6

Methods for getting information

This chapter outlines some rapid rural appraisal (RRA) and participatory rural appraisal (PRA) methods that are useful in HEA work, and describes approaches to conducting interviews with key informants and groups.

The aim of an interview is straightforward – the interviewer is trying to find out something which the interviewee knows. However, in many situations, interviews can be problematic. Communication might be through a translator, with the risk that the question will be changed; there may be misunderstandings; the interviewee may be reluctant to respond to certain questions and so on.

The chapter covers:

- tools commonly used in HEA
- interview techniques with key informants and groups
- measurement.

1. Tools

A variety of RRA/PRA techniques can be useful in conducting a semi-structured interview. The main benefits of these techniques are:

- to make complex and abstract questions clear

- to handle complicated information sets, eg, the proportion of households that fall into different defined wealth categories
- to rank lists of items such as foods.

However, remember that these techniques are tools to be used when necessary, not as an end in themselves. There may be other simpler and more effective ways in which some of these tasks can be achieved. In some places it will be found that people have their own techniques for similar purposes. For example, the Nuer in Southern Sudan use straw stalks to count cattle for dowries, in which case this will do well in place of the beans which are widely used for "proportional piling". Some people, even those with low levels of formal education, are entirely at ease with the idea of proportions. In some locations informants will be found who have a complete knowledge of all the people and households in a locality, and can give you an exact wealth ranking of the households, so that the use of tools may be unnecessary. The use of these tools also takes time, which may be better spent in other ways.

Ranking

Ranking can help you to establish the order of importance of a set of things. Say, for example, you want to find out the relative importance of the different sources of a household's food. First you ask for a list of all the sources of food, and second rank them in order of importance. For our needs, however, this will seldom be enough, and you will need to use proportional piling (see page 80) to work out the ratio of the different elements to each other, as well as their relative importance.

There is no big secret about ranking. You can ask directly if you feel your informant is able to give a meaningful answer. Or if you wish to spend more time on ranking, you can use a couple of other field techniques. One is borrowed from PRA and utilises different sizes of stick. The other, "pair-wise ranking", is used in several disciplines, and by a process of elimination narrows down the scope for error.

Collect a number of sticks equal to the number of items you would like to compare, making sure that each stick is of a different length. Explain to your informants that you would like them to associate the longest stick with the item that is most important and the shortest with that which is least important. Hand the sticks to the informants and ask them to arrange them on the ground so as to represent the order of importance of the items you are comparing. Wait until the informants have finished arranging the sticks and discussing the order amongst themselves before you ask about their final picture. If they wish to make changes after your discussion, that is fine, so long as there is justification for it.

Pair-wise ranking

Pair-wise ranking is used to overcome the difficulty people often have with ranking more than two items at a time. When asked to think about how five or six different items relate to each other, informants can sometimes find it difficult to assess so many objects at once. Pair-wise ranking helps you break the process down so that informants are only comparing two items at any one time.

An example:
You are working in an area that suffers from frequent droughts and crop failures. The population has become used to adapting its behaviour in drought years to overcome the threat of famine. In the course of discussions with key informants, you record a variety of mechanisms for adapting to bad years. They are:
- eating wild foods
- migrating out of the area to find work
- selling unusual numbers of livestock for food
- rationing food consumption to one meal per day.

You would like to know the order in which a poor family in this area uses these different mechanisms in a bad year.

Set up a matrix that lists across the top (in any order) the items to be compared. List the same items, in the same order, down one side as set out in Table 2 overleaf.

Table 2

	Wild foods	One meal	Sales livestock	Outmigration
Wild foods				
One meal				
Sales livestock				
Outmigration				

Now take the top item in the vertical column, and ask the informant to compare it with the items listed horizontally across the top. In this case, the top item of the column is "wild foods". You cannot compare wild foods with itself, so you move along the row to the right and ask: "Do families like this eat wild foods before they ration themselves to one meal?"

You write the answer on the grid. Always mark the preference under the item that is preferred. So if the informant thinks that families ration themselves to one meal before eating wild foods, put a mark below "one meal". If they eat wild foods before they sell livestock, put a mark under "wild foods". So after comparing wild foods to the other three items, the table looks like this:

Table 3

	Wild foods	One meal	Sales livestock	Outmigration
Wild foods	XX	X		
One meal				
Sales livestock				
Outmigration				

Table 3 shows that households ration themselves to one meal before eating wild foods (one mark under "one meal"), but eat wild foods before selling livestock or migrating (two marks under "wild foods"). This completes the first row.

Next, move down the column to the next option: "one meal". You have already compared one meal with wild foods, and as you cannot compare it with itself, go straight to comparing one meal with "sales of livestock", then with "outmigration", again working across the table.

Finally, compare "sales of livestock" with "outmigration". You have now compared all items with all other items, as in Table 4 below:

Table 4

	Wild foods	One meal	Sales livestock	Outmigration
Wild foods	XX	X		
One meal		XX		
Sales livestock			X	
Outmigration				
Totals	**2**	**3**	**1**	**0**

Add up the number of points that each option scored. You wanted to know what the population would do first in a bad year; this will be the activity with the most points. So in this area, in a bad year, people start by rationing themselves. If this does not work, they eat wild foods, then sell more livestock than usual, and finally migrate to find work.

You could just as well have asked which activity was "the most important", rather than which was "done first", and you may well have obtained a different set of answers. You could also have included a far larger number of options; but the logic remains the same.

Proportional piling

As noted above, you will almost always want to find out the relative importance of different types of information. You are not simply asking whether people eat more food they have grown themselves or more food they have bought – but how much food they have grown themselves and how much they have bought. One way to do this with key informants is by proportional piling.

First, you will need a hundred beans (or nuts, or pebbles, or anything else readily available).

Ask your informants to put the beans (or whatever) in piles that show how important each item is in relation to the others. It is best for informants to divide the beans first and then tell you what the piles represent afterwards. They should put more beans on the piles representing items that are more important, and fewer beans on the piles representing items that are less important.

Informants must use all the beans. They have to imagine that the beans represent all the food they eat during the year, or all the families in the community, or all the cattle in the village, or whatever you are asking about.

Once the informants have divided the beans into different piles, you can count them, calculating an approximate percentage for each pile.

Example

In a highly pastoral economy you have asked a group of women from average families to estimate the proportion of households which fall into the following wealth categories:

<div align="center">

0 cattle = destitute
1 – 9 cattle = poor
10 – 20 cattle = average
21 – 40 cattle = rich
over 40 cattle = very rich

</div>

Establish that the beans represent all the families in the community.

Informants may initially have trouble dividing the pile of beans into five or six smaller piles. In this case, try starting with two piles. Divide the beans into two piles, showing in one pile those families with more than 21 cattle, and in the other showing those with 20 cattle or fewer.

Then ask for the informants to divide the rich pile again into two, showing those with fewer than 40 cattle in one, and those with more than 40 in the other.

You would finish by having the informant divide the other pile into three, representing those families with 0 cows; those with 1–9 cows, and those with 10–20 cows.

If you have trouble remembering what each pile represents, label them with small pieces of paper.

2. Conducting interviews

Interviewing through a translator

A translator is used to translate, as accurately as possible the questions put by the interviewer, not to insert their own opinions. Always take time before the interview to discuss with the translator the techniques you will be using and the general topic of conversation. Ask for a literal translation, rather than their personal interpretation. Tell them that you would like to hear their impressions afterwards, but that during the interview you want to hear the interviewee's slant. Wherever possible, try to work with the same translator throughout. A good translator is a partner, who knows how to manage a group properly and can steer you out of trouble if you ask an inappropriate question. The best translators will quickly grasp the purpose and logic of the interview, and with practice should be able to conduct interviews on their own. If a translator is really unsatisfactory find someone more suitable – it is impossible to conduct good work with inadequate translation.

Semi-structured interviews

A semi-structured interview is one in which the interviewer knows exactly what information they want but where the questions are not put in a specific order, or even directly on the subject of interest. The questions will not follow the inflexible format of a questionnaire. HEA usually uses semi-structured interviews, either with individuals or groups.

It is essential to keep in mind the type of information you are after. As time is usually short, your questions should be focused: always ask yourself whether the question you are about to put will really elicit the information you need.

In general it is best to begin with open-ended questions (eg, what crops are grown in this area?) which will allow the person to tell you what they know. Leading questions (eg, is maize grown in this area?) that put ideas into the discussion, should be left until the end of the interview, if they are asked at all.

Interviewing individuals: key informants

A checklist is useful to ensure that no subjects are missed. As long as the informant understands your question, you should allow them to digress to a certain extent – they are probably answering the question in their own way. So do not adhere blindly to a checklist, but instead keep in mind what you need to know and ensure that the questions are well understood; this should enable you to tread the difficult path between covering the ground and allowing informants to talk freely. The checklist is for you to be sure that you have covered the ground. The most important point to remember is that you are attempting to get information on specific topics, not asking specific questions.

Remember also that you have chosen the key informants because of their detailed knowledge of matters that interest you. So it is pointless to ask informants about matters of which they cannot be expected to have first-hand information. You may as well make up the answers. If key informants are unhappy about answering a question, or say that they do not know the answer, take them at their word.

You may feel that some of the questions you ask, although within the field of knowledge of informants, are too "difficult" for them to answer. But remember,

Some guidelines... semi-structured interviews

- Be flexible in your approach. Let the informant explain points fully, and allow them to "wander" if it is necessary for them to make their point.
- Ask direct (not leading) questions: the questions to which you want to know the answers.
- Only ask questions to which the key informant can be expected to know the answer.
- Ask questions about groups of people, not about the informant.

Continually remind the informant of the terms of the conversation: who you are talking about, what kind of year you mean, etc.

concepts that may be alien to you often form the very basis of how rural households survive. When you talk to key informants, particularly at village level, you really are talking to the experts: the answers to your questions consist of basic information that underpins their lives. After all, you yourself probably have a fairly accurate idea of how much you earn! People tend to know in minute detail how rich and poor people are defined, how much food they grow and how many days in a season poor households work for rich households.

In a questionnaire survey, the interest is in the interviewee; individual answers are tallied together in an attempt to come up with the Big Picture. In HEA the questions are not specifically related to the individual to whom you are talking. "How many goats do you have?" is a survey question; "How many goats do most poor families have?" is an HEA question.

Interviewing in the community: group interviews

HEA interviews conducted in the community are usually conducted with groups rather than individuals. Group interviews differ from individual interviews in that people within a group often have divergent views, which leads to interaction

between individuals. It also raises the need for some management to ensure that you remain on the subject.

Before conducting interviews in the community you should already have a broad overview of the economy of that group – at the least you should know the chief economic activities and have a sense of the normal social relationships. For example, you should know if men are allowed to interview women (or the reverse) and have a clear idea of what constitutes a household.

The more you know about a community before the interviews begin, the more productive your interviews will be.

Keep your groups small, three to six people. The questions you are asking require concentration, and discussion may be impossible in a very large group. You will not necessarily get more varied opinions with a group of thirty than with a group of three. If possible, and socially appropriate, include some men and women in the group as they often have complimentary information. Do not let one person dominate the discussion.

Interaction between group members should (within reason) be encouraged.

3. Specific areas of enquiry

HEA work requires that you define food economies, households, wealth groups within communities, and household budgets for each wealth groups. This section gives some ideas as to how this can be done.

Defining the food economies

Food economies are usually broadly outlined from documentary sources and from key informants. The aim is to identify a population which shares a broadly similar economy, and which will be vulnerable to the same sort of events. Some questions which may be useful are:

- Do people produce the same things across the area (eg, crops, livestock, trade goods such as charcoal or handicrafts)?
- Is this production carried out in the same way? For example, if people are cultivating sorghum, are they doing it at the same time of year? Are they getting the same kinds of yield across the area? Is all the sorghum rain-fed, or is some irrigated? Are all groups growing it for themselves, or are some basically sharecropping for others?
- Do people trade the same things? For example, is it normal for the population right across the area to consume most of their sorghum harvest, or are there some people who, perhaps because they are near a market, trade it all?

An example from Uganda

A risk mapping team had outlined a provisional HEA in Rakai and Masaka districts of Uganda. The boundaries of the food economy were based on information gained from studying secondary sources in Kampala. Weather patterns, crops and yields very similar across the area.

However, in the course of interviewing key informants in a variety of sites across the provisional food economy, it became apparent that land tenure relations in the north of the area and the south were very different. In the north, there were large numbers of landless tenants, whereas in the south, far more of the population had freehold-type access to land. Thus the ways that people made a living in the two areas were very different. As a result of talking to key informants, the initial HEA was divided into two.

Note: Do not worry if this process sounds complicated. The definition of food economies is an integral part of the HEA analysis, and not something that has to be done separately from the rest of the work. Once you have defined the possibilities, the food economies become apparent as you begin to look more closely at how the rural economies in the area of study work. This is because a food economy is an area where a group shares the same risks and vulnerability because they live the same way. As your task is to find out how people live, it will quickly become apparent if you are looking at one food economy or at several. If people in different locations are telling you the same things about an area, then they are all in the same food economy. If they say people are doing very different things, you are looking at two or more food economies.

Defining households

The challenge here is to discover which social unit within a society most closely matches the definition of a household used in HEA work, ie, a group of people who work together as a production and consumption unit.

Anthropological or ethnographical studies of the people with whom you wish to work may describe the elements of their social structure. However, in many cases it will be necessary to ask key informants. Often this will be straightforward – a household will be a man, a woman and dependent children. In some cases the situation may be more complex. The basic approach to defining a household is to try to find out who produces and consumes what. For example, if you are working in a polygamous, agro-pastoralist society:

Q. When the maize is grown, who does the work in the fields?
A. *The women do it. Sometimes the man helps the youngest wife.*
Q. Do all the women work together on the same piece of land?
A. *No. If the man is rich, his wives may all work together growing tobacco on one piece, but they grow maize on their own piece of land. Sometimes all the women in the village will work together.*

Q. Does that happen often?
A. *No. Normally only at harvest time.*
Q. After harvest, do all the wives share the maize? Do they eat it together, or put it in the same granary?
A. *No. Each woman has her own granary. They eat the food with their own children. Sometimes the man might tell one wife to give some food to another, if she doesn't have enough. But this is unusual.*
Q. Does each woman own animals?
A. *Yes, they have their own chickens and goats.*
Q. Cattle?
A. *No! The cattle are looked after by the man. In the dry season, the man takes them to pasture.*
Q. And in the wet season?
A. *They stay around the homestead. Most of the cattle are for the children. Each one is for one child. If the family gets new cattle, the father will say this one is for so and so.*
Q. What if the animal is sold? Does all the money go to the child?
A. *No. The father will keep it and spread it out between the wives, depending on who needs it. But most will go to the mother of the child.*

In this case, the household is the female-headed unit. This unit produces food crops together (using communal labour at peak periods) and consumes together. They may redistribute food to other female-headed units within the male-headed family, but such redistribution is irregular. Livestock and livestock products, although largely owned by the man, are allocated to individual children, and thus to female-headed units. Although income from livestock sales is shared, the bulk will go to the female-headed unit with the greatest share in the animal. You can assume that, over time, the remaining money that goes to other female-headed units is balanced by money that comes into the unit in question from the households of other wives. To be sure of this classification, however, you would need to find out more about how money is earned and divided, but the discussion above should give you some directions for your questioning.

Often village-level informants will be able to tell you the indigenous names for different types of family unit. It helps to use these names during discussions,

to ensure that you and the informant are talking about the same groups. If any ambiguity exists, you should explain in your report what the terms for households mean, and the average number of persons in the household type you have used.

Wealth ranking

You are trying to discover three things:
- What are the criteria that differentiate poor and rich households?
- Using these criteria, how are households grouped within the economy?
- What proportion of the population falls into each group?

In a typical HEA enquiry it will be necessary to establish the wealth groups at each site visited as this will lead on to interviews with groups drawn from each category identified.

Two types of secondary source can be particularly useful:
- NGOs and other organisations often carry out wealth rankings to help their planning. They usually divide the population into groups according to wealth and then describe what proportion of the population falls into each group. This is what you are trying to do as well, so it makes sense to use any work that has been done already. But do check that the wealth ranking is representative of the food economy you are looking at, and not just of a village within the food economy. In many societies (including western Europe and north America) there is a tendency for rich people to live together in one community and poor people to live together in another. In this situation, the proportion of rich or poor people in any one place is not going to reflect the proportion of rich and poor in the area as a whole. Even so, wealth ranking that has already been done can be extremely useful, particularly if you can discuss the information with the people who compiled it.
- The second type of source is more diverse, and comes under the general heading of socio-economic information. This includes data about land holding, livestock ownership, the hiring of off-farm labour and a variety of other topics collected by household survey. Once you have established criteria for wealth and poverty, and key informants have given you an idea of how

many people are rich and poor according to these criteria, you can cross-check what they say against the survey information. For example, if you are told that the real mark of poverty in an area is owning less than one hectare of land and that about one-third of the population is poor, you can use land ownership surveys to check if about a third of households own less than one hectare.

In a community it is often straightforward to establish the wealth groups. Rural populations usually have very strong views about wealth differentiation. You will often find that socio-economic groups are locally classified and have local names. In Islamic societies, identifying the recipients of alms (zakat) may be a good way to identify the poor. In some cases an individual may be found who has a complete knowledge of all households and can both classify these and organise them into groups. If this is not the case, the best way to divide the population into wealth groups is to follow the three-stage method described below.

Begin by finding out what criteria are used to differentiate between households of different wealth. It is best to start with either the better-off or the poor, the ends of the scale, and to fill in the middle groups as a second step. Try asking questions like: "If you took me to a rich (or poor) household, what would we find?" or: "How do you know if a household is rich (or poor)". The answers to these questions often revolve around ownership of livestock, ownership of land, family size, hiring labour, food consumption, quality of housing and economic activities.

The last step is to use this information to make generalisations about groups. As suggested above, you may well find that the key informants have their own categorisations. If not, take all the facts you have been given and use them to divide the population of the area into categories. Always begin by defining the poor category and the rich category, and then define the rest, who are neither poor nor rich: it is much easier to establish the ends of the wealth distribution than the middle.

In discussing the better-off and the poor it is important to ensure that you are not discussing people who are rare exceptions. In some places you may find one or two "rich" people (landlords, moneylenders) and a small number of near

destitute poor. Keep in mind that you are discussing the top 10% and the bottom 10%, not exceptional cases.

Example

In the 'Lakes' food economy of Tomboctou, Mali, only the rich own large parcels of land. A few households own small parcels, and the majority of the population work as sharecroppers on the land of the rich. Very few people own cattle: again, this is the prerogative of the rich. Many households own goats. Most households own donkeys, which are necessary for carrying firewood for sale and for domestic use. If you don't own a donkey, you are really poor. Because the rich own so much land, they use the labour of others to work it. This is normally sharecropping labour, but they also hire labour for a few days at peak periods. Most people neither hire labour in, nor hire themselves out, but the really poor, in addition to sharecropping, hire out their labour at peak periods. Rich households can have up to twenty people: they benefit from having a lot of labour, and varied opportunities to make income, and their success attracts relatives, who come and live as part of the household. Most households have between six and eight people. This means that they have enough labour to work the fields, and also to send at least one person out of the area to get profitable work elsewhere. Poor households are small, and do not have enough men to send away to work.

Discussion revealed that:

- The rich group are the big landowners, who have other households sharecropping their land, who own cattle and who hire labour at peak periods. They normally have large households.
- The poorest group are all sharecroppers. They own no livestock. They are almost always quite small households, or households with very little labour. They do not send members outside the area to work, and the land they work by sharecropping is very small. They will undertake local, paid labour at peak periods.

You can now ask about the rest: "Are the households that are not rich and not poor almost all the same?"

Absolutely not. They all have donkeys, but they do not all have goats. There is a wide variation in the amount of land they cultivate. Those who cultivate more land tend to have goats. The small landowners normally have goats too. You can divide this group into three:

- The poor who sharecrop less than two hectares in a year. They will seldom have more than five goats.
- The small landowners, who normally own between one and two hectares, but are richer because they keep all their produce. They will normally have between ten and twenty goats.
- The large sharecroppers, who cultivate up to six hectares, have between ten and twenty goats, and may hire labour in the same way that rich households do.

So you have five basic groups: rich landowner, poorest sharecropper, poor sharecropper, small landowner and richer sharecropper.

The final step is to discover what proportion of the population falls into each group. This is probably easiest to do by proportional piling (see page 80). Once you have agreed the allocation of the groups with the key informants, bring out the beans and explain that the total number represents all the households in the area. Each bean is one household. Can the informants divide the pile into five, to show how many households there are in each group?

Sometimes you will find that a very large proportion of the population has been assigned to the poorest or the richest group. If so, try asking the informants if they can further subdivide the group. As a rule, you will not want either extreme of wealth to account for more than 25 per cent of the population: for example, it would be a very unusual society where half the population is at the bottom of the heap.

When you have defined the groups, and know their relative size, you can decide which ones you wish to discuss.

Do not simply ask how many households are "poor". Areas that have already received food aid may have a vested interest in saying that everyone is poor. Instead, ask how many households have the characteristics you specifically associate with being poor in that area.

Defining the baseline year

Your aim is to define the most frequently occurring type of year in terms of production and exchange. In many cases it will be possible to designate an actual year (say, 1997) as a "normal year" and then use it as the focus of discussion. In cases where production varies a lot between years, as occurs in many semi-arid areas, it may be necessary to establish a range of years which taken together make a normal period.

Note that in some areas the situation may be changing so rapidly – for example, as the result of drought or civil war – that it is inappropriate to talk of a "normal year". In these circumstances use the current year as your baseline, recognising that the baseline will have to be changed once the situation stabilises.

To decide on which year (or years) to use, count out ten markers (beans, twigs or anything else that comes to hand) and lay them out in a line. Explain to your informants that each marker stands for one of the past ten years: the first is 1990, the second 1991 and so on. Ask them to divide the markers into two piles: one for good years, one for bad years. Then ask them to divide the good pile into good and very good and the bad pile into bad and very bad. The largest single pile of the four represents the normal years. Ask which years were in this pile; the informants may say, for example, 1990, 1991, 1994 and 1996. Then agree that, throughout the interview, you will be talking about the most recent of these normal years; in this case, 1996.

A recording form is shown in Annexe 3.

Household budgets: interviews with wealth groups

Once you are sure of the meaning of "household" in the place where you are working, and have defined the categories of wealth, the next stage is to interview small groups of people from each wealth group to find out:

- What are the sources of food income?
- What are the sources of non-food income?
- What proportion of total food income comes from each source?
- What proportion of total non-food income comes from each source?

To complete a full HEA interview with one wealth group takes time (typically about two hours) and it is important that all the information required is obtained. It is therefore important not to get too distracted by incidental matters.

HEA requires the collection of complete household budgets – there is little point in learning about food income but having no knowledge of non-food income.

Interviews with groups are always semi-structured. However, the form shown in Annexe 3 gives a good basic structure for a wealth group interview. Following the main sections of the form also allows the interview to proceed methodically through the main topics – sources of food, sources of other income and expenditure – and ensures that nothing is omitted.

At the outset of the discussion it is important to ensure that the group is made up of people from the same wealth group: for example, members of poor households or of rich households. If people from different wealth groups are included confusion will result for both the interviewee and the interviewer. This is especially important where the power relationship is unequal – for example, between rich patrons and poor clients – as people in the less powerful position may be loath to talk.

You should begin by clearly defining who you are talking about:

- The wealth group. For example, you know that the poorest households in this area farm less than half an acre of land and have no animals. Check that all those present fall into that group.
- The size of household. Establish with the group that the discussion is about a typical household from that group, not a specific household. Define the number of people in the typical household (eg, mother, father and four

> It is important to note that *production costs*, eg, for fertiliser, labour or land rental *should only be included once*. If a person is employing labour to work land, this should be recorded as a cost. If fertiliser is used, the cost of this is usually deducted from the amount of value gained, and only the profit recorded. If you do this, do not also record fertiliser as an expense.

children). A way into this is to ask each member of the group to outline their own family membership. Derive a typical household from that.

● The normal baseline year, which you are discussing.

Then establish the sources of household food supply. "So, a household which farms less than half an acre and doesn't have animals... how do they get food in a normal year?" List each response.

You may find it useful, when you have the lists, to rank the importance of each item.

Once you have a list of activities, the next task is to find out the relative importance of each activity: how much of total food/non-food income is covered by each activity. There are two ways of going about this: adding things up and breaking things down.

Adding things up

The procedure here is that, armed with your list of economic activities, you take each activity in turn and find out how much food/non-food income it produces. Once you have covered all the activities on the list, you can check that the food you have been told about adds up to at least the household's total consumption needs, using the methods outlined below.

This approach depends heavily on information about production. You will tend to move from questions about how much the household produces, through questions about what is done with the produce, to questions about how much they consume (which is the most important part), how much is sold, how much stored as reserve, etc.

Here is an example. Having agreed on how to describe poor households and a normal year, you ask your informant:

Q: What would a poor household, like the one you described, do to get food in a normal year?
A: *Well, most of it they would buy. But they would grow some food too.*

As the informant hasn't mentioned several categories that appear on your list, you should quickly check whether they are relevant to the discussion:

Q: Do they ever collect fruits or other foods from the bush?
A: *Not really. In a very bad year, when the rains fail, they might, but not in a normal year.*
Q: What about fishing? Do poor households go fishing in the rivers or the wetlands around here?
A: *Yes. Most poor families fish a little most years.*

After a few more questions like this, you have a list showing crop production, purchase, fishing and gifts as sources of food income for a poor household. You now take each item in turn and build up information about it. You start with crop production:

Q: What type of crops do poor families grow?
A: *Mostly they grow groundnuts, sorghum and millet.*

You then ask for an approximate ranking of the importance of these crops for poor families, and begin with the most important food crop, in this case sorghum:

Q: How many harvests of sorghum would a poor household get in one year?
A: *Just one. That's true for all crops: there is only one growing season here.*
Q: So just how much sorghum would a poor household expect to harvest in most years?
A: *Between two and three sacks for the sort of family I described.*
Q: How large is a sack?
A: *90 kilograms.*
Q: And how about groundnuts?
A: *Two sacks.*
Q: Is that with or without the shells?
A: *With the shells.*
Q: How much would that be when they were shelled?
A: *About two-thirds of a sack.*
Q: And can you tell me about millet? How much millet would a poor household harvest?
A: *Probably one sack or a little bit less.*

Q: Are the groundnuts, millet and sorghum all consumed?

A: *Yes, for the most part. They would eat all the sorghum and millet, but they would eat about half the groundnuts and sell half.*

You can now move on to discussing the next item, purchase, finding out how much food is being bought, when it is bought and how much it costs.

Continue with each option in the same systematic way: look in each case at how much food comes from each source, and how much of it is consumed, sold, given away, etc.

When you have completed the information set for sources of food, you can move on to asking about sources of non-food income; again, by listing the sources of non-food income and then finding out how much income comes from each source. In the example above, you will return to the information about selling groundnuts when you move on to discussing sources of non-food income.

The advantages of this method are that:

- It provides a lot of information that can be cross-checked against itself (in the example above, does two or three sacks of sorghum and one of millet sound reasonable for a household cultivating half an acre?), and against secondary sources (does two or three sacks of sorghum and a sack of millet for half an acre agree with yield tables? Does half an acre sound reasonable for a household of six to cultivate, given the literature on labour requirements for sorghum and the information from the informant about the amount of off-farm labour the household undertakes?)
- It can be carried out in instalments. If you have an informant who is particularly knowledgeable about agriculture, but doesn't know much about, say, wild foods, you can collect just the agricultural information and add it to information from other specialists to build up a more complete picture.

However, the disadvantages of this method are:

- It is time-consuming.
- In order to construct the food economy, what you are really interested in is food consumed. Calculating consumption by analysing production is going the long way round, and to do it effectively, you need to have a good knowledge of the entire household economic cycle so that you know what

happens to all the food produced; otherwise, you will be left with production that does not seem to be consumed but which you cannot account for. An example of this would be grain that is lost to pests during storage or is used for brewing. You might not think to ask about this, and so might assume that the grain is eaten. This will make it impossible to construct the food economy, as your figures will not add up.

Breaking things down

Again, before you do this you should already have a list, which you believe to be complete, of economic activities: food generating and non-food generating. Begin by obtaining a broad picture of the relative importance of each food or income source, by proportional piling if necessary, then work through each source individually, checking that the information about it fits with the overall information you have been given.

As applied to sources of food, this approach goes directly to what a household consumes, and production has only peripheral importance.

Here is an example. Looking at the same household type in the same area as above:

Q: So all the food a poor household eats in a normal year will come from purchase and exchange, crop production, fishing or gifts?

A: *That's right.*

Q. OK, what I want to know now is how important each kind of food is to that household. So what I would like you to do is this. Imagine that this pile of beans represents all the food that the family eats in one year: the food they buy, the gifts, the fish and the food they grow, all together. I'd like you to divide it into four piles, one for each kind of food, so there is one pile for food they buy, one for food they grow, one for fish, one for gifts. The size of each pile should show the importance of that kind of food to the household. So if they eat a lot of fish, you make a big pile for fish, like this [demonstrates], but if they only eat a small amount, then you only make a small pile, like this. Divide all the beans into four piles, so that we can see how the different kinds of food compare.

A: *Like this?*

The informant divides the beans up thus:

Crops 25%   Gifts 10%   Fish 15%   Purchase 50%
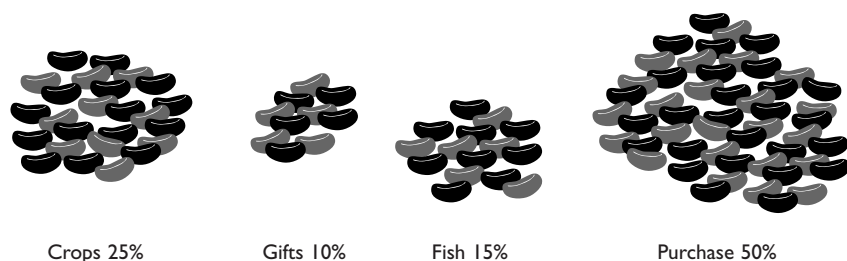
The interviewer then asks questions about each source, attempting to check that the proportion given in the exercise is consistent with the informant's estimate of each individual element of income:

Q: Thank you. Let's start with the biggest pile. What is this for?

A: *That's the food that the household buys.*

Q: What sort of food do they buy?

A: *Maize, beans. Some tea and sugar.*

Q: Anything else?

A: *Not really. Sometimes they might buy some milk, if there is somebody sick, but very seldom.*

Q: How much maize do they buy in a month?

A: *That's very hard to answer.*

Q: Why?

A: *Because it depends. They buy more when they have no sorghum or millet.*

Q: When is that?

A: *Normally from December to June or July.*

Q: And how much do they buy in those months?

A: *About half a bag a month.*

Q: What about the rest of the year?

A: *They don't really buy maize the rest of the year.*

Q: So in one normal year they buy half a bag a month for seven or eight months. About four bags in all?

A: *Yes.*

Q: What about beans?

A: *They buy them at the same time as the maize – about half as much.*

Q: Half as much as the maize? So about a quarter of a bag every month for seven or eight months?

A: *Yes. So that would be about two bags a year.*

So far you have discovered that the maize and beans bought come to between five and six sacks per year in total. That would represent between 40 and 50 per cent of minimum food needs. From what the informant goes on to tell you about sugar and oil, the total purchase of these roughly equals 50 to 60 per cent of the household's minimum food needs. This falls within 10 per cent of the proportional piling estimate (which was 50 per cent), so, given that you can allow a variation of up to 20 per cent around the actual figure, this is quite acceptable. You would in any case expect a household to eat slightly more than the absolute minimum they need to stay alive, and so the total figure for what people actually eat (as represented in the piling exercise) and the total for what they have to eat (which you have used to cross check the exercise) may be slightly different.

You would go on to cross-check the other proportions from the piling exercise in the same way.

The advantages of this method are:

● It is far quicker than the adding things up method, and involves asking questions about what you need to know (consumption) rather than working through to consumption from production.

● It is easy to cross-check the information for internal consistency as you go along, as you have the full information set from the beginning and are checking that each piece adds together to make a credible whole. In the example above, for instance, if purchased food was given as 50 per cent in the piling exercise, but the informant later said that households bought one sack of maize per year, which would meet less than 10 per cent of energy requirement, it would quickly become apparent that something was wrong. By contrast, the adding things up method does not give you a picture of total income until the interview is over.

● There is a visual focus for the discussion, and this helps to minimise misunderstandings between you and the informant. For the same reason, it

works well in group situations, giving each member of the group something to focus on.

The disadvantages are:

- Since you are mainly trying to confirm the truth of the initial, proportional piling estimate, you will tend to collect less information. This makes for a quicker interview, but also means you have less to compare with secondary sources later, which makes cross-checking more difficult.
- The piling exercise can create confusion. The question 'What proportion of food comes from…' is open to a variety of interpretations, depending on how food is measured. By quantity? By quality, as locally perceived? By quality (in this case calories) as perceived by us?
- This method only works if you have a key informant who knows about every aspect of food income for a household, so that they can give each aspect a relative value. If the informant knows a lot about crops, but very little about fishing and gifts, and nothing at all about wage labour, you are wasting your time asking them to position all types of food income in relation to each other.

Things to look out for. Whichever method you choose (and you will probably want to use a combination), you may find that asking questions about the quantities of food produced does not get you very far. This is especially true where food is not bagged or where much of it is eaten "green" (see page 116). You may prefer to talk about how long the food lasts (for example, "How many months of sorghum do you get?" instead of "How many bags…"). If you do this, remember that a range of foodstuffs are normally eaten at the same time, and so will "last" longer than they would if they were the only food being consumed. Four bags of cereal are equal to 30 per cent of minimum food needs for a family of six, which would mean that, if it was the only food eaten, the cereal would last about four months of each year. As a general rule, one bag of cereal lasts one household of six persons one month if it is the only food eaten. In this case, however, the four bags of cereal will in practice be mixed with beans or groundnuts, and so will last for perhaps six months. So do not automatically assume that six months of cereal is equivalent to six bags.

When you move on to talking about sources of non-food income, key informants will tend to think you are talking about the non-food income used to buy food. This is not normally the case: you want to know about all non-food income, regardless of how it is used. You must make this very clear at the outset.

Where payments are made in non-monetary "value", you should try to express them in terms of how much staple food they would buy at normal market price. This gives you an opportunity to compare different income sources and to describe the proportion of non-food income each source provides.

Note that you are trying to define a "typical" household in a wealth category when, in fact, there is some variation across the group. You will need to make a judgement about what information should be included and what excluded.

Typical problems include:

- Specialised activities that only some households in the wealth category engage in: for example, brewing, gathering honey or hunting. These should be noted, as they provide useful contextual information for any final report, but if only a few households regularly benefit, the activities should be excluded from the household budget. Include only items that represent a typical pattern of expenditure.
- Variation in expenditure. The take-up of health services varies widely, so you will need to find a reasonably typical level of actual expenditure.

An important feature of a household budget is that it should be internally consistent:

- The amount of food recorded in the interview should be sufficient to allow the household to subsist. This is discussed in Chapter 7.
- Income and expenditure should balance. Methods for keeping a running balance during an interview is discussed in Chapter 7.

What level of household food consumption is normal? There is no fixed level of average energy intake per person which is "normal". This will vary with levels of individual activity, the ambient temperature, the availability of food, and other factors (Chapter 1). In practice it is often found that in warmer areas where people are not engaged in heavy work (eg, much of lowland Africa), recorded

household food consumption is around 1,900 kcal per person per day (assuming a household of a typical range of ages). However, this may vary from place to place. The fact that you are getting information that indicates a somewhat lower or higher level of average consumption does not necessarily mean that you are being misled. Look for explanations in terms of unusual levels of activity or environmental losses.

Markets

The name and location of all the markets used for all the main traded commodities is easily obtained from key informants. A note should be made of the geographical location of each markets – in many cases it will be difficult or impossible to locate these on maps.

The current price of different commodities will normally be obtained as part of the household interviews.

Non-market transfers and the availability of wild foods

An estimate of income obtained by non-market transfers (gift, reciprocity) as part of normal household income (eg, gifts, relief) will be obtained as part of the household budget interview. If the information is to be used for understanding the effect of a drought or other shock on households it will also be necessary to get an idea of how this source of income may vary under conditions of economic stress.

In many situations this information can be obtained by asking people about what happened in previous periods of stress, such as rain failure.

Information will also be needed on the potential availability of wild foods, hunting, and fishing – to what extent could a household cover a fall in income by expanding these food sources? Clearly, exact quantification is impossible, but it is usually straightforward to establish if the supply of wild foods is very small, or if these are abundant, and to roughly quantify their likely availability. This may be done, as with non-market redistribution, by reference to a period of stress when people used wild foods.

4. Seasonal calendars

Seasonal calendars are a means of recording events during a normal year. They can be constructed in a number of ways, and before, during or after a visit to a food economy. They can include any number of topics, such as harvest and planting times, sales of livestock, purchase of grain, movement to grazing lands, peak fishing times, sickness among children, etc.

The advantage of a seasonal calendar is that it presents visually a number of different activities that are carried out at the same time, enabling you to see the correlation between them. For instance, if peak labour requirements occur at the same time as planting and harvest, it is likely that smaller households (which you have discovered through interviews resort to off-farm labouring as an important income-generating activity) will not be able to devote much time to their own plots. If the second peak fishing time, in November, coincides with the period when animals are being moved to the river for the dry season, and also coincides with the harvest period, poor families, who are less likely to be at the river as they do not have cattle and who have to work as labourers during this period, are less likely to be able to fish.

Because seasonal calendars reveal a range of possible interconnections, they can spark off interesting debates. So you should construct one for your food economy area as soon as possible, even if it is only very rough, to serve as an aid to discussion.

A form for recording a seasonal crop information and seasonal labour use is given in Annexe 3.

Constructing a calendar in a village

This exercise often works best with a group. This does not have to be a focus group (that is, one consisting of, say, poor women only); in fact, the exercise works better if there is a mixture of people.

Find a patch of ground and clear it of stones and other debris. Collect a number of different objects to represent different activities (for example, stones for harvesting of maize, beans for labour demand, leaves for fishing periods, etc).

First, define the seasons carefully with your informants. Try to match the local seasons to the months of the Gregorian calendar (if only in your head, but better make a note on paper), but use the local seasons as your x-axis. Mark them out on the ground, by drawing lines in the dirt or laying down sticks.

Start by correlating the rainy and dry seasons with the local seasons. Then choose any one of the activities and ask your informants to place the stone, bean or leaf representing it in the months or seasons when the activity occurs. For instance, if you want to know when maize is harvested, ask the informants to place stones in all the months when this happens.

Continue in the same way until all the activities or events are represented on the ground. Your discussion can then focus on the connections between the different activities. Do not forget to copy the calendar on to paper before leaving.

A variation on this can be used to show when an activity is at its most intense or important. If the seasonal calendar shows you that an activity takes place during six months of the year, take a hundred beans and ask the informant to place them all under the months when that activity is occurring, in quantities according to the importance of the activity during each month. This method combines proportional piling and seasonal calendars to good effect. You can create a histogram by proportionally piling beans (or another appropriate symbol, such as maize or nuts) across a particular time period to show when the activity is at its most intense. You can show, for instance, the rate of consumption of different sources of food in this way.

Preparing seasonal calendars from documents

Secondary sources can be invaluable in understanding certain aspects of seasonality, and are often readily available. In most places, you should be able to find monthly rainfall charts and cropping calendars. You should also look for farming systems surveys or seasonality surveys, which can tell you a lot about seasonal labour use. Occasionally you may even find figures for seasonal food consumption. Treat these with some caution: the methods used (such as family members recalling their consumption over a 24-hour period) can be inaccurate.

Keep the beginning of a seasonal calendar on hand when you read through documents. Record events or activities as you come across mentions of them. In this way you can collate information from a number of sources (and possibly point up inconsistencies) while compiling a seasonal calendar.

See Figure 4, page 13, for an example of a seasonal calendar.