Editorial

Once again, we would like to thank so many of you for having returned copies of the readership survey. The results will be published in issue No. 14, as RRA Notes 13 will be solely devoted to reporting recent developments in Participatory Rural Appraisal in India.

This issue contains seven articles. The first two take further the comments and discussions raised by Weyman Fussell and Ueli Scheuermeier in previous issues. Don Messerschmidt draws attention to the importance that outsiders can play in group and team dynamics during rural investigation in Nepal, and Susan Johnson raises further questions about the whole nature of projects and interventions. In the third article James Mascarenhas and Prem Kumar of MYRADA review their considerable experience of participatory mapping and modelling to present guidelines in the form of Users' Notes. Mehreen Hosain reflects on a rapid appraisal designed to elucidate women's views and values in north west Pakistan, and concludes that the exercise not only produced valuable information on social structures that varied from village to village, but also raised the awareness of women in the villages investigated. Andy Inglis makes an important contribution to the debates about the comparative accuracy of the participatory qualitative methodologies embodied by rapid rural appraisal and formal questionnaires. He led a team to investigate fuelwood issues in Sierra Leone, and was able to -compare the results with those from a questionnaire conducted just before. He concludes that the RRA survey not only generated useful results but was probably better suited to the gathering of complex socio-economic and socio-ecological information. The results of the RRA were presented the day after the fieldwork was concluded; close to a year later the questionnaire results had still not been analysed. In the sixth article Mick Howes. Goes beyond the 'chapati' diagram to suggest new ways of diagrammatically representing formal and informal social relationships. Lastly Antony van der Loo reports on the use of topical surveys to produce closer farmer-extension worker relationships in Mozambique. We conclude with a new section, End Notes, that will report on a range of issues - on this occasion a new newsletter on qualitative methods, and a request for information on experiences with wealth ranking.

- **Jules Pretty,** IIED, 3 Endsleigh Street, London WC1H 0DD, UK.

Source: RRA Notes (1991), Issue 12, pp.3, IIED London

1

Some advantages to having an outsider on the team

Don Messerschmidt

• Introduction

In their discussions of the cross~cultural impacts, cultural neutrality, and Insider/outsider effects on RRA research, Weyman Fussell and Ueli Scheuermeier raise some interesting points (in RRA Notes 9 and 10 respectively). While recognising both sides of the issues, the pros and the dons, I wish to take the stand as witness for the defense. Outsiders on RRA teams can have quite positive, sometimes catalytic roles to play. And sometimes Insiders become Outsiders in their own society.

Some years back a discussion was raging in anthropology about the relative ease/difficulty with which Outsiders and Insiders can pursue research in a society. The debate was carried in several journals, and in books (Freilich, 1970; Fahim, 1977; Fahim et al 1980; Messerschmidt, 1981). Even earlier, Berreman (1962) observed, in a classic study, what a great difference the social identity of the researcher makes in gaining rapport and collecting data. The roots of the issues are found, partly, in socio-linguistics made popular by Edward T. Hall (1959; see also Gumperz and Hymes, 1972). Basically, depending on how far in or out of a society a researcher is perceived to be, he/she will have more or less difficulty getting on. Insider villagers sometimes view Insider researchers with suspicion or contempt. Outsider researchers often have advantages - of strangeness, and being able to see things in a new light.

I don I t mean to bog down in theory. Rather, with the knowledge that there's nothing new under the sun (the Insider/Outsider debate is not new), I wish to demonstrate by means of three examples how being Outsider is sometimes helpful to RRA research. My examples come out of recent experience at the Institute of Forestry (IOF) in Pokhara, Nepal, where RRA is used to study community forestry. My role at the IOF is as research adviser, and RRA trainer and collaborator.

• Case 1. On translation and encapsulation

On an early reconnaissance of two hill villages, Rhiban and Lahchok, near Pokhara, an RRA team of seven Nepalis and one expatriate set out to learn about local forms of forest management. Focus group discussions were conducted in Nepalese along village lanes and under the ubiquitous banyan tree. After each session, and sometimes during them, my Nepali colleagues wished to debrief a little on the spot, and discussed the findings among themselves, sometimes consciously translating certain terms and concepts to me in English (though I speak Nepali). Our sideline discussions dealt with the significance of the fresh data we were collecting. One effect of this was to encourage team members to paraphrase, summarise and encapsulate .the new knowledge.

John Mitchell and Hugo Slim (RRA Notes 10: 'The bias of interviews') are understandably wary of 'summing up' or, as they call it, 'nutshelling'. Yet in my experience that day under the banyan tree, it was a valuable analytical process. For one thing, it allowed the team members to digest a bit of what was happening while still in the field. (It was their first RRA experience). They then returned to the discussions with increased awareness and insight. It was during this process that we discovered a hitherto unreported deviation

Source: RRA Notes (1991), Issue 12, pp.4–7, IIED London

from the norm in Nepali community forest management.

On the one hand, the villagers from Rhiban described their single, large community forest as run by a representative elected ban samiti (forest committee); their prevailing attitude towards it was as hamro ban (our [collective] forest). On the other hand, people from Lahchok village described a form of forest management that was quite new to us - but very old in fact. Instead of a single forest the Lahchokis named several, each reserved for the exclusive use of a single caste or clan group from the village. Instead of a village-wide ban samiti they had none, but managed the resource quite as they ordinarily manage other caste affairs, through the dictates of the most powerful families. Of each forest, the corporate caste members said mero ho, bhanne chalan (literally: it is mine, we say is the custom).

The Lahchok villagers had no special name for their system (we probed, and found none), but while digesting and translating these findings to English, largely for the benefit of the team's Outsider (me), my colleagues came up with an important concept: 'Communal Forestry'. The result of one short analysing/translating/encapsulating session sparked tremendous interest, and we re-entered the discussions to probe further and to triangulate on the topic from new perspectives. Despite its drawbacks, this 'summing up' in English (which would not have occurred without the presence of the outsider) provided important impetus for further RRA exploration. our preliminary findings are written (Subedi et al, in press; Messerschmidt, in press) and a new, more focused RRA on the topic is planned.

• Case 2. Outsider rapport and repartee

In 1990, three IOF faculty members were trained in RRA for six weeks at Khon Kaen University, Thailand. Following the training, they returned from home to conduct research leading up to a major publication on the subject of wood energy production in a Nepali district town (Balla et al, in press). On several occasions during the research, the all-Nepali team was accompanied in the field by expatriate advisers (one of the Thai trainers, an anthropologist; a Dutch sociologist; and an American anthropologist). After observing the difference that having a Nepali-speaking Outsider along made in gaining rapport and collecting data in the villages, one of the trainees remarked (here paraphrased):

> "You know, we Nepalis can't ask questions of the villagers like you expatriates do. You can laugh and joke with men and women along the trails, and they answer you. You can probe sensitive subjects, like illegal charcoal-making and wood-cutting, and you get answers and good information. It's because you aren't Nepali, and they assume you know nothing and don't suspect you (of being a government official). If we asked questions and joked about those things like you do, -they'd get angry or wonder if we were stupid or something. You can do it; you're an Outsider. We can't, we're Nepali like they are".

• Case3. More outsider than in

During a study of tree and land tenure in the eastern Nepal Terai (Subedi et al, in press), our team of three (two Nepalis, one expatriate) spent some time among the Maithili-speaking Musahars, landless labourers of the lowest Hindu caste. One team member was a higher caste Maithili speaker; the other was a Nepali Brahmin, the highest Hindu caste.

Normally, in traditional society (from which these villagers were not far removed in time), a Brahmin and a Musahar would rarely meet, and certainly would avoid commensal relationships. Normally, Nepali visitors from outside the villages are viewed with suspicion (as we had encountered elsewhere on the same study). We were taken aback, then, by our open reception in one Musahar hamlet, and by the people's perception of all three members of our team as neutral outsiders.

We were in the midst of a rapport-building discussion and map - sketching session in the village square, when our Brahmin colleague and the influential Musahar ward leader disappeared. They'd gone to the ward leaders' house (we found out later) to drink tea and have a frank but private discussion about the

Source: RRA Notes (1991), Issue 12, pp.4–7, IIED London

Musahars' dilemma. Being landless and powerless they have no access to trees and pursue, out of necessity, illegal tree- cutting and selling logs from the nearby government reserve.

The ward leader wanted us to know their plight, and invited the team to join a forest harvesting group two weeks later. The data we got through interviews and participant-observation on that trip, including a night smuggling foray across the border into India, was only available because the Nepali members were identified and trusted as a category of Outsider, somewhere between a fellow Nepali and an expatriate, I suppose. The point is, it gave us a level of rapport and trust among Musahars that neighboring Nepalis and government officials are not privileged to enjoy. (Of course, we have a solemn obligation to our friends to maintain their anonymity, given the sensitive nature of the data).

Being the Outsider, even a little, has its advantages. It also has its disadvantages, but that's grist for a future discussion.

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Source: RRA Notes (1991), Issue 12, pp.4–7, IIED London

2

Revolutionary rural appraisal?

Susan Johnson

Recent editions (RRA Notes 9 and 10) of RRA notes have contained pieces by RRA practitioners concerned with "being there" - the impact and how to explain it. I am not aware that there is a right answer to these questions, just some more honest answers than others. Rather, I would like to comment on the context of those questions.

Scheuermeier asked (RRA Notes 10) how to explain his presence to the "lady sitting in front of her house". It is indeed the question that makes you squirm inside - you may be there because you like the travelling, like the scenery or whatever, but is that really the question the old lady is asking? If it wasn't you there it would probably be somebody else - so the issue concerns what you represent since you are not usually representing yourself. This is not a problem that is peculiar to RRA practitioners, but it seems to me that there should be a difference in the RRA answer.

RRA techniques tend in these pages to be treated as tools without much in the way of a political context. My understanding of RRA is that these techniques are not simply designed in order to result in projects which are more responsive to the needs, values and beliefs of a community. RRA also provides something of a process approach to that project which enables the community to become more self-aware in relation to "outside" assistance. This is because the techniques do not just use the community as a database but put it in a position of power by recognising that without its knowledge and participation the project is dead.

So let us be aware of what this approach is. The approach is practiced in a paternalistic framework - nobody asked the old lady if she wanted you there. You are doing it this way because you believe that it is better than what someone else might do. You would prefer it if she had invited you - she didn't - someone else did. Our hope is that because of the process employed she will understand in the future that she is in a position to say "No" until she gets what she wants or agrees with (rather than just to act No - the reason why other projects failed) because through the process she has learnt that she is in a position of power. That is my understanding of the goal - perhaps we should call it Revolutionary Rural Appraisal don't tell the Boss.

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Source: RRA Notes (1991), Issue 12, pp.8, IIED London

3

Participatory mapping and modelling users' notes

James Mascarenhas and P.D. Prem Kumar

The purposes of these notes are:

- to outline the main methods, enabling readers to try them for themselves;
- to encourage readers to adapt and develop them and invent new methods; and,
- to let readers know where they can find out more.

Background and uses

Maps and diagrams are an essential part of any planning activity. Maps are especially important in rural development projects where planning, implementation, monitoring or evaluation are required. This is especially the case when the subjects are land use, water sheds, afforestation, agricultural development etc. Increasingly in recent times, village maps showing the layout of the villages the infrastructure and houses etc are being used to map the household statuses of health, wealth, education and other socio- economic conditions.

Rural people are natives of the areas that we are talking about. They have been living in these areas, most times over several generations. They have a great ability to represent their surrounding accurately and diagramatically - whether they are literate or illiterate. When given an opportunity, they are able to highlight those items that are of importance and interest to them.

In this way:

- 'outsiders' are able to gain much more information about a particular location or situation in a village, the village itself, its resources, its land use pattern, or watershed situation than they would otherwise;
- outsiders also gain insights into the ways in which rural people think, their priorities, and their reasons for wanting or not wanting, for doing or not doing certain things; and,
- they are also able to locate and pinpoint situations details pertaining to each house such as the presence or absent of any chronic diseases, family planning, number of children, educational status, wealth, land holdings, livestock etc.

Different types of mapping and their uses

As mentioned earlier, there are two major types of maps:

- a village layout map showing houses and village infrastructure
- a village resource map showing the resources of the village such as land, soil types, land use, irrigation etc.

Mapping on the ground

This is simply done by drawing on the ground by hand with a stick, with chalk on concrete, or by using rangoli powder. Mapping on the ground:

- is visible to several people;
- can generate a good deal of discussion;
- can contain a lot of information;
- can be altered or corrected easily;
- can be sequentially developed if required; and,
- can be expanded, as usually the space (ground) is unlimited.

Source: RRA Notes (1991), Issue 12, pp.9–20, IIED London

The ground map can either be a plain one or it can be coloured with rangoli or other coloured powders to indicate various subjects such as land use: dryland, irrigated land, forest land, wasteland, housing layout etc.

Mapping on the ground has the disadvantage that it cannot be carried away unless it is copied on paper.

Mapping on paper

Mapping on paper has similar uses as mapping on the ground.

- It has an advantage over mapping on the ground in the sense that it is a record which can be carried away.
- It is also participatory, though not as much as when mapping on the ground (this is mainly because the size of the paper is limited and offers limited space for people to gather around it and participate).
- Another variation in mapping on paper has been the use of coloured paper, cut out in different shapes and stuck on a plain background. This method was used to map the command area of an irrigation tank in Kolar District in Karnataka, and was evolved by a farmer. It showed clearly and accurately the different plots, shapes and sizes according to layouts, ownership and survey number - this tallied with the official map of the area.

It's main disadvantage is its limited size - which does not allow for greater detail or elaboration. Mapping can be done with pencil or by using different coloured pens.

Details such as land use, layout of plots of lands, or houses in the village itself, and problem areas in each can be easily done either on ground or on paper. With village resource maps, comparisons between the past, the present and the future can be mapped. Treatment plans can also be mapped. With village infrastructure maps or social maps, extension of the map to show wealth and household assets such as land and livestock, household problems, economic status, health status, education status and so on is possible by marking on the map itself with various symbols either drawn or placed. Seeds and different coloured powder can also be used to mark specific houses/situations/problems. In this way selection of beneficiaries for different programmes and monitoring of the impact of programmes on specific families can also be done.

Modelling

This is an advancement over mapping in the sense that it is three dimensional and shows in greater detail the features of an area such as a watershed or a tank and its command.

It has been found to be more participatory even than mapping on ground or on paper, and is a lot of fun for villagers and outsiders alike. Rangoli and other colours form an essential component of this method as do other local materials for making models of houses, people, culverts, bridges, electric lines, vehicles etc.

Modelling has been found to be very useful in land use planning, watershed planning etc. where the problems, treatments, and opportunities can be indicated on the model itself, jointly by the villagers and the outsiders. In modelling, the detail allows for a focused discussion that is easily understood by all. Models can be historical (what did the area look like 50 years ago) or futuristic (what will be area like 20 years hence). Other variations of the theme are if we have one type of treatment. For example, planting eucalyptus, what will it look like in 20 years time, or if we plant a mixed forest, what will it look like in 20 years time? In either case, what will be the benefits/effects?

However, models cannot be carried away and hence would either have to be photographed or copied on slides or paper.

• Some practical applications

As mentioned earlier the mapping exercise is useful in a variety of ways. Their participatory nature makes them an extremely useful tool in understanding the situation that exists in a village or a watershed and leading from here, to planning of development programmes for that village or watershed.

Source: RRA Notes (1991), Issue 12, pp.9–20, IIED London

Evolving from plain pictoral representations of village resources and layouts, a lot of 'hybridisations' and extensions have taken place. Some of these are listed below. The list is by no means complete, nor have we reached the limit of what is possible. Much more can be added on in terms of the methodology, content, uses and applications. And anyone can try to do it for themselves.

Situation assessment

Establishing the current status of the village and its resources.

A. Village social mapping (see Figure 1)

This involves asking the villagers to make a map of the current/existing situation prevailing in the village. Starting with a layout of the village, one can then move on to marking out the following:

- Caste distribution and location.
- Population (no. of adults and children male and female, different age groups etc).
- Health mapping: locating houses with persons having chronic aliments, malnourished children, family planning etc.
- Socio-economic Status: indicating distribution of landless or homeless families, small and marginal farmers, other occupations (rural artisans), local resource people, widows, etc. Wealth ranking of the village community can also be done this way.

B. Village/watershed resource mapping (see Figure 2)

Here the villagers are asked to make a map of the village land/watershed. This could be added on to the map of village layout (Social map). In this type of mapping, it is possible to represent the visible and invisible physical features of the village/watershed. These would include vegetation (forests, trees), land use (cultivated, uncultivated waste, grazing land, forest land, irrigated land), land ownership patterns, land productivity, cropping patterns etc.

In a regent exercise the farmers of a watershed did a 'Matrix Ranking'[1] of different types of soil according to various criteria such as type of crop, drainage, yield/productivity, ease of management and land value, and indicated on their map where these different types of soil occurred.

In the case of watershed planning, it has become customary for the different transect[2] groups to converge on the map/model of the watershed to represent their observations/suggestions regarding indigenous technologies, problems, solutions and opportunities on the map/model in full view of each other and the whole village, thus generating a great deal of healthy discussion, leading to more accurate and refined planning.

This example indicates how various PRA exercises can be linked to one another (sequencing). It is also possible to combine methods in other ways, for example combining the social map with the village resource map ('A' with 'B') would give a more comprehensive picture of the village in its totality. One could then begin to observe how various factors begin to interact such as the trends and the impact of populations on deforestation, land use, land fragmentation, migrations etc, or the land ownership patterns in terms of various economic groups and the type of land they own, eg the relationship between wealth and land productivity.

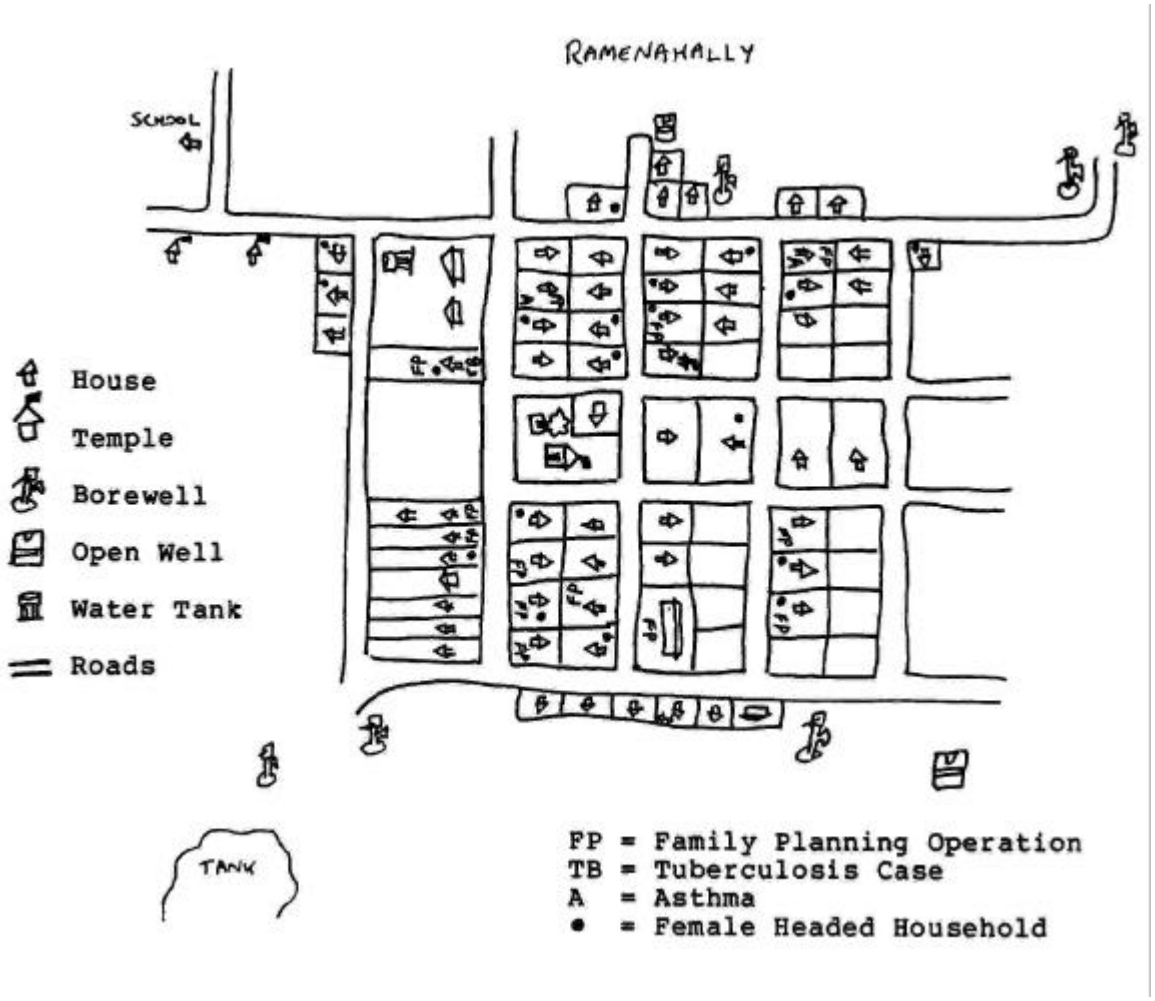
An inventory of local technology is also an important component to which appropriate new techniques can be added to arrive at a 'basket of choices' from which the community chooses, based on their needs and constraints and capabilities.

[1] Matrix ranking is the subject of another paper, entitled "Quantification, scoring and ranking". PALM series IV G. Available form MYRADA.

[2] Transects are descried in PALM series IV entitled "Transects in PRA". Available from MYRADA.

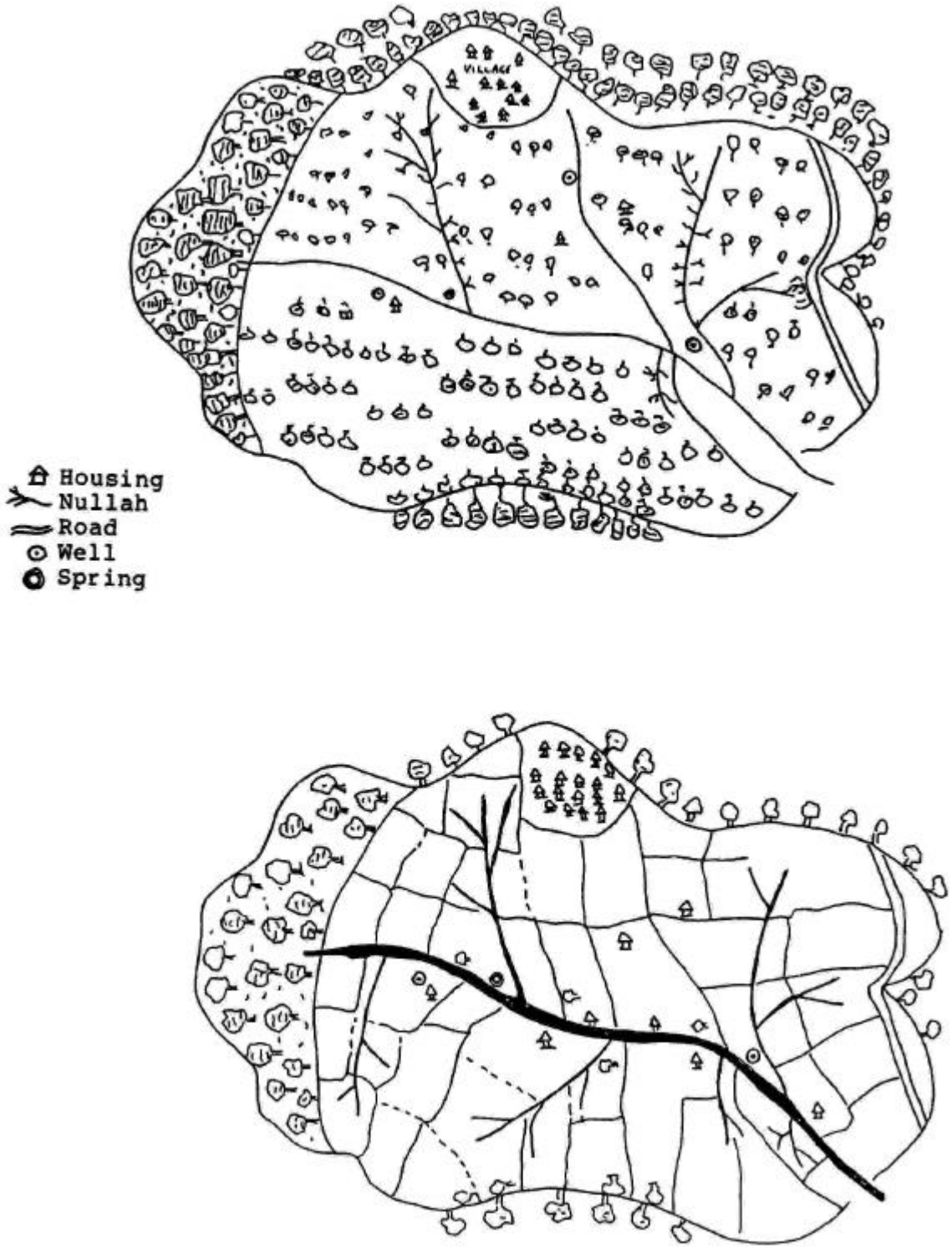
Source: RRA Notes (1991), Issue 12, pp.9–20, IIED London

Figure 1. Social map drawn by villagers of Ramenhally



Source: RRA Notes (1991), Issue 12, pp.9–20, IIED London

Figure 2. Maps drawn from two watershed models made by people of Ardanarypura village, Karnatka, India. The top shows the watershed 50 years ago, the bottom as it is today (1990). PRA team from MYRADA, Bangalore



Source: RRA Notes (1991), Issue 12, pp.9–20, IIED London

Time series

Representation of either the socio-economic situation of the village community or the village watershed resources (or both) over a period of time can be obtained, and related to each other. This gives extremely interesting historic profiles/transects which help us to know what the situation was like several years ago, how it evolved, and the reasons for this evolution.

Participatory village/watershed planning

This has been tried extremely successfully and is emerging as a very powerful means of participatory planning[3] of rural development programmes. Here both villagers and 'Outsiders'/planners can sit together to discuss the village and its resources using the map as the focal point. Treatments can be marked on the map simultaneously. An advanced way of doing this exercise is to allow the villagers themselves to arrive at a development plan of which they then make a presentation to the outsiders/'planners'. This would serve as the basis for discussion and negotiation. The plan however should include the elements of equity and appropriate technology.

Other applications

Variations of this theme are when items are brought by outsiders into the village for discussion. These include aerial photographs or ordinary photographs (taken from a vantage point and giving a good view of the terrain and features), maps and plans of the area/villages. Farmers show a great ability to interpret these documents and discuss them, sometimes even pointing out gaps (for instance, one farmer in Nepal pointed out that the aerial photograph shown to him must have been an old one, as it had only 18 houses in it, whereas the village had 20 houses 2 houses having been constructed recently).

[3] This subject 'Participatory planning using PRA methods' is subject of paper PALM series IV H. Available from MYRADA.

Source: RRA Notes (1991), Issue 12, pp.9–20, IIED London

Table 1. Users' notes for mapping

Do	Don't
Do spend some time thinking about the exercise - what information do you need, why etc.	
Do select your work group (including village men and women)	
Do select a work spot: someone's house, under a tree, in the open, the village square, a threshing yard, etc.	
In the case of mapping on paper, first draw an outline with pencil before you use coloured felt pens	
Do allow the villagers themselves. to draw the map according to the way that they perceive things and decide among themselves	Don't dominate proceedings
Do facilitate the exercise by asking relevant questions at the right time	Don't interrupt - remember the villagers are concentrating hard
Familiarise yourself with the features on the map by actually verifying features in the village	
Try to add to the map additional information such as households by caste, wealth ranking, assets owned, tree preferences etc.	
Copy ground maps out on paper and make copies of them for documentation and training purposes	

Source: RRA Notes (1991), Issue 12, pp.9–20, IIED London

Table 2. Users' notes for modelling

Do	Don't
Do have a fair idea about the terrain and the features of the area that is going to be modelled	Don't take it for granted that the model will appear on its own. The exercise needs to be facilitated
Do spend time thinking about the exercise (HOW you are going to go about it, WHERE you are going to locate it, WHO you wish to involve, WHAT you are going to depict, WHY you need to do the exercise etc?)	Don't overdo the planning part - you might end up doing only planning
Do brief the people well about the exercise and the purpose of it	
DO make the exercise into a game which everyone - the men & women (young & old), the outsiders - enjoys. Allow children to participate	Don't be too strict or rigid in the development of the model - either the place, alignment or colour scheme etc. Let the villagers decide
Do involve the villagers in the selection of the spot. The best places are flat, with a good vantage view of the area being modelled. A fairly open or public place is likely to enhance discussion and participation	
Do have a fair sized model: at least about 5-6 feet in size so that various features can be depicted	Don't make the models too small
Do facilitate the exercise in such a way to promote work participation. Discuss the project with the villagers. Ask them what they think is the best way to proceed. Allow them to construct the model themselves - including details such as nullahs, fields, vegetation, houses, temples	Don't interrupt the flow of once it gets going. Let the people argue among themselves and come to decisions regarding size, colour, shape, location etc.
Do watch how things turn out and take shape. If at the end certain things are left out, ask the villagers 'What about, this... or what about that?*	
Do use locally available materials as much as possible, such as twigs of different species to show vegetation or: - pebbles & stones (to show pavements, stone revetments, nullah training or checkdams, degraded eroded patches) - twigs and twine (to show electric lines, transformers, handpumps etc) - matchboxes for houses - twine for electric lines -grass to show crops. Supplement these with items such as: - rangoli powder** - toys (men, women carts, buildings, bridges) - coloured card (for houses etc) - bits of pipe and so on	Don't overdo the detail. You may neglect the main features. Don't use sophisticated material
Do try to make alternate models of 50 years ago, 20 years hence, models showing proposed treatment plans and so on - using the existing model as a base.	Don't scrap the models. Keep them as long as possible for discussions

* In most cases you may not have to. In one case the children were extremely keen to have their school a respectable size. In another, an elderly woman earned the wrath of the villagers because she threw out a stone that was representing a large rock in the village where the villagers used to sit and chat in the evenings!

**Roughly about 1 kg. of each colour - up to 6 colours - should be adequate. White powder may be required in a larger quantity (say 4-5 kgs) as it can be used to mix with other colours to prepare ash. Chili powder gave us red colour and turmeric powder gave yellow. Blue we obtained from 'Robin Blue', mixing yellow and blue we got green colour. Yellow and red gave us orange. We had our 6 colours. One can try variations of this. Red can also be obtained by crushing bricks. Black from black soil or powdered charcoal, grey or white from 'chunam' or ash. The quantity of coloured material can be increased greatly by using fillers such as sand or sawdust, with which the colours are mixed to increase the bulk. This enhances the quality of the model as the colours then become easy to apply.

Source: RRA Notes (1991), Issue 12, pp.9–20, IIED London

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Source: RRA Notes (1991), Issue 12, pp.9–20, IIED London

4

Rapid appraisal for women in the North West frontier of Pakistan

Mehreen Hosain

• The project

The Malakand Social Forestry Project (MSFP) is a project of the Forest Department of the North West Frontier Province (NWFP) of Pakistan, supported by the Netherlands Government. The project commenced in 1987 and covers the Malakand Agency, some 952 sq km of mainly mountain with narrow inner valleys. There are no major urban centres. About half of the project area consists of steep, barren hillsides which. are communally owned and covered with sparse grass and shrub vegetation, and devoid of any trees. Apart from its reforestation activities, the project has sought to form village organisations (village development committees or VDC'S) which it is hoped will eventually initiate and manage village development activities.

An important target group for the project is village women, who are the actual users of fuelwood, and also responsible for the stall-feeding of animals. In 1989 the project felt it was ready to initiate a Women's Programme. Little was known, however, about the role and status of women in the project area, or how effectively to organise them for the Programme. As the Women's Programme had already commenced there was an urgent need to obtain this information in a timely manner, as well as get a feel for the needs of the women, and gauge the reactions of the community to the Programme. Without this diagnostic information, serious mistakes could be made in the implementation of the Women's Programme, which could set the whole project back. Consequently, I was asked to conduct a Rapid Appraisal exercise prior to the actual launching of the "stoves" component, which was to serve as an entry-point for the Programme.

• The area

The NWFP region is inhabited by Pathan tribes, following the Pathan code or Pukhtoonwali. The purdah system is normally followed, severely restricting access to women and their mobility. It is only possible for female project staff or researchers to have access to village women under these socio-cultural circumstances. Any interaction of local women with male outsiders would be considered an affront to the honour of men, so jeopardizing the whole project. It is also generally wise to be sensitive to the nuances of the Pukhtun code of conduct, especially as revenge for any real or imagined wrong is the first commandment of the Pukhtoonwali!

• The RRA

As the Female Programme Consultant (FPC) was involved in other aspects of programme design, it was decided that I would conduct the exercise on my own, with the assistance of educated local girls. The FPC, who is a forester, did, however, participate in the exercise for the first three days. The local girls had tentatively been chosen by the FPC as Village Motivators for the Programme, each having been identified by the villagers as educated and capable women. In each village, a girl from that particular village was used. This was extremely helpful, as these girls were familiar with the village, and with all the households in the village. Being accompanied by them meant I had immediate access to any household in the village, and the villagers were more accepting of me. Later the information

Source: RRA Notes (1991), Issue 12, pp.21–31, IIED London

gathered was discussed in detail with the male project staff from various disciplinary backgrounds, who could not participate in the exercise, as well as the FPC, the WID (Women in Development) consultant and the Chief Technical Advisor for the Project.

Programme activities were to start in three or four villages. These had been selected previously by the FPC as suitable villages, on the basis of discussions with project staff and the willingness of villagers to participate in the Women's Programme. These villages were considered to be representative of distinct clusters of villages, some belonging to distinct agro-ecological zones for example. Four villages were to be covered over a period of eight days, allowing two days for each village.

An initial checklist of issues was drawn up by the FPC and myself prior to the first village visit, and was modified after the visit. The checklist was geared towards getting information that would be directly relevant to the Programme, and focused on the proposed programme components which were:

- creation of village level institutions
- savings and credit programme
- introduction of fuel saving and appropriate technology
- income generating activities within the social forestry sector (fruit and forest nurseries, vegetable gardens)
- management and development of fodder crops
- poultry development
- human resource development (skill training in vegetables, fruit, poultry, accounting, forestry etc)

The checklist concentrated on information about the socio-economic status of the household; the mobility of the women and their participation in agriculture; women's daily and seasonal routines; fuel collection, usage and availability; livestock and fodder; vegetable growing; poultry; and savings and expenditures in the household. These issues were investigated in depth, to try and ascertain problems, needs, decision-making patterns etc associated with them. The checklist was flexible, and allowed us to talk around each subject. At this stage secondary data sources, eg village baseline surveys, literature on women in the NWFP etc, were also studied.

Members of the male VDC's had been notified that this exercise was going to be carried out, as I felt the approval of the men was crucial. We also spent our first moments in the village notifying the men of our arrival, and explaining exactly what we were going to do. This served as our introduction into the village, and also facilitated access to the women.

Initially, male key informants (VDC members, school-teachers, leaders, elders) were asked general questions about the history and problems of the villagers, and the social and geographical organisation of the village. Agricultural calendars and seasonal patterns of vegetable and fruit growing were also discussed with them, as was fuel and fodder availability. Men were asked what they thought the problems of the women might be, and what one could do about them. This gave the male perspective on. The different issues under consideration, which was important for the success of the programme. These meetings took place in the hujra, which in Pathan society is a room where men congregate. As a female outsider it was acceptable for me to sit there.

After this group discussion one of the men would offer to show me around the village and then his house. The local girl who was to accompany me would be brought over to the house, where I would discuss the checklist with her, and explain to her what I wanted to do. The girls were usually quick to understand what was required, and would be able to deal with the main issues in the checklist on their own. In this way I could listen and observe the women, and interject at relevant points in the discussion.

At this point we would ask if a number of women could be gathered at that house for group discussions. The household where one would be taken to would inevitably be one of the more affluent households. This was in some ways an advantage, as it was found that the poorest women will visit the houses of the affluent, who are often their patrons, while the richer and middle income women will sometimes be reluctant to visit the homes of the poorer women, from whose families they

Source: RRA Notes (1991), Issue 12, pp.21–31, IIED London

observe purdah. In this manner it was found that women of all social groups could be gathered for the discussion'. When the women were gathered we would introduce ourselves in the context of the project and what it was trying to do.

While many of the women had heard about the project, they were not very aware of project activities, except when it impacted on them directly, such as where areas had been cordoned off and they were not allowed to graze their animals and collect fuelwood from there. Men had felt that this was a project which related to them only, and had not shared information with the women. This is found to be true in many cases, where project staff mistakenly feel that information imparted to men might filter through to women. This group discussion about the project served as an ice-breaker, and got women talking about their problems and issues.

Following this, discussions were initiated (as with the men) about the social and geographical organisation of the village. Women were asked to construct rough maps showing the geographical/social neighbourhoods in the village. This exercise generated considerable excitement, and it was found that despite their limited mobility, women did manage to sketch fairly accurately the lay-out of their village. The discussions on the socio-geographical organisation of the village was crucial to the social organisation of the women. As each set of questions relating to different sectors was completed, the women were told about the various Programme components relevant to those questions to obtain some idea of their receptiveness to the various concepts being put forward, and to bring up some of the problems that these "packages" might encounter. Often a lively discussion would ensue, with the women arguing about why and why not a particular activity might be suitable for them. The ideas being put forward were very new to them, as previously their exposure was limited to crafts programmes, or immunization or population planning workers.

The group discussion was concluded by asking the women to identify households in different income classes and in different geographical neighbourhoods in the village so that household level discussions could take place the next day. This was a tricky exercise as essentially we were asking the villagers to rank households into poor, middle-income and rich categories, as we did not have the time to do so. This was done by the villagers on the basis of land-holdings. Land has a great deal of value in Pathan society and in many cases those who don't own any land are referred to as ghareeb (lit. poor). In most cases the women were anxious to point out the extreme poor, and neighbourhoods on the fringes of the villages where the extreme poor were sometimes clustered. Where there were distinct social groups present in the village who might be "different" from the others, attempts were made to visit their households as well, e.g. the gujars or pastoralists, many of whom have settled into the villages, or the occupational classes, eg barbers, priests or mulesters, etc.

The next stage of research was spent in holding household level discussions and in walking through the different neighbourhoods in the village. We did not have the time to walk with the women to their fuel source which was often located several hours away on the hillsides, but it became evident that there were sources of fuel within the village as well. Attempts were made to visit the different fuel sources or grazing sites which might be present within the village, and to observe women in the field while walking through the village wherever possible. The information gathered from the household level interviews was used to build up portraits of households, which proved extremely useful in giving us some idea of household dynamics and the differing needs of different socio-economic groups.

- **Interesting findings from the RRA and strengths of the approach**

It was found from accounts of oral history that deforestation in the area had taken place amongst other things due to the abolition of feudal authority and decline in the traditional authority of the jirga (tribal council). Where ownership rights were brought into question and forest revenues were to be shared with the state, the people staked their claims on what they felt rightfully belonged to them. The Wali

Source: RRA Notes (1991), Issue 12, pp.21–31, IIED London

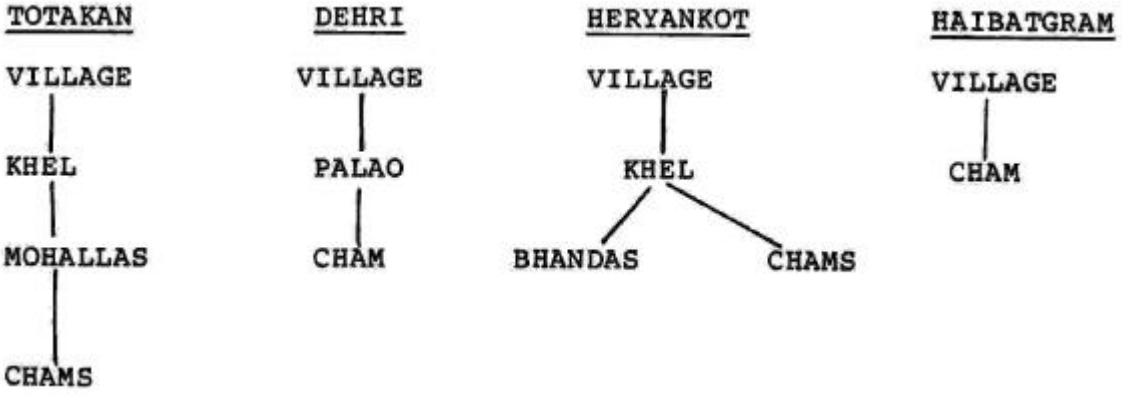
or Swat, (the traditional feudal leader) the villagers say, had such control over the forest resources that the locals claimed that they would have to report even a branch of a tree cut in their own courtyard!

Discussions and accounts of oral' history revealed that villages were organised into social/geographical units along lineage patterns. The khel or kandey are the line descendents of the clans that originally settled the village (Figure 1). These are further broken down to mohallas, palaos or chams, which are geographical neighbourhoods, inhabited originally by one family (khel). Over the years as families grew and land was divided, some families grew richer and others poorer. Thus each neighbourhood became inhabited by a number of economic groups. In addition to this other social groups also moved in (eg occupational castes). Thus each neighbourhood, though originally based on one family, now consists of a number of social/economic groups. This information was of great interest to the Project.

Men in the village have a formal meeting place (hujra), and formal and informal meetings for men do take place frequently to discuss problems and issues relevant to the village and individuals. Women meet on a more informal basis, and due to purdah restrictions their mobility is restricted anyway. It is difficult to get women to congregate for a group meeting as they all have different schedules and there is no one period during the day which they all have free. To get women from the whole village to meet and organise into women's organisations would be extremely difficult. It was found that the convenient unit of organisation was the neighbourhood. Given their common descent, relationships are strongest among women in a mohalla, and women are most mobile in their own mohalla (Figure 2). It thus seemed logical to recommend that this be the basis of the social organisation of the women. Women will visit other neighbourhoods with varying frequency, and are most comfortable with visiting homes of similar socio-economic status. While pukhtoons (line descendents of original settlers and original owners of all the land) will be comfortable with meeting each other and people of similar socio-economic status, purdah restrictions prevent them from visiting households of gujars (pastoralists) or occupational classes. These classes will, however, often visit and be comfortable in the houses of the rich. This information on social dynamics and spatial layout of the village was crucial to developing an effective programme which would reach all segments of the society, and in discovering geographical areas where the extreme poor were clustered (eg bhandas or neighbourhoods on the outskirts of the villages).

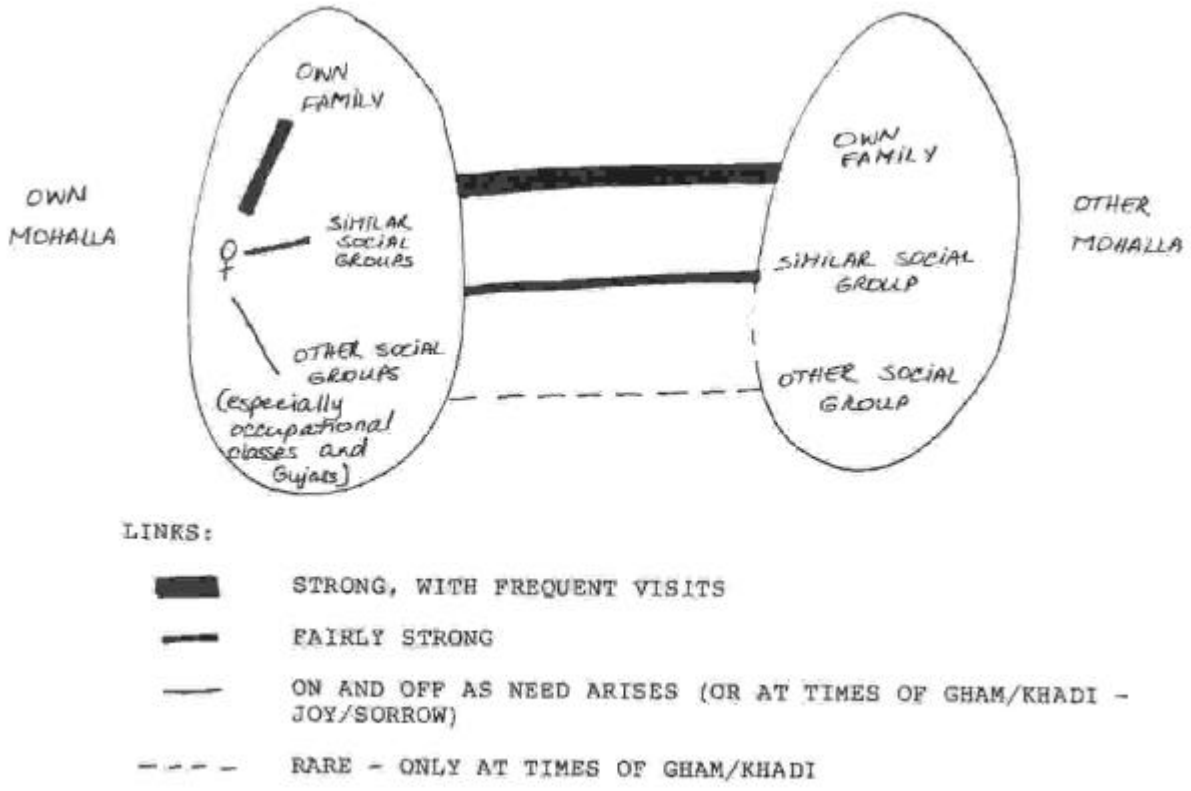
Source: RRA Notes (1991), Issue 12, pp.21–31, IIED London

Figure 1. Models of social organisation in four villages of Malakand agency, NWFP



KHEL:	Kandey-line descendants of clans	
MOHALLAS:	Khel/Kandans originally family based	
PALAO:	Family-based but now comprising all socio-economic groups,, rich, poor, outsiders and occupational classes	
Sizes:	Khel	100 +/- households
	Bhandas	small neighbourhoods on periphery of village
	Palao	a neighbourhood of 25-30 households
	Chamsmaller	units of 4-5 households

Figure 2. Model of social relations between women



Source: RRA Notes (1991), Issue 12, pp.21–31, IIED London

The combination of group and household level discussions was found to be particularly effective. Group level talks gave an overview of the situation and needs of the women (arguments and discussions in groups can be quite revealing), while the household level interviews helped to engage women who might not be vocal in group discussions in the process. The needs of different social and economic groups also became more explicit in the household level interviews. Most women felt more comfortable to discuss issues in greater depth in the privacy of their own homes, in their own environment, especially issues related to income and expenditures. Most were keen to extend hospitality and physically show their cooking arrangements, fuel usage etc. They would get even more involved in the exercise when we asked to weigh the amounts of fuelwood burnt- at every meal and to be shown cooking arrangements, livestock sheds, kitchen gardens etc. It also helped us to see their homes and families and be able to hold more detailed discussions with them. The level and detail of information gathered in the household can be extremely useful.

It was pointless asking the men what activities the women engaged in, as inevitably the answer was "nothing". Again, it reflected on male honour if you even suggested that their women were doing any "work". The way around this problem in some cases was to actually mention the kind of work eg "who feeds the livestock", in which case they would admit that the women did that. When asked what one could do to help the women out, their answer was often limited to "open a sewing centre". This was not only true of the men, but also of the women, who could only think of sewing" when asked what income generating projects they might like to do. This perhaps follows from the traditional approach of Governmental and other organisations in dealing with women's projects. These women have had little exposure to anything outside the realm of "handicrafts projects", and consequently are unable to envisage themselves doing anything else. It was also found that while many educated girls wanted paid employment, the need was for flexible jobs, within the village, for it to be socially acceptable.

While a vegetable growing "package" had been developed for the Programme, it was found that women's role in vegetable growing and kitchen gardening was minimal. This is not true of other areas of Pakistan (eg Northern Areas) where women are responsible for vegetable growing. Women were not receptive to growing vegetables in their courtyards as they felt that children and scavenging poultry would not allow this, and anyway the men were already growing vegetables for marketing and home-consumption. Thus the pre-formulated package proved to be unsuitable for this area, and it became clear that traditions vary from area to area (and even from village to village)It is essential to be sensitive to these variations.

It was found that women had a significant role and control in decision-making with regard to livestock and poultry. These often also provided a source of income over which the women had control. Productivity in this sector was found to be extremely low, and it was recommended that this be one of the priority areas for the project to involve itself in.

While fuel-efficient stoves were a very popular concept, the idea of collective or neighbourhood bakeries which had proved popular amongst other fuel-conserving projects in the NWFP, proved (surprisingly) to not be popular in this area. The women preferred to bake their bread in their own homes at their own convenience. It was recommended that this idea be approached again at a later stage in the project.

It helped in some ways to carry out the exercise in the context of the project, as people felt that we had something concrete to deliver, and were more interested in the whole process. This did however also lead to the problem of raising expectations.

- **Problems encountered and weaknesses of approach**

The RRA should have been carried out before the programme packages were put together.

Cultural sensitivity is crucial in approaching women as well as in interpreting answers to questions. Of ten when we asked how many children there were in a household, we were

Source: RRA Notes (1991), Issue 12, pp.21–31, IIED London

only told the number of sons, as daughters are not considered so relevant!

Lack of time meant that the information and results could not be discussed with the villagers.

A slightly larger, multi-disciplinary team might have been able to gain greater insight to the issues - it was difficult for one person to handle all aspects of the exercise.

Raising expectations - this happens even if you are just asking questions and not promising anything. Villagers have a habit of feeling you can solve all their problems. In this case one has to be sensitive but firm, and let them know what you cannot do for them. Previous visits by, project staff meant that the villagers were expecting the Women's Programme to actually start now and they could not understand the delay. The villagers felt that I now had the power to get things going, and they had to be convinced that I did not.

Tendency of local females assisting in the exercise to answer the questions on their own or prompt the women. Greater time was required to train the Female Village Motivators.

Tendency of Female Motivators to promise the women all nature of things that the Programme could not deliver, in their eagerness to convince them of the "worth" of the Programme. It was useful that this became evident at this stage so women could be properly trained before the Programme was actually initiated. Similarly these women were themselves not entirely convinced by the Programme and this also became evident as the exercise progressed. It was also noticed that the Female Motivators were reluctant to visit some of the poorer households. It was recommended that these women be given appropriate training before allowing them to continue. If false expectations were built up on either side there could be disastrous results for the Programme. It was also recommended that they be given appropriate support, eg chaperones to accompany them.

People who launch into long speeches as they feel they have to be spokesperson to communicate the needs of the community (invariably exaggerated) - they have to be tactfully interrupted.

Tendency of one person to dominate the discussion in groups and household level discussions - this is to some extent solved by going to visit women (e.g. the poorer women) in their own households. Within a household this problem can be solved by taking a person aside or asking them to show you a part of the house or the livestock shed and questioning them away from the others. In the case of poorer women their richer patrons will often answer for them. As they tend to employ them for various purposes in their households or have other dealings with them, their information is often accurate but this situation can be avoided by visiting individual households as stated above.

The rich wanting to "hijack" you to their houses. You have to be very firm in insisting that you want to go to the poorer households as well.

Giving direction to the group discussions where all women tended to speak at the same time.

Tendency of villagers to feel that you should be giving them handouts. It is hard to get them to start thinking about what they can do for themselves. They are normally quite clear about their needs but have to be focussed. You have to be quite clear about the issues you are able to deal with, and ways in which the project can help them.

Male hostility when you questioned them on work that their women engaged in, the general response was "women don't work". This could to some extent be overcome by not using the word "work", and talking about the different activities such as livestock care etc. Men were most resentful when you questioned them about agricultural work that their women might be engaged in, as this is considered in the MQFP to be the male domain, and it would be going against the system of purdah to allow women to work in the field. In most cases, even if women are working in the fields, the first response from both women and men is to deny this. It takes a certain amount of probing and tactful discussion before the role of women in agriculture can be ascertained.

Source: RRA Notes (1991), Issue 12, pp.21–31, IIED London

Over-zealous males who took too great an interest in the process and wanted to follow us everywhere as well as answer all the questions aimed at the women ("what will she be able to tell you, why don't you ask me"?). It is important to keep men away when talking to the women. Apart from interference, women were considerably inhibited in the presence of men, and gave the answers they felt they should be giving. In one case a farmer who happened to be home when I was talking to the women in his household became highly irate when I was questioning the women about their role in agriculture, claiming they did nothing, while the women were actually involved in bringing home the grain and cleaning it in front of us. At the end however he smiled and said "don't be unhappy", a traditional Pathan saying to ensure you have not offended a guest!

Excessive time spent in "hospitality". This is unavoidable in Pathan society where hospitality or melmastia is a crucial part of the Pukhtoonwali. It would be a major offence if you refused tea or a proffered meal. This is n6t- however entirely undesirable as I have found that a great deal of information can be gathered in an informal discussion over a cup of tea in both households and offices in the NWFP and in Pakistan in general. In fact this information is often more revealing as questionnaires tend to make people more "official" in their responses. If one employs the Western approach of asking questions and leaving, you tend to get less information. It is far more effective sometimes to engage in social chitchat to a certain extent to establish a rapport and throw the relevant questions in between.

• Conclusions

The RRA' proved to be a useful exercise in giving an overview of social dynamics and the role of women in the area, and clearing misconceptions about what was feasible in the project area. It served a dual purpose in investigating the role of women, and introducing them to the Programme at the same time. This was a two-way learning process, as we learnt an enormous amount from the women, and their awareness of issues and what they could be achieving was also enhanced. It was especially interesting to be attempting such an exercise in an area where strict purdah was operating, and the mobility of women was very restricted. For most women it was the first time they had been gathered for a group discussion and given a chance to discuss their needs and problems. Although the exercise was carried out with minimal time and resources and could not employ RRA tools optimally, it did allow us to gain insights which helped in making a more effective Programme. The exercise was particularly relevant in that its findings were incorporated in the design and implementation of the Women's Programme, and the Female Village Motivators who were to later implement the Programme were also included in the exercise. In a way this trained them in understanding the Programme and in introducing it to the villagers, and also in understanding the problems and issues which were of relevance in the village.

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Source: RRA Notes (1991), Issue 12, pp.21–31, IIED London

5

Harvesting local forestry knowledge: A comparison of RRA and conventional surveys

Andy Inglis

• Introduction

The RRA survey described in the following notes set out to collect socio-economic and socio-ecological information which could be directly compared with the results of a formal questionnaire survey conducted by a social forestry project in Sierra Leone, West Africa. Whilst not conclusively proving that RRA is more accurate than conventional surveys (although some of the results are very revealing), we certainly proved RRA to be more efficient than the standard formal questionnaire.

• The study

The RRA survey was conducted during July 1990 by a 4 person team. The team, led by a social forester (Andy Inglis, then of the Edinburgh Centre for Tropical Forests), included a demographer (Jeneh Pemagbi[1]), a planner and community worker (Val Woodward), and a final year forestry, agriculture and rural economy undergraduate (Rebecca Badger).

As well as the main academic objective of comparing the results with those of a statistical survey, our practical objective was to provide an FAO Fuelwood Project's management staff with accurate information regarding fuelwood marketing structures and species preference variations in selected locations in the Western Area. This information was to enable them to devise an appropriate strategy for marketing mangrove and acacia fuelwood produced by the Project. These subjects had also been included in a questionnaire survey designed by Dutch statisticians and carried out by 6 Project staff, most of them forestry trained, during a 6 week period in March and April 1990 (ie 3 months earlier).

• The RRA fieldwork

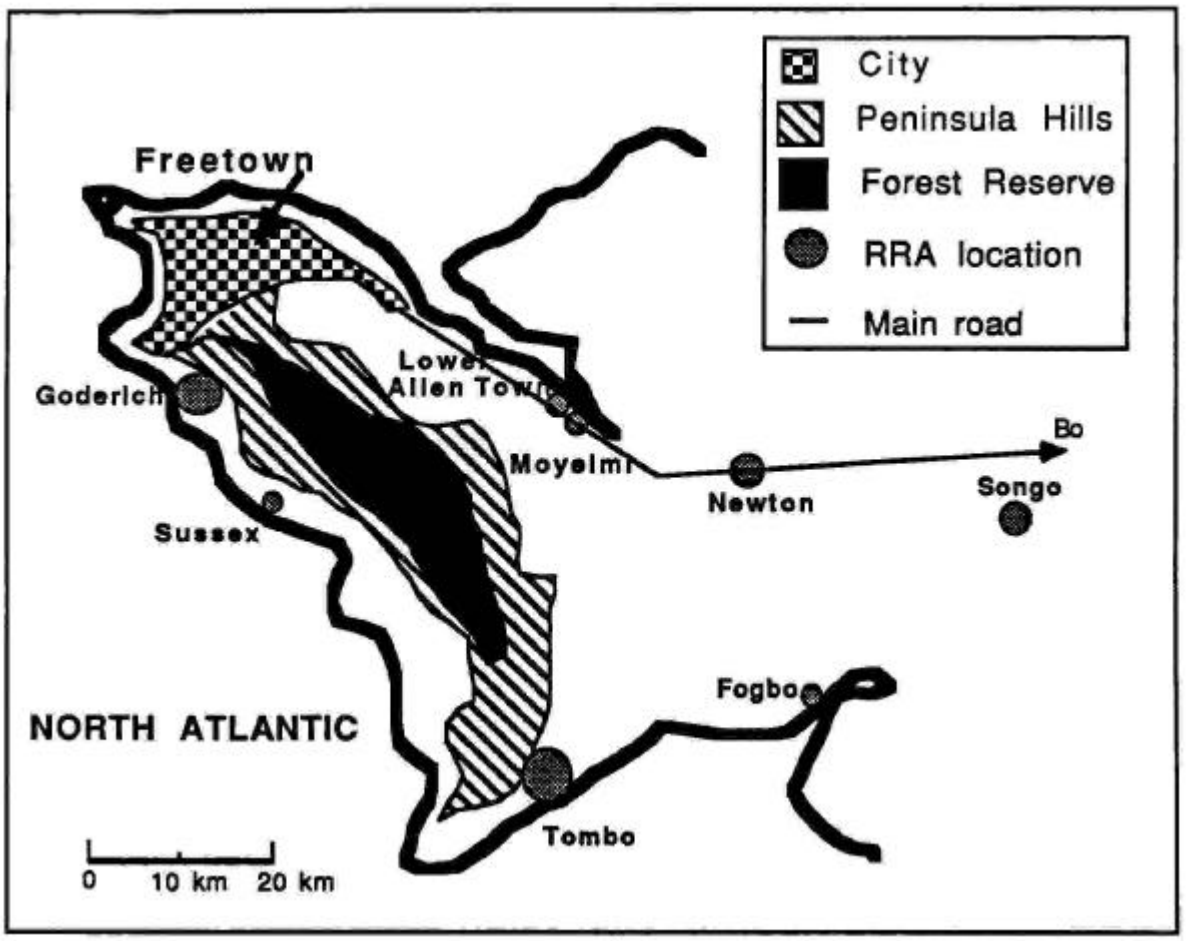
During a 3 week period, we surveyed,2 villages (Sussex and Moyeimi), 4 small towns (Fogbo, Lower Allen Town, Newton and Songo), 2 large towns, (Goderich and Tombo), and the capital city, Freetown (see Map 1).

Five of these locations (Fogbo, moyeimi, Newton, Songo and Tombo) were selected because they were part of the FAO conventional questionnaire survey, and Sussex was used as a training and pilot survey location for the RRA team. None of us had any previous field experience with RRA.

[1] Jeneh, who had been trained to use formal sampling, started off being very sceptical about RRA, but was soon advocating its worth to any who would listen, eloquently attacking sceptical project managers and officials with the zeal of a convert!

Source: RRA Notes (1991), Issue 12, pp.32–40, IIED London

MAP1. Western area of Sierra Leone and RRA locations



The RRA trials and training period lasted four days and took place in Sussex Village during the first week of July. RRA techniques were used by the team on an experimental basis to create a full socio-economic and socio-ecological fuelwood profile for the village. All of the techniques were successful, and we were able to use the experience and confidence gained by this initial exercise when the main survey began three days later.

Not all four team members were available every day of the survey due to illness, job interviews, conferences etc, although there were always at least three of us. To compensate for this, the smaller locations were covered on the days when the team only had three members (the three had to operate together so less area could be covered). When all four were present, we split into 2 pairs: usually the social forester (who could speak the local language) and the planner; and the forestry student and the Sierra Leonean demographer. Sometimes each pair would cover the same subject areas in different geographical areas of a research location. At other times each pair would cover the same geographical area but concentrate on different subjects or different end user or socio-economic groups. The latter method provided more scope for the triangulation of results.

The following techniques were used by the team:

- interviews: based on a prearranged checklist of topics, lasting between thirty seconds and one hour in length. The respondents in this study normally included individual and groups of fuelwood buyers, traders or subsistence collectors.
- Key informant interviews: with local community development workers, foresters, experienced fuelwood traders, farmers and local community leaders.
- Mapping: the drawing of a rough freehand map of the study area, wherever

Source: RRA Notes (1991), Issue 12, pp.32–40, IIED London

possible by a local person (often a key informant) on arrival at the location to show main and minor roads, the location of fuelwood traders, fuelwood sources and various individuals such as subsistence collectors and commercial fuelwood users.

- Preference pair ranking: to obtain the views of local people on the virtues and drawbacks of different local species of fuelwood. This was useful for comparing and contrasting species knowledge, species preference and differing preference criteria for the different locations and user groups.
- Indicator identification: to help us to interview a socio-economic cross section of the community (ironically women selling firewood in some of the communities studied is an indicator of severe poverty). Indicators of fuelwood related resource management issues were also noted by the team (soil erosion, use of valuable species as fuelwood, very short fallow periods, etc).
- Fuelwood measurement: the prices and weights and estimated volumes of several fuelwood bundles are recorded in each location (sometimes a bundle of fuelwood had to be purchased before the trader agreed to it being weighed, or even sometimes before they would agree to talk).
- Direct observation: fuelwood related events, processes, and human relationships were recorded in written notes and diagrammatic form.

We divided specific information gathering areas of responsibility between us. These delegated duties included:

- drawing pair ranking matrices and recording pair preference results;
- measuring and weighing fuelwood;
- recording rough transcripts and key points of interviews;
- conducting interviews;
- identifying and recording fuelwood type and species;
- drawing maps/plans of the research station,
- prompting the interviewer if necessary;
- noting species preference criteria;
- checking that all socio-economic and fuelwood using groups were included in each survey, and,
- carrying equipment and supplies.

The pair ranking matrix technique (see Figure 1) worked very well as many respondents who at first said they had no species preference were within a matter of minutes giving intricate technical details of why they did indeed have species preferences. However, we found the technique to be a tedious exercise when conducted in full, five or six times a day, every day. It was progressively shortened as the survey progressed, using three well known common indicator species from the previous results (i.e. one very good, one medium, and one poor quality fuelwood species) to generate the criteria and ranking order. After a few aborted attempts, we gave up the pair ranking exercises in the large urban centre, Freetown, where the very low or non-existent levels of species knowledge made them impossible to do.

The use of interviews, and trading flow diagrams were the main RRA techniques used to generate the marketing structure results for each location. The diagrams were simple to draft and amend in the field and effectively synthesised a large amount of information into a form that was understandable and was able to be verified when interviewing respondents.

• Survey biases

We attempted constantly to recognise the research biases of the survey and to adjust our fieldwork methodology to overcome them. Consequently, the following strategies and unwritten rules were evolved to try to counteract the main biases.

- Main road bias. A rough map of the location was drawn as early in the day as possible, to plan the survey strategy and record where interviews etc took place. In the early afternoon we would meet and discuss geographical gaps in the map that had to be filled, and also if there was a bias towards any particular socio-economic group that had to be redressed before we left the location at the end of the afternoon. It was a strict rule of the team that if one of us noticed a small path

Source: RRA Notes (1991), Issue 12, pp.32–40, IIED London

or side street and suggested that the team follow it, then it had to be done (no matter what the weather, time of day, how muddy the path, how deep the water, how tired we were, how much any of us complained or swore, etc, etc). We called this our "team contract".

- Local knowledge bias. Some of the locations were known to the team leader and invariably some of the key informant and other interviews in these locations occurred because of previous indirect and direct working or social relationships with these respondents. However, to ensure that the proportion of these respondents was kept to a minimum, we decided to introduce a rough method of random selection of respondents. Consequently if, in the course of each survey, anybody (wood trader/cutter/buyer or not) invited us in to their house or asked what we were doing there, or were in some other social setting with us (in a bar, shop or sheltering under a tree for example), then that person or persons would be interviewed. This technique also reduced the time spent in finding respondents, and if they were not directly involved in any aspect of the fuelwood trade, they provided objective information which was often useful in the triangulation process. However, it must be said that not all of the people who invited us into their homes were reliable or cooperative respondents. Often they were drunk and/or were only wanting an argument. All part of the fun of RRA, really.

- Seasonal bias. This was recognised by the team - in fact it was very difficult to forget, as the frequent heavy rains soaked us and made walking and fuelwood measuring difficult or impossible. Seasonal factors relating to fuelwood trading, cutting and buying were discussed during interviews. Diagrammatical seasonal calendars were used to begin with, but were found to be too complicated for the simplistic wet/dry season division generally used by respondents. It was very difficult to judge how strong an influence seasonal factors have on issues such as fuelwood price increases. Were they due to seasonal factors or to general inflation?

  On the positive side, the heavy rains provided a good excuse for stopping and seeking shelter which usually culminated in successful interviews with those providing the shelter. Additionally, the fish smokers, who are notoriously difficult to interview when they are busy, do not have so much fish in the wet season. Consequently, it can also be the slack period for the fishing community fuelwood traders. It was therefore fairly easy for them to be interviewed in a relaxed, but very damp, atmosphere.

- Previous reading biases. By reading relevant research papers before conducting the survey, it may have been possible for the team to be heavily influenced and prejudiced or biased by their findings. However, because we were aware of this, we were very careful to use the information only to provide points of reference to be raised with respondents in interviews. This turned out to be very important as we could win the confidence and attention of respondents very quickly by showing them that we knew the general subject area and technical vernacular of fuelwood collecting, buying and selling very well, but nothing about the specific local situation. This enabled the team to go into technical details very quickly, something that has to be done if an RRA survey of this type is to be successful.

  There was also a bias in favour of resident people, which was unfortunate as important people such as the travelling wood traders were seldom interviewed. This would have helped with the triangulation of results, but we found it impossible to plan for interviewing itinerant traders when we were only in each location for one day.

As the fieldwork was so intensive (10 locations in 10 days) there was no time or energy for the fieldwork to be written up as the work progressed. (This was not helped by the lack of a lap top word processor which had been recommended by an experienced RRA

Source: RRA Notes (1991), Issue 12, pp.32–40, IIED London

researcher but had been unobtainable/unaffordable.) However, the information gathered from each location was always discussed, and the resulting conclusions decided on and entered on the diagrams before the next location was surveyed.

The two most important aspects of our information collation and analysis activities were that:

- species preference results, interview details and fuelwood price and measurement information were always collated and numerically referenced in location-specific notebooks; and,
- a fuelwood trading flow diagram was always drafted and discussed before leaving a research location.

At the end of the fieldwork period these rough notes and diagrams were used immediately to provide the FAO Fuelwood Project with an interim marketing strategy report. The (ten) notebooks were brought back to Edinburgh to complete the written presentation and graphics production.

• Presentation

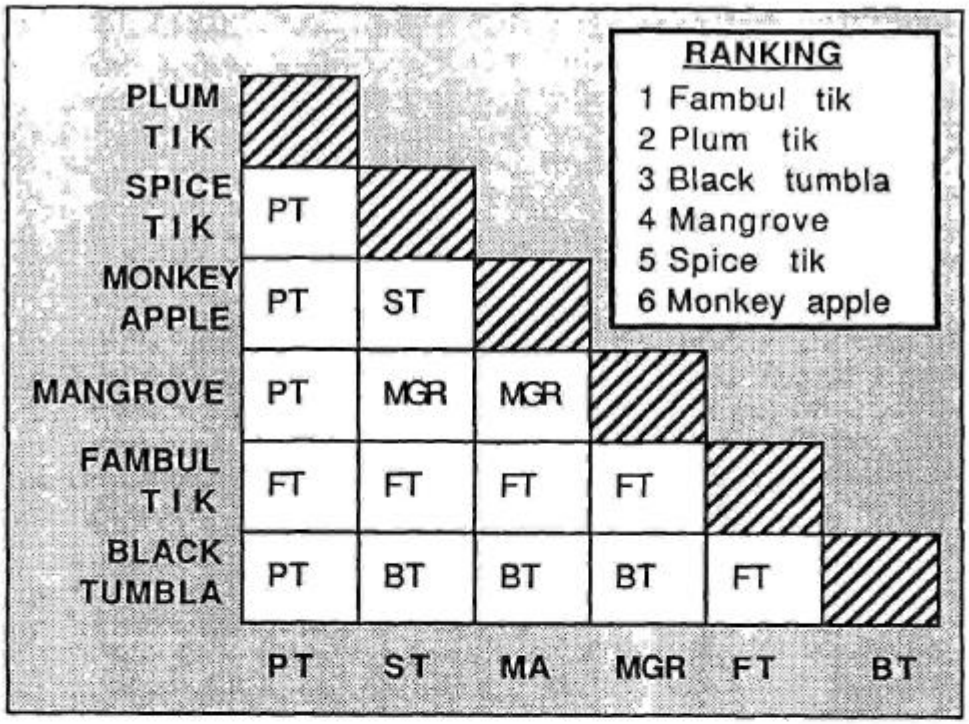
The RRA survey reports produced for each location include:

- a brief description of the location;
- a plan of the study area showing where the team conducted the research (except Freetown, where street names are included), and what RRA techniques were used with which respondents;
- a diagrammatic and written analysis of the location's fuelwood trading systems and the major participants. The thickness of the arrow lines in the diagrams indicate relative quantities of fuelwood flow in each location and are not drawn to a universal scale (Figure 2). The three sections are not titled in any of the diagrams as they vary from location to location, depending on the information gathered. However, in all cases the right column represents the actual end use observations of the team; the middle column the different trading systems observed by or reported to the team; and the left hand column represents the observed primary source or sometimes the reported initial source (as far back in the trading system as could be accurately determined, in other words);
- a diagrammatic report of the pair ranking exercises in each location. The criteria generated by the pair ranking exercises are also illustrated, and the quantity of them is used as an indicator of species knowledge;
- a list, in expanded note form, of socio-ecological issues relating to fuelwood collection, trading and use; and,
- a brief summary of local fuelwood marketing best bets.

The standardised reports were presented in alphabetical order, ie, there was no classification of locations according to size or their main economic activity. This was done deliberately to maintain the important location specific information gathering and analysis nature of an RRA survey. To report objectively on the situation in each specific location gives the desired and necessary emphasis on differences in local forestry technical knowledge. To amalgamate, aggregate and average the results according to whether they are large or small population, or "farming communities", etc nullifies the importance of the often, subtle variations of information gathered. If the decision maker/project managers want to use the information collected to make decisions regarding specific policy planning issues affecting wider, regional areas, then further analysis may be justified.

Source: RRA Notes (1991), Issue 12, pp.32–40, IIED London

Figure 1. Example of fuelwood pair ranking matrix



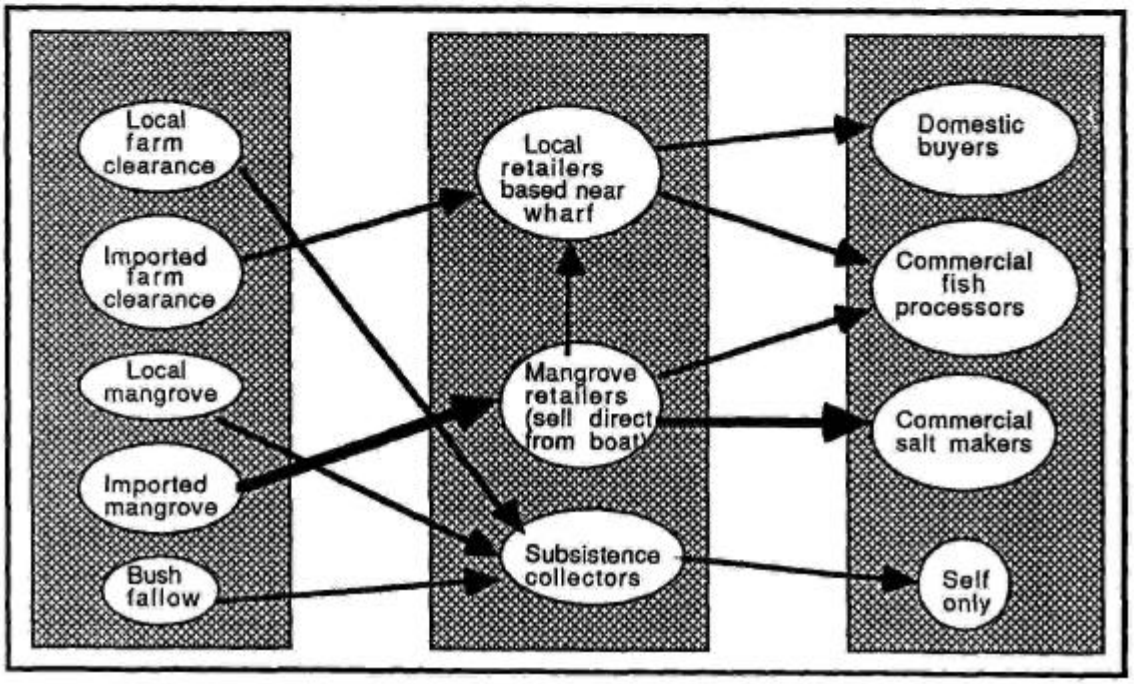


Figure 2. Example of a fuelwood trading flow diagram

Source: RRA Notes (1991), Issue 12, pp.32–40, IIED London

Additionally, and importantly, if the location reports are kept as free standing documents they can be used in the same location as discussion papers with local people to check and/or update the results in the future.

• Results

The final results of the formal statistical survey were not available, as they had still not been produced in report form at the beginning of August (4 months after the questionnaire fieldwork).However, using a tabulated summary of the results produced by the fuelwood project, obtained from the fuelwood species preference question in the questionnaire (Question 33 out of a total of 278), it was possible to compare the results.

There are subtle variations in the results for some of the locations, and a wide discrepancy for one of the major fuelwood using communities, Tombo. According to the questionnaire survey, Tombo has a very low level of species preference. The RRA survey found it to have the highest. Also, the most preferred species according to the questionnaire results did not appear in the top three species according to the species preference ranking of the RRA exercise. More alarmingly, this species, which was also top in a previous questionnaire survey (1986), is not mentioned at all in the 1990 formal survey results.

Again, from the results of the formal questionnaire survey's fuelwood marketing questions, there are subtle variations in the results for all the locations, and a wide discrepancy for one of the locations, Songo. The RRA survey for Songo clearly shows a well organised fuelwood trading system satisfying both local and external (urban) demands, operated by eight local static traders. However, the tabulated questionnaire results indicate that there are no fuelwood sellers at all in Songo! This is despite the same questionnaire survey producing a result which indicates that 75% of the community buy fuelwood.

• Conclusions

Whilst perhaps not a role model for a participatory approach to planning social forestry activities (this particular project was too far gone down a technical blind alley for that), the RRA survey generated useful results that should help the project management staff market the fuelwood they will be producing in an efficient and locally appropriate way.

As a contribution to the RRA versus formal statistical surveys debate, the comparison between the results obtained by the different methods throws up interesting similarities and differences. It could be argued that, backed up by the available evidence, the two main variations described above indicate that RRA is a far more appropriate and accurate way to collect socio-economic and socio-ecological information for social forestry projects.

In any case, as the analysis of the questionnaire results have only just been produced the number of similarities in the information collected definitely show that worthwhile information can be collected and presented in a far shorter amount of time, using fewer resources and enabling the respondents to enjoy a professional chat about their livelihood or kitchen habits, instead of being subjected to an intrusive 278question questionnaire by bored enumerators.

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Source: RRA Notes (1991), Issue 12, pp.32–40, IIED London

6

Beyond chapatis

Mick Howes

• The problem

The RRA show appears to be dominated by biologists and geographers, who are good at explaining the relationships between human activities and different aspects of the physical environment, but weaker when it comes to exploring connections between people themselves. These human relationships become particularly important when we start to think about things like participation or adaptive local level planning.

This note identifies what RRA already has to offer in this respect, and asks whether we might be able to devise some new diagrams, or borrow some old ones from anthropology, which could extend the repertoire.

It is almost entirely speculative. None of the ideas have actually been tested in the field; nor even discussed with anyone else[1]. It also reflects my Asia bias, although I have tried to draw on examples from other regions.

• Economic relationships

Let's start with economic relationships. Here we must presently rely upon two devices which offer only hints of what might be going on. The first is the stacked bar chart (Figure 1), which shows how the composition of asset holdings changes as we move up the economic hierarchy. The illustration here looks at different types of land, but you will probably already be familiar with other variations. These convey a sense of who might potentially be able to participate directly in activities built around assets of different kinds. The second device is wealth ranking, which offers insights of a similar nature. Neither bar charts nor wealth rankings say anything about the relationships that might arise from differences in asset holdings. Furthermore, they tell us little about the power which certain people will enjoy as a result or the way in which that power might be used to impose restrictions upon others.

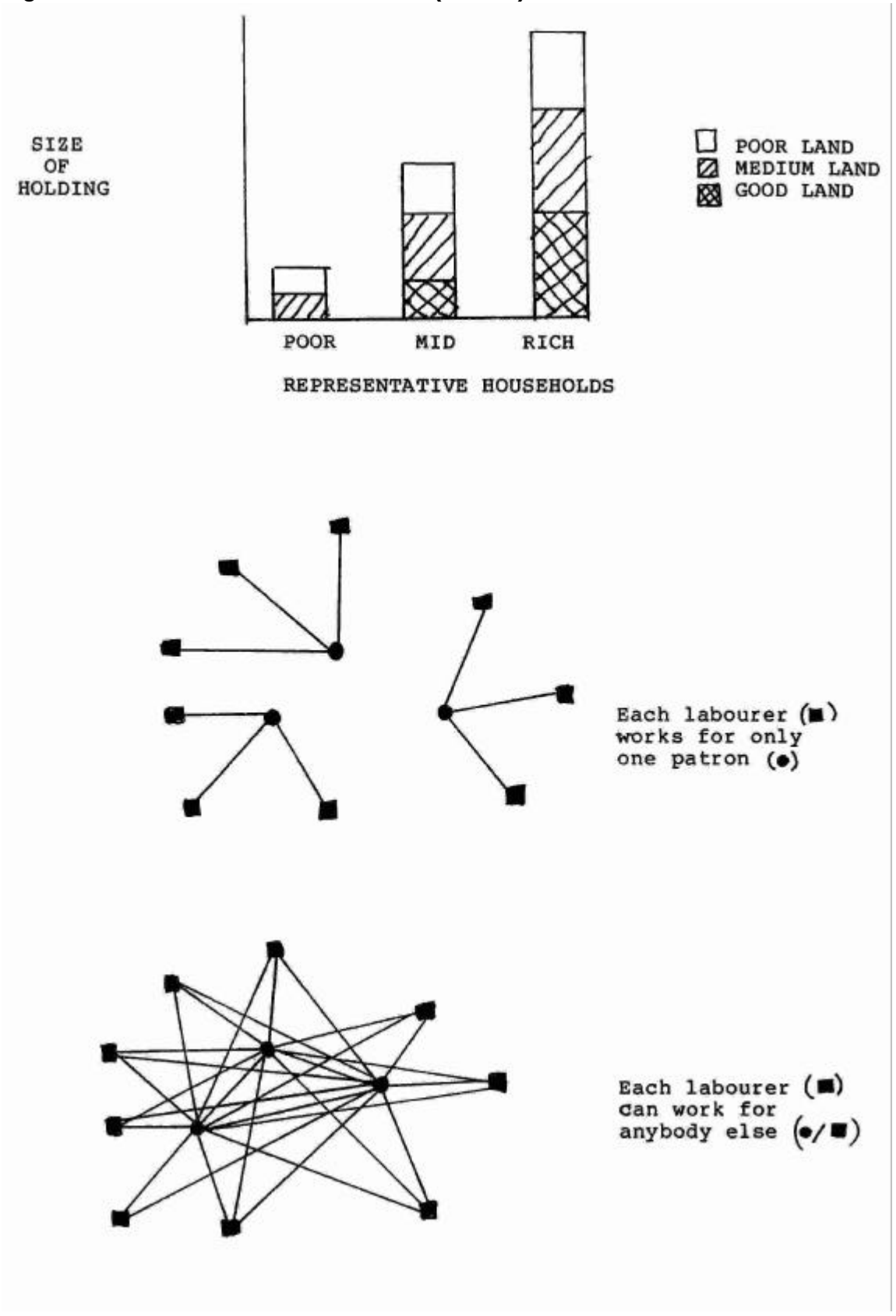
We might, for example, have a situation where villagers with little land of their own rely exclusively upon one relatively wealthy patron for all of their employment opportunities (Figure 2), and therefore have to listen very carefully to what that person has to say about what they may or may not do. On the other hand, poorer people may be able to tap multiple sources of employment (Figure 3), in which case they are likely to enjoy much more freedom of manoeuvre.

If we look not only at employment, but also consider sources of credit or opportunities to secure the temporary use of land under some form of tenancy arrangement, the same sort of possibilities might arise (Figure 4). Poor clients may be locked into a highly constrained "multi-stranded" relationship with one powerful patron. Others may find themselves in a much more fluid set of market relations.

[1] Except Jenny McCracken, to whom I am grateful for some helpful suggestions.

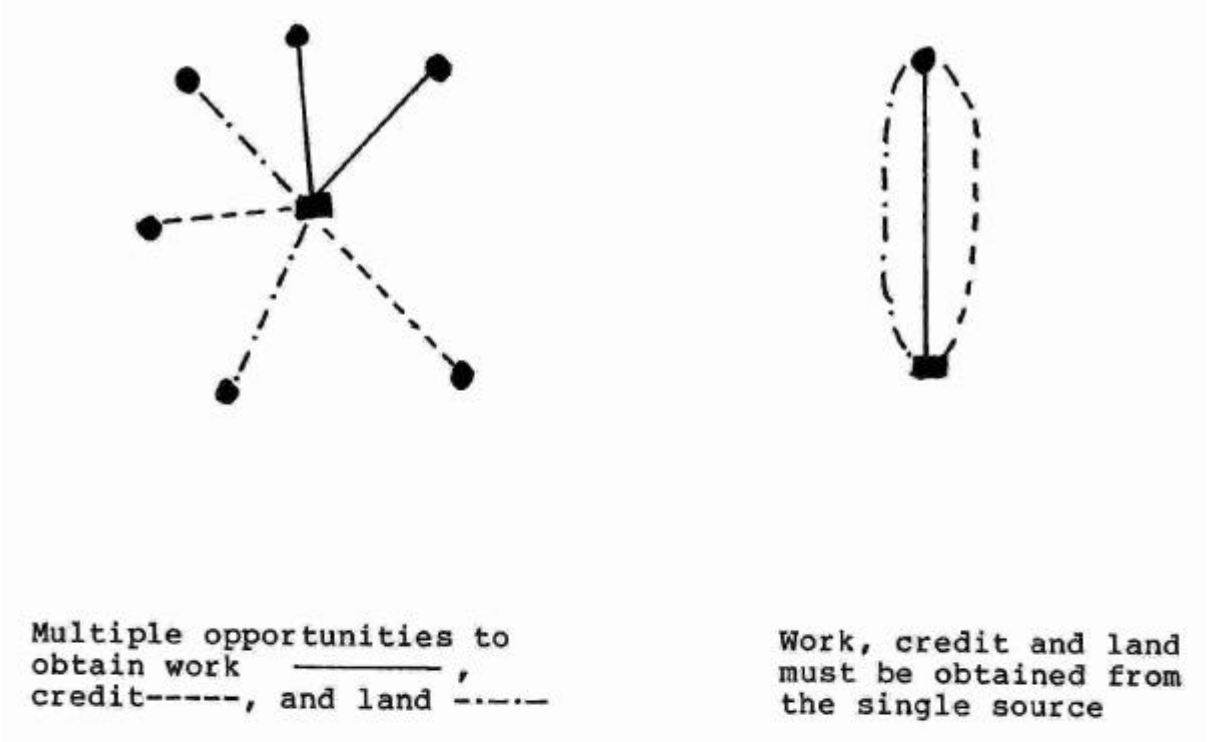
Source: RRA Notes (1991), Issue 12, pp.41–46, IIED London

Figure 1. Stacked bar chart (top)
Figure 2. Patron-client labour relationship (middle)
Figure 3. Market based labour relations (bottom)



Source: RRA Notes (1991), Issue 12, pp.41–46, IIED London

Figure 4. Single stranded and multiplex relations



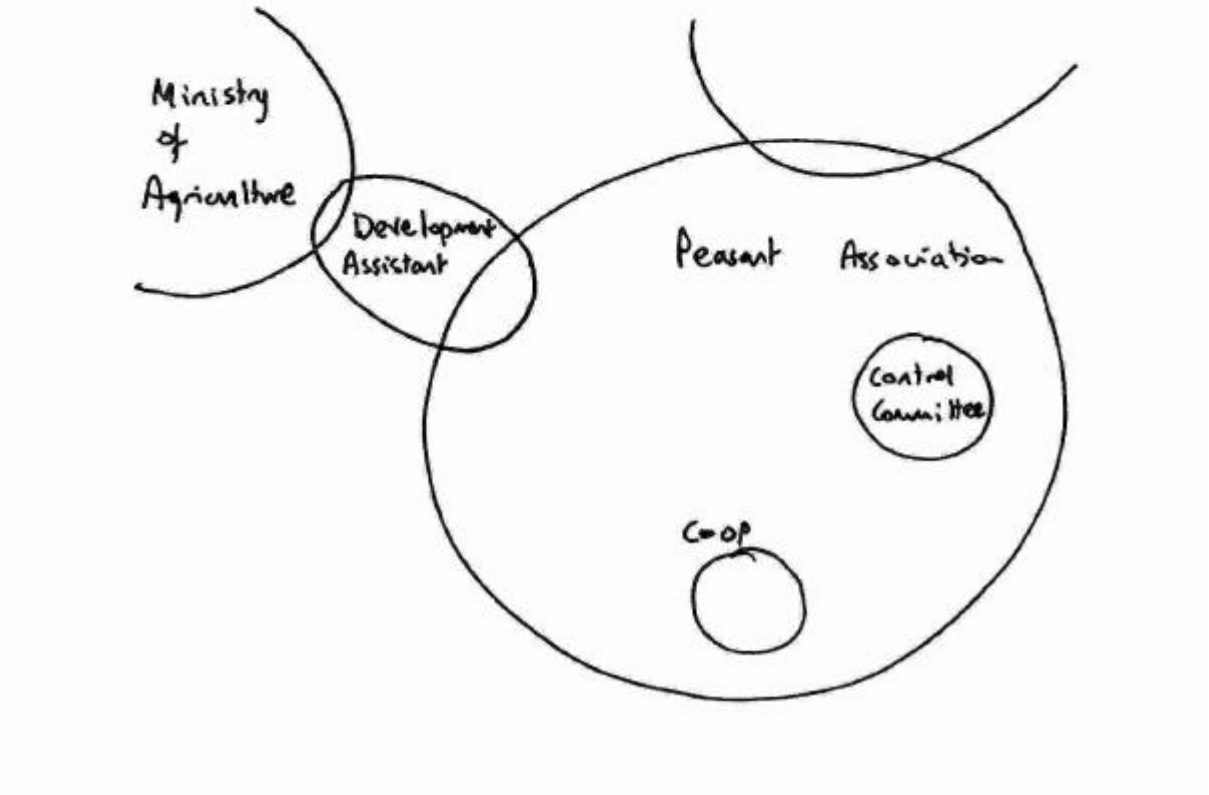
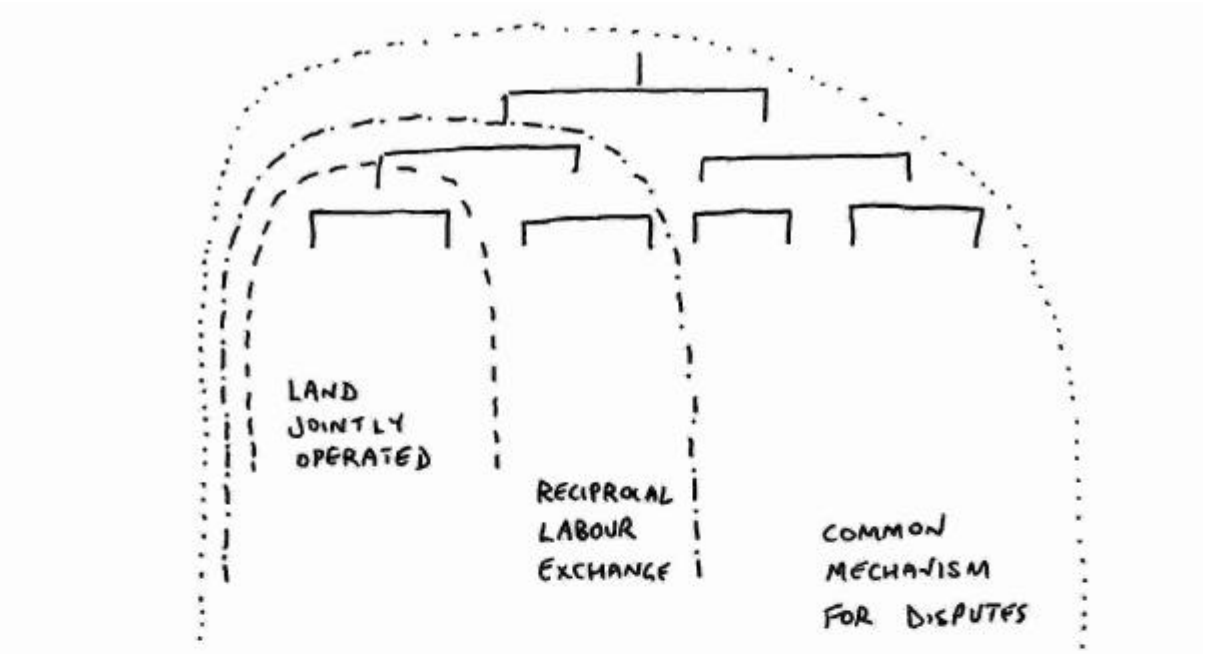


Figure 5. The 'humble' chapati

Source: RRA Notes (1991), Issue 12, pp.41–46, IIED London

Figure 6. Inclusion and exclusion through genealogies



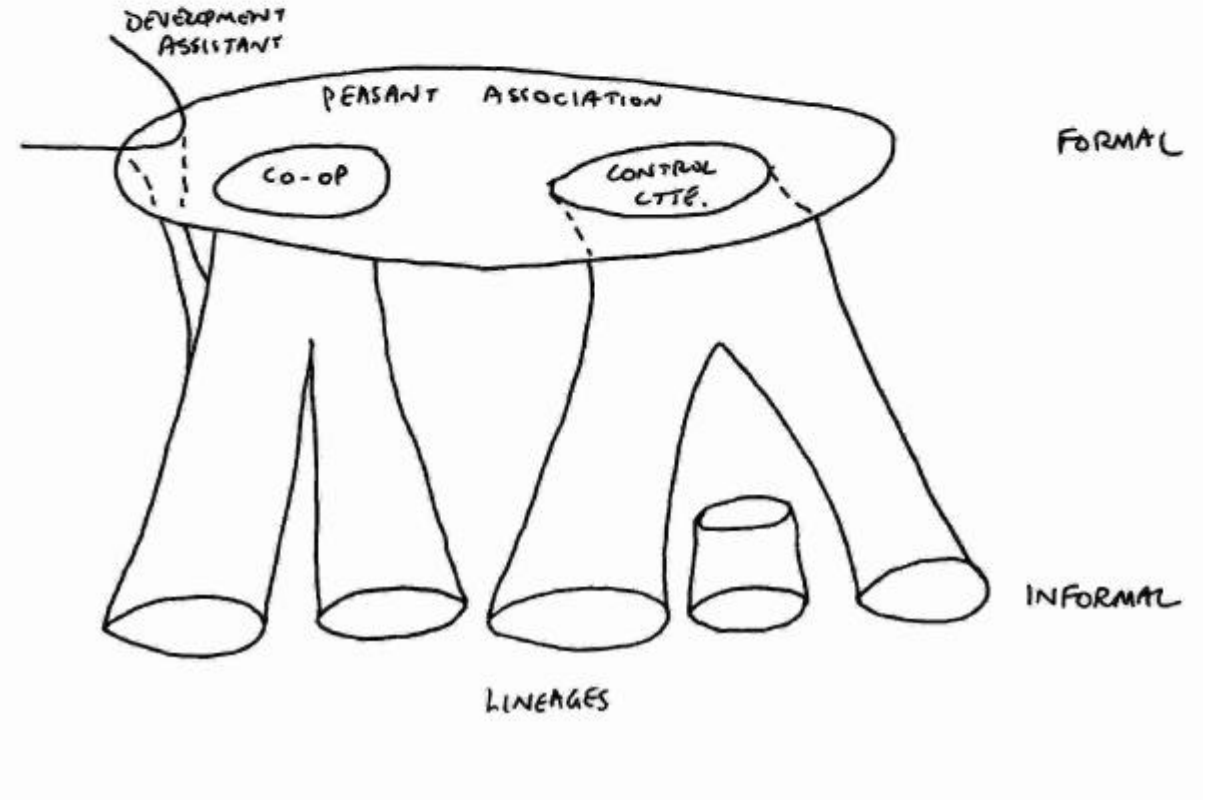


Figure 7. Linking formal and informal institutions

Source: RRA Notes (1991), Issue 12, pp.41–46, IIED London

Anthropologists are accustomed to drawing diagrams of these kinds, but would it be possible for them to be used in a participatory fashion? They would, probably be very difficult to do "cold", but perhaps coming after a wealth ranking they might sometimes work quite well.

• Social relationships

RRA is also rather weak when it comes to social relationships[2]. The humble 'chapati' (Figure 5) has its uses, but still tells only part of the story. By focusing on formal institutions, it gives some sense of who is presently associated with whom, and therefore of who might work together effectively in future. But much more may be going on below the surface.

This takes us into the territory of informal or social institutions, most of which are likely to take kinship as their basic building blocks. A classic genealogy (Figure 6) will be comprehensible to at least some village people and might work as a device for eliciting information about the types of co-operation which already operate at different levels in a system. A more abstract formulation, with the same relationships expressed through a series of concentric circles, might sometimes be useful for purposes of presentation outside the village.

As in the earlier examples, it may be difficult to start with a genealogy, but given the degree of overlap between social and economic relationships, a discussion of the latter might itself provide a good lead-in. So, too, could the wealth ranking.

It will also frequently be the case that key social relationships will be reflected in the spatial configuration of communities. Where this applies, a map, of the type of which is often already produced (see Mascarenhas & Prem Kumar, this issue) might provide a good starting point. It could also be used to create a better picture of the resources controlled by different groups.

Once a picture of the underlying social relations has been established, it might finally prove possible to link the informal and formal together. The Bangladesh Rural Advancement Committee (BRAC) attempted something of this kind in their "Net" of families showing function links, kinship links, marriage links plus notes about who held positions of power in formal institutions. Another option would be to turn the chapati on its side (Figure 7). Then we could see who the formal institutions really work for, and identify those whose interests may not be reflected on this level at all.

This, and the preceding exercise, would only work where populations were relatively stable. In urban settings, or in rural areas affected by high levels of migration, there would still be networks (as in the economic diagrams), but these would be less likely to be attached to a base of traditional social institutions.

I haven't said anything about gender relations, although RRA is weak in this area as well. I hope to contribute a piece on this subject to RRA Notes soon.

• Conclusion

Will the new diagrams be any use? They cover some potentially sensitive topics, and there is a danger that people will express a sense of what ought to be, rather than what actually is. Verification will be more difficult than is usual in RRA, and there may be a fine line between accuracy and intrusiveness. Moreover, what works in one place may not readily transfer elsewhere. Even if a good picture can be constructed we may not end up knowing much more about what will work than what would have "come out in the wash" in a community meeting. In spite of all this, I think these approaches can be useful additions to our present repertoire. Is there anybody willing to give them a try?

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[2] For a notable exception, see Robin Mearns on clans and disputes in Papua New Guinea, RRA Notes 7, and Mehreen Hosain, this issue.

Source: RRA Notes (1991), Issue 12, pp.41–46, IIED London

7

Topical surveys as a tool for a more dynamic farmer extension worker relationship

Antony C van der Loo

• Introduction

Most of the papers on Farming Systems Research and Extension (FSR(E)) principles and methods stress the importance of high quality human resources: a multi-disciplinary team of university degree scholars with extensive experience in the subject matter. What if they are not at hand? Should the idea of FSR(E) be dropped altogether or can one introduce some useful FSR(E) principles and methods into the working schedule of any extension field worker and support him/her in this process?

Looking at it from another angle: can one expect to integrate FSR(E) results in the working programme of a regular extension service if its personnel isn't familiar with the basic philosophy and concepts of FSR(E)?

This article describes the results of a workshop held in the Tete Province of Mozambique in September 1989[1]. The main objective was of encouraging extension personnel from field level to provincial level to integrate farmer reality into the extension programme. It was based upon the assumption that new farmers' groups will have to be approached in an open dialogical way which supports their active participation and respects their knowledge and values.

• A program of topical surveys

The workshop concentrated on the simple truth that 'one has to understand a situation before

one can intervene in it', without denying that the consequences of a (careful) intervention can also contribute greatly to our understanding of a situation. This meant that, although extension workers (EWs), and their supervisors were encouraged to investigate farmers' reality, the whole process was very much oriented towards action.

The methodology sought to disturb the existing working patterns of EWs as little as possible. Hence their scheduled meetings and farmer visits were the primary fora at which ideas were discussed and actions planned.

EWs were asked to concentrate every month (or two months) on one topic such as grain storage and pest control. The emphasis was on 'gathering understanding' while executing their normal working programme[2] (Figure 1). A checklist of issues such as conversation topics, observations, measurements, etc was used. These activities were referred to as 'topical surveys'.

In periodical meetings with their fellow extension workers and superiors, each recently completed topical survey was analysed (description of encountered situation, definition, discussion of alternatives, etc) and the next topical survey was prepared (training, discussion, making of checklists). The strategy depended as much as possible on the extension

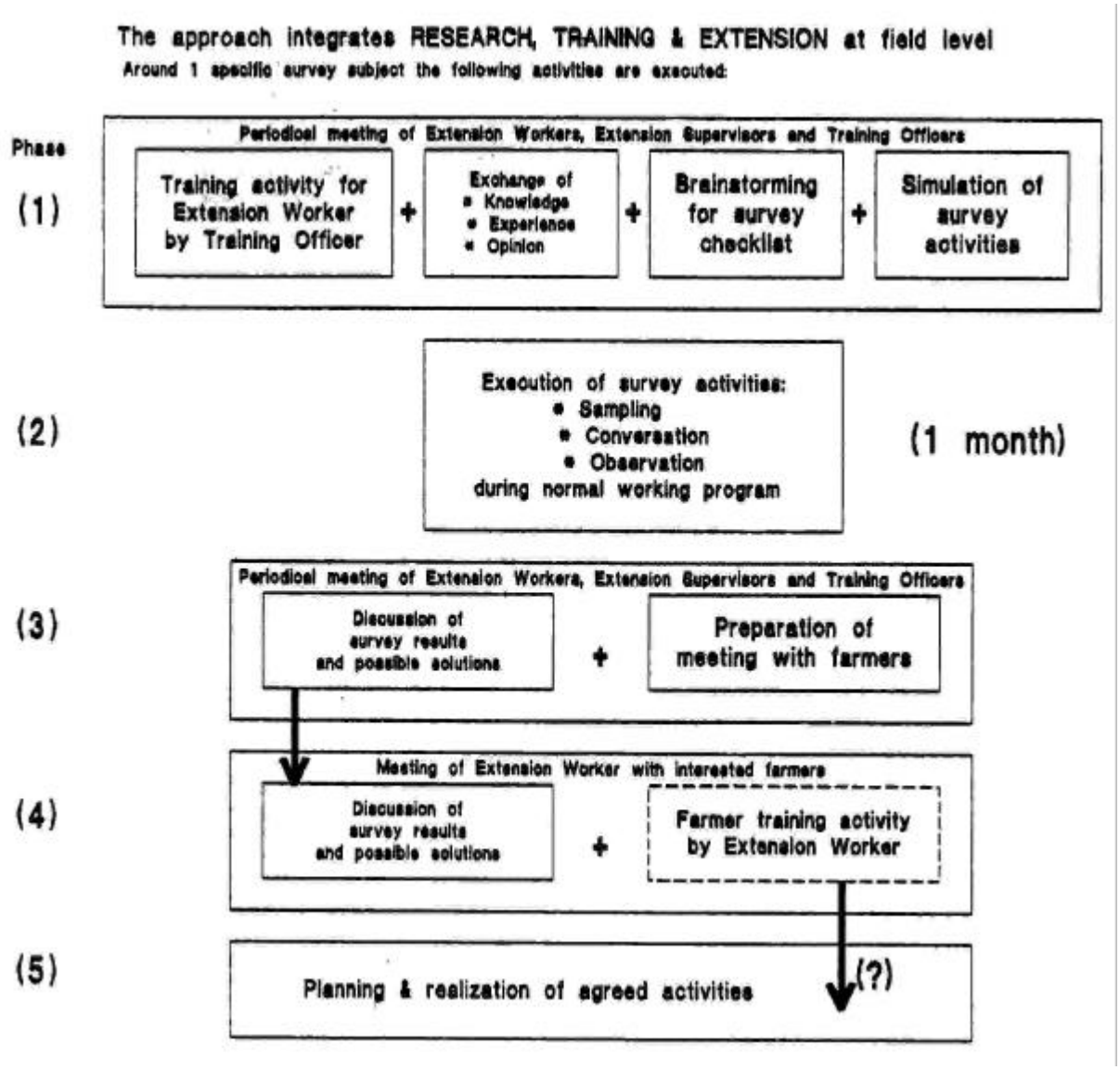
[1] The workshop was devised and organised by the author of the article, who worked at the National Training Institute for Rural Development (CFA) in Mozambique at the time. A step-by-step teaching guide is available in Portuguese (52pp).

[2] Gathering understanding versus gathering information.

Source: RRA Notes (1991), Issue 12, pp.47–53, IIED London

workers' way of perceiving reality, supporting them in their efforts to ask the right questions. The results of these meetings were then used as the bases for the discussions which the EWs would initiate on return to their areas.

Figure 1. Overview of extension workers' working programme



Source: RRA Notes (1991), Issue 12, pp.47–53, IIED London

A reasonable depth of critical analysis was expected because the free exchange of information and ideas between the extension field workers was encouraged during the meetings, which were facilitated by at least one senior officer.

• Preparing the workshop

It was crucial that all levels of the extension hierarchy in an area to be selected participate in the exercise. We held to the idea that there can be no real discussion between a farmer and an EW if there is no communication within the extension service. Besides, the integration of the approach could only be realised with the support of the authorities up to at least provincial level.

Two case study sites were chosen at which the participants would actually have to test the topical survey approach. These concentrated on maize storage and maize stalk borer control, both of which were identified as serious problems by farmers in the selected area.

• The first week: introduction of the approach

Through informal group work, plenary discussion meetings, role plays, field exercises and other exercises, the following introductory programme was executed:

- basic extension philosophy;
- farmer attitude towards extension;
- farmer reality, following a systems approach; and,
- survey techniques.

Using the participants' work experience and knowledge of key problem areas, the following interesting conclusions were reached:

1. Farmers' knowledge is a critical resource we must acknowledge, support and complement;
2. Extension workers can and should play an active role in research; and,
3. Only after acknowledging and understanding farmers' logic can a more appropriate extension system be developed and implemented.

A 'Farmer Activity Calendar' was designed which incorporated non-agricultural activities, gender differences, etc. This turned out to be a key tool for avoiding a narrow technical focus. Based on the calendar, ideas for interesting survey topics and short checklists for future surveys were generated.

• The second week: application of the approach

The topical survey approach was tested in the selected study in two different communities. Over, 3-4 days in each case, the following procedures were employed[3].

1. Theoretical and practical training of extension personnel on the subject (2 provincial training officers (PT0s));

2. Discussion of EW's knowledge of the situation in the chosen area and brainstorming to prepare checklist for future survey (2 extension supervisors);

3. Simulation of survey activities (sampling, interviewing and observing) at the Training Center (2);

4. Execution of a small quick survey in the area by teams of 2-3 participants (1 EW);

5. Collection and discussion of survey results, bottle-necks, alternative solutions and possible interventions (2 EWs supported by 1 PTO);

6. Preparation. of the meeting with the interviewed farmers and other interested farmers (2 EWs);

   This meeting consisted of the following:

   - presentation of survey data and conclusions in order to stimulate a discussion with the farmers and verify survey results;

   - a farmer training session whenever possible (normally part of the training

[3] The participants who were in charge of each phase, as in the real working situation, are noted in brackets.

Source: RRA Notes (1991), Issue 12, pp.47–53, IIED London

activity mentioned under 1, and the activity which is of special value to the farmers); and,

- presentation and analysis of practical solutions to the problem;

7. The simulation of the meeting with the farmers at the Training Center (2 PT0s); and,

8. Meeting with the farmers: discussion of survey results, bottle-necks and possible solutions, plus a farmer training activity by extension workers (2 EWs).

• The third week: integration of the approach

The workshop aimed at changing the attitudes of extension personnel towards farmers and stimulate them to investigate farmer reality and integrate farmer opinion in the planning of extension activities. It was realised that a two-week workshop could not achieve this. Therefore, the last week was devoted to the programming of a year's worth of topical surveys around a number of specific themes by extension personnel (provincial, district and field level).

Themes chosen included production, storage and marketing problems identified by farmers as well as specific extension messages which needed promoting. An example of the latter was the 'Planting in Rows Program': nobody could really explain why farmers did not plant in rows[4]. Here again the Farmer Activities Calendar was used as a tool to avoid a narrow, excessively technical focus. While these activities were instituted on the ground, the provincial extension officers planned the resource component needed for monitoring (people, transport, money). Thus, at the end of the workshop, a year-long programme of topical surveys could be presented to the Provincial Agricultural Authorities for approval.

• Results and discussion

Extension personnel were most receptive to the idea that they themselves can be instrumental in the research process, as well as to the belief that farmers' knowledge is valuable to them. During the survey there were moments when EWs discovered that farmers were aware of phenomena they themselves had only learned of at the training session (eg the effect of heavy rainfall on maize borer damage). This contributed to their respect of farmer knowledge.

Farmers,' in turn, were very positive about the fact that, only three days after a half-hour conversation with an extension worker, a possible solution to their problem was presented and discussed. Farmers participated actively in the evaluation of alternative solutions.

Based upon the results of the topical surveys, a demonstration was given at the Tete Workshop of a method to combat the maize borer by mixing a small quantity of cypermethrin with sand and applying this mixture in the funnel of the maize plant after detection of 'windows' caused by young larvas in the upper leaves, then repeating the treatment after a two-week interval (normally 3 and 5 weeks after planting). It was received with enthusiasm by the farmers.

The farmer training session about the life cycle of the maize stalk borer, which was developed by 2 EWs for the workshop, was also successful. Farmers knew the 'different' insects and were very much taken by the idea that they were one and the same animal at different stages of development. Their reaction boosted the morale of the EWs, who were glad to impress the farmers. At these moments, it was stressed to the EWs that they were able to capture the farmers' genuine interest because of the genuine interest they took in the farmers' problems. It was then that the EWs discovered that knowledge was not a fancy idea, but a pool of ideas and strategies from

[4] The idea that arose during the preparation of the workshop was that farmers refused to plant 1 maize plant per plant hole, as recommended by the extension service, since they felt that harvesting two maize cobs at an early stage and leaving 1-2 plants per plant hole for the final harvest, was more advantageous in terms of shortening the period when food supply was critical. This was a clear example where local extension objective (higher yield) and farmers' objective (security food) did not coincide and led to misunderstanding.

Source: RRA Notes (1991), Issue 12, pp.47–53, IIED London

which they could draw to improve their own work.

The three month interval between the selection of the area and case-study topics and the beginning of the course, was used to build three different types of locally used granaries. EWs participated in the construction of a fourth, improved granary which was later presented to the farmers (The main storage problems being rats and weevils). This granary was presented to the farmers as an alternative and it was stressed that, if interested, they could participate in a trial comparing production losses in the four models.

In order to avoid the entrance of rats in the improved granary, rat guards were prepared by the participants using various materials. one provincial training officer remarked: 'I always tell them(the EWs) to use rat guards but I didn't know it was so difficult to make one'. Farmers were very definite in their rejection of six out of seven funnel models, then demonstrated that they were very much at ease in direct discussions with EWs and not meekly accepting the suggestions that were put forward. In the end, a more appropriate alternative was produced combining farmers' and EWsl ideas.

AS mentioned, these workshops were only the first step in a process which aims to bridge the gap between research and extension: not by bringing the researcher closer to farming and extension, but by bringing the extension worker closer to the research.

It is clear that the extension personnel need strong assistance from people who have an FSR(E) background and it is also clear that analysis can be slower and possibly not as comprehensive as more research-oriented FSR work. In particular, the EWs need a lot of support in asking the right questions. It must be remembered, however, that the development and implementation of a new approach by an extension service is a long-term investment which can produce a lot of positive benefits in the years to come.

It should be noted that prior to a workshop, a general survey must indicate more clearly what the suitable topics for a 'programme of topical surveys' might entail. In this experience, a quick meeting with farmers and extension workers mainly came up with two critical topics for the initial case studies, but did not provide enough insights to assist EWs in selecting the topics for their year programme.

More activities will have to be developed in order to achieve the earlier mentioned goals. More specific RRA techniques such as direct matrix ranking could be included. Village teachers, health workers and other key individuals could be asked to participate in the workshop in order to improve the analysis of the selected area. Further it may be necessary to repeat the workshop in different locations and at different times of the year to see how easily it can be adapted to fit different socio-economic and agro-ecological conditions.

Clearly, it is not only necessary for scientists to conduct their research with the direct involvement, of farmers, but also for extension personnel to participate directly in those research activities. Both processes can have a positive influence on a more dynamic farmer-extension worker relationship.

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Source: RRA Notes (1991), Issue 12, pp.47–53, IIED London