Annex 4

Questionnaire design

A questionnaire is a written instrument used to obtain information from study subjects. Developing a questionnaire is the last step in designing a study after all variables of interest have been identified. By first identifying the information that is needed to answer the study objectives, questions will be limited to those needed to obtain the required information. As a general rule questionnaires should be as simple as possible, collect only needed information and be valid. A valid questionnaire is

- **Relevant** – Does the questionnaire obtain the information it was designed to seek?
- **Complete** – Was all desired relevant information obtained?
- **Accurate** – Can reliance be placed upon the responses to the questions?

**Questionnaire methods**

Questionnaires can be administered by an interviewer or answered by the respondents themselves (self-administered).

Self-administered questionnaires can be mailed or given in person to the respondents. They are feasible in a literate population if the questions are short and simple. If questions are complex or nested or if significant probing is required, interviewer-administered questionnaires may be preferable. Interviews conducted by interviewers can be personal (face-to-face) or by telephone. Telephone interviews usually yield shorter answers than personal interviews, with respondents tending to favour the first in a list of possible answers.

Self-administered questionnaires offer the following advantages:
- no interviewer bias;
- less time spent on administration;
- easier questioning of larger numbers of people;
- more leisurely, which may permit more careful responding;
- perceived as more anonymous and may therefore yield more accurate data on sensitive issues;
- printed visual aids can be incorporated.

Interviewer-administered questionnaires offer the following advantages:
- respondent literacy not necessary;
- questions and responses can be clarified;
- allows probing for additional information;
- complex and open-ended questions are possible;
- answering of questionnaire by intended person is assured;
- fewer “blanks”;
- participation potentially increased by personal contact.

There should be an introduction to all questionnaires that explain the purpose of the study to interviewees and assure them of confidentiality.
Questions

Questions may be closed-end or open-ended. Closed-end questions allow a limited number of answers, leaving no room for additional information to be volunteered; they require only recognition and a choice from among answer options. Advantages of closed-end questions are greater precision, uniformity, easier recall for the respondent, easier coding and easier analysis than open-ended questions. Because open-ended questions are not pre-categorized, they gather more information but require respondents to have a good recall and to explain their answers. In relation to food consumption, closed-end questions may be preferred to open-ended as most persons cannot spontaneously or accurately recall all foods eaten over a period of several days.

Closed-end question

- Have you eaten any of the following items in the past four days:
  - Poultry? Yes / No / Don’t know
  - Pork? Yes / No / Don’t know
  - Beef? Yes / No / Don’t know
  - Lamb? Yes / No / Don’t know

Open-ended question

- List the types of meat that you have eaten in the past 4 days.

____________________________
____________________________
____________________________
____________________________

In the initial stage of an investigation, open-ended questions are likely to be preferred to identify relevant topics and determine the full range of possible answers. Once the exploratory stage has been completed, questionnaires may use predominantly closed-end questions to focus on issues identified as relevant to the investigation.

Checklist of points to consider when drafting questions

- Keep wording informal, conversational and simple.
- Avoid jargon and sophisticated language.
- Keep questions appropriate to educational, social and cultural background of the respondents.
- Avoid long questions (but vary question length).
- Avoid leading questions (“You surely agree with me, that …”).
- Avoid negative questions.
- Avoid questions beginning with “Why”.
- Avoid hypothetical questions (“Imagine that …”).
- Limit each question to a single subject.
- Pay attention to sensitive issues.
- Check the adequacy of the list of responses to closed-end questions.
- Avoid a large proportion of responses being in the “other (specify) ……” category.

1 Source: Smith, 1991.