SECTION 2:

Learning from Rural women

WHY ASK WOMEN?

"Don't bother talking to the women. What do they know? They just spend their time collecting dung and fuelwood. You are educated people, these women have nothing to tell you."

This was the advice given to a team conducting a survey in a fishing village in India, by the village leader (a man) during a meeting attended by about 50 villagers - all men. Talking later with a group of women who had been listening nearby, the team were told:

"We heard what the chief said, about us doing no real work. Well, just ask him what happens every day when the boats come ashore and the fish are landed. Who is it that buys the fish on the beach and takes them to markets to sell?"

This story, which could have come from many different countries, provides three good reasons for talking with rural women:

* Women are often regarded as an unimportant group, both by "insiders" and "outsiders". They are rarely involved in traditional leadership and decision-making roles. For this reason they should be a group of particular interest to those trying to learn about a community and the problems of disadvantaged groups within the community.

* Women, as well as men, are involved in a range of activities, some of which will affect and be affected by the surrounding natural resources. Thus women need to know about their local environment, for instance as they collect water and firewood, or gather fodder or medicinal wild plants. If we do not talk with these women we will miss the opportunity to learn from their knowledge.

* In addition if we are planning to involve rural women in resource conservation programmes we need to understand their ideas and knowledge of the local resources. For instance, a training programme in tree nursery management would be better if local women and men were first asked which species they felt would be most popular and which problems they were encountering in seedling survival etc. It may be found that a whole wealth of local knowledge already exists which can be used for the training programme. It may also be found that the women and men have different preferences for which trees should be grown - this is also important to know.

But these are not the only reasons for talking with rural women. Yes, these women do have particular problems which should be investigated and as a group they do represent an important source of information.

But not only can **we** benefit from talking with these women, the women also can gain from being included in our learning process. If we are better informed as a result of talking with them and learning from them they stand a better chance of getting their points of view taken into account as we use our newly-gained knowledge in our work. If we do not talk with them, our knowledge will be male-biased and possibly neglect or adversely affect women.

The role of learning in conservation activities

Of course, talking with the local people, women and men, is only part of the answer. Sensitive listening and learning is vital but to be effective there also needs to be a sensitive and cooperative approach to any subsequent activities. This section of the manual limits itself to questions of **how to learn** from rural women as well as men and how to include them in the actual learning and planning process. Later sections will look at ways of involving rural women in on-the-ground resource conservation activities. One important part of this is to involve the women from the very start, as we discuss and plan the conservation work.

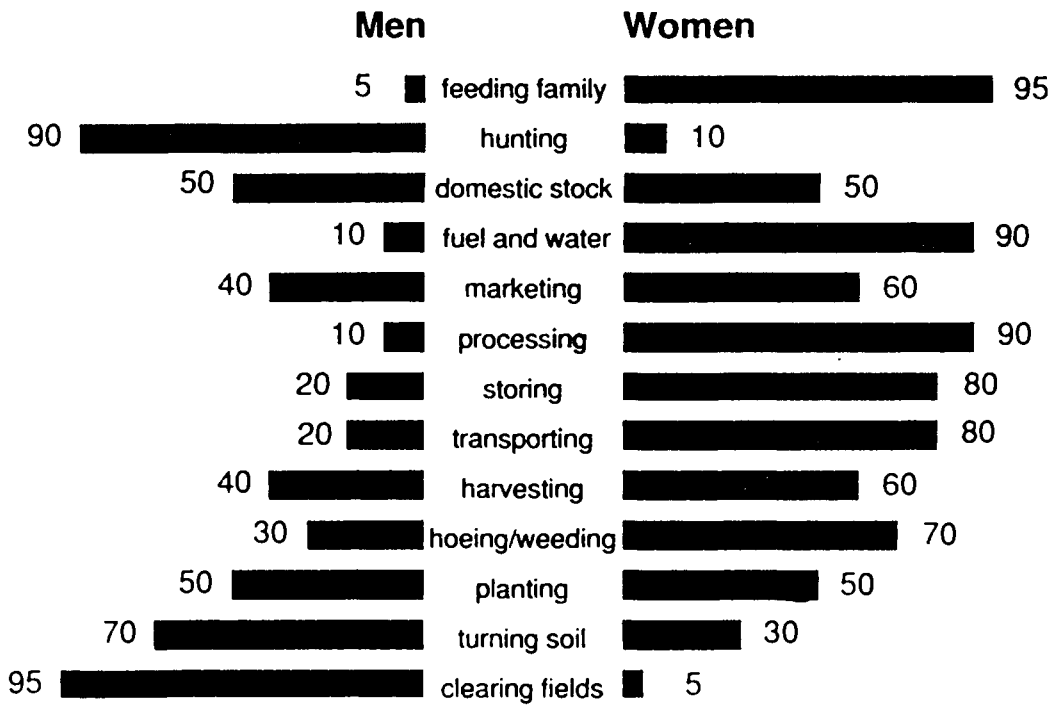
In addition many of the same communication and learning techniques can also be used in the later stages of development and conservation activities. Learning from rural women can assist the monitoring and evaluation of ongoing or completed activities. In this way local criteria for measuring success can be included in the review of the activities, and local people can be involved in deciding how best to improve any shortcomings which may emerge.

WHAT DO RURAL WOMEN KNOW?

So, in what areas do rural women have particular knowledge? We can ask this question in a different way: "What activities are the women involved in"? These activities will then tell us something of the types of knowledge which women must have and make use of in their daily lives. The answer to this question will differ from country to country, even from village to village and household to household, depending on, among other things, the social structure and how it affects the division of labour, the existence of any taboos on women's involvement in certain activities, the agricultural cropping patterns present, the extent to which cooperatives or working groups are responsible for some activities, and whether or not men are going outside the community for seasonal or year-round employment.

Box 3 suggests the general division of labour between rural women and men in Africa: men hunt, clear the fields and turn the soil, while women do most of the rest. Do you agree with this picture for your own area?

Box 3 **How the work is divided** (Africa, % of total labour in hours)



Men clear the land, turn the soil—women do most of the rest

Exercise 1 What do rural women know?

Think about the situation in your area of work. What determines the types of activities with which rural women are involved? Do any of the above factors apply? Make a list of any other reasons why women are involved, or not involved with certain activities in the communities with which you are familiar. Consider how this differs between different households.

Now, consider **who does what** in the communities with which you work. How is the work divided between men, women and children? Below are six different categories of work, each divided into a number of different activities. Try to fill in the tables by considering one activity at a time and putting an X against the people involved with this activity. For instance if the collection of fodder is done by everyone, men, women and children, put an X in each of the four boxes. If land preparation is only done by men, put an X only in the "men" column. You may like to make additional lists for the different types of livestock - sheep, goats, chickens, fish, etc., and for the different types of crops grown in your particular area.

When you have completed the table spend a few minutes identifying those activities which are not traditionally the responsibility of women, but which have become a recent addition to their workload. For instance, in some areas, women's increasing role in agriculture has meant that

they are now ploughing the land, looking after cattle and doing other, traditionally male, activities. It is useful for us to know which activities women have only recently started, not least because they may require some training to develop these new skills.

You may like to make use of these completed lists as you talk with rural women, men and children in your work. You can certainly check your ideas on the division of labour and you may want to explore in more depth women's knowledge of a particular activity. Perhaps some activities are carried out by older women, or younger women, or groups of women working together. Perhaps some activities are done by women during certain times of the day or certain months of the year, and by men at other times.

	Women	Men	Girls	Boys
1. COLLECTING & GATHERING				
* water				
* fuel				
- wood				
- dung				
* fodder				
* wild plants				
- medicine				
- food				
- other uses				
2. LOOKING AFTER CATTLE				
* supervision of grazing				
* stall-feeding and watering				
* tending to sick animals				
* milking				
* processing & marketing of milk				
* selling & buying animals				
3. GROWING CROPS				
* land preparation				
* planting				
* weeding				
* applying fertilizers, pesticides				
* bird-scaring				
* harvesting				

* transporting harvest from field
* processing
* marketing
* buying seeds and inputs

4. GROWING TREES

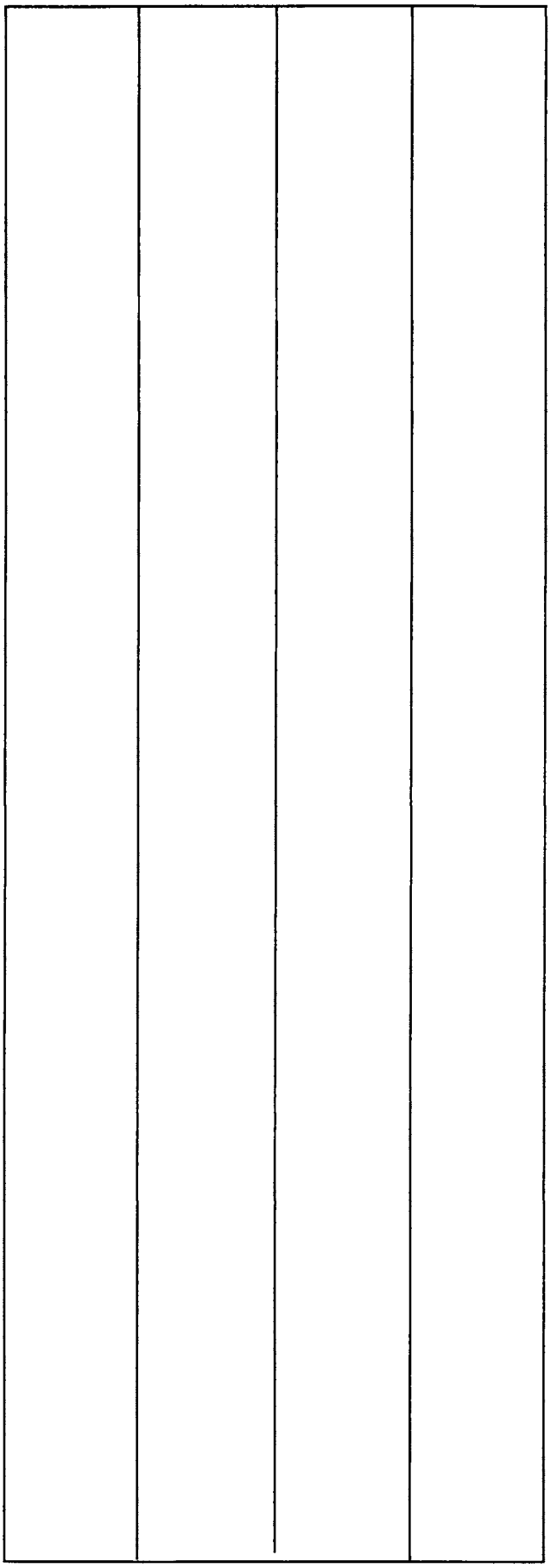
* land preparation
* planting
* protecting young trees from livestock
* applying pesticides
* pruning, maintaining
* harvesting fruit, etc.
    - fodder
    - fuelwood
    - other
* felling
* market produce

5. LOOKING AFTER THE HOUSEHOLD

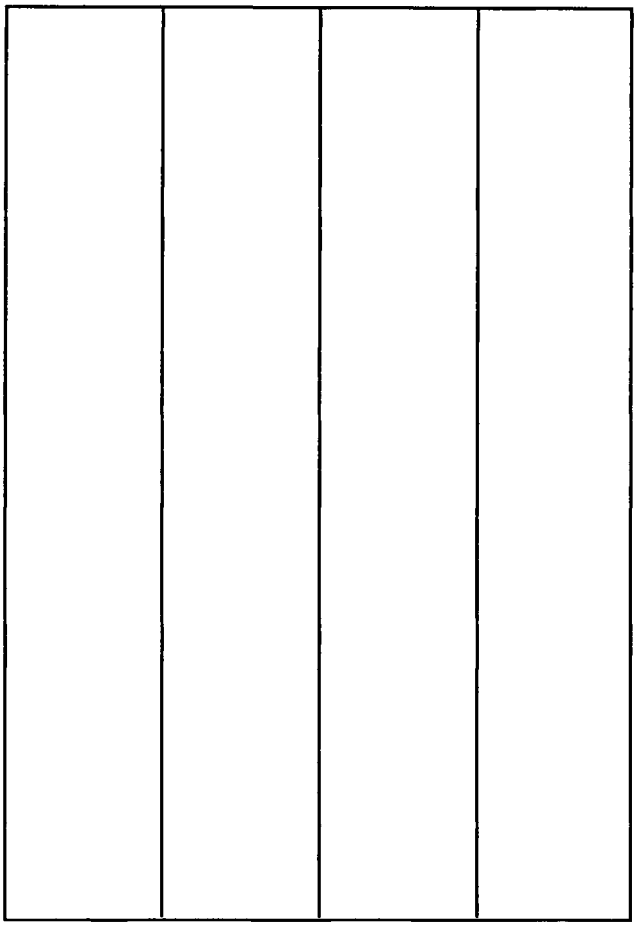
* cooking
* washing utensils
* washing clothes
* looking after children
* cleaning the house
* tending the garden
* buying household goods
* building & maintaining house
* other

6. MAKING DECISIONS

* crops
    - which crops to grow
    - where
    - when to plant and harvest
    - marketing
* trees
    - which trees to grow
    - where
    - how to use them



* livestock
    - when to buy/sell
    - price to pay/ask
    - milk to sell/use for household
    - how to manage
* credit
    - when to take loans
    - how to repay loans
    - what to use loans for
    - amount to borrow
* education
    - which children to go to school
    - when to stop their education
    - how to pay for school fees
* budget
    - responsibility for savings
    - responsibility for loan repayments
    - amount to spend on festivals, weddings
    - amount to spend on household needs (food, clothing medicines, etc.)



WHAT DO RURAL WOMEN KNOW ABOUT THEIR ENVIRONMENT?

We have been thinking about the range of activities with which rural women are involved in their daily lives. The assumption we have made is that it will be these activities and the associated knowledge and skills required to undertake them with which the women will be most familiar. It is these activities which we need to discuss with rural women if we are to learn about them.

Now, we can make another assumption. The natural resources with which women are familiar will be those which they use in their daily lives - i.e. those associated with the women's activities. So, in order to learn fully about these resources we need to talk with women as well as men.

In Sierra Leone for example, women knew 31 uses of trees on fallow land and in forests and knew what forest products would be produced in a particular fallow year; men identified only eight different uses[2].

Just how we learn about these resources will vary according to what we **need** to know and what is **relevant** to our needs. Box 4 gives suggests the types of questions which could be asked of rural wome to learn about:

a. their knowledge of and their ideas about the local environment and the natural resources which they use;

b. the status of these resources and their management by the local people and in particular by women.

This is not meant to be a complete list of questions to be asked in every situation and for every resource. It is provided here to illustrate the different angles from which questions can be asked, in order to obtain a full picture of the resource and its use.

Box 4: A possible sequence of questioning about resource use.

1. Availability of the resource

What do the women think about:

* the availability of the resource?
* the seasonality of the resource (does its availability change throughout the year and how)?
* any longterm trends (is the availability of the resource changing from year to year and how)?
* why is the availability changing?

2. Quality of the resource

What do the women think about:

* how good is the quality of the resource?
* the seasonality in quality (does the quality change throughout the year, and how)?
* any longterm trends (is the quality changing from year to year and how)?
* why is the quality changing?

3.Management of the resource

What do the women think about:
* how much the resource is being used?
* the seasonality of exploitation (is the resource exploited more at certain times of the year? When? Why? Is it exploited in different ways at different times of the year? When? How? Why?)
* any longterm trends (is the use of the resource changing over the years? If so how? Why?)
* how does the use affect the availability and quality of the resource?
* are there any limits or controls set on the levels of use? Who sets them? How do they work?
* what is the best way to manage the resource?

continued ...

Box 4: continued

You could choose a particular resource with which you are familiar (e.g. water from a particular stream, pond, lake, or fuelwood and fodder from an area of forest or common land) and work through this list to try and ask yourself about this resource. Are these questions in a sensible order? Do they produce a complete picture? What else could be asked?

As a general tip it is useful to remember we can ask about any topic from the different angles of:

Who?
What?
Where?
When?
Why?
How?

For instance if we were trying to learn about the use of water in a village and we wanted to discuss a particular stream which we know to be polluted we could ask:

Who uses this stream?
When do they use it? (time of day, month)
What do they use it for? (irrigation, washing, fishing)
Where does the stream flow to, from?
Why is the water quality getting worse?
How can the water quality be improved?

HOW CAN WE LEARN FROM RURAL WOMEN?

So, how can we work with rural women to learn and make best use of their knowledge and to share our experiences and ideas with each other? How can we learn about the local environmental conditions with rural women?

The methods that we use will depend to a great deal on what exactly it is we need to know: the amount of information, the level of detail and accuracy and the type of information. For instance, if we need detailed information on several households' use of certain resources during one year, we would probably need to spend some time living with the households, observing their daily activities and recording the details in a standardized format. On the other hand if we need to know about the resource use in a whole village or cluster of villages, we could not devote so much time and detailed investigation to each household; we may need to use a questionnaire to cover a large number of households in a relatively short period of time.

The learning techniques which will be dealt with in this section are particularly appropriate for use in the following contexts:

* where the learning and investigating takes place informally

* where most of the information to be collected is of a qualitative nature

* where the learning and investigating is being done by local people (researchers, fieldworkers, project staff) together with the rural women and men

* where the focus is at a local (e.g. village) level

* where money and/or time is limited

The techniques will **not** be so appropriate in situations where:

* much of the information needed is quantitive

* the information is needed for statistical analysis

* a formal questionnaire survey is to be the focus of the work

* information is to be collected on a large (e.g. regional or national) scale

The simple, informal techniques which will be outlined here come under the umbrella term of Rapid Rural Appraisal (RRA) and have been used in various combinations in many different contexts. As tools for learning their points of value include:

* the techniques themselves involve outsiders working with local rural women and men, and encourage a participative two-way learning.

* the techniques can be used informally with little back-up of resources and can be very cost-effective if used well.

* careful choice and use of these techniques allows the investigators to focus their work and to limit the amount of detailed information they collect. In this way they can avoid collecting too much or irrelevant information.

* by combining the use of several different techniques, the information collected can be cross-checked. Several techniques can be used to investigate the same question and the results can be checked against each other.

It should be stressed again that these are only some techniques to use in learning about local resources and resource use. They are suitable for getting certain types of information and are less useful for other types of learning (see above). Often they are best used **along with** other techniques. For instance, as well as visiting and talking with rural women, using these informal techniques, it would also be useful to consult any documents, census data, project records etc., which already exist on the area. Similarly, it would be useful to talk with local specialists who

have expert knowledge, such as the local administration officers, local shopkeepers, bankers, researchers, to learn from their own knowledge.

AND WHAT ABOUT MEN?

In the great majority of cultures the leaders and elders of a community are male. Since they are the ones responsible for making decisions it is often necessary, certainly respectful, to approach them first for their permission to talk with the women. This is particularly true if some or all of the investgators are men, in order to avoid any misunderstandings about their motives for visiting the women. It is also especially relevant in muslim societies, such as some West African countries, where women spend much of their time in the seclusion of their own homes, and where males may be prohibited from visiting them unless their husbands are at home and are clear about the purpose of the visit.

However, investigators need to be aware that the opinions expressed by male leaders are not necessarily those held by others in the community. There is a danger of placing too much emphasis on what these powerful and educated men have to say. The leaders may have their own selfish motives for telling only one side of the story. For example they may try and persuade the investigators that the priority of the community is to have a bigger and better office where they can hold their meetings, or a tractor to make ploughing an easier task. On the other hand, ordinary women and men of the community, who do not use the office and whose landholdings are too small to need a tractor, will have very different ideas!

To reach the rural women it is also useful to find out who are the **female** opinion leaders in the community. They may be leaders in the church, in a political party, they may be the more qualified women such as health workers, or schoolteachers, or they may be just ordinary women who are much respected in the community. The investigators would benefit from talking with these women, while bearing in mind that they will have their own particular opinions, not necessarily the same as those of the less prominent women.

PLEASE EXPERIMENT!

Although the techniques described here are associated with the RRA approach, they are neither new or unique to RRA. They have been used in various types of survey and research work and in a number of different sectors. Neither are they applicable only to learning from rural women! Since this is the focus of this manual, it will be this application which we will be considering, but rural or urban populations of women and men and children could be involved. Some of the techniques are especially useful in learning about different perspectives and conflicts of interest between individuals, including those between women and men. These uses will be highlighted in the discussions below. While some of the techniques are discussed in the context of their use by a **team** of investigators, it is also possible for an **individual** to make use of these techniques. Do not be discouraged if you can not work with a team of other people! Try some techniques and see which ones work. And on this note, don't rely too much on the examples provided, such as the diagrams or the ranking results. These are by no means perfect examples, nor do they

represent the only correct way to use the technique. Please don't be restrained by anything shown here. If you are in doubt whether something will work, try it and see! You may be pleasantly surprised. Experiment and invent new techniques, and if you do, share your experience with others.

HOW CAN WE BEST TALK WITH RURAL WOMEN?

The simple technique of **informal interviews** is one with which most of us are familiar. The key points about such dialogues are:

* they are informal conversations rather than formal question and answer sessions.

* they take place in the field or at the home of the interviewee. The interviewers go to meet the interviewees, rather than call them for an interview.

* questions are not fixed before the interview. Rather than using a questionnaire, the interviewers draw up a checklist of issues, from which to choose certain topics to cover in any one interview. The planned direction of the interview may well change as the discussion gets underway.

* the success of the interview depends largely on a relaxed atmosphere and an open learning attitude of the interviewer(s).

* the interviews are short, probably no more than an hour for an individual interview and no more than two or three hours for a group discussion (this depends on how rushed or interested the interviewees are).

Exercise 2: Interview technique

Before we consider what makes up a good interview, take a look at the following photographs (Plates 1-5) of real-life interview situations. The only piece of information provided is the country in which the interview is taking place. Discuss what you see in each case: does it look like a good or a bad interview? Do the people look comfortable, relaxed, interested? Who seems to be the interviewer(s) and who the interviewee(s)? What about how they are positioned, the place of the interview, the number of people? Use your own judgement and make some assumptions where necessary. You may like to note down your thoughts in the form of two lists of guidelines for interviewing, one of "Dos" and one of "Don'ts". After you have completed this exercise, you can compare your lists of guidelines with the hints given below.

Plate 1 - Interview in Ethiopia.
Credit: Robin Mearns.

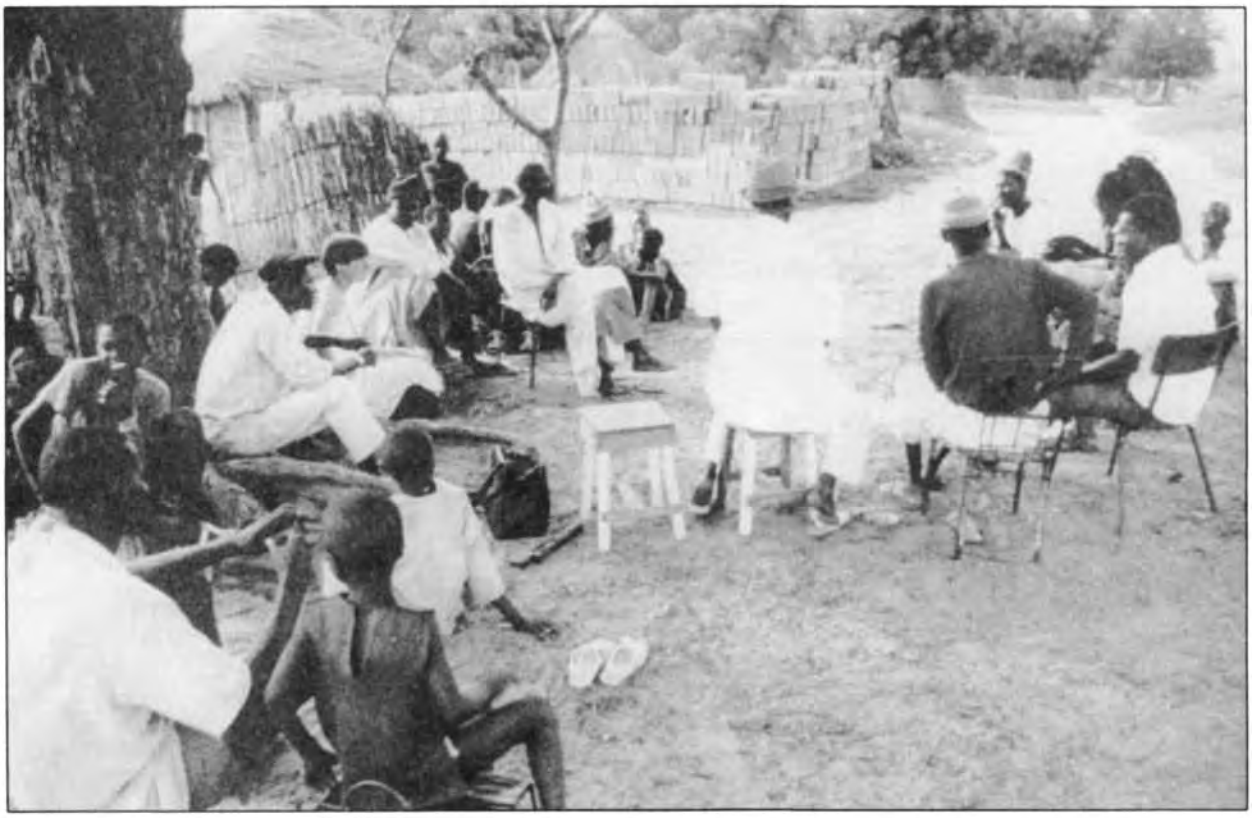


Plate 2 - Group discussion in Senegal.
Credit: Jules Pretty.

Plate 3 - Interview in Ethiopia. Credit: Jennifer McCracken.

Plate 4 - Interview in Cape Verde. Credit: Irene Guijt.

Plate 5 - Interview in Ethiopia. Credit: Jennifer McCracken.

Some hints on interviewing

* Starting off well

If coming to a village for the first time, pay a courtesy visit to the leader to introduce yourselves and why you are there. Clearly explain the likely follow-ups to your visit - can the villagers expect any benefits from the research? Be honest. Ask permission to go ahead with the work.

Approach the place of interview on foot. Vehicles give the appearance of important, rushed and wealthy intruders. Project vehicles or government vehicles with prominent logos also reinforce this alienation.

Choose the location carefully. If outside, look for an area of shade large enough for everyone present. If discussing a particular area or feature in the village, try to be in sight of it. If the interview involves drawing a sketch map of the village or looking at aerial photographs try and get to a high point from which most of the village can be seen. If the topic is sensitive or personal, it is probably best to hold the interview in the home of the interviewee, where curious passerbys are less likely to interfere with the discussion.

If possible sit on the ground or at least on the same level as the interviewee(s). Chairs add an unnecessary air of formality. Tables or desks between interviewer and interviewee are even worse. If in a group discussion try to arrange to sit in a circle, for maximum eye contact between everyone. If there are several interviewers, don't all sit together in the group.

Don't come with too much baggage. Preferably only a small pocket-sized notebook. Don't wear an official uniform. Dress casually, but carefully. If you are unsure ask advice on appropriate dress.

* Sequence of discussion

Begin by introducing yourself: who you are, where you come from, why you have come.

Check that you have come at a suitable time. Suggest that you can come back later if you arrive at an inconvenient time.

Start the interview by talking about something familiar - perhaps something close at hand such as the crop in the nearby field, the stove in the home, or the livestock in the compound. Discussing the weather and the seasons are always good ways of starting a conversation. Leave more sensitive or complex questions until later.

If the interviewee has difficulty answering a particular question, try and think of different ways of asking it. Come back to it later in the interview. Also, if you feel unsure about any answer, try to cross-check by asking the question again later, in a different way.

Always finish by thanking the interviewee and asking whether she would like to ask you any questions.

* Things to avoid

Don't ask questions randomly. Try to follow up each line of discussion before moving on to a new topic.

Try and avoid asking leading questions. Ask questions in a way that they require more than just a Yes or No answer. For instance, rather than ask "Will you plant groundnuts here after harvesting the maize?" ask "How will you use this land after the maize harvest?"

Don't dominate the interview. Try to spend more time listening than talking.

Don't ask too many questions about quantities. Switch between these and more qualitative and in-depth questions which give the interviewee a chance to express her own opinions.

Don't continue the interview if the interviewee seems uncomfortable or anxious to leave.

* Other tips

Use the six helpers of who? what? where? when? why? and how? These will offer ideas on how to probe a topic.

Take notes during the interview, after checking that the interviewee does not mind. Much of the details of the interview will be forgotten if you leave it until later to take notes.

Use the checklist as a means of guiding the interview. But don't try and cover every topic on the checklist in any one interview. Choose several topics and guide the questioning around these.

Exercise 3: A bit of drama

The attached script is for a short role-play of a **bad** interview situation. (Note the superior, official style of the interviewer, and the leading questions!). Try and make up two short role plays, based on your own area of work. One, like this one, showing what **not** to do, and the other of a **good** interview situation. Use the interviewing guidelines here to help you and use your own experience too. Try and keep the role-plays simple and humourous. If you are working in a group, you might like to split the work, so one group could write a good interview, and one a bad interview. Two people from each group could then act out their piece to start a discussion on interviewing skills.

Bad Interviewing Sketch

Woman farmer:	(On ground, grinding grain)
Interviewer:	(Comes in, wearing city jacket, stands over her, clipboard in hand) I'm an Official and I've come to ask you some questions.
Woman farmer:	(blank)
Interviewer:	Name. Family size. Husband's income. Number of chickens. (Pauses each time, answers not forthcoming) (Repeats:) Number of chickens.
Woman farmer:	I sold two yesterday.
Interviewer:	How many does that leave you with?
Woman farmer:	Well, I had five yesterday, and I have three now.
Interviewer:	So, on average you have four. (Writes it down). (Looks over to field). That maize doesn't look very good. Is that because of Stalkborer?
Woman farmer:	(Looks irritated). Yes.
Interviewer:	That sack of maize over there, is that to be sold at the market?
Woman farmer:	Yes.
Interviewer:	You'll get about 10 dollars for it, will you?
Woman farmer:	Yes.
Interviewer:	I need a chair to sit on.
Woman farmer:	I don't have one (Interviewer looks annoyed, woman gets up). I'll fetch my neighbour's chair. (Returns with a chair and a friend).
Interviewer:	(Brushes off chair, sits, looks at neighbour). What are you doing here? (Looks at clipboard). Go away I'm not interviewing you until tomorrow. (Neighbour leaves, puzzled. Interviewer sitting, woman farmer on the ground again).
Interviewer:	Do you work? Do you have a job?

Woman farmer: No, I just cook, do the housework, fetch water, fetch firewood, go to the market, keep chickens...

Interviewer: Right. So you don't work (notes it down).That's all I need for now. I'll come back later if I need

Box 5: Sequences of checklists for guiding interviews

If interviewing is spread over several days, the investigators will find themselves focussing their work more and more as their level of knowledge increases daily. In effect they use more refined checklists as their learning progresses. Below is an example of a sequence of checklists, used during an RRA exercise in Kenya which focussed on soil and water conservation[3]. Note how the issues in the first checklist are very general, in comparison to the later ones.

First checklist - used for the first two days

* Current soil and water conservation activities
* Climatic factors
* Sources of food
* Land use history, future conflicts; security and tenure
* Use of external resources; natural and economic
* Crops, livestock and trees; multiple functions
* Institutional issues
* Beliefs, experiences and memories
* Labour availability and conflicts
* Group/individual approach
* Gender issues
* Education and training; farmers, children, extension
* Health

Second checklist - used for the third day

* Livestock - fodder
* Manure
* Diseases
* Second transect
* Farm sketch map - intercropping
* Livestock
* Soil conservation
* Water management
* Health
* Education
* Female labour calendar
* Soil and water conservation during which months?

continued ...

Box 5: continued

* Important dates, major achievements, population increase, changes in cropping patterns, future changes
* Institutions (venn diagrams)
* Communal works?
* Medicinal and other uses of trees, wild plants
* Calendar for prices of horticultural crops, livestock and wage rates
* Wealth indicators

Third checklist - used for the fourth day

* Institutions - what does the womens' group do?
* Seasonal fodder use - for calendar
* Artificial insemination problems
* Food availability
* Alternative sources of income

Fourth checklist - used for the fifth day

* Historical information - distribution of land settlement arrangement
* Dams affecting rainfall - when were they built?
* Controlled grazing - when, how organised?
* Sisal and eucalyptus plantations - when were they cut?
* More dates?
* Off-farm male employment - degree of off-farm work
* Wealth indicators?
* Malaria peak - check it is in July
* Firewood - ask more women, find more about stoves
* Soil and water conservation - activities achievements
* Reasons why and why not involved in conservation
* Plans
* Traditional practices
* More farm sketch maps
* Adult education

Choosing whom to talk with

How can we select a certain number of women to talk with, from the community? If the investigators do not need to interview a set number of women, there are several ways to ensure that the women chosen to talk with are representative of the community. They can be chosen on the basis of:

* location: If the investigators are interested in learning about the range of conditions within the village they need to ensure that they visit a number of homes in each of the different housing areas. They can do this either by simply walking through the village and noting where people are living, or by using a map of the village and marking areas to visit. People on the edge of the village are among those most likely to be missed, as are the homeless, the migrants and the squatters. Special effort should be made to contact them.

* chance encounters: As the investigators walk through the area they will inevitably meet people on the paths and in the fields. These chance meetings are often valuable opportunities for the investigators to introduce themselves and perhaps to hold a brief interview.

* recommendation: The investigators may be interested in a particular group of women, such as women involved in basket making, or women working as outside labourers in a factory, or women owning chickens. In this case specific names may be recommended by someone knowledgeable in the village. In other instances the investigators may pay special visits to women and men with specialist knowledge (i.e. key informants), such as school teachers, heads of organizations, leaders, elders, and so on, to learn from their particular knowledge. One danger in relying on recommendations for selection of interviewees, is that this may introduce a bias from those who have done the recommending. For example, a women's leader may recommend only her friends and acquaintances, who will tend to be from the powerful elite group and will not be likely to recommend poorer, less eminent people. Unless specifically asked to do so, men will rarely recommend women and vice versa.

Indeed there are many other ways of selecting interviewees. You may well have your own methods which you use. It is clear though that without some consideration of sampling we will always tend to talk with those whom we feel most comfortable - often those from our own social group, people we have met before, people who are friendly towards us. This will obviously produce a biased sample and give us an unbalanced and partial view of the issues we are investigating.

HOW CAN WE GET A QUICK OVERVIEW OF THE LOCAL RESOURCES?

One of the best ways to start talking with rural women about the natural resources in their village is to ask them to draw a sketch **map** of their surroundings. It is often said that rural poorly educated people are not able to understand or draw maps or other diagrams. But the vast majority of those who have tested this assumption, by using maps in the field, have proved it wrong. Rural, non-literate women and men can understand maps well, especially if they have made the maps themselves. Maps drawn by outsiders often introduce unfamiliar perspectives. For example the orientation with north towards the top of the map is not necessarily how the rural people view their village. A North-South aligned map of the village may seem very unfamiliar to them. Symbols of houses, and land use types may also cause confusion if drawn by outsiders. In general then, unless a clearly understandable map exists of the village, such as one in the village office with which most people are familiar, it is best to ask several women to draw a sketch map themselves. Figure 1 is an example of a sketch map drawn with the assistance of local women in Kenya. Here are some tips to remember:

Mapping

* Drawing on the ground is preferable to using paper and pen since more people can join in the exercise and changes are easier to make. Sticks, stones, leaves etc can be used to represent landmarks. Once completed the 'map' can be transferred on to paper for a permanent record. (See Plates 10, 11 and 12 below).

* If large scale aerial photographs are available these can be used to first outline village boundary lines, major rivers, areas of forest etc. Details can be added later.

* It is rarely necessary to produce an accurate, scaled, finely drawn map. For the purposes of identifying the local resources and environmental features such as the location of gullies, degraded slopes or sites of conservation measures, a rough sketch is perfectly adequate.

* The accuracy of the map can be checked during subsequent interviews and meetings. Changes should be made on-the-spot. A good map is one which has been scribbled on!

* It is useful to ask a group of people to draw the first version of the map. As they discuss and argue about the correct positioning, an agreement is reached and the final product is likely to be more accurate than if drawn by a single individual.

* Investigators may like to record an individual's resource use by mapping their farm. The example here (Figure 1) shows the range of conservation measures taken by a woman farmer in Kenya.

Maps can also be used to help plan which parts of the village the investigator should visit to learn about the different resources and their management. One way to ensure that the range of local environments is seen is to go on a **transect walk** through the village.

Walking a transect

This is simply a walk, or a series of walks, which takes the investigators through the different areas of a village and allows them to see the range of conditions across these areas. The walk rarely follows a straight line, but more often zigzags through different areas. One of the main values of this technique is that it forces investigators to go to the more remote parts of a village which would otherwise not be visited. Indeed, interesting surprises often turn up! (See Box 6 below). Here is an example of what investigators found during a transect walk in a village in Wollo, Ethiopia. (Figure 2). The map which they used to plan their walk is also shown (Figure 3). The dotted line on the map represents a possible route of a transect walk which the investigators may have taken in order to produce such a transect diagram.

Another example of a transect diagram is shown below. This one comes from a catchment in Murang'a District of Kenya (Figure 4).

Figure 1[4]
Sketch map of Mrs Tabitha Njeri's farm
Mbari-ya-hiti Catchment Kenya (6 acres, 2.4 hectares)

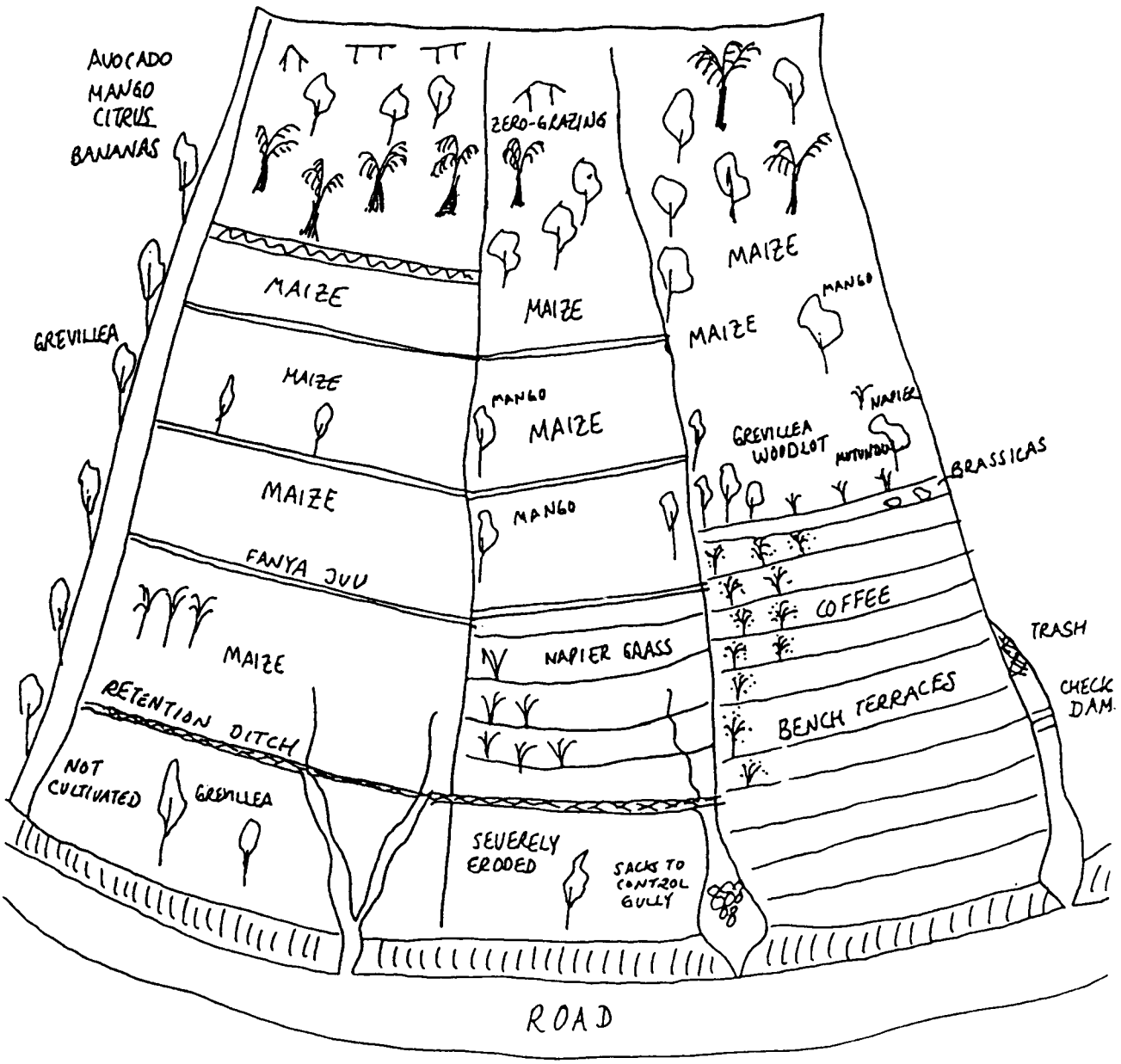


Figure 2[5]: Transect through Gobeya Peasant Association, Ethiopia.

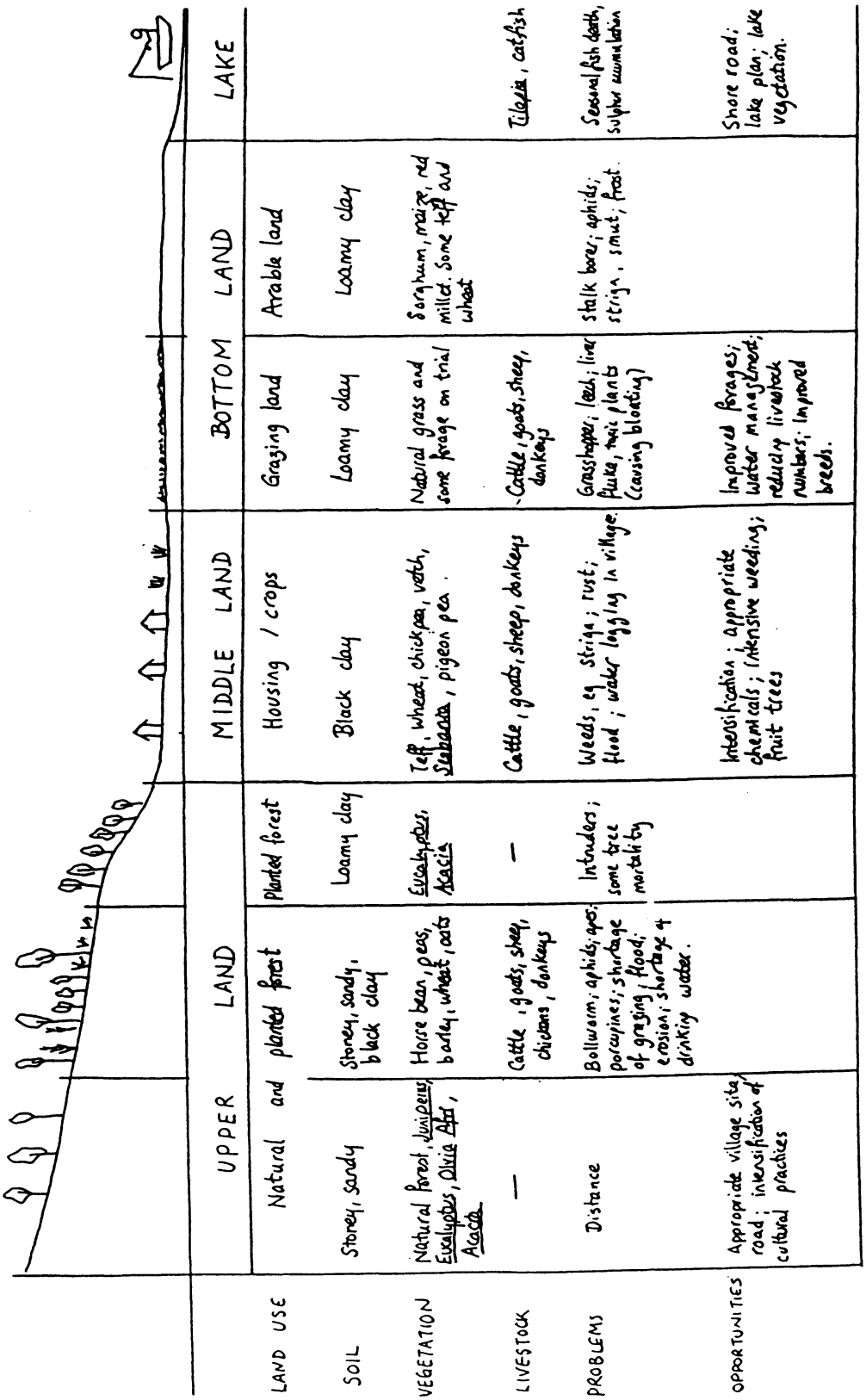


Figure 3[6]: Sketch map of Gobeya Peasant Association, Ethiopia.

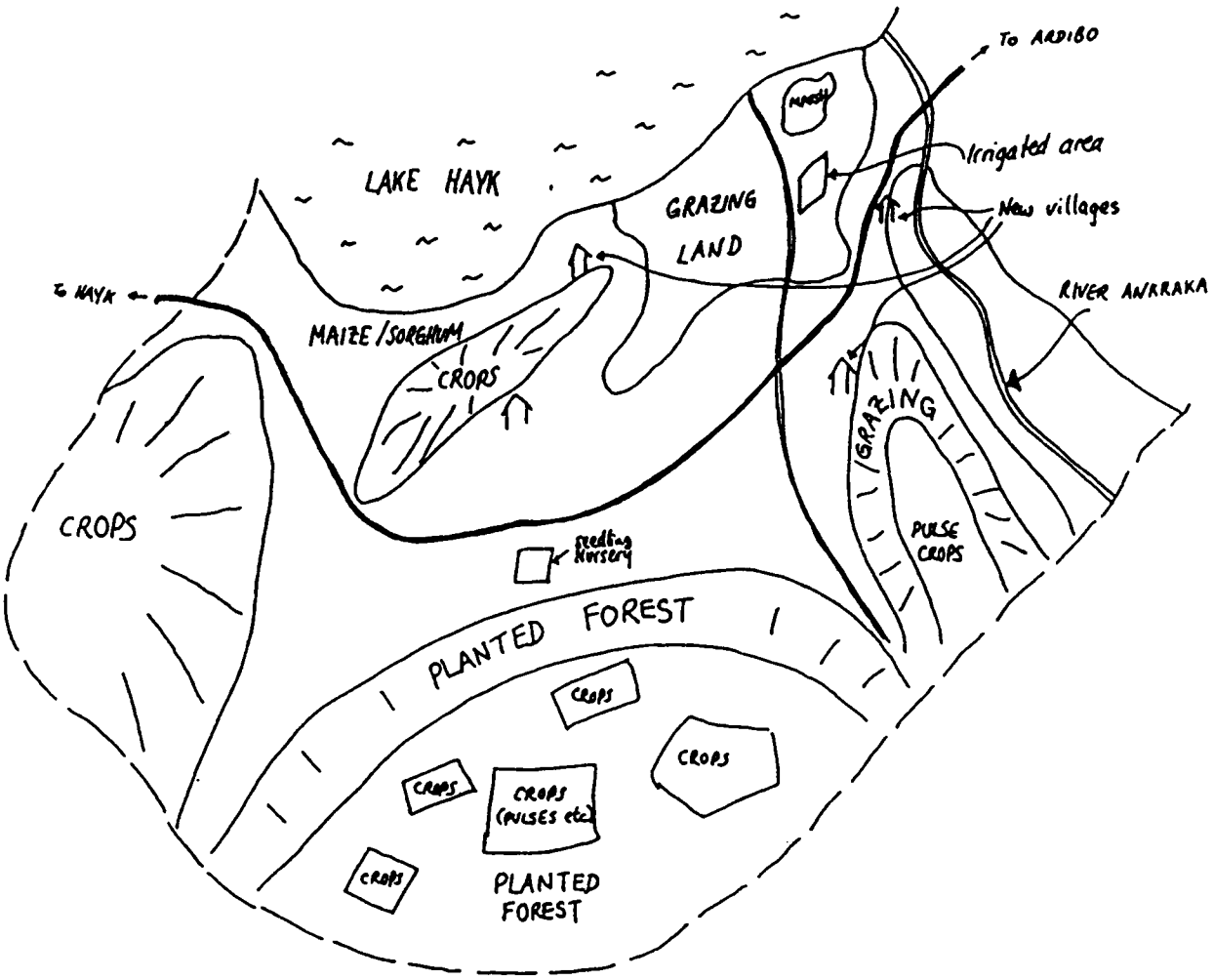


Figure 4[7]: A transect of Mihango Sub-catchment, Kenya.

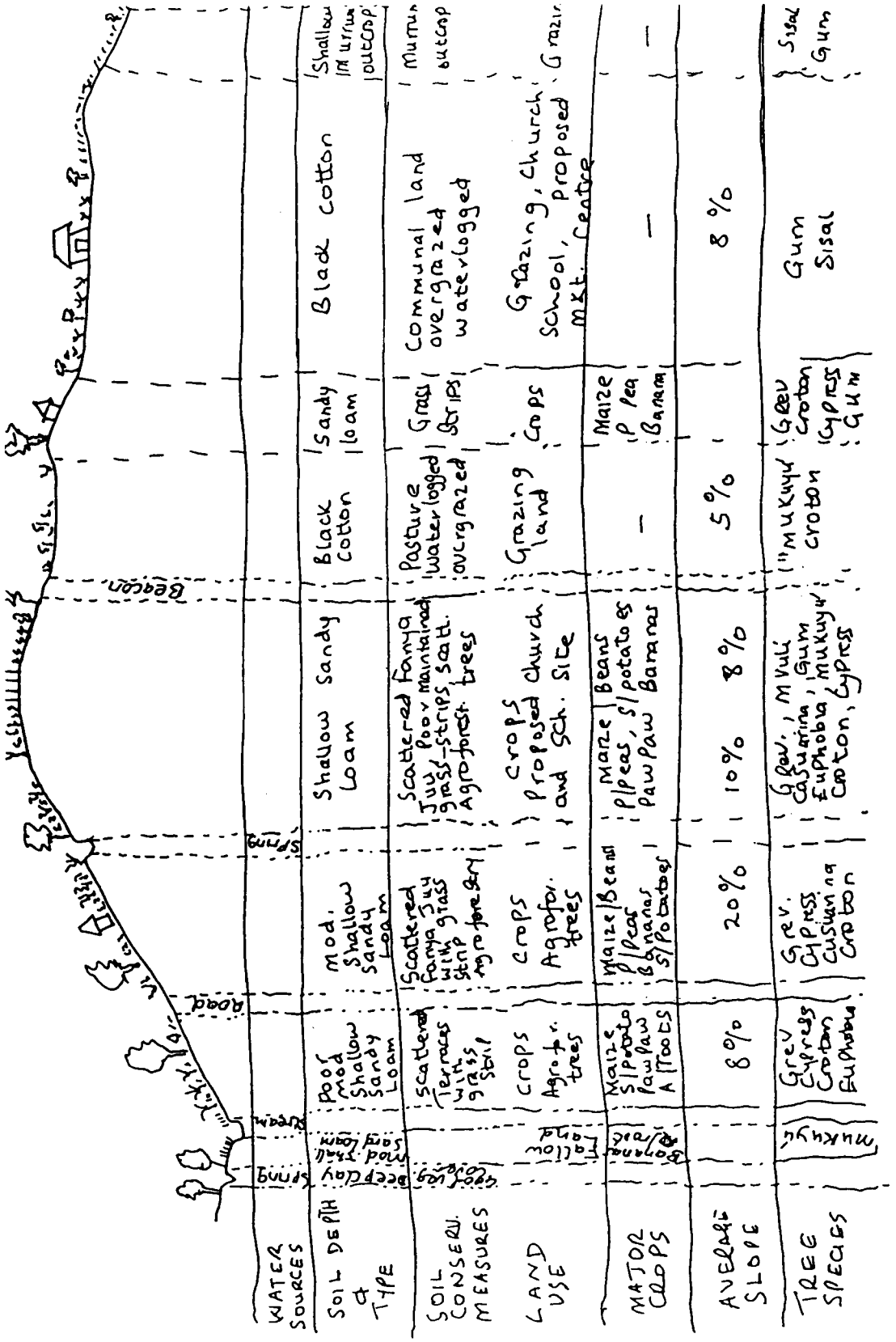


Plate 6 -
On a transect walk with a farmer, Ethiopia.
Credit:
Ian Scoones.

Plate 7 - Drawing a transect after a walk, Zimbabwe.
Credit: Ian Scoones.

Box 6: Transect walks lead to...

A team of soil and water conservation extension agents in Kenya were spending several days in a catchment to help plan their work in that area. They decided to walk two transects across the catchment to get an idea of the terrain and the conservation measures being used by farmers (See Figure 4 above). One topic which they were interested in was agroforestry and the availability of tree seedlings. They knew that the nearest tree nursery was several kilometres away in another catchment area. The team were considering how best to support farmers by agroforestry initiatives. As they were nearing the end of their transect walks, they met with a farmer who had many different types of trees on his land. Asked where he went to get his seedlings, he took the team to one of his plots - to a well stocked tree nursery! He was raising both native and exotic species and as well as using some of the seedlings himself he was distributing others free to other farmers in the catchment. The team sat down to talk with him...

In a Peasant Association in Wollo region of Ethiopia a team of investigators had been on a transect walk for several hours. They were approaching the main housing area and stopped for a rest in a roadside hut. Here they got into conversation with two farmers and began to tell of what they had seen on their walk, especially the large number of gullies running through the area. The farmers offered to show them how they had turned these gullies to their advantage so the team set off again with them to an area they had not yet covered. There they found an impressive gully cropping system, with a series of stone checkdams built along a major gully. Fields were being established in between these soil traps and healthy crops of sorghum were being cultivated. The farmers explained how they were building up these checkdams every year and strengthening them with tree roots. The team began talking with these farmers about how to help other farmers to benefit from this technique...

Some hints on transect walks

* Ask some local women and men to accompany you on the walk. Try to choose guides who have lived in the area a long time. Their knowledge will be invaluable. Without them, you will miss many features and explanations.

* Take your time. A transect walk can last a whole day. These walks are a good opportunity to meet people living in different areas of the village. You may want to spend some time talking with these households.

* Record what you see. Take notes and, if appropriate, photographs.

* Wear suitable footwear!

* Look for differences between the different areas which you pass through. Ask about the specific problems in each area.

* Summarize your walk as a diagram. But don't worry about making a good diagram - the important point is to keep your eyes open on the walk, ask questions as you go, and enjoy it!

Nature Trails

Nature trails are really a particular type of transect walk. They are especially useful for identifying local types of trees and plants and discussing their value with the women who make use of them. Nature trails can be conducted jointly by the investigators and a number of rural women (and men) who know the area. Walking through an area of woodland, the investigators can ask the women for the local names of the different types of vegetation, and samples of leaf, seed, bark etc. can be taken for later identification of their scientific names. These samples can also be used during later preference ranking exercises (described on page 28). Contrasting areas may be chosen for nature trails, to discover the differences in vegetation, soil condition etc.

Walking through a plot of relatively remote woodland would reveal many more and different natural resources to those found during a walk in a very heavily exploited patch of forest. The differences found could form an interesting starting point for a discussion with the women on the changes caused by human activity and the implications of these changes.

Aerial Photographs

As mentioned above, looking at aerial photographs can be an excellent way of getting an overview, or a "bird's eye view" of an area and its natural resources. The photographs can also show us places which we are unable (or unwilling!) to go to see for ourselves. (See Box 2.5 below)

Box 7: Using aerial photographs[8]

"To begin with, I have found the photos especially useful for thinking about different land-use patterns, particularly those which would not be immediately evident from the ground. The spatial arrangement of the shamba (farm) becomes really clear from the air, and regular land-use patterns which are common amongst smallholdings stand out... The photos tend to reduce spatial biases which even the most intrepid field worker can encounter on the ground. There is a tendency, for instance, to walk along the contours and along the ridges where there are paths, rather than from one ridge into a valley, across the river and to the next ridge. The photos enable one to identify specific features of land-use which are of interest, and then to check them on the ground. In this sense, the search through the photos for the extremes - the smallest holdings, the largest holdings, the most heavily tree-covered holdings, the most barren holdings, and so on - can be especially enlightening when one has a chance to interview farmers."

Plate 8 - Team of investigators consult an aerial photograph, Zimbabwe. Credit: Ian Scoones.

Plate 9 - Investigators and farmers consult an aerial photograph, Ethiopia. Credit: Jennifer McCracken.

It is true that aerial photographs may be difficult to obtain, and those which are available may be rather out-of-date. However, it is certainly worth trying to bring some of these photographs to the communities. Although it is generally assumed that rural people can not understand these photographs, this has often proved wrong in practice. Rural women and men can understand and do appreciate this overhead view of their local environment and can use them for example to show the boundaries of their village.

HOW CAN WE LEARN ABOUT HOW WOMEN PERCEIVE THEIR ENVIRONMENT?

Every person sees their surroundings in a slightly different way, through their own eyes. How can we find out about these differences?

One way is to use a variation of the mapping technique. In this case, rather than asking a group of people to produce a map on which they all basically agree, we can ask several individuals to draw how **they** see their local area.

Comparing these different impressions of the same area can reveal some interesting points of view.

Discussion question: How do you think personal maps drawn by women and men would differ? How would they see their environment?

In India, Anil Gupta reports how women's drawings of their village reflect their more limited environment, compared to that of the men in the village[9]. He asked both women and men to draw their village or the parts of it which were important to them. The women's drawings included trees, plants and almost without fail, temples. The equivalent drawings of men usually included transport links beyond the village, whereas the women's drawings showed virtually none.

Another example comes from Shewa Region of Ethiopia where fieldworkers of a non-governmental organisation asked the Peasant Association leader to draw a map of the Peasant Association (PA). His map, drawn directly on paper and translated here in English (Figure 5), is markedly different from that produced by a woman in the PA who was also asked to map the area. She drew her map on an area of ground outside her home, using stones, leaves and pieces of household waste to represent landmarks. This was then transferred on to paper (Figure 6). What differences can you see between these two?

A few differences between these two perspectives are worth mentioning. The PA leader has drawn a much more detailed map. This is probably partly because he was using a pen and paper, rather than drawing on the ground. He may well be more familiar with map drawing than the woman. Perhaps he has based this map on one which he has previously seen.

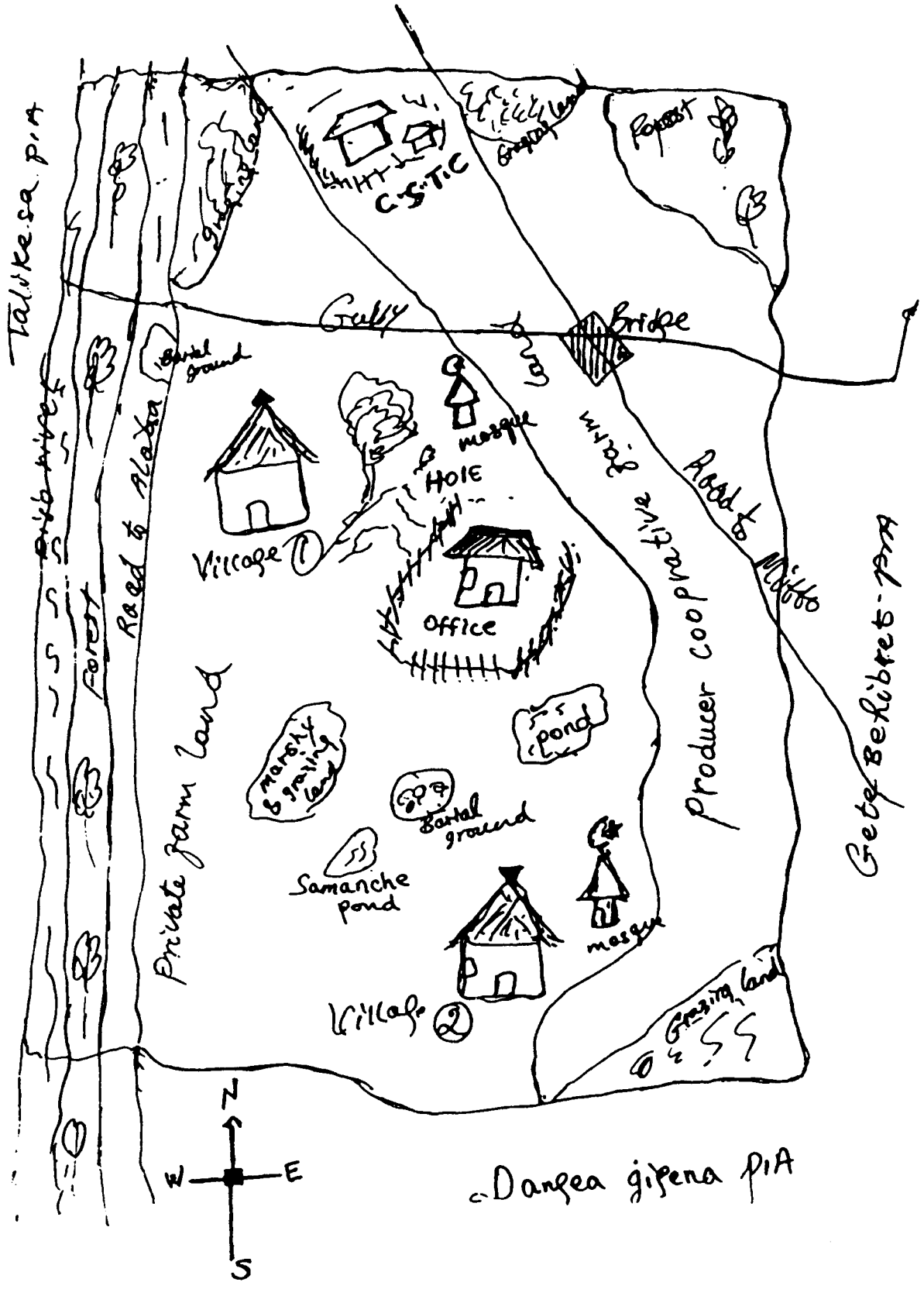


Figure 5[10]: **Sketch map of Kuteyo Sabola Peasant Association, Ethiopia. As drawn by the PA Chairman.**

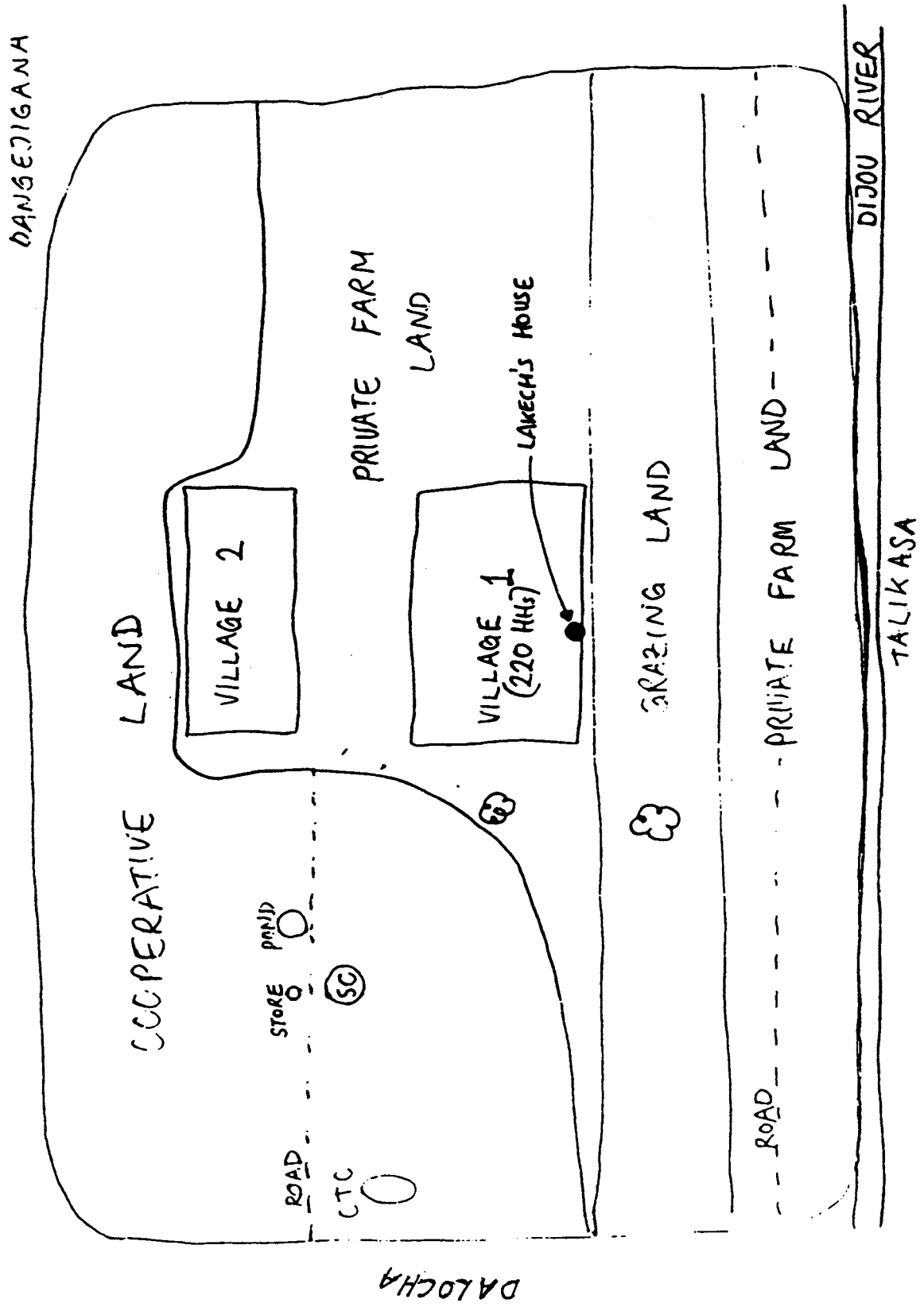


Figure 6[11]: Sketch map of Kuteyo Sabola Peasant Assocation, Ethiopia. Drawn from a map on the ground, made by Lakech, a woman living in village 1.

Plate 10 - Mapping on the ground, Senegal. Credit: Jules Pretty.

Plate 11 - Farmers in India make a model of their village. Credit: Robert Chambers.

Plate 12 - The finished product! Credit: Robert Chambers.

The dominant feature of the leader's map is his office, shown as the same size as the whole village!

The woman's version, while broadly agreeing with the map drawn by the leader, shows the Service Cooperative (SC) compound (which includes the leader's office) to be much smaller and less central.

The area of land owned by the Producer's Cooperative takes up a larger proportion of the woman's map than in the leader's version. The woman has omitted the small areas of grazing land and forest land which, according to the leader's map, exist on the periphery of the Cooperative land. Indeed during subsequent interviews in the PA this was found to be a very contentious issue, as many women and men in the PA who were not members of the Cooperative felt the Cooperative was taking over far too much land. The resulting shortage of quality private farm land and grazing land was becoming a major problem, they said.

In another study, in Sierra Leone a group of men and a group of women were each asked to draw a sketch map of their village and mark on it points where they felt important improvements were needed. The results were quite different (Figure 7): Why do you think the two groups painted such different pictures?

HOW CAN WE LEARN ABOUT THE WORKLOAD OF RURAL WOMEN?

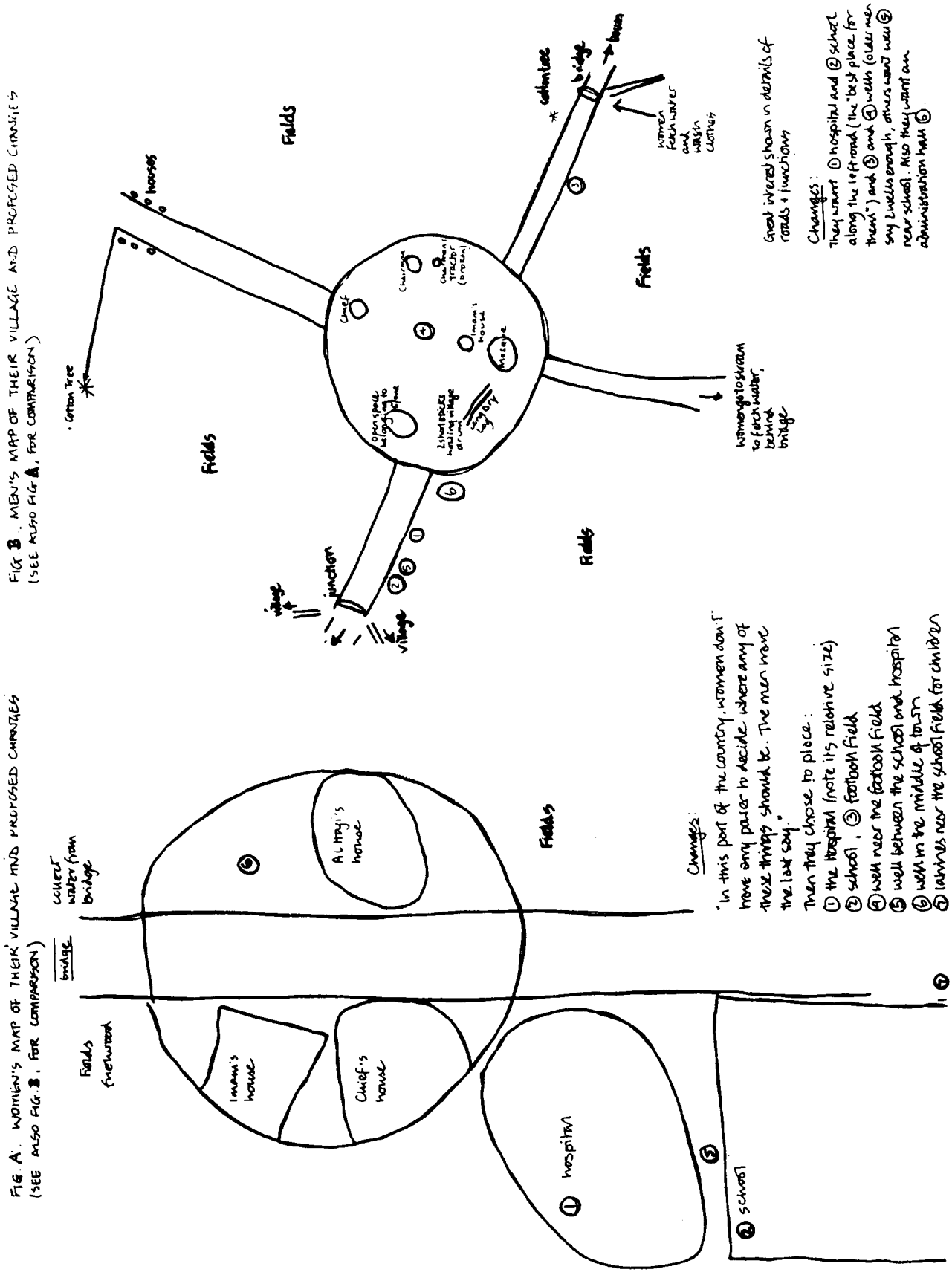
There are two problems in finding out about the workload of rural women:

1. Unless we spend several months with them it is very difficult to see for ourselves the types of activities with which the women are involved and especially the different tasks at different times of the year. In exercise 2.1 you may well have found it difficult to identify which tasks are done by women, men, girls and boys. The way in which jobs are divided up in a family will vary from place to place and even from household to household.

2. It is extremely difficult to quantify the workload of rural women, either in terms of hours worked per activity or effort involved per activity, or even hours worked per day. If you have ever had to fill in timesheets to record how many hours you spent on particular projects, you will understand the problem very well! Part of the problem is that a woman may be doing several different jobs at the same time. While she is supervising the family's livestock grazing on the common land she may also be collecting dung and wood for fuel and wild plants for adding flavour to the meal she will prepare.

How can we get at least a rough estimate of their workload? One way is to construct a **labour calendar** to show how the relative labour demands of women change during the year. An example of such a calendar is shown below (Figure 8). This particular example also includes the tasks done by young girls.

Figure 7[12]: Women's and men's maps of a village in Sierra Leone.



Some hints on constructing labour calendars

* Start by asking the women which month is the busiest for them. Give this month a maximum height on the calendar bar-chart. Ask what activities they are involved with during this month. Note these down.

* Then ask for the second most busy month. To get a relative measurement, ask how it compares with the busiest month: is it half as busy, or three-quarters, or one quarter as busy? Or, preferably ask the women to draw the appropriate height of this month's labour demand.

* Continue with the third and fourth most busy months. Then it may be easier to continue by asking for the least busy month (i.e. the slackest month) then the second slackest, third and fourth. The "middle" months can then be filled in by comparing against others already dealt with.

* It may be more appropriate to begin the calendar, not with January but with, for example, the month at the beginning of the agricultural cycle. This is the case in Figure 8. It is also useful to use the local calendar when constructing the diagram, and afterwards to translate it into the calendar system with which we are most familiar (see Figure 8).

* All this is easier if the women draw the calendar themselves.

* A group of women can be asked to produce a labour calendar. As in the mapping technique, this is useful to get a consensus answer but may hide individual differences.

* It may be useful to know the differences between the seasonal labour patterns of women and men in the same village. In this case, repeat the exercise with men. The differences may be striking, as the example below shows!

Box 8: Our labour calendar is wrong![14]

In a village in India, a group of men and women were asked to draw their labour calendars - one for men and one for women. They drew both calendars on the ground, using pieces of straw to mark the bars of each month's labour demand. When both calendars were complete, the women came closer to view the final results. They began to discuss among themselves, and looked quite agitated at what they saw. When asked what the matter was they said: "When we compare these two calendars, they do not tell the truth. Our calendar is wrong! It only shows agricultural work, not our extra household work. We must add a whole band to the bottom of our calendar, to show that we do extra work at home as well as in the fields!" The adjusted calendar showed the women with a much higher workload than the men.

Figure 8[13]: Labour calendar for<u>Women</u> + <u>Girls</u> (10 years)
<u>Kuteyo Sabola P.A., Ethiopia</u>

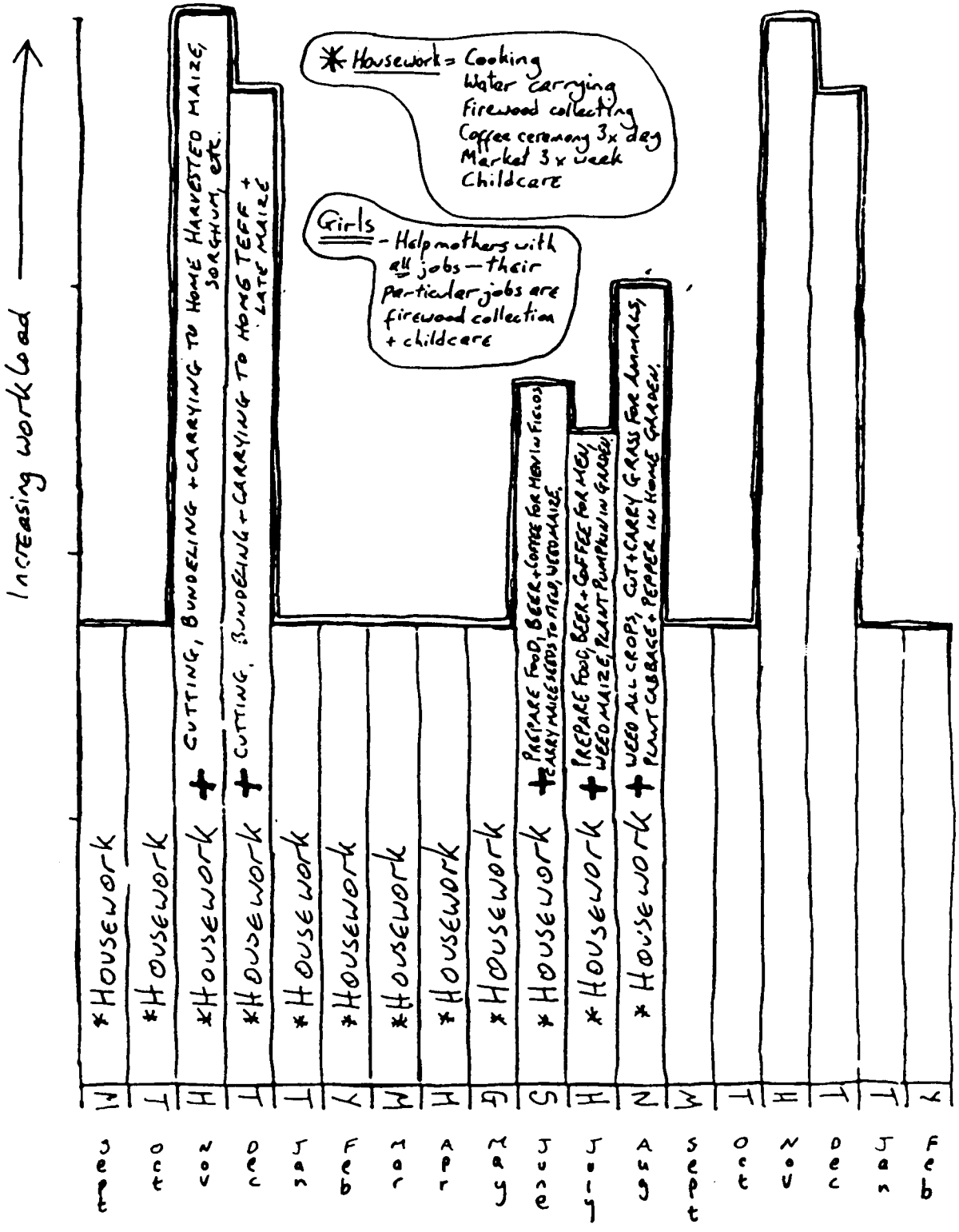


Plate 13 -
Constructing labour calendars for women and men, using rice straw in India.
Credit:
Robert Chambers.

Plate 14 -
A woman in India uses stones and seeds to construct a seasonal calendar.
Credit:
Robert Chambers.

Constructing labour calendars is an essential exercise when planning to start activities in an area. The results will indicate which months the women and/or men will be busiest, when the extra activities may have to compete with agricultural or other labour peaks, and when the slack periods occur during which time the new activities may be most appropriate. Other calendars will also help in planning the timing of activities. For example a calendar of local events will highlight times when distractions are most likely, such as election periods, fasting months etc.

Daily activity schedules

A typical day's work can be the topic of an interview and here again, interesting comparisons can be drawn between the ways men and women spend their time. An example from Cape Verde (Figure 9) shows the activities of a man, who has more free time than a young woman who, although she attends school also has many other jobs to do.

Different women will also have different daily routines. An example from the Gaza Strip (Figure 10) compares the routine of a rural woman with that of a young, urban professional woman.

You may like to draw your own schedule for a typical day, and think about how such information could be useful to someone planning a project in your area. How would this type of information help them plan the work?

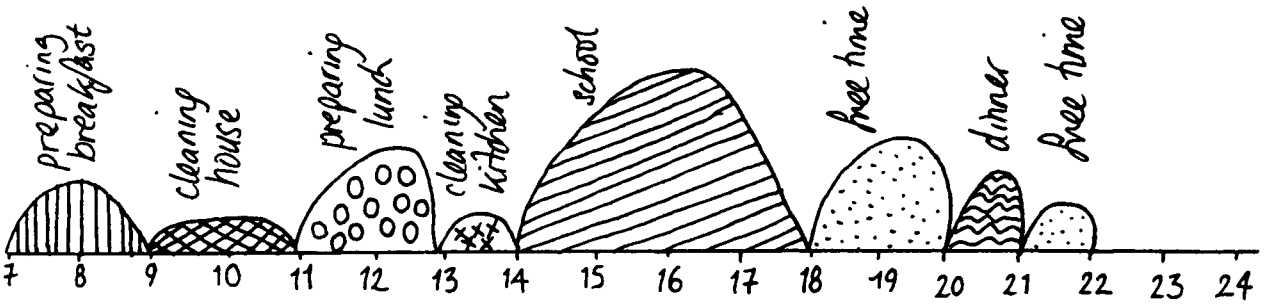
HOW CAN WE LEARN ABOUT DIFFERENT PREFERENCES FOR RESOURCE USE?

Learning why people make the decisions they do is the key to understanding the ways in which they are using the natural resources. These choices are usually made on the basis of a number of many criteria. These criteria are measures, or yardsticks, by which people assess the utility of an item. In comparing different items, two individuals in similar situations may make very different choices or may make similar choices for very different reasons. How can we learn something about these complex decisions and how they are made?

One simple technique which can be of some help is **preference ranking**. This involves asking an individual (or a group) to rank in order of their own personal preference a set of items, and to give the reasons for their preferences. These items could be anything from tree species, livestock types, or vegetable types, to income sources, types of fertiliser, or land managment techniques. The resulting ranked list therefore shows both the order of preference of the items and the criteria on which these preferences are based. There are several different ways of finding out about these preferences. Two of the preference ranking techniques are outlined here - pairwise comparison and matrix ranking.

Figure 9[15]: Daily routines of a young woman and young man in a village in Cape Verde.

young woman



young man

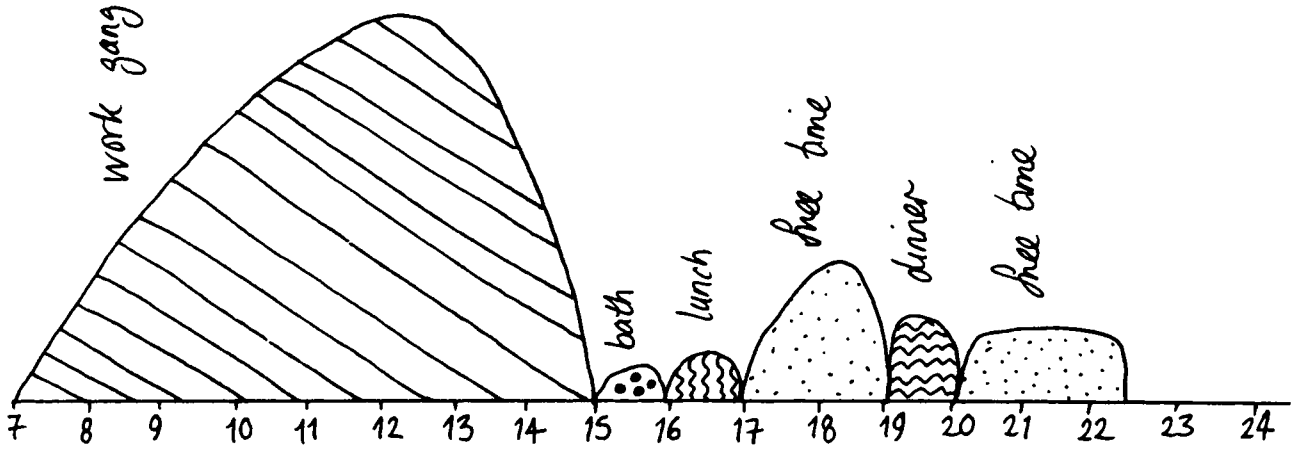
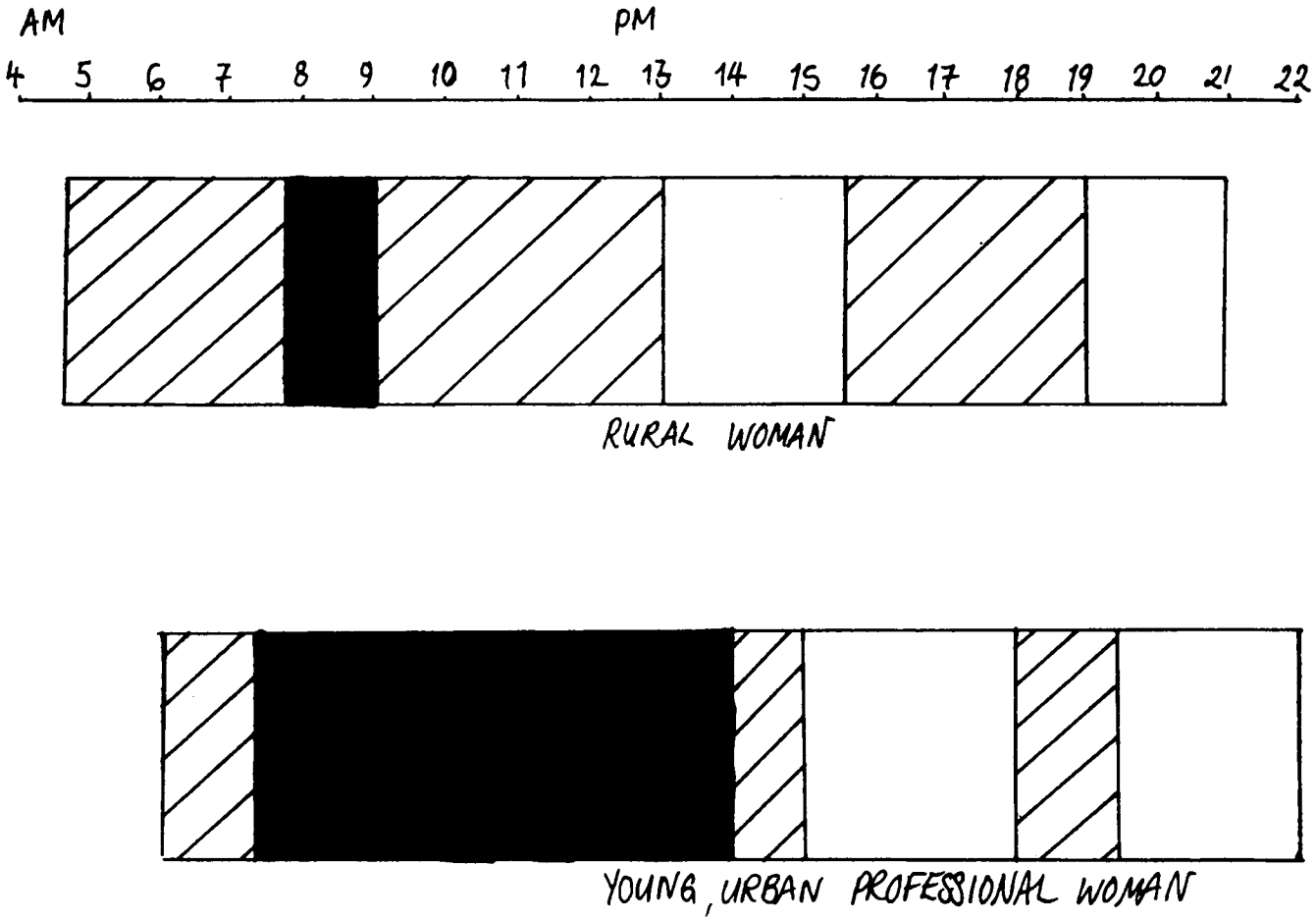


Figure 10[16]: Daily routines of women in the Gaza strip.



Pairwise Comparison

This version of the technique involves a sequence of comparisons, where two items at a time are rated against each other. Here are the steps involved:

1. Ask the woman to choose the set of items to be ranked. For example, if you are interested in learning of women's interest in growing vegetables, ask a woman (or a group of women) to choose a number of vegetables with which they are familiar. For the purposes of the ranking exercise, it is probably best to limit this number to five. More than this tends to make the exercise rather long. Let us assume the woman has chosen to rank sweet potato, cabbage, carrot, onion and tomato.

2. Pick any two of these five vegetables and ask the woman which of these she would prefer to grow. If possible have examples of each of these vegetables to hand, to stimulate discussion. Alternatively, use five pieces of paper on each of which you have drawn, or written the name of, one of the vegetables. So, if you choose to first compare, say, onion with tomato, present these vegetables, or pieces of paper representing them, in front of the woman. Note which she prefers and use probing questions to find out why she prefers this one.

3. Then chose a different pair of vegetables and ask the woman which one of these she would prefer to grow and why.

4. Continue until you have worked through all the combinations.

5. Draw up the results as a list and ask the woman whether she agrees with the end result.

One way to keep a record of each comparison is in a matrix. The one for this example could look something like:

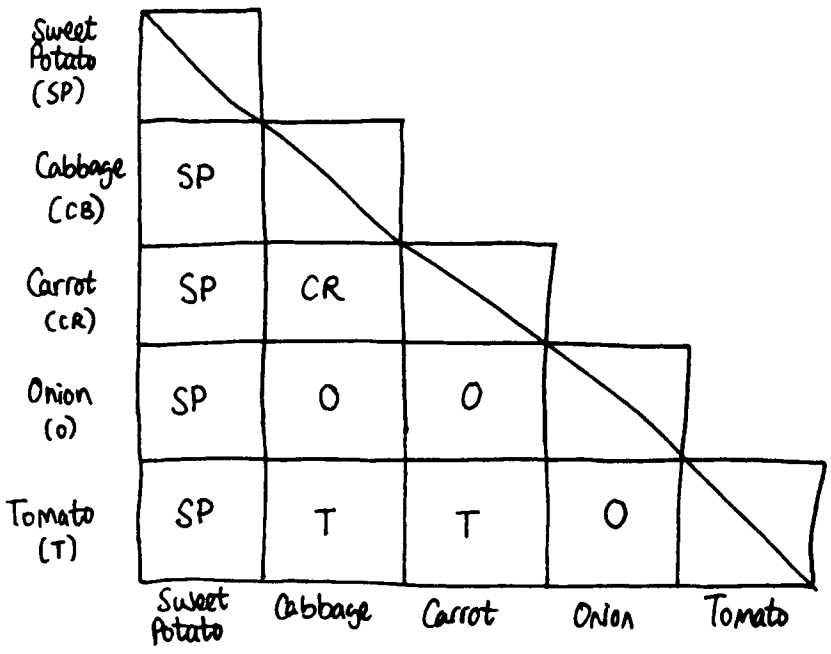


Plate 15 - Women ranking six different rice varieties in India.
Credit: Robert Chambers.

The "winner" of each comparison is entered in the appropriate box. In the case of ranking five items, as above, you can see there are ten different comparisons to make (i.e. 10 boxes to fill in). The final ranking is then simply a matter of adding up the number of times each vegetable appears as a "winner". Here sweet potato won 4 times, onion 3 times, tomato twice, carrot once and cabbage was never preferred in a comparison. Hence the ranking in this case is:

1. Sweet potato (most popular crop)
2. Onion
3. Tomato
4. Carrot
5. Cabbage (least popular crop)

The more interesting result of the ranking technique however is often the criteria which have been used - the reasons the woman gave for each preference she made.

Below are the results of a ranking exercise in Ethiopia where a group of women ranked six tree species which they use for fuelwood.

Box 9: Fuelwood preference ranking by a group of women in Wollo, Ethiopia[17]

		GOOD	BAD
1.	Agame (4)* -	- best for baking	- thorny
2.	Degita (5)	- charcoal	- used immediately
3.	Dedeho (2)	- available	- no charcoal
4.	Debobesha (3)	- charcoal	- available
5.	Sebensa (1)	- available	- thorny
6.	Weiba (6)	- incense - ladies use it for beauty - medical use - income generating	- worms

* Ranking of availability in the area

Another example, from Sudan, shows just how many different criteria can be revealed through this technique. This is the combined result of two separate ranking exercises. These two ranking exercises produced 31 quite different valued criteria for the use of resources from these eight trees!

Box 10: Good and bad points about eight trees from two preference rankings by farmers in Sudan[18]

FAVOURABLE	UNFAVOURABLE
SIDIR: Ziziphus spina-cristi	
1. Edible fruits	1. Cannot plant
2. Thorny fencing	2. Source of trouble in courtyards because of thieving children
3. Leaves for fodder	
4. Medicinal bark	
5. Windbreak	
6. Bark for washing bodies in funeral ceremonies	
7. Wood for building and furniture	
NEEM: Azadirachta indica	
1. Shade tree	
2. Fuelwood	
3. Wood for building huts	
4. Trees will grow after pruning	
5. Grows from seedlings	
6. Ornamental	
7. Multiple uses	
8. Wood for handtools	
SUNUT: Acacia nilotica	
1. Pods medicinal	1. Cannot plant
2. Pods used in marriage ceremony	
3. Strong burn - used in brickmaking	
4. Wood for roofs, boats, furniture, beds, tools	
5. Produces gum - ingredient for inks and strengthens sand when mixing for building	
6. Pods used for tanning leather	

continued ...

Box 10 continued

TALH: Acacia seyal

1. Strong fire	1. Very susceptible to termites and wood-borers
2. Smoke with good aroma	2. Wood has to be soaked for 3 months for resistance to termites
3. Smoke anti-rheumatic	
4. Produces gum	
5. Fuelwood	3. Never planted
6. Skin colouring and perfume	
7. Flowers for fodder	
8. Wood for burning	

SALEM: Acacia raddiana

1. Wood for building	1. Moderate fire
2. No aroma to smoke	
3. Straight and strong, good for sticks	
4. Flowers and fruit for fodder	
5. Wood for building huts	

HARAZ: Acacia albida

1. Fruit for fodder	1. Susceptible to termites and wood-borers
2. Wood for furniture and beds	2. Mild fire
3. Wood for mortars for grinding	3. Weak wood
4. Shade tree	4. Wood not straight
5. Best wood for building boats - very light	
6. Wood for tablets for writing Koranic verse upon	
7. Young boys use it to float across river	

TUNDUB: Capparis decidua

1. Fruit for fodder	1. Mainly branches, no thick stems
2. Used to treat jaundice	
3. Hedges	

EUCALYPTUS: Eucalyptus sp.

1. Ornamental and beauty value	1. Too tall for dense shade
2. Seedlings available enough for building	2. Wood fragile, not tough
	3. No regrowth after pruning
	4. Susceptible to termites and wood-borers

A third example, from Kenya, deals with soil conservation techniques. Note the reason why some families chose not to construct infiltration ditches - because of the danger that small children will fall into them!

Box 11: Good and bad points about soil and water conservation structures according to some farmers in Murang'a District of Kenya[19]

* RETENTION DITCHES (CUT-OFFS)
- protects crops and structures below
- holds much water
- has 2 lines of napier grass
- forms a bench easily

but:
- ends can break and water rush down farm
- uses up large proportion of farm
- requires much labour to construct

* FANYA JUU+
- reduces the slope
- prevents run-off down slope
- napier grass planted on topside
- does not use up much of farm

but:
- it is laborious work throwing the soil uphill when slope is steep

* BENCH TERRACES
- no loss of nutrients when apply manures/fertilisers
- when short and tilted back there will be no run-off and much infiltration
- no waste of land

but:
- very laborious to construct

* INFILTRATION PITS
- slow down flow
- increase infiltration

but:
- risk that children will fall into holes

* FANYA CHINI++
- easy to dig

but:
- wastes space
- increases the slope

* GRASS STRIPS
- not so effective on steep slopes because so much water runs off

\+ (terrace constructed by throwing soil up the slope)
++ (terrace constructed by throwing soil down the slope)

Direct Matrix Ranking

This is a different version of the preference ranking technique. It involves the following steps:

1. Ask the woman to choose the items she would like to rank, as in the pairwise comparison technique.

2. Taking each item in turn ask about its good points and bad points. Try to get as many as possible.

3. List all these criteria. Turn negative criteria (bad points) into positive ones. For example "vulnerable to pests" becomes "not vulnerable to pests." So all criteria are now positive.

4. Draw up a matrix with the items across the top and the criteria down the side.

5. For each criteria in turn, ask which item is best. Give this item the value of 1. Ask which is next best, give this item value 2, ask which is next best, and so on.

6. Work down the matrix filling in the rankings.

7. Finally ask the question "If you could only choose one of these items, which would you choose?". This will give some indication of the relative weighting of the different criteria.

Here are two examples of matrix ranking from Kenya (Tables 1 & 2)[20].

To come back to the question of weighting the criteria, look at the example of fertiliser types. It appears that farmyard manure is the most popular fertiliser, as it has come first on eight criteria. However it is conceivable that if the farmers were extremely concerned about cost, i.e. they put great weight behind the criteria of low cost, farmyard manure (the most expensive fertiliser) would <u>not</u> be chosen as the priority. In other words, when farmers were finally asked which fertiliser they would choose if they could only choose one, they may choose not farmyard manure but another less costly type.

RANKING OF CHARACTERISTICS OF

FOUR TREE SPECIES BY MRS ZENA IBRAHIM,

MUNIAS DIVISION, KAKAMEGA DISTRICT, KENYA, 7 MARCH 1988

	EUCAL-YPTUS	GREV-ILLEA	SESB-ANIA	MULUL-USIA
SPEED OF GROWTH	3	4	1	2
TIMBER	1	2	DON'T KNOW	DON'T KNOW
FIREWOOD	1	4	2	3
IMPROVES SOIL	3=	3=	1=	1=
OK WITH CROPS	3=	3=	1=	1=
KITCHEN SMOKE	1	4	2	3
STATUS/POPULARITY	1	4	2	3
MARKET VALUE	1	DON'T KNOW	NIL	NIL
BEAUTY	3	1	4	2
RESISTS TERMITES	1	DON'T KNOW	2=	2=

1 = BEST 4 = WORST

Table 1[20]

COMPARISONS OF FIVE TYPES OF FERTILISER BY FOUR FARMERS

IN VILLAGE KUCHIAROLE, DISTRICT BANKURA

ACCORDING TO THEIR CRITERIA 28 APRIL 1988

	FYM	DAP	GROMOR 28-28	MOP	UREA
LOW COST	5	1	4	2	3
PRICE RISES LITTLE	1	3	4	2	5
EASY TO APPLY	5	2=	2=	4	1
GOOD NUTRIENT PROPORTIONS	1	3	2	4=	4=
HIGH N CONCENTRATION	4	3	2	NIL	1
MICRONUTRIENTS	1	-	-	-	-
N AVAILABILITY TO PLANT	4	1	2	NIL	3
LASTS WELL IN SOIL	1	2	3	4	5
IMPROVES SOIL FERTILITY	(+) 1	(-) 3	(-) 4	(-) 2	(-) 5
SOIL HOLDS WATER BETTER	1	2=	2=	2=	2=
ACIDITY NOT INCREASED	1	DK	DK	DK	5
EFFECT ON PESTS/DISEASES	1=	3	4	1=	5
MARKET AVAILABILITY*	2	1=	1=	1=	1=
STORING QUALITY*	2	3	4	1	5

* = suggested by interviewer

1 = BEST 5 = WORST

FYM = Farmyard manure
DAP = Diammonium phosphate
MOP = Muriate of potash

Table 2[20]

Exercise 4: Preference ranking

To make sure you understand this technique, try a ranking exercise yourself to rank whatever type of items you wish. As a suggestion, you could choose to rank five different types of fruit on the basis of which fruits you would like to have available at your local market. If there are several of you, you might like to split up into groups of two or three. In each group, one person could be the interviewee (i.e. the person who is being asked to rank the items) while the other one is/are the interviewer(s). If several groups are trying this technique, you can compare the results afterwards. In this case you might like to each rank the same set of items, to make comparisons easier. You can choose whether to try the pairwise comparison or the direct matrix ranking method.

Try this question before reading the next section on the uses of ranking.

Discussion question: Can you think of any ways that the criteria used by women, choosing which tree species they prefer would differ from those used by men?

Uses and limitations of ranking

As hinted above, the ranking technique can discover the reasons behind why women and men make different choices. Often women farmers make choices about food crops and fruit on the basis of their nutritional value, their ease of cooking and their medicinal qualities as well as their growth characteristics. Men on the other hand often emphasise the economic value of the crops, and rarely mention these criteria which the women find important. When ranking tree species, men are mostly concerned about the multiple and diverse uses of the wood (for construction, implements, fodder, fuel etc). Women often use criteria such as the type of smoke it gives off when used as firewood, the thorniness of the branches when gathered for fodder or fuelwood (usually a women's job), and again the medicinal and nutritional value of the bark, leaves and fruit.

These differences in criteria can sometimes help to explain the conflicts in interest between men and women when new species, new techniques or other innovations are introduced into the area. It would be useful, for example, if agricultural extension agents planning to encourage tree growing through agroforestry first conduct some ranking exercises with a number of women and men to discover what features of the trees are important to each group.

This raises one limitation of the ranking technique. Because the choices made are so individual to every person, a ranking result should not be used to recommend a particular item which appeared as no. 1 in one, or even several, rankings. The idea that a farmer actually chooses one item is in practice a false one. A farmer very rarely grows one species of tree, or uses one soil conservation technique. Rankings often show the need for choices to be available, and should not be used to advocate concentrating on only the winning item.

Likewise the results of a limited number of rankings should not be extended to produce recommendations for a whole village or area. In other words ranking should not be used as direct planning tools. They can give some ideas but should not be relied on for anything beyond this.

Finally ranking exercises are fun! They generally take about half an hour to complete and are a good way to open a discussion. For instance, a group discussion on fruit tree growing could be livened up by beginning with a group ranking of the commonest fruit trees in the area.

HOW CAN WE LEARN ABOUT CONFLICTS OF INTEREST IN A COMMUNITY?

A community is generally composed of a number of different groups, some in direct conflict with each other, some more powerful than the rest, and some particularly disadvantaged. Within these groups there may be differences of opinion and points of conflict. Even within one household decisions are more often based on compromises between the different members' priorities rather than a total agreement of ideas. For example, farmers relying on the same irrigation system may not agree on how the water should be shared. Those with larger plots of land at the beginning of the water channel may be more successful in any disputes over the management of the system.

Landless households in a village may petition the village council to allow them to farm some of the common land, presently used for grazing. Livestock owners in the village may react against this, seeing it as a threat to their herds. Members of the village council are more likely to be livestock owners than landless.

The men of a village may have become interested in a coffee project which has just been started in the area. They have heard that their incomes could double if they replaced some of their maize crop with coffee trees. They are keen to work with the project. However, the women are very unsure about the idea. They fear that their workload will increase, as they have heard how much care the coffee trees need. They also feel there will be problems if they grow less maize - where will they get enough food for the family and what will replace the maize stalks for fodder for cattle? They also wonder who will benefit from the extra cash which the coffee trees might provide. The women and men discuss the project and can not agree.

How can we learn about these conflicts of interest? These issues tend to be hidden from outsiders, especially those who visit the community for only a short period. Those who stay longer often see the seemingly uniform community gradually revealed as much more complex, as different interest groups become evident.
One technique which can be useful in this respect involves **focus group discussions.**

Focus group discussions are a particular type of discussion, where a set of people are brought together specifically to discuss a particular issue. As the discussions focus on this one issue, they can deal with it in some depth. If the group is made up of people with common concerns, or people facing a common problem, a focussed discussion can allow them to be more frank and

honest than they may otherwise be, say in an open meeting in the community. Hence these discussions are ideally suited to dealing with particularly sensitive issues.

Focus group discussions differ from other types of interview in that the "interviewer's" role is one of moderating the "interviewees" discussions rather than asking questions to each member of the group. Once the discussion gets underway the interviewer/moderator plays a part in guiding the discussion and recording it (usually taking notes).

One application of this technique allows discussions to take place **within** different interest groups and then **between** these groups. In this case, following a series of focus group discussions, each with a different interest group, representatives are chosen from these groups to attend another focus discussion where their different views can be aired. Given that they have already aired their own views in front of the moderator, these final mixed group discussion meetings can quickly become open and uninhibited debates between the different interests represented. The moderator now plays a part in keeping the discussion balanced and preventing it becoming overheated.

Box 12 is an example of how focus group discussions were used in this way.

Box 12: Focus on conflict[21]

In a Peasant Association (PA) in Wollo, Ethiopia, a team of investigators (made up of both local and non-local fieldworkers) was exploring ways of local level planning for natural resource management. They were especially interested in the management of the hillside closure areas in the PA. These are sites where agriculture and grazing are restricted, with armed guard patrols preventing human or livestock intruders, in order to allow natural regeneration of vegetation and to protect any newly planted trees.

Problems had arisen because of unclear regulations about the permitted levels of use of the products of these closed areas (i.e. grass, twigs, fallen branches etc.), and those entitled to these benefits. The majority of PA members were not involved in the planning and management of the closures and many felt their livelihoods had been adversely affected by the closing of these previously communally-held or privately-managed areas.

Different groups in the PA had different opinions about the closures and how they could best be managed. The investigators arranged for a series of focus group discussions on this issue, including groups of:

PA leaders
Producers' Cooperative members
Private farmers
Women's group members
Youth group members
Old men
Old women
Closure site guards
Livestock owners/non-owners

These groups, composed of between 3 and 15 local people and 3 or 4 investigators, each met for about one or two hours. The investigators made use of a checklist to guide the discussion around a number of points, but stayed in the background and rarely intervened in the discussion. Ranking games were used to focus on preferences and attitudes to different management options. The opinions of the group members were recorded as notes, and verbatim quotes were also noted to illustrate particular local views.

After these meetings, about 2 or 3 representatives from each group came together in a workshop meeting in the PA, where each group could voice their views and discuss the differences of opinion. The end result of the meeting was a clarification on where the groups priorities overlapped, where they conflicted, and an agreement on what should be done next.

The following is a summary of some of the focus group discussions with quotes recorded during these meetings.

Box 13: Summary of focus group discussions on management of hillside closures, Wollo, Ethiopia.

Group	Issues raised	Plans for Management
PA leaders	- Shortage of land - Definite benefits of closures	- Thinning of bush and pruning to increase grass production - Cut and Carry - Controlled grazing? - No new closures - PA Level control
Women	- Cannot get access for fuelwood, clay, etc - Extra labour in collection - Wildlife pests	- Alternative home as trees will be taken - Open the areas for use
Site Guards	- Fear for lives - Lenient on poaching - Do job because of food-for-work	- More guards - More PA support - Supervised cut and carry
Old Men	- Rights of use not clear	- Increase use-grazing access, wood and bark

PA Leaders
"The closed areas will supply us with fuelwood, construction wood, grass for our animals from cut-and-carry and they will also stop erosion of the land. However they also result in a shortage of grazing and farm land and hinder livestock rearing."

Women
"We are not allowed to go into the closed areas to get anything from there. I can not even take a stick for a toothbrush!"

Site Guards
"Farmers come to cut the trees at night. We can hear them and see the remains of the trees in the morning. If we catch them and report them they will be our enemies and will threaten us and want to kill us. Sometimes we have to report our neighbours and friends."

Old Men
"We do not deny that closing the land controls erosion. But we have to get opportunities to use the area, for example taking the dried branches and bark for fuelwood, or being allowed to graze our animals on the gentler slopes within the closures."

Livestock Owners
"If you do not have enough grazing land, having cattle is like having a wife from a bad family."

Organising focus group discussions

* Keep the size of each group to a manageable number of people - the optimal size is probably between 3 and 15.

* Choosing who should attend a focus group meeting is liable to introduce bias. If a leader is asked to nominate participants, his or her choice will be influenced by his/her friends and acquaintances. This is difficult to overcome, but the representativeness of the group should be borne in mind.

* Choose a site where the group will feel comfortable to talk. Choose a site where there are unlikely to be any unwanted observers or intruders. Informal settings, such as sitting on the ground under a shade or shelter, are more conducive to frank discussion than formal arrangements. Sitting in a circle allows everyone to see each other.

* Choose a time which suits the group of people.

* Start the discussions off on a light-hearted note. Ranking games are ideal.

* Explain carefully at the beginning of the discussion why you would have called the group together, and what you would like to discuss.

* Try to ensure that every member of the group gets an opportunity to speak. Don't allow one member to dominate the discussion.

* The discussion should not last much more than two hours, unless all of the local members of the group want to continue.

* Organising these meetings takes time and attending them also makes use of valuable time for the rural people. Be aware that people may miss important opportunities for employment or may have to delay other activities to attend the meetings.

* Following up the meetings by supporting the implementation of any agreements reached is a vital part of the work.

A word of caution

There are a number of risks involved in investigating conflict. Firstly by making the conflict more public and by providing a forum in which the differences can be discussed openly, these different opinions may become even more hotly contended, and the conflict may actually deepen. People who previously had not been involved or interested in the arguments may, once they hear it being discussed, start to take sides.

A related danger is that the more powerful and influential interest groups in the community may be put in a better position to force their opinions on other groups. They may use the group discussion sessions for propaganda purposes rather than for constructive discussion with others.

These two dangers require very careful organizing of the investigations. Those responsible for managing the group discussions need to be able to control the different interest groups represented and to encourage the less strong groups to speak out. They also need to be very open and explain why they are trying to gather such information.

A third potential danger is that the investigators may appear to take sides in the argument too. If, for example, they spend more time talking with one particular interest group, the other groups may see that as evidence of support for that group's argument. This may cause problems at later stages if any degree of favouritism is suspected. Again, this can only be avoided by careful organization and sensitivity to each group's fears and suspicions.

Despite these difficulties and dangers, it is often very important to learn about conflict situations. For example, an apparently inexplicable pattern of land use may make sense once it is discovered that there are disputes and conflicts over rights to that area of land. Also, conflicts between different groups in a community may hinder any community-based activities which are being planned. In such instances it is worthwhile investigating the conflicts, in a sensitive and careful way.

HOW CAN WE LEARN ABOUT ENVIRONMENTAL CHANGES?

The environmental history of a village can explain much about why the present situation is as it seems and can help to explain people's attitudes to the present day resources. For example, a seemingly over-exploitation of forest land can be better understood if we find that up until very recently there was abundant areas of forest and little problem of obtaining wood. Similarly present trends in resource use or environmental degradation can be used, with care, to foresee any problems which may lie ahead or any opportunities for preventing these problems.

There are several ways of learning about past changes and trends:

Interviews

Talking with older people, we can learn much about the changes they have seen in their lifetime. They may also be able to remember the stories told by their parents and grandparents, of how the land was used by previous generations. If we bring together a group of old people, they can help to check each other's memories, to provide more reliable information.

Old aerial photographs

If available these photographs can provide valuable information on landscapes, for example showing the size of lakes, forest, grazing areas, the course of rivers, the extent of housing areas, or the types of crops grown. They are useful tools to help jog the memory of old women and men during interviews on changed environment.

Historical transects

One way of representing previous landscapes is as a series of transects. An example below comes from Indonesia, and illustrates the numerous experiments with tree production on the agricultural land, following felling of the fruit trees, and the changing land use on the upland slopes, after deforestation during the Dutch colonial times (Figure 11).

These historical transects can be drawn either during interviews with old women and men, or can be constructed by the investigators after interviews and discussions in the field.

Historical calendars

Previous years' seasonal trends can be shown as a series of calendars, to illustrate changes in this aspect of resources and resource use. Like historical transects these can be constructed during interviews with elderly members of a community and checked on-the spot. An example here was drawn during a group interview with farmers in Ethiopia, recounting monthly rainfall over the previous five years (Figure 12). The farmers based their recollections around memorable events such as the land redistribution of '74-'75 and on what they remembered about that time, e.g. the area of land they were farming or the crops they were growing. The approximate picture which this provides is valuable in itself, as the farmer's perspective of rainfall and its variability. In addition, in such a case as this where no other resources of rainfall data are available for these years, this estimate is the best we can get.

Models

One step on from mapping on the ground, constructing a model of a village can be a valuable exercise in learning about the land use and topography of the area. These models do take time and can become quite elaborate but are also a great deal of fun.

Models are also a good way of reconstructing past landscapes, in particular looking at land use and the status of the environment in former days. Equally they can show what future landscapes may look like. In India, farmers constructed two different models of their catchment area in the future. (Mascarenhas, pers. comm). One model, with many trees and well managed slopes showed how they would like it to be. The other model had bare slopes, gullies and a very degraded landscape. Indeed to make it worse still, a farmer collected ash from his home and scattered it over the model! This was how they saw their village if nothing was done to prevent overuse of the present resources[24].

Figure 11[22]: Transect-through-time illustrating land use trends in Kates village, 1900-1987, Java, Indonesia.

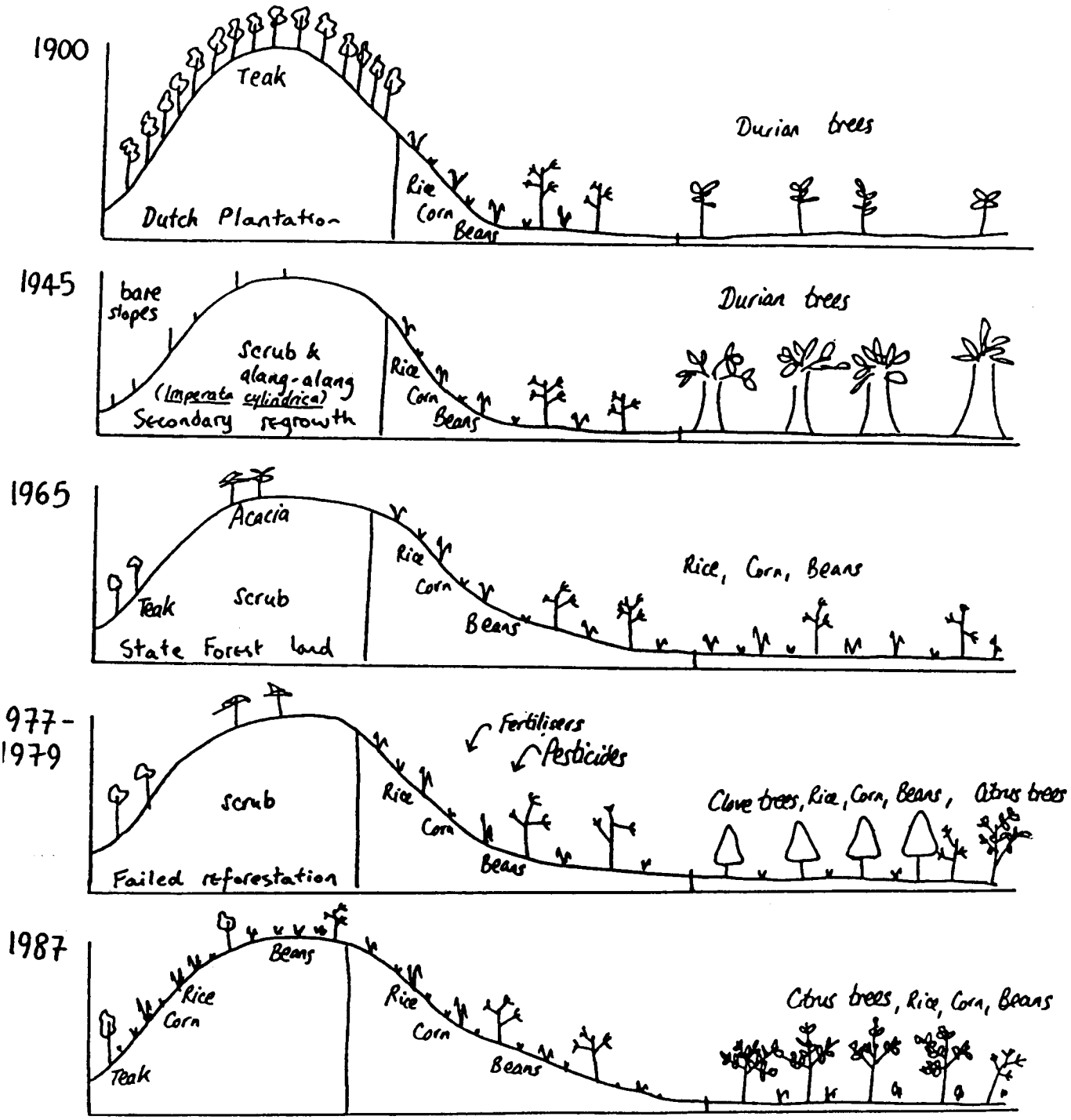
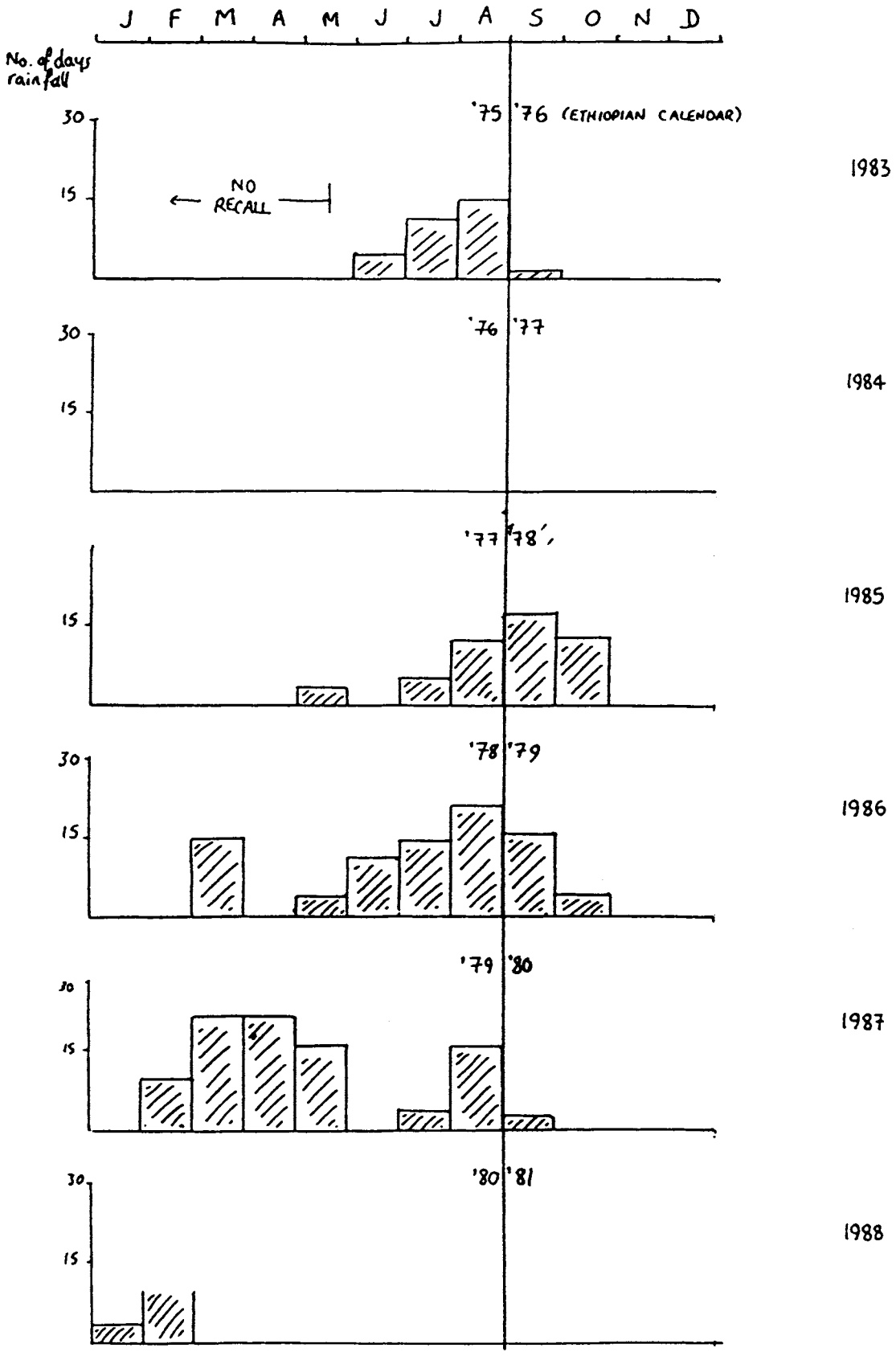


Figure 12[23]: Farmers' recall of rainfall over last five years, in Gobeya Peasant Association, Ethiopia. Data collected by interview, February 1988.



HOW CAN WE LEARN ABOUT LOCAL INSTITUTIONS AND GROUPS?

Learning about which formal institutions are present in a community is relatively straightforward. But how can we learn about the informal groups and the extent to which the various institutions link together and collaborate? If we are investigating the use of natural resources in a village, we need to know which groups are responsible for deciding how the resources are used - for example, the water management committee (controlling use of irrigation water), the village council (controlling disputes over land), the local women's groups (organising a rota system for working in the village tree nursery), and so on.

A quick way of starting to learn about this is to construct a **venn diagram**. This is simply a set of overlapping circles, each circle representing an institution or group and the overlap between circles depicting the extent to which the institutions overlap and collaborate in practice. The relative size of the circle representing an institution is drawn to indicate the relative importance of the institution in the village - i.e. the influence which it exerts in the community. The venn diagram may be first constructed using cut-out circles of card, which are placed overlapping on top of each other. This can be done by a local leader or schoolteacher or anyone else familiar with the formal and informal groups in the village. Once satisfied with the lay-out of the circles, the diagram can be transferred on to paper. Two examples are shown below, one from Botswana (Figure 13) and one from Sudan (Figure 14).
The completed venn diagrams are summaries of which groups are present within a community, which outside groups have contacts inside the community and how these different groups are linked together. For example, the venn diagram of a village in Botswana (Figure 13) shows the women's group, a relatively small (unimportant?) group, as being far away from the chief and the village committee. This may reflect the attitute of the person who constructed the diagram; perhaps a male member of the village committee would have drawn such a picture, with the committee represented by a large circle at the top of the page. It would have been interesting to ask, for example, a member of one of the women's groups to construct her own version of the groups in the village. How might her diagram be different?

AND WHAT NEXT?

So, what happens after we have spent some time talking with and learning from rural women? Where do we go from there? Obviously our learning will only be a success if we can make some use of the new knowledge and the ideas which we have obtained. This includes:

Reporting the results

The women and men who have spent time talking with us, answering our queries, and discussing their ideas deserve the opportunity to hear what we have learnt from our visits with them. If we are to work together well with the local people we need to make time to share our findings with them and keep them up-to-date with our own ideas and plans.

We need to find a suitable means for reporting these results. It may be useful to organize an open **community meeting** where everyone is invited to attend. Such meetings are a valuable means of informing a large number of people at one time, but have certain limitations, including:

* the size of the meeting can become very large, making it difficult to communicate effectively with those at the edge of the crowd;

* the time of day at which the meeting is held will determine how many and who can attend. While men may be most free during the early evening, women may not be able to leave their homes then if they are caring for young children;

* any discussions in large meetings tend to be dominated by the usual set of leaders and elders and other elite - usually males. Those facilitating the meeting need to make every effort to involve others, including any women who are attending. However this is a difficult task and may create an atmosphere of antagonism with the leaders and discomfort with those being pressed to make contributions. It may be better instead to hold separate smaller meetings to discuss in more detail any points arising in the community meeting. These smaller meetings would need to be organised carefully, to ensure representatives of each different section of the community are invited. (See previous notes on focus group discussions). In some communities separate meetings would need to be held for the women and men.

Remembering the above points, good use can be made of **visual presentation material** to show those results which can be depicted pictorially. Posters, cartoons, maps and calendars can be presented. These charts can help to brighten up the meeting and can be left behind afterwards, perhaps to be used in the local school or to be discussed during future meetings in the community. If used in meetings where useful discussion **is** possible, these charts can be excellent visual cues for stimulating and focussing the discussion around the issues which they represent. However care needs to be taken to avoid any chances of the pictures being misinterpreted! There are numerous stories of visual presentations causing confusion and misunderstanding in rural villages, such as the case of a team who brought a film about the dangers of malaria to show in an African village. The sight of a mosquito on the large screen caused many "oohs" and "aahs" from the audience and after the show the main response was "Well thank goodness there are none of those enormous insects in our village! We are safe from this problem." Testing the pictures with a selected audience before using them in a large meeting is one way to help avoid any potential communication problems. A better way is to involve the local women and men in designing and preparing the posters and diagrams. Some people may already have been involved, e.g. in drawing maps of the village, or constructing labour calendars, and they best know how to make these pictures accessible to others in their village. Failing that, the outsiders can at least try to reduce any obvious sources of confusion including using as little written text as possible, and using local script and local terms for any text which is included. The job of presenting these diagrams is another one best done by local people - those who have been asked to preview the diagrams before the meeting or those who have been involved in preparing the diagrams.

In addition to holding these report-back meetings, producing a **written report** of the newly-gained information is a valuable part of the survey/learning work, and one which is often a required output. These reports are best produced as quickly as possible after the field visits. A few tips on what to include in the report alongside the main findings of the investigators:

Figure 13[25]: Venn diagram of institutional structures in Moshaneng village, Botswana.

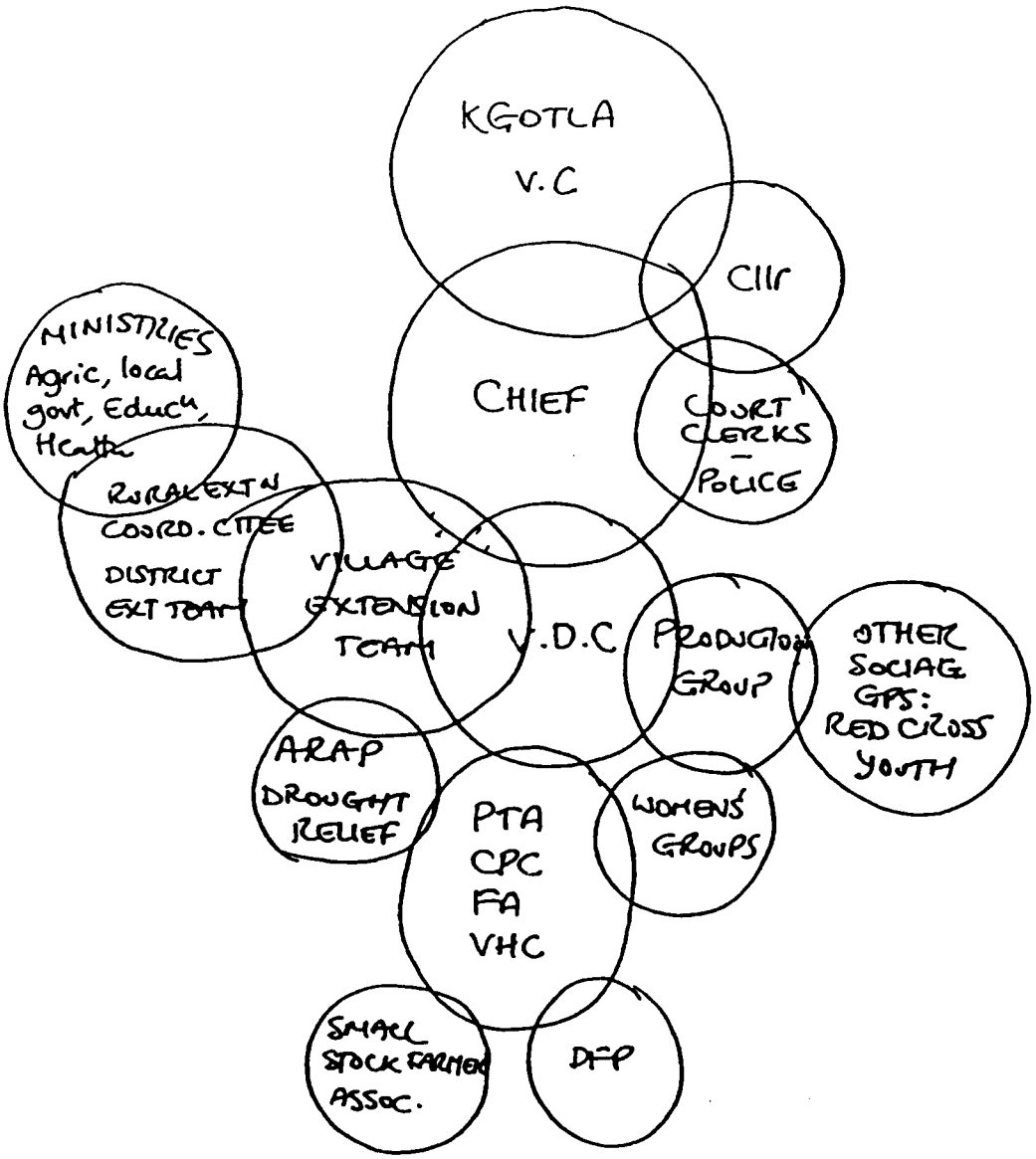
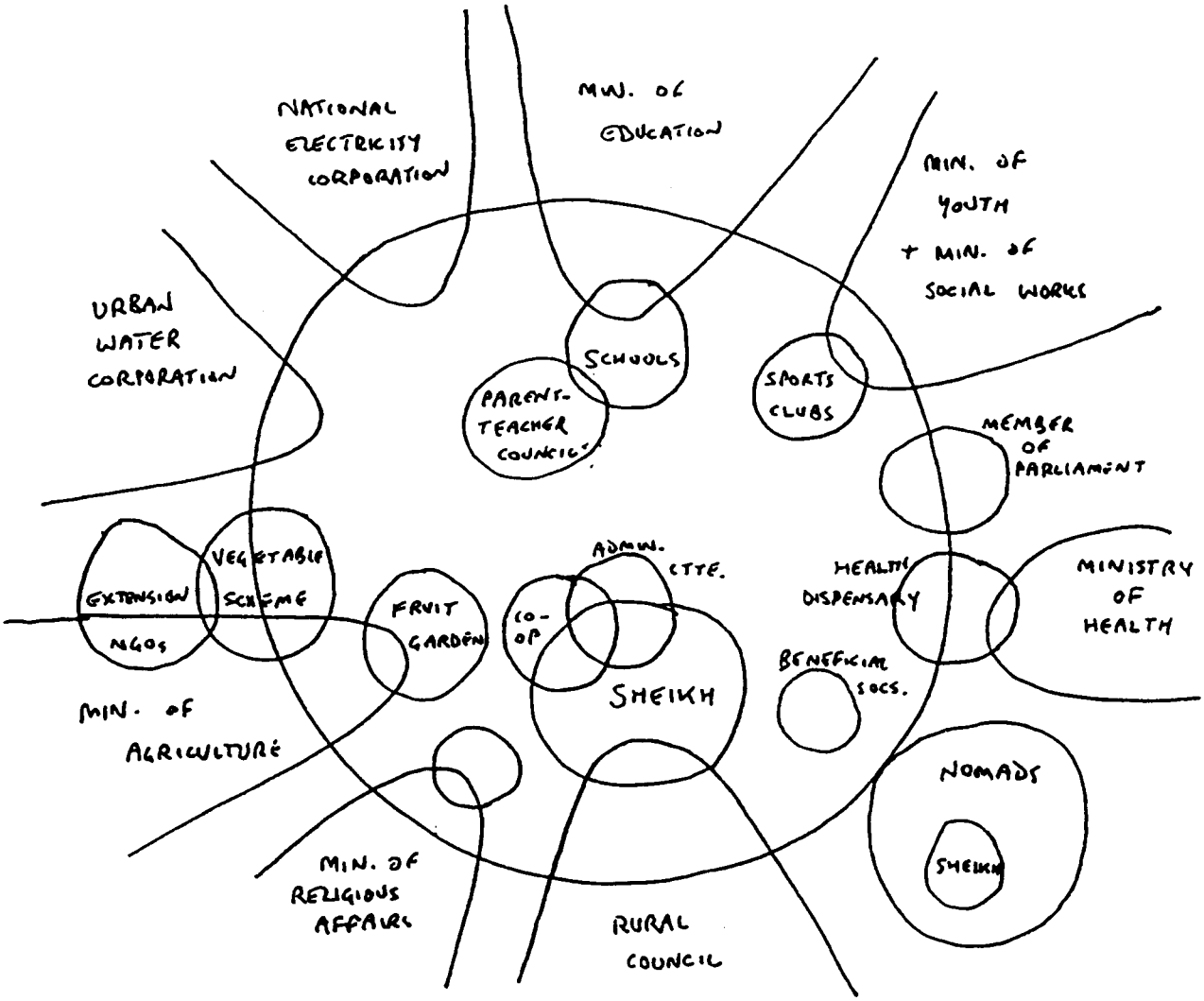


Figure 14[26]: Venn diagram of institutions in Faki Hashim village, Sudan.*



copies of the diagrams and drawings produced during the interviews and discussion sessions;

* a selection of interesting quotes noted down during interviews. Do not include the names of those quoted if there is any chance that this will cause problems for them;
* detailed information on some particular women, men or households visited who illustrate well a particular point, e.g. as examples of people facing one of the major problems in the community;

* lists of people visited and interviewed and list of any group discussions held. Again, if providing actual names of those interviewed is not possible, or is likely to cause problems in a sensitive situation, omit names and give only brief descriptions of each person contacted. For instance whether a large or small landowner, or a landless labourer; a man or women; a newcomer or an established resident; etc. This list will show the range of contacts made and will indicate the representative nature of those interviewed;

* brief accounts of any problems encountered in the work, e.g. the difficulties in using some techniques or the logistical problems which hindered the work (i.e. anything which may help those doing similar work in the future).

Planning activities

It is impossible to produce one set of guidelines on how to make the necessary steps: from **learning** about an issue by talking with rural women to **action** in the form of carrying out activities seen as priorities. This process is very dependent on, among other things, the agency involved and its existing structure, the investigators involved and their preferred way of working, the type of activities being planned and the main initiators. For example, if the outside agency involved is flexible and thinks that the planned activity is possible and worthwhile, the planning stage will be quicker and more trouble-free. Likewise if the activity being planned is straightforward and simple, suggested and supported by the local women and men, the planning will go more smoothly. Funds may be made available quickly and local responsibility is likely to be high. In such instances, local participation in carrying out the activity is also likely to be high, as are the chances of the activity being a sustainable one.

If however there are no plans for any immediate follow-up activities, the information can still be valuable for, say, reviewing the impact of past activities and revising existing work plans or using as a baseline for future studies or field activities. In any case, the investigators have benefited from learning directly from the local women and men and will now be able to have something of an "insider's view" in addition to their own perspectives. Equally, if the learning work has been truly participatory, the rural women and men involved will also have learned from the experience. These learning benefits can be of real longterm help in encouraging cooperative efforts in future conservation activities, as the outsiders and insiders work with each other. (See Section I of the manual).

The learning process of investigators and rural people will not stop with the identification of activities. As the activities are planned in detail, discussed among the different people involved and finally implemented, the investigators and the local people will continue to learn more about

the resources, their use and their users. And since it is most often the local women and men themselves who are the users of the resources, it is essential that they be involved in every stage of the work, from the initial learning to the later learning to evaluate the activity.

SOME PRACTICAL POINTS TO REMEMBER

It is impossible to plan a perfect piece of fieldwork - something always changes the programme! But here are a few things to bear in mind when planning the work to try to avoid some obvious pitfalls:

People

To be successful the number of people working in this learning/survey work needs to be kept small. The actual number will depend on the purpose of the study, the size of the area to be visited, and the way the survey is to be organised. If only one outside person is to be involved it is obviously easier from the point of view of organising the necessary logistics. If, however, a team of outside people are involved there are particular points to remember. When visiting a community the team would be most effective (and less intimidating!) if split into small groups of two or three people. If the team members switch between the field visits, each person gets the chance to work with everyone else. This mixing of the team members is a good way of encouraging real teamwork and making use of the different experience and skills of every participant.

It would be rare to require an all-female or all-male team. A balance of women and men on the team makes the investigation itself more balanced.

Local people are the ideal investigators. They generally have fewer difficulties in communicating with the rural communities. They know the local dialect, the local forms of address and customs, and they are less likely to become the centre of attraction when they visit a village. They can quietly get on with the work. However, it can also be useful to include some non-local people on the team, to bring a different perspective. They may be able to contribute ideas which they have learned elsewhere and since they know less about the area they will be less likely to make prior assumptions about what they will find there. Indeed local investigators often admit that they find it difficult to ask questions in their neighbourhood, as they already have their own ideas about the answers!

Payment?

If local women and men are involved in the investigations, for example if they accompany the outside investigators on the transect walk, or spend some time in group discussions, then the question arises: should they be paid for this work? There are arguments for and against these payments. On the one hand, these people have given up their own time to help the investigators and to provide them with information. In doing this they may have missed the chance to earn money or may have had to postpone an important task on their farm. In such a case, some kind of compensation would seem reasonable. However the use of financial incentives is full of

dangers. People may be quick to provide information in order to get payment, but the quality of information they provide may not be as reliable as that provided by those who are genuinely interested in the investigations, even if they are not paid.

One possible option is to pay the local women and men in kind rather than in cash. For example, they may appreciate receiving some tree seedlings, a simple extension booklet, or a hand-tool. Like so many guidelines in this manual, there is no one correct way. The appropriate solution will need to be worked out according to the local situation.

Timing

The work needs to be planned for a period of time when:

* the rural women and men are not too busy to spend time with the investigator(s);

* the climate is not likely to hamper the work (e.g. the roads are not likely to be blocked by heavy rainfall);

* the workload of the investigator(s) is not too heavy;

* ideas for action which may result from the learning work can be fitted into the planning schedule of the agency involved;

In any case, if the work will involve several days of visits in a community, the investigator(s) should first visit the local leaders to explain their plans and to ask their permission.

Where to stay

If the investigator(s) would have to travel long distances to reach the communities they wish to visit, or if transport facilities are not freely available, it is probably better to arrange to stay overnight in the community. Staying there also helps the investigator(s) get to know the people and the place more quickly. Evenings are often good times for discussion, and early mornings and late evenings can be interesting times to watch activities such as farmers using night irrigation or outside labourers going to and from their daily work.

NOTES FOR TRAINERS

Firstly, to reiterate an earlier suggestion - please do not feel constrained by any of the exercises, case studies, diagrams, or photographs used here. You will have more locally suitable material to use instead. You will see, for instance, that many of the photographs in this section come from countries outside Commonwealth Africa. This is because the author had easier access to photographic examples of the techniques being used in these countries. Trainers using this manual may like to replace some of these photographs with similar ones from their own countries, where they are available.

This section of the manual has been laid out in the form of eight questions. Related to each question are a number of exercises which you, the trainer, might like to try. They are designed to encourage interactive learning by the participants and to stimulate discussion on the techniques and topics being described. Here is a list of some exercises to explore each question:

1. How can we best talk with rural women?

* Ask the participants to look at the photographs of interviews. In small groups, or as an open discussion, they could identify good points and bad points about the way each interview is being conducted. They could make out their own set of guidelines, or "Do's" and "Don'ts" for good interviewing. A list of hints is provided and they could compare this with their own ideas.

* Ask one group of participants to design and perform a role play to illustrate a bad interview situation. An example of such a sketch is provided but encourage them to make up their own. Similarly, ask another group to design and perform a good interview situation (e.g. with an informal, conversational manner, with polite introductions and explanations by the interviewer, and with careful questioning on a couple of topics). Leave some time for the groups to discuss the issues raised after the dramas.

2. How can we get a quick overview of the local resources?

* If all the participants know the area around the training site, ask them to split into groups to draw a sketch map of the local environment. To make it more interesting, ask one group to draw their map on the ground, one to use paper and pen, one to use blackboard and chalk, etc. and compare the types of maps produced.

* If possible, ask the participants to walk a transect across the area in which they are staying. The route of the transect can be decided after drawing the map, and can be designed so as it includes all the main types of land use. Ask them to draw a summary of the transect, noting down vegetation type, ownership, water sources, key problems and limitations, and so on. 3.

3. How can we learn about how women perceive their environment?

* Ask the participants to look at the maps in Figures 5 and 6, from Ethiopia. There are several key differences between the image of the village as seen by the male PA leader, and by the woman. Ask the participants to work in small groups to see what the maps tell us about the person who has drawn it (i.e. what they feel is important, what is less relevant to them, and so on). Ask them to present their key ideas on flipchart paper and discuss the results of each small group.

* Similarly, ask the participants to work in small groups to analyse and discuss the two maps in Figure 7. Again, much can be learned about the different priorities of the women and men of the village.

4. How can we learn about the workload of rural women?

* To practice drawing labour calendars, ask the participants to divide into groups of three. In each group one person can be the respondent, with two interviewers. It is the respondent who draws her/his own labour calendar (i.e. their work pattern over a year), while the two interviewers help and ask questions following the hints provided. If there is time, repeat the process with a different respondent in each group. Finally with the calendars transferred on to large/flipchart sheets of paper, compare the results. Note different work patterns and what they show about the different respondents. Discuss the value of this type of information in planning, monitoring, or evaluating a project initiative.

* In a similar way, ask the participants to practice drawing their own daily activity schedules. They may also like to try and recall the different patterns of their youth. Again present and compare the schedules of each respondent.

5. How can we learn about different preferences for resource use?

* You as the trainer could take on the role of director of a fruit and vegetable development project, in your own country. Tell the participants that you have already conducted a survey of the producers, to find out which types of fruit and vegetables they prefer to grow. You now want to know the preferences of the consumers. So, divide the participants into groups of three, with one respondent (i.e. consumer) and two interviewers in each group. Ask the participants to choose 4 types of fruits and 4 types of vegetables to use in the preference rankings. Make sure all the respondents are familiar with all of these. Give half the groups the opportunity to rank the fruit, and the other half can rank the vegetables. Each group can divide whether they would like to use the pairwise comparison technique or the matrix ranking. Allow 30-40 minutes for each ranking. Finally ask a spokesperson from each group to report back the findings and identify the key results of use in planning the project.

6. How can we learn about conflicts of interest in a community?

* To give the participants some practice in handling situations of conflict, ask them to choose a topic around which they could perform a role-play to highlight the conflicting viewpoints of different groups in a community. For instance, they might choose to explore the issue of firewood scarcity, and show the viewpoints of the poorer women (who spend more time and/or money collecting or buying the firewood), richer women (who have alternative sources of fuel, or who are involved with fuelwood merchants who come to the village to sell the scarce resource), the older women and men (who call for a return to the days when fuelwood was plentiful) and newcomers (who bring reports of what has happened in other parts of the country). When the drama has been performed and the different viewpoints and conflicts discussed, ask the participants to enact a village meeting to further discuss their positions. Asign the role of an outside extension agent to one of the participants. This person's role is to control the discussion so everyone gets a say, and to try and facilitate a consensus on how the problems can best be solved. Finally, allow the participants to step out of their roles and discuss the problems involved in dealing with such sensitive situations.

7. How can we learn about environmental changes?

* Ask the participants to look at Figures 11 and 12. Ask them to think about how these diagrams were constructed, what they can contribute to information about present day events, and what other suggestions they might have for other diagrams to represent environmental change.

8. How can we learn about local institutions and groups?

* Once the participants have looked at the venn diagrams in Figures 13 and 14, ask them to draw similar diagrams for the project with which they are involved, or one with which they are familiar. If possible, ask several participants to draw their own perspectives of the same project; perhaps participants who work at different levels of the project (e.g. field and local extension officers, compared with office-based managers). Compare their diagrammatic representations. What do they show us?

Finally there are several general discussion questions highlighted in this section. You might like to ask the participants to discuss these in small groups, or you may prefer to use them to stimulate an open discussion by all participants. Likewise, exercise 1 (the matrix of the relative responsibilities of women, men, girls and boys) may be conducted in small groups or in plenary, to initiate discussion on what rural women know.

FOR MORE INFORMATION

If you would like to learn more about how to learn from and with local women and men, here are some suggestions for futher reading:

1. Abel, N.O.J. et al. 1989. Amelioration of Soil by Trees. Guidelines for Training in Rapid Appraisal for Agroforestry Research and Extension. Commonwealth Science Council, UK and Forestry Commission, Zimbabwe. £10.95

These guidelines are designed for training research and extension personnel in rapid appraisal methods for development of agroforestry in peasant land use systems. The methods described are based on the principles of interactive research, learning-by-doing and interdisciplinarity.

Contact: Commonwealth Science Council
Commonwealth Secretariat
Marlborough House
Pall Mall
London SW1Y 5HX
UK

2. Davis-Case, D. 1989. Community Forestry. Participatory Assessment, Monitoring & Evaluation. Forest, Trees and People, Community Forestry Note 2. Food and Agriculture Organisation of the United Nations, Rome Italy. Cost unknown.

This book outlines the concepts, approaches and techniques that need to be an integral part of a truly participatory development strategy. It includes a section outlining 23 different tools for participative analysis and communication.

Contact: Community Forestry Officer
Room 823bis
Policy and Planning Service
Forestry Department
FAO
Via delle Terme di Caracalla
Rome 00100, Italy

3. Epstein, T.S. 1988. A Manual for Culturally-Adapted Market Research (CMR) in the Development Process. RWAL Publications, Bexhill-on-Sea, UK. Cost unknown.

This manual discusses the number of emerging participatory approaches in rural development and provides guidelines as to how established market research methods can contribute to the improvement of project success rate. It also outlines why and how these methods have to be culturally adapted.

Contact: RWAL Publications
Lloyds Bank Chambers
15 Devonshire Road
Bexhill-on-Sea
East Sussex, TN40 1AH
UK

4. Feuerstein, M-T. 1986. Partners in Evaluation. Evaluating Development and Community Programmes with Participants. Macmillan Publishers. Cost Unknown.

This guide is designed to be used in the field by busy practitioners with little or no formal training in evaluation methods. The methods, principles and examples it contains can be used in many different types of programmes, but they are particularly appropriate to development and community programmes.

Contact: T.A.L.C.
Box 49
St Albans
Herts AL1 4AX
UK

5. Hope, A. and Timmek S. 1987. Training for Transformation. A Handbook for Community Workers. Mambo Press, Gweru, Zimbabwe. Cost unknown.

This book, produced in three separate volumes, is aimed at educators and community workers in the field. Based on the approach by Paulo Freire, it gives practial advice on how to

use participatory analysis and participatory education for the development of self-reliant communities.

Contact: Mambo Press
PO Box 779
Gweru, Zimbabwe

6. Kumar, K. 1987. Rapid Low-Cost Data Collection Methods for A.I.D. A.I.D. Program Design and Evaluation Methodology Report No. 10. A.I.D. Washington, USA. Cost unknown.

This guide is written for the use of A.I.D. managers who commission studies for gathering information for designing, implementing, monitoring and evaluating development projects and programmes. It is designed to help managers determine whether a rapid, low cost method would be appropriate for their specific information needs and to prepare the scope of work for the contractor who will be conducting studies based on these methods.

Contact: A.I.D. Documentation & Information Handling
Facility
7222 47th Street, Suite 100
Chevy Chase, MD 20815
USA

7. Kumar, K. 1987. Conducting Group Interviews in Developing Countries. A.I.D. Program Design and Evaluation Methodology Report No. 8. A.I.D., USA. Cost unknown.

This guide describes the nature, uses, advantages and limitations of group interviews with reference to the conditions of developing countries. It is designed for use by A.I.D. managers, contractors and host country nationals. It explains the steps involved in conducting two types of group interviews - focus group interviews and community interviews.

Contact: as above

8. Kumar, K. 1989. Conducting Key Informant Interviews in Developing Countries. A.I.D. Program Design and Evaluation Methodology Report, A.I.D., USA. Cost unknown.

This guide provides general guidance on the use of key informant interviews as rapid, low-cost data collection method. It is designed to assist A.I.D. staff, contractors and host country nationals to determine whether key informant interviews are the most appropriate method for gathering information in a particular situation and to design, conduct and supervise studies based on key informant interviews.

Contact: as above

9. McCracken, J.A., Pretty, J.N. and Conway, G.R. 1988. An Introduction to Rapid Rural Appraisal for Agricultural Development. Sustainable Agriculture Programme, IIED, London. £4.00, free to Third World individuals and institutions.

An overview of the Rapid Rural Appraisal approach and some of its techniques. This publication is not designed as a field guide but provides examples of where the techniques have proved useful. Strong emphasis on diagramming.

Contact: Sustainable Agriculture Programme
IIED
3 Endsleigh Street
London WC1H ODD
UK

10. McCracken, J.A. et al. 1991. Diagrams for Shared Learning and Analysis. Participatory Rural Appraisal Handbooks: No. 2. IIED, London and FAO, Rome (in press).

This handbook covers a range of diagrams: maps, transects, seasonal and daily calendars, historical and predictive diagramming, cartoons, flow diagrams, decision trees, pie diagrams and venn diagrams.

Contact: Sustainable Agriculture Programme
International Institute for
Environment and Development
3 Endlseigh Street
London WC1H 0DD

11. McCracken, J.A. et al. 1991. Annotated Bibliography: Participatory Rural Appraisal Handbook No. 4. IIED London and FAO Rome (in press).

This bibliography includes approximately 250 references to publications on general participatory research and development approaches; case studies of RRA and related approaches, including non-agricultural applications; and documents on specific techniques.

Contact: Sustainable Agriculture Programme
International Institute for
Environment and Development
3 Endlseigh Street
London WC1H 0DD

12. Nichols, P. 1991. Social Survey Methods. A Fieldguide for Development Workers. Development Guidelines No. 6. Oxfam. Cost Unknown.

This manual is aimed at readers with no specialist knowledge of social research methods or statistics. In particular it is designed to help those working in remote rural areas, with little money or technical back-up. Guidelines are provided on, for example the fieldwork team, choosing the sample, and presenting the findings.

Contact: Oxfam
274 Banbury Road
Oxford OX2 7DZ

13. Participatory Rural Appraisal Handbook. 1990. National Environmental Secretariat, Kenya, Clark University, USA, Egerton University, Kenya and the Center for International Development and Environment of the World Resources Institute.

This handbook explains the use of participatory rural appraisal (PRA) for developing community-based resource management plans. It uses case study material of RRAs conducted in Kenya. This handbook has also been summarised as a booklet: Mwagiru, W., Thomas-Slayter, B.P. and Ford, R. 1989. An Introduction to Participatory Rural Appraisal for Rural Resources Management. Clark University, USA and National Environment Secretariat, Kenya.

For both these publications contact:

Director
National Environment Secretariat
Ministry of Environment and Natural Resources
PO Box 67839
Nairobi, Kenya

or:

Director
Program for International Development
Clark University
Worcester
Massachussetts 01610
USA

14. Pretty, J.N. et al. 1991. Semi-structured Interviewing. Participatory Rural Appraisal Handbooks No. 1. IIED, London and FAO, Rome (in press).

This handbook provides guidelines on how to select informants, how to prepare to interview, appropriate styles of questionning, how to avoid errors and biases, and so on.

Contact: Sustainable Agriculture Programme
International Institute for
Environment and Development
3 Endsleigh Street
London WC1H 0DD

15. Pretty, J.N. et al. 1991. A Guide for Trainers. Participatory Rural Appraisal Handbooks: No. 3. IIED, London and FAO, Rome (in press).

This handbook provides guidelines for trainers who wish to introduce the techniques of semi-structured interviewing, participatory diagramming, and ranking and scoring. General guidance is given on how to train groups.

Contact: Sustainable Agriculture Programme
International Institute for
Environment and Development
3 Endsleigh Street
London WC1H 0DD

16. Rojas, M. FAO. 1989. Women in Community Forestry. A field guide for project design and implementation. Food and Agriculture Organization of the United Nations, Rome.

This guide focuses on practical ways to include women in project design and implementation and is meant to be a tool to facilitate descussion, offer options and promote action on behalf of women and forestry.

17. Rugh, J. 1986. Self-Evaluation of Rural Community Development Projects. A World Neighbours Publication, Oklahoma, USA.

The basic purpose of this manual is to help those involved in running rural community development projects to learn how to do more effective and appropriate evalution themselves. It discusses the questions: why evaluate, evaluation for whom, evaluation by whom, levels of evaluation, when to evaluate, what to evaluate and how to evaluate.

Contact: World Neighbours Development Communications
5116 North Portland Avenue
Oklahoma City
OK 73112
USA

18. Russo, S. et al., 1989. Gender Issues in Agriculture and Natural Resource Management. The Gender Manual Series. US Agency for International Development.

This manual provides methods, guidelines and examples for integrating women into agricultural and natural resource development projects. It includes lists and question sheets to identify gender issues that should be addressed by those involved in project assistance. The manual also presents case studies describing efforts to incorporate women in development activities.

Contact: Dissemination Manager
Office of Women in Development
Agency for International Development
Washington DC 20523-0041
USA

19. Society for Participatory Research in Asia. 1987. Training of Trainers. A Manual for Participatory Training Methodology in Development.

This manual deals with the topics of the role of trainer in participatory training, designing a training programme, small groups, learning-training methods, and evaluation and follow-up.

Contact: Society for Participatory Research in Asia
45 Sainik Farm
Khanpur
New Delhi 110 062

20. Theis, J. 1989. Handbook for Using Rapid Rural Appraisal Techniques in Planning, Monitoring & Evaluation of Community-Based Development Projects. Save the Children Federation/US, Sudan. Cost unknown.

This handbook presents research tools specifically designed for use by development workers. It deals with the issue of local participation in RRA work, and although compiled for SCF's programme in the Sudan, it is relevant to others working in related fields.

Contact: Mohamed Ali Idris
REU Manager
Um Ruwaba
Save the Children/USA
Box 3896
Street One, New Extension
Khartoum, Sudan

21. Theis, J. and Grady, H. 1991. Participatory Rapid Appraisal for Community Development. A Training Manual. Cost Unknown. Save the Children Fund.

This manual, available in English and Arabic, introduces the basics of the PRA approach, and includes simple exercises to practice the tools and techniques. Guidelines are provided for trainers and for those designing and writing up the results of a PRA.

Contact: Joachim Theis/Heather Grady
SCF
48 Wilton Road
Westport, CT 06880
USA

22. Vella, J. 1989. Learning To Teach. Training of Trainers for Community Development. SCF and OEF International.

This manual is designed to be used in training of trainers workshops and includes guidelines on, for example, adult to adult communication, using pictures and sociodrama.

Contact: OEF International
1815 H St, NW
11th Floor
Washington DC 20006
USA

23. Wasonga, L.M. and Zwart, G. 1984. A Manual for Extension Workers in Arid and Semi-Arid Zones. For Promotion and Management of Women's Group Projects. Ministry of Finance and Planning, Kenya, and Food and Agriculture Organisation of the United Nations, Rome. Cost unknown.

The purpose of this manual is to provide workers with guidelines to assist them when working with women's groups who have organized themselves to undertake income generating activities. The manual contains case studies of projects in arid and semi-arid lands of Kenya.

Contact: Ministry of Finance and Planning
PO Box 30005
Nairobi
Kenya

FOOTNOTES TO SECTION 2

1. Table taken from Rojas, M. FAO. (1989). Women in Community Forestry. A field guide for project design and implementation. Food and Agriculture Organization of the United Nations, Rome.

2. From Goswami, P. and Hoskins, M. (1980). Assistance to local community forestry: report to the Government of Sierra Leone. FAO/SIDA Forestry for Local Community Development Programme. Rome, FAO.

3. Taken from Soil and Water Conservation Branch, Ministry of Agriculture, Kenya and International Institute for Environment and Development, London. (1990). Report on the Rapid Rural Appraisal Workshop held at Blue Posts Hotel, Thika. July (1989).

4. Figure taken from document cited in footnote 3.

5. Figure taken from Ethiopian Red Cross Society (1988). Rapid Rural Appraisal. A Closer Look at Rural Life in Wollo. Ethiopian Red Cross Society, Addis Ababa and IIED, London.

6. Figure taken from document cited in footnote 5.

7. Figure taken from document cited in footnote 3.

8. Extract taken from article by Dewees, P. in RRA Notes 7, (1989). IIED, London.

9. From Gupta, A. (1989). Maps drawn by farmers and extensionists. In Chambers, R., Pacey, A. and Thrupp, L.A. (eds). Farmer First. Farmer Innovations and Agricultural Reseach. Intermediate Technology Publications, London.

10. Figure taken from Action Aid-Ethiopia/IIED. (1989). Action Aid in Local Partnership. An Experiment with Rapid Rural Appraisal in Ethiopia. Sustainable Agriculture Programme,

IIED, London.

11. Figure taken from document cited in footnote 10.

12. Figure taken from Welbourn, A. (1991). The Social and Economic Dimensions of Poverty and Ill-health. Liverpool School of Tropical Medicine.

13. Figure taken from document cited in footnote 10.

14. Story as remembered from Chambers, R. pers. comm.

15. Figure taken from MDRP-DR/SARDEP and IIED. (1991). Tecnicas Uteis de Comunicao para extensionistas. Relatorio dum seminario em diagnostico rural participativo (DRP) Santo Antao, Cape Verde.

16. Figure taken from Theis, J. and Grady, H. M. (1991). Participatory Rapid Appraisal for Community Development. A Training Manual. SCF, USA.

17. Taken from ERCS/IIED. (1989). Participatory Rapid Rural Appraisal in Wollo, Ethiopia: Peasant Association Planning for Natural Resource Management. Ed. by Scoones, I.C. and McCracken, J.A. Ethiopian Red Cross Society and IIED, London.

18. Taken from Pretty, J.N. and Scoones, I.C. (eds). (1989). Rapid Rural Appraisal for Economics: Exploring Incentives for Tree Management in Sudan. IIED, London and Institute of Environmental Studies, Khartoum.

19. Taken from document cited in footnote 3.

20. Taken from article by Chamber, R., in RRA Notes 1, (1988), IIED, London.

21. Taken from document cited in footnote 14.

22. Figure taken from Pretty, J.N., McCracken, J.A., McCauley, D.S., and Mackie, C. (1988). Agroecosystem Analysis Training in Central and East Java, Indonesia. IIED, London.

23. Figure taken from document cited in footnote 5.

24. Mascarenhas, J. MYRADA, India. pers. comm.

25. Figure taken from Scoones, I.C. (ed). (1989). Participatory Research for Rural Development in Zimbabwe: A Report of a training exercise for ENDA Zimbabwe trees project. IIED, London and ENDA-Zimbabwe, Harare.

26. Figure taken from document cited in footnote 15.