

3.

Collecting Anthropometric Data Through Surveys

The type of anthropometric data collected will depend on the reason for the survey. When the survey results will be used for long-term planning, the information needed might be different than information for program management. The evaluation of Title II programs is a situation in which long-term changes in stunting or undernutrition need to be reflected. Monitoring of growth promotion programs will require different types of information.

The collection of anthropometric data may be the main purpose of a survey or it may be part of a larger more comprehensive survey such as the KPC (Knowledge, Practice, Coverage). Information on individuals and households should be collected to interpret anthropometric data. Deciding what information will be collected, how it will be collected and from whom it will be collected is all part of planning the survey. The steps that should be taken to conduct a survey are outlined below.

3.1. Steps for Conducting a Survey

The following checklist outlines the steps necessary for conducting a survey. All of these steps should be clearly thought out before the survey begins.

- **Define survey objectives.** The first step is to determine the specific purpose of the survey. Make a detailed list of what is expected to be achieved and what information is needed.
- **Budget for the survey.** Develop a detailed item-by-item budget for all the costs and expenses of the survey, including personnel, supplies, materials, transportation, accommodation and meals. Determine the costs associated with data entry, cleaning, analysis, reporting and testing of all steps to ensure smooth implementation.
- **Choose the survey design.** Depending on the goal of the survey, the survey planning team should review different design possibilities such as a case-control or reflexive design before choosing the final design. Having a clear idea of the survey goals will help to determine which people or which groups of people to include in the survey and the best method for collecting the information.
- **Plan for personnel, facilities, and equipment.** Conducting a survey within a limited time-frame (usually less than six months) requires early planning for materials and staff. During this stage the survey planning team decides how many field staff and how many office personnel they will need and how they will recruit them. Any advance work needed to find and hire staff is planned at this point. Other needs such as office

space and equipment are also considered and planned. Specific equipment is needed to do anthropometric assessments as part of a survey and is discussed in Part 4.

- **Select the sample.** Once the survey goals and methods of collecting the information have been decided, the groups and numbers of people to be interviewed are selected. A sample is a small part of the group being studied that has been chosen to represent the whole group. There are special considerations when choosing a sample for anthropometric assessment. Sampling is discussed in Appendix 3 and the reader is referred to the FANTA Sampling Guide at www.fantaproject.org/publications.

- **Develop the questionnaire.** The list of essential information needed to meet the survey objectives forms the basis of the survey questionnaire. A standard, printed questionnaire ensures that all the respondents are asked the same questions and enables the survey responses to be tabulated easily and quickly. The questionnaire may need to be translated into local languages. Translated questionnaires should be translated back to the original language by another translator and compared to the original questionnaire. Enumerators need to be trained in the appropriate use of the translation. See Figure 5.6 for a sample questionnaire.

- **Pre-test the questionnaire.** Before the questionnaire is finalized, it should be tested for content and length; the questions should gather the needed information and should be easily understood by both interviewers and respondents. In the pre-test, a small number of interviews are conducted and the questionnaire is revised on the basis of these results and comments from the interviewers.

- **Train personnel.** Training of field staff is a vital step in the survey process; accurate, meaningful information can be collected only if interviewers thoroughly understand all their field instructions and procedures. When all the field materials have been prepared and finalized, and the field staff has been hired, all interviewers and supervisors should be brought to a central location to be taught survey procedures, how to collect the data and how to

use the questionnaire. When anthropometric assessment will be part of the survey, correct methods for taking measurements should also be part of the training schedule (see Section 5.2). If the actual survey is delayed for more than three weeks following training, it will be necessary to retrain personnel.

- **Standardize the anthropometric technique.** The training of personnel on specific measurement and recording techniques should include not only theoretical explanations and demonstrations, but also provide an opportunity for participants to practice the measurement techniques, as well as reading and recording the results. Once all personnel have adequately practiced the measurement and recording techniques, and feel comfortable with their performance, standardization exercises should be carried out to ensure that all interviewers acquire the skills necessary to collect high quality data. Details of these exercises are presented in Appendix 6.

- **Interview.** The success of a survey depends on the quality of the field procedures, supervision and interviewing. Interviewers should follow sampling and interviewing instructions precisely and accurately. They need to keep in touch with their field supervisor and bring any problems or difficulties to their attention.

- **Supervise the data collection.** Once the interviewing begins, field supervisors should be present to assist interviewers with problems that may arise in finding the correct households, conducting the interviews or completing the work on time. Field supervisors, in addition to solving field problems, are responsible for distributing materials, reviewing and checking completed questionnaires and making progress reports to the central office. Detailed guidelines for supervisors are presented in Appendix 7.

- **Edit and code the interviews.** Completed interviews should be reviewed to make sure all the questions have been asked and the answers have been recorded clearly. Someone from the survey planning team should check all numerical codes on the questionnaire and assign codes to any responses written

in respondents' own words. Some surveys directly enter data into the computer at the time of the measurement. This improves quality and speed but requires functioning equipment in often difficult conditions.

- **Tabulate the data.** Whether the survey results are to be compiled by hand or by computer, the responses for each questionnaire will have to be assigned numerical codes. This process is usually simplified by including numerical codes for each of the response categories on to the printed questionnaire form. When the interviews are completed, these codes are then transferred by hand to tabulation sheets or the codes can be entered into a computer. Both of these methods allow the survey results to be read and interpreted by means of statistical tables and percentages. As field computers and satellite communication become more common, it will be possible to enter data directly by the interviewer with immediate feedback for possible errors in measurement and recording.

- **Analyze and report the survey results.** On the basis of the tables prepared, the survey data are studied and interpreted, and conclusions are drawn about the nutritional and socio-economic conditions of the households in the project area. The report on the survey contains the most important findings and conclusions, statistical tables and a description of the procedures used in conducting the survey. The survey results should be presented in a clear and straightforward manner.