  | der of im | n problems people face to a portance. Do not read optio |  |                              |
|------|-------|--|-----------|---|--|------------------------------|
|      |       | A. Lack of banks and formal credit institution |           | D. Need to have a bank account                          |  | G. Structures are too<br>far |
|      |       | B. Formalities too complicated                 |           | E. Need to be in group / cooperative type               |  | H. Need relatives, friends   |
|      |       | C. Need high guarantees / caution              |           | F. Interests rate are too<br>high                       |  | I. Others, specify           |

## Section 8 – Agriculture and Animal Husbandry

| <b>8.9-</b><br>Please<br>complete<br>this table | <b>a-</b> What are the<br>main cash and<br>food crops (up to<br>10) cultivated in<br>this village (write<br>rank) | <ul> <li><b>b</b> - What is the main use of [crop]</li> <li>1 = Consumption</li> </ul> | <b>c</b> - Main<br>cultivars? (write<br>names of<br>varieties) | <b>d</b> - What is the<br>usual type of<br>cropping<br>method?<br>1 =<br>Intercropping<br>2 = Pure stand | e - What was the<br>evolution of [crop]<br>production over the<br>last 5 years and why? |
|---|---|--|--|--|---|
| Maize   |   |  |  |  |   |
| Millet  |   |  |  |  |   |
| Sorghum   |   |  |  |  |   |
| Rice  |   |  |  |  |   |
| Irish Potato                                    |   |  |  |  |   |
| Sweet<br>Potato                                 |   |  |  |  |   |
| Cassava   |   |  |  |  |   |
| Matooke   |   |  |  | II   |   |
| Kidney<br>beans                                 |   |  |  |  |   |
| Cow peas  |   |  |  |  |   |
| Pigeon<br>peas                                  |   |  |  |  |   |
| Soy beans                                       |   | <u> </u>   |  |  |   |
| Garden/field<br>peas                            | II  |  |  |  |   |
| Ground<br>nuts                                  |   |  |  |  |   |
| Simsim  |   |  |  |  |   |
| Теа   |   |  |  |  |   |
| Coffee  |   |  |  |  |   |
| Tobacco   |   |  |  |  |   |

**8.10** - For the main crops outlined above, please complete the following table Use XXX = HIGH, XX = MEDIUM, X = LOW to define the intensity of each activity/event

|         |                      | AUG | SEPT | OCT | NOV | DEC | JAN | FEB | MAR | APRI | MAY | JUNE | JULY |
|---------|----------------------|-----|------|-----|-----|-----|-----|-----|-----|------|-----|------|------|
| Crop 1: | Land preparation     |     |      |     |     |     |     |     |     |      |     |      |      |
|         | Planting/Seeding     |     |      |     |     |     |     |     |     |      |     |      |      |
|         | Thinning and weeding |     |      |     |     |     |     |     |     |      |     |      |      |
|         | Harvesting           |     |      |     |     |     |     |     |     |      |     |      |      |
| Crop 2: | Land preparation     |     |      |     |     |     |     |     |     |      |     |      |      |
|         | Planting/Seeding     |     |      |     |     |     |     |     |     |      |     |      |      |
|         | Thinning and weeding |     |      |     |     |     |     |     |     |      |     |      |      |
|         | Harvesting           |     |      |     |     |     |     |     |     |      |     |      |      |
| Crop 3: | Land preparation     |     |      |     |     |     |     |     |     |      |     |      |      |
|         | Planting/Seeding     |     |      |     |     |     |     |     |     |      |     |      |      |
|         | Thinning and weeding |     |      |     |     |     |     |     |     |      |     |      |      |
|         | Harvesting           |     |      |     |     |     |     |     |     |      |     |      |      |
| Crop 4: | Land preparation     |     |      |     |     |     |     |     |     |      |     |      |      |
|         | Planting/Seeding     |     |      |     | 1   | 1   | 1   |     |     |      | 1   |      |      |
|         | Thinning and weeding |     |      |     |     |     |     |     |     |      |     |      |      |
|         | Harvesting           |     |      |     |     |     |     |     |     |      |     |      |      |

| SECTI | on 9 –  | - LIVELIHOOD  |           |  |            |  |
|-------|---|---|-----------|--|------------|--|
| 9.1-  | In orde   | r of importance, what are th<br>read options, write number  |           | f the identified source in or  |            |  |
|       |   | A. Own crops  |           | F. Milk and milk<br>products   |            | K. Food for work   |
|       | II  | B. Own animals  |           | G. Market purchases  |            | L. Kinship support                                       |
|       | II  | C. Hunting  |           | H. Food loans  |            | M. Other charities                                       |
|       |   | D. Gathering  |           | I. Barter  |            | N. Food aid  |
|       |   | E. Fishing  |           | J. School feeding  |            | P. Other, specify  |
| 9.2-  |   | for reasons/justifications for<br>f the answers separately  | their ran | king each source and, write  | their re   | easons/ justifications for                               |
| 9.3-  |   | er of importance, what are th<br>read options, write number |           |  |            |  |
|       |   | A. Crop sales   |           | F. Skilled labour<br>(artisan)   |            | K. Remittance / Kinship                                  |
|       |   | B. Animal sales / Animal product sales                      |           | G. Sale of Handicrafts   |            | L. Salaries, wages<br>(employees)                        |
|       |   | C. Fishing / Fish sale                                      |           | H. Use of nat. resources<br>(sale of firewood,<br>charcoal, bricks, grass,<br>wild food) |            | M. Government<br>allowances                              |
|       |   | D. Brewing  |           | I. Petty trading   |            | N. Other, specify  |
|       |   | E. Unskilled wage labour                                    |           | J. Other commercial activity   |            | P. Other, specify  |
| 9.4-  |   | for reasons/justifications for<br>f the answers separately  | their ran | king each source and, write  | e their re | easons/ justifications for                               |
| 9.5-  |   | er of importance, what are th<br>read options, write number |           |  |            |  |
|       | A. Drought/irregular<br>rains, prolonged dry<br>spell |   |           | G. Unusually high level of human disease   |            | M. Serious illness or<br>accident of household<br>member |
|       | B. Floods   |   |           | H. High prices for food  |            | N. Death of a working household member                   |
|       |   | C. Landslides, erosion                                      |           | J. High costs of agric.<br>inputs (seed, fertilizer,<br>etc.)                            |            | P. Death of other household member                       |
|       |   | D. Unusually high level<br>of crop pests & disease          |           | K. Loss of employment for a household member   |            | Q. Theft of productive resources                         |

| 9.5  |   | E. Unusually high level   | ÷      | Reduced income of a R. Insectuse hold member                      | urity/Violence                   |  |  |  |
|--|---|---|--------|---|----------------------------------|--|--|--|
| (cont)   |   | F. Lack of employment   |        |   |                                  |  |  |  |
| 9.6-   |   | of these have affected the village in t<br>n one (grave, moderate, none).                       | the l  | ast year? Describe the intensity and impa                         | act on the village               |  |  |  |
|  |   | main shocks above, please complet<br>plete one line at the time.                                | e th   | e following table using the codes. Please                         | be consistent in                 |  |  |  |
| Rank &   | <b>Cause</b><br>ode<br>e above<br>nin   | What are the usual solutions used deal with those problems?<br>Use codes below, record all used | to     | What are the characteristics of the he vulnerable to [constraint] | ousehold                         |  |  |  |
| 1  |   | 1.  , 2.  |        |   |                                  |  |  |  |
| 2  |   | 1.  , 2.  |        |   |                                  |  |  |  |
| 3  |   | 1.  , 2.  |        |   |                                  |  |  |  |
| 4  |   | 1.  , 2.  |        |   |                                  |  |  |  |
| 5  |   | 1.  , 2.  |        |   |                                  |  |  |  |
| 02 = Bc<br>03 = Pu<br>04 = Cc<br>05 = Cc<br>06 = Re<br>07 = Ac<br>08 = Re<br>09 = Sk<br>10 = nu<br>11 = Pe<br>12 = Re<br>13 = Bc | 5.       1. <td< td=""></td<> |   |        |   |                                  |  |  |  |
| In the la  | ast six mo  | nth have a large number of the popu   | ulatio | on employed any of the following coping s                         | strategies?<br>1 = Yes<br>2 = No |  |  |  |
| -  |   | eferred, less expensive food  |        |   |                                  |  |  |  |
|  |   | vere helped by relatives  |        |   |                                  |  |  |  |
|  | sed food o  | on credit<br>wild foods or hunted   |        |   |                                  |  |  |  |
|  |   | stock held for next season  |        |   |                                  |  |  |  |
|  |   | nealtime were limited   |        |   |                                  |  |  |  |
| · · · · ·  |   | embers ate less   |        |   |                                  |  |  |  |
| <u> </u>   |   |   |        |   | •                                |  |  |  |

| Adults ate less so that children could eat       |
|--|
| Reduced the numbers of meals per day"            |
| Skipped days without eating                      |
| Some household migrated temporarily (< 6 months) |
| Some household migrated permanently (> 6 months) |
| Spent less money on education, health            |
| Spent savings                                    |
| Borrowed money                                   |
| Sold jewellery                                   |
| Sold HH articles – utensils, blankets            |
| Sold agricultural tools, seeds,                  |
| Sold HH furniture                                |
| Sold HH building materials (sheeting,)           |
| Sold electronics – radio,                        |
| Sold poultry, birds, ducks                       |
| Sold small animals – goats, cheep                |
| Sold big animals – oxen, cow, bulls              |
| Rented out land                                  |
| Sold land  |

What are the most commonly eaten food and why?

What are the "less" preferred food?

What are the most preferred food?

Are there food considered as taboo or that people should not eat?

| 10.1- | Please complete the difficulty in coping   |            |                                 |  |             | of support enjoye                                    | d by tl | nose wł     | no have     |  |
|-------|--|------------|---------------------------------|--|-------------|--|---------|-------------|-------------|--|
|       | Cause  | Rank       | Percentage of<br>beneficiary in | m  |             | assistance (wr                                       | ite Ye  | s / No)     |             |  |
|       | Cause  | Παπ        | the village                     | Food   | Shelte      | r Clothing   | Health  |             | Others      |  |
|       | Family structures  |            |                                 |  |             |  |         |             |             |  |
|       | Friends/Neigh-<br>bours  |            |                                 |  |             |  |         |             |             |  |
|       | Faith based organizations  | _          |                                 |  |             |  |         |             |             |  |
|       | NGOs/Charity<br>organizations  |            |                                 |  |             |  |         |             |             |  |
|       | Others   |            |                                 |  |             |  |         |             |             |  |
| 10.2- | Did some household in this village receive food aid in the<br>last 6 months?1Yes2No $\rightarrow 10.4$ |            |                                 |  |             |  |         |             |             |  |
|       | If yes, please spec  | ify the ty | pe of program.                  |  | 1<br>2<br>3 | Gift from family<br>General food r<br>School feeding | ation   | ves         |             |  |
| 10.3- | Circle all that app  | bly        |                                 | 4 Supplementary feeding<br>5 Therapeutic feeding |             |  |         |             |             |  |
|       |  |            |                                 | 6 Food for work/for ass<br>7 Other, specify      |             |  |         |             |             |  |
| 10.4- | Are there projects international organ   |            |                                 |  | 1           | Yes  | 2       | No <u>→</u> | END         |  |
| 10.5- | If yes, which ones   |            |                                 |  | orming      | and who are the                                      | benef   | iciaries    | ? (up to 7) |  |
|       | Name of organ  | ization    | Туре с                          | of activities                                    |             | Туре с   | of ben  | eficiari    | es          |  |
| a-    | -  |            |                                 |  |             |  |         |             |             |  |
| b-    |  |            |                                 |  |             |  |         |             |             |  |
| C-    |  |            |                                 |  |             |  |         |             |             |  |
| d-    |  |            |                                 |  |             |  |         |             |             |  |
| e-    |  |            |                                 |  |             |  |         |             |             |  |
| f-    |  |            |                                 |  |             |  |         |             |             |  |
| g-    |  |            |                                 |  |             |  |         |             |             |  |



(add the logo of any partner agencies which took part in the survey)

Annex 6: Executive brief of a CFSVA Executive Brief on the [country] Comprehensive Food Security and Vulnerability Analysis

See final page of this document for additional overall guidance on preparing this brief. **Overview, scope and methods** 

- Introductory paragraph that gives information on the context (general information on the country, crisis or chronic situation).
- ✓ If an EMOP or PRRO is ongoing, mention the dates, number of recipients and interventions (one sentence).
- ✓ Paragraph on the purpose of the survey (in particular if it will inform the design of a WFP programme), list the team members (Agencies, NGOs and Government ministries), what the survey covers (entire country, specific regions or areas), and the dates of the field work.
- ✓ Clearly mention the dates of data collection and explain how it relates to seasonal food insecurity.

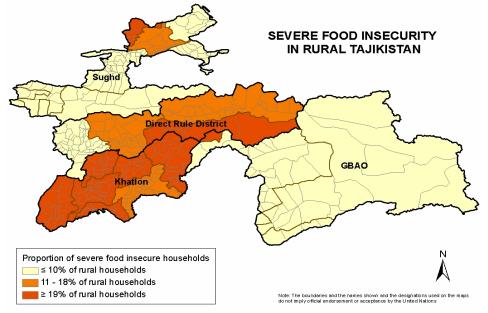
**How was the analysis done?** Provide here some brief information on the methods (secondary data analysis, household survey, key informants interviews, etc). Mention the number of villages visited, of households interviewed, and where. Mention the number of children whose anthropometric measures were taken, and the number of mothers interviewed.

### How many people are food insecure or vulnerable?

- ✓ State the absolute number of people who are food insecure, and the percentage of total population it represents. Provide a clear explanation of how the number is calculated and what its means in this particular case.
- ✓ State the absolute number of people who are vulnerable to food insecurity, and the percentage of total population it represents. Provide a clear explanation of how the number is calculated and what its means in this particular case.
- ✓ When possible, give an indication of how the situation has evolved since the last the baseline (if any).
- ✓ Provide the percentage of malnourished individuals (e.g. stunted, wasted and underweight under-5 children and mothers) and mention the source and date of the data.

## Where are the food insecure or vulnerable people?

- Include a clear map showing the location of the people who are food insecure or vulnerable to food insecurity. Provide some brief explanatory text.
- Make sure that the map and associated legend are readable. If relevant, indicate which regions have the highest numbers of people who are food insecure or vulnerable.



## Who are the food insecure and vulnerable people?

 Provide a profile of food insecure people by describing their livelihood characteristics, gender, age, their sources of food, etc

## Why are the causes of food insecurity and vulnerability?

This section should provide an overview of the context and causes of the crisis. In particular:

- Discuss the main causes of food insecurity: e.g. related to food availability, access and consumption/ utilization. This part of the brief can be divided into these categories.
- ✓ Highlight conclusions related to markets (in relation to food availability and access).
- ✓ Highlight the most important CFSVA conclusions, e.g. on food consumption, access, coping strategies and income earning opportunities, etc.
- Present data and conclusions on nutrition (when available). Specify if malnutrition is related primarily to food security or to other factors such as health, sanitation and care.

## Is the situation likely to change in the future?

- ✓ Add information on prospects and likely scenario for the coming months.
- ✓ Add information on potential shocks in the future. Explain how the potential shock may impact on people's livelihoods and food security situation. Specify if this forecast will change the number and type of people who are food insecure or vulnerable.

# **Recommendations for interventions**

- Summarize the main recommended food and non-food programming options, if possible stating how many people should be targeted under each, the suggested length of time, and any targeting criteria (e.g. people without any land, IDPs, etc). Explain briefly the linkages between the proposed responses and the causes of food insecurity.
- ✓ If cash-based or market responses are recommended, discuss which conditions need to be in place (e.g. market monitoring), whether there is prior experience/implementation capacity, and what fallback responses should be considered (e.g. food-for-work if cash-for-work is not feasible).
- Include recommendations regarding complementary non-food activities, e.g. agriculture, water and sanitation, market support.
- ✓ Include any recommendations for a follow-up assessment and/or monitoring to update the situation.

#### For more information on the CFSVA, please contact:

[Name of Country or Regional Director], WFP [Country]: email address: <u>name@wfp.org</u> [Name of WFP staff responsible for CFSVA, i.e. CFSVA Team leader]: email address: <u>name@wfp.org</u>

Additional Guidance for Preparing the Executive Brief:

1. The Executive Brief should ideally be two pages, and a maximum of three pages. It should follow the established format to the extent possible. Remember to fill in all the areas in the form, including the headers and footers (date of release) and other sections highlighted in yellow.

2. The main audience is humanitarian decision-makers and managers, both within and outside of WFP, who are familiar with food security issues: CDs, RDs, donor representatives, representatives of partner agencies, government representatives. Given the diversity of this group, avoid using WFP-only acronyms and overly technical language.

3. Make sure that the key conclusions and recommendations are presented in a clear, convincing and concise way

4. The Executive Brief should be written by one of the main authors of the CFSVA report, and should be prepared on a timely basis, i.e. as soon as the main conclusions and the recommendations are finalised. It can be use to disseminate the main finings even before the report is finalised.

5. The language of the brief should be the language of the primary audience (i.e. generally the language of the assessment report). However, to ensure a wider audience of decision-makers, it should also be translated into English.

6. The brief should be based on the final assessment results as approved by the CD/RD. If the brief includes any "tentative" results, this should be clearly stated.

7. Try to ensure consistency between the brief and any public document produced by the CO or HQ (including ODMR, the Operational Reporting Group in HQ) on the same operation.

8. All Executive Briefs will be put on WFP's public website (Food Security Analysis Service page), therefore please be sure to send the final versions to the Food Security Analysis Service who will handle this task.

9. The Brief should be cleared by the lead "assessor" and the CD and disseminated by the Country Office.

# Annex 7: CFSVA Quality Monitoring Sheet

### Part I – General information

Report title Country Date data collection Date of report Reviewer WFP Team leader Partners

### Part II – Report

- 1. Content and format
  - 1.1 Provides clear executive summary
  - 1.2 Illustrates findings with maps/tables/charts/photos
  - 1.3 Are results communicated adequately?
  - 1.4 Are sources of information clearly cited?
  - 1.5 Includes bibliography (e.g. in the annex)
- 2. Objectives and methods
  - 2.1 Is there a clear overall conceptual framework and analytical plan that identifies how secondary data and primary data will be combined?
  - 2.2 Describes methods used (incl. primary data collection, sampling, qualitative data, secondary data analysis, spatial data analysis)
  - 2.3 Clearly states objectives of the CFSVA
  - 2.4 Uses secondary data and presents their sources
  - 2.5 Presents the limitations of the study/methods
  - 2.6 Household survey design
    - 2.6.1 were sampling methods appropriate?
    - 2.6.2 are instruments appropriate and reflective of best practices, are standard indicators used
  - 2.7 Household survey analysis:
    - 2.7.1 Is statistical significance testing utilized and utilized appropriately?
    - 2.7.2 Was the design effect incorporated into the analysis of data? Was it reported?
- 3. Quality of the food security and vulnerability analysis related to the following:
  - 3.1 Political, Economical, Institutional Environment
    - 3.1.1 Are the aspects of the political context that are important to food security and poverty reduction and the risk to food security sufficiently analyzed?
    - 3.1.2 Are economic characteristics (macro economic trends, economic structure, businesses) important for the overall situation of the country described and their importance for poverty and food security highlighted
    - 3.1.3 Are the long term trends in food production and consumption described, are excess and deficit areas in the country and the important food-trade flows known? Are

trends of import parity price for main imported staple food given? Are possible market responses to shocks discussed? Is the involvement of various households in producer and consumer markets given?

- 3.2 Household Asset Endowments
  - 3.2.1 Is natural capital (geography, climate, natural resources, land distribution, cropping season, livestock) discussed with special focus on their role in agricultural production and livelihoods in general?
  - 3.2.2 Is human capital (Demographics, skills, abilities...) discussed with special focus on their role for livelihoods in general?
  - 3.2.3 Is physical capital (productive/non-productive assets, communal and individual) discussed with special focus on their role in agricultural production and livelihoods in general?
  - 3.2.4 Is financial capital (wealth), its' distribution and role in increasing resilience sufficiently discussed?
  - 3.2.5 Is the role of social capital (formal and informal networks and safety nets) for food security described?
- 3.3 Livelihood strategies of households
  - 3.3.1 Is there a description of main livelihood activities and income sources
  - 3.3.2 Are the typical Livelihoods of households, their prevalence and performance described and is their food security and vulnerability discussed? Is the importance of agricultural production and stocks at household level analysed.
  - 3.3.3 Are household expenditure patterns described and interpreted, with regards to food security.
- 3.4 Current Household Food Security Status
  - 3.4.1 Are household food consumption patterns described and interpreted, with regards to food security? Are households classified according to their food security situation based on valid food security indicators (FCS)? Is there a distinction between chronic and transitory food insecurity?
  - 3.4.2 Are characteristics of food insecure households given? Are determinants and underlying causes of food insecurity identified
- 3.5 Food utilization and Nutritional Status
  - 3.5.1 Is there a description of Health, Hygiene and care practices, relevant for nutrition?
  - 3.5.2 Do we know from the CFSVA how food is utilized at household level?
  - 3.5.3 Is the current Women's and children's nutritional status given together with trends?
  - 3.5.4 Are underlying and immediate causes of malnutrition explored?
- 3.6 Risk exposure and variability
  - 3.6.1 Are the critical hazards to food security recognized?

- 3.6.2 Are populations and regions that are likely to experience serious declines in their future food security status due to effects of various hazards identified?
- 3.6.3 Is the methodology for modelling risk clearly described?
- 3.7 Information base
  - 3.7.1 Are key indicators, disaggregated by administrative and other strata available?
- 4 Operational recommendations
  - 4.1 Are recommendations supported by solid analysis in the report? Is there a balance between recommendations addressing underlying issues of food insecurity versus short term measures.
  - 4.2 Are findings translated into recommendations for beneficiary targeting?
  - 4.3 Does it recommend appropriate interventions to mitigate vulnerability and food insecurity
  - 4.4 Are recommendations made in terms of partnerships?
  - 4.5 Are recommendations made in terms of food security monitoring?

#### Part III – Process

- 1. Partnerships
  - 1.1 Was the CFSVA conducted in partnerships and is this reflected in the report?
  - 1.2 Was the partnership effective?
  - 2.1 Was the CFSVA conducted in a timely manner?
- 2. Usefulness
  - 3.1 Is there evidence of use of CFSVA for WFP programming? For food aid programming of partners? For development planning? For the set up of FSMS? Used in subsequent EFSA

#### **Overall comments**

# Annex 8: Questionnaire Design – some principles

## Format of the questionnaire

### A. Logical flow of the questionnaire

The modules are ordered logically, so that similar topics are treated together. Within a module, questions follow a logical flow, and are not redundant. Skip questions are included.

### B. Length of the survey

The duration of a household survey should be not more than 1 hour. Questions that are tedious and do not add much to achieve the objectives of the study, should be removed. Questions that never will be analysed should definitely be removed.

### C. Lay out enables data entry

The design of the questionnaire should allow for easy encoding and analysis. For instance, if a data entry screen is made in MS-Access, "sub-forms" used to enter open ended tables have a limitation: additional records can only be entered at the bottom of the open ended table. Tables in a questionnaire (for instance for household members), where the number of members is not pre-defined, should hence be arranged that the extra members are added at the bottom.

### D. Unforeseen comments

To allow for better data cleaning, leave the possibility for the enumerators to make comments to explain unusual or extreme values. Otherwise, these values might be removed during data cleaning, in spite of the correctness of the responses.

### E. Recognizable format

WFP-VAM questionnaires should have a similar look. WFP analysts or others not involved in the design will more easily get familiarized with them.

### Formulation of questions

#### A. Understandable questions

- Keep the questions clear and as short as possible.
- Use exact words that are not complicated. The type of language should correspond to what respondents are used to (even before translation).
- Unambiguous terminology (cash revenue vs. "total value of the production, converted to cash").
- Avoid negative formulations "during which months is the village not accessible" (even worse: double negatives).
- Treat one topic only in each question.

### B. Precise questions

Question should be precise. For example: "how much did you spend on maize and maize meal during the last 30 days".

Response options have to precise. Avoid words like "often, many, frequently....", since these have a different meaning for different households. Change it in specific terms "<1/week"; "1-3 times/week; ..."

Time periods may be difficult to remember – an event in the past can be a reference and could be included, if not in the questionnaire, at least in the questionnaire guidelines for specific use by enumerators.

### C. Avoid bias

### Leading / loaded questions

The order of response options will influence the response of the household (enumerators should be trained not to read out the options).

The answer should not be suggested in the question. "Do you think the situation in the village now is worse than 10 years ago?" (circle Better – the same – worse). A better formulation is: "How do you think the current situation in the village is, compared to 10 years ago?"

### • <u>Response expectations</u>

Respondents might give the answer they think is expected. In the context of CFSVA / EFSA, subjects that are prone to such social desirability bias are: information on income, hygiene (questions related to use of toilet, washing of the hands after using the toilet), selling of food aid and illegal activities (example hunting in protected areas). The questionnaire should not contain any indication of which answer might be "right".

Training enumerators in building trust, to accept any answer without showing disapproval and to make it clear that responses are kept absolutely confidential will also help.

#### D. Realistic questions

It must be possible for the respondents to answer the question. Ask information that the respondents are capable to know. Example "what's the value of self consumed food from hunting and gathering over the last year": most people don't know even an approximate value of this. Consider adding auxiliary questions to arrive at this information with the help of a well trained enumerator or, if still not realistic, just cancel such a question.

#### E. Pre-defined answering options

Questions with predefined options may promote a limited number of ideas, might restrict the truthful answer or leave only simplistic answers to be chosen. However, questions with pre-defined answering options are also easier to understand and to answer (if the option would be read out loud) and are easy in analysis.

Open ended questions on the other hand, reflect better the opinion of the respondent, and allow for more nuanced and deeper answers. Even answers the designer did not foresee might come up. However open ended questions are much more tedious in analysis. These questions should be kept in focus group discussions.

#### F. Coding binomial variables

It's recommended to code as follows: "yes, present" as "1" and "no, none" as "0". This has advantages in many statistical procedures, since the mean corresponds with the

proportion of households who answered positive on the question. In correlations and regression, the sign of the coefficients is simpler to interpret.

However, *sex of children* should be coded "male" "1" and "female" "2", since this facilitates analysis of nutrition data with Epi Info or Anthro. *Sex of adults* (head of households, household members, etc.) uses the same codification in order to avoid confusion in the enumerators/data entry clerks.

### G. Analysis friendly variables

When formulating a question, one should always have in mind how this will be analysed, how indicators can easily be derived, the prevalence computed and relations with other indicators established. It should be avoided that because of the formulation of the question, lots of transformations will be needed before data can be analysed properly.

#### H. Allow for missing values

The options "Don't know", "Missing" and "Does not apply" must be available if a relevant answer can not be obtained. The codes should be an impossible value, so no confusion is possible (better to use "-999/-888" instead of the usual "999/888").

However, these options are sometimes abused by households who don't want to reply and enumerators who don't insist (example: missing values for sex of child), highlighting again the importance of training and supervision of enumerators.

### I. "Missing" values versus "zero" values

Missing values are a real problem in data analysis because they reduce the actual number of real data in hand. Missing value can compromise the calculation of determinate indicators and can result in the failure of collecting primary data.

That said the enumerator has to leave the answer space blank if a relevant answer can not be obtained. However, for certain variables, the missing data might be interpreted and recoded as "0": for example, a blank space in any of the age cohorts of the demographic module can indicate that there are no people in that (those) certain age/sex category (-ies). This is, of course, an assumption, because the only possible way to be sure of that would be to have the "0" as value written down by the enumerators.

While this point must be stressed during the enumerator training (no blank spaces in determinate variables!), maybe also writing a note close to some of the questions, there will be unfortunately some missing values subjective to diverse interpretation in every primary data collection.

The solution of minimizing the effect of missing values substituting those with zeros can be applied to some of the continuous variables (i.e. food consumption frequencies or expenditure) but not to some others (age, years of education, number of rooms, meals eaten yesterday, etc.).

# **Annex 9: Developing Data Entry Templates**

The following guide should help the database developer to develop a data entry template using masks to control for entry errors. It discusses a few technical aspects that need to be considered in developing the Access data entry template. However, please note that this list is not meant to be exhaustive as other steps might be required.

# Variable Labeling

A complex household survey can typically contain hundreds of variables. The programmer(s) in charge of the data entry program will need to refer to them by means of codes, according to the specific conventions of the development platform used. It is important that a rational and simple coding system be selected for this purpose from the beginning of the data entry program development process. This will facilitate the communication between members of the development team and the analysts.

As mentioned earlier in the guideline, prior to the administration of the questionnaires in the field, the person responsible for the data entry application should review the questionnaire to make sure that

- 1. The questionnaire format allows for easy data entry
- 2. Each question is properly labelled with a question number.

It is recommended that when constructing a data entry application that each variable should be labelled according to the corresponding questionnaire number. However, certain analysis software requires that the variable label begin with a non-numerical character with no decimals or spaces. As explained in Box 1, employing the recommended best practice, question number 0.3 would become variable S0\_3.

### **Box 1: Creation of Variable Labels**

| h1. Entrevistadór/a mak sei prenxe   | 2. Team Leader mak sei prenxe:   |   |  |  |   |
|--|--|---|--|--|---|
| Tende like prename mobile, contravanta           0.1         10 Entravantado/or  | 0.0- Nämeru Kastionäriu:<br>.Köligu suku + Köligu umatem<br>0.8 – Data:  // / 2005<br>0.9- Köligu Team Leader  /                         |   |  |  |   |
| Favór ida lee formuláriu konsentimentu tuir mal:<br>"Ha'u nia naran. Ami halibur informasaun iha Timor-Leste.<br>Ha'u hakarak husu ita atu partisipa iha entrevista ida ba<br>ka. Favór ika hatán pergunta hotu ho la'holos. La iha<br>resposta ne'ebé sala ba pergunta sira ne'ebé sel husu.<br>Peskizador sei rai Ita nia resposta konfidensiái. Ita la  | Team Leader nis Asinatura:   |   |  |  |   |
| presiza uza Ita nia naran loloos iha entrevista. Ita nia<br>naran kompletu sel la hakerek iha ne'ebé deit no sel la<br>identifika ita. Peskizador ne'ebé involve iha estudu ne'e<br>det mak sel haree buat ne'ebé hakerek iha diskusaun.<br>det mak sel ipassun iha estudu ne'e sel la 16 benefisiu<br>direta ba ita.  | 10- Kódigu Supervizór/a kampu<br>  <br>Komentáriu:   | ≣ | HHIdentification : Tabl                          | e  | _   |
| naran kompletu sei la hakerek iha ne'ebé deit no sei la<br>identifika ita. Peskizador ne'ebé involve iha estudu ne'e<br>dett mak sei haree buat ne'ebé hakerek iha diskusaun,<br>ita nia partisipasaun iha estudu ne'e sei la fó benefisiu<br>direta ba ita.<br>Maibe, Ami espera katak peskiza ne'e sei fó benefisiu ba<br>Timor-Leste atu ajuda ita komprende buat ne'ebé povu<br>presiza atu nune'e bela ajuda nasaun ne'e bá oin. Ita sei la   |  |   | HHIdentification : Tabl<br>Field Name            | e<br>Data Type                                       | Description   |
| naran kompletu se la hakerek iha ne'ebé deit no se la<br>sidenttika ita. Peskizador ne'ebé involve iha estudu ne'e<br>dott mak sel haree buat ne'ebé nakerek iha diskusaun.<br>Ita nia partisipasaun iha estudu ne'e sel la fo benefisiu<br>direta ba ita.<br>Maibe, Ami espera katak peskiza ne'e sel fó benefisiu ba<br>Timor-Leste atu ajuda ita komprende buat ne'ebé povu<br>preiziz atu nune'e bele ajuda nasaun ne'e bá oin. Ita sel la<br>símu osan kark ta hola parte iha estudu ne'e.<br>Ita nia partisipasaun violantiru. Ita bele lakohi atu fó  | LKomentáriu:<br>Supervizór Kampu/a nia Asinatura:  |   | Field Name                                       | Data Type  | Description   |
| naran kompletu sei la hakerek iha ne'ebé deit no sei la<br>istenttika ita. Peskizador ne'ebé involve iha estudu ne'e<br>deit mak sei haree buat ne'ebé nakerek iha estudu ne'e<br>la na partispasaun iha estudu ne'e sei la fó benefisiu<br>direta ba ita.<br>Maibe, Am espera katak peskiza ne'e sei fó benefisiu ba<br>Timor-jeste atu ajuda ita komprende buat ne'ebé povu<br>simu osan kareit ita hola parte iha estudu ne'e.<br>Ita nia partisipasaun valo atu iha bele hili atu haio para<br>responsa ba pergunta ruma no ita bele hili atu haio para<br>kai ta nia familia iha saida deit. Ta iha pergunta ruma mal   | L _ L _ L Komentárie:<br>Supervizór Kampu/a nia Asinatura:<br>3. Data Entry mak sei prenxe   |   | Field Name<br>HHId                               | Data Type<br>AutoNumber                              |   |
| naran kompletu sei la hakerek iha ne'ebé deit no sei la<br>identifika ika. Peskizator ne'ebé involve iha estudu ne'e<br>identifika ika.<br>Na nih partisipasaun iha estudu ne'e sei la fó benefisiu<br>direta ba ika.<br>Nalbe, Ami espera katak peskiza ne'e sei fó benefisiu ba<br>'mor-Leste au ajuda ita komprende buat ne'ebé povu<br>presiza atu nune'e bele ajuda nasaun ne'e bé ohi. Ita sei la<br>simu osan karif ita hofi pante iha estudu ne'e.<br>Ta nih partisipasaun voluntáriu, Ita bele lakohi atu fó<br>diskusaun banihria deri. Lakohi atu partisipa sei la afeta ita  | L _ L _ L _ L Kamentariu:<br>Supervizór Kampu/a nia Asinature:<br>3. Data Entry mak sei prenxe<br>0.14 - Deta: I _ L _ I / IL / 2005     |   | Field Name<br>HHId<br>QuestionNo                 | Data Type<br>AutoNumber<br>Text                      | Corrected ID Code                                   |
| naran kompletu sei la hakerek iha ne'ebé deit no sei la<br>istertitika its. Peskizator ne'ebé involve iha estudu ne'e<br>deit mak sei haree buut ne'ebé nakerek iha diskusun,<br>direta ba its. Anni se suitudu ne e sei la fo benefisiu<br>Maibe, Ami espora katak peskiza ne's sei fo benefisiu<br>mor-Leste au ajuda ita komprende buut ne'ebé povu<br>presiza atu nune'e bele ajuda nasaun ne'e bé oni. Ita sei la<br>simu osan karik fa hola parte iha estudu ne'e.<br>Ita nis partisipasaun voluntáriu. Ita bele lakohi atu fô<br>resposta be pergunta ruma no ita bele hil atu halo para<br>diskusaun beinhira deit. Lakohi atu partisipa sei la afeta ita<br>ami' Ita bele husu pergunta kona-be | L _ L _ L Komentárie:<br>Supervizór Kampu/a nia Asinatura:<br>3. Data Entry mak sei prenxe   |   | Field Name<br>HHId<br>QuestionNo<br>S0_1         | Data Type<br>AutoNumber<br>Text<br>Text              | Corrected ID Code<br>Interview ID                   |
| naran kompletu sei la hakerek iha ne'ebé deit no sei la<br>identifika ika. Peskizator ne'ebé involve iha estudu ne'e<br>det mak sei haree bunt ne'ebé nakerek iha diskusun,<br>direta ba ika.<br>Maibe, Ami espera katak peskiza ne's sei fo benefisiu<br>mor-Leste au ajuda ita komprende bunt ne'ebé povu<br>presiza atu nune'e bele ajuda nasaun ne'e bé oin. Ita sei la<br>simu osan karkit ka hola parte iha estudu ne'e.<br>Ita nis partisipasaun voluntáriu. Ita bele lakohi atu fô<br>resposta be pergunta ruma no ita bele hil atu halo para<br>diskusaun bainhira deit. Lakohi atu partisipa sei la afeta ita<br>ami? Ita bele husu pergunta kona-be estudu ne'e bainhira<br>det               | Supervizér Kampu/a nia Asinatura:       3. Data Entry mak sei pranxe       0.14 - Deta: I       J. J |   | Field Name<br>HHId<br>QuestionNo<br>S0_1<br>S0_2 | Data Type<br>AutoNumber<br>Text<br>Text<br>Date/Time | Corrected ID Code<br>Interview ID<br>Interview Date |
| naran kompletu sei la hakerek iha ne'ebé deit no sei la<br>identifika ika. Peskizator ne'ebé involve iha estudu ne'e<br>det mak sei haree bunt ne'ebé nakerek iha diskusun,<br>direta ba ika.<br>Maibe, Ami espera katak peskiza ne's sei fo benefisiu<br>mor-Leste au ajuda ita komprende bunt ne'ebé povu<br>presiza atu nune'e bele ajuda nasaun ne'e bé oin. Ita sei la<br>simu osan karkit ka hola parte iha estudu ne'e.<br>Ita nis partisipasaun voluntáriu. Ita bele lakohi atu fô<br>resposta be pergunta ruma no ita bele hil atu halo para<br>diskusaun bainhira deit. Lakohi atu partisipa sei la afeta ita<br>ami? Ita bele husu pergunta kona-be estudu ne'e bainhira<br>det               | Supervizér Kampu/a nia Asinatura:       3. Data Entry mak sei pranxe       0.14 - Deta: I       J. J |   | Field Name<br>HHId<br>QuestionNo<br>S0_1         | Data Type<br>AutoNumber<br>Text<br>Text              | Corrected ID Code<br>Interview ID                   |

# Variable Types

Depending on the type of data you wish to store, you can define the type of variable in the "Data Type". Clearly defining the type of data allows the data entry platform to limit the type and size of the data that can be entered. Table 1 below is a list of key types of variables that are relevant for data entry.

| Setting    | Type of data  | Size                        | Variable<br>Definition       | Use   |
|------------|---|-----------------------------|------------------------------|---|
| Text       | (Default) Text<br>or combinations<br>of text and<br>numbers, as<br>well as<br>numbers that<br>don't require<br>calculations,<br>such as phone<br>numbers. | Up to 255<br>characters     | Text                         | Names of people,<br>places, and alpha-<br>numeric codes;<br>identification-code                                   |
| Memo       | Lengthy text or<br>combinations of<br>text and<br>numbers.  | Up to 65,535<br>characters. | Memo                         | Dialogue or long<br>text responses<br>from respondents  |
| Number     | Numeric data<br>used in<br>mathematical<br>calculations   | 2-4 bytes                   | Integer –<br>long<br>integer | Monetary<br>responses,<br>identification<br>number  |
| Number     | Numeric data<br>used in<br>mathematical<br>calculations   | 1 byte                      | Byte                         | Quantities (if<br>whole numbers<br>between 0 and<br>255), percentages<br>(0 to 100),<br>categorical<br>responses  |
| Number     | Numeric data<br>used in<br>mathematical<br>calculations   | 4-8 bytes                   | Single,<br>Double            | Numbers that<br>requires a decimal<br>such as height or<br>weight<br>measurements in<br>anthropometric<br>data.   |
| Date/Time  | Date and time values.   | 8 bytes.                    | Short Date                   | Collection dates  |
| AutoNumber | A unique<br>sequential<br>(incremented<br>by 1) number<br>or random<br>number<br>assigned by<br>Microsoft<br>Access                                       | 4 bytes                     |                              | Auto generated<br>number that can<br>be used to index<br>tables but "Should<br>not be used as a<br>unique HH-ID". |
| Yes/No     | Yes and No<br>values  | 1 bit.                      | Yes/No;<br>True/False        | Yes/No assets,<br>months, etc.  |

Table 1: Types of Variables

# Variable Descriptions

| III Section 5 : Table |            |            |   |   |
|-----------------------|------------|------------|---|---|
|                       | Field Name | Data Type  | Description   |   |
| 8                     | AutoNumber | AutoNumber |   |   |
|                       | QuestNo    | Text       | Question Code   |   |
|                       | S5_0       | Text       | Section 5 Agriculture   |   |
|                       | S5_51a     | Number     | 5.1a: Do you have access to agricultural land?                    |   |
|                       | S5_51b     | Number     | 5.1b: What is the size of this land?                              |   |
|                       | S5_51c     | Number     | 5.1c: How did you or members of your household acquire this land? |   |
|                       |            |            |   | 7 |
|                       |            |            |   | 7 |

| Figure | 2. | Descri | ntions  | of       | Variables | in | the | data | table |
|--------|----|--------|---------|----------|-----------|----|-----|------|-------|
| riguie | ∠. | Desch  | prioris | <b>U</b> | variables |    | uie | uata | lable |

Microsoft Access allows the data entry operator to insert a description of the variable into the table. Recording the actual question (number and text) as a description is a good practice. Figure 2 shows an example of data table. Inserting the question into the description helps future analysts to identify the question that corresponds to the variable label. This description can later be imported into SPSS as variable labels.

# Creating a Data Entry Mask

The primary objective in writing a data entry program is to provide a quick and easy tool to enter large amounts of data into a spreadsheet/database format in a time-saving and error-preventing manner. Although most of the data entry operators are familiar with the Windows environment and use of the mouse, clicking a mouse can require more time than 'tabbing' through the data entry cells. Similarly, if the data entry mask resembles the actual questionnaire, the probability of entering data into the wrong field gets lower. Moreover, it is a good practice to limit the amount of text (names, locations, etc) that needs to be entered. Consequently, when designing a data entry mask it is recommended that the application should consider the flow between the data entry cells.

Microsoft Access allows designing data entry masks that are identical to the paper questionnaire. Below is an example of a data entry template developed in Microsoft Access for Burundi Food Security Assessment. The following template mimics the paper questionnaire.

|  | ? Burundi<br>uivi de la Sécuri  | ty   |
|--|---|--|
| Burundi: Etude sur la Sécurité Aliment   |   | le ménage  |
| DATE Round: 0  | VÉRIFICATION DU QUESTIONNAIS  | NE:  |
| SECTION 1 – CIRCONSTANCES DU'MENAGE<br>1.1 Non préhon du cher de hénage<br>1.2 Sexe du cher du ménage<br>Home: | 1.5 OU SONT-ILS ALLÉS ?<br>1.4 L'INTÉRIEUR DE LA COMBARE<br>3.4 L'INTÉRIEUR DE LA COMBARE, DANS UNE<br>VALE<br>5.4 L'EXTÉRIEUR DE DAYS (AVE VOISING)<br>MAIS PAS DANS UN CAMP DE RÉFUGIÉS<br>1.6 EVENCE QUE DE SA HUNDES DE VOISING<br>1.6 EVENCE QUE DE SA HUNDES DE VOISING | 0         2. A 1 ExtEnsion DE LA COMMUNE, EN ZONES           1. A 1 ExtEnsion DE LA COMMUNE, EN ZONES         3. A 1 ExtEnsion DE LA COMMUNE, EN ZONES           4. A 1 ExtEnsion DE LA SOUR PORTE LA SOUR REGION         4. A 1 ExtEnsion DE LA SOUR REGION |

#### Figure 3: Example of a data entry template

During the initial development phase of the database, it is recommended that a folder on the root directory be created; this allows easy installation of the program on different computers. A good practice would be to label the directory after the name of the data entry application.

Sub-directories such as "images" and "references" allow for components to be inserted into the application while maintaining a "clean" installation.

The example of the data entry mask presented in Figure 6 has unique components that allow for ease of data entry. These components will be discussed in sequence.

### Image Watermark

Although most of the software mentioned in the previous section can be used for data entry, Access allows a data entry mask designer to embed an image as a watermark on which the data entry cell can be overlaid. There are several programs that allow text documents to be converted into images, or by simply scanning the documents with a scanner. Once the questionnaire has been finalized, the designer will need the application to convert the paper copy of the questionnaire to separate digital images. A useful naming convention is to label each image with a page number. For example, name household questionnaire page 1 "hh\_01", page 2 as "hh\_02", etc... If the questionnaire is a community questionnaire the prefix "hh" can be replaced with "com".

During the creation of the digital images, it is suggested that the image is reduced in size to dimensions normally used on a computer screen (13.5 cm x18.0 cm with a resolution of 60 pixels/cm). After creating digital images of the questionnaire, import each image into a separate form. However, for the sake of keeping the front-end as small as possible, make sure that the image's properties link the image to form (An example is presented in Figure 4).

| 🖆 Image: Image2      |  |
|----------------------|--|
| Image2               | <b>•</b>                                       |
| Format Data Event C  | Dther All                                      |
| Picture              | C:\Images\EastTimorQuestionnaire\ETHHLL-01.jpg |
| Picture Type         | Linked   |
| Size Mode            | Zoom   |
| Picture Alignment    | Top Left                                       |
| Picture Tiling       | No   |
| Hyperlink Address    |  |
| Hyperlink SubAddress |  |
| Visible              | Yes  |
| Display When         | Always   |
| Left                 | Ocm  |
| Тор                  | Ocm  |
| Width                | 21.164cm                                       |
| Height               | 28.148cm                                       |
| Back Style           | Transparent                                    |
| Back Color           | 16777215                                       |
| Special Effect       | Flat   |
| Border Style         | Transparent                                    |
| Border Color         | 0  |
| Border Width         | Hairline                                       |
|                      |  |
|                      |  |
|                      |  |

Figure 4: Embedding an image

By linking the image to the form it is essential to properly reference the location of the image. A good practice is to place all the images in a subfolder labelled "images".  $\$ 

## Tab-Page Interface

It is critical to allow the data entry operator to navigate between the forms to double check the entered data before submitting the questionnaire to the database. To create this type of data entry template, you need to create one form with TABs. Each TAB is a separate page and should have a sub-form place in it.

Figure 5: Tab page interface

Page1 Page 2 Page 3 Page 4 Page 5 Page 6

It is important to note that when navigating between forms, sub forms and tabs requires special referencing. For more information on referencing text boxes between forms please visit the MS Access MVP website at : http://www.mvps.org/access/forms/frm0031.htm.

## **Questionnaire Number**

As discussed earlier, it is strongly recommended that a sequential ID number for each of the household questionnaires should be maintained. The questionnaire number should be defined as a unique key and should exist in each table. This number will allow the analyst to merge different data sets. To control for the data entry so that the replica ID numbers are not entered, a simple VBA command, can be embedded in the Questionnaire Text Box. The sample code in Box 2 assumes that the table is called "QuestData" and the field with the unique ID is [QuestNo].

| Box 2: Example of VBA code  |
|---|
| Sub QuestNo_Exit(Cancel As Integer)   |
| IDNumber = Me!QuestNo<br>AlreadyEntered = DLookup("[QuestNo]",<br>"QuestData", "QuestNo = "" & _<br>IDNumber & """)<br>If IsNull(AlreadyEntered) Then<br>Else |
| MsgBox "You Have Already Entered in this<br>Questionnaire!!!"<br>Me!QuestNo.Setfocus<br>End If  |
| End Sub   |

Aside from checking whether the Questionnaire Number is unique, it is important to keep the format of the number. To control for the format of the questionnaire number, configure the Input Mask in the Questionnaire Number Text Box with the following code: 0000;;# This requires that data entry clerk to enter in all 4 digits of the questionnaire number without spaces and a "#" will hold the place of the missing digits.

Alternatively, the autonumber datatype of MS-Access can be used to generate sequential numbers, who then have to be written on the paper questionnaire.

### Figure 6: Number format

| 🖆 Text Box: QuestNo   | K) |
|---|----|
| QuestNo   |    |
| Format Data Event Other All   |    |
| Control Source       QuestNo         Input Mask       0000;;#         Default Value |    |

## Dates

Correctly entering date information provides the temporal reference of when the survey, verification or data entry occurred. Different countries use different date formats. However, when designing a data entry program you can set the date format.

### Figure 7: Formatting date and inserting an automatic date mask

This must be done in two steps. First, in the table design the format for the date variable must be set to date. Second, the input mask must be set so that the values entered by the entry operator are limited to numbers. If you want to automatically record the date and time that the entry operator started entering data, it is recommended to set it as a default value to the current date and time by using the expression =now() in the default value field property.

# Limiting data entry

### **Categorical Variables and Data Value Limits**

Categorical, ordinal or nominal variables employ codes to represent a closed response (example "level of education"). To control for the values that are inserted, set the validation rule to the

maximum and minimum value (Figure 8). Once the values have been limited, an error message can be entered to alert the entry operator for an entry mistake. This data mask helps to minimize entry errors for categorical variables. For continuous variables, if we know an acceptable range of data for the field with certainty, we can set a similar validation rule to the maximum and minimum value (example: age of a child for an anthropometric survey ranges between 6 and 59 months).

### Figure 8: Control entry using validation rule

| 🖆 Text Box: \$5_3_2 🛛 🔀 |         |         |                                |          |  |
|-------------------------|---------|---------|--------------------------------|----------|--|
| Format                  | Data    | Event C | ther All                       |          |  |
| Control                 | Source  |         | <u> 55_3_2</u>                 | <u> </u> |  |
| Input M                 | ask     |         |                                |          |  |
| Default                 | Value   |         |                                |          |  |
| Validatio               | n Rule  |         | <4 Or =99                      |          |  |
| Validatio               | on Text |         | This is not an available value |          |  |
| Enabled                 |         |         | Yes                            |          |  |
| Locked .                |         |         | No                             |          |  |
| Filter Lo               | okup    |         | Database Default               |          |  |
|                         |         |         |                                |          |  |
|                         |         |         |                                |          |  |
|                         |         |         |                                |          |  |
|                         |         |         |                                |          |  |

# **Categorical Variables Based on a Previous Answer**

In certain cases, the data entry option can be available to the entry operator based on the response from a previous question. For example, if we consider two questions that are related to each other --"Did you cultivate any crop last year?", "What crops did you cultivate?" Here the second question should only be asked if a household answered "yes" to the first question. We can create a data entry mask that will make the second "entry field" unavailable to the entry operator if the first

| Market                 | •      |
|------------------------|--------|
| Format Data Event Othe | er All |
| Input Mask             | s      |

Figure 9: Example of a Combo Box

question is answered "no". In order to structure an entry field whose availability to the entry operator depends on the answer to the previous question the programmer should use a combination of VBA and SQL (structured Query Language codes).

To create a data entry field dependent on the previous answer, change the field of the "Text Box" where the value is to be entered to a "Combo Box". Set the "Row Source Type" to "Table/Query" and in the "Row Source", design a query similar to the example below where the line HAVING is to reference the selected value in the previous "Combo Box".

The code shown in the example, will only allow appearing a drop-down list of the markets located within the state if the market was selected in the previous question.

#### Box 3: Previous response data entry code SELECT SudanVillages.SORT\_NAME, SudanVillages.ADM1\_CODE FROM SudanVillages GROUP BY SudanVillages.SORT\_NAME, SudanVillages.ADM1\_CODE HAVING (((SudanVillages.ADM1\_CODE)=[Forms]![NewMarket]![State])) ORDER BY SudanVillages.SORT\_NAME;

## Filters

In certain cases, one question will act as a filter for another question. Using the "Enabled" command in Access, filters can be created that lock succeeding cells. For example in the Liberia CFSVA, question # 2.4 acted as a filter for question 2.41 and 2.42. Using the AFTER UPDATE option the VBA code presented in Box 4 was used.

Figure 10: Example from Liberia CFSVA

| 2.4 -  | Is any member of your household chronically ill or disabled? | 1 | Y         | 0 10 → Skip to 2.5 |
|--------|--|---|-----------|--------------------|
| 2.41 - | If yes, how many?  |   | 0 persons | 5                  |
| 2.42-  | Is one of the chronically ill persons the head of household? | 1 | Yes       | 0                  |
| 2.5 -  | Do you have orphans in this household?                       | 1 | Yes       | 0                  |

| Box 4: VBA code to lock cells   |
|---|
| Private Sub S2_4_A_AfterUpdate()  |
| If Me!S2_4_A = 2 Then<br>Me!S2_4_B.Enabled = False<br>Me!S2_4_C.Enabled = False<br>Me!S2_4_B.= Empty<br>Me!S2_4_C=Empty<br>Else<br>Me!S2_4_B.Enabled = True<br>Me!S2_4_C.Enabled = True<br>End If |
| End Sub   |
| Box 5: VBA code to create a warning<br>message<br>Private Sub S7_1_AfterUpdate()  |
| If Me!S7_1 > 2000 Then<br>check = MsgBox("Are you sure you entered the<br>right<br>amount?", vbYesNo)   |
| If check = 6 Then `if yes'<br>Me!S7_2.SetFocus<br>Else  |
| Me!S7_1 = Empty<br>Me!S7_2.SetFocus<br>Me!S7_1.SetFocus<br>End If   |
| End If  |
| End Sub   |

# **Expected limits of Data Values**

For non-categorical variables, it is difficult to limit the values. This is particularly the case for continuous variables such as age, weight, income, or total number of household members. However, with the information from key informants or previous studies, a warning message can be inserted into each "Text Box" which alerts the entry operator (s) if an entered value is outside of the expected minimum or maximum values. An example of a VBA code is presented in Box 5 above.

Drawing from an example of the household expenditure from Djibouti, it was determined that expenditure greater than 2,000 DJF would be excessive for any of the expenditure items. Consequently, in the AFTER UPDATE properties of each of the Text Boxes, the VBA codes were inserted that first alerts the entry operator about the abnormal value (Figure 11) and second if the operator finds the value is an error, it resets the value to "0" and returns the entry operator to the "Text Box" to enter the correct value.

| roduits ?                           | in brey par ie | ménage sur ces differents             |
|-------------------------------------|----------------|---------------------------------------|
| Dépenses du mois précédent          |                | Total dépenses<br>(en DFc)            |
| 7.1: Céréales (Sorgho / Petit mil)  |                | 123123                                |
| 7.2: Mais                           |                |                                       |
| 7.3: Riz                            | Micros         | oft Access                            |
| 7.4: Pain/Blé                       | Are vo         | ou sure you entered the right amount: |
| 7.5: Pates                          | HICYC          | a saro you encered the right amount:  |
| 7.6: Racine et tubercules (Patates) |                | Yes <u>N</u> o                        |
|                                     |                |                                       |

### Figure 11: Warning Message

# Illogical Values

The data entry program should identify errors and situations that represent logical or natural impossibilities. For example, the total number of people living in the household should not be greater than the sum of the composition of the household. Similarly, the number of children between the ages of 6 and 14 should not be less than the number of children of the same age category that are going to school.

Drawing from an example from the Niger CFSVA data entry application, questions 1.9 requests the number of people living in the household based on age groupings. Question 1.10 asks for the total number of members living in the household. Using the AFTER UPDATE property you can check if the sum of the household's composition is equal to the value entered in Question 1.10. Box 6 on the following page shows an example of a VBA code that checks whether the total confirms to the household totals as well as

filtering the questions 2.1, 2.2 and 2.3. Moreover, if there is no school age child in the household then it automatically inserts the value assigned for "Not applicable".

| Box 6: VBA code to check the total number  |  |  |  |  |  |
|--|--|--|--|--|--|
| Private Sub Q1_10M_AfterUpade(Cancel As Integer)   |  |  |  |  |  |
| If $Q1_10M = 99$ Then<br>Exit Sub  |  |  |  |  |  |
| End If   |  |  |  |  |  |
| $HHTotalM = Me!Q1_9A1 + Me!Q1_9A2 + Me!Q1_9A3 + Me!Q1_9A4$   |  |  |  |  |  |
| If Me!Q1_10M <> HHTotalM Then<br>MsgBox "The Total of the Male Population Composition and Household Populations are not<br>Equal, Go" &  |  |  |  |  |  |
| Else $\begin{array}{c} Me!Q2\_1M=0\\ Me!Q2\_2M=0\\ Me!Q2\_3M1=0\\ Me!Q2\_3M2=0\\ Me!Q2\_3M3=0\\ Me!Q2\_1M.Enabled=True\\ Me!Q2\_2M.Enabled=True\\ Me!Q2\_3M1.Enabled=True\\ Me!Q2\_3M2.Enabled=True\\ Me!Q2\_3M3.Enabled=True\\ Me!Q3\_3M3.Enabled=True\\ Me!Q3$ |  |  |  |  |  |

## Tick Boxes

In addition to continuous and categorical variables, questionnaires also ask questions that have "Yes" or "No" answer. An example of this type of questions is presented in

Figure 12. To conserve space and expedite data entry, it is possible to use tick or check boxes. In Microsoft Access, tick boxes either hold a value of "0" for "No" or "-1" for "Yes"<sup>4</sup>.

| 3.6 - | Did any of these persons send/bring back any of these items during the last 12 month? |   | Money/Cash<br>If yes, how much? LD |
|-------|---|---|------------------------------------|
|       | CIRCLE ALL THAT APPLY   |   | Medicine                           |
|       |   | I | Clothing/shoes                     |
|       |   |   | Household utensils                 |
|       |   | I | Food                               |
|       |   |   | Building / construction materials  |
|       |   | I | Seeds or tools                     |
|       |   | I | Other:                             |
|       |   |   | Nothing                            |

Figure 12: Example of questions that require "yes" or "no" answer

Liberia - Comprehensive Food Security and Vulnerability Analysis 2005

The example from the Liberia CFSVA, 2006 (Figure 12) shows that the respondents were asked to answer the question "Did any of these persons send/bring back any of these items during the last 12 months?" A list of item is presented to be ticked/ checked off. In the variable table, each option is labelled from S3\_6\_1 to S3\_6\_9 and the data type is set as Yes/No. To tick the box, the entry operator uses the space bar. If the option "Nothing" is selected, the application un-ticks all of the other sources.

## Household Members, Child and Mother Sub Tables

If the questionnaire asks for the identification of all household members, then a subform and one-to-many relationship between the household and its members table is required. The example and the discussion below are focused on the data entry subform for entering household member data. However, the principles employed for the mother data entry sub-form and the child data entry sub-form are the same.

|    | Field Name | Data Type  | Description          |
|----|------------|------------|----------------------|
|    | AutoNumber | AutoNumber |                      |
|    | QuestionNo | Text       | Questionniare Number |
| ଞ∙ | HHMemID    | Text       | Household Member ID  |
|    | MemOrdNo   | Text       | OrderNo              |
|    | 51_2       | Text       |                      |
|    | 51_3       | Text       |                      |
|    | 51 4       | Tevt       |                      |

Figure 13: Household member list

As demonstrated in Figure 13, a relationship table is established between the household and the household member table. The construction of the table requires the following variables with the following properties:

 $<sup>^4</sup>$  If the data is imported into SPSS, the yes value (-1) is converted in the value of 1

| Field          | Data Type                   | Properties                 |
|----------------|-----------------------------|----------------------------|
| Question<br>No | Text -size 5<br>characters- | Indexed (Duplicated OK)    |
| HHMemID        | Text-size 7<br>characters-  | Indexed (No<br>Duplicates) |
| MemOrdNo       | Text-size 2<br>characters-  |                            |

Table 2: Variables properties for sub-forms

Once the table has been created and the relationships established, the form in the following page (a part of the questionnaire) has to be imported into MS Access to create a template similar to the paper questionnaire. The next step is to configure the form.

## Figure 14: Household Roster imported to construct the data entry template

| First name   | 1.3   | 1.4   | 1.5  | 1.6  | 1.7  | 1.8  | 1.9  | 1.10  | 1.11  |  |
|--|---|---|--|--|--|--|--|---|---|--|
|  | ne Sex Relationship Age in<br>to Head years | For persons of<br>the age 12 and<br>above   | the age 12 and schooling   | ooling School reas   |  | For <b>children 6-18</b> years<br>old that are not enrolled in<br>school | For <b>adults</b> (19 and<br>older that are<br>currently not<br>attending school)  |   |   |  |
|  |   |   |  | Marital<br>Stotus  |  | Did [name]<br>miss School for<br>at least 1 week<br>in the last<br>month |  | Why is [name] not enrolled<br>school? Name up to two<br>reasons in order of<br>importance   | What is the level of<br>education of<br>[name]?   |  |
| Do net record<br>full name, but<br>only an<br>identifying first<br>mane to refor to<br>the household<br>member | 1 –<br>Male<br>2=<br>Female                 | 1 = Head<br>2 = Spouce<br>3 = Child<br>4 = Parent<br>5 = Sibling<br>6 = Grand-child<br>7 = Grand-<br>parent<br>0 = Orphan taken<br>care of<br>9 = Other<br>relative<br>10 = No relation | for children<br>below<br>6 months,<br>write "6"<br>For children<br>6-12<br>months<br>write "1" | 1 = Single<br>2 = Married<br>3 = Living<br>together with<br>partner<br>4 = Divorced<br>5 = Separated<br>6 = Widow or<br>widower<br>99 = Not<br>applicable (<12<br>years old) | 1 = Attend<br>kindergarten<br>2 = Attend<br>elementary school<br>3 = Attend<br>highschool<br>4 = Attend<br>university<br>5 = Attend<br>university<br>5 = Attend<br>vocational or other<br>training<br>programme<br>6 = Currently not<br>attending any type of<br>achoolytreining | 1 = Yes<br>2 = No<br>77 = No<br>response<br>99 = Not<br>applicable       | 1 = Sickness<br>2 = Work to earn money<br>3 = Household<br>Work, take care of<br>siblings<br>4 = Help with farm work<br>5 = Long Distance to<br>School for not paid<br>7 = No teacher at school<br>8 = Inaccurity<br>9 = Refuse to go<br>10 = Other<br>77 = No response<br>99 = Not applicable | 1 = Needs to work to earn<br>money<br>2 = Not enough money to pay<br>echool fee<br>3. Got married/pregnant<br>4 = Needs to help with<br>household work/takes-care of<br>eiblings<br>4 = Helps with farm work<br>5 = No school in the community<br>6 = Long Dictance to School<br>7 = No tachers at school<br>8 = Inaccurity<br>9 = Sickness/disability<br>10 = Refuse to go<br>11 = Other | 1 = No Schaaling<br>2 = Some elementary<br>3 = Completed<br>elementary<br>4 = Some high school<br>5 = Completed<br>high school<br>6 = Vocational<br>7 = Some University<br>8 = Completed<br>University<br>27 = No response<br>50 = Not applicable |  |

# Form Configuration

The form, once constructed, should be configured so that the "Default View" is changed to "Continuous Form". This allows the data entry operator to enter information about multiple members using the same form. However, to ensure proper data entry the following points should be followed.

a) **Household Member Order Number**: This is a two digit order number that is printed on the questionnaire. The properties of this "Text Box" must be configured as presented in Figure 15.

The Unique ID used for the household member is interlinked to the questionnaire number and the household member order number. Once the Input Mask has been set, VBA code presented in Box 7 could be inserted into the HHMenID TextBox to create the Household Member ID.

Alternatively, the auto-number datatype of MS Access can be used. This will then generate numbers that are unique across all members of all households of the survey. Figure 15: Member Order Number Text Box

| $\sim$ |
|--------|
|        |
|        |
|        |
|        |
| -      |
|        |
|        |
|        |
|        |
|        |
|        |

### Box 7: VBA code to create member ID and to avoid duplicate entry

#### Private Sub MemOrdNo\_AfterUpdate()

If IsNull(Me!MenOrdNo) or Me!MenOrdNo="00" or Me!MenOrdNo=Empty Then MsgBox "Please enter in the Household Member Order Number" Me!MenOrdNo.SetFocus

Else

HHEntered = Dlookup("[AutoNumber]","HHMemTable","HHMemID='" & Me!QuestionNo & Me!MenOrdNo & "'") If IsNull(HHEntered) Then Me!HHMemID = Me!QuestionNo & Me!MenO

Else

MsgBox "You have already entered in this he End if

End if End Sub

b) Household Member ID: As mentioned above, the Household Member ID should be interlinked to the Questionnaire Number and the Household Order Number in the

data entry mask. This text box is not visible as it is automatically updated once the order number is entered however as it is the unique ID, it must be completed for the data to be properly recorded.

c) **Completed Button**: To gain better control over the member sub form, a "message box" can be created that will appear once the information for each household member have been entered into the database. The message box will ask whether the entry operator would like to enter information about another household member. After finishing this section, this button will help the entry operator to navigate out of the household member sub form. Box 8 presents an example of the VBA code to create this option.

| Box 8: VBA code to create a message<br>Previous Page Next Page  |
|---|
| Private Sub Command3_Click()  |
| AnotherMember = MsgBox("Do you want to enter in another Household<br>Member?", vbYesNo)<br>If AnotherMember = 7 Then<br>Forms.DataEntry.Page1.SetFocus<br>Forms.DataEntry.Page1.Form!S1_12.SetFocus<br>Else<br>DoCmd.GoToRecord acActiveDataObject, , acNewRec<br>Me!MemOrdNo.SetFocus<br>End If<br>End Sub |

d) **Navigation Buttons:** It is considered to be good practice to create buttons at the end of each page that allow the entry operator to either navigate to the top of the next page or back to the top of the previous page. An example of the code that permits this navigation is presented in Box 12.

| Box 9: VBA code to create button<br>each page  | s at the end of |
|--|-----------------|
| Private Sub CommandO_Click()<br>Forms.Form1.Page3.SetFocus<br>DoCmd.GoToControl "TabCtl0"<br>End Sub         | 'Next Page      |
| Private Sub Command1_Click()<br>Page<br>Forms.Form1.Page1.SetFocus<br>DoCmd.GoToControl "TabCtl0"<br>End Sub | 'Previous       |

e) Scrolling Mouse: If a data entry operator enters data on a computer with a scrolling mouse or mouse with a mouse wheel, it is necessary to **turn off** the automatic "new record" function in Access. There is a great deal of discussion and solution available on the internet. However, the easiest and free solution is to use the Lebans "Mouse Wheel Off" tool. Documentation and the module that needs to be imported in the application is available at the following URL: <a href="http://www.lebans.com/mousewheelonoff.htm">http://www.lebans.com/mousewheelonoff.htm</a>

# Annex 10: GIS and Remote Sensing Data Used for Risk Analysis

Through GIS programmers can study the geographical extent, seasonality, probability and intensity of the hazard by the smallest administrative boundaries or other detailed areas. Historical data on extent, frequency, duration and intensity of a hazard are crucial.

### Population Density (Landscan)

For hazards that can be defined geographically, the number of vulnerable people is an indispensable factor in risk analysis (see earlier: Risk = Hazard • Population in the area • Vulnerability of the population). Absolute population numbers of a certain area can be obtained using GIS techniques. If the proportion of vulnerable households<sup>5</sup> is known, the absolute number of vulnerable people is easily known by multiplying by the total population-numbers in the area of consideration. The LandScan Global Population Project is a worldwide population database at 30" X 30" resolution. Best available census counts are distributed to cells based on probability coefficients which, in turn, are based on road proximity, slope, land cover, and night time lights

### Irrigation Area

Vulnerability to drought in areas under irrigation is different than in the non-irrigated areas, therefore it's important to include this information in the drought risk analysis. FAO and partners developed a global digital map of irrigated areas on the basis of cartographic information and FAO statistics with a spatial resolution of half a degree. Since 1999 it has a resolution of 5 minutes<sup>6</sup>.

Normalized Difference Vegetation Index (NDVI).

The Normalized Difference Vegetation Index (NDVI) provides a measure of the amount and vigour of vegetation at the land surface. The magnitude of NDVI is related to the level of photosynthetic activity in the observed vegetation. In general, higher values of NDVI indicate greater vigour and amounts of vegetation. NDVI is derived from data collected by National Oceanic and Atmospheric Administration (NOAA) satellites, and processed by the Global Inventory Monitoring and Modeling Studies group (GIMMS) at the National Aeronautical and Space Administration (NASA)<sup>7</sup>.

The Famine Early Warning System (FEWS) has built a valuable archive of decadeal (10-day) composite NDVI images (resolution 8 km) of Africa.

### Rainfall Estimates (RFE)

FEWS RFE products are distributed to the public via the ADDS server in the same format as NDVI, in a 8.0-km resolution.

<sup>&</sup>lt;sup>5</sup> this assumes that in the area of study the household size is constant

<sup>&</sup>lt;sup>6</sup> http://www.fao.org/nr/water/aquastat/irrigationmap/index.stm

<sup>7</sup> Fews Net

### Most Suitable Cereal

FAO, through it's Agro-ecological Zones, provides the `best' cereal types based on agronomic suitability, nutritive factors and output value.

### AgroMetShell

AgroMetShell (AMS) provides a toolbox for agro-meteorological crop monitoring and forecasting<sup>8</sup>. The program includes a database that holds all the weather, climate and crop data needed to analyse weather impact on crops. Data can be input into the database using a variety of options, for instance, they can read from WINDISP format images or be imported from ASCII files.

The FAO Crop Specific Soil Water Balance produces a number of outputs: water balance variables, such as soil moisture, actual evapo-transpiration over the vegetative phase or the water stress at flowering, etc. which are the basis of yield estimations.

### ILWIS

ILWIS<sup>9</sup> (the Integrated Land and Water Information System) is a Geographic Information System (GIS) with image processing capabilities. ILWIS 3.4 Open delivers a wide range of features including import/export, digitizing, editing, analysis and display of data, as well as production of quality maps. The extraction of data from NDVI, RFE, and PET images needs a certain algorithm that requires a repetitive work flow, and ILWIS can deal with the automatic calculation using script.

<sup>&</sup>lt;sup>8</sup> Based on the AgroMetShell Manual, August 2004,

http://www.fao.org/nr/climpag/pub/AMS%20manual%20Part1.pdf

<sup>&</sup>lt;sup>9</sup> ILWIS has been developed by the International Institute for Aerospace Survey and Earth Sciences (ITC), Enschede, The Netherlands.

| Elements of<br>the Markets to<br>Analyze | Key<br>Components  | Key Indicators  | Analytical Tools   | Possible<br>Secondary<br>and Primary<br>Sources  | Where in the<br>CFSVA<br>Outline?                      |
|--|--|---|--|--|--|
| Macro-<br>environment                    | Relevant<br>structural<br>policies,<br>macro-<br>economic<br>policies and<br>performance,<br>regulatory<br>environment                                 | <ul> <li>Macro economic, structural policies</li> <li>GDP growth (including breakdown and contribution by sector, especially agriculture), inflation, exchange rates, terms of trade (exports/imports) and import parity prices (IPP) for major import sources of major commodities</li> <li>Food market regulations, institutions and trade policies and reforms (quotas, bans, subsidies, taxes, licensing, foreign exchange regulations).</li> </ul> | <ul> <li>Annual trends, averages and deviations (at least most recent 5 years available)</li> <li>Qualitative and quantitative description of policy changes (most recent, if possible)</li> <li>Import parity prices</li> </ul>       | Department of<br>Statistics, Ministry<br>of Economy,<br>Finance and/or Plan,<br>Central Bank,<br>Ministry of<br>Agriculture,<br>Development<br>Partners (World<br>Bank, IMF, FAO,<br>UNDP, US Trade<br>Department) | Chapter on<br>Economic<br>Characteristics              |
| Food<br>availability                     | Production,<br>stocks<br>(including<br>government<br>stocks),<br>imports,<br>exports and<br>food aid   | <ul> <li>Patterns of production,<br/>stocks, imports, exports and<br/>food aid;</li> <li>Surplus/deficit production<br/>(both at national and sub-<br/>national levels).</li> </ul>   | <ul> <li>Annual trends (at least most recent 3-5 years available)</li> <li>Tables and Maps of deficit and surplus areas (most recent years)</li> <li>Food Balance Sheet</li> </ul>   | Department of<br>Statistics, Ministry<br>of Agriculture, FAO<br>statistics   | Chapter on<br>Aggregate<br>Availability and<br>Markets |
| Market<br>structure                      | Market types;<br>Trade patterns<br>between<br>markets; Type,<br>number and<br>organization of<br>traders at<br>various levels<br>down the<br>marketing | <ul> <li>Trade flows between<br/>markets; (including formal<br/>and informal cross-border<br/>trade, if possible)</li> <li>Traders' type and<br/>organization (number of<br/>traders relative to total<br/>number of traders in the<br/>market, barriers for entry,</li> </ul>  | <ul> <li>Commodity flow charts of<br/>main food commodities<br/>(current or most recent<br/>structure)</li> <li>Analysis of primary data by<br/>size of trader (Competition)</li> <li>Trader solvability<br/>(Stock/Credit)</li> </ul> | Ministry of<br>Trade/Commerce,<br>Ministry of<br>Agriculture, Key<br>informants (Trader<br>and Trader's<br>Associations)   | Chapter on<br>Aggregate<br>Availability and<br>Markets |

# Annex 11: Market Analysis: Indicative Topics and Outline for a CFSVA

CFSVA Guidelines - Annexes April 16, 2008

| Elements of<br>the Markets to<br>Analyze | Key<br>Components  | Key Indicators  | Analytical Tools  | Possible<br>Secondary<br>and Primary<br>Sources   | Where in the<br>CFSVA<br>Outline?                      |
|--|--|---|---|---|--|
|  | chain (e.g.<br>competition<br>versus<br>oligopoly or<br>monopoly)  | total storage capacity, %<br>stock relative to credit<br>obtained and % stock<br>relative to credit given).   |   |   |  |
| Market<br>Performance                    | Wholesale/Ret<br>ail/Consumer<br>prices; market<br>price<br>integration;<br>price structure,<br>and; price<br>seasonality. | <ul> <li>Consumer price indices<br/>(including food versus non-<br/>food such as fuel/energy,<br/>transport cost); real retail<br/>price trends and seasonality;</li> <li>By major locations,<br/>wholesale or retail prices,<br/>transfer costs (e.g.<br/>transport).</li> </ul> | <ul> <li>Monthly price trends and<br/>volatility (variations and<br/>deviations) (most recent 2-3<br/>years available)</li> <li>Graphs on price movements,<br/>simple correlations of prices<br/>In different locations,<br/>comparison of price<br/>differentials with transport<br/>costs between markets<br/>(most recent 2-3 years<br/>available) (see Appendix 2<br/>for price integration and local<br/>import parity price analysis<br/>tools)</li> <li>Market value chain from<br/>producer/importer to<br/>consumer/exporter (graph)<br/>and price structure<br/>(including % margins of<br/>farmers, wholesalers,<br/>retailers) analysis (current or<br/>most recent structure)</li> </ul> | Department of<br>Statistics, Ministry<br>of Trade/Commerce,<br>Ministry of<br>Economy/Finance<br>and/or Plan, Central<br>Bank, Partners<br>(World Bank, IMF,<br>FAO, UNDP, WFP),<br>Key informants<br>(Trader and Trader's<br>Associations) | Chapter on<br>Aggregate<br>Availability and<br>Markets |

| Elements of<br>the Markets to<br>Analyze | Key<br>Components  | Key Indicators   | Analytical Tools   | Possible<br>Secondary<br>and Primary<br>Sources  | Where in the<br>CFSVA<br>Outline?                                |
|--|--|--|--|--|--|
| Households<br>access to<br>markets       | Access to food<br>and livelihood<br>markets; and<br>effective<br>demand<br>(purchasing<br>power).  | <ul> <li>Physical access to markets<br/>(travel distances and time,<br/>transport means and cost to<br/>markets, by season);</li> <li>Dependency on food<br/>markets (proportion of food<br/>purchased from markets,<br/>share of food in total<br/>expenditures);</li> <li>Dependency on livelihood<br/>markets (proportion of<br/>income from labour<br/>markets, from cash crops,<br/>from credit);</li> <li>Purchasing power and<br/>minimum food basket cost<br/>(local terms of trade of main<br/>staple food/main cash crop,<br/>main staple food/casual<br/>labour wage, main staple<br/>food/main livestock)</li> </ul> | <ul> <li>Analysis of primary data by<br/>HH groups and locations</li> <li>Analysis of primary data by<br/>HH groups and locations (of<br/>terms of trade and cost of<br/>food basket tools)</li> </ul> | Department of<br>Statistics, Ministry<br>of Labour, Ministry<br>of<br>Agriculture/Livestoc<br>k, Ministry of<br>Trade/Commerce,<br>Ministry of<br>Transport/Infrastruc<br>ture, Household<br>surveys | Chapter on<br>Household<br>Food Security<br>and<br>Vulnerability |
| Risk and<br>vulnerability<br>analysis    | Possible supply<br>and demand<br>shocks and the<br>risk of their<br>occurrence,<br>responses and<br>impacts on<br>household food<br>security and<br>vulnerability. | <ul> <li>Supply shocks (e.g. drought, floods, pest); demand shocks (price and income changes), and actual impacts on household food security and vulnerability;</li> <li>Simulations of potential impacts on household food security and vulnerability</li> </ul>  | <ul> <li>History of types of shocks,<br/>impacts and response<br/>actions</li> <li>Shock-response tools</li> </ul>   | Disaster<br>management<br>organizations (e.g.<br>OCHA, GDACS),<br>Special studies on<br>poverty, coping<br>mechanisms, risks<br>and vulnerability<br>analysis  | Chapter on<br>Risk Analysis                                      |

# Annex 12: PDPE Market Analysis Tool: Market Integration

Markets are important determinants of food availability and food access. The extent to which markets make food available and keep prices stable depends on whether markets are integrated with each other. Integrated markets can be defined as markets in which prices for comparable goods do not behave independently. If markets are well integrated, it can be assumed that market forces are working properly, meaning that price changes in one location are consistently related to price changes in other locations and market agents are able to interact between different markets. If markets are integrated, food will flow from surplus to deficit areas - and imports will flow from port and border areas in order to meet market demand in outlying areas. High prices in deficit areas provide the incentive to traders to bring food from surplus to deficit areas, making food available. As a result of these flows, prices should decline in deficit areas, making food more accessible to households.

### What insights can this tool provide?

Prices usually give important indications on whether markets are integrated. Markets are integrated if prices among different locations move in similar patterns, given that the differences between prices is explained by the transfer and transaction costs as food flows between the locations. Otherwise markets are segmented. This could, for example, be a result of prohibitive transaction costs related to poor infrastructure in remote areas or roads and bridges damaged as a result of a disaster.

When markets are integrated, food flows among regions and prices fluctuate less, enhancing food security. Knowledge about market integration is, therefore, essential for programming. The degree of market integration will inform the analysis of food security, appropriate responses to a crisis, the extent of possible negative effects of food aid and local procurement possibilities. Here are some examples:

- Where markets are poorly integrated and prices more volatile vulnerable households will more often experience high prices;
- Regarding response options, cash transfers can be a response option if markets are integrated, food is available and prices are relatively stable;
- Local procurement is also highly dependent on market integration. WFP might be able to procure locally with no detrimental effects on the market if food flows from other regions<sup>10</sup>; and
- In case of an emergency, the degree of market integration affects the estimates for the required amount of food aid because traders might be able to meet part of the food needs of the disaster-affected people.

#### How to analyse, interpret and use the data

Analyzing market integration is done by comparing prices in different locations. The chart below provides a framework to analyse prices. This framework can be discussed step by step as follows:

• Step 1: Assess whether prices move in tandem or not. One could calculate simple correlation coefficients or plot price series in a graph to check co-movement. If prices co-move, markets may be integrated. However, high correlation coefficients or price co-movement can be a result of other factors, like a steady increase in all prices, rather than market integration. Checking for outliers - caused by a specific

<sup>10</sup> WFP could also procure locally in areas where a lack of market integration prevents available surpluses being moved out to deficit areas.

phenomenon in one market e.g. - and stability of price series overtime is also needed.

- Step 2: Analyse whether prices converge by calculating the average of price differences between markets in a given period. Convergent markets are integrated markets where prices are at the same level. A zero average suggests absolute convergence, indicating that the markets may be well integrated. Non-zero mean points to relative convergence, indicating that prices move in tandem, but that there are price differences as a result of transaction costs.
- Step 3: Compare spatial price differences with transaction costs. If transaction costs are higher than the price differences between two markets, it is likely there is no incentive for traders to move food between these markets at a period of time. Otherwise, the two markets are likely to be integrated.
- Step 4: Cross-check with traders if there is any reason why they might not move food. Among other reasons, it is worth analysing risk factors such as seasonal food availability and transport hindrances, changes in policy, security as indicated in the big "cloud of the framework".
- Step 5: Implications can be drawn for programming and response options. If the above steps point towards market integration, food is available in markets and prices are stable, cash transfers may be an option. If markets are integrated, the effects of food aid on markets are also likely to be small and temporary.

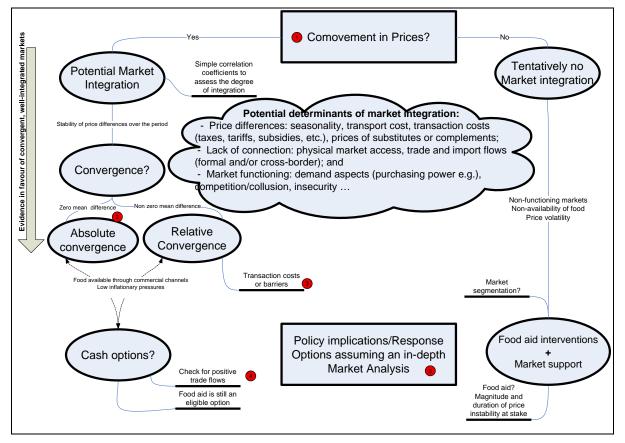
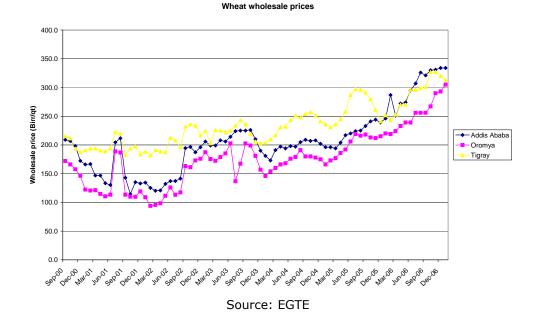


Figure 16: Market Integration Framework

Example: Grain wholesale prices in Ethiopia (2000-2006)

To illustrate the issue of market integration, consider the case of Ethiopia's wholesale prices for teff, wheat and maize in 3 main regions/cities: Addis Ababa, Mekelle (Tigray) and Oromya. The price data used are extracted from the Ethiopian Grain Trade Enterprise (EGTE) database and the estimate for transportation costs between Mekelle and Addis Ababa from the Tigray Agricultural Marketing Promotion Agency (TAMPA) bulletin.

• Step 1: A rapid look at the price movements in the graph below for wheat shows how Tigray price evolution is peculiar. When prices in Addis Ababa and Oromiya went up swiftly (e.g. in July 2001 and September 2002), Tigray prices increased much less. On the contrary, in 2004-2005, Tigray experienced two price hikes (first half of 2004 and between March and July 2005) whereas Addis Ababa prices were increasing more moderately. From the correlation coefficients (around 80%) for the different commodities one could assume Addis Ababa and Oromya grain markets are well integrated. Yet, the Addis Ababa and Tigray regions have slightly different price variation patterns (correlation coefficients between 55% (wheat) and 77% (maize)). Regarding price stability over time, there seems, first, to be no significant outlier in any of the market price series that could affect our calculations. Then, the  $\beta$ -coefficients, which give a measure of how quickly changes in one series (location) are transmitted to another series (location), show that Tigray ( $\beta_{Tigray}$ =0.45) is more inert (much less volatile) than Oromiya ( $\beta_{Oromya}$ =0.70) relatively to Addis price variations.



#### Figure 17: Wheat Wholesale Prices in Ethiopia

• *Step 2*: Based on Addis Ababa average price differences with Oromiya and Tigray , one can develop the table below:

|       | Average<br>difference<br>Oromya - Addis<br>Ababa<br>(birr/quintal) | Relative<br>difference to<br>Addis Ababa<br>average price <sup>11</sup> | Average<br>difference<br>Tigray - Addis<br>Ababa<br>(birr/quintal) | <i>Relative<br/>difference to<br/>Addis Ababa<br/>average price</i> |  |  |  |  |
|-------|--|---|--|---|--|--|--|--|
| 2001  |  |   |  |   |  |  |  |  |
| Teff  | -63  | -29%  | -9   | -4%   |  |  |  |  |
| Wheat | -25  | -16%  | 43   | 28%   |  |  |  |  |
| Maize | -21  | -23%  | 36   | 39%   |  |  |  |  |
| 2002  |  |   |  |   |  |  |  |  |
| Teff  | -55  | -27%  | -15  | -7%   |  |  |  |  |
| Wheat | -24  | -16%  | 54   | 36%   |  |  |  |  |
| Maize | -13  | -14%  | 28   | 30%   |  |  |  |  |
| 2003  |  |   |  |   |  |  |  |  |
| Teff  | -48  | -19%  | -15  | -6%   |  |  |  |  |
| Wheat | -32  | -15%  | 11   | 5%  |  |  |  |  |
| Maize | -34  | -21%  | 7  | 4%  |  |  |  |  |
| 2004  |  |   |  |   |  |  |  |  |
| Teff  | -37  | -14%  | 1  | 0%  |  |  |  |  |
| Wheat | -26  | -13%  | 40   | 20%   |  |  |  |  |
| Maize | -25  | -17%  | 24   | -17%  |  |  |  |  |
| 2005  |  |   |  |   |  |  |  |  |
| Teff  | -39  | -14%  | 11   | 4%  |  |  |  |  |
| Wheat | -20  | -9%   | 44   | 20%   |  |  |  |  |
| Maize | -28  | -16%  | 19   | 10%   |  |  |  |  |
| 2006  |  |   |  |   |  |  |  |  |
| Teff  | -41  | -11%  | -3   | -1%   |  |  |  |  |
| Wheat | -49  | -16%  | -10  | -3%   |  |  |  |  |
| Maize | -30  | -17%  | 25   | 14%   |  |  |  |  |

The pattern of differences seems constant over time. Exception can be made for wheat prices in Addis Ababa rising above Tigray prices in 2006 and teff price difference between Addis Ababa and Tigray, whose sign alternates but still remains low (relative difference to Addis Ababa price smaller than 10%). Therefore one can assume there is no absolute convergence between the different markets apart for Teff between Addis Ababa and Tigray where price difference is close to 0. Oromiya prices are on average lower than in Addis Ababa (49 birr per quintal difference in 2006 for wheat) and generally higher for Tigray (25 birr per quintal difference in 2006 for maize).

• Step 3: Focusing on Tigray, TAMPA points at an average 40 birr per quintal transportation costs in 2006 for grain from Addis Ababa to Mekelle (assuming transportation cost to be constant over the period of analysis). This is approximately the price difference for wheat for example (except in 2003 and 2006), reflecting existence of incentives for traders to move wheat from Addis Ababa to Mekelle. This same transportation cost difference is not big enough for maize trade.

<sup>11</sup> Relative differences to Addis Ababa average price are the average difference divided by the average price in Addis.

- *Step 4*: Knowledge in the WFP Country Office concerning food flows among the regions confirms that the flows are indeed better from Oromiya to Addis Ababa than from Addis Ababa to Tigray.
- Step 5: The Productive Safety Net Programme (PSNP) advisory board, on which WFP sits, recently advised to reduce food-based safety net programmes in Oromya region in favour of cash-based interventions. This could indeed be justified based on the degree of market integration. On the other hand, Tigray's situation needs to be closely monitored as most of the cash-based woredas (districts) in the PSNP asked for switching to food.

### Limitations

- i) High volatility or persistent price differences need further analysis. A temporary segmentation among markets might denote other issues and not reflect behavioural changes that could involve programming adjustments. The volatility of prices across locations, as well as in one given location, might nevertheless give the wrong signals to households (frequent important variations will blur households' purchase intentions) and therefore increase their vulnerability.
- ii) Demand-side variables are often needed to understand the reasons of market integration, as well as derive what the main implications for households' food security are. A low purchasing power potential in an area may explain the lack of incentives for traders to move food there. Conversely, in a segmented market, prices will remain high due to the low food inflows, thus deteriorating household food access. Unfortunately, data on purchasing power is not easy to come by and often considered unreliable. One could nevertheless analyse the terms of trade between food prices and livestock, cash crop prices or wages (or other incomegenerating activities) to capture such situations (see MARKIT tool on terms of trade).
- iii) Often various retail markets are highly integrated with a well-identified marketplace, such as, for example, a particular wholesale market (radiality). In such cases, an analysis of price seasonality and transport cost changes through the seasons are necessary. Unfortunately, the availability of those data is often a problem. Proxies or specific tools can be used (see MARKIT tool on price seasonality). For instance, if transport cost cannot be monitored, distance, fuel prices and road conditions can be used to have a proxy indicator because they have a direct impact on transport cost.

#### How to calculate the indicators

Following the steps given in the section above, here are some elements to analyse the price data to capture market integration. The different steps are followed in the attached Excel datasheet on Ethiopia data.

• Step 1: A simple graph of the different prices over time can often reveal whether prices move in tandem or not. Normally wholesale prices are preferred to retail prices because we assume that traders move large quantities between markets while retailers sell locally<sup>12</sup>. It is important to use either only wholesale prices between two markets or only retail prices between two markets, not a combination. Using the same type of price will make it easier to compare with transaction costs, as long as the analysis focuses on price differences. Prices in

<sup>12</sup> There should not be a huge difference between retail price differences and wholesale price differences because the margins and additional costs will likely be similar between wholesalers and retailers.

one region might lag behind changes in prices in other regions because of the time it takes to react to price differences and move food. But if a common pattern exists, even with some delay, it is usually clear.

The correlation coefficient  $\rho$  could also be used to give an idea of the intensity of the co-movement. This function is available in Excel. It is usually computed as follows<sup>13</sup>:

$$\rho_{MarketA,MarketB} = \frac{\sum_{i=1}^{T} (MarketA_i - \overline{MarketA}) \bullet (MarketB_i - \overline{MarketB})}{\sqrt{\sum_{i=1}^{T} (MarketA_i - \overline{MarketA})^2} \bullet \sqrt{\sum_{i=1}^{T} (MarketB_i - \overline{MarketB})^2}}$$

where MarketX<sub>i</sub> represents the price of the commodity at time i in market X and  $\overline{MarketX} = \frac{1}{T} \sum_{i=1}^{T} MarketX_i$  the average of the prices over the period T in market

X.  $\rho$  varies between -1 and 1. The closer to 1, the more correlated the prices are and allegedly the better the integration between the markets. The coefficient of correlation is close to 0 when there is no (linear) link between the two sets of prices and therefore presumably no flows between the markets that could regulate the prices through incentives.

Checking for stability of prices is also useful; a quick look at the graph helps identify outlying values (e.g. abnormal prices in one market). Too many outliers can threaten the validity of the tools used in the next steps. An erratic data series might therefore need some stand-alone analysis of the market situation.

Stability of a given market relative to a main market (Market '0') can also be measured through the  $\beta$ -coefficient (the volatility coefficient):

$$\beta_{MarketX} = \frac{Cov(MarketX, Market0)}{Var(Market0)} = \frac{\frac{1}{T}\sum_{i=1}^{T}(MarketX_i - \overline{MarketX}) \bullet (Market0_i - \overline{Market0})}{\frac{1}{T}\sum_{i=1}^{T}(Market0_i - \overline{Market0})^2}$$

Market '0' is referring to prices on a main market that can also be the Consumer Price Index in the country or its food subgroup. If the  $\beta$ -coefficient is 0.8, the prices have varied approximately 0.8% in the market of interest when the main market prices have varied 1%. The prices on this market are therefore less volatile than on the main market. A  $\beta$ -coefficient of 0.5 (or 2) means the price in Market X are moving twice as slow (twice as fast) and thus indicating a more volatile market. Households living in areas with more volatile markets face a higher risk of price rises and hence higher vulnerability to food insecurity.

• *Step 2:* The next step is the analysis of the difference between market A and market B prices, if any. One can derive the average difference as follows:

$$Diff_{A-B} = \frac{1}{T} \sum_{i=1}^{T} (MarketA_i - MarketB_i)$$

<sup>13</sup> See CORREL() function in Excel

The sign (+/-) indicates which market has, on average, higher prices and whose magnitude indicates how significant the gap is. A difference close to zero indicates an absolute convergence, i.e. potentially a good integration between the two markets. A non null difference - relative convergence - needs more investigation. A chart of the price differences over time (rather than the prices themselves) could be helpful. Along this line, one can compute the relative difference to one market to understand what the estimated level of difference represents. Relatively to market A price level, the difference will then be:

$$relativeDiff_{A} = \frac{\frac{1}{T}\sum_{i=1}^{T} (MarketA_{i} - MarketB_{i})}{\overline{MarketA}};$$

- Step 3: From secondary sources (or from WFP logistics and procurement units), estimates of transportation costs can be useful to explain price differences in the case of relative convergence. These costs may explain market segmentation if they are larger than the price differences calculated above because they make it unprofitable for traders to move commodities from one market to another. A simple comparison over time between the transportation costs and the price differences in a chart gives a good idea of the possible incentives for traders;
- Step 4: A rapid checking of actual flows between the areas, through traders' interviews/focus groups, is necessary to derive any conclusions on market integration. Analysis through prices does not provide all the answers on market integration. The actual existence of positive trade flows is the only sufficient condition for market integration. Therefore, to the extent possible, traders interviews enquiring about their willingness to move food and risks associated, are extremely useful complement to price integration analysis; and
- *Step 5:* Market integration provides important elements for the response analysis, including whether cash transfers are an option, and the design of programmes (see MARKIT cash decision tool).

#### Data needs, data sources

| Data needs  | Type and transformation  | Data sources  |
|---|--|---|
| Time-series for prices (per unit) of main<br>food staple(s) in major urban/wholesale<br>markets, including border markets and<br>rural markets, if available. Data needs<br>depend on the depth of analysis required<br>on market integration | Weekly or monthly data,<br>plotted against time in graph,<br>correlation coefficients of<br>price trends, spatial price<br>differences, price differences<br>per major seasons | WFP monitoring (FSMS); NGOs<br>(for some rural areas);<br>government (for major urban<br>areas and wholesale markets,<br>import prices); Ministry of<br>Agriculture |
| Transportation costs per unit between<br>major markets, including wholesale,<br>border and rural markets, by major<br>seasons, if available   | Average cost per unit, cost changes by season  | WFP procurement/logistics, ad hoc traders' interviews   |
| Flows of food among these markets   | Basic set of questions on the<br>willingness and risks for<br>moving food  | Ad hoc trader interviews, observations  |

Analysis of relevant issues affecting trends in food prices will of course depend on the specific market context and availability of reliable data. At a minimum, analysts should ensure that data adequately captures the range of price differences between all major wholesale markets. It should also account for price trends in each location during each of the key agricultural seasons in the particular country or region, preferably over the course of at least two years.

## Annex 13: PDPE Market Analysis Tool: Import Parity Price

The import parity price (IPP) is the price at the border of a good that is imported, which includes international transport costs and tariffs. If a good is cheaper abroad, i.e. the domestic price is higher than the IPP, traders have a strong incentive to import the good. A comparison of the time series of domestic wholesale prices of the main staple food, import parity prices and import quantities can give an indication whether traders are responsive to price changes. The key question is whether private sector imports take place when domestic prices rise to levels approximating the IPP. If this is the case, the domestic market is integrated with regional or world markets and domestic shortfalls in food supply are likely to be mitigated through imports and the IPP is likely to provide a ceiling for domestic prices.

#### What insights can this tool provide?

The tool helps to understand whether the national market is integrated into the regional and/or world markets. If a country is integrated into regional or global food markets and trade is basically free, food supply shortages, which would normally cause rising domestic prices, are likely to be met through private imports if there is domestic purchasing power. As a result, prices will stabilize at import parity.

Alternatively, if private sector imports and government trade policy are unresponsive to the IPP, it signals a lack of integration with regional and/or global markets. It is critical to consider possible contributing factors to a lack of market integration in order to understand the potential influences of external food aid on domestic markets. Such considerations will inevitably affect the formulation of appropriate food aid programming, including the amount, timing and method of distribution of external resources.

#### How to analyse, interpret and use the data

Rising imports, in response to domestic wholesale prices at or slightly above the IPP, indicate that the private sector responds to price incentives and a shortfall in production should be compensated by imports. If, on the other hand, a domestic wholesale price above the import parity level does not lead to an increase in imports, it indicates that markets are not integrated with external markets. This could be explained by weak trader capacity, lack of competition, import/export barriers or government policies affecting imports and exports (see also Limitations of the tool below). Further analysis to understand the specific reasons why imports do not respond to rising prices should be carried out.

For a simple visual examination of whether imports react to a positive price difference between the domestic wholesale price and the import parity price, it is best to plot the three time series in a graph (see below).

Example: Rice imports after the 1998 Bangladesh flood<sup>14</sup>

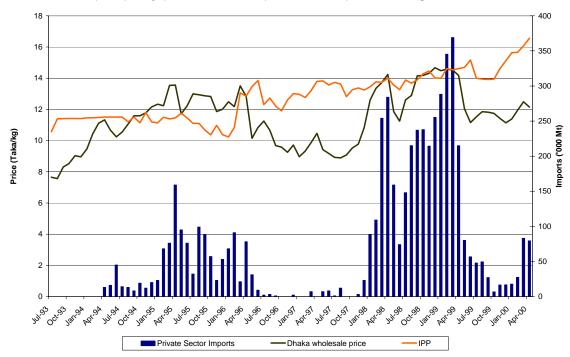
Rice flows between India and Bangladesh nearly came to a halt between 1996 and 1997. Favourable weather and stable input supplies helped boost rice production in Bangladesh and domestic market prices dropped below import parity levels. But, following a poor rice harvest in Bangladesh in November/December 1997, rice prices rose sharply and soon

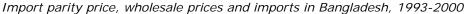
<sup>&</sup>lt;sup>14</sup> The example is based on Dorosh, P. 2001. Trade Liberalization and National Food Security: Rice Trade Between Bangladesh and India. *World Development* 29(4): 673-689.

reached import parity levels. The Government encouraged private sector food imports and removed a surcharge on rice imports. From December 1997 to May 1998, 917,000 mt of rice were imported by the private sector.

A good rice harvest in Bangladesh in May 1998 brought a sharp decline in rice imports from India, as prices dropped below import parity. But from July to September 1998, floods in Bangladesh destroyed large quantities of rice crops, leading to a sharp rise in wholesale prices for rice, surpassing import parity.

Government rice policy was based on the realization that government imports and food aid alone would not be sufficient to make up for the projected shortfall in rice supply before the next harvest in April-June 1999. Consequently, the Government of Bangladesh encouraged private sector imports and the private sector responded with importing more than 200,000 Mt of rice per month from August 1998 to March 1999 (see graph below).





Source: Dorosh (2001)

As the example from Bangladesh illustrates, the private sector may be capable of importing food more quickly and on a larger scale than governments in response to an emergency. It is critical to understand and monitor the IPP and the ways in which government trade policy affects imports, given that private will consider them to be primary signals in formulating a response to market trends. The capacity of private traders to respond to the IPP will likewise influence the need for external food aid.

#### Limitations of the tool

Domestic wholesale prices may diverge from estimated import parity prices even when trade is taking place or trade may not take place even though domestic wholesale prices are above IPP. Some reasons for this include:

- <u>Trade barriers</u> other than tariffs are in place. In this case, private traders may not be able to import the full quantity of imports that they would in the absence of these trade barriers (i.e. the trade barriers are *binding*) and the market price may be higher than the IPP;
- Large-scale <u>government imports or food aid</u> reduces the domestic price below import parity prices;
- Export or production <u>subsidies</u> could artificially reduce the IPP, bringing domestic wholesale prices above IPP without indicating that food is relatively scarce;
- If <u>competition</u> on the domestic wholesale market or among importers is limited, traders may decide to import less than what would be imported in a competitive market to get higher prices. Again, the domestic wholesale price will be higher than the calculated import parity price;
- <u>Traders are uncertain</u> about government policies related to future import tariffs and restrictions, levels of government commercial imports and how much food aid (and grain from government stocks) the government or other agencies are planning to distribute. This creates uncertainty about potential profits for traders and could prevent traders from reacting to price incentives;
- The actual exchange rate used by agents might be a <u>black market exchange rate</u> and not the official rate. In this case, it would be useful to re-calculate import parities using this parallel market. Exchange rates could also be very volatile, creating uncertainty for traders;
- Official trade statistics may be unreliable and a significant part of imports may come through <u>informal channels</u>, evading trade monitoring systems ; and
- <u>Internal transport costs</u> can be significant, creating a wedge between the border IPP and the domestic price, which is determined in the wholesale market away from the border (see under refinements).

One other limitation of the tool is that it is not really appropriate for estimating import volumes. Close inspection of the graph could give a rough quantitative idea of the responsiveness in terms of volumes, but the Zambia spreadsheet model (see PDPE tool on Zambia model) is a better tool to estimate import volumes.

#### How to calculate the indicator

The import parity price is defined as the import price at the border of the importing country in domestic currency. The IPP includes the world price plus international transport costs, insurance and, if applicable, the import tariff.<sup>15</sup> It could be difficult to get monthly data on transportation costs. As a first approximation, one could assume constant transportation costs.

<sup>&</sup>lt;sup>15</sup> The IPP proposed here is different from the one that is used for procurement purposes, which should exclude tariffs (if food aid is exempt) and is calculated in US\$. Procurement is interested in actual purchases for food aid. The IPP in this tool is about the incentive (in local currencies) to the private sector for commercial food imports, which would include payments of tariffs, etc.

$$IPP = \left[ \left( P_{fob} + Tr \right) * XR(1+T) \right]$$

| 100  |        | ••     |       | (1 - (1 - 1)) |
|------|--------|--------|-------|---------------|
| IPP: | Import | parity | price | (LC/Mt)       |

 $P_{fob}$ : World (or cheapest cif import) market price for rice (US\$/Mt)

- XR: Exchange rate local currency vs. US\$ (LC/US\$)
- LC: Local currency unit

US\$: US dollar (or currency of source country)

Mt: Metric ton

- fob: free on board, i.e. price of a good in the country of origin
- cif: cost, insurance and freight, i.e. price of a good in the country of destination (at the border)
- T: ad valorem<sup>16</sup> tariff (in %)
- Tr: transport costs, port handling, etc. (US\$/mt)

# Example: Import parity price for rice at the border of Bangladesh for April 2000 (see Dorosh, 2001):

 $\begin{array}{l} \mathsf{P}_{\mathsf{Delhi}} = 10.03 \; \mathsf{Rs/Kg} \\ \mathsf{XR} = 1.172 \; \mathsf{Tk/Rs} \\ \mathsf{Tr1} = 1.30 \; \mathsf{Rs/Kg} \; (\texttt{transport from New Delhi to border}) \\ \mathsf{Tr2} = 1.10 \; \mathsf{Tk/Kg} \; (\texttt{transport from border to Dhaka}) \\ \mathsf{Tr3} = 1.53 \; \mathsf{Tk/Kg} \; (\texttt{transaction costs from border to Dhaka}) \\ \mathsf{T} = 5\% \; (\texttt{tax}) \end{array}$ 

$$IPP_{border} = \left[ \left( 10.03 \, \frac{Rs}{Kg} + 1.30 \, \frac{Rs}{Kg} \right) \left( 1.172 \, \frac{Tk}{Rs} \right) \right] * \left[ 1 + 0.05 \right] = 13.94 \, \frac{Tk}{Kg}$$

#### **Possible refinements**

- i) Imports might not respond instantaneously to a widening gap between domestic wholesale prices and IPP. The graph might therefore show a clearer picture if the import series is lagged against the price series.
- ii) If imports arrive discontinuously, e.g. because they arrive by ship, and if in one month by coincidence 3 ships arrive, imports are huge and bias the analysis. In that case, it might be better to use 3-month averages.
- iii) The assumption that transportation costs are constant could be weakened. Volumes and fuel prices are two important determinants of transportation costs. If fuel prices change significantly, transportation costs could be inflated by the increase in fuel prices. Transportation costs could also be adjusted by the volume of imports.
- iv) Internal transportation costs could be taken into account. Dorosh (2001) calculates the import parity price for Dhaka, rather than the border, to compare it with the wholesale price in Dhaka. He adds the transportation costs, marketing costs and margins to the IPP at the border.<sup>17</sup> Dorosh assumed that these costs were constant, except for a one-off jump in transportation costs in November 1998. For April 2000 the calculation is as follows (see also graph above):

<sup>&</sup>lt;sup>16</sup> Ad valorem tariffs are tariffs as a percentage of the value of a good rather than as a fixed amount. Tariffs charged as an amount per weight or volume could also be incorporated.

<sup>&</sup>lt;sup>17</sup> This includes all in country expenses in the marketing chain up to the wholesaler (import licenses, duties, clearing expenses, loading/unloading, storage charges, transportation costs, etc.).

*IPP* <sub>Dhaka</sub> = 13.94 + 1.10 + 1.53 = 16.57 
$$\frac{Tk}{Kg}$$

#### Import parity price

| Data needs  | Data source  |
|---|--|
| P <sub>fob</sub> : Time series (monthly) of prices of potential sources of supply for the major staple food or of world market prices | Local procurement unit, (procurement<br>website, URL :<br><u>http://docustore.wfp.org/stellent/</u><br>groups/public/documents/reports/<br>wfp118156.doc)<br>Commodity exchange, like SAFEX in South<br>Africa |
| Tr: Transportation costs (if possible<br>monthly) Sea freight, insurance, port<br>charges, transportation to wholesale market         | Local procurement/logistics unit, ODTP-I   |
| T: Ad valorem tariffs or ad valorem equivalents of other tariff-like restrictions levied on imports                                   | Trade Ministry   |
| XR: Time series (monthly average) of the exchange rate local currency/US\$ or local currency/currency of source country               | IMF/International Financial Statistics,<br>National central bank statistics, URL:<br>depends on country  |

#### Wholesale prices

| Data needs                                 | Data source                         |
|--|-------------------------------------|
| Time series (monthly) of domestic          | Local procurement unit, procurement |
| wholesale prices for the major staple food | website                             |

#### Imports

| Data needs                                 | Data source                               |
|--|---|
| Time series (monthly) of import quantities | Trade Ministry, national trade statistics |
| for the major staple food                  |   |

## Annex 14: Example of CFSVA Budget

## Proposed Budget Comprehensive Food Security and Vulnerability Study WFP Sudan

| Proposed Budget                                       |              |             |      |                           |
|---|--------------|-------------|------|---------------------------|
| Salaries - International                              | <u>Days</u>  |             | Rate | <u>Total</u>              |
| Quantitative Data Specialist                          | 52           |             | 425  | \$22,100.00               |
| Qualitative Data Specialist                           | 42           |             | 375  | \$15,750.00               |
| Nutritional Data Specialist                           | 42           |             | 350  | \$14,700.00               |
| Senior Food Security Advisor                          | 23           | (two trips) | 425  | \$9,775.00                |
| International Sub-total:                              | 159          |             |      | \$62,325.00               |
|   |              |             |      |                           |
| Indirect Costs  |              |             |      |                           |
| Overhead (Intl. Salaries)                             |              |             | 0.28 | \$17,451.00               |
| Indirect Costs: Sub-Total:                            |              |             | ••   | \$17,451.00               |
| Tarrad  | Time         |             |      |                           |
| Travel  | <u>Trips</u> |             |      |                           |
| International   | 4            |             | 2500 | ¢10,000,00                |
| Round-trip Airfares from US                           | 4<br>1       |             | 2500 | \$10,000.00<br>\$1,000.00 |
| Round-trip Airfares from UK<br>Local (covered by WFP) | I            |             | 1000 | \$1,000.00                |
| Travel: Sub-Total:                                    |              |             |      | \$11,000.00               |
|   |              |             |      | ψ11,000.00                |
| Per Diem  | <u>No.</u>   |             |      |                           |
| Accommodations (Khartoum)                             | 41           |             | 190  | \$7,790.00                |
| Accommodation (Other)                                 | 39           |             | 161  | \$6,279.00                |
| DSA Khartoum  | 41           |             | 82   | \$3,362.00                |
| DSA (Other - covered by WFP)                          | 39           |             | 57   | \$2,223.00                |
| Per diem: Sub-Total:                                  |              |             |      | \$19,654.00               |
| Direct Costs  | No.          |             |      |                           |
| Communications  | 1            |             | 500  | \$500.00                  |
| Visa Fees   | 4            |             | 190  | \$760.00                  |
| FedEx for Visa  | 1            |             | 19   | \$19.00                   |
| Direct Costs: Sub-Total:                              |              |             |      | \$1,260.00                |
|   |              |             |      |                           |
| Salaries: Sub-Total:                                  |              |             |      | \$62,325.00               |
| Indirect Costs: Sub-Total:                            |              |             |      | \$17,451.00               |
| International Travel: Sub-Total:                      |              |             |      | \$11,000.00               |
| Per diem: Sub-Total:                                  |              |             |      | \$19,654.00               |
|   |              |             |      |                           |
| Direct Costs: Sub-Total:                              |              |             |      | \$1,260.00                |
| Direct Costs: Sub-Total:<br>Total:                    |              |             |      |                           |

#### **Budget Notes:**

- 1. All figures are in U.S. dollars.
- 2. International consultants are budgeted using a six-day workweek.
- 3. The rates consultants are in line with their current established daily rates as of July 2004.
- 4. Travel days will be included in the total number of work-days.

| Response<br>option   | When it may be appropriate  | Information required to establish appropriateness   |
|--|---|---|
|  | In a situation of acute/transitory food insecurity where:   | <ul> <li>Previous and current nutrition status of population; previous and current morbidity patterns; previous and current mortality rates, both crude and for children under 5.</li> <li>Presence or absence of structural food aid.</li> </ul>   |
|  | <ul> <li>all, or a significant proportion, of<br/>households lack access to food; and</li> </ul>  | <ul> <li>Current levels of household access to food:         <ul> <li>quantity/type of food obtained through normal mechanisms;</li> <li>current consumption levels;</li> <li>sustainability of households' coping strategies.</li> </ul> </li> </ul>   |
| Free general or targeted food  | • there is a lack of food availability; and   | <ul> <li>Current and potential availability of food:         <ul> <li>whether there is a food deficit at the local, sub-national and/or national level(s): reasons for deficit(s), trends and elasticity of food supply over the year, and factors affecting food supply trends;</li> <li>presence of alternative sources of food supply: extent to which a deficit could be filled by local actors such as government and/or commercial traders, and the possible role of humanitarian actors in supporting the government or the private sector.</li> </ul> </li> </ul> |
| distribution:<br>provides<br>households with<br>free rations of  | <ul> <li>alternative ways of assisting<br/>people's access to food would be<br/>unpractical or unreliable and/or<br/>take too long, because the<br/>situation is urgent; and/or</li> </ul>  | <ul> <li>Practicality of implementing alternatives to a general distribution:         <ul> <li>whether infrastructure and conditions are in place to implement a non-food aid project rapidly;</li> <li>whether partners, equipment and technical inputs are available, and the security situation permits it.</li> </ul> </li> </ul>   |
| following       • the characteristics of the affected         following       population mean that many target         sections on       households would not be able to         ration types)       participate in an employment. | <ul> <li>Demographics of affected population.</li> <li>Health status of affected population.</li> </ul>   |   |
|  | <ul> <li>the population has no time to<br/>engage in other activities; people<br/>are not underemployed, in that<br/>they are engaged in their usual<br/>livelihood activities such as<br/>preparing fields and planting for<br/>the next harvest; and their is no<br/>surplus labour.</li> </ul> | <ul> <li>Daily, seasonal calendars of activities engaged in by men, women and children in the affected<br/>population.</li> </ul>   |
|  | In addition, food distributions may be ap without knowing whether the above con   | propriate for short periods, of one to two weeks for example, when there is reason to fear possible hunger ditions have been met.   |

## Annex 15: Main response options and information needs

#### Additional information required for designing a free general or targeted food distribution programme:

- Number of beneficiaries, and their location.
- Duration of the intervention.
- Gender roles and patterns of intra-household distribution.
- Ability to move outside household.
- Security situation.
- Seasonal, daily, weekly calendars of men, women and children to prevent distributions from disrupting economic and other activities.
- The target population's food habits, commodity preferences and acceptable substitutes, and familiarity with/acceptance of the commodities available for distribution.
- Households' access to fuel for preparing the proposed foods, and their ability to store food.
- Micronutrient requirements, to decide on the need for food fortification.
- Potential distribution points and an appropriate distribution system.
- Media and community networks available to publicize ration entitlements and distribution arrangements.
- Partners' capacity staff, equipment and administrative for distribution and monitoring systems.
- Infrastructure roads, storage capacity and milling facilities, if required.
- Needs of host population, when distributions are planned for displaced people.

| Response option  | When it may be appropriate  | Information required to establish appropriateness  |
|--|---|--|
| Food for work<br>(FFW) and<br>food for<br>recovery               | In situations where:<br>households lack access to food;<br><i>and</i>   | <ul> <li>Current levels of household access to food:         <ul> <li>quantity/type of food obtained through normal mechanisms;</li> <li>current consumption levels;</li> <li>sustainability of households' coping strategies.</li> </ul> </li> </ul>  |
| (FFR):<br>provision of<br>food rations in<br>payment for<br>work | • food availability in the area<br>is limited in quantity and/or<br>variety, and there is no<br>indication that this will<br>change; <i>and</i> | <ul> <li>Current availability of food:         <ul> <li>whether there is a food deficit at the local, sub-national and/or national level(s): reasons for deficit, trends and elasticity of food supply over the year, and factors affecting food supply trends;</li> <li>potential alternative sources of food supply: extent to which a deficit could be filled by local actors such as government and/or commercial traders, and the possible role of humanitarian actors in supporting the government or the private sector.</li> </ul> </li> </ul> |

| Response option | When it may be appropriate  | Information required to establish appropriateness  |
|-----------------|---|--|
|                 | food-insecure households     include able-bodied people     who are unemployed or     underemployed; i.e., there     is surplus labour in target     households; and  | <ul> <li>Composition of food-insecure households: average number of able-bodied people per household; percentage of households with no able-bodied member available to work.</li> <li>Seasonal labour patterns, periods when no work is available.</li> </ul>                        |
|                 | <ul> <li>public works projects are required;<sup>18</sup> and</li> </ul>  | <ul> <li>Current conditions – and requirements for rehabilitation/reconstruction – of infrastructure, physical assets or the environment.</li> <li>Labour-intensive project s that would contribute to long-term food security and services for food-insecure households.</li> </ul> |
|                 | <ul> <li>the necessary non-food<br/>inputs, such as materials,<br/>equipment and technical<br/>supervision, can be<br/>assured; and</li> </ul>  | Availability of managing partners, non -food inputs, equipment and technical staff.  |
|                 | <ul> <li>the assets created will be<br/>properly managed and<br/>maintained after completion<br/>of the project; or</li> </ul>  | <ul> <li>Presence of community and/or government arrangements to ensure ongoing management and<br/>maintenance.</li> </ul>   |
|                 | <ul> <li>following a sudden disaster<br/>when:</li> <li>there is need for debris<br/>removal and general clean-<br/>up operations, labour-<br/>intensive repair of rural<br/>roads, small embankments<br/>or other public<br/>infrastructure; and</li> <li>the population has the<br/>capacity to undertake the<br/>required work without<br/>outside technical<br/>supervision.</li> </ul> | <ul> <li>Nature and extent of physical damage, and need for initial, labour-intensive clean-up and repair action.</li> <li>Availability of able-bodied people in food-insecure households to participate in short-term community rehabilitation activities.</li> </ul>               |

<sup>&</sup>lt;sup>18</sup> Appropriate public works projects could include repairing damaged infrastructure and creating physical assets such as roads, schools and irrigation systems.

#### Additional information required for designing a FFW project:

- Number of target beneficiaries/workers.
- Availability of public works benefiting the community and long-term food security.
- When works can/should be undertaken, seasonal considerations.
- Locations of possible public works sites.
- Capacities of partners staff, equipment, administrative and monitoring systems to plan and implement the activities.
- Security situation.
- Gender roles and their implications for participation in public works at particular times.
- Local daily wage rates and the transfer value of commodities, to determine the FFW wage rate in food.
- Attractiveness of the available food commodities.
- Media and community networks available to publicize the project.
- Infrastructure roads, storage capacity, milling facilities to handle the delivery of food commodities and materials for public works activities.
- Ownership of the asset(s) created.
- Possible environmental impact of the public works projects.

Where there are large numbers of displaced people, employment opportunities should be made available to both displaced people and food-insecure groups within the host population; activities should not be at the expense of the local population.

#### Additional information required to design a FFR project:

- Number of target beneficiaries/workers.
- Locations of possible public works sites.
- Capacities of partners to plan and manage distributions.
- Local daily wage rates and transfer value of commodities, to determine the FFR wage rate in food.

| Response option   | When it may be appropriate   | Information required to establish appropriateness  |
|---|--|--|
|   | In situations where: <ul> <li>households lack access to food; and</li> </ul>   | <ul> <li>Current levels of household access to food:         <ul> <li>quantity/type of food obtained through normal mechanisms;</li> <li>current consumption levels;</li> <li>sustainability of households' coping strategies.</li> </ul> </li> </ul>  |
|   | • food is available in the area; and   | <ul> <li>Current availability of food:         <ul> <li>whether there is a food deficit at the local, sub-national and/or national level(s): reasons for deficit, trends and elasticity of food supply over the year, and factors affecting food supply trends;</li> <li>potential alternative sources of food supply: extent to which a deficit could be filled by local actors such as government and/or commercial traders, and the possible role of humanitarian actors in supporting the government or the private sector.</li> </ul> </li> </ul> |
| <ul> <li>food-insecure households include<br/>able-bodied people who are<br/>unemployed or underemployed, i.e.<br/>there is surplus labour in target<br/>households; and</li> <li>the risk of inflationary pressure is low<br/>– a depressed economy needs a cash<br/>injection; and</li> </ul> | able-bodied people who are<br>unemployed or underemployed, i.e.<br>there is surplus labour in target   | <ul> <li>Composition of food-insecure households: number and gender of able-bodied people per household; percentage of households with no able-bodied member available to work.</li> <li>Nature and seasonality of the income-generating activities of able-bodied household members.</li> </ul>   |
|   | <ul> <li>State of the economy, risk of inflation if cash is injected; market prices and integration of local<br/>markets within a wider system.</li> </ul> |  |
|   | • public works projects are required; and  | <ul> <li>Current conditions and requirements for rehabilitation/reconstruction of infrastructure, physical assets or the environment.</li> <li>Availability of labour-intensive projects that would contribute to long-term food security and services for food-insecure households.</li> </ul>  |
|   | <ul> <li>the necessary non-food inputs, such<br/>as equipment and technical<br/>supervision can be assured.</li> </ul>                                     | <ul> <li>Capacities of partners to plan and manage projects – availability of necessary material inputs,<br/>equipment and technical staff.</li> </ul>   |

#### Additional information required for designing a CFW project:

- Number of target beneficiaries/workers.
- Location of public works to be undertaken.
- Security situation.
- Gender roles.
- Local daily wage rates and cost of living, including medical and funeral costs where the impact of HIV/AIDS is high, to set CFW wage rate.
- Timing and duration of activities.
- Timing of payment.
- Likely duration of project.
- Media and community networks available to publicize the project.
- Partners' capacity staff, equipment, administrative and monitoring systems.
- Availability of banks.
- Benefits of public works for long-term food security.
- Ownership of assets created via public works.
- Environmental implications of public works.

Where there are large numbers of displaced people, employment opportunities should be made available to both displaced people and food-insecure groups within the host population; activities should not be at the expense of the local population.

| Response option   | When it may be appropriate   | Information required to establish appropriateness  |
|---|--|--|
| Cash transfer<br>programmes:<br>cash distributed to<br>target beneficiaries | <ul> <li>In situations where:</li> <li>food is available in local markets but<br/>households lack means of purchasing it<br/>without depleting essential assets; or</li> </ul> | <ul> <li>Market prices of the usual staple and other, less preferred staples.</li> <li>Price trends.</li> <li>Income and purchasing power of food-insecure households. Presence of vulnerable groups who do not participate in economic activities.</li> </ul> |
|   | <ul> <li>the costs of procuring and transporting<br/>food to the affected area are high, but<br/>traders would respond to market demand;<br/>or</li> </ul>                     | <ul> <li>Costs of delivering and distributing food aid.</li> <li>Competitiveness and integration of markets.</li> <li>Ability of traders to respond to increased demand.</li> </ul>  |
|   | <ul> <li>mobilizing food aid would take a long time; or</li> </ul>   | Lead times for the delivery of food aid.   |
|   | <ul> <li>the aim is to support economic recovery<br/>as well as survival; and</li> </ul>   | Prospects for economic recovery without intervention.  |
|   | <ul> <li>there is little risk of inflation due to an<br/>injection of cash; and</li> </ul>   | Risk of inflation.   |

| Response option  | When it may be appropriate   | Information required to establish appropriateness  |
|--|--|--|
|  | <ul> <li>capacity is available for managing the programme; and</li> <li>donors are willing to support a cash</li> </ul>  | <ul> <li>Administrative capacity to implement programme, such as the banking system.</li> <li>Capacity for monitoring and accounting.</li> </ul>   |
|  | distribution programme.  | The policies of potential donors.  |
| Food vouchers:<br>vouchers<br>distributed to target  | <ul> <li>In situations similar to those for cash transfer programmes but where:</li> <li>donors are not willing to make cash available for distribution but are willing to support a voucher system; and</li> </ul>      | The policies of potential donors.  |
| beneficiaries  | <ul> <li>local retailers are willing to cooperate in<br/>the scheme and to receive vouchers for<br/>subsequent reimbursement in cash or<br/>kind (food).</li> </ul>  | The availability of retailers willing to cooperate.  |
| Exchange against<br>produce:<br>food given to<br>affected rural<br>households in           | <ul> <li>In situations where:</li> <li>drought has led to deaths among cattle,<br/>a dramatic fall in the prices paid for<br/>livestock and consequent acute<br/>hardship among pastoralists;<sup>19</sup> or</li> </ul> | <ul> <li>Prices of livestock, and price trends.</li> <li>Terms of trade of livestock against grain and other essential items.</li> <li>Livestock death rates.</li> </ul>                                 |
| exchange for their   | <ul> <li>farmers face an acute food shortage<br/>and would eat their seed stocks;<sup>20</sup> or</li> </ul>   | <ul><li>Poor farmers' on-farm seed stocks.</li><li>Poor farmers' access to food.</li></ul>   |
| own produce for<br>which there is no<br>local market                                       | <ul> <li>marketing systems have collapsed, so<br/>rural producers of cash crops are unable to<br/>sell their produce and buy food.<sup>21</sup></li> </ul>   | Problems of market integration affecting specific areas and produce.   |
| Market assistance<br>programme: <sup>22</sup><br>lower-status food is<br>made available to | <ul> <li>In situations where:</li> <li>the price of the usual staple is no longer affordable to many, owing to shortage and resulting inflation; and</li> </ul>  | <ul> <li>Market prices of the usual staple and other, less preferred staples.</li> <li>Price trends – rate of inflation.</li> <li>Price differential between main staple and low-cost staple.</li> </ul> |
| retailers to sell at<br>affordable prices  | <ul> <li>targeted general rations are not<br/>feasible, especially in urban areas; and</li> </ul>  | Options for assistance directly targeting food-insecure households.  |

<sup>19</sup> In this kind of situation, grain may be given in exchange for animals – destocking – and the meat used in other programme activities.

<sup>20</sup> 

<sup>21</sup> 

In this kind of situation, grain may be given in exchange for seed, which is stored and distributed in time for the next planting. For example, in Mozambique in the 1980s, grain was given in exchange for cashew nuts. See *MAPP-Malawi* case study on the CD-ROM for a brief description of such a programme, implemented by CARE, and supported by USAID. 22 CFSVA Guidelines – Annexes

| Response option    | When it may be appropriate   | Information required to establish appropriateness  |
|--------------------|--|--|
|                    | • retailers are interested in participating in the scheme; <i>or</i> | Numbers of retailers willing to participate in the scheme.   |
|                    | <ul> <li>there is need to revitalize the milling</li> </ul>          | <ul> <li>Existence of milling and storage capacity.</li> </ul>   |
|                    | sector.  | Capacity for fortifying low-cost staple.   |
|                    | In situations where:   | o Location and nature of logistics bottlenecks that inhibit the movement of food from other parts                |
| Market system      | <ul> <li>damaged roads, bridges or other</li> </ul>                  | of the country into the affected area.   |
| support: logistics | infrastructure prevent traders from                                  | • The feasibility of repairing/improving infrastructure to enable greater quantities of food to be               |
| bottlenecks are    | bringing sufficient food into the area; or                           | moved into the area.   |
| reduced or credit  | • traders who would otherwise bring food                             | <ul> <li>The constraints, other than logistics, that prevent traders who normally bring food into the</li> </ul> |
| made available to  | into the area are unable to do so owing                              | area from doing so, or from increasing the quantities that they bring in.  |
| traders            | to lack of finance (credit) or lack of                               | • The credit-worthiness of the traders and the existence of a mechanism - or the possibility for                 |
|                    | access to fuel and spare parts.                                      | establishing one – that makes credit available to traders and assures repayment.                                 |

#### Issues related to cash transfer programmes

Experience of cash transfer programmes is relatively limited, so there are a number of unknowns regarding this type of programme, including:

- the necessary level of purchasing power, and the distance from the supply that ensures an inflow of food or other items;
- how prices behave following an injection of cash;
- the level of cash inflow at which inflation becomes inevitable;
- how beneficiaries of different gender, economic status, etc. spend cash in different circumstances emergency/non-emergency;
- security risks in situations of conflict and political instability.

#### Issues related to exchange against produce programmes

- Rates of exchange should normally be fixed, taking into account the relative prices on local markets both before the emergency and at present.
- The produce received can be used in local relief programmes or be transported to urban markets where it can be sold. It may be back-loaded on the trucks that bring relief food into the area.

#### Non-food support to livelihood activities

| Response option   | When it may be appropriate  | Information required to establish appropriateness  |
|---|---|--|
| Non-food support<br>to livelihood   | <ul> <li>In situations where:</li> <li>targeted households have access to<br/>the natural resource base; and</li> </ul> | Household access to the natural resource base, ownership patterns.   |
| activities: provision of productive inputs  | <ul> <li>targeted households lack productive<br/>inputs; and</li> </ul>   | <ul> <li>Households' stocks of productive inputs, in normal times and now.</li> <li>Households' ability to buy productive inputs – expenditure patterns, assets, access to credit.</li> </ul>  |
| and/or services <sup>23</sup> for<br>rebuilding/restoring<br>the capital assets of<br>food-insecure but<br>economically active<br>individuals and<br>households | <ul> <li>productive inputs of the right quality are<br/>not available; and</li> </ul>                                   | Availability of productive inputs of satisfactory quality in local markets.  |
|   | • this lack limits, or will limit, production.  | <ul> <li>Production levels, normal and at present.</li> <li>Factors affecting production levels: access to the natural resource base, labour availability, security situation and/or access to and availability of productive inputs.</li> </ul> |

#### Additional information required for designing a livelihood support project:

- Number and geographical spread of beneficiaries.
- Likely duration of project.
- Security situation.
- Gender roles.
- Seasonal calendar of livelihood activities.
- Timing of distribution of project inputs.
- Media and community networks available to publicize project.
- Partners' capacity staff, equipment, administrative and monitoring systems.
- Environmental implications of the project.
- Access to functioning markets and banks, particularly for micro-finance projects.

<sup>&</sup>lt;sup>23</sup> Productive inputs may include seeds, tools, irrigation, fodder or other livestock inputs. Services may include veterinary care, extension, improved access to pasture, and financial services, such as emergency loans for rebuilding/restoring the capital assets of food-insecure but economically active individuals and households.

| Response option   | When it may be appropriate  | Information required to establish appropriateness   |
|---|---|---|
| <b>School feeding:</b><br>provision of a<br>nutritionally<br>balanced meal or<br>snack to<br>children/youths at<br>school; provision of<br>take-home rations<br>to children/youths<br>at school | <ul> <li>In situations where:</li> <li>school attendance is low and a school meal would encourage attendance, among girls as well as boys; <i>or</i></li> </ul>   | <ul> <li>School enrolment and attendance rates for girls and boys.</li> <li>Opportunity cost to households for sending children to school, and extent to which food can be an incentive to sending children to school regularly.</li> </ul>                     |
|   | <ul> <li>educational performance is low because children attending<br/>school are hungry, do not get enough food at home and/or have<br/>a diet lacking in variety and low in essential micronutrients; or</li> </ul>                                       | <ul> <li>Children's food consumption – the access to food of schoolchildren's families, patterns of intra-household distribution and diet diversity.</li> <li>Educational performance and the reasons for poor performance, as reported by teachers.</li> </ul> |
|   | <ul> <li>regular attendance at school could help children to overcome<br/>psycho-social trauma or reduce their exposure to abuse and<br/>exploitation, and school feeding could encourage and enable<br/>such regular attendance; and</li> </ul>            | <ul> <li>The degree of stress children have suffered and the extent of psycho-social trauma, as reported by social workers and trained teachers.</li> <li>The risks of abuse and exploitation of children.</li> </ul>   |
|   | <ul> <li>schools have the basic facilities to store and prepare food; and</li> <li>school teachers and parents' committees are willing and have the capacity to organize the preparation and distribution of the food; and</li> </ul>                       | • Schools' capacity to store and prepare food: availability of staff, cooking fuel, cooking utensils and storage space, access to clean water, and good sanitation.   |
|   | <ul> <li>if there is a general ration distribution programme, school<br/>feeding is planned as an integral part of the overall food<br/>assistance strategy.</li> </ul>   | <ul><li>The overall food security assistance strategy.</li><li>Nutrition requirements of school-age children.</li></ul>   |
|   | <ul> <li>Preschool feeding may be appropriate in situations where:</li> <li>preschool-age children have particular nutritional needs that are not met by a standard general ration; <i>and</i></li> <li>preschool-age children attend preschool.</li> </ul> | <ul> <li>Nutrition requirements of preschool-age children.</li> <li>Schools' capacity to store and prepare food: availability of staff, cooking fuel, cooking utensils and storage space, access to clean water, and good sanitation.</li> </ul>                |
|   | <ul> <li>Exceptionally, school feeding may be appropriate in situations where:</li> <li>older children/youths have particular nutrition needs that are not met by a standard general ration;</li> <li>older children/youths attend school.</li> </ul>       | <ul> <li>Nutrition requirements of older children/youths, for their height<br/>and level of activity.</li> <li>Existence of schools.</li> <li>Profile of school pupils.</li> </ul>  |

#### Additional information required for designing a school feeding programme:

- The number of safe learning spaces.
- The numbers of functional and non-functional schools in the area.
- The geographical and social coverage of schools.
- Number of children to be fed.
- Likely duration of the intervention.
- Food preferences and the availability of acceptable foods that can be prepared at school.
- Gender roles and girls' specific needs.

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- Environmental impact, such as of the type of stoves used.
- Communities' willingness to participate.
- Security situation.
- Infrastructure roads, storage capacity, milling facilities, water and sanitation provision.
- Partners' capacity to provide complementary inputs.

| Response option  | When it may be appropriate  | Information required to establish appropriateness   |
|--|---|---|
| Food to other social<br>service institutions:<br>such as orphanages;<br>homes for the elderly or<br>handicapped; hospitals<br>and health centres   | <ul> <li>In situations where:</li> <li>social service institutions do not have the resources to assure adequate food for in-patients or residents; <i>and</i></li> <li>residents' families do not have access to enough food to feed them; <i>and</i></li> </ul>  | <ul> <li>Quantity and quality of food available in each institution relative to number of residents, diet of residents.</li> <li>Nutrition and health status of residents.</li> <li>Current levels of food access for residents' families: <ul> <li>quantity/type of food obtained through normal mechanisms;</li> <li>current consumption levels;</li> <li>sustainability of families' coping strategies.</li> </ul> </li> </ul>   |
|  | <ul> <li>staff and the facilities to store and prepare food are<br/>assured at each institution.</li> </ul>   | • Each institution's kitchen facilities, storage space, cooking utensils, and staff available to prepare and cook food.   |
| <b>Neighbourhood care</b><br><b>programmes (NCPs):</b> <sup>24</sup><br>for unaccompanied<br>children, orphans and<br>vulnerable children<br>where there is high<br>prevalence of HIV/AIDS | <ul> <li>In situations where:</li> <li>there are large numbers of orphans and vulnerable children owing to the HIV pandemic; <i>and</i></li> <li>communities are under strain to provide care for these children, and many preschoolers have little food provision; <i>and</i></li> <li>NCPs will afford protection to this vulnerable age cohort, and will help strengthen village-level food security through agricultural schemes and orphan and vulnerable children initiatives.</li> </ul> | <ul> <li>Numbers of orphans and vulnerable children in the community.</li> <li>Evidence of higher rates of malnutrition among these children.</li> <li>Evidence of higher rates of malnutrition among households supporting these children.</li> <li>Evidence of sexual risk among this age cohort.</li> </ul>  |
| Targeted<br>supplementary<br>feeding with a take-<br>home ration: mothers<br>of malnourished<br>children and other<br>malnourished people<br>provided with a take-                         | <ul> <li>In situations where a general distribution is ongoing and:</li> <li>10–14% of children under 5 are below 80%, or &lt; -2 SD, of median weight-for-height; or</li> <li>5–9% of children under 5 are below 80%, or &lt; -2 SD, of median weight-for-height and there are aggravating factors; and</li> </ul>   | <ul> <li>Prevalence of malnutrition among children aged 6–59 months, specifically, percentage of children with &lt; -2 SD of median weight for height.</li> <li>Presence of oedema among children aged 6–59 months.</li> <li>Presence of other aggravating factors including: a general ration below mean energy requirements, crude mortality rate &gt; 1 per 10 000 per day, epidemic of measles or whooping cough, or high prevalence of respiratory or diarrhoeal disease.</li> </ul> |

<sup>&</sup>lt;sup>24</sup> NCP and orphan and vulnerable children programmes have been developed in the context of PRROs in the Southern Africa region.

| Response option   | When it may be appropriate  | Information required to establish appropriateness   |
|---|---|---|
| home ration in addition<br>to the general ration;   | <ul> <li>it is possible to identify and target malnourished<br/>individuals; and</li> </ul>   | Capacity of partners to screen/select malnourished individuals.   |
| aims to prevent the<br>moderately<br>malnourished becoming<br>severely malnourished,<br>including children under<br>5, older children,<br>children discharged<br>from therapeutic feeding<br>programmes, and<br>pregnant and lactating<br>women | <ul> <li>there is reason to believe that targeted individuals will consume a significant proportion of the food; <i>and</i></li> <li>the ration size allows for some sharing among family members, which is taken into account in the standard recommended ration size for take-home distribution.</li> </ul>                     | <ul> <li>Patterns of intra-household distribution: How is food shared within<br/>the household? Are certain foods reserved for children? For women?</li> </ul>  |
| Targeted<br>supplementary<br>feeding on site:<br>Malnourished children<br>and other malnourished<br>people provided with<br>ready-to-eat food to be<br>eaten on the spot, in  | <ul> <li>In situations where a general distribution is ongoing and:</li> <li>10–14% of children under 5 are below 80%, or &lt; -2 SD, of median weight for height; <i>or</i></li> <li>5–9% of children under 5 are below 80%, or &lt; -2 SD, of median weight for height and there are aggravating factors; <i>and</i></li> </ul> | <ul> <li>Prevalence of malnutrition among children aged 6–59 months, specifically, percentage of children with &lt; -2 SD of median weight for height.</li> <li>Presence of oedema among children aged 6–59 months.</li> <li>Presence of other aggravating factors, including: a general ration below mean energy requirements, crude mortality rate &gt; 1 per 10 000 per day, an epidemic of measles or whooping cough, or high prevalence of respiratory or diarrhoeal disease.</li> </ul> |
| addition to the general ration; aims to prevent   | • it is possible to target malnourished individuals; and  | Capacity of partners to screen/select malnourished individuals.   |
| the moderately<br>malnourished becoming<br>severely malnourished,<br>including children under<br>5, older children,<br>children discharged<br>from therapeutic feeding<br>programmes, and<br>pregnant and lactating<br>women                    | <ul> <li>there is reason to believe that a take-home ration would<br/>be widely shared; or</li> </ul>   | • Patterns of intra-household distribution: How is food shared within the household? Are certain foods reserved for children? For women?  |
|   | <ul> <li>food preparation at the household level is difficult –<br/>households lack cooking fuel and/or cooking utensils; or</li> </ul>   | • Targeted households' access to cooking fuel and cooking utensils.   |
|   | <ul> <li>insecurity levels are such that beneficiaries are not safe<br/>going home with the ration; and</li> </ul>  | Security situation.   |
|   | <ul> <li>it is possible to establish decentralized supplementary<br/>feeding sites close to the homes of the target<br/>beneficiaries, so that opportunity costs for carers are low.</li> </ul>   | <ul> <li>Extent of the area within which target beneficiaries live.</li> <li>Partners' capacity to establish and manage supplementary feeding sites in many locations.</li> </ul>   |

| Response option   | When it may be appropriate   | Information required to establish appropriateness   |
|---|--|---|
| Blanket<br>supplementary<br>feeding with take-<br>home ration: all<br>children and other<br>nutritionally vulnerable<br>individuals provided<br>with a ration to take<br>home, in addition to the<br>general ration | <ul> <li>In situations where a general distribution is ongoing and:</li> <li>15% of children under 5 are below 80%, or &lt; -2 SD, of median weight for height; <i>or</i></li> <li>10–14% of children under 5 are 80%, or &lt; -2 SD, of median weight for height <i>and</i> there are aggravating factors; <i>or</i></li> <li>during the early stages of an acute crisis, before a reliable pipeline can be established for an adequate general ration; <i>and</i></li> </ul> | <ul> <li>Prevalence of malnutrition among children aged 6–59 months, specifically, percentage of children with &lt; -2 SD of median weight for height.</li> <li>Presence of oedema among children aged 6–59 months.</li> <li>Presence of other aggravating factors, including: crude mortality rate &gt; 1 per 10 000 per day; an epidemic of measles or whooping cough, or high prevalence of respiratory or diarrhoeal disease; or a general ration not yet adequate to cover people's mean energy requirements.</li> </ul> |
|   | <ul> <li>there is reason to believe that target individuals will consume a significant proportion of the food; and</li> <li>the ration size allows for some sharing with family members, which is taken into account in the standard recommended ration size for take-home distribution.</li> </ul>  | <ul> <li>Patterns of intra-household distribution: How is food shared within<br/>the household? Are certain foods reserved for children? For women?</li> </ul>  |
| Blanket<br>supplementary<br>feeding on site: all<br>children and other<br>nutritionally vulnerable<br>individuals provided<br>with ready-to-eat food<br>eaten on the spot, in<br>addition to the general<br>ration  | <ul> <li>In situations where a general distribution is ongoing and:</li> <li>15% of children under 5 are below 80%, or &lt; -2 SD, of median weight for height; <i>or</i></li> <li>10–14% of children under 5 are 80%, or &lt; -2 SD, of median weight for height <i>and</i> there are aggravating factors; <i>and</i></li> </ul>  | <ul> <li>Prevalence of malnutrition among children aged 6–59 months, specifically, percentage of children with &lt; -2 SD of median weight for height.</li> <li>Presence of oedema among children aged 6–59 months.</li> <li>Presence of other aggravating factors including: a general ration below mean energy requirements, crude mortality rate &gt; 1 per 10 000 per day, an epidemic of measles or whooping cough, or high prevalence of respiratory or diarrhoeal disease.</li> </ul>                                  |
|   | • there is reason to believe that a take-home ration would be widely shared; <i>or</i>   | • Patterns of intra-household distribution: How is food shared within the household? Are certain foods reserved for children? For women?  |
|   | <ul> <li>food preparation at the household level is difficult,<br/>households lack cooking fuel and/or cooking utensils; or</li> </ul>   | Household access to cooking fuel and cooking utensils.  |
|   | • insecurity levels are such that beneficiaries would not be safe going home with the ration.  | Security situation.   |

#### Additional information required for designing a supplementary feeding programme:

- Number of beneficiaries and their location.
- Likely duration of the intervention.
- Acceptability of the commodities that could be available for the programme.
- Potential sites for supplementary feeding distribution or feeding centres.
- Security situation.
- Media and community networks available to publicize information concerning supplementary feeding.
- Possible causes of malnutrition other than lack of food, such as diarrhoeal disease due to lack of access to sanitation and potable water.

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- Partners' capacity to address underlying causes of malnutrition, other than lack of food.
- Partners' capacity staff, skills, equipment, administrative and monitoring systems to establish and manage supplementary feeding programmes, including availability of cooking fuel, cooking utensils and storage space, access to clean water and sanitation for on-site programmes.
- Infrastructure roads, storage capacity, milling facilities.
- Possible arrangements for monitoring and reporting over the life of the project.

| Response option   | When it may be appropriate  | Information required to establish appropriateness  |
|---|---|--|
| Therapeutic feeding<br>on site: Medical and<br>nutritional treatment<br>provided in health<br>centres or specially<br>established therapeutic<br>feeding centres (TFCs)<br>to save the lives of<br>severely malnourished<br>individuals | <ul> <li>In situations where:</li> <li>there are significant numbers of<br/>severely malnourished individuals –<br/>children and/or adults – or an evident<br/>increase in numbers of severely<br/>malnourished individuals; and</li> </ul> | <ul> <li>Prevalence of severe malnutrition among children aged 6– 59 months, specifically, percentage with &lt; -3 SD of median weight for height and/or oedema.</li> <li>Prevalence of severe malnutrition among children aged 5–9.9 years, specifically, percentage with &lt; -3 SD of median weight for height and/or oedema.</li> <li>Percentage of adults aged 20–59.9 years with BMI &lt; 16, excluding disabled people and pregnant women and/or oedema.</li> </ul> |
|   | <ul> <li>case loads are sufficiently<br/>concentrated to warrant establishing<br/>TFCs within all communities<br/>concerned; and</li> </ul>   | Geographical distribution of cases of severe malnutrition.   |
|   | <ul> <li>trained health staff are available, or<br/>can be made available to supervise all<br/>TFCs.</li> </ul>   | Availability of trained health personnel.  |
| Community-based<br>therapeutic care:<br>therapeutic foods   | <ul> <li>In situations where:</li> <li>there are significant numbers of<br/>severely malnourished individuals –<br/>children and/or adults – or an evident<br/>increase in numbers of severely<br/>malnourished individuals; and</li> </ul> | <ul> <li>Prevalence of severe malnutrition among children aged 6–59 months, specifically, percentage with &lt; -3 SD of median weight for height and/or oedema.</li> <li>Prevalence of severe malnutrition among children aged 5–9.9 years, specifically, percentage with &lt; -3 SD of median weight for height and/or oedema.</li> <li>Percentage of adults aged 20–59.9 years with BMI &lt;16, excluding disabled people and pregnant women, and/or oedema.</li> </ul>  |
| provided for severely<br>malnourished children<br>through take-home<br>supplementary feeding<br>with community-level<br>follow-up by trained<br>health workers  | <ul> <li>populations are widely dispersed<br/>and/or separated by hills, rivers, etc.,<br/>making it difficult to establish TFCs<br/>accessible to all concerned<br/>households, so default rates are likely<br/>to be high; and</li> </ul> | <ul> <li>Geographical distribution of cases of severe malnutrition.</li> <li>Nature of the terrain/topography.</li> </ul>  |
|   | <ul> <li>trained community health workers are<br/>available to provide home-based<br/>follow-up.</li> </ul>   | Availability of trained community health workers.  |

#### Additional information required for designing a therapeutic feeding/care programme, on-site or community-based:

- Numbers and geographical spread of affected individuals.
- Duration of intervention.
- Potential sites for establishment of treatment centres, within health centres or as separate TFCs.
- Security situation.
- Capacity of health structures to treat severely malnourished people: availability of intensive health care facilities.
- Capacity of health structures to address underlying causes of malnutrition.
- Capacity of partners to provide social and psycho-social support for care givers bringing children for treatment.
- Possible arrangements for monitoring and reporting over the life of the project

## **ANNEX 16: Report outline**

The most important output of a CFSVA is the analysis report. Presented below is a typical layout of this type of report, showing the chapters, topics/subjects/headings.

#### Notes:

- This outline is not exhaustive, nor have all topics to be included; other relevant topics can be added
- This outline is a suggestion; it is not a strict rule. Some changes may be made depending on the context. Ideally, most/all topics listed here should be covered, however, many points could be covered by one line or paragraph.
- Literature review, secondary data analysis, and possibly a number of focus groups and/or key informant interviews should precede primary data collection and already help defining the hypothesis that will lead to the conclusions on food security and vulnerability. Secondary data and the primary data collection will have to provide the evidence confirming or rejecting those hypotheses.
- Annex tables will show all important data disaggregated by all important classifications, such as big administrative zones, food security zones, livelihood groups, food-security groups and gender. Margins of error should be indicated, as well as sample size in the different strata.
- The main text has to focus on the factors relevant for food security and how they lead to make the overall conclusions, data should support the statements made. The main conclusions must answer the "VAM questions" (who, how many, where, why, interventions).
- The sources of information are highlighted for each section. However, this is only a suggestion; the source of data for these sections will differ from survey to survey. Information sources include:
  - SD = Secondary Data
  - HH = Household survey data
  - FG = Focus Group data
  - KI = Community/Key Informant data
- Information from different sources (literature, secondary data analysis, community survey, focus groups discussions, household survey, etc.) is combined and compared to discuss the issues related to food security. Hence the report format is not organized by information "source".

## **Executive Summary**

- 1 Scope and Methods
- 2 Who are the hungry poor?
- 3 How many are they?
- 4 Where do they live?
- 5 What are the underlying causes of food insecurity?
- 6 What are the interventions recommended?

## Introduction

- 1 General information on country
- 2 General information on FS in country

## Part I – Study objectives and methodology

- 1 CFSVA objectives
- 2 Definition, terminology and concepts
- 3 Sources of data
  - 3.1 Secondary data review
  - 3.2 Focus group discussion
  - 3.3 Primary data collection
    - 3.3.1 Survey instruments
      - 3.3.1.1 Key informants
      - 3.3.1.2 Focus groups
      - 3.3.1.3 Households
      - 3.3.2 Sampling procedures
      - 3.3.3 Data entry and statistical analysis
- 4 Limitations to the study

## Part II – Food Security and Vulnerability Analysis

## 1 Political, Economical, Institutional Environment

- 1.1 Political context (SD)
  - 1.1.1 Poverty reduction and Food security Policies
  - 1.1.2 WFP programs
- 1.2 Economic characteristics
  - 1.2.1 Economy (SD)
    - Macro economic trends, economic structure, businesses, imports. exports, sources of hard currency
- 1.3 Aggregate availability and markets

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- 1.3.1 Food markets
  - 1.3.1.1 Aggregate availability (SD)
  - Stocks, production, imports, exports,
  - 1.3.1.2 Surplus and deficit areas (SD)
    - Surplus deficit map
  - 1.3.1.3 Food Markets (SD, KI)
    - 1.3.1.3.1 Prices and price trends
      - Staple food commodity prices (wholesale, retail) (nominal and real)
      - Major determinants of price changes
      - Import parity prices
      - Consumer Price Index (Food versus Overall) at national and subnational level
    - 1.3.1.3.2 Structure
      - Marketing infrastructure: Transportation and Storage (household, traders, etc)
      - Marketing Chain (importers/producers, distributors, wholesalers, retailers) and price structure
    - Market integration, commodity flows
  - 1.3.1.4 Local milling needs and capacity Trade flows (SD)
    - Including volumes
  - 1.3.1.5 Vulnerable household's dependence (HH)
    - Net buyers net sellers of main staple food
- 1.3.2 Recent history of food (in)security (SD)
  - 1.3.2.1 Trends (SD)
  - 1.3.2.2 Market Shocks, responses and impact (SD)
  - 1.3.2.3 Future Trends (SD)
- 1.3.3 Food Aid
  - 1.3.3.1 National and International food aid programs
  - 1.3.3.2 Actual food aid commodity flows (SD + HH)
    - Quantities distributed, source, etc
    - Assistance received at household level

#### 2 Asset Endowments

- 2.1 Natural Capital
  - 2.1.1 Geography, climate and natural resources (SD)
    - Distribution of rainfall, soil suitability, other production factors
  - 2.1.2 Land distribution/tenure (SD, HH)
    - Area under cultivation by various households
    - Land tenure arrangements by various households

- 2.1.3 Cropping season (SD)
  - Crop calendar
- 2.1.4 Livestock (SD, HH)
  - Livestock ownership
- 2.1.5 Agricultural production at household level (SD + HH)
  - 2.1.5.1 Farming systems (SD/ HH)
    - Crop calendars, family labour, hired labour, agricultural strategies, production of food crops at household level, main crops cultivated, estimation of self consumed production, technology level.
- 2.2 Human capital
  - 2.2.1 Demographics (SD / HH)
    - Age pyramid, female headed households, age of household head, marital status, household size, dependency ratio, occupation ratio
    - 2.2.1.1 Population displacements (SD, FG, KI)
  - 2.2.2 Literacy/Education (SD)
    - 2.2.2.1 Education (SD) + HH
      - Education level of household members
      - Enrolment rates, attendance, absenteeism (=livelihood outcomes)
    - 2.2.2.2 Literacy (SD + HH)
    - Literacy rates
- 2.3 Physical and financial capital
  - 2.3.1 Productive assets (SD + HH)
    - Common physical infrastructure: transportation, irrigation,
    - Household level productive assets, equipment
  - 2.3.2 Non productive assets (SD + HH)
    - Common physical infrastructure: schools, health centres
    - Housing, amenities,
  - 2.3.3 Household Financial assets (SD + FG + HH)
    - Long term savings, valuables, access to credit,
  - 2.3.4 Wealth index
- 2.4 Social capital
  - 2.4.1 Social assets (SD + FG)
    - Networks, social and ethnic groups, community based safety networks
    - Land rights at community level

## 3 Livelihood strategies of households

- 3.1 Main activities and income sources (HH)
  - Income (cash / kind) for main livelihood activities and livelihood groups; seasonal calendars
  - 3.1.2 Livelihood groups (HH)
    - Groups of households with similar livelihoods strategies
  - 3.1.3 Reserves (FG + HH)
    - food stocks, savings, debts
  - 3.1.4 Household expenditures (HH)
    - Expenditure patterns, total HH expenditures, per capita expenditures, food expenditures, proportion of expenditures spent on food , seasonality

## 4 Current Household Food Security Status

- 4.1 Food consumption patterns (HH)
  - Dietary patterns, number of foods consumed
  - Number of meals consumed
- 4.2 Food consumption Classification (HH)
  - 4.2.1 Construction of food consumption score
  - 4.2.2 Household food consumption groups
    - Food score (frequency weighted diet diversity score based on food groups) and classification,
  - 4.2.3 Confirmation of the food consumption score
    - CSI coping strategy index
    - Is the food consumption score in line with well supported, known, directional relationship with food security?
    - Contextualization of the FCS based on seasonality and long term trends
  - 4.2.4 Geographic distribution of consumption
- 4.3 Underlying Causes of food insecurity (SD, FG+HH)
  - Commonly cited reasons of food insecurity (SD) and determinants of household food insecurity (HH)
- 4.4 Household food security profiling
  - Description of the typical food insecure households and particular groups with higher food insecurity

## 5 Food utilization and Nutritional Status

- 5.1 Health, Hygiene and care practices (SD)
  - 5.1.1 General (SD)
  - 5.1.2 Women/mothers, maternal care (SD + HH)
    - Child care, vaccination rates

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- 5.1.3 Children (SD + HH)
  - Morbidity, recent episodes of fever, diarrhoea, cough,
- 5.1.4 HIV/AIDS (SD+HH)
  - Prevalence of chronic illness, mortality after chronic illness, (male- female household head)
- 5.1.5 Access to health services (SD + HH)
  - Use of health facilities
- 5.1.6 Hygiene conditions (SD + HH)
  - 5.1.6.1 Water
    - Access to safe water supply, distance to water supply
  - 5.1.6.2 Sanitation
    - Use of various types of toilet
- 5.2 Utilization of food at household level (SD + FG + HH)
  - Food preparation, feeding practices, intra household food distribution
- 5.3 Women's and children's nutritional status (SD + HH)
  - Malnutrition rates, mortality rates (child and other)
- 5.4 Underlying and immediate causes of malnutrition (SD + HH)

### 6 Risk analysis

- 6.1 Hazards/shocks: (SD, HH)
  - Overview of hazards in the country and their historical impact. Description of covariate and idiosyncratic shocks, How were various households affected by a recent shocks
  - Likely future shocks, probability, time dimension, areas exposed
  - Hazard map
- 6.2 Vulnerability (HH)
  - How would various household livelihood strategies be exposed to different shocks
  - Risk management strategies used by population groups in different circumstances.
  - Vulnerability map
- 6.3 Risk and likely impact
  - Where hazard and vulnerability come together, the risk for food insecurity is highest. Geographical distribution of risk to food insecurity from various types of shocks

### 7 Conclusions

- 7.1 Livelihood food security and vulnerability profiles
  - Including gender roles, need, differentials...
- 7.2 Geographic Food security and vulnerability profiles
- 7.3 Priority areas and causes of food insecurity and vulnerability

#### 8 Recommendations

- 8.1 Food interventions by priority area and priority group
- 8.2 Non-food interventions by priority area and priority group

#### References

• References to sources of data and information can be referred to in the text and listed here, or alternatively included as footnotes in the body of the report.

### Annexes

Standard annexes include:

- Output tables resulting from the survey. (In the main text, include only tables, figures, and maps that are important for the discussion)
- Any other additional graphs, maps, figures that are not needed in the body of the report but are considered to be of interest.
- Detailed description of sampling procedures.

## **Other Annexes**

Any other annexes that could be pertinent include:

- Questionnaires
- Metadata