



DOCUMENTING TRADITIONAL FOOD SYSTEMS OF INDIGENOUS PEOPLES: INTERNATIONAL CASE STUDIES

GUIDELINES FOR PROCEDURES

Harriet V. Kuhnlein (McGill University, Canada), Suttilak Smitasiri (Mahidol University, Thailand), Salome Yesudas (DDS, Hyderabad, India), Lalita Bhattacharjee (FAO, Bangkok, Thailand), Li Dan (Institute of Nutrition and Food Hygiene, Beijing, China), and Salek Ahmed (UBINIG, Dhaka, Bangladesh)

and collaborators:

Solot Sirisai, Prapasri Puwastien, Lakana Daoratanahong, and Sakorn Dhanamitta (Mahidol University, Thailand), Fengying Zhai (Institute of Nutrition and Food Hygiene, Beijing, China), P.V. Satheesh (DDS, Hyderabad, India), Gopa Kothari (Child Eye Care Charitable Trust, Mumbai, India), and Farida Akhter (UBINIG, Dhaka, Bangladesh)

April 2006



DATA GATHERING TOOLS

1. KEEPING GOOD NOTES

(Adapted from Blum, Pelto, Pelto and Kuhnlein (1997))

Field notes are your primary data records from interviews in the community as well as from direct observations. The different kinds of items that should be written in field notes are:

1. Observations of crops and other food sources that one sees while walking about the community.
2. Lists of the different types of food being sold on a market day, along with notations about prices, quantities, condition of the food, behaviors of people in the market and other details.
3. Detailed, play-by-play description of unstructured interviews with key-informants.
4. Observations of the cooking areas seen in peoples' homes and lists of cooking equipment, stored foods, and other details.
5. Step-by-step descriptions of cooking processes as told to you by informants (e.g., preparation and cooking of unusual wild foods, sauces).
6. Notes on past history, geographical features, ecological data (climate, rainfall, etc.), ethnic and language features, and other background materials as gathered from written sources and from open-ended interviews.
7. Notes on health patterns and behaviors you see in the community that may be affected by nutrition.

This discussion will cover writing of notes from both informal observations and interviews. Formally structured interviews (survey interviews), on the other hand, are generally recorded directly on the prepared interview forms.

Field Notebook

> *Your field notebook should be small enough to keep in your pocket or purse. The notebook should not be overly conspicuous, but it is often a good idea to make it obvious to community people that you (and your team members) are taking notes. Writing things down from interviews demonstrates to the community colleagues that you are serious about wanting the information and you regard them as experts.*

Whenever possible, your information gathering team members should write down notes directly into a notebook when doing open-ended interviewing. In addition, you should have your information gatherers write notes on descriptions of places (e.g., marketplaces, cooking and food-storage areas); sketches or diagrams of a complex food processing device; sketch plus written description of home gardening area with its crops; and other special information. It is also useful to include notes on such things as: "Graciela is a very good key-informant...but it's important to find her early in the morning, or else late at night, as she goes to sell in the marketplace every day...."

Reviewing food list notes; taking field notes; interviewing Karen participant; Miao mother and child.

Many of the items you write in field notes are the *same information* your research assistants already know because they are members of the local community. But writing these things down in field notes makes the information available and organized for direct use in planning interventions.

From "Jottings" to Fully Written Notes

Obviously you can't write down everything the informant says. But you can jot down key words and phrases, to keep a running "log" of the ideas and answers as your informant responds to your questions, probes, and encouragements.

The jottings are intended to jog your memory when you expand them into fuller statements, as soon after an interview as possible. Here is an example of jottings from an interview and then the full notes, written up later:

Interview with elderly woman (excerpt)

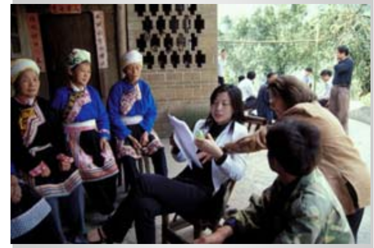
Jotted notes:

> Earlier..."all people collected them (calchan) wild greens, stalk, leaves had time. Children. Especially older women. Now. Too far. All summer. Cooked with meat. Poor people potatoes. Lazy. "Young women won't cook 'em..." Edge of fields...river...people. "Weaker now..." "Poor food..."

Expanded notes as written up afterwards:

> The elder grandmother in the___________ household told me that when she was a child and even as a young married woman, people gathered the wild greens called calchan, which were available throughout the summer. "All people collected them...." The main locations were at the edges of the cornfields and also along the riverbank. They gathered the stalks and leaves. Sometimes they sent the children to gather them, but mainly it was older women who did not have small children to care for. The wealthier families cooked the greens with meat, but most families were poor and cooked them with their potatoes.
>
> When I asked why people do not gather these wild greens nowadays, she said that "people are lazy" and then she added that "...the younger women won't cook 'em." because they view the greens as being inferior food and "poor food" (that is, food for the poor people). She also said that she believes people today are weaker now and less healthy because they do not eat the healthy foods "from nature" like they did when she was young.

In this example we see that the expanded field notes are approximately four times as many words as the originally jottings. Also,



Reviewing Dalit data by candlelight; reviewing Miao interview data for accuracy.

the jottings are almost undecipherable. Only a person who heard the original interview could make sense of these jottings.

Some Additional Guidelines

1. Look for *key words and special vocabulary*. Be sure to write down those key words in the exact language of the speaker. Note especially any words that are special to this population and which identify special roles, (e.g., the name of the food) and special words for actions, behaviors, or ideas that might come up in structured interviews or behavioral messages during the actual intervention, especially words such as "poor food" that reflect strongly held attitudes.
2. Check with the informant to be sure that the special vocabulary is actually used by the target population, that it is an insider vocabulary. You may find that the older informant uses a word (e.g., calchan), that is not familiar to the younger generation, or, perhaps it is the word used by the people in one ethnic group only.
3. Particularly important ideas of the key-informants *should be written down in their exact words* (at least key phrases showing how they expressed the idea). Expand and write out full field notes from your jottings as soon as possible after an interview. If you do not have the opportunity to write out the full notes immediately, try very hard to get all the notes written out *the same day of the interview*. Otherwise you may lose much of the content.

Often it is useful to check some part of your jottings during the interview. Sometimes you can say to the informant. "Let me just check this thing I have here in my notes...let's see...you said that ____________"

It is a good idea to go over your notes right after an interview, if you can find a private place. Just go through and add in a few details to the written notes. That will help to make sure that you will remember clearly when you sit down to write out the notes more fully.

As you write out your notes more fully, try to preserve as much as possible of the play-by-play flow of the interview. Do not try to write a polished essay, just go through the specific information-what the informant said-in the order that it occurred in the interview. Often during the interview you will need to change direction to get more data on a point made earlier. Also, your key-informants usually wander off the topic and return to earlier points, filling in earlier gaps. Usually it's best that those later additions be written in the order in which the interview actually happened.

The most preferred way to write out your notes fully is with a microcomputer. If possible, your team members should become familiar with using a word processor system in the microcomputer, so that all the interview notes and other field note materials will be accumulated in computer files. That makes it much easier to go through the files of notes to find particular points of information.

A second alternative is to write the notes out on a typewriter. In any case the field notes should be written out on paper so that they can be stored, sorted, and organized efficiently. If the notes are typed, be sure to make at least one extra copy, and it's better to have two extra copies of all of the materials. Those should be stored in different (secure) places.

If your team members cannot type, they must write out the notes fully by hand, and those handwritten notes should be checked by others to be sure that they can be read easily. In some cases, if you have typists available, it is possible that your information gatherer can *dictate* out loud from the field note jottings, while the typist writes out the full text.

5. You can include in your notes some of your own *interpretation* of things that your key-informant said. You should also include comments such as, "At this point the informant seemed to be covering up something and quickly changed the subject. Next time, I should ask her some more about this. This time it seemed to be a touchy and emotional subject."

   When you write such personal impressions, you will of course, make sure they are clearly your ideas and not the words or ideas of the informant.

6. Allow at least *two hours of writing time for each hour of interview*. That's right-two hours! It is slow work, because often you will be remembering many different things that your key-informant has said, at the same time trying to make sense of the very short and cryptic jottings in your field notebook.

7. In some cases you may be able to use *tape-recordings* of some key-informant interviews. Even if you are tape-recording the interviews, you should still take good notes and write out those notes fully, as described here. The tape-recording can serve as a backup source. Remember that it costs a great deal of money and time to transcribe from tapes to typewritten form. Most projects cannot afford to pay for the transcribing.

8. If you do use a tape-recorder, be sure to transcribe the interview(s) into the computer or write them out on paper as soon as possible. Never leave tape-recorded materials in unwritten form, as it is very difficult to go back to find information on tapes. Often you won't be able to hear everything clearly, especially after several weeks have passed after the interview.

9. *Keep all field notebooks and your written out field notes in safe and secure places* where unauthorized persons cannot get them. Even seemingly noncontroversial, innocent-sounding information about foods and diet may be considered personal and private and you should always protect the confidentiality of informants' statements.

Keeping Field notes Organized

Field notes can quickly become an unwieldy mess unless you take pains to keep them organized. Even a few weeks of fieldwork will produce several hundred pages of notes that can be very difficult to manage unless some system of indexing is used.

1. In most cases it is best that your field notes are kept in chronological order. That is, at least one set of field notes kept more or less in the calendar order that the materials were collected. The pages of field notes can be numbered consecutively. It may add some additional structure if you start new page numbers each month. So, if you started in October you would have notes from zero to one up to perhaps zero to 500. Then comes N-1, N2, and so on.

2. It can help you to find things if you put key words at the beginning of each interview, or at the beginning of each separate note. Some people put key words at the top of each page.

3. If you are entering all your interview notes and other field notes in a computer, *you do not need to list key words when those words are in the text itself.*The normal search programs that you use with the computer can quickly find any words that are in the interviews. Only list key words that are important index words, or identification of topics, if they are abstractions that do not occur in the statements themselves. For example, in the case of the bit of interview above, you would use key words such as *prestige foods, SES, traditional or historical*.

4. During the first two weeks of information-gathering, as your interview notes begin to pile up, start listing the main topics in the notes-key words that you will use as an index.

5. If you are not using a microcomputer for writing and storing your interview notes, then you will need to write more key words at the front of each interview-including important words that are found in the text itself.

6. Even if you are storing all notes in the computer, you will want to have hard copies (paper copies) in your files. As mentioned above, store your paper copies in two different, secure, locked places.

7. With two separate sets of (paper copies) of interviews and observations, you can keep one set in the chronological order in which the work was completed and notes written; the other copy can be sorted out into the *topical areas*, key words that you begin to organize into different file folders. When the research is completed you will want to ask your community leaders and assistants if they want to keep a copy of the notes, and make it possible for them to do so.

8. One way to keep good organization of your field notes is to keep one set of files that are directly linked to the generic questions and other important questions.

Suppose you had a really good interview with an excellent key-informant and she told you information that applies to five or six different generic questions? Then, make extra copies of that interview, so you can put a copy into each of the five or six file folders that are answers to those generic questions.

The Field Work Log

In addition to the field notes and diary, it is also recommended that the Project Manager maintain a field log. The log is a running account of your work schedule. The log should reflect your planned schedule for the next two weeks or more, as well as the record of actual times and places of interviews and other data gathering. Keeping a tidy logbook can help fieldworkers stay on schedule and maintain a sense of progress in the face of the daily frustrations brought by bad weather, hard-to-trace informants, and other problems typical of field work.

2. USING CAMERAS

In doing field work with Indigenous Peoples cameras and their products become a useful, even powerful, research tool. Cameras are helpful in documenting unique food items and research situations—as stated earlier, a picture is worth a thousand words. This being said, it is important to develop a rapport with the community that includes willingness for being photographed. In some societies, photographs are regarded as a happy event, while in others they are regarded as threatening. Be sure to check with the community leaders about general sensitivity to photography in the region. It may be necessary to request permission from each individual before photos are taken.

If publications are a goal, photos of recognizable individuals may require written permission of the individual. This is more the case for profit making publications than for educational or public service publications. Usually, it is the community and individual preference in these matters that should guide your permissions.

Good camera techniques are required for using either 35mm or digital cameras. High resolution digital images or clearly focused 35mm (slides or prints) are essential. If good, publishable pictures are a goal, a professional photographer as part of the team is a distinct asset. Otherwise, a course in photography may be required before you set out. Key elements are lighting, backgrounds, contrasts, etc. Many of the photos in this document were taken by professional photographers.

Obviously, cameras and film need to be protected in extreme weather situations. This should be planned for before beginning field excursions to document the traditional food system. Sufficient high quality film, extra batteries, and standard background cloth materials should be included.

Photo of Bhil portions; photo of Miao plant samples for analysis.

3. KEY INFORMANT INTERVIEWS

Selecting Key-Informants

The team leader/manager should work with six to eight community research collaborators (key-informants). The most appropriate key-informants for addressing issues related to an Indigenous People's traditional food system in a community are:

- Community leaders familiar with the hunting, fishing and harvesting practices of the different family groups in the community.
- Elders consistently resident in the community and familiar with the changes that have taken place during the last several decades
- Mothers who have raised a number of children within the community
- Other primary caretakers, such as grandmothers or older siblings who play a key role in the care of the children under six years of age and living in households in the community who are familiar with health of families
- The local *outsider* health professional, agricultural extension worker, or vendor, who is knowledgeable about the topics under review.
- Traditional health practitioners.\

If there is more than one culture of Indigenous Peoples in the community, it may be important to choose key-informants from different ethnic backgrounds.

A way to identify appropriate key-informants is to ask either local community leaders or government officials with whom you meet during your initial introduction to the community, about people living in the area who may be good sources of information. For example, you may ask, "Do you know of any mothers who are active in the community and who would be willing to talk to me at length about food beliefs and household consumption?" If there is a local health clinic, you may find that the health personnel can help you select mothers who are active within the community and would be available to participate in the research.

Once you have chosen two or three key-informants, they can assist in the selection of other community members who fit the criteria listed above and who have appropriate characteristics for interviewing. When individuals are identified, you will need to test their willingness to talk and their ability to respond to questions concerning the topic. You may begin by asking them very broad questions about food within the community. For example, you may say, "How would you describe the standard diet in the area?" Short, terse answers, such as "We only eat millet," and an unwillingness to elaborate when prodded, may indicate a resistance to discuss subjects with strangers to any great length.

It is important to work with key-informants who are nonjudgmental and sensitive to differences within the community. In other words, you need to identify individuals who are highly aware of what goes on in the community and interact with a range of community members from different backgrounds. When choosing key-informants keep in mind that these individuals need to represent perspectives on food use of the general community.

Key-Informant Interviewing: Principles of Open-Ended Interviews

Key-informant interviews will be conducted throughout the duration of the research design and data will be collected in the form of written field notes. The interviewer should record as much as possible during the key-informant interviews, in the informant's exact or near-exact words. Words, phrases and whole sentences should be written down as they were stated.

Note taking is an important element in the interview process. Remember that you are looking for vocabulary and local terms that may allow you to capture important insights into the local culture and belief system. When such terms are mentioned, insure that you have an accurate understanding by probing for specific examples or illustrations. You may say, "What do you mean by ?" or "Could you give me an example of where is found in this community?"

Often interviewers find that taking good notes requires time, leading to brief pauses while the interview is being conducted. While the notes are being recorded, the interviewer may feel that these short interruptions cause some discomfort for both the interviewer and the key-informant. If this occurs, explain once again to the informant that what they have said is important and in order to capture the information you need to write it down in its entirety. It is also important to remember that as the interviewers and the key-informants become more familiar with one another, these short periods of silence will become less noticeable. Furthermore, with time the interviewer will become more adept at note-taking. Always keep in mind that when trying to capture the local belief system and gathering data on health and nutrition concepts that it is critical to get information in the words of the key-informants.

During the interview you may also find the body language or the hand motions of the key-informant to be significant. If this is the case, record observations that you have identified as important.

You may find that the information you gather from the key-informants may vary according to the location and the timing of the interview. For instance, when talking about food, it may be useful to carry out interviews with the key-informants in settings where the foods are purchased or gathered, such as in the market or during a visit to the local garden. Another possibility is visiting other women in their compounds with the key-informant. Conducting the interview while the informant is preparing a meal may also enable the interviewer to elicit different and pertinent information. As you become more familiar with your informants and the activities in which they are involved, explore the possibility of conducting the interview in different settings that may enhance the interview or allow you to expand upon the information gathered.

Key-informants should also be consulted for the testing of interview procedures used with the mother-respondents. Discussing the procedures and conducting exercises with the informants will help the researcher determine what revisions and modifications need to be made so that the research instrument is appropriate for the community under study. You may want to choose two or three of your best informants to test the research procedures. Once you have administered the exercises ask for advice on how to modify the procedures so that they are appropriate for the local audience. Get suggestions about specific terms or phrases and whether there are ways to make the questions more clear.

Additional Notes on Working with Key Informants

The key-informant methodology is the single most powerful ethnographic data-gathering tool. Although individuals vary considerably in their natural interviewing skills, the techniques of key-informant interviewing can be taught to persons ranging from the highly educated to near-illiterate community people. The most effective training methods are usually a combination of role-play, trial-and-error, and continued practice under supervision. The following summarizes the main elements of key-informant interviewing:

1. The informants must be interviewed more than once, so that a social relationship develops between the interviewer and key-informant.
2. The key-informant is regarded as an *expert*, who imparts important information to the interviewer. The interviewer acts the part of someone interested in learning from the informant. For this reason the term *consultant* may be used in place of key-informant. The interviewer should not respond to information from the key-informant/consultant with value judgments or expressions of criticism.
3. The interviewer must record as much of the information presented by the informant as possible, usually by writing in a notebook, sometimes supplemented with tape-recording. The act of recording the information is part of the demonstration that the data from the expert are important.
4. The interviewer seeks to get key portions of the *testimony* in the informant's exact, or nearly exact words. Words, phrases, and (sometimes) whole sentences are written down exactly, when possible. Sometimes the tape-recorder is used as a backup device, to check on the interviewer's note taking. As often as possible the interview must take place in the informant's native language and the interviewer must also be fluent in the local dialect.
5. The interviewer must avoid too much reliance on asking a series of focused questions. Instead, he or she tries to get the informant to narrate, list and enumerate, and expand his or her explanations of various topics.
6. The interviewer tries to get the informant to lead the discussion

into elaborations, explanations, and sometimes into whole new topics.

7. If the interviewer has some prepared questions, or lists of topics, these are never used to structure the entire interview. The prepared questions are introduced occasionally, secondarily, for example, when the informant has finished explaining a topic. One exception to this rule occurs when the key-informant is asked to respond to a pre-testing of a structured interview that is being developed for use with a wider range of respondents.
8. Second and subsequent encounters with the informant provide the opportunity to bring up materials from the previous interview-probing for more information. Often the interviewer repeats portions from a previous interview to verify or her understanding and to prompt the informant for more detail.
9. Probing for more detail, information, examples, or cases, is a major element of successful interviewing technique. This probing, prompting, urging of the informant is a counterpoint to "listening to the narrative explanations."
10. Ideally, the relationships of researchers to their key-informants continue throughout the duration of the project. In later phases of information gathering, it is very useful for the interviewer to try out hypotheses with his or her best key-informants. That is, the researcher has developed a model or general idea of the particular cultural/behavioral domain that is the focus of study. For example, perhaps the research team has a series of ideas about the *personality* of leafy green vegetables and how they differ from other vegetables. This idea can be brought up with the key-informant, who is asked to comment, correct, and perhaps expand the idea into other food groups. In some cases researchers will ask their key-informants to comment on drafts of reports, or on descriptions written from past interview materials.
11. In an increasing number of cases, you should seek to have true local participation in the data-collection and interpretation processes. In such cases the key-informants become participating information-gatherers, paid or unpaid.

Probing and Prompting

One of the central skills of interviewing (whether it is key-informants or just one-shot informal discussions with persons you meet in the community IS getting the informant to continue to elaborate, give examples, or suggest new areas of exploration with little interference and minimal structuring from the interviewer. The main technique involves unobtrusive *probing*. Here are some miscellaneous examples used in the midst of open-ended, conversational interviews:

"That's interesting, please go on."
"Why did people stop using .________________(e.g., a food or a method of food preparation)?"
"What did you do then?"
"Could you explain that a bit more, I didn't get the part about

the___________(some element of action or content)."
"That's fascinating...can you think of any other examples?"
"What do you call that method of food preparation?"
"Please tell me about what you ate when you were young and how food and diet have changed since then."
"Can you think of any other dry season foods?"

In many instances you can simply repeat a part of the previous statements of the informant, such as:

"I see. So the people who live closer to the river are the ones who do most of the fishing...."

Simply restating the informant's words often leads to further elaboration and explanation. It cannot be too strongly emphasized that your attitude of interest, expressed in body language and verbal reactions, is often the most effective *prompt* that leads to further explanation and detail from the informant. Sometimes the most effective prompt is in the form: "This is so interesting that, if its OK with you, I'd like to come back tomorrow. Then we can have more time to go into these details."

Getting Lists of Things (Items) in a Domain

One of the more important techniques in open-ended interviewing is that or asking informants for *lists of things*. The most mundane, ordinary topics can suddenly come to life when an informant tries to list a series of elements, types, or other things. In addition to gathering lists of foods it will be useful to get lists such as special holiday/celebration foods, types of snacks, foods that are good for you when sick, etc.

Of course we do not usually say, "Please give me a list of __________." More likely, we say "You just mentioned that chicken soup is good to give children when they are sick. Can you tell me what other foods are good to give to sick people, for different sicknesses, or for different kinds of people...?"

Usually, you will have to do some prompting and encouraging: "OK, that's three different types...any others? What about any special foods for the sickness that pregnant women get?"

It is worth repeating that the best, most detailed and systematic information comes from key-informants, after you have established a social relationship in which they come to understand and appreciate the kinds of information you are trying to gather. They become emotionally involved in the process themselves and will often make special efforts to think about the information, and will even seek out more examples and details from their friends.

So, the bottom line is, cultivate long-term communications with your best key-informants.

4. FOCUS GROUPS AND WORKSHOPS

Focus Groups and Community Workshops

In thinking about conducting a focus groups or community workshop, one must first think about objectives for the meeting. What kind of food information is needed, and do you need to gather the diversity of knowledge and opinion of a few people, or do you need a broader perspective from all in the community, or several communities? **Focus groups** are comprised of a small group of people usually of common age and gender who are knowledgeable in a specific area. **Community workshops** can engage larger numbers of people, and are ideally suitable for gathering information from multiple communities, or for sharing research results with representatives from the whole community. Both require facilitators who are excellent communicators, who speak the language of the community, and who are respected by the community. Both require a person "recording" proceedings, with note taking and/or use of a tape recorder. These proceedings should then be prepared into a report and discussed with the research leaders and community representatives for accuracy.

Training of the facilitator is critical to a successful focus group or community meeting. This leader must be completely knowledgeable about the questions being asked, and how to encourage full discussion among participants. As well the recording person needs to know what key points are being made. Advance meeting among the research manager, facilitator and recorder should clarify the purpose and desired results from the meeting. Appropriate terms and language, and if possible the key words should be identified in advance.

Participants in both focus groups and community workshops should be carefully considered. The community council or group of leaders should guide decisions on which people would be most helpful in expressing the diversity of activities, opinions and knowledge that exist in the community, and which individuals might be too controversial, domineering or disruptive and should therefore be excluded.

Focus groups. These usually take place over a maximum of two hours with a maximum of 8-10 people who commit to the entire period. The questions should be clearly "focused" and individuals of similar age and gender are asked to express their views. If knowledge and opinion of multiple ages and both genders of adults are desired, then several focus groups can be held. It is possible to understand attitudes as well.

It is important to eliminate irrelevant issues and to aspire to generate discussion among the participants. All members of the focus group must be encouraged to talk. Disagreements among members should be encouraged if they exist, and dominance of one or a few individuals should be discouraged.

Focus groups are good for planning activities of a program, solving program problems, and for advising on evaluation strategies. They can be

Miao focus group; Karen focus group; Karen men's focus group; Bhil men in workshop; Suttilak workshop.

key for conducting evaluations. A focus group can advise on wording/terminology of planned questionnaires delivered to individuals.

Community workshops. These meetings can accommodate many people, but they should not become so large they are unwieldy for the facilitator. It is very helpful to have the community leaders open the workshop to show support for the initiative. One example of a successful community workshop is when several people from different knowledge bases in the community (or from several communities in a region) come together to create a community food list. The facilitator can begin the discussion, and members will add to the list. A flip chart or wall chart of the list can be made for all to see, and a grid created to gather specific information on each food. Examples of this information are taste appeal scores and seasonal availability scores (on a scale of 1-5), even locations of foods.

Another example of a community workshop is for explaining results of a research activity. Visual aids on flip charts are very helpful in getting community members to relate to the discussion.

It is routine to conduct an evaluation of the workshop to ensure that the information was clear and understood, and that all opinions were expressed in the discussion.

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5. INDIVIDUAL INTERVIEWS (SAMPLING AND DATA PROCEDURES)

(Adapted from Blum, Pelto, Pelto and Kuhnlein, 1997)

Selecting the sample of interview respondents

Approximately twenty-five to thirty households should be selected for the structured interviews. Depending on the focus of your particular inquiry among the Indigenous People in the community, the interviews may be carried out with mothers or other primary caretakers, of children of a particular age, or defined categories of adults by age and gender. Ideally, a random sample of the particular age/gender group would be taken from the community to insure representativeness. However, random sampling is often not feasible unless a full (recently updated) list of all households is available. If such a list of all the households is not available, you can develop a method such as selecting every third or fourth house, (depending on the size of the community) in order to get a representative sample. See the end of this section for further discussion of the sample selection strategy.

If the objective is to understand the food system of a particular culture of Indigenous Peoples avoid including individuals from other ethnic groups. On the other hand, if the community is composed of other indigenous cultures that constitutes significant numbers, it will be essential to select sub-samples of these groups to be interviewed. If this is the case, it is important to include a large enough sample of respondents representing a particular culture for the analysis to be meaningful.

In communities where the nuclear family is the dominant pattern, the principle caretaker of infants and children is generally the mother. In many areas, however, the grandmother or older siblings may play a key role in the care of children. If your focus is on children, depending upon the situation, it may be necessary to conduct the structured interviews with other caretakers as well as the mother. If you determine that it is appropriate to interview more than one caretaker in a household, be sure to record the responses on separate data collection forms. However, if more than one interview is conducted in one household, for sampling purposes, they are counted as one household.

In selecting households (mothers) for the sample remember the following criteria:

1. There must be at least one target individual (for example a child six months to six years old) living in the household.
2. The person you interview should be a permanent member of the community, not a visitor, and preferably have resided there for several years.
3. Each respondent (ie, mother or other caretaker) should be available for a series of interviews over the next five to six weeks (anticipate approximately one hour per visit). When you first meet with the person of the household, ask whether he/she will be available and willing to participate in the study.

Notes on selecting a random sample

The information that you gather using these procedures is intended to provide a balanced and fair representation of the target community and population. But your time and resources are short; usually you do not have the luxury of spending a lot of time enumerating every household and then generating a careful random sample. On the other hand, you will want to be sure that your observations, informal interviews, and your sample of household respondents are as representative as possible of the geographic and cultural subgroups and subdivisions of the community.

Representativeness: Age, Gender, Ethnic Groups, Geography

In any population there are different types of people, with different attitudes and information, and some of the differences are quite predictable. That is, you know from experience that information presented to you by males is likely to be different from that of females, and young people see the world differently from the senior generation.

You should try to have key-informants from different age groups and different neighborhoods or localities in your target area. Information about typical food use patterns should be gathered from persons who are current family food providers, but older persons who may be retired from cooking and food preparation may be important sources of information concerning earlier food patterns.

Young persons, including small children, may be important informants concerning children's snacking and related food patterns, as well as their attitudes and taste preferences.

During the assessment you may not have time to be sure of representativeness of your key-informants, focus groups and all your miscellaneous sources of information. However, you should be constantly aware of the gaps in your information sources. Typically, you will be aware that you still have not talked with people from the other side of the tracks or, frequently enough, you will be aware that you have a serious imbalance of one gender or the other among your key-informants.

Use Maps and Diagrams to Chart Your Representativeness

As soon as you have a good working map of your target area, you can begin to use pins or other markers to identify the areas for which you have information. For example, you can use a pin for each key-informant, and then inspect your map to see how you can increase the geographic representativeness of your information. Perhaps you will need to find some new key-informants in those areas that are still blank on your map.

Simple tables and charts can keep you reminded of the representativeness or balance of gender, relevant age groups, ethnic groups, and other differences in your client population. In some cases, you will be able to see from your charts and maps that you have information piling up in one area because all of your team members tend to go to the same area. Perhaps, after the first week or two, your team should disperse into different areas, or specialize in talking with different kinds of key-informants.

If your data-gathering team is all female and you find that you are not getting any interviews with males, then you will need to assign someone to get some interviews with males, to get a male-oriented view of food acquisition, crops, and food preferences.

Representative Sampling of Times and Places

We often think about representative sampling in terms of *people*. In fact, many books about sampling focus all their discussion on sampling from people, households, and other sampling units. On the other hand, it is important that you consider other types of representativeness. Observations of actual meals, including collection of 24-hour recalls, should be distributed as representative of the weekly cycle, for example. If there is more than one weekly market in the area, observations should be carried out in each of those sites, especially to note differences in the foods available, price differentials, and perhaps differences in the kinds of people who shop in the different locations. Similarly, if your project is in an urban location, different neighborhoods are likely to have different relationships to stores and other facilities.

Representative (Random) Sample of Respondent Households

In rare situations, you may find that there is a recent census of the target community, listing all the households with details of household composition. In such a case the drawing of a random sample can be quite straightforward. You would follow these steps:

1. Identify the list of all households with your target age/gender group.
2. Assign a number to each household, starting with one.
3. Select numbers from a table of random numbers. Each time one of those random numbers corresponds to a numbered household, that unit is added to the sample.
4. For a proposed sample of thirty respondents, select fifty households, so you have a reserve to substitute for persons who are unavailable or unwilling to participate, as well as those who drop out due to illness or absence.

Drawing Household Numbers from a Hat (Instead of Random Numbers Table)

In most cases the total number of eligible households is not so large as to preclude your writing all the numbers on slips of paper and then drawing your sample in that time-honored folk method. The table of random numbers is then unnecessary.

Stratified Random Sample

In the majority of communities, there is some major division of the village or area-upper/lower caste, landowners/landless, uphill/lowlands, or central village/peripheries. In such cases it is wise to *sample separately* from the two sectors. That is, you would first prepare the two separate census lists (perhaps in consultation with key-informants) and then proceed to use the random numbers table.

MANAGING INTERVIEW DATA

Preparation of the report from this research is greatly enhanced by the use of the data-collection forms and data tabulation sheets with the modules. The research team will need to establish systems to manage the forms which can quickly accumulate and become unruly. It is important that the research assistants include the respondent numbers on all individual forms and that the completed forms be filed in an orderly and simple fashion. The forms can either be separated according to respondent or procedure. This depends on what your particular research team finds most logical and convenient.

Many of the forms need to have the list of the twenty-five to thirty key foods written on the form prior to the interviews. Remember that the food items retain the same order on the food list and do not change. If a word processor and photocopy machine are available a tremendous amount of time is saved by making master forms that can be copied for the sessions with the respondents.

It is also useful to keep a table or log with a list of all of the respondents, with important background information and notes showing which procedures have been carried out with each individual. This table or log is updated on an ongoing basis and can be kept in a notebook and/or presented on a blackboard or flipchart. It is recommended that every evening after interviewing sessions the team meets to review what was accomplished during the day and to discuss the following day's events. At this time the research manager ensures that the forms have been properly filed and that new forms are prepared for the next day's activities.

Other Considerations

Remember that your goal is to capture emic (meaningful in the local culture) language and information. Therefore, to preserve the integrity of the data you will want to conduct the exercises and record the responses in the local language if possible. Translations and interpretations will need to be made later when data are analyzed and for the writing of the final report.

You will find that the exercises are more effectively carried out with two people, one conducting the interview and the second recording the responses. Before beginning interviews with mother-respondents decide who will record the responses. This should depend upon the skills of the field assistants and determined in practice sessions. Determine which modules require two interviewers and which can be carried out by one interviewer.

6. PROJECT AND COMMUNITY PROCEDURES TO ENHANCE COMMUNICATIONS

REMINDERS ON DO'S AND DON'TS FOR FIELD WORK WITH INDIGENOUS PEOPLE

(Adapted from Blum, Pelto, Pelto and Kuhnlein, 1997)

Most people who develop projects using these methods will have previous experience in various kinds of research and intervention programs. Therefore, many of these elementary principles of community-based work will already be well-known. This list of *do's* and *don'ts* will be useful when you are training team members who are new to this kind of activity with Indigenous Peoples.

i. *Do* remember to *clear* your data-gathering activity with local authorities, local governmental persons, and community leaders. Failure to follow and respect lines of local authority can lead to serious obstacles that compromise the data-gathering and subsequent intervention programs. Be sure to obtain prior collective, community and individual informed consent for the research procedures.

ii. *Do* explain your general purpose to the people that you interview and explain where the information is likely to be used. This explanation is part of the information that people should have as a basis for agreeing to be interviewed. This is what we mean by *informed consent* as required by governmental and international standards of ethics.
iii. *Do not* coerce individuals to respond to interviews or other data-gathering. Individuals should be assured that their participation is voluntary and that they have a right to refuse to answer questions.
iv. *Do* not, as a researcher, promise the community leaders or any other individuals anything in the way of unlikely or yet unknown future benefits or services in relation to the study.
v. *Do* promise to share the results of the study with the community and those contributing their time as interviewers.
vi. *Do* be considerate of people's time schedules. If possible, data-gathering should be carried out during times of the year and days of the week, when people are not burdened with heavy work in harvesting or other activities.
vii. *Do* try to set up appointments with people, so that interviews are scheduled at times of the day and week that are most convenient for them.
viii. *Do* assure your informants and respondents that everything they say to you will be confidential and will not be told to other persons.
ix. *Do not* criticize individuals concerning their food habits, hygiene practices, and other behaviors, no matter how much they differ from what you think they should be.
x. *Do not* ridicule or correct persons if they tell you ideas and beliefs that you regard as superstitious or old-fashioned. Instead, you and your field team should treat all ideas, beliefs, and attitudes with respect and interest.
xi. *Do not* assume that all the statements of your key informants (and other sources) are correct and accurate. Always look for confirmations and ways to verify statements through checking with other persons and information sources. Also, it is a good idea to be cautious in accepting written reports concerning a locality or community. These, too, might be biased or out of date.
xii. *Do* be aware of local, intracommunity differences in cultural beliefs, knowledge, and behaviors. In all communities, there are variations in food use, diet, and other behaviors, even though food use in general is highly patterned. The differences found in some families are often important clues to directions of change, as well as indications of patterns of behaviors that might become general, under favorable conditions.
xiii. *Do not* wear out your respondents or informants with lengthy interview sessions. Try hard to discover an ideal duration (often about one hour), beyond which your informants' patience and attention begins to weaken. This is especially considerate in busy households with young children.
xiv. *Do* maintain an attitude of interest and sincere learning about local food and diet ideas and practices. The data in projects like this are much more believable and the relationships with local community people are much more pleasant if the data gathering team shows

sincere interest in the ideas and practices of the community people.

xv. *Do* be aware of special cultural and social sensitivities of the local population, particularly special religious areas, religious beliefs, and ritual behaviors. For example, you should be aware of general religious food restrictions in the community. For example, in households with religion-based vegetarian practices one must use extreme caution in introducing any questions about meat-eating.

TRANSLATIONS

In working with Indigenous Peoples in different settings you may encounter a local language that is not written. If community members are not bilingual in a language that is written, you will need to employ a bilingual interviewer from the community who can record responses to interviews for data interpretation and management.

If the local dialect is written as well as spoken, here are some main points to follow in training your data-gathering team about translation from the local dialect or language to the national and international languages.

i. Preserve vocabulary of key words and phrases in the original form, as used by the local people. This applies to the names of crops, foods, meals, dishes (types of prepared foods), attributes of foods, and other key words that emerge in interviews. For example, if local people have special words, or nicknames, for food items, these can be presented as used, rather than substituting the national language equivalent.

ii. Do not assume that words that *sound like* equivalents in the national language have the same range of meaning. For example, the word *sopa* in Mexican food culture sounds as if it refers to the same kind of food as soup in English. However, when we learn that a platter of noodles is also *sopa* we realize that the word cannot be freely translated, without further explanation.

The word *tomati* in Hausa almost always refers to tomato paste in arid regions of Niger, rather than a fresh tomato. In speaking of fresh tomatoes the adjective generally is added for clarification.

In many parts of the world foods are categorized in words that refer to *hot* or *heaty*. In some contexts the word may actually refer to the temperature of the food, while in other contexts the word hot (and the opposite, *cold*) refers to an abstract quality or attribute of food in relation to maintenance of a complex balance of hot and cold qualities in the body.
Thus the label hot or heaty concerning food may require considerable explanation, instead of simply literal translation into the equivalent word in the national language.

The need for 4 layers of translation: Miao-Sichaun-Mandarin-English.

iii.Complex local vocabulary items should be presented first in the indigenous language, followed by the *literal translation*, followed by further clarifying explanation.

Example: In Hausa some people say: "/Shine/ /mini/ /koshi/." Literally: "/That food//makes me/ /full/."

The statement can refer to filling one's stomach, but in Niger the statement also referred to building up bodily reserves for a future time of food shortages. Thus statements in the field notes should always use the Hausa word, *cowshi*, rather than the French language equivalent, plein.

For important attributes or qualities such as *cowshi* it is useful to ask informants to use the word in different contexts. Interviewers can also try using the word themselves, asking the informants if this example is a correct use of the word.

iv. Investigators must watch for topics in which local assistants might not have full command of the national language, even though they have moderately fluent use of both languages in most areas of conversation. Conversely, educated research supervisors and team leaders may believe themselves fluent in the local dialect, yet they may be lacking in local nuances. For example, in rural Haiti the term *opresion*, is considered by the local health professionals to be synonymous with asthma. There is, indeed, an overlap between the meanings of these two words, but in rural localities it turns out that opresion can refer to a wider range of sicknesses, including forms of bronchitis and pneumonia.

v. When passages of field notes are translated into the national language, the key terms in the local language should remain imbedded in the text. For example, in Andhra Pradesh, India the language spoken in rural communities is Telugu, in which the abstract concept of hot/treaty is *vedi*. Since for research purposes the national language is often English, a sentence concerning this attribute should be written like this: Fruits such as papaya and mango are rated high in vedi (hot/treaty).

vi. Team leaders can review the field notes and reporting forms of the research assistants to see that local terminologies are carefully preserved and explained.

vii. Important features of local vocabulary are not only to be found in food names and their attributes. In some cases the local dialect will have special expressions or special slang for behaviors dealing with foods and eating. Also, there may be slang expressions or special words for types of persons corresponding to ideas such as picky eater, omnivore, etc.

7. CHECKLIST FOR A QUALITY FOOD COMPOSITION LABORATORY

Gathering information about the composition of food in a traditional food list can be a tedious process, and the help of experts is often required who can complete the appropriate searches of the world's data systems. This usually happens through interface with the Food and Agriculture Organization's INFOODS network.

(www.fao.org/infoods/publications_en.stm#fna). Researchers who have completed this kind of search using common English names and scientific names of species will then have a clear idea of missing data in their traditional food list. Often, wild species are subject to neglect in national food composition tables because they do not enter commerce. Once a list of missing data are identified, and the researchers know the items that are frequently consumed in the community, it becomes clear which foods to sample and take to the laboratory for analysis.

Identification of the closest food composition laboratory with which to work on a project such as this requires attention to several details. Review of the following checklist of important points for evaluation may need the assistance of a laboratory scientist. Attention is needed to:

1. What is the training of staff supervising and doing the actual analysis? A degree in food science from a university is required within the team.
2. Is there a protocol manual of standard analytical methods that is routinely followed? Is it a recent publication?
3. Is the laboratory equipment functional? For standard analyses conducted in this manual, ask to see the following equipment: Analytical balance, freeze dryer, oven dryer, ashing oven, freezers at -20 and -70º C, atomic absorption instrument, high-pressure liquid chromatography instrument.
4. Are the equipment maintained or serviced by a professional at least once yearly?
5. Are procedures for cleaning laboratory glassware using distilled water?
6. Are reagents for analysis from a recognized chemical company (Sigma, for example-reagent grade chemicals)?
7. Are laboratory notebooks maintained by date and methods, with results? Are calculations checked and re-checked in the notebooks?
8. Are quality control analytical procedures up to date. Does the laboratory participate in performance tests with other regional laboratories using standard samples?
9. Are reference materials maintained for quality control of analyses (orchard leaves for minerals, for example?)
10. Are duplicate and triplicate analyses run for each independent sample? Is the laboratory insistent that more than one independent (harvested and packaged) sample is analyzed for each nutrient.
11. Does the laboratory keep a history of sample data sheets identifying species, place and date of harvest, quality of sample received into the laboratory (fresh, frozen, or dried without damage in transport?), record of analyses conducted, date of return of results to the researcher, and potential problems with the samples or data?
12. Is the time to completion of analyses reasonable for the expectation and needs of the researcher? Is the estimated time adhered to?
13. Does the laboratory maintain a database of previous analyses conducted?
14. Are the prices requested reasonable?
15. Ask for names, addresses, and telephone numbers of previous clients to do a reference check. Is the laboratory known by the national food monitoring agency?

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