

CHAPTER 5

PREPARING FOR DATA COLLECTION

This chapter is written for survey coordinators and technical resource persons.

It will help you to:

- Make logistical arrangements
- Prepare the questionnaire and training materials
- Select and train fieldworkers
- Choose and prepare the equipment
- Carry out the pilot study
- Set up computers and hire data processing staff
- Make arrangements for returning questionnaires to headquarters
- Prepare for collecting supplementary information
- Address ethical considerations

MAKING LOGISTICAL ARRANGEMENTS

Logistical arrangements include (1) setting up central headquarters, (2) contacting local authorities where the survey will be carried out, (3) deciding on the size and composition of the field teams, (4) arranging accommodations, transportation and security, and (5) arranging to obtain or prepare copies of local maps.

SETTING UP HEADQUARTERS

The survey must have a central headquarters, preferably in the capital, from which the whole operation will be coordinated. It is often possible to set up this office at a government institution such as a national statistical office or ministry of health. Usually, two to three rooms are needed for general administrative activities, in addition

to meeting rooms where the training can take place. The headquarters office will hold the computing equipment and serve as the storage place for questionnaires. The rooms where questionnaires and data-processing equipment are kept must be secure, so that only survey

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personnel can access them. Telephone or radio facilities are necessary for keeping contact with the field teams.

CONTACTING LOCAL AUTHORITIES

In some areas, the arrival of a team of strangers may be regarded with suspicion. National authorities should prepare a letter to send to local authorities well before survey staff contact them. In the past, survey teams' failure to contact local authorities in advance to let them know what they would be doing has caused problems. In one extreme example in Latin America, the interviewers who had not contacted the local authorities before arriving were arrested. You can avoid such problems by contacting local authorities and community leaders before beginning the study, to ask for their permission and to advise them of the team members' arrival dates. You can also ask them at this time to identify suitable local guides and, if necessary, translators. Another area in which local authorities may be helpful is in arranging accommodations and meals for the survey team.

DECIDING ON THE SIZE AND COMPOSITION OF THE FIELD TEAMS

The number of interviewers required depends on the sample size, the number of days to be spent interviewing and on the number of households one interviewer can complete in a day (or the number of clusters a team can complete in a day). You can estimate this number from the length of a working day divided by the amount of time it takes to complete one interview (determined when you pre-test the questionnaire – see below), allowing some travel time. You should keep in mind that travel time will usually be substantially longer in rural than in urban areas.

EXAMPLE:

The pre-test has shown that an interviewer will need approximately 60 minutes to complete all interviews in a household, on average. You also estimate that 10 more minutes will be needed to move from house to house. Considering a 6-hour working day (to allow for transportation to and from the selected area and for a midday break), one interviewer would cover about five households a day $[(6 \text{ hours} \times 60 \text{ minutes}) \div 70 \text{ minutes}]$. A four-interviewer team would cover 20 households a day, which could correspond to the size of a cluster.

To estimate the total duration of your survey, you should also allow for travel time from town to town, 1-day breaks every week, and travel time of fieldwork teams from headquarters to the field and back. You should also make sure to allow time for call-backs, as well as unanticipated delays.

EXAMPLE:

In Chapter 2, we estimated that 32 interviewers would cover 6,000 households in 40 working days, but we allowed a further 14 days for travel from town to town and for unexpected delays.

You can calculate the number of interviewers needed using this formula:

$$\text{Number of interviewers} = \frac{\text{Sample size}}{\text{Number of days available} \times \text{Households per interviewer per day}}$$

EXAMPLE:

If the sample size is 6,000 and you want the work done in 40 days, and if each interviewer can do 5 interviews a day, the required number of interviewers will be $6000 \div (40 \times 5) = 30$ interviewers

An alternative way of calculating the number of interviewers needed and the total number of days needed to complete the fieldwork is to take into account the number of teams needed to begin with, and follow this by calculating the number of interviewers needed. The following formula can be used for this purpose:

$$\text{Number of teams} = \frac{\text{Sample size}}{\text{Desired length of fieldwork} \times \text{Number of interviews per team per day}}$$

EXAMPLE:

Continuing the example in Chapter 2, we calculate the number of teams needed as follows: We have a sample size of 6,000 households and we want to complete the fieldwork in 40 working days. We estimate that a fieldwork team composed of one supervisor, one editor and four interviewers will be able to complete 20 households per day, which is our cluster size. Then, $6000 \div (40 \times 20) = 7.5$. Rounding this up to allow for call-backs, unexpected delays, etc., we get eight teams – in other words, 32 interviewers.

The advantage of this approach is that it makes it possible to take into account the fieldwork teams to begin with, and allows the linking of cluster size with team size, composition and fieldwork duration.

If possible, avoid using a large number of interviewers. Having a large number of interviewers means that fieldwork can be conducted over a shorter period of time; however it also means that it will be more difficult to ensure high-quality training and supervision. UNICEF recommends that the length of fieldwork and the number of field staff be balanced in such a way that the number of interviewers is kept at a size that will enable standardized training to be organized centrally and high-quality supervision of fieldwork to be carried out. A relatively small number of interviewers will make it possible for the same trainers to provide training to all interviewers, thus ensuring consistency. As discussed later, it is crucial to monitor the fieldwork operation and provide feedback to interviewers before a large number of households have been interviewed. For this to happen, it is necessary that fieldwork be conducted at a pace that will allow for the identification of systematic errors, if any, and feedback provided to field teams before it is too late.

In countries where the fieldwork will have to be carried out by different teams in each region or district and training will be provided locally, you should make sure that the training for each team is the same, to the extent possible. It is best to use the *same trainers* and training materials for *all* the survey fieldwork training. This means that one group of trainers, who know the requirements of the survey very well, should do all the training, even if this means that they must repeat the training course several times.

Once you have decided how many interviewers are required, work out the team composition. The team composition and the number of interviewers per team will have to be decided based on a number of factors: the expected duration of interviews, the content of the questionnaire, the size of clusters, etc. For instance, if anthropometric measurements will be undertaken, the team will have an additional workload, and it will be necessary to have the editor on the team carry out measurements as well as edit questionnaires with help from the supervisor. There may be cases where anthropometry will not be included in the survey and cluster size will be small, say 12. In this case, a team composed of a supervisor, plus three interviewers, assuming that they can complete four households per day, will be sufficient. On the average, however, for a typical MICS3 covering most of the core modules plus a number of additional and optional modules, each team will need one supervisor, one editor, one driver (unless public transportation is used) and three to five interviewers (depending on how many households an interviewer can complete in a day and the cluster size). A common team composition will include seven persons: supervisor, editor, driver and four interviewers. This arrangement assumes that the vehicles will be large enough to carry seven persons plus their equipment, questionnaires and personal luggage.

When in doubt, be conservative. If you are not sure whether each interviewer can do four or six interviews a day, choose the smaller number. Allow plenty of time for travel and for rest, since fieldwork can be very tiring.

ARRANGING TRANSPORTATION, ACCOMMODATIONS AND SECURITY

Transportation may be provided by government offices or arranged privately – for example, by renting cars. When using government vehicles, ensure that they are well maintained and that there will be no conflicting demands for them during the fieldwork period. Allow funds in the survey budget for fuel, maintenance and unforeseen repairs, or ensure that they will be covered by government funds (you will need to ensure that vehicles can be re-fuelled and serviced 7 days a week during fieldwork). Estimate fuel needs by calculating the typical distances to be travelled from town to town and within each selected area.

Make plenty of allowance for extra mileage, since the actual distances to be travelled are often underestimated.

It is often possible to arrange for the team's accommodations with local communities: Teams may sleep in guesthouses, army quarters or even the mayor's house. If private accommodations are arranged, make sure that the interviewers get a daily allowance that is sufficient to cover their costs. Meals may also be arranged with the local authorities, as mentioned above. Many places have no commercial restaurants, so meal arrangements have to be made in advance.

Security issues are also important. Fieldwork may take place in urban slums or in rural areas where there may be security problems. Local guides are often useful in anticipating and avoiding security risks. These issues must be considered in advance.

Adequate arrangements for transportation, accommodations, meals and security are essential not only for ensuring high-quality and timely data collection, but also for the psychological well-being of the interviewing team.

On the other hand, there have been cases where, due to envisaged security problems, the police or the military has accompanied fieldwork teams to the clusters, and this has resulted in high refusal rates and reluctance of the local community to cooperate with the fieldwork team. Such situations will, of course, depend on the political context, and consideration should be made of the possible effects on data quality of taking such precautions. However, the priority should always be the security of the fieldwork team.

Finally, careful arrangements should be made for paying the fieldworkers and supervisors as well as providing them with 'pocket money' for meals, accommodations and unexpected expenses. Timely payment is essential for maintaining the team's morale.

OBTAINING AND PREPARING COPIES OF LOCAL MAPS

Before the fieldwork begins, you should obtain copies of maps indicating the large areas (states, provinces, districts, towns, etc.) as well as the small areas (villages, census enumeration areas, etc.) in which the survey will be conducted. These may be available from the census bureau or another government office. Army maps are often very useful, if it is possible to gain access to them. Make sufficient copies of all maps in advance.

PREPARING THE QUESTIONNAIRE

The questionnaires you need for conducting your survey are provided in Appendix Two. Before training begins, you will need to translate the questionnaire and the instructions for interviewers, supervisors and editors into all the major local languages. As explained in Chapter 3, do not expect the interviewers to translate the questions as they ask them. Different interpretations of the questions will make the data useless.

One person, preferably a native speaker of the language, should translate the questionnaire. Following that, another translator should independently translate the questionnaire back into the original language. The two versions can then be compared. Be sure to consult technical people, familiar with the terms used in the questionnaire, especially when translating words for certain health conditions. Discuss any words or terms that seem to be ambiguous or confusing, and agree on the correct translation.

All the interviewers must ask the questions in the same way.

When more than one local language exists in the area to be surveyed, use this translation procedure for all the questions and the instructions, for each language that will be used. Remember to give the translators very clear definitions of all the terms used in the questions. The survey coordinator may need to work closely with the translator to ensure that he/she understands the meaning of the questions. The correct definitions are given in the Instructions for Interviewers (Appendix Three).

EXAMPLE:

Make sure the order of the questions is not changed during the translation process. Take particular care over the translation of phrases such as 'seek advice or treatment' and 'since this time yesterday'. Be careful, as well, when referring to answers from previous questions (for example, 'during this last episode of diarrhoea').

PRE-TESTING THE QUESTIONNAIRE

You must pre-test the translated questionnaire in the field. The pre-test should identify potential problem areas, such as dates of birth or vaccinations, unanticipated interpretations and cultural objections to the questions. Apply the pre-test to respondents similar to those who will be interviewed during the survey. The survey coordinator should do the pre-test with the help of future supervisors or interviewers – well before fieldworker training is to take place. Make sure to work with individuals who will be able to provide feedback at the end of the pre-test exercise. Do not make final copies of the questionnaire for the survey until *after* you have pre-tested, and, if necessary, revised it.

The objectives of the pre-test were discussed in Chapter 3 and are not taken up here. However, a number of additional points are indicated.

- It is very important to assess the duration of interviews during the pre-test, since this influences the plans for fieldwork, planned workload for interviewers and, most importantly, helps you assess whether the duration of the interviews will be appropriate for respondents. Although there are no standard recommended durations for interviews, it is important to make sure that interviews are not so long that they

- fatigue respondents and lead to the collection of poor quality data. Therefore, make sure to include starting and ending times on your questionnaires during the pre-test, and evaluate these data at the end of the pre-test. In doing so, also note that during the pre-test, interviewers are still learning the questionnaire, so the time spent per interview is longer than it will be in the field after they become more experienced.
- Regarding the duration of the pre-test itself: A pre-test exercise for the global MICS3 questionnaires has shown very clearly that 1 week of training is not sufficient. Depending on the length of the questionnaires, pre-test training should probably run for 1 to 2 weeks, plus the pre-test fieldwork exercise.

Once the questionnaire has been translated and pre-tested, you will need to make copies of it to use in field staff training and in the survey itself. When preparing the questionnaire for printing, remember the following:

- Do not change the layout of the questionnaire. In particular, do not try to squeeze too many questions onto a page. A good layout helps to reduce interviewer error in the field. If you use the layout given for the questionnaires, data can then be entered directly into the computer. This saves time and effort.
- Use good-quality paper. This will help you to write clearly and will prevent the questionnaires from tearing.
- Use a heavier stock of paper for the cover of each questionnaire, preferably in a different colour, so you are able to easily differentiate them.
- Print the information panels of each questionnaire on the outside of each cover, rather than on inside pages, to permit staff to find questionnaires according to the identification fields without having to open the questionnaire.
- Ensure that questionnaires are stapled together well, with a minimum of three staples per questionnaire, preferably with the staples on the spine of the questionnaire.
- Print more copies than you need. There will always be some wastage, and extra copies are needed for training. Allow a separate set of questionnaires for each household in your sample.

The manual for interviewers, supervisors and editors should be translated with the same care as the questionnaire. Pre-test it by giving it to potential interviewers, supervisors and editors. Have them read the relevant manual and discuss it with them to identify any instructions that are unclear.

SELECTING THE FIELDWORKERS

The quality of the information obtained from a survey depends on the quality of the work done in the field. Good survey organization and thorough fieldwork are vital.

A team of interviewers and their supervisors and editors will do the fieldwork. A detailed description of each of their tasks is provided in Chapter 6, but the brief job descriptions given

below will help you identify potential candidates.

The *field supervisor's job* is to:

- Identify the clusters to be surveyed
- Supervise interviewers as they perform the survey
- Ensure that the interviewers follow instructions
- Answer interviewers' questions as they arise
- Control data quality by checking for errors during interviewing, checking that forms are completed fully and correctly, and checking that all respondents are answering the questions
- Identify problems and retrain interviewers who are doing their job incorrectly.

The *field editor's job* is to:

- Monitor interviewer performance by:
 - Observing several interviews every day, especially during the early stages of fieldwork
 - Editing all completed questionnaires in the field, before leaving the cluster
 - Conducting regular review sessions with interviewers
 - Compiling completed questionnaires from a cluster and packing them up to be sent to the central office
- Obtain anthropometric measurements of children under 5 years of age.

The *interviewer's job* is to:

- Identify the specific households to be surveyed
- Gain the consent of respondents to be interviewed
- Conduct interviews using the standard questionnaire
- Maintain standard procedures in conducting the interviews and recording the answers.

The interviewers, supervisors and editors should be selected for their ability and motivation to perform these tasks. Supervisors and editors must understand the importance of adhering to survey instructions and be capable of ensuring that interviewers follow instructions.

The interviewers, supervisors and editors should be:

- Intelligent and educated – to secondary-school level or higher
- Willing to follow instructions precisely and accurately
- Polite and able to establish a good relationship with respondents
- Fluent in the language of the respondents.

Previous survey experience is not necessarily a positive factor. While participation in well-conducted surveys can be an advantage, previous involvement in poorly planned and implemented surveys may have led to bad interviewing habits that may be hard to correct.

EXAMPLE:

In many countries the standards of so-called market research are very poor. Interviewers with previous experience in these surveys may actually require more training than completely inexperienced candidates.

You should also try to avoid overqualified interviewers, who may follow their own agenda and stray from the precise techniques developed for conducting the survey.

EXAMPLE:

In some countries, medical doctors were used for data collection, often with disastrous consequences due to their inability or unwillingness to follow the questionnaire instructions precisely and their tendency to make medical diagnoses during the interview.

Use female interviewers in each team, and ensure that the age of the interviewers is adequate for the information you want. In some societies, women may be reluctant to provide answers to sensitive issues such as pregnancy outcomes or breastfeeding to interviewers who seem too young. In almost all societies, women will be very reluctant to provide answers on sex-related matters to male interviewers. Since the MICS3 questionnaires include modules on contraception, sexual behaviour, HIV/AIDS and other sensitive issues, female interviewers must be used in MICS3. Supervisors and editors can be of either sex, although having female supervisors and editors will also make it possible for them to observe interviews.

In addition to the above qualifications, supervisors should preferably have previous field experience as interviewers in well-conducted surveys.

Always select more potential interviewers than you will need. Train all of them and select the required number at the end of the course. This will guarantee that only the best fieldworkers will be involved in the study, and will also provide a few additional interviewers in case you need replacements. Provide training certificates to all participants of the training course, including those who will not be employed for the fieldwork.

Always select more potential interviewers than you will need.

CHOOSING AND PREPARING THE EQUIPMENT

Equipment must be purchased well in advance of the survey. Table 5.1 lists some of the main items of equipment required in addition to the questionnaires, cluster control sheets and maps.

Notebooks for the supervisors/editors	Geographic Positioning System (GPS) units
Clipboards	Weighing scales and accessories
Backpacks or other types of bags	Length/height boards
Pens (blue for interviewers, red for editors and supervisors)	Salt iodization testing kits
Bags for filing questionnaires	Calendar of events (to aid in respondent recall)
Envelopes for filing control sheets and maps	Display set of vitamin A capsules (recall aid)
Paper clips, staplers, staples	Display set of antimalarials (recall aid)
Sleeping and cooking equipment (if necessary)	Display of insecticide-treated mosquito nets
	Literacy test cards
	Flashlights

IMPORTANT: *In addition to this equipment, fieldworkers should also carry letters of introduction to the households, preferably on official letterhead, and identification cards with their photograph.*

WEIGHING SCALES

Each team will have one scale and the editor will be responsible for weighing children. Extra scales should be ordered in case of breakdown, loss or theft.

Technical details of the recommended scales are provided in Appendix Five. The UNICEF electronic scale is a floor scale for weighing children as well as adults (capacity 150 kilograms). It has a precision of 100 grams and a digital display. The child should be weighed directly, if possible. Alternatively, if the child is very small or is frightened or upset, the mother can first be weighed alone and then weighed while holding the child in her arms, and the scale will automatically compute the child's weight by subtraction. Unlike hanging scales, there is no stress to the child and there are no trousers to wash. No calibration is required. The scale itself weighs 4 kilograms and is powered by a battery with a 10-year lifespan.

LENGTH/HEIGHT BOARDS

In addition to weight, the MICS3 recommends that length or height also be measured. Since children under 2 years of age will be measured lying down (length) and older children will be

measured standing up (height), measuring boards should be adaptable to both situations. As with scales, one measuring board per team is required.

UNICEF recommends a model made out of wood that can accommodate children up to 130 centimetres, which is appropriate for the purposes of MICS3. The board weighs 6 kilograms, measures 75 centimetres when collapsed and comes with a shoulder strap. Technical details on the length/height boards are provided in Appendix Five. In the past, some countries have attempted to manufacture locally produced equipment, and in many cases, this has resulted in problems in measurements and durability. If locally produced, these boards will cost less, but you should allocate plenty of time to this process since several adjustments in the early prototypes may be required.

SALT IODIZATION TESTING KITS

Each interviewer should carry a salt iodization test kit. Each kit is sufficient for testing at least 100 samples of salt. Test kits for potassium iodate will be required for most countries, although in a few countries test kits for potassium *iodide* will be needed – ensure that the correct test kits are used. In order to standardize the results of all MICS3 surveys, it is recommended that all countries use the same test kit, manufactured by MBI in India. Other test kits may be used in addition, but these should not replace the MBI kits.

GEOGRAPHIC POSITIONING SYSTEMS (GPS)

Countries may also want to use Geographic Positioning System (GPS) units during fieldwork to record information on the exact geographic location of the sample cluster. This will make it possible after the survey to link MICS3 data with other data sets containing similar geographic information. Typical examples would be to use databases that include geographic location information on health facilities, schools, climate, altitude or many other geographically located attributes. With the use of GPS, it becomes possible to carry out further analyses of MICS3 data sets by expanding them with information available from other databases.

GPS units may also be used to update the sample frame. As discussed in Chapter 4, listing teams may have used GPS units to record information on the geographic location of the clusters in the sample. In such cases, using GPS during the main fieldwork may facilitate locating the clusters, since information on longitude and latitude will be available to supervisors during fieldwork. It is recommended that one GPS unit be used per team, and one measurement be undertaken per cluster. Technical details are provided on GPS units at www.childinfo.org.

TRAINING THE FIELDWORKERS

Collecting high-quality data will only be possible if enough time is allowed to train the supervisors, editors and interviewers thoroughly.

Training should be planned ahead of time.

Before you train the interviewers, you should:

- Translate and pre-test the questionnaires, instructions for filling in the questionnaire and the field procedures for the survey. This means planning for supervisors and editors to check completed questionnaires, fill out daily Cluster Control Sheets on the completed questionnaires, return them to headquarters, make transportation arrangements for teams, and make payments to fieldworkers.
- Identify typical field locations for practising household selection and interviews.
- Become comfortable with the questionnaire, including the skips and the purpose of the questions. If the trainers are not comfortable with the questionnaire, the interviewers will pick up on this and doubt the quality of the survey. Similarly, if the trainers question the effectiveness, or use, of some questions during the training, the interviewers will doubt the instrument and will not be motivated to collect the data correctly. All trainers must be comfortable and thoroughly familiar with the questionnaire before the start of the training.

Decide which interviewers, editors and supervisors are qualified to go on and dismiss those who cannot perform the tasks adequately.

Training should be provided by senior survey staff. At least two trainers will be necessary for each classroom to be able to conduct practice sessions. It is recommended that a separate trainer – who is a seasoned professional in that area with experience in the field – be used for training in anthropometry. In addition, it is often helpful to organize lectures by authorities in the various fields covered in the questionnaires, such as education, maternal and child health, child protection, HIV/AIDS, etc.

UNICEF recommends that fieldwork training be carried out in a central location, preferably with a relatively small group of interviewers, and, if possible, in a single classroom. The likelihood of following these guidelines will undoubtedly depend on a number of factors, including the total number of trainees, the size of the country, etc. However, the main goal for survey administrators should be to ensure that all trainees receive identical training. This is very difficult to accomplish if training is carried out by different trainers in different locations. In cases when different training locations are necessary, it is important to make sure that training is provided either by the same trainers (who could rotate between training locations), or that, before trainers start training in different locations, the differences between them is minimized as much as possible. It is important that the size of training classes be kept as small as possible, so that trainers are able to get to know the trainees, to work with them on an individual basis, and provide extra training

if necessary. As indicated earlier, the number of trainees should be more than will eventually be needed for fieldwork, to make sure that those trainees who will not be able to produce good quality work are eliminated before the actual fieldwork starts. In addition to prospective supervisors, editors and interviewers, trainees should also include those who will later be entering the data. It is important that data-entry clerks know the questionnaires well, since they will be dealing with problems in the questionnaires during the later, data-entry stage.

The length of training will depend on the content of the questionnaire, as well as the complexity of field procedures and the characteristics of the field staff. A longer, complicated questionnaire will require longer training. Based on lessons learned from previous rounds of MICS, as well as the pre-test of model questionnaires for the current round, UNICEF recommends that training be carried out for 2 to 3 weeks, depending on the content of the questionnaire. Table 5.2 provides an example of a 12-day training course for interviewers, supervisors and editors. Supervisors and editors will also need additional training (Table 5.3). Training should not exceed 8 hours per day, at the end of which trainers should meet to evaluate the day.

Training should be carried out in a good working atmosphere, so that interviewers are motivated to perform well in the field. Be sure that adequate space is available in the classroom(s), and that beverages and snacks are provided.

Below are some simple guidelines in conducting the training sessions:

- It is very important that training and practice sessions are conducted in a participatory fashion. Trainers should encourage trainees to ask questions and make sure that everything is clear and understood before the actual fieldwork starts. In addition, trainers should ask questions of trainees, ask them to read the questionnaires aloud, and practise the administration of questionnaires as much as possible.
- In regard to practice in the classroom, there are several ways of ensuring that trainees get experience in asking the questions: these include demonstration interviews, front-of-class interviews and mock interviews. Additionally, real respondents might be brought into the classroom for practice, and/or interviewers may be taken to households in the vicinity of the training venue to ask questions of real respondents, even before the main pilot study begins.
- It is best to schedule practices for the latter part of the day.
- Use audio-visual aids, such as overhead projection, during the training.
- Inviting a high-level official to open and close the training course can help ensure that trainees believe in the seriousness of the survey and conduct themselves in a responsible manner.
- One of the ways to motivate trainees is by issuing certificates showing course completion.
- In addition to practice sessions in the classroom and in households, trainees may be given homework assignments, including readings, and they can be asked to complete interviews at night, perhaps with other family members, relatives and neighbours.

In cases when some of the trainees are those who have already worked in the pre-test, they could be used to assist with practice in the classroom, and can be involved in editing questionnaires filled in during the training.

Training should include both observational and written tests at various points during the process. This is necessary to understand general difficulties and to identify elements of the survey tools that require revision and more emphasis. The objective of the tests should not be to ask difficult questions to the trainees; rather, easy questions should be asked, perhaps sometimes with intentional errors, to test how alert and motivated trainees are.

By the end of the training course, trainers should be able to develop profiles of the capacities of each trainee on an individual basis, and take decisions about the best roles they could be playing in the fieldwork. This involves the observation of trainees' relationships to each other, which might provide clues on their leadership qualities, on whether they can easily build rapport with respondents, and whether they are careful in editing and spotting mistakes. By the end of the training course, you should be able to decide on those who would be the best individuals to supervise teams, edit questionnaires, or conduct interviews.

Table 5.2
Example of a 9-Day Training Course for Fieldwork Staff

Day 1	<p>Explain thoroughly the purpose of the survey and introduce survey instruments.</p> <ul style="list-style-type: none"> • Arrange an opening ceremony and invite a high-level official from the implementing agency to deliver a speech on the importance of the survey. • Introduce all team members and participants from the implementing institutions (national statistics office, ministry of health, etc.) and other organizations. • Provide a framework for the survey and describe indicators. • Outline the whole survey procedure including reporting and analysis. • Motivate fieldworkers by explaining the importance of the data to be collected and what will be done with it. • Explain the administrative arrangements for the work. • Give details of the working hours and pay, the survey schedule, transportation arrangements and everyday procedures. • Provide a general overview of the survey instruments, including a description of the modules included.
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Table 5.2 (continued)

Days 2–8	<p>Discuss the survey procedures and questionnaire.</p> <ul style="list-style-type: none">• Discuss interviewing techniques. Explain how to gain the confidence of the respondent, how to avoid inducing answers, and the importance of completing each assigned interview and of following standard procedures. Emphasize that the interviewers must ask the questions <i>exactly</i> as they are worded on the questionnaire. Discuss ethical issues.• Discuss the general structure of the questionnaires, explaining eligibility issues.• Conduct a module-by-module discussion of the questionnaire.• Explain and discuss each question. There should be no unfamiliar terms. Give each fieldworker written instructions to take to the field.• Do demonstration interviews.• Organize lectures to be delivered by professionals specializing in relevant topics.• Have role-playing interviews, where trainees interview each other. Use questionnaires completed in the pre-test as examples.• Conduct a general training on anthropometric techniques. Spend at least half a day in a place with many small children (day-care centre or nursery).• Introduce and train fieldworkers to perform salt tests.• Introduce and train fieldworkers on visual-aid materials.• Practise recording data and managing forms.• If the sexual behaviour module or other modules including sensitive questions are included in the survey, be sure to role play these questions so interviewers get over any initial uneasiness about discussing sexual matters.• Videotape the practice sessions if possible, and provide constructive criticism of the different interviewers. Hold more demonstration interviews as the training proceeds.• Conduct brief written exams to test the interviewers' understanding of the questionnaire. This can also help you filter out interviewers who did not comprehend the training.• Give out homework. Ask the interviewers to read the next day's topics from their manuals, and/or go through the modules that will be covered. Ask interviewers to complete interviews with their families, relatives, neighbours. Have the trainees edit each other's questionnaires and spot errors.
Days 9–12	<p>Conduct a field exercise and have further discussion of interviewing.</p> <ul style="list-style-type: none">• Practise reading maps.• Discuss how to handle empty buildings and refusals.• Organize practice in the field. Each trainee should complete at least five practice interviews in the field. Observe all the interviewers' practice sessions and provide them with feedback.• Discuss the problem of the interviewer influencing the respondents' answers and other interviewer mistakes. Agree upon solutions to these problems.• Go over field practice questionnaires with individuals who have particular problems, and discuss problems as a group.• Ask the participants to share their ideas and suggestions for dealing with difficulties.

Table 5.3
Example of a 3-Day Additional Training Course for Supervisors and Editors

Day 1	<p>Household selection and map reading</p> <ul style="list-style-type: none"> • Explain the procedures to be followed and the importance of random selection of households. • Provide practice and time for discussion. • (If sketch-mapping will be used for segmentation of small areas, as described in Chapter 6, then provide at least 2 additional days for training in the field.) • Introduce and practise the roles of supervisors and editors.
Day 2	<p>Quality control</p> <ul style="list-style-type: none"> • Explain the need to monitor interviews and check interview quality on the spot. • Discuss how to deal with interviewer errors. • Explain what to do with the completed questionnaires and how to deal with unanticipated problems. • Emphasize that the supervisor should keep field notes and go through what should be recorded in these notes. • Discuss the survey schedule and the need for liaising with the survey coordinator.
Day 3	<p>Anthropometric training</p> <ul style="list-style-type: none"> • Standardize anthropometric procedures. • Proceed with the selection of supervisors and editors.

BRIEFING THE DRIVERS

All persons involved in the survey should be briefed about its purposes and the main methodological guidelines. Drivers who will work with the team throughout the whole survey are a group in need of special attention. Drivers often fail to understand random sampling and may even refuse to take secondary roads or paths to reach scattered households. This preference for certain roads is known as ‘main road bias’. Another common problem occurs when drivers interfere in the interviews. Since all interviews are confidential, drivers should not be within hearing distance of any interview and should not read completed interviews stored in the vehicle. A special session at the beginning of the fieldwork may help prevent these problems.

CARRYING OUT THE PILOT STUDY

The pilot study is the final rehearsal for the fieldwork. It is used to test that all procedures work smoothly and that all protocols are understood and followed. The pilot study should be carried out at the end of the training period, but at least a few days before beginning the

A properly conducted pilot study will identify major problems with the survey methodology and help prevent them during the data-collection phase.

actual fieldwork. This will allow time for correcting any problems detected during the pilot study.

The pilot study should cover both urban and rural areas. These areas should be selected to be representative of the situations the interviewers might face during the survey. The pilot study should last for 3 to 5 days, depending on the results of the exercise for interviewers, supervisors and editors, and include the daily routine shown in Table 5.4.

Table 5.4
Daily Routine for the Pilot Study

- Briefing at headquarters
- Transporting the team to the field sites
- Locating clusters
- Contacting local authorities and introducing yourself
- Identifying selected households
- Interviewing and measuring
- Editing and compiling questionnaires
- Evaluating the results and providing feedback to the survey team, including re-training or additional training, as needed.

The pilot study should be seen as an extension of the training programme. *Close supervision of the interviewers during this phase is essential.*

SETTING UP COMPUTERS AND HIRING DATA PROCESSING STAFF

You must obtain the services of a computer programmer with experience in using the software packages you will use. If you do not already have the recommended data-entry software (CSPRO) and the statistical analysis package (SPSS), you need to obtain these immediately. Information on the software is provided in Chapter 7.

Your computer programmer will need to adapt the MICS3 standard model programs for entering, cleaning and tabulating the collected data. Training on the adaptation of the model programs will have been provided through workshops. Nevertheless, the survey coordinator will need to work closely with the computer programmer to ensure that the data entry, editing and tabulation programs produce the needed data sets and the correct tabulations for each indicator. Before the main survey begins, make sure that the programs have been properly tested and are functional.

IMPORTANT: *Use the questionnaires of the pilot study for testing the data-entry and analysis programs. Check the programs for the production of tables. Sort out any problems and make any corrections that may be necessary.*

You will also need data-entry staff. Depending on the size of your survey and the duration of fieldwork, a number of data-entry clerks will have to be recruited and trained by the computer programmer in using the data-entry software. (See Chapter 7 to calculate the number of data-entry clerks needed.) The training for data entry should require no more than 2 days. However, it is important that data-entry staff are trained during the main training session, together with the interviewers, so that they understand the purpose of the survey and the content of the questionnaires.

Arrange for the necessary office equipment, including computers, printers, CD-ROMs/diskettes and paper, and make sure that the power supply is adequate. One computer will be needed for each data-entry clerk, plus one for the computer programmer. Chapter 7 (Processing the Data) contains further suggestions on how to manage the data processing and organize record-keeping.

Remember – unless all arrangements for data entry and analysis are made before starting the fieldwork, this process can lead to major delays in producing survey results.

In addition to data-entry staff, you will need staff to edit questionnaires and to provide consistent responses to the problems in the questionnaires identified in the office – either by the computer or when verifying materials manually. These persons can be selected during the main training of supervisors and editors or trained separately during the data-processing training.

MAKING ARRANGEMENTS FOR RETURNING THE QUESTIONNAIRES TO HEADQUARTERS

Instruct supervisors and editors on the procedure for returning completed questionnaires to the data processing headquarters. Remember that the questionnaires contain confidential data and should be handled appropriately.

Completed clusters of questionnaires should be returned weekly so that data can be processed quickly. In the early stages of the survey, this will also enable you to check for any systematic problems that may still be occurring in the field. When simultaneous data entry is in place, errors can be identified and feedback can be provided to fieldworkers, permitting the early identification of systematic errors that can compromise the quality of the survey. Supervisors should arrange for completed clusters of questionnaires to be delivered back to the survey headquarters on a weekly basis. This can be done by a roving team that picks up clusters of questionnaires or by having the drivers deliver them.

The prompt return of the questionnaires to headquarters contributes to quality control, allows for early data entry and feedback to fieldworkers.

Back-up copies of computer files should be made daily and kept in a secure location where only survey staff have access to them.

PLANNING EARLY TO OBTAIN SUPPLEMENTARY INFORMATION

Field staff can be valuable informants because they become familiar with conditions in communities. They may obtain insights about how programmes are operating, the reasons why a programme is not working, or the problems experienced by fieldworkers during data collection. If possible, make the most of this opportunity to obtain qualitative as well as quantitative data from your field staff by conducting focus group discussions after the survey finishes. Health and development programme staff may have a particular interest in what these field staff observe. Enlist the help of such interested parties and prepare a discussion guide. Write a short report of these discussions, and include any pertinent observations in your survey report.

ETHICAL CONSIDERATIONS

Household surveys typically raise a number of ethical questions, particularly surveys that pertain to the health of children and other household members. Such questions relate to individual rights to privacy, the need for informed consent, and responsibilities that arise upon uncovering potential health problems in a survey. It is important to consider such dictums as those enumerated in Table 5.5 during the early stages of planning a survey.

Table 5.5
Ethical Aspects of Conducting a Survey

Ethical approval: The survey must abide by the laws of the country. If approval by an ethical review committee is required, this should be requested at an early stage to prevent delays.

Confidentiality: All information provided to the interviewers should be kept strictly confidential. Records should be securely stored. Computerized records should not include any names that might be used to identify the families, unless this is strictly necessary (for example, if follow-up visits are planned).

Informed consent: Mothers and/or all other respondents should be informed about the contents of the interviews and measurements to be carried out. They must understand the procedures and give their full approval. In some countries, written consent may be required.

Feedback to the families: Families have freely donated their time to the survey and are entitled to some feedback. Any important conditions discovered during the interview should be reported to the parents. For example, mothers should be advised when their children's vaccinations are overdue, when the child is malnourished, or when non-iodized salt is being used. In some countries, fieldworkers carry packets of oral rehydration salts or plastic spoons for preparing sugar-salt solutions to distribute to children with diarrhoea who are not being treated properly.

Feedback to communities: Before starting the survey, the coordinators should plan what type of feedback will be given to communities. In most cases, the number of interviews per community will be too small for statistical validity, but even some general feedback is often appreciated by local authorities (for example, that 30 of the 40 children in the village had not been vaccinated). If possible, this type of feedback should be given before the team departs for a new community.