

Editorial

- **IDS seminar**

This edition of RRA Notes has resulted from a two-day workshop, held at IDS in November 1991 and hosted by Robert Chambers.

The first substantial document to be produced on PRA techniques in relation to health was presented by Robert Chambers in December 1990 at the Nutrition Society of India in Hyderabad. Whilst that document provided a comprehensive overview to date, fieldwork has moved on dramatically since then. It was therefore considered appropriate to call together practitioners for the IDS meeting.

There has been growing interest in PRA, also known as RRA, RAP, and with other names also. Scrimshaw and Hurtado's work on Rapid Assessment Procedures for PHC is mentioned by several authors in this volume and reflected a shift in approaches to community based health studies. In March of this year, a Special Issue of the Journal, Health Policy and Planning was produced on rapid assessment methods for the control of tropical diseases. Thus the papers of this volume contribute to a highly topical debate within the health field as well as beyond.

- **Themes**

At the workshop there was much fruitful discussion, both of individual papers which were presented and of more general issues relating to the development of PRA in health. Susan Rifkin's overview paper highlights four key issues which were addressed during the discussion sessions. These included:

- reflection on the relative values of qualitative and quantitative data;
- the position of 'the community' as subjects or objects of health service delivery;

- the importance of the process of community-based health information collection, as opposed to a more conventional pre-occupation with the product; and,
- the importance of the development of health worker skills towards learning and facilitation as opposed to imperious superiority.

- **Process and mutual learning**

It is clear from several articles how much the staff - particularly health staff - involved in the studies have gained from them. They have gone through a changing process of scepticism, disbelief, unlearning and relearning about the communities with whom they work and should be communicating.

Several articles also point out how much community members themselves declared that they had gained from the exercises. By being given time and space by health staff to discuss and analyse with them their health and other problems, they too went through a learning process. As Eng et al (1990) also found through their work on focus group discussions in Togo, the sense of learning from the process gained by community women and health workers alike, resulted in greater mutual respect and confidence and an increased uptake in western health services.

- **Analysis of difference**

Another theme recurrent amongst several articles stresses the importance of the analysis of difference. This recognises that different members of a community have different experiences, needs, problems and therefore require different solutions. Aspects of difference with regard to gender, age and well-being in particular are illustrated in the case

studies. This theme is becoming increasingly important in PRA work and cannot be ignored.

- **Expansion and quality control**

Finally a key issue which was aired at the workshop and which Richard Heaver's paper also addresses is the question of PRA expansion, institutionalisation and quality control. This is a question not just of relevance to the health field but to all practitioners of PRA. How can a methodology and approach which so fundamentally challenges the conventional centralised, bureaucratic forms of project implementation, be accepted and embraced by governmental and donor agencies? This is a challenge, which also presents itself to existing NGO practitioners. It may form all the more of a barrier to PRA uptake by larger bodies. This is a key area for further study, in all sectors of PRA work.

- **Order of presentation**

Whilst only some of the papers presented in this volume were actually delivered at the workshop at IDS, others have been received separately by IIED for publication. It seemed appropriate, however to present them all together in one volume, since issues raised in all of them have many common threads.

Rifkin's paper, as well as setting out the main themes of the discussion (see above), presents the workshop in the broader framework of current health data collection developments.

Heaver's paper, also in the overview section, presents a review of PRA with specific reference to its potential for the India Family Planning, Health and Nutrition Programmes. In this context he studies the issue of quality control described above. The combination of Heaver's macro-level paper - which focuses on potential governmental level health development - with subsequent papers from different Indian NGOs - which work on the small scale - provides a valuable all-round perspective of unfolding PRA interests in the health field in India.

Subsequent papers present a variety of specific case studies of health related field work. Together they provide a wide geographical

spread. There are a variety of examples of the use of RRA/PRA from Asia, Africa and one each from Latin America and Britain. The latter two provide examples of the use of the approach in deprived urban environments.

The papers also reflect a certain chronological development in the use of the PRA approach. Whilst the first three case studies, presented by LaFond, Cresswell and Moneti, were essentially studies conducted without the use of graphic representation, the spirit of their approach and the experience of the participants of those studies clearly relate closely to those of participants in other studies presented here. These three examples have therefore been presented as the first of the specific case studies. The rest of the case studies, accompanied mostly by illustrations, have then been divided up according to continent.

Four of the papers (Francis et al, Joseph, Appleton and Tolley and Bentley) are reports of training sessions and data collected in that context. Other case study papers also have given detailed methodological accounts. They have been published partly to enable those readers who are interested in practising these techniques for themselves, to understand more clearly how to set about doing so. Each paper also reflects once more the important role of the process of conducting the exercises, in the development of community rapport and confidence.

- **Conclusion**

The wealth of experimentation and innovation apparent in the articles and their accompanying illustrations is most impressive to behold. In order to share these and other ideas for the use of PRA in health, we held a small group brainstorming session towards the end of the workshop. The results of that session are presented at the end of the volume. Do please experiment with these suggestions for yourself. Please also write back to us with your ideas and experiences, together with your comments on this volume, for inclusion in future editions of the RRA Notes. We look forward to hearing from you.

• Alice Welbourn

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Rapid appraisals for health: an overview

Susan B. Rifkin

• Background

In the last few years, interest for collecting information that is obtained quickly and is reliable has been growing. Both for reasons of planning and cost, rapid collection procedures have gained popularity. Pioneered in the field of rural agricultural development in the so-called 'developing countries', these procedures might be defined as "any systematic activity designed to draw inferences, conclusions, hypotheses, or assessments, including acquisition of new information, in a limited period of time" (Grandstaff and Grandstaff, 1987).

Recently this concept has gained advocates in the health field. Interest has grown for several reasons. Certainly the main reason is the prospect of gaining information about the health problems of populations quickly and cheaply. Another important aspect, however, is the focus on the participation of the community in the information gathering exercises. This interest stems from the promotion of primary health care (PHC) in which community participation is seen as the key.

The last few years have provided an increasing number of experiences for health people ranging from the rapid collection of quantitative epidemiological data (*World Health Statistics Quarterly 1991*) to the gathering of information through qualitative anthropological/ethnological methods (Scrimshaw and Hurtado, 1987). In 1990, several international agencies including WHO and UNICEF convened a meeting in the United States to review some of these methodologies and their relevance to planning and evaluating health programmes. The

proceedings of this meeting are to be published soon.

As a further contribution to this area a meeting at the Institute of Development Studies, November 14-15, 1991 brought together a number of practitioners, researchers, and health care personnel to explore in more detail the potentials and limitations of the rapid collection procedures concept in the health field. Convened by Robert Chambers, participants included those attending an IDS seminar on planning primary health care, as well as aid agency personnel, members of the UK health service and university people.

At the onset, it is important to note in the health field that two distinct approaches have emerged under the umbrella of rapid information collection procedures. One comes from the field of epidemiology and has concerned itself with obtaining information about ill health and diseases. This has often been called 'rapid assessment' or 'rapid epidemiological assessment'. Its developers have concentrated around interests supported by the National Academy of Sciences in the United States and the Tropical Disease Research programme (TDR) of the World Health Organisation. In general this approach stresses rapid information gathering as a product of a specific and clearly articulated set of activities undertaken by health professionals using community people only as informants. (*Health Policy and Planning*).

The other approach, called Rapid Appraisal (RA) with more exacting titles such as participatory rural appraisal and rapid rural appraisal, continues to be rooted in the field of rural agriculture and rural development. This approach might be characterised as one, which stresses information gathering as a process and has developed a specific set of characteristics for data collection and analysis. These include:

- community involvement in information collection and analysis;
- holistic and systematic approaches;
- multidisciplinary and interactive methods;
- flexible responses;
- emphasis on communication and listening skills; and,
- development of the visualisation of information to replace only verbal communication.

In this approach the process is iterative, innovative, based on optimal ignorance, interactive, informal and in the field.

Both approaches, however, present an alternative to traditional data collection instruments which are longer implementing and are more structured and more detailed. Both have come to mean a quick collection of information at a low cost useful for planning at the local level.

This paper examines the RA approach and the issues it raises for health development. The objective of this overview is to identify some of the more important issues and discuss their implications for health RAs. While bias and value of information remains a concern, these are not the most important because users of RA attempt to recognise and confront these issues. Other issues are highlighted because they still are not so clearly conceived or articulated.

Although common with planning rural agricultural and development programmes, these issues develop different dimensions in the area of health including nutrition. Below, four major issues emerging from past experiences and critical to the use of RA in the health field are briefly discussed. These are 1) types of information collected, 2) community participation, 3) the information collection process, 4) information use.

• Major issues

Types of information

One major issue focuses on what information is collected. Rapid Appraisal recognises that only limited information on specifically focused topics is to be gathered. However,

there is the question about what type of information is most valuable - quantitative or qualitative? For planners who seek to make decisions about resource allocations quantitative information has been traditionally used. Only in the last few years has the value of qualitative information, particularly for use in programme evaluation, been recognised (Patton, 1990).

Many of the RA techniques emerging from the rural agricultural and development concerns produce mainly qualitative information. Their value to date has been to identify how communities look at different aspects of their daily lives. The techniques have not been designed to ask how many people have such views and beliefs.

In the past, in the health field, most health plans have been based only on quantitative information. Emerging from the scientific tradition of the search for 'objective' measures of health status and being dominated by the discipline of epidemiology, this view has resulted in a push for 'indicators' of health (Hansluwka, 1985). The indicators are seen as numerical representations of the health of a given population.

However, with the emergence of Primary Health Care which explicitly recognised less measurable factors, such as community participation as a key to better health, the supremacy of quantitative information for use in planning and evaluation has begun to be questioned. Planners, particularly those involved in programmes 'on the ground' have realised the value of information provided, for example, by key informants and focus group discussions. Many methods for obtaining this information can be found in the discipline of medical anthropology (Heggenhougen and Stone, 1986). Qualitative work of this nature based on personal interviews and researchers' observations is only just beginning to find recognition among those who plan and allocate resources on both national and international levels.

Still, health planners, particularly those with strong quantitative backgrounds such as epidemiologists and economists, struggle to accept the value of qualitative data. Their attitude might be summed up in this most

recent quote from the *World Health Statistics Quarterly*: “The qualitative rapid assessment methods, such as focus-group discussions, can complement quantitative methods by adding depth and insight but it may be dangerous to use them as a stand-alone method for policy makers” (Anker, 1991, p 97).

Community participation

One main contribution of the rural and agricultural development field to Rapid Appraisal is the development of a toolbox of techniques for information collection. This issue of *RRA Notes* details some of the techniques and their uses in health. The techniques are based on participation of community people in both the collection and analysis of data. Yet, participation in the context of this exercise has taken on a variety of meanings.

In the health field, PHC has focused much of the debate on what ‘community participation’ means. WHO has recently published two monographs which explicitly address this question (Oakley, 1989 and Rifkin, 1990). Aspects of this question include whether community participation is a means or an end? what is active, as opposed to passive participation? are community people subjects or objects of the planning process?

RA contributes to the debate in some specific ways. It focuses on the need to explore the question of: how can active participation be ensured when the planners/professionals provide the conceptual framework for data analysis i.e. well-being ranking, matrix priorities, mapping? In other words, if the researchers/planners define the conceptual framework, what does community participation mean? There is a danger that it could be seen only as the provision of information for professionals/outside to use for decision making in which the community is not involved.

This leads to a corollary question, which is how can RA avoid becoming a manipulative process (whereby planners get and give selective information from communities), and become a participatory process whereby community people gain equal status with

professionals because of their knowledge and perceptions? RA has the potential to empower community people by both providing new information and, more importantly, validating information which they already have. A key to empowerment is the growth of dignity which comes from the ability to influence key decisions with knowledge internal to community people. This dignity most often comes with struggle for power and control of decision making mechanisms. RA has the potential to empower community people by both providing new information and, more importantly, validating information which they already have. A key to empowerment is the growth of dignity which comes from the ability to influence key decisions with knowledge internal to community people. This dignity most often comes with struggle for power and control of decision making mechanisms. RA has the potential either to support or impede this process. Planners/professionals must recognise this potential and act accordingly.

Finally, who owns the information and how can ownership be developed so the communities can use this to ensure their role in the planning process? Ownership of information helps or hinders the empowerment process. This process can only be supported when the community takes ownership. If the professionals/planners give ownership of information as a gift or a pay-off for the community’s participation, it endangers the empowerment process because the choice of ownership is not that of the community but of the outsiders.

The community role is critical to the development of rapid appraisal originating in the social/community tradition. It is the feature which distinguishes this approach from the rapid epidemiological approach. As with community participation in other health activities, however, there still is no agreement on the essential character and objectives of this area of concern. Focusing on the struggle and tension between control and empowerment, this state of affairs is likely to remain a major concern in the process of RA and, in fact, the whole development of health policy and action in the immediate future.

The information collection process

Emerging from the questions surrounding the issue of participation is the more focused discussion about how information is collected. RA demands that information collection is a result of an exchange between professionals and lay community people. The quality of the information depends on the credibility established on both sides.

In the health field particularly, professionals are trained to see information as an end not the means of a process. Although health programmes and services are designed to benefit people, people are often treated as the means for getting the information.

RA has developed in the data collection methods, a mandate both to develop skills and attitudes which make professionals better listeners and which support lay people to be partners in the provision of information and decisions about how the information is used. By re-enforcing this type of exchange, professionals can be encouraged to be facilitators rather than inhibitors of community participation. This has implications.

Firstly, professionals need to become aware of the contributions of community people as sources of both information and insurance for programme implementation. Often, this means that situations for awareness building through direct experience with the RA methodologies must be created as few are convinced by merely reading articles. RA can create this environment and can generate support for professional re-orientation. For health planners, working in the community rather than the office, has in the past put them in touch with real situations and provided 'shock treatment' for rethinking.

Secondly, awareness needs to be supported by acquiring skills which enable professionals to work with community people. This means that training programmes must be established to teach these skills and engender new attitudes. Particularly important are communication and listening skills. The training aspect of RA is one which is critical to the promotion of community participation and PHC.

Thirdly, community people must acquire the skills and knowledge both to collect and interpret information. If they are to be more than passive informants, then they too must be able to handle information. Teaching and supervision is necessary. But most critical is support and confidence which can only be gained as a partnership between professionals and lay people is realised.

Information use

The development of RA techniques in agriculture and rural development has focused on the process of data collection and needs assessment. It has rarely addressed the issue concerning how the information is used for planning a programme. In the health field there is a continual growing demand to link research with policy and action. An underlying theme in RAs undertaken by health personnel is fusing research with decision making. Two implications arise from this concern.

The first is the recognition of the need to build mechanisms to ensure support for a community role in programmes resulting from RA information gathering. These mechanisms include ways to ensure that lay people participate in the decision making process as well as the development of an accountability system between planners and communities. In an area like health where professionalism has so much respect, money and power, such mechanisms often flounder.

The second is the need to address directly the role of the professional in programme planning and implementation. Emerging from the power of the medical profession is the insistence of their role in controlling programmes and priorities. As a result, few health programmes have been able to establish strong partnerships between service providers and their designated beneficiaries. Only when mutual respect is established can control truly be shared.

- **Contribution of rapid appraisal to the health field**

Despite these unresolved issues, Rapid Appraisal has begun to make important contributions to the field of health policy and planning both in the developed and developing

countries. In addition to its attraction as a quick and cheap method for data collection, among the most important are the following:

What information to collect

It has focused the dialogue on the debate about the value of quantitative and qualitative methodologies. Those involved in such exercises have begun to realise the contribution and limitations of both approaches and have sought ways to use both in developing their programmes.

Community participation

It has developed techniques which have generated participation from lay people, particularly among the poorer communities, as a means to initiate their participation in planning processes and supporting their confidence in order to become subjects, not objects of health programmes.

The information collection process

It has re-enforced the search to link information with decision-making, by enforcing the PHC emphasis on decentralised local planning through allowing those who manage programmes to collect the information. In this process, it has opened channels for local people to participate in both collection and use of information. As a result, programmes have the capacity to be controlled at the local level by a wide range of people including service providers and beneficiaries.

Use of information

It has begun to develop training programmes that emphasis the development of attitudes among the professionals that enable them to act as facilitators, rather than dictators about community needs. Particularly, it has emphasised the need of professionals to develop good communication and listening skills and to recognise the value of experiences for those they are to serve. In this respect, it makes an important contribution to re-orienting health people toward Primary Health Care, the official policy of the member nations of the World Health Organisation.

• Conclusion

Rapid Appraisal is likely to continue to be of growing interest to health people, both because of its focus on rapid information gathering and on community participation. In addition, as a training process, it facilitates the promotion of attitudes and skills which professionals need to do solid and productive community work. Its value in the health field will depend on whether the information it generates is seen to be of use to planners for purposes of both resource allocation and community participation. At worst, it has the potential to be a misused tool to collect poor information for supporting poor decisions and planning outcomes. At best it has the potential to give substance to the rhetoric of community participation by providing tools, techniques and information useful to planners and people to build a partnership for better health and health planning.

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Participatory rural appraisal: potential applications in family planning, health and nutrition programmes

Richard Heaver

• Introduction

The terms participatory rural appraisal (PRA) or participatory rural learning embrace a series of techniques, many of them recently developed in India, for using local people's knowledge and skills to learn about local conditions, identify local development problems and plan responses to them. This discussion paper first sets out the origins, advantages and drawbacks of PRA in general. Part II discusses specific potential applications in family planning, health and nutrition programmes, using as case examples the Indian family planning, maternal and child health and nutrition programmes. Part III suggests steps which could be taken to experiment with and institutionalise the approach, again using the example of India, if its potential seems worthwhile.

• PRA: origins, principles, advantages and drawbacks

Origins

PRA approaches have developed out of the Rapid Rural Appraisal (RRA) techniques which were first systematised in the late 1970s, and which had become academically respectable by the end of the 1980s. RRA techniques in turn developed out of a dissatisfaction with large scale questionnaire surveys which gave delayed and questionable results; and, on the other extreme, out of equal dissatisfaction with the unreliability of impressions gained during the brief field visits made by urban based professionals which came to be known as 'rural development tourism'.

RRA techniques include, among others, secondary data review; direct observation in field situations; taking part in rural activities; semi-structured interviewing; workshops and brainstorming; taking transects across rural areas through group walks; mapping and aerial photography; ranking and scoring (rather than quantifying with statistical significance); developing chronologies of local events; and making portraits or case studies of people or situations. As these and other techniques were systematised, it became apparent that the results they gave were not only faster and cheaper than previous methods, but often produced a greater range of information and greater accuracy.

Many of the RRA techniques were developed for agroecosystems analysis, and by the Universities of Chiang Mai and Khon Kaen in Thailand. But by the end of the 1980s, they had been applied in a wide range of sectors in more than 25 countries, and articles on RRA were being published in respectable journals. In the health and nutrition sectors, Rapid Assessment Procedures (RAP), a similar set of techniques developed by Scrimshaw and Hurtado, also gained rapid currency. RAP uses anthropological methods, including systematic recording in field notes, informal interviews and conversations, participant observation and focus groups (Scrimshaw and Hurtado, 1987). Within the World Bank, a form of rapid appraisal based on a combination of structured interviewing and participant observation and known as 'beneficiary assessment', was also developed during the 1980s. The approach is summarised in 'Listen To The People' (Salmen, 1987). By 1991, this methodology had been applied in several countries in the population, health and nutrition sectors.

Participatory rural appraisal grew out of a concern that RRA was essentially an 'extractive' approach. Outside researchers came to villages, learned from the people, left, analysed the data, and drew up development plans. PRA uses many of the same techniques as RRA, but in a participatory manner, so that local people identify their own problems and are involved in planning how to resolve them. PRA has been developing rapidly since 1988, and the most active research is going on in India and Nepal. It has mainly been applied so far in the natural resource development sectors, especially watershed development and social forestry, but applications are being made to health and nutrition. Three Indian NGOs, Aga Khan Rural Support Programme in Gujarat, and MYRADA and ActionAid in Bangalore, are the main pioneers in these sectors.

Principles of PRA

The following principles of PRA are quoted from a paper given by Robert Chambers at the Silver Jubilee Celebrations of the Nutrition Society of India (Chambers, 1990):

- learning rapidly and progressively, with flexible use of methods, improvisation, and iteration, not following a blue-printed programme but adapting in a learning process;
- offsetting the biases (spatial, project, person, seasonal, professional, diplomatic...) of rural development tourism, and not rushing but relaxing;
- learning from and with rural people, directly and face to face, seeking to understand their perceptions, priorities and needs;
- triangulating, meaning using more than one, and often three methods, sources, locations, positions in a distribution etc to cross-check and for a balanced perspective;
- optimizing, relating costs of learning to the useful truth of information, with trade-offs between quantity, relevance, accuracy and timeliness. The principles apply here of optimal ignorance - not trying to find out more than is needed; and of appropriate imprecision - not trying to measure what

does not need to be measured, or not measuring more accurately than is necessary for practical purposes; and,

- critical self-awareness and doubt, reflecting on what is being seen and not seen, who is being met and not met, what is being said and not said, embracing and learning from error, and consciously exercising judgement.

Advantages

PRA has three broad advantages in addition to the speed and cheapness which it shares with RRA. First, the information it provides tends to be highly accurate. This is partly because, as experience has shown, local people's knowledge of local conditions is often greater than had been supposed, as is their capacity to map, model, estimate, rank, diagram and plan. This is also because participatory approaches to describing local conditions and planning allow local people to discuss and cross-check each others' knowledge on the spot.

Second, plans drawn up in a participatory manner by local people are more likely to work than plans drawn up by outsiders. This is because they will automatically take account of and be adapted to local conditions, whether ecological, social, cultural, financial or political.

Third, and potentially most important of all, the participatory nature of the process is a development benefit in itself, in terms of empowering local people. At best, PRA can increase local people's understanding of their problems and opportunities; increase their control over development choices and plans; and initiate a process of community participation that can continue through programme implementation-either in terms of community management of local initiatives, or at least in terms of community monitoring of government schemes.

Potential drawbacks

The success of PRA depends upon the behaviour of the outsiders who come to villages and slums to initiate the process, and the quality of the rapport that the outsiders can establish. PRA requires not only a technical understanding of the techniques to be applied,

but also the capacity to listen, to stay in the background, to be critically self-aware, to allow local people to dominate discussion, to be taught rather than to teach. Learning such behaviour can mean significant and difficult reversals of engrained attitudes and approaches for development researchers used to traditional methods. Such reversals are still more difficult for government servants running local development programmes, whose field trips have traditionally been inspection tours in authoritarian style.

The major potential drawback with PRA therefore is whether the quality of the work can be maintained as its use spreads outside the NGOs who are pioneering it, and who have a comparative advantage in using it because they already have a strong rapport with their clients. In particular, the question is whether PRA can or should be institutionalised in the government bureaucracies responsible for major rural and slum development programmes. At the very least, it is clear that scaling up the use of PRA will be a challenging task, which should be approached slowly and carefully on an experimental basis.

- **Potential applications in the Indian family planning, health and nutrition programmes**

The Indian family planning and maternal and child health programme is known as the Family Welfare (FW) programme. The key field level worker is a Multi-Purpose Health Worker (MPHW), working out of a Health Sub-Centre, at the ratio of one to 5,000 population. The main Indian maternal and child nutrition programme is known as the Integrated Child Development Services (ICDS) Scheme. It provides nutrition education, growth monitoring and supplementary feeding through a network of Anganwadi Workers (AWs), working out of Anganwadi Centres (AWCs), at a ratio of about one per 1,000 population.

Both the Family Welfare and ICDS programmes have been criticised for their rigid design, and their failure to elicit community participation. With regard to the former, both schemes are centrally designed and funded, and a standard package of services is delivered in a standardised manner, with little regard to meeting the varying needs of different social

and demographic groups. With regard to the latter, both programmes have failed to mobilise communities to contribute resources in cash or kind, to help in service provision or health and nutrition education, or even to monitor service delivery. Given the nature of these problems, the principles and approaches of PRA are in principle ones which could help to tailor programmes to better meet local needs, and involve communities more.

The challenge, however, is to move from this general statement to a set of specific techniques which are useful to the programmes, and clear and simple enough to be applied on a routine basis in the field. Given the difficulties of training field staff to use these techniques sensitively, implementability is the key test to be applied. For this reason, it may make sense to divide the possible applications of PRA into three categories: (i) those which are simple enough to be applied on a routine basis in every village, with the local health or nutrition worker acting as facilitator; (ii) those which are more demanding, because they require more understanding or more sustained community involvement, and hence should be introduced only after successful experience with the first category; and (iii) those which require specialist outsider input, and hence which should be attempted on a small scale in sample villages rather than on a large scale by field workers as part of programme implementation.

The following specific applications are suggested as appropriate for systematic testing in the field in the context of the government programmes, rather than in NGO-run schemes. They are presented according to the three 'categories of complexity' proposed above. They should be critically reviewed from two perspectives: are they useful enough to be worth the time, money and energy needed to train and supervise workers/researchers in them? And can they work on a large scale in the real world of the Indian health and nutrition development bureaucracy?

Category one: for routine use in every village

Four distinct types of application are suggested here: group interviewing to get clients' perceptions of the local health and nutrition situation; village mapping to identify target

clients, non-users of services and local health care providers; individual and group interviews to get qualitative feedback on service performance; and verbal autopsies to establish what went wrong in the case of deaths from preventable/curable illness or malnutrition.

Clients' perceptions of the health/nutrition situation

Systematic conversational interviewing can be used to get clients' perceptions of the local health and nutrition situation. Providing this is structured so that all the main social groups in the village or slum are consulted, this can be useful in at least three ways:

- a. Perceptions of the importance of different local health problems. This is worth inquiring into, because local people's perceptions of what is important may differ significantly from health professionals' perceptions of what is important from an epidemiological point of view. For example, poor people may attach more importance to transient disease which prevents them from working and earning, than to leading causes of death which may be viewed with a degree of fatalism. Or, people may simply not know how serious a local problem actually is: the classic case in point is malnutrition, which parents often do not recognise in their children, and if recognised, is seldom seen as a major contributor to illness or death. Understanding such perceptions is important to health workers in at least two key ways. First, it can help them vary the standard package of health interventions to meet locally felt needs. While this is important in itself, it may also improve programme impact - it may make good sense to give priority to treating diseases of low epidemiological but high local importance, if this will increase the health worker's credibility in changing undesirable health behaviour that relate to 'more important' diseases. Second, it is essential for the design of health and nutrition education messages that are relevant to the local situation.
- b. Knowledge about seasonality. Local people will have detailed knowledge about

the importance of different diseases at different seasons; how disease interacts with seasonal peak labour demands; and how family food security varies seasonally, and interacts with both disease and labour peaks. This information is essential for varying services and education messages by season.

- c. Knowledge about trends. Local people will know about trends over time in the incidence of diseases and in food security for different social, income and occupational groups. This information will not be available from any other source, because sample surveys will not be valid for the local level, and service statistics do not distinguish between different groups in the village or slum.

Village or slum mapping

Experience in over 100 villages in different states of India has shown that local people can map, diagram or model their village or ward extremely accurately; it is clear that Indian villagers carry with them a much better mental map of their surroundings - physical and social - than do urban westerners. In general, a small village can be mapped in chalk or rangoli powders on the ground in about twenty minutes by two or three people. The experience is that two or three villagers, helped by others watching, can then very rapidly fill in the numbers, ages and sexes in each household (using sticks or stones of different sizes), together with caste and occupational groups (using colours or symbols). This is done with a high degree of accuracy, because of the cross-checking by on-lookers.

Such maps/censuses, which would with traditional techniques require an expensive and time-consuming house to house survey, could be used for at least three important purposes:

- a. Identifying clients for service delivery and education. For example, particular client groups might be 0-3 year old children for outreach visits under the ICDS scheme; pregnant women for ante-natal care; or women in their first years of marriage for education about birth spacing methods. Being able to identify clients spatially on a

map facilitates the planning of outreach visits;

- b. Targeting non-users of services. Mothers preparing a village map will know who are the non-users of services - something which is impossible to find out from records kept at Health Centres or Anganwadis, which naturally focus on service users. Knowing, for example, which children in the Anganwadi area have not been weighed, or who are malnourished but not coming for supplementary feeding, is of critical importance; and,
- c. Targeting high risk individuals and groups. Village mapping can be combined with wealth ranking to identify the poorest people, most prone to illness, malnutrition and premature deaths. Experience with PRA has shown that local people can quickly and accurately rank the wealth of those in their village or slum, and identify the neediest. They can also identify families with special problems which may put them at risk - for example, the single parent family, or the woman with an alcoholic husband. Again, knowing the location of high risk clients facilitates the planning of special service delivery or educational efforts, or their referral for participation in credit or income generation programmes run by other departments.

Qualitative feedback on programme performance

One weakness of both the FW and ICDS programmes is that monitoring information is mainly quantitative, in the form of service statistics; but these do not give a picture of service quality or client satisfaction. In both programmes, however, service quality is recognised to be low; clients are often unaware of the full range of services to which they are entitled; and, even if aware, service utilisation is low. In these circumstances, using conversational interviewing to get regular qualitative feedback from clients on their awareness of and satisfaction with services would provide dual benefits. It would provide FW and ICDS programme managers with a clients-eye view of their programmes; and it

would help to increase the accountability of local service providers to their clients.

Verbal autopsies

The birth and death registration system in India works unevenly; but even when it works, it is only the proximate, medical cause of death which is reported. More important, from the standpoint of preventing future deaths, is to know what was the underlying cause of death. Was it that the dangerous nature of the disease was not recognised by the parents? Or was it recognised by the parents, but the child was not referred? Or was the child referred but not treated properly? Was the child anyway more likely to succumb because it was malnourished, or unprotected by Vitamin A prophylaxis? A participatory discussion - or verbal autopsy - of the underlying causes of each death in the village, involving the family of the deceased, the local health worker and her supervisor, and one or more village leaders, could have three important benefits:

- a. the local health worker and her supervisor would understand what had gone wrong, and be in a position to take corrective measures to prevent a recurrence;
- b. supervisors could compare notes on deaths at monthly meetings, and wherever patterns of inappropriate care emerged repeatedly, training programmes for local workers at the local level could be arranged to correct the particular problem; and,
- c. local people and local leaders would gain a better understanding of local health problems and how the health system should respond, and would be in a more effective position to monitor service performance, and assist in health and nutrition education of local families.

Category two: using PRA for programme monitoring and management

The applications of PRA described above are essentially one-off or intermittent interventions, whether for reorienting the package of primary care services, checking on client satisfaction, or investigating a death. But

wherever these applications of PRA were established and working well, consideration could be given to a more advanced use of PRA in which these techniques would be applied on a continuous basis to enable communities to monitor and manage the performance of health services in their own villages. While this would be an ideal for every village, because this would help to empower communities, it might be difficult to sustain the degree of community participation required, at least in the Indian context, because:

- a. clients, especially poor clients, may not be willing to make the time available on a continuing basis for this;
- b. village leaders or particular caste groups in the village may not be willing to encourage greater control over local services by poorer groups or other castes; and,
- c. health workers may not wish to sustain the process either for the bad reason that it increases pressure on them to perform, or for the good reason that they fear polarisation of the local community as in b) above.

For these reasons, it would be preferable initially to limit continuous PRA to communities which had already worked successfully with 'category one' approaches, and through them strengthened cooperation between community and health service. Continuous PRA would be useful for two main purposes: continuously adjusting local health care priorities, and monitoring and managing service use and service performance.

Adjusting local health care priorities

A combination of continuing verbal autopsies of all village deaths, plus involvement of local people in the growth monitoring of children would give clients greater insight into changing local disease patterns and hence the need for changing health care priorities (growth monitoring is particularly valuable in this regard not only for the insights it gives into under-nutrition, but also into the links between malnutrition, dehydration and measles). This could help local communities to set community-specific, time-bound, evolving

health improvement goals. For example, a tribal village in Orissa where malaria is a major cause of child mortality and lost adult work-days might give malaria priority in year one - an intervention with visible results whose success might encourage the community to tackle a less obviously visible malnutrition problem thereafter. On the other hand, verbal autopsies might lead a village in Uttar Pradesh to concentrate on reducing neo-natal tetanus first and malaria later, and villages in Tamil Nadu, where tetanus has all but been eliminated, to concentrate on reducing maternal mortality as a health care priority.

Monitoring service performance

While service statistics are necessary for reporting performance up the managerial line and for recording trends over time, they are not easily accessible to clients, especially poor, illiterate clients. For this reason, it would be useful to experiment with the maintenance of permanent, continuously up-dated village maps showing local health care performance. At a glance, it would be possible for the local health worker, her clients and her visiting supervisor to see the type and location of families not using services or with persistent problems. This could have a powerful impact in terms of concentrating care where it is needed; of generating cooperative discussion on how to help particular cases; and of increasing the accountability of health workers both upwards and downwards.

Category three: using PRA to facilitate research and development

In a small way, each application of PRA in the above categories is an exercise in R&D: research into what people think and what is happening at the village level, and development of more relevant and effective local services. But PRA can also be used in a more formal way to contribute to solving programme-wide, rather than local design or management problems. Because such research may lead to changes in national or regional programme approaches and the content of national training curricula, a very high premium attaches to getting the findings right, and therefore to ensuring that these PRA efforts are carried out with appropriate specialist skills. This kind of PRA therefore needs to be approached in a very intense way,

with highly trained staff, in a small number of representative field locations.

One example of such an application in India might be to gain clients' input into why obstetric emergency cases are referred too late. What are the social and financial disincentives to referral? What can the health system do to counter them? Another might be to explore the factors behind the persistence of small numbers of severely malnourished children even in areas where ICDS is rated successful. To what degree are these cases due to health complications which could be tackled by better case management, and to what degree due to social factors which may be beyond the capacity of a nutrition programme to modify? While each health worker will come across such problems, and will do her best to deal with them with her resources, these are problems so complex that they require a national or regional level R&D effort which puts together local people and specialist operations researchers.

• Institutionalising the process

FW and ICDS field workers in India number in the hundreds of thousands, so there is no question of sending these workers away for special training in PRA by the NGOs who have pioneered the approach. And in any case, the best way to train workers in PRA is likely to be in their own environment, working with their local health and nutrition team, and their local people. To make it financially feasible, PRA training must be integrated with the normal in-service training operations of government; to make it technically feasible, these must be carried out at the local level.

Fortunately, in the case of both FW and ICDS programmes, in-service training is currently being reoriented and decentralised, so that a suitable institutional framework will soon be in place in many states. For FW, decentralised, block level training is being developed in eight northern states under Population Projects 6 and 7, and will be developed nation-wide under the proposed Child Survival and Safe Motherhood project. For ICDS, decentralised training is being developed under the First and Second ICDS projects in several states.

Given this emerging framework, the next step is to train the trainers who will train the workers.

This means training the state and district level training teams which are being set up for both programmes; these in turn would be responsible for training FW and ICDS supervisors and workers down the line, at the block level and below. The unknowns here are how well the training team staff will respond to the ideas of PRA, and whether the orientation and quality of PRA can be maintained as these trainers in turn train workers down the line. Because of these uncertainties, it is suggested that this be experimented with initially in one or two districts within the field areas of the NGOs which have been developing PRA in India.

The approach recommended is that the pioneering NGOs be contracted to train one District Training Team each; to observe how these teams handle the process of training workers down the line; to document the strengths and weaknesses of the training; to document the subsequent usefulness or otherwise of PRA in the area; and to make recommendations for improvements to both the training process and the PRA approach itself in the context of the government health system.

Assuming the approach was evaluated as useful and the training feasible on this scale of activity, the main challenge would be to replicate this on a wider and eventually national scale. One lesson on how to do this may perhaps be learned from UNICEF's experience with participatory mapping in urban slum areas for water and sanitation schemes. Here, government staff has been trained in how to help slum-dwellers develop water and sanitation maps of their areas, and this has been successful on a large scale. However, the tendency has then been for the government staff to take these maps away and itself draw up water and sanitation implementation plans for the areas, thus undermining the concept of the participatory approach.

Given the natural tendency of government to revert toward extractive data-gathering or paternalistic implementation, it seems essential to maintain a central role for NGOs, which are more oriented toward community participation, in the expansion process. Therefore, the speed of expansion should be governed by the rate at which suitable NGO support for the process can be made available. It is suggested that in Phase Two of the expansion the pioneering NGOs

should pick those NGOs in other states which they feel have most potential to foster the PRA process, and train them in the approach in the initial pilot districts. During Phase Two, these satellite NGOs would begin training of Training Teams in their own states, with a watching brief being kept on their activity by the pioneering NGOs.

In a third phase of expansion, the best of the satellite NGOs would be picked to train other NGOs to help support the adoption of the approach in more districts. Once all training teams in a state had been trained, the NGO role would become a quality monitoring one, with each NGO being allocated a number of districts to monitor and support.

If external assistance was required for either pilot or expansion phases, this could be readily made available either from the IDA-assisted FW and ICDS projects; or from UNICEF. Another possible source of assistance might be CARE in the case of the ICDS programme. In addition, UNICEF and CARE, with their network of field staff in the states, might play a useful role in assisting the implementation process in the field.

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NOTE

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3

Qualitative methods for assessing the acceptability of immunisation in Somalia

Anne k La Fond

• Introduction

In 1989, Save the Children Fund and the Ministry of Health in Somalia conducted a study to identify the factors influencing acceptance of immunisation. Focus group discussions, key informant interviews and observation were employed to assess the following:

- Knowledge of immunisation;
- Attitudes towards characteristics of immunisation: safety, effectiveness, accessibility and cost;
- Perceptions of the EPI (Expanded Programme on Immunisation) diseases: susceptibility, seriousness and cause, treatment and prevention;
- Perceptions of prevention;
- Attitudes toward methods of immunisation promotion;
- Sources of advice on health matters; and,
- Attitudes toward the health services and other health providers.

The research team consisted of the research co-ordinator (Save the Children) and two Somali researchers. During the fieldwork phase, the team lived with families in two communities for a total of 12 weeks.

Methods and respondents

Focus groups: Mothers aged 15-30
Mothers aged 31-45
Mothers over 45
Mother and Child Health (MCH) staff
Traditional Birth Attendants (TBAs)

Key informant interviews were held with:

- people with official connection to immunisation activities - party and government officials, health staff, community health workers, TBAs; and,
- community members normally consulted for health advice - midwives, sheiks, traditional healers, older women.

Observations were made in MCH clinics and immunisation sites of traditional healers' working sessions.

Summary of main findings

- Perceptions of the EPI diseases influenced mothers' attitudes toward immunisation. Where the disease was believed to be serious, a child's susceptibility high and the cause unrelated to spiritual phenomena (measles and whooping cough), motivation for seeking out immunisation was greater. Favourable attitudes toward measles and whooping cough immunisation were enhanced through mothers experiencing a visible reduction of these diseases in the community following immunisation campaigns.

Alternatively, mothers generally felt immunisation could not be effective against diseases which were believed to be caused by spiritual phenomena (polio and neonatal tetanus) and disease where reduction was not evident.

- The messages used to promote immunisation were also found to hinder acceptance. Many of these messages did not reflect mothers' perceptions of certain

diseases and failed to inform, educate or motivate. For example, mothers distinguished between neonatal tetanus and tetanus as diseases with different causes and names. Health messages failed to make the connection between tetanus toxoid immunisation and prevention of neonatal tetanus because health messages employed an incorrect term for neonatal tetanus.

Messages about polio immunisation were also misunderstood due to poor understanding of community perceptions of polio. The name given to polio, *dabeyl*, means wind or spirit and relates to the perceived cause of the disease. In addition to polio, the term *dabeyl* is used to describe a number of conditions of like origin such as epilepsy, miscarriage and madness. Using the term *dabeyl* for immunisation education confused mothers as to the purpose of polio immunisation. Hence, few mothers believed that immunisation could prevent polio.

- In relation to perceived safety of immunisation, mothers feared side effects in children and spread rumours that tetanus immunisation would cause infertility. These negative attitudes were exacerbated by the methods of promotion employed in the programme. Campaigns which emphasised rapid increases in coverage through authoritarian measures incited resentment and fear. Information and health education suffered due to lack of time spent informing and involving beneficiaries. The use of Party cadres to ensure compliance with the programme also linked immunisation with political goals rather than community needs.
- Mothers reported that they normally seek health advice from relatives, friends and traditional and religious healers. Neither government officials nor the MCH were trusted as a source of health advice, therefore immunisation messages were ineffective.

Lack of trust in health services resulted from the poor quality of health care available. Immunisation was often the only service offered in many health centres. Lack of perceived benefit from attending

the MCH coupled with constraints on mothers' time hindered immunisation completion.

• Lessons learned

For health planning

Throughout the implementation of the EPI, no effort was made to assess community needs or attitudes toward immunization. This study provided evidence of the need for this type of information and the importance of involving beneficiaries in programme planning and implementation. From the community's standpoint, they had participated in the immunization programme as the 'object' rather than the subject of development efforts. According to beneficiaries, this approach proved highly ineffective for two reasons:

- As in many countries, immunisation was introduced in Somalia through mass campaigns bent on raising coverage quickly. This approach continued beyond the campaigns through biannual immunisation days and a birth registration campaign and always involved intense promotion and sometimes forced compliance.

Throughout the period of rapid expansion of immunisation services, planners neglected to involve and educate the community. Health messages were often misunderstood because community perceptions of immunisation and disease were not considered in design. Trusted health advisors were rarely involved in spreading information about immunisation or designing the approach to the community. Rather, health messages were delivered through Party officials or MCH staff, who, because of their authoritarian approach or the poor quality of their health services, were not respected or believed and failed to inspire confidence in the programme.

- At the time of introduction of immunisation, Somalia's basic health infrastructure was near collapse. Nevertheless, the EPI focused exclusively on reaching immunisation coverage targets and paid little attention to strengthening the

faltering MCH services. Respondents revealed that motivation for regular attendance at the MCH was indeed dependent on the presence of other health service. Delivering immunisation alone would not ensure sustained demand. Mothers perceived that the immunization programme aimed to benefit the health and government staff, who received payments for increasing coverage.

For further research

- In the Somali context, many of the reasons for poor immunization acceptance were complex and politically sensitive. Qualitative methods proved very effective for identifying and explaining these factors of acceptance. Had the research not employed informal and open methods of communication, it is unlikely that certain attitudes would have been reported. Nor would the research have revealed the importance of certain factors of acceptance such as disease perceptions and the authoritarian measures used to raise coverage.
- Mothers in focus group discussion were divided into three groups which reflected their level of experience and authority in relation to child-raising. Young mothers (aged 15-30) with fewer than 4 children were grouped together, as were mothers (aged 31-45) with 4 or more children. A third type of group consisted of 'grandmothers' or women who had completed their child-bearing and served as experienced and often powerful advisors on child health issues. These divisions ensured that women were among their peers in terms of levels of experience and authority and responded freely in discussions.
- Gathering information in Somalia was a sensitive activity. Due to the political culture of the previous regime, officials were often suspicious of 'surveys' especially those which involved foreigners. The qualitative approach, which allowed time to live in a community and establish relationships with officials as well as community members, greatly facilitated data gathering.
- Because the study was partly exploratory, the flexibility of the approach allowed for identification of new research topics and questions and revision of inappropriate concepts.
- Use of three methods - focus groups, key informant interviews and observation - allowed for cross-checking and validation of themes throughout the data gathering and analysis.
- The quality of this research was largely dependent on the strength of the researchers we employed. However, this does not preclude involving relatively inexperienced people. Neither of the two researchers in the programme was familiar with qualitative methods prior to the research. While many hours were spent sensitizing researchers to a qualitative approach and training them in data gathering methods, their interest in the topic ensured successful implementation.
- In addition to 'rapidly assessing' factors of immunization acceptance, this programme also aimed to develop a capacity for conducting qualitative research within the Ministry of Health (MOH) in Somalia. Hence, it was necessary to involve researchers in every stage of development and execution of the research. This participatory/learning approach was welcomed by the MOH and ensured necessary support from Ministry authorities. However, the 'in-house training aspects of the programme' greatly extended the time frame of the study.

• Additional comments

The focus group meetings with the mothers were conducted during the afternoons. We had 2-3 hour discussions with them on mats over a flask of hot tea.

We were able to piece together an historical picture of how communities had experienced EPI over the past 67 years. For instance we learnt that women could see that measles had been cut dramatically by the EPI campaign. But women made no connection between neo-natal tetanus and EPI. "Why should it help?" they asked. Neo-natal tetanus is known in Somali as

“seven days of stalking”, essentially a spiritual ailment only to be protected by an amulet from a sheik. The health education they had received had only taught them that EPI protected against tetanus, not against neo-natal tetanus. Likewise polio, known as the *wind of the djinn*, could, they said, only be prevented by a sheik. EPI could not help them.

Many EPI messages were not making sense, because the wrong name was being used for diseases or women believed that children do not suffer from the disease. TB, for instance, according to these women, was not a child's illness.

The Government had already run several mass campaigns, such as literacy, Arabic language teaching, anti-tribalism and so on. So this was seen as just another government self-promotion drive. They dubbed it the year of forced immunisation, where they had to attend.

The first round coverage was quite high. But during the second and third rounds, women fled to the bush, fearing that their children were going to die. They just did not believe the health messages because of the forced approach to the issue.

When we talked with the women about health services, they said, “*Why don't you talk to the people to whom we go for health care?*” But when we thought this was the MCH, the women replied “*No! The MCH offers nothing but EPI*”.

With regard to future EPI health education, the women talked about the measles vaccine as if it were like putting a house round their child. We thought that EPI in general might in future be presented as a house of protection. It might also be presented positively as an amulet, in co-operation with influential sheiks who are widely regarded in Somali society.

In conclusion, the women whom we had talked to said that they had learnt a lot from our discussions. We were at first worried when they said this, because we had been trying to learn from them and not impose our views on the discussion. But they then explained that they had not been taught, but that they had learnt a lot for themselves from the discussion experience. Next, this approach is not familiar

to health staff, who treats patients as objects rather than subjects. We are missing out here and need to use these methods in regular working practice. Thirdly, there is often a complete failure to include fathers and other men in these maternal health programmes. Men should be included in such matters. Finally, it is essential to make the first round of an EPI campaign a very positive experience, to encourage women to return for the further rounds.

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NOTE

The full report of this work, *A Study of Immunisation Acceptability in Somalia* 1990, is available from Anne La Fond at the above address.

4

Unemployment and health: the development of the use of PRA in identified communities in Staveley, North Derbyshire

Teresa Cresswell

• Aims

This study aimed to meet with unemployed workers in the Staveley area of North Derbyshire. Staveley is an urban area, where unemployment rates are 40% higher than the National UK Average. The study aimed to:

- identify personal risk factors for cardiovascular diseases, and enable people to address those factors to reduce the risk;
- enable unemployed workers to discuss health difficulties specific to unemployment and low income; and,
- promote a greater understanding of the specific health needs of unemployed people and people on a low income.

It was clear that health services were not meeting the needs of unemployed workers. Thus the study was geared towards trying to match needs and services more effectively.

Our greatest resource is human beings. But we do not work with people, we work on people. Why do people not use the services which are available? What do they really want? We provide structures of health services, but take away the ability to communicate.

• Methodology

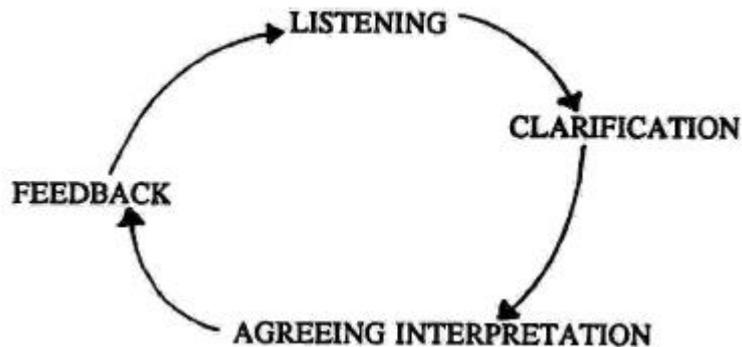
My approach was to break the community down into 'manageable patches'. I asked key people to help me identify the different sections and needs of the community. This was done on the basis of deprivation levels, such as levels of

unemployment; single parenthood; uptake of health services; car ownership; housing; child abuse/family difficulties. These were a combination of criteria based on deprivation levels and on the community's own perceptions.

Key people whom I identified included professionals in education, health, social services (including home helps), police (who had a very narrow perspective), clergy (who were excellent), and the housing sector. Key people from the community also were included, such as elected councillors (excellent), shopkeepers (again very good, because they knew who was buying what kind of food), other people of influence and community leaders. Finally the community themselves were divided into the elderly, middle aged, parents, children, group members, disabled, males, females. This was in recognition of the different needs of all these different groups.

When I first met with managers in the health authority, education, social services and so on, they wanted me to ask a long list of questions. They wanted immunisation rates, statistical data, disposable incomes and so on. I had to persuade them that statistics were irrelevant to the study and that disposable income could not be found out in any case, because of the black economy in the area. I managed to focus the study onto questions based on the differences between perceptions of the community and those of the professionals about the health problems of the area.

In each interview, I spent one hour approximately on the following:



I also used video, although it does make people a bit nervous because they feel they have to put on their best frocks and look smart. But it is a very good medium for taking back to the board room. I have also used tape recordings, although those can also be a bit difficult. Photos are good at prompting discussion. Maps too have been useful, to help people point out problems around the estate.

Those involved in the study also had an opportunity to test their own health by filling in a health profile questionnaire. This covered areas such as personal health, stress symptoms and a diet check. They could also have their blood pressure checked.

- **Different perceptions of the problems**

Whilst professional perceptions of the problems were based on overall disadvantage, community perceptions were based on splits between different factions of the community. One example of such splits concerns housing. Housing in the area was originally built for coal-board employees. However there have been mass job losses in the neighbourhood. Thus the estates now largely house unemployed people. Whilst previously, when everyone was at work in the mines, there was work-mate peer group pressure to maintain the general upkeep and behaviour on the estate, nowadays all that has changed.

Nowadays the borough council is in charge of the estate. The new people who have moved onto the estate are unemployed and are

therefore looked down on by others. The elderly dwellers put all the blame of the present problems of the estate on these newcomers. They say they are unmarried, have wild children who create havoc and that they have brought the estate a bad name.

Thus whilst the professionals go on about general deprivation in the community, causing stress and so on, the estate dwellers themselves point out the immediate practical problems which they face, such as no phone boxes, inadequate street lighting and no community centre. When I asked "*If you could, how would you...?*" some very good answers came up.

- **Different perceptions of solutions**

Having established the difference between perceptions of the problems, I went on to find out about different perceptions of possible solutions. I began by asking professionals how they think they might improve upon their present working methods. The curious thing was that, while the professionals are really committed to working with the community, they are never asked how they might change to improve this. As far as the community were concerned, they said they did not know the professionals at all. They saw them as being intrusive, unhelpful watchdogs rather than as supporters.

Again it became clear that to learn about people's problems, you have to talk to them themselves. For instance even amongst the community themselves, differences arose

between general community beliefs and the thoughts of those about whom the belief was held.

Unemployed single parents, for instance, whose families had broken up, were identified by community members as people with special problems. However when I spoke with them, they explained: *"Since the community see us as a problem, that is how we act. Yet, our needs for resources, such as child care, really don't need much input to solve"*.

Similarly children had a different view of things. Whilst the community at large declared that *"kids are a problem"*, I identified 200 children through school. Their parents said they needed youth clubs. But the children themselves said *"we want people to talk to us, such as counsellors and young youth leaders. We want structured activities, with different age groups, to stop bullying and pressure from the older ones"*. They knew quite clearly what they wanted, but no one had ever asked them.

• The interview experience

The community were really surprised by the study. They said they had never been asked anything before. At first, they said they did not know anything, but then a real wealth of information began to flow out of them. A real sense of empowerment emerged out of the process. The children particularly were glad that they had been included.

• Validity and follow-up

The next question is the extent to which the authorities were prepared to believe the information which I produced and to act on it. I checked all the information which I was told by informants by repeating it back to them and asking them to check and change it if they wanted to. In that sense, therefore, I have worked as a catalyst for their ideas: they have done the thinking. I feel pretty confident that the councillors will act on the information collected. Their initial reactions have been very positive and big new resources are not necessary to meet many of the needs identified.

• Conclusions of the study

'Good Health' in any community group is difficult to achieve, but perhaps more so in community groups that are disadvantaged through unemployment and poverty. This study illustrated the complex interaction between unemployment, poverty, family influence, age, housing, and the many other social factors which considerably affect and restrict an individual's ability to make a 'health choice'.

The opportunity to utilise the health check was taken advantage of, which in part dispelled the myth that unemployed people were not interested in their health. The response of the participants indicated that they valued the time given to talk, and the individual attention. The blood pressure check was seen as something constructive to work from. The extended use of the health profile formed the basis for the easy exchange of information, which was productive, and enabled people to identify with the many complex social, emotional and financial problems that affected their health. The participants also valued the opportunity to return for the re-checking of blood pressure, health information or counselling.

Men were more receptive to asking and learning about health issues than previously thought; more importantly, they were prepared to make health changes based on the information given.

The level of health knowledge was generally poor, as it is with most other community groups. People who had diagnosed illnesses appeared to have little health knowledge about their specific condition. This was not a reflection of the individual's ability to absorb the information given, but it appeared to be due to the information not always having been given in a form which they could readily understand.

The high number of referrals to health and other agencies demonstrated that there were many health associated problems that required specific help. It also identified the general lack of awareness of resources, existing services, and the benefit system.

Unemployment did put pressure on families; many families in the study were estranged and

divorced. Tension in the home was known to cause problems for the children, both emotionally and physically through impoverishment. Clearly the parents interviewed did care about the effects poverty had on their children, but felt unable to combat these effects. The unemployed people interviewed were very sensitive about their position. People usually became unemployed because of factors beyond their control. It is the unemployed status - more specifically, the way status provoked discrimination - which appeared to add to the health problems. I found it important to disregard the 'unemployed status' and concentrate on the individual knowledge and skills that people had. These were from a wide range of backgrounds, and all had something to contribute during the interviews. It is also very important to acknowledge that unemployed people are not a separate community group. They are the community, and experience the same health problems as other members of the community. But they may have additional health problems because of unemployment and associated poverty.

available from Teresa at the above address.)

The study identified that there is a need to improve the health and associated care for individuals and families that are disadvantaged through unemployment. It showed that people were willing and able to make effective use of such a facility. It also highlighted the need for an informed, integrated, inter-agency approach with the involvement of unemployed people in order to be able to respond effectively to the problems of unemployment. There clearly is a need for initiatives to take place which combat the health effects of unemployment and poverty. Initially this could be best achieved through improved professional training and joint work using the skills and expertise of unemployed people.

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NOTE

The article produced here is compiled from reports by Teresa Cresswell and additional comments made by her at the IDS meeting, November 1991. Full reports of the project are

5

Community-based information systems

Francesca Moneti

• Introduction

During the 1980s, the government of Italy provided UNICEF very substantial support for a number of global programmes in the areas of health and nutrition, namely the Extended Programme of Immunization, the Essential Drugs Programme and the Joint WHO/UNICEF Nutrition Support Programme. As the programmes were meant to provide the greatest benefit to the countries in greatest need, the majority of resources were directed to countries in sub-Saharan Africa.

Perhaps the most important lesson that emerged from the implementation of these programmes is that achievement of health and nutrition goals can only be attained by strengthening the capacity of the population to address their health situation. It also requires effective decentralisation of the services, with greater participation of the population. This process must include both the retention of resources (organisational, human and financial) at peripheral level and an increased capacity, at that level, to take decisions on the allocation of the resources in line with the priority needs of women and children. The process of decentralization thus goes hand in hand with the push for greater democratization which is growing in strength, particularly in Africa.

• Background

The Joint WHO/UNICEF Nutrition Support Programme (JNSP) played a key role in bringing about a greater consensus on what constitutes a viable approach to address the problem of malnutrition. The approach, which provides the basis of the nutrition strategy now promoted by UNICEF, is based on the recognition that significant human and economic resources can be better focused on

the needs of women and children by increasing people's awareness and understanding of their health and nutrition situation, and by strengthening their capacity to take action.

The major methodological lessons emerging from the JNSP experience, outlined during the course of the JNSP evaluation done under the leadership of the Istituto Superiore di Sanita' in Rome, were as follows:

- The various JNSP programmes were originally quite different in their approach and strategy even though they shared similar overall objectives. Over the course of the life of the programmes, the differences have decreased and there is an emerging JNSP approach which is community-based, multisectoral and uses nutrition as a focus. **It emphasizes the need to create awareness about the nutrition situation and to empower the community to handle their own health and nutrition problems.**
- Experience has shown the usefulness and need to generate nutrition data. **The regular collection of information regarding the nutritional status of children under five years of age has shown to be a powerful mobilization tool.** This is because the information is obtained through a system of community-based growth monitoring, where the data is analysed by the community before being sent to higher levels. The use of nutrition data also seems to have made intersectoral coordination more achievable and convergence more possible.

The community-based methodology is applicable to all development activities in so far as it aims at increasing people's awareness of

their situation, helping them to deepen the analysis both of their problems and of the available resources so as to take appropriate action.

At the final meeting of the JNSP Steering Committee, held on 7 February 1990, it was agreed that a portion of the uncommitted JNSP Global funds would be used by UNICEF to further develop the methodology and accelerate its adoption '*beyond nutrition*'. Due to a series of bureaucratic obstacles, there has been a delay in the development of the proposal for the utilisation of these resources.

The delay has enabled UNICEF to better evaluate how to situate the activities. Specifically, it has enabled it to place the resources strategically, taking into account past experience as well as the challenge of the WHO/UNICEF Goals of the 1990s endorsed by Heads of State at the World Summit for Children in September 1990.

Since the resources available for the development of community-based information systems are limited, they must be used as 'seed' funds to influence other programme activities supported by UNICEF that are endowed with greater resources. The Bamako Initiative has emerged as the most promising approach for achieving the health goals of the 1990s, exactly because of its emphasis on strengthening management capacity with more direct control of resources by the population. It has therefore been deemed appropriate to link the development of community-based information system to the development and implementation of Bamako Initiative programmes covering all of sub-Saharan Africa. Presently, a group of 12 countries is well into full scale implementation of the Initiative and it is expected that, by the end of 1992, an additional dozen will have begun implementation.

• Programme goal

Within the context of Bamako Initiative programmes already established or being developed, strengthen the capacity of communities and government staff at district and peripheral levels to manage the health and nutrition situation and more effectively contribute to decreases in morbidity and mortality of women and children.

• Programme objectives

The general objectives of the programme are:

- identify and strengthen existing community-based systems which generate and spread information on the health and nutrition of the population so as to enable households and communities to better quantify their health and nutrition problems;
- increase people's understanding of the immediate and underlying causes of death and disease by strengthening their capacity to analyse the information on the health and nutrition status, relating it to how resources are presently used, both at household level and collectively; and,
- increase the quantity and effectiveness of resources being used to promote the health and nutrition of women and children.

In order to achieve these objectives, it will be necessary to:

- accelerate the establishment and functioning of development committees at village or neighbourhood level;
- ensure that, through the community representatives serving on health centre committees, information on the health and nutrition situation of villages is shared with health centre staff so that appropriate decisions can be made about the allocation of resources available at the health centre; and,
- similarly, ensure an effective flow of information to district level to enable a better allocation of resources at that level.

• The Bamako initiative and development of community-based information systems

The challenge presented by the goals of the 1990s is to capitalize on the substantial progress made during the last decade in the pursuit of Universal Child Immunization and shift from specific coverage goals to the overarching impact goals such as the decrease in infant,

child and maternal mortality. Achievement of these goals is deemed impossible without a strengthening and extension of the health care delivery system. This is the main objective of the Bamako Initiative. Adopted by the African Ministers of Health in 1987, it has the following main elements:

- community participation, with a view to fostering self-reliance;
- strengthening management systems at community and district levels with a view to making them more supportive of each other;
- constant availability, rational prescription and use of good quality essential drugs; and,
- community financing.

Emphasising MCH, the Initiative integrates a wide range of individual health interventions such as immunisation, CDD, pre- and post-natal care, the prevention and control of malaria, ARI and AIDS. What characterises the Bamako Initiative is that the revival and strengthening of these basic health services is subject to people's greater participation and control. Local ownership, with finances that are generated by the health system being maintained under community management, has shown to be effective in making services more appropriate to local conditions.

Community-based management of resources requires information with respect to the health and nutrition situation and with respect to the present availability and utilization of resources. The development of community-based information systems, when linked to the direct control of resources, will therefore be of crucial importance in increasing people's ability to make decisions aimed at improving their health and nutrition situation. It will also enable communities to monitor the progress being made locally in the achievement of health and nutrition goals.

In countries that have begun to implement the Bamako Initiative, a central element of the effort to strengthen the peripheral health delivery system has been the greater direct participation of the population in the decisions relating to the use of resources generated by the health facilities. Concretely, this has meant supporting the establishment of health centre

committees composed of health staff and community representatives. While the exact responsibilities of the committees vary from country to country, their role generally includes:

- participation in, and oversight of, the accounting of resources (most specifically the proceeds from the sale of services and drugs);
- decisions about the allocation of resources generated locally;
- decisions to ensure access to services, including criteria for exemptions, reduced payments or credit arrangements; and,
- representation in the health management process at district level, through participation in district health committees.

Community representation in health centre committees is a necessary but insufficient condition for ensuring that the resources available at health centre level are used for the priority health problems of the population. In order to effectively carry out their role, the committees need to have specific information about the health situation of the population falling within the catchment area of the centre. Such information is necessary at the outset to determine the priority health needs of the population, to agree on specific targets and, based on these, to take decisions regarding the allocation of the resources available at the health centre. Subsequently, information on the health situation is necessary in order to monitor and evaluate the effectiveness of the allocation of resources.

The central issue here is that of the **accountability of the health system**, not only in terms of financial management but in terms of its ability to fulfil its mandate of serving the health needs of the population. In order to facilitate accountability, specific targets relating to the health of the population need to be established and regularly monitored. For these to be set, and to enable communities to monitor the progress being made toward their achievement, there must be a simple system which provides key information about the health status of the population. The more this information is public and shared widely, the greater the potential for increasing the accountability of the health system.

There is another, perhaps more fundamental reason why the information should be generated, analysed and used at village or neighbourhood level. The highest proportion of resources to promote the well-being of women and children come from the household and the community level. These include not only financial resources, but also people's time, knowledge, land and infrastructure. Greater consciousness at local level of the health and nutrition situation and of the resources available to address the problems can serve as an important stimulus for development activities at local level.

Thus, simple data on, for example, child births, deaths and nutritional status, when collected and analysed regularly at the level of the community, can be a powerful tool for decision-making. In addition, information on women's health, such as the outcome of pregnancies, should be included in order to focus more attention on the situation of women. The decisions taken at local level can relate to specific actions to be undertaken directly by households or collectively. Examples include organisation of feeding posts to ensure that young children receive at least three meals per day or lightening of women's workload during the last months of pregnancy. At household level, the increased awareness and understanding can lead to decisions on child spacing. Other actions, such as increasing the number of children immunized, need to be undertaken with the collaboration of the health system.

In this context, the establishment and functioning of a community-based information system can help to strengthen the role of the community representatives in health centre committees. If the targets set locally are shared with the health centres through the community representatives, the resources at the health centre can be more effectively mobilised toward the achievement of the targets. Another important implication is that an element of accountability is also introduced with regard to the individuals serving on health centre committees; they will be the direct linkage between the health system and the population and will be responsible for explaining how

resources were used by the peripheral health system and why.

To facilitate the collection, analysis and use of health and nutrition information both at community and at health centre levels, particular attention must be placed on the inclusion of women in health centre committees since, typically, they are most knowledgeable and directly responsible for the health and nutrition of the family.

• **Strategy**

To promote the development of community-based information systems within the programmes being supported by UNICEF, activities are carried out at two levels:

- A number of countries will be given direct support for the development of health and nutrition information systems that are community-based. This will be done in the context of the Bamako Initiative programmes. In some cases, the inputs will only consist of technical support, in others, they may be coupled with some financial support. The countries to be selected will include some where the Bamako Initiative is already well established and some where it is being developed.
- At Headquarters level, work will be undertaken directly with the Bamako Initiative Management Unit (BIMU), to ensure that community-based information systems are part of the Bamako Initiative programmes being developed at country level. The experience gained through the focused activities in a few countries will help to refine the overall programme development. This type of direct collaboration has already been effectively established between BIMU and the Essential Drugs Programme, with the Advised, Essential Drugs, working as part of the 'extended' BIMU team and having direct responsibility for backstopping Bamako Initiative programmes in countries that are also receiving support through the EDP.

- **Additional comments**

The Bamako initiative

UNICEF views the Bamako Initiative as a means of empowerment for villages.

Information collection plays a crucial role in the activity of health centres.

Initially those health committees involved were very worried about having enough money on hand to buy their drugs. But once they could see that they did have enough money coming back in through charges, they then started asking what to do with the extra money. Some committees hoarded it, others thought about how to work at community level. There is a triangular relationship between the utilisation of the centre, which drugs are bought and sold and the income/expenditure levels of the centre. The question was how to encourage these committees to move on from concentrating on the financial aspects of the centre to a consideration of the health aspects of the community. In Guinea, for instance, there were initially no catchment areas for health centres. No pro-active community work was carried out. It should be said here that P/RRA would make a very valuable contribution as an initial participatory base-line study.

Accountability and control of resources would then be built into the system, for instance in the recording of new births. Questions could be addressed such as: "*How do health centre resources reach new babies? How can villagers save to pay for those resources?*". Of course the health centre would have to be responsible for EPI, for instance. Yet at the community level some things can be done. Nutrition work, for instance, is an area which could very much be focused at community level, through information generated by the community.

Growth monitoring in Tanzania is a good example. This was a large scale issue of this last decade. In Tanzania there was a focus on making it a village-based activity. Village-level data collection and analysis took place. Only then was information passed on to district level. Village growth charts were generated, with locally set targets. This was a process that emerged independently when the weighing was

done. No one had previously asked the communities to set themselves targets.

Some said this could only be done in Tanzania. However UNICEF decided to try it in Mali, Peru and a richer area of Ethiopia. These ventures were all supported by government staff, not by UNICEF. In Ethiopia, local health workers initially resisted the idea. They did not believe that villagers could do the weighing themselves. However at the first weighing session, there was a recognition that 40% of children were underweight in food surplus area.

In Mali literacy training took place alongside the village based monitoring. But maybe this was not necessary. The third round of weighing was after the harvest (the children were weighed every three months). The villagers expected that their children would weigh more, because of the food availability. But the children turned out to be worse off. The villagers then asked themselves why this was so. They then realised that, although there was food in the house, the women were out harvesting groundnuts and therefore were not available to feed their children. Thus they realised that women's work loads were a problem which had to be addressed if children's nutritional status were to improve. (This realisation then also indirectly offered the possibility of improving life for women). In such ways, rapid assessments allow for a local analysis which can be continued over time. Villagers can themselves monitor the health process and make the health system accountable.

In the Peruvian Andes men reacted very violently when they realised the low nutritional status of their children. They said it was because they were landless. They wanted to reclaim their land, which was of course a big issue. But there were also some more immediate smaller solutions which could be addressed. Over time their analysis of the problems grew deeper and they appreciated that they had a combination of immediate, underlying and basic causes governing their poverty. On the immediate level, there was a problem of infections and lack of food. At the more underlying level, there was a lack of health services, food security and land. At a basic level were such questions as who controls the resources and so on. Thus, through the

process of village involvement in growth monitoring, the community were able to develop their appreciation of their needs. Thus as a basis for general community awareness raising, community involvement in such activities has proved to be an effective process.

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6

Training workshop on participatory rural appraisal for planning health projects

Sheelu Francis, John Devavaram, Arunothayam Erskin

• Introduction

The 1980s have seen the growth of the use of RRA in health and nutrition. The mode of RRA was initially mainly extractive: that is *we* learning from them and analysing data later by ourselves. This took a change and in the late 80s PRA 'analysis of information by them', was given importance and most analysis happened in the field. SPEECH, Society for Peoples' Education and Economic CHange, had an opportunity to be introduced to the technique and were convinced of its relevance. We have been practising it in our work area since 1990. We also felt the need to disseminate the new information and skills we have learnt. Thus we conducted a series of workshops in PRA for NGO and Government officials in Tamil Nadu, southern India.

• Workshop objective

The health PRA conducted at Manavarayanenthal is one example of these workshops. SPEECH's objective in doing this topical PRA on health was primarily to introduce the NGO participants to an overview of general PRA principles and to evolve new strategies in planning specific health projects with participation of the village analysts.

• Preparation

The PRA workshop started on October 2, 1991 at Manavarayanenthal, which is 6 kms from Tiruchuli, where SPEECH has its field office. There were 23 participants from 11 NGO groups. They arrived at the workshop site on the morning of October 2. The villagers had arranged accommodation for the participants.

Our field workers had done a lot of spade work for the training workshop dividing themselves into small committees, i.e. food committee, local arrangements, accommodation, purchase. Some of the staff were also participants. The earlier experiences of conducting PRA training workshops had helped our staff to plan and implement individual responsibility well. At the end of each day, the SPEECH staff team met, though it was as late as midnight some days, to evaluate the day's performance and correct it then and there.

• First lessons

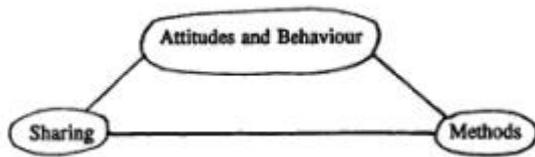
The PRA training workshop on health started at about 6 in the evening with a brief introduction on the organisation to the participants and of the outside participants to the various committees. We discussed about how care should be taken in working in a village, which is a work area of another NGO, especially in a PRA training which involves villagers. Working with people is not like other trainings which are usually organised in classrooms with a book and pen. The heavy rain in the evening did not allow us to proceed further with the training.

• Principles of PRA

The second day of PRA workshop started at 08.30. The NGO participants were given some background of PRA, its history, different types, principles and methods. The points highlighted how PRA can be defined as a semi-structured process of learning from, with and by the rural condition. The main applications of PRA have so far been at the community level with participatory appraisal and planning, leading through to the implementation of plans. These

have been concerned mainly with natural resources, especially Watershed Management, Social Forestry and Tank Rehabilitation but increasingly applications are being explored in Health and Nutrition. PRA is refined form of RRA. Instead of Rapid (Rushing), it is done in a relaxed way with a good rapport with people. Thus extracting from them and planning for them has changed to analysing and planning with them.

The three legs of PRA:



There is a need to show appropriate attitudes, basic respect, an interest in what people know, patient listening, and humility. Role play was done to highlight the role of outsiders, especially our attitudes and behaviours.

• Concerns and expectations

Later the participants clarified doubts about the methods and how they could be used in the village. The representatives from SPEECH shared their earlier experiences. In groups, the participants brought out their expectations and raised some questions. They are:

- What are the PRA techniques?
- What are the methods?
- How can we do PRA in villages?
- What are the experiences of SPEECH?
- Will all the villagers participate?
- Can we conduct PRA in a new village?
- What are the problems? How to approach the villagers?
- How can the villagers and outside participants do this together?

• Learning techniques

The outside participants were divided into five groups on the first day. The villagers were also divided into five groups. Three exercises were introduced:

- Village Mapping;

- Village Modelling; and,
- Time Line/Historical Transect.

• Mapping/modelling

The village mapping was done by three village groups. The first group did Social Mapping, the second group did Health Mapping and the third group, which was exclusively a women's group, did Social Health Mapping. The village mapping and model group brought out the village layout, types of houses, infrastructures, castes, religion, joint family, electricity connection, chronic health cases, handicapped, malnourished children, family planning, pregnant mothers, lactating mothers, adult men and women, under fives, destitutes, widows, orphans, and second marriages. Each group had five outside participants and 15-20 village analysts.

Facilitators and NGO participants divided the responsibilities such as process and content writing. The group was given approximately 3-4 hours to complete the exercises of interviewing and observation. The groups did the mapping on charts as well on the ground. The exclusive women's group, which did the village mapping on the ground, used seeds, vegetables and colours as counters to mark different data on the map. The groups which did the map on the chart used different colour bindies¹ to bring in different information (Figures 1a and 1b).

The village modelling group used small cards to bring out the individual family details using bindies. The advantage in this method is that these cards could be preserved by the organisation and later updated by local animators/village analysts during the project life time (Figures 2a and 2b).

¹ Bindies are stickers used by girls and married women in this area to decorate the forehead.

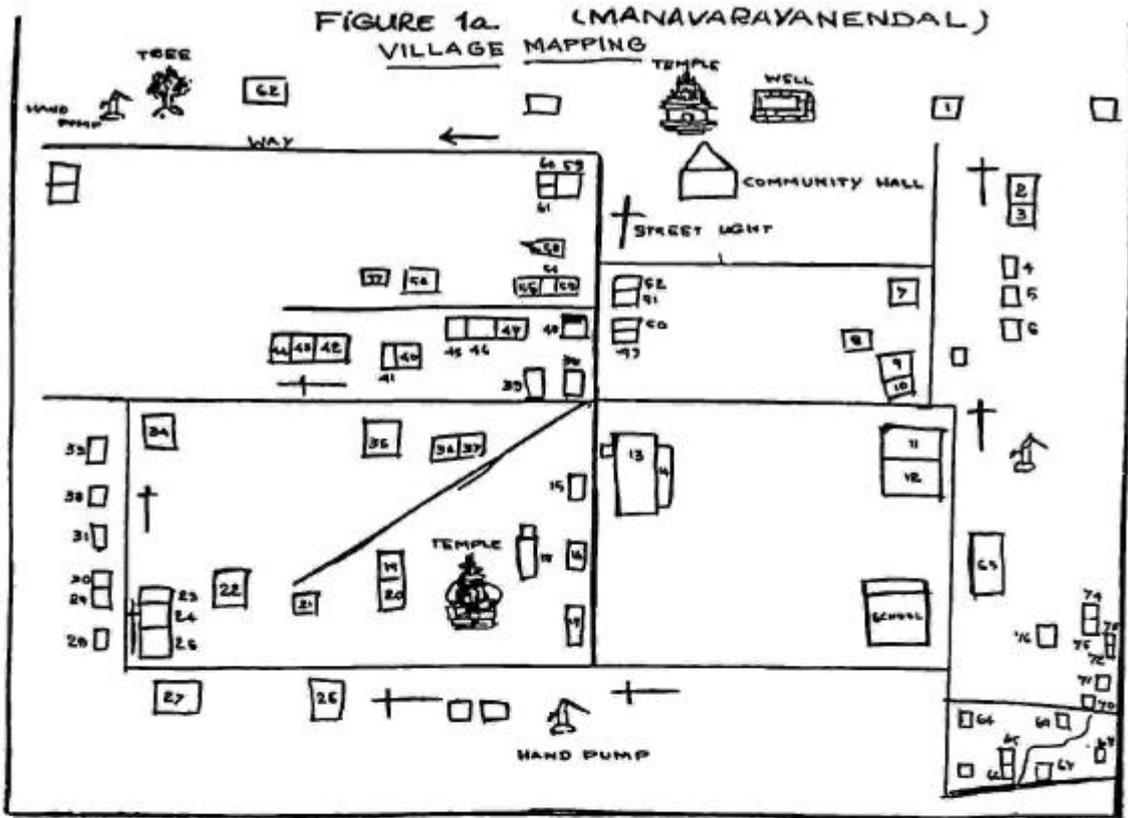


FIGURE 1b: INFO FROM VILLAGE MAPPING

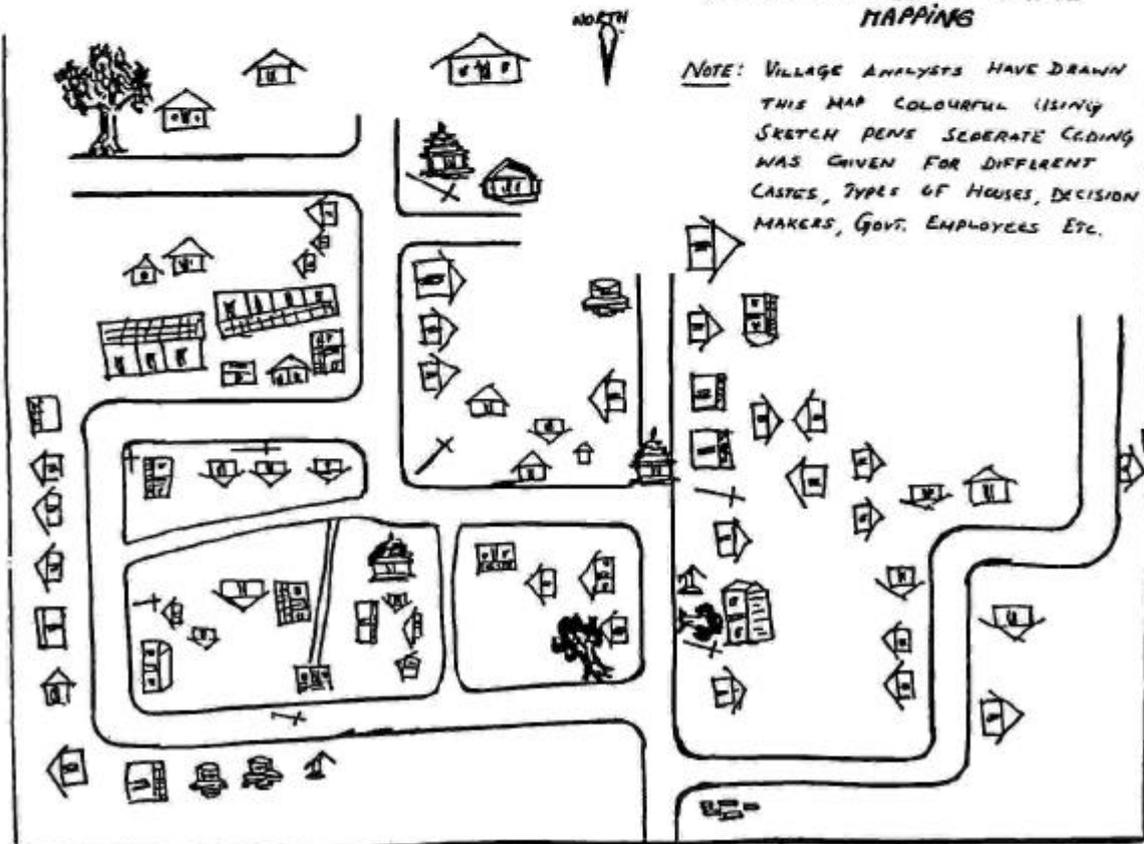
SAMPLE REPORT PURPOSE

1) பாலபந்தர்கள் M F ●● 2 ●● 2 • 1 •• 2 •• 2 •• 3	2) பூங்கொட்டிகள் M F ● 1 ●● 2 •• 2 • 1	3) பள்ளிகள் M F ●● 2 ●● 3 •• 2 •• 3	4) ச.ப.பந்தர்கள் M F ● 1 ●● 2 •• 2 •• 2	5) மடல்கள் M F ●● 3 ●● 2 •• 3 -	6) நெல்லை M F - ● 1 - -
7) கிண்தொண்டி NIL	8) கீழ்ப்பந்தர்கள் M F ●●●● 4 ●●●● 3 • 1 • 1	9) தவண்பந்தர்கள் M F ● 1 ●● 3 • 1	10) v. (செயல்) M F ● 1 ●● 2 • 1	11) நாயப்பந்தர் M F ● 1 ● 1 • 1 • 1	12) குடிசைகள் M F - ● 1 - -
13) கையப்பந்தர் M F NIL	14) மார்பந்தர் M F - ●● 2 - -	15) குடிசைகள் M F NIL	16) கையப்பந்தர் M F ● 1 ●● 2 - -	17) குடிசைகள் M F ●● 2 ●● 2 • 1 -	18) கையப்பந்தர் M F ●● 2 ●● 2 • 1 • 1
19) மடல்கள் M F ● 1 ● 1 • 1 •• 3	20) கையப்பந்தர் M F ● 1 ●●●● 4 • 1 -	21) கையப்பந்தர் M F NIL	22) கையப்பந்தர் M F ●● 2 ●● 2 •• 2 -	23) கையப்பந்தர் M F ● 1 ● 1 - • 1	24) கையப்பந்தர் M F ●● 2 ●● 2 •• 2 -

INFO FROM
FIGURE 2a. VILLAGE MODELLING

TOTAL FAMILIES	→ 58	<u>CASTE BREAKUP</u>	
TOTAL POPULATION	→ 320		
0 - 5	23 M	25 F	NADAR — 28
6 - 13	36 "	39 "	THEVAR — 24
14 - 45	73 "	64 "	PILLAI — 4
45 (ABOVE)-25 "		31 "	NAYACKER — 1
JOINT FAMILY			CHETTIYAR — 1
NUCLEAR FAMILY			
HANDICAPPED			
ANC CASE			
SECOND MARRIAGE			
WIDOW			

FIGURE 2b. VILLAGE SOCIAL MAPPING



- **Time line/historical transect**

The time line and historical transect group chose old people in the village as their key respondents, who were able to recollect the history of the village, educational scene, important events, health, agricultural practices and evolution of the village. They also did a historical transect of education, health, agriculture and other cultural practices in three periods, i.e. before independence, after independence up to 1970 and 1970-1990. This information was presented in chart form.

- **Presentations and evaluation**

All the groups presented their group maps, model and time line charts to the villagers in the evening and some corrections were made in the village mapping. The modelling group's individual family cards were used to check against the women group's village mapping information. Thus, it was triangulated. After the presentation, the outside participants gathered and presented the process. The following drawbacks were highlighted:

- no coordination between NGO participants while in the small groups;
- the domination of men in the group;
- wrong selection of key informants;
- outside participants' attitudes such as lead questions and imposing ideas;
- selection of place for group work; and,
- women only brought out minute details, not broad issues.

After this, an evaluation of the day's work was done. The facilitators shared their observations about individual trainees and the changes needed. The trainers felt that the NGO participants were open to suggestion and new learning. By the end of the day, the trainees learned that PRA had attracted the participants and that they were convinced of its usefulness.

The day ended with a presentation of a cultural programme by the village youth which really inspired the outside participants later to contribute from their side.

- **Day Three: more techniques**

The third day started with the usual enthusiasm. The outside participants gathered at 8.30 am. They were briefed about seasonality, trend change matrix ranking, Venn and linkage exercises. There was a slide show and a video show about earlier PRA exercises. The slide and video shows were very effective and educational. They clarified and resolved some unanswered questions for the participants. Then the outside participants and villagers were divided into four groups.

Trends

The trends in diet, diseases, health treatment (practices), feeding practices, cooking vessel, fuel, education, cultural practices, *panchayat* and political representation, marriageable age, festivals, celebration around attending puberty, marriage, etc. from 1930-1990 were recorded.

Seasonality

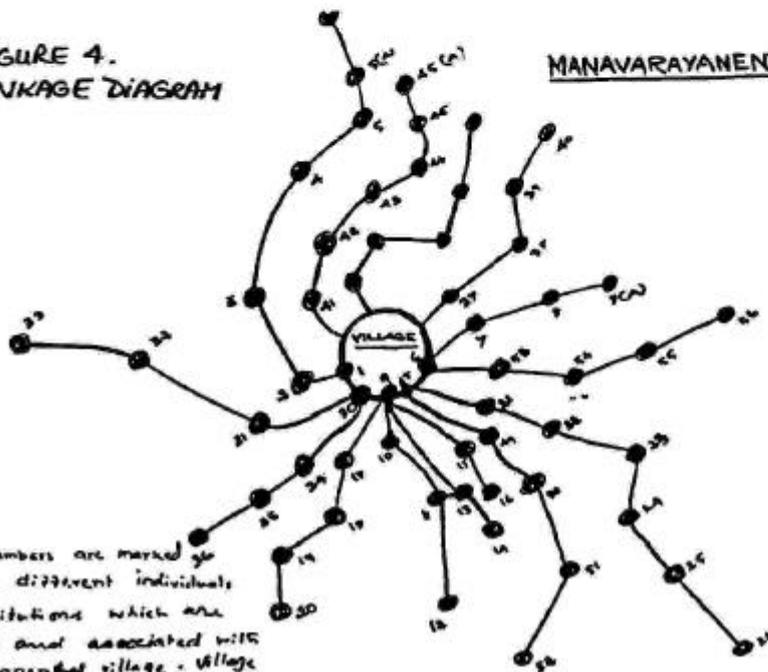
The seasonality exercise was done by the only-women group and they brought out very sensitive issues this time. The seasonality exercise included: food practices, health practices, cultural practices from puberty to marriage, work load, husband and wife sexual relationships during pregnancy (from first month to delivery and to five years), feeding. The seasonality group also learnt about the recurrence of rainfall and diseases for 18 months. Wages, income, savings, loans and expenses, as well as agricultural practices, employment and festivals were recorded for each month on a twelve month chart.

FIGURE 3. SICKNESS ACTION MATRIX (SAM)

RANKING	SICKNESS	VILLAGE TREATMENT	RAJAKANI MEDICAL	THIRUCHULI, ARUPPUNTAI, VEDUNAGAR, MADURAI
1.	STOMACHACHE	•	••	•••
2.	KNEE PAIN	•	••	•••
3.	FEVER/HEADACHE	•	••	•••
4.	POR	NIL	NIL	NIL
5.	MADRAS EYE	•	••	NIL
6.	TOOTH ACNE	NIL	•	••
7.	HEAT	•	NIL	NIL
8.	WHITE DISCHARGE		•	••

FIGURE 4. LINKAGE DIAGRAM

MANAVARAYANENDAL



NOTE: Numbers are marked to denote different individuals and institutions which are important and associated with Manavarayanendal village. Village analysts have used different colors stickers and triangulated with larger forms.

Ranking

The group did a ranking of diseases and a pair-wise preference sharing method for health practices (see Figure 3). The venn and linkage group used chapatti diagrams to indicate the relationship of individuals and institutions to the village. The size and distance of chapattis indicated the degree of relationship. The linkage not only explained the relationship but also clearly showed the link between institutions and individuals (see Figure 4). The NGO participants met initially to show the process and their new learning during the day. They were:

- Women's participation had improved;
- selection of interviewer and the relationship with the village;
- suggestive questions/prompting answers; and,
- use of games/ice breakers to involve all participants.

Other questions were raised by the participants, especially about the need to come up with innovative method of presenting and how to involve all the villagers in the group discussions.

The participants were told that participation by the villagers does not mean that all present are drawing a chart or sharing the information. The interviewer should be capable of identifying 2-3 key informants during the first five to ten minutes and later try to involve others by asking questions or second opinions from others. The group will also identify two or three to present the charts.

NGO Group

1. Over-crowdedness
2. Lack of ventilation
3. Goats, birds and people living in the same house
4. Lack of cleanliness
5. Stagnation of water around the house
6. Garbage dumped all over the village
7. Lack of trees

We highlighted that we should not be interested in finding out innovative presentation because our interest is not presentation but quality and triangulation of information. There was also discussion about the objective of PRA training workshops and PRA practitioners in the field.

The third day evaluation brought out the drawback in the selection of the place for group work; improvement in the facilitators' role, and the process writers. Each group met separately to share their observations about attitude and behaviour of each member, which naturally helped the new participants to reflect on their own performance and improvement.

After the presentation, the SPEECH cultural team had a musical evening. The villagers enjoyed the evening very much. Before going to bed, the outside participants were briefed about the next day's exercise (transect exercise) and were divided into three groups.

The fourth and final day started a little earlier than usual. The participants gathered at 7 am and went in three groups across the village. The NGO participants went around the village and observed the environmental sanitation. They came back and discussed health problems, solutions and existing opportunities. This was presented and the process was discussed. By 10 a.m. the villagers had gathered and both outside participants and village analysts were divided into four groups and discussed the health problems, solutions and opportunities.

The only-women group came up with the following health problems, which were completely different from the outside participants' ideas.

Women's Group

Lack of clean drinking water facilities
 Workload in the field
 Use of hybrid varieties, fertilisers, pesticides, reducing nutrition
 Marriage age which was 23-25 now reduced to 13-17 as reached resistant power of women
 Lack of road and transportation facilities
 Water sanitation around the village during rainy season, serving as breeding place for mosquitoes
 Lack of medical facilities. Government health worker in Thotiyankullam is not visiting the village regularly

Likewise, even in bringing out solutions and opportunity, differences were expressed. This being a training workshop, SPEECH did not attempt to plan a health programme at this stage

but decided to do it later with its animators and health workers. The key information is already on hand for SPEECH, but needs to be probed in the further exercise.

Information on reproductive cycle shared by only-women group

Age at puberty 13 - 17

Diet Practice

First Day Green Seeds mixed with milk will be given (reason attributed -in order to get more number of children). Then the girl will be kept separate from the house

Second day Gingili Oil mixed with rice water

Up to 30 days Steam boiled food with more Gingili Oil

30th Day Formal ritual will be celebrated to announce/make known to relatives and villagers. Marriage will be arranged between 15 and 17 years of age

Pregnancy When menstrual cycle (villagers have mentioned the colloquial term) stops, they assume the girl is pregnant

Up to 40 days Women feel giddy and some do not feel like eating. Up to 7 months, normal working, husband and wife relationship, etc. During seventh month, parents of the girl will celebrate a ritual and take the girl back home. While mentioning about husband and wife relationship after seventh month, they said they would avoid such action. Reason attributed - so that if baby in the womb is a girl, the father might have a forbidden moral ethics

After childbirth

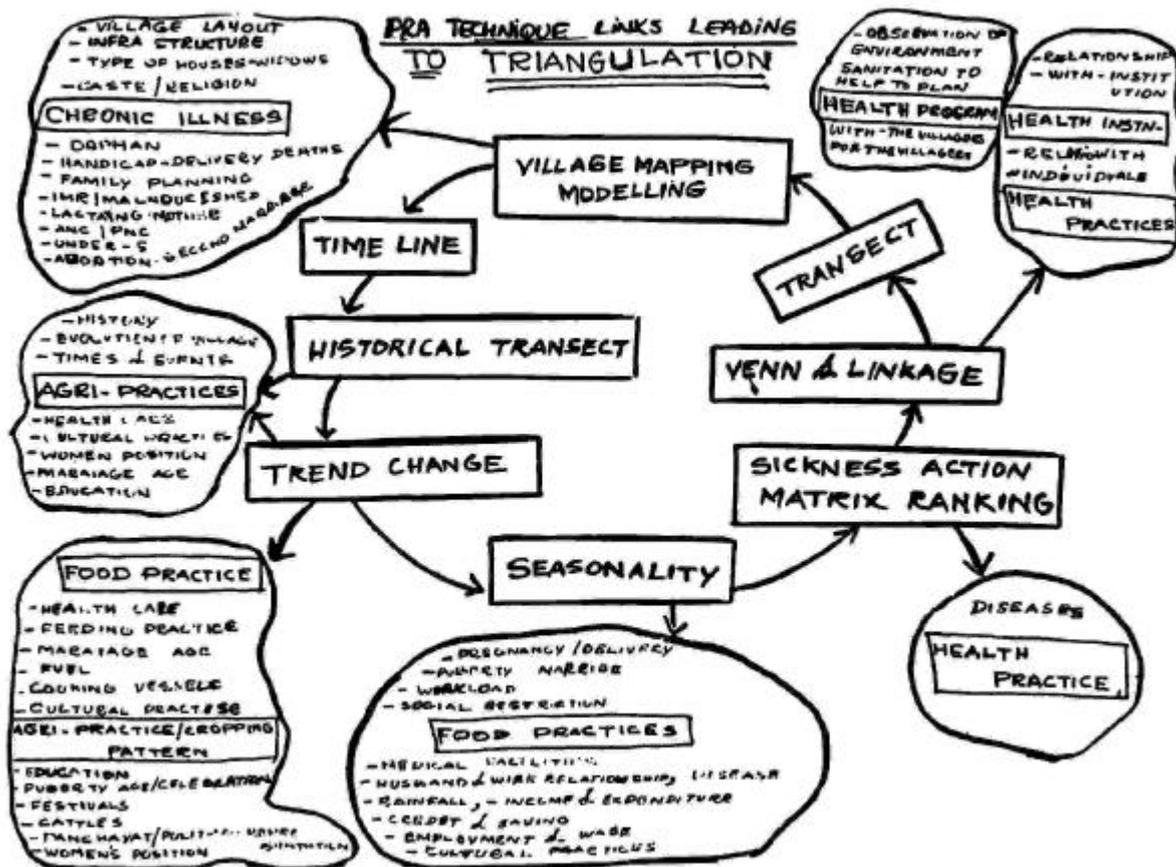
Up to 1 1/2 days after delivery, the mother will be fed only with porridge made out of dry ginger and fried rice powder. Up to 3 days garlic sauce with cooked rice will be given. Up to 5 days, tender bringal (aubergine) and peer gourd (sour gourd) will be added more in food. Simultaneously up to seven days, paste made out of medicinal green leaves will be applied and bath taken after two hours. In breast feeding, there is no difference between a male and a female child. Up to 30 days, drops of Castor Oil will be put in the eyes and ears of the new born before a bath.

Since the topic is highly sensitive, it took a long time for the facilitators to make the group give this information. Also the women triangulated only among themselves and never wanted to present in the larger forum, where there are men. It was interesting to see that the women

came with a seasonal calendar of 10 months pregnancy period, food practices, workload, family relationship, religious rituals, local health practices etc.

This exercise was mainly done to highlight to the NGOs that their perception of villagers' problems were totally different from that of villagers. As outsiders, we also normally look at things with our own background, and due to our enthusiasm help the villagers adopt our ideas. The differences were brought out by this exercise.

After the exercise, the outside participants evaluated the day's exercise and accepted the fact how we, as outsiders, often try to bring out our own answers by asking leading questions and suggestive questions, especially in such delicate situation, which involves the programme planning. We often think that we know better than villagers and fail to recognise the villagers' wisdom.



In the evening, the trainees brought out the link between various exercises that were done. They took up one issue and expressed how the link is made between different exercises (Figure 5).

The day ended by matching the expectations with learning. We again explained various methods of PRA and that we have used very few of them in this workshop. We have to know how to choose the appropriate method for the type of information we require for our programme. This could be used in planning, implementation, monitoring and evaluation stages of programmes.

The evaluation of the PRA workshop brought out the following points:

- The quantity of information gathered in very little time surprised many of the participants.
- One participant asked whether any training was given to the villagers to do mapping and charts.

- Involving people totally was an enjoyable experience.
- We should have all eyes and ears (maximum observation) during participation.
- I know that the illiterate people have more knowledge and experience than the so called educated
- PRA is something which could be learnt by experience.
- I came to learn about health planning but learnt about novel methods of village survey.
- I learned how to ask non-suggestive questions in non-threatening tones in a more inquisitive way.
- Through PRA, people brought out their needs by themselves very clearly.

- This is the first time, where I found all NGO participants totally taking part in the training.
- PRA, as I observed could be the best and most effective tool in the planning, implementation and evaluation stages.
- PRA involves and makes people participate in their own future well-being. This we never find in any other method of workshop and training.

The training workshop was an eye-opener for the organisers. The group learnt that the facilitation has to be done more professionally, especially in training workshops for NGO participants. It was indeed a pleasure to do training for a group of trainees who were open to new ideas and suggestion. As one of the participants said, it is easier to unite on a new clean slate rather than writing on an already written slate. The process of unlearning what we have learnt, especially the role of advising to villagers and changing to listening to villagers is a very difficult one. The workshop was a positive experience for both organisers and the participants. It was an enjoyable one for the participants who expressed their interest in attending more PRA training in order to prepare themselves as future practitioners.

This report is dedicated to those who wish to 'learn to unlearn'.

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| <ul style="list-style-type: none">• Sheelu Francis, John Devaram and Arunothayam Erskin, SPEECH, 14 Jeyaraja Illam, Opp: Kasirajan Hospital, Tirupalai, Madurai 625 014, India. |
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7

Trends in health care

Alok Kumar

- **Introduction**

Trends help to understand how things have been changing in various fields over an approximate given time. For this exercise contact is made with a mix of young and old people, and after initial rapport building they are asked about how things have been changing over the last few years. About health care trends they are first asked what treatment facilities they have access to at present. This is symbolised on paper and checked (triangulation) by asking others also if these details are accurate. Then the older people in the group are asked about each of the facilities mentioned to know how it was when they were very young. This change-centered recallable lifetime shows the response of the local people to modern treatment facilities compared to total dependence on witch craft and traditional herbal medicines. It also brings to light certain institutions like the village *dai* (or midwife) who still holds the same importance in status as before.

The group assigned the above exercise reached the different *tolas* of the village, collected information about what usual health care practices in the past (about 35-40 years ago), the percentage of population making use of that kind of aid (herbs, *ojhas*, hospitals, *dhangrin* or *dai*, etc) and what is the trend now. They expressed percentage in terms of so many *paisa*, in hundreds of *paisa*, or in terms of sand and stone particles. The information collected shows the evolution that has emerged and indicates the direction for the development agency to understand and for which to provide

support (Figure 1). If, for instance, the institution of the *Dhangrin* (*dai*) or midwife has gained a lot of credence with villagers, the best help for the village would be in the form of training these local midwives to be more hygienic and follow better techniques rather than set up a parallel midwifery service with city trained staff. Studies of this nature can help in making adequate and suitable modifications for health care.

- **Seasonality of disease**

This study was carried out with a small group of villagers. Initially when the pie diagram type of method was used (asking how many *paisa* in a *rupee* represented the occurrence of particular diseases) the group could not understand how to do it. So another method was tried. A thin long stick was shown to the group and they were asked that if the entire length represented different diseases according to their frequency of occurrence there, what size would be assigned by them for each disease. This was immediately understood and very soon different lengths were laid out and pointed out as different diseases. Seasonality of occurrence was also found out and the chart shown here distinctly shows when different diseases occur (Figure 2).

This type of study can be carried out in different ways to find out what the main diseases in the area are and when they occur, so that timely action can be taken accordingly.

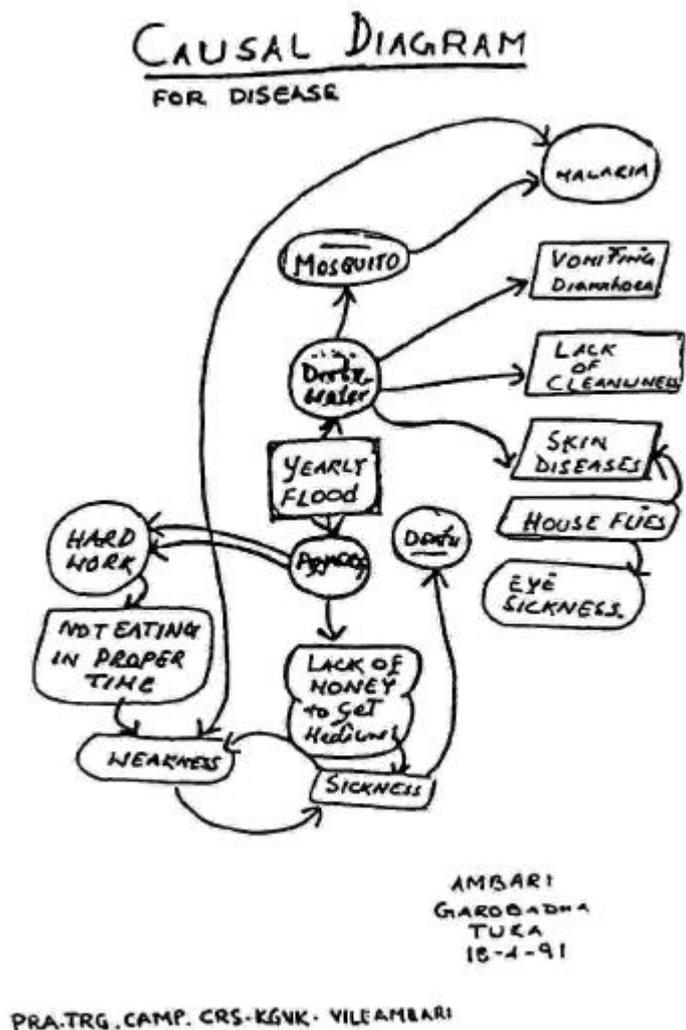
• **Causal diagram for disease**

This study was carried out to find out what the main links were in the chain of causes for disease taking place. The study revealed a vicious circle where poverty and lack of safe drinking water played a major role (Figure 3). This suggests that the best way to break the cycle is to provide safe drinking water and some means to increase their livelihood.

Most of the villagers are quite aware of local herbal and other methods for treating diseases. Since due to extreme poverty every person who can work has to work, disease is first treated locally and only if this fails do they contact the dispensary. Going to the dispensary probably means wasting half a day or more. Preventative vaccination measures also came out as a major felt need.

The 'causal diagram' exercise could be applied for a variety of needs such as trying to find out the cause for excessive deforestation etc.

Figure 3. Casual diagram



• **Causes of child mortality**

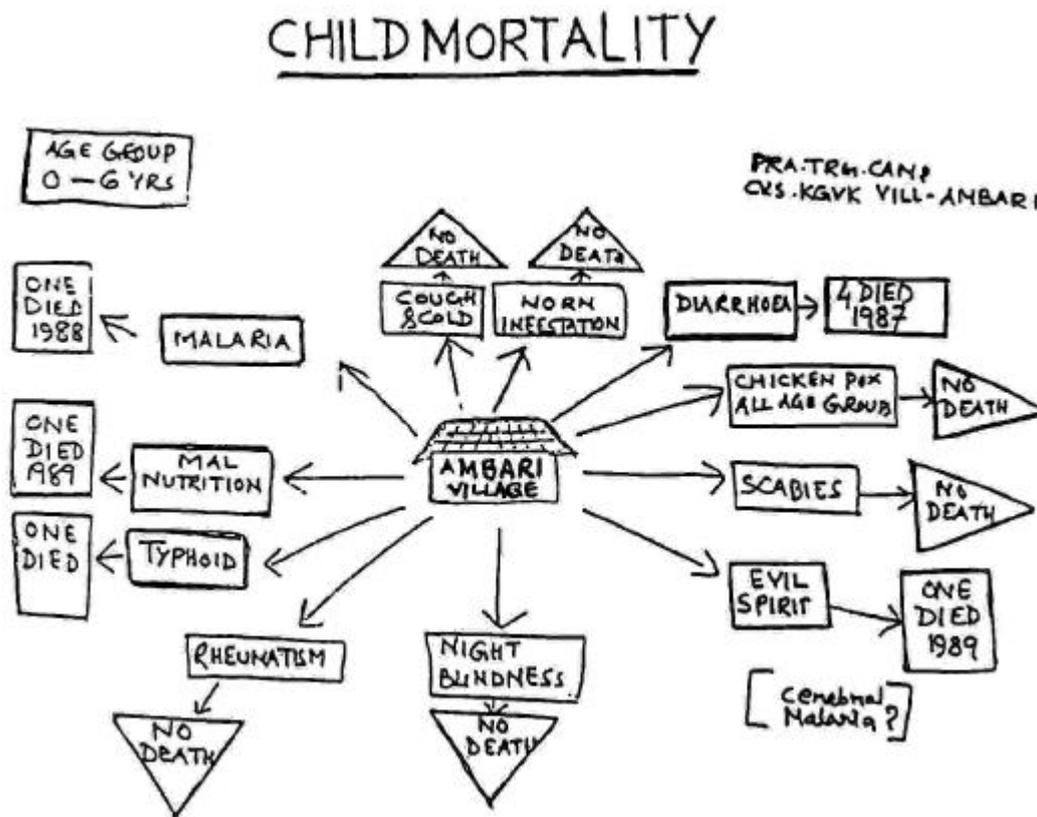
A study of the causes of child mortality particularly in the 0-6 year age group helped to understand what main diseases were affecting children and which of them resulted in death (Figure 4). Malaria, malnutrition, typhoid and diarrhoea were identified to be the main causes of death and sadly enough all of these could easily have been prevented, particularly since

the solution exists in the components of the Mother Child Health Programme.

Since these problems have now been clearly identified a greater effort can be made to overcome it and prevent possible future death.

Similar exercises could be conducted for other subjects like low attendance in school. The range of applicability is quite wide.

Figure 4. Child mortality



• **Health ranking**

This exercise was conducted for the first time in a KGVK related case and the method followed was the same as for a wealth ranking exercise, except that ranking was being done for classifying the health status of children. We explained to the villagers what was planned and then the group sat outside under the shade of some trees. The group which was small initially soon became quite a large group of women with their children. Once the villagers understood what was required they soon used stones to classify the health status of children, as can be

seen in the chart (Figure 5). Participation was spontaneous in classifying the children and this was soon being done with great enthusiasm.

One of the main aims of this study, as with wealth ranking, was to locate and identify those who were in need of immediate help for improving their health status. Those that were very sick and those with a tendency to being sickly have been listed and the MCH centre at Ambari may be advised to take up treating and helping improve the condition of these people as the villagers also repeatedly requested that something be done for these children urgently.

Figure 5. Health Ranking in Ambari, Meghalaya



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8

Participatory rural appraisal in identifying major illness, health care providers and costs

Sam Joseph

- **Purpose**
 - To train a core group of Jamkhed workers in PRA methods, which they could later use for situational analysis in new, villages/new programme areas; and,
 - To generate information on the status of health care systems as part of a MHO (Maintenance of Health Organisation) proposal.
- **Participants**
 - Comprehensive Rural Health Project: (CRHP) - Jamkhed. There were twelve participants (five from the CRHP Centre, 6 women health volunteers, 1 farmer's club member). Dr. Mrs. Arole also participated. Most of the team members have been working in the area for about 20 years.
 - PACHEALTH (Pacific Health & Development Resources - Hawaii). Dr. Michael O'Byrne and Susan Cheney O'Byrne.
 - ActionAid-India. Sam Joseph led the training.
- **Duration**

The PRA exercises and training were conducted over a five-day period – i.e. May 6 to May 11, 1991.

Questions to be answered:

- How many adults and children are there in the village?

- Which type of major illnesses has occurred in the last 6 months?
- What was the action taken to deal with these?
- How much did the treatment cost (including questions on how far did they go for medical treatment? To whom and why?)
- Who are the different types of health care providers and what are the reasons for using these health care providers?
- How much does it cost to access and use these different health care providers?
- Which diseases are considered important and why?

- **Methods used**

General

The group was divided into six teams. Those that were neo-literates were teamed up with literate persons. The first three days were scheduled for working in one village. The team would discuss specific methods in the class. These methods would then be attempted in the village. Some of the field exercises were conducted with 3 different focus groups of old men, young men and women. After each fieldwork session the teams would meet to present and discuss their diagrams and findings. The fourth day was scheduled for a new village in which the six teams would attempt the appraisal of the village in one day. The fifth day was kept for presenting the findings of the fourth day and further discussions.

Village-inside (social) and village-outside (resource) maps

Three teams attempted the mapping of the inside of the first village while three teams

attempted the outside of this village. Each team covered a focus group of either old men, young men or women. At the end of the exercise the PRA group had maps drawn by village residents which showed differences in the perception of old men, young men and women, with regard to resources, roads, size of the village etc.

The next day, two of the teams which had done the village social map (village-inside) divided the village into 2 parts, and then each team with village persons marked out every house in the village. After this the names of the heads of households were listed by pointing to each house in the map and asking “*who is the head of this household*”.

On the third day both these teams, using the map as a focus point, asked village residents about major and minor illnesses. The process went something like this. After consulting the maps, a physical location was selected to sit and talk. Village persons were requested to call some people of the neighbourhood. When several people had assembled discussion followed along these lines:

Project staff would point to a house on the map/or read out a name of a household head. Then questions would be asked: How many adults in this house? How many children? Any children under 5 years? Do you remember any minor ailments in the past 3 months in this house? Did anyone get seriously ill during the last six months here? What did they do? How much did they spend? When the information about one house was complete then the discussion moved to another house.

One of the teams actually went to those houses which their group of informants had mentioned as having had major illness to cross-check. It was found that there were no major discrepancies between the account of the group and the concerned family.

Preference ranking / scoring

In the ‘classroom’ discussion session a mock exercise of preference on trees was carried out. First, trees were listed along with their major characteristics. Then a pair-wise comparison of each against all the others was done to elicit further indicators/characteristics. After this a

grid was prepared with characteristics in the left margin and the trees across the top. A quick discussion followed about the benefits of ranking in terms of best/worst: dividing up 10 or 16 counters (seeds) across each row of characteristics; or awarding scores out of ten to each element in the grid. The group, especially the village level workers, felt that scoring out of ten for each element was most suitable. In the village, one team attempted a ranking of diseases while another team attempted a ranking of health care providers.

Seasonality diagrams

Two teams attempted seasonality diagrams on the occurrence of diseases.

Venn/chapatti diagrams

One team attempted the Chapatti diagrams to identify persons/groups which influence the village.

New village

In the evening of the fourth day a new village was selected and the following information was generated by the teams:

- A village map was completed with each house marked out with roads, water pumps, wells temples, etc. Names of each head of household were also noted. (A torch had to be used after dark).
- A village resource map with wells, ponds, check dams, was completed.
- A list of characteristics was identified for diseases in preparation for the ranking/scoring exercise.
- A preference ranking/scoring of health care providers was attempted.
- A seasonal analysis of the common diseases was attempted.
- In the morning of the next day (ie. fifth day), the teams completed the following:
- A transect of the village, which led to the identification of a major opportunity for

repairing a check dam. Details of the resource map (village-outside) were also cross-checked.

- A chapatti/Venn diagram was constructed leading to the identification of individuals/groups who influence the village.
- A wealth ranking exercise was carried out with one informant, based on the list of household heads made by the social map team.
- A house-wise profile of the population; under-5 population; major illness and how they were treated; expenses involved; etc. was created using the village-inside map.
- A flow/process analysis was also attempted to define the steps taken when a person gets sick.

The entire group met again at the base to present and discuss their findings. The general feed-back from the group appeared to be that these methods were easier and faster than door-to-door surveys, which they had used earlier. These methods could be used in their existing project villages and also in a new project area now in the planning stage.

• **New lessons learned**

The **village-inside** map (or Social Map) is a very powerful tool. In addition to providing information on caste wise location, water resources, education, religious centres, etc. this map, after marking each home, can be used for generating information like base-line surveys on population, literacy, assets, etc. It can also be used to focus recall on issues like major illness and mortality.

If the village is large then different teams can select neighbourhoods, streets or castes to divide a large village into smaller units and then use the map to focus discussion.

Dr. Michael O'Byrne who came out to the villages on most exercises remarked that these methods of using diagrams and other methods to get into village people's mental maps and into people's 'mental computers' were very powerful and it would not be long before the

commercial world also start using these methods.

On reflection I agree with this, because most consumer surveys attempt to derive and infer usage patterns and preferences of consumers, using the producer's criteria, rather than the consumer's criteria, and that also in a restricted questionnaire format.

Regarding the **preference ranking**, the PRA team should not make any assumptions on characteristics of any topic. The 3 steps in the method i.e. first listing all diseases and their characteristics, secondly comparing them in pairs in terms of effect; and then finally starting the ranking, helped to bring out a large number of characteristics. In this PRA it was a local farmer who conducted all 3 steps of this exercise with other village residents as informants.

The findings of the **chapatti/venn diagram** provided an immediate list of key persons and groups who need to be contacted about proposals which affect the larger village. In this case where the project team want to begin a Health Maintenance Organisation, they plan to discuss the mechanism of contributions, health care delivery systems, etc. in separate meetings with individuals/groups, already identified in the chapatti /venn diagram. Later these issues will be discussed in open village level meetings.

In summary PRA methods can be used for generating information on health-related issues, especially in situations where there is clarity on the issues to be examined.

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NOTE

A more detailed report of this work is available from Sam Joseph.

9

A little experience of PRA exercise conducted at Mecluskigang

Mahadeo Sahu and Ranjan Tirkey

• Introduction

Originally, Mecluskigang was an Anglo-Indian village set up during the middle forties by Anglo-Indians. There were about 750 families but now only 15 to 20 Anglo-Indian families are residing in the village. After independence most of the outsiders, especially from Calcutta, were settled down. Mecluskigang is situated 58 km from Ranchi city (Bihar) and had many forests. Apart from Anglo-Indian families, there are also some other communities (e.g. Oraon, Mahli, Muslim, Sahu and Mundas) in and around Mecluskigang.

The population is not very thick as its topography is undulated. Most of the households are engaged in agriculture and a few households earn their livelihood through small business, collection of forest produce, as daily wage labourers etc. The social composition of the village is heterogeneous.

Xavier Institute of Social Service (XISS), Ranchi, India, conducted PRA exercises with post-graduate students of Rural Development during March 1991 and October 1991 in the village of Mecluskigang (Lapra) Chattinadi and in Hesalong village, respectively.

This PRA exercise is now being accepted by XISS as a very useful technique for the Rapid Rural Survey. XISS is also one of the leading organisations involved in the development of the oppressed people in and around Chotanagpur plateau which is a tribal dominated region. The main objective of the PRA exercise was to prepare a plan for the development of the *Panchayat*. To achieve this objective, a series of exercises was conducted to find out the real situation of the panchayat people.

• Causal diagram of drinking habits

As these villages are dominated by the tribals, one of the major problems is drinking habits which is considered a major obstacle in the process of development. We have tried to analyse the positive and negative effects of drinking. For this purpose four groups of different *tolas* were contacted for information gathering and was triangulated with different groups. The respondents were both male and female, drinkers and non-drinkers. We found that most of the villagers drink liquor prepared out of Mahuwa flower and rice. Due to poverty and lack of awareness of its negative effects, a few members drink because that is in their culture and customs.

To start the discussion, the group was first asked how liquor could be prepared. The villagers explained the different stages of liquor preparation and gradually they opened up and gave basic reasons for high alcoholism among the villagers. The casual diagram is shown in Figure 1.

• Women's status

The group joined the villagers under an old mango tree; they were eleven in number. The group interacted with them and asked about the status of women. Initially they hesitated to speak out but after one and a half hours they started speaking out and finally the causal diagram of women's status was prepared on the floor, using different types of materials (different colours of soil, seeds, stick) available locally. They explained direct cause through bold line and indirect causes through dotted lines. The diagram is shown in Figure 2.

Figure 1. Causal diagram of drinking habits

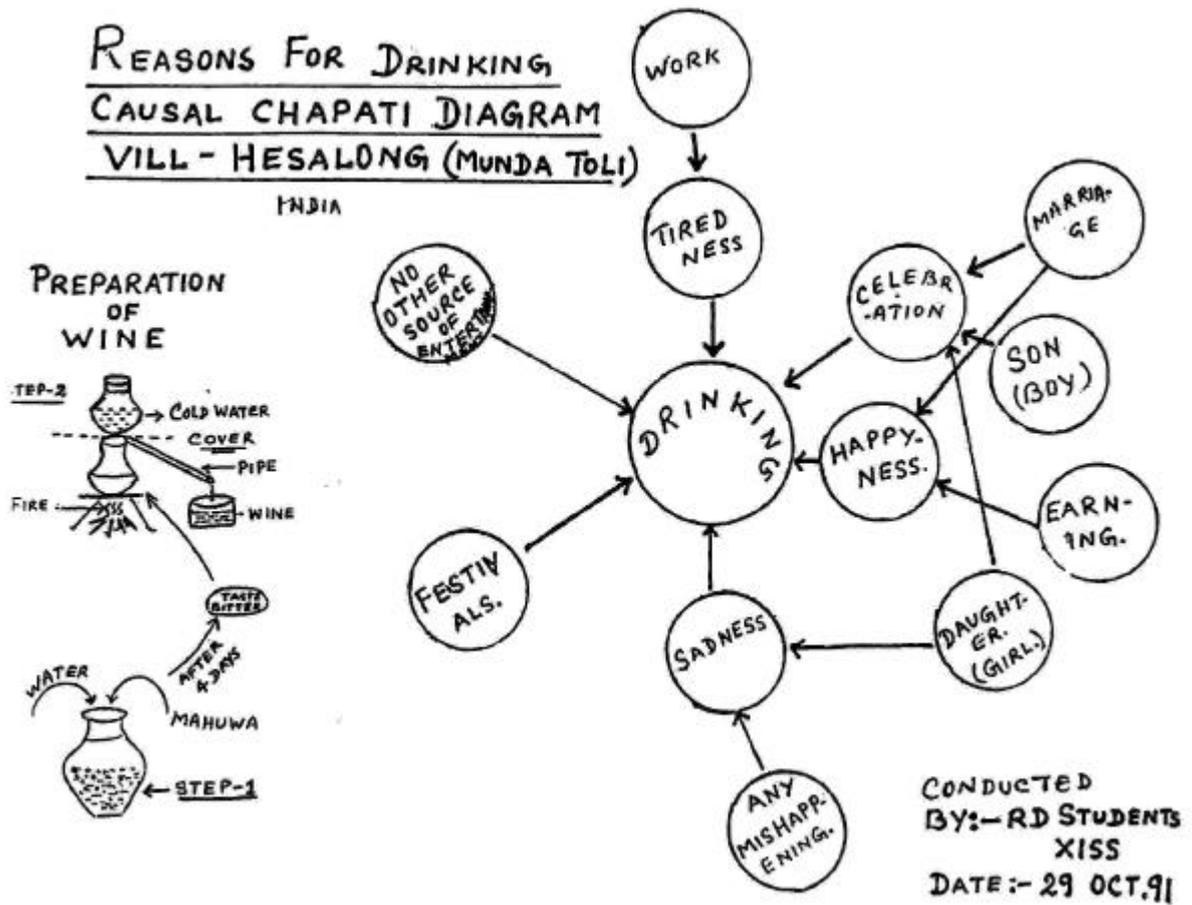
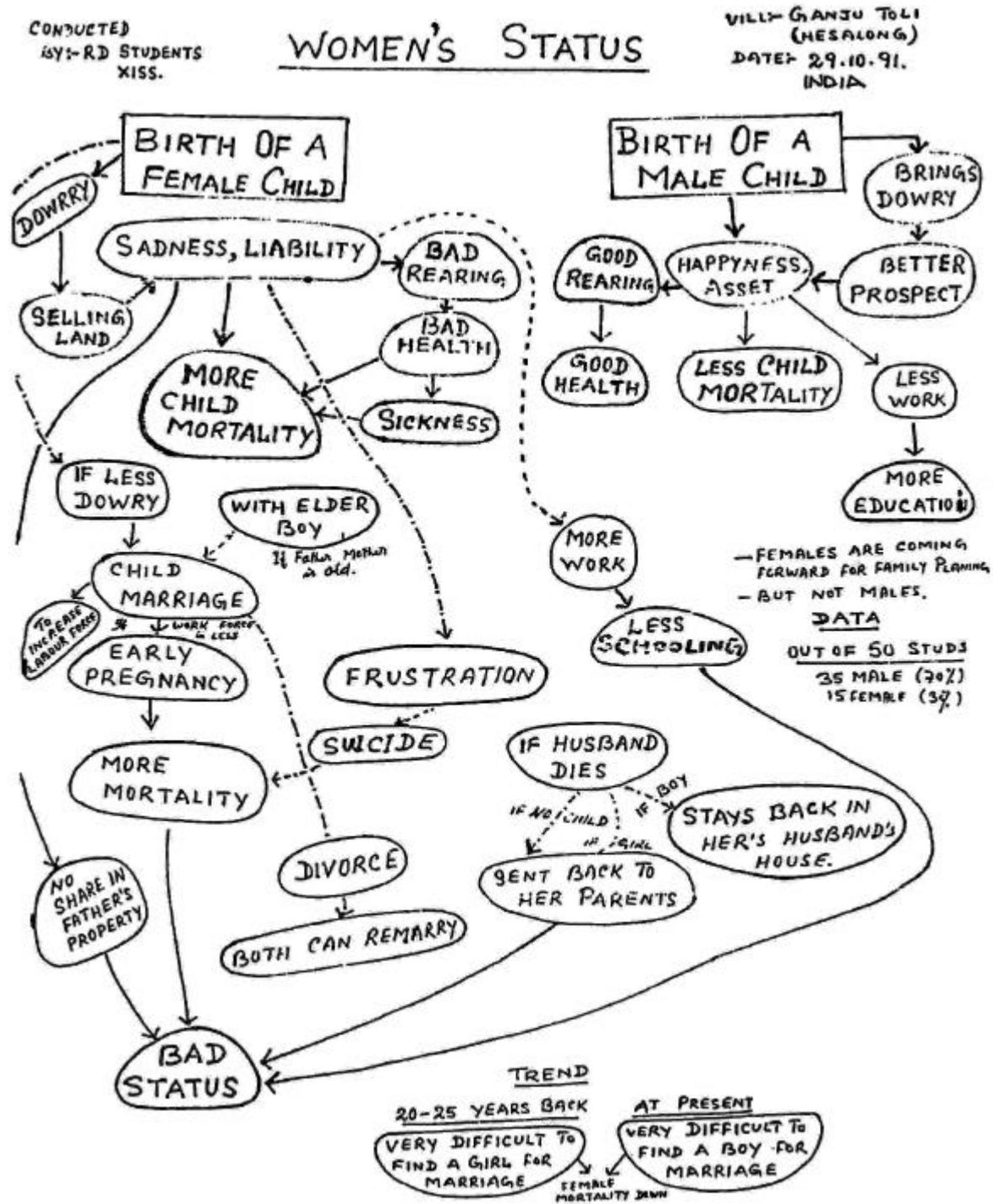


Figure 2. Women's status



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10

**Extract form:
Research report series no. 4, February 1991:
participatory rural appraisal for Nepal: concepts and
methods. A guide to the slide presentation**

Lorna Campbell and Gerard J Gill

The extract illustrated here shows the use of some PRA techniques to investigate issues relating to family planning.

• Slide 110

A. Family Planning

Objectives

1. To find out villagers' understanding of family planning.
2. To determine villagers' knowledge and use of different family planning methods.

• Slide 111

Time line

This gives a record of the arrival of different family planning methods, detailed by the farmers, in the village. It shows how long people have been exposed to different methods and through what channel they received the information. The dates recorded on the chart were not actually given by the farmers but they referred to major events, like the earthquake, in a more general time line. The slide shows information given by two informants, one on the left and one on the right, and illustrates the importance of cross-checking, or triangulation, of information. The informants became aware of different methods at different times. The reason for this could be investigated further.

Year	Method	Source & Info
1974	Condom, Vasectomy	Radio
1972	Iparascopy	Neighbours
1987	Nilogan, Kamel	Radio
1984	Pila	Radio
1979	Na-plant	Radio

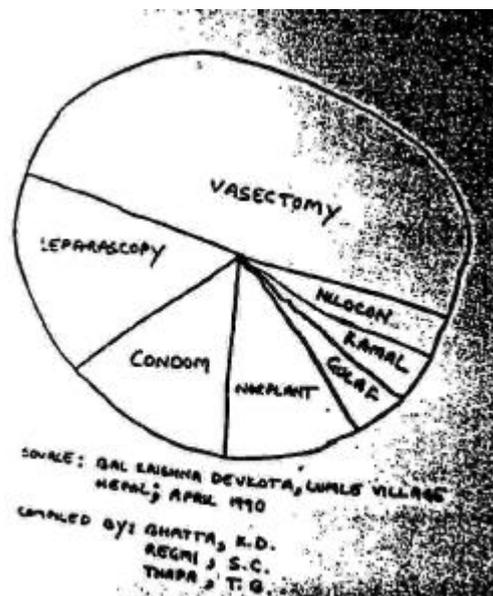
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April 21, 1990

Family Planning
Koshi District, Nepal

• Slide 112

Pie diagram

This was used to discover the overall preference among family planning methods, showing vasectomy as the most popular.



• Slide 113

Matrix ranking

The matrix ranks family planning methods for criteria important to the villagers. This was used to generate discussion on the reasons why people find one method more acceptable than another. When compared to the last slide there initially seems to be a contradiction; in the matrix, condom scores higher than vasectomy, yet the pie chart shows vasectomy as the most popular method. The farmers explained that the reasons they scored vasectomy lower in the matrix were:

Reliability There was one failed vasectomy in the village which caused some confusion.

Availability Men have to go to Pokhara or wait for the mobile clinic to have the vasectomy operation.

Simplicity in Use Vasectomy is not directly under their control due to the availability situation compared to the condom.

Resistance to Side Effects A convalescence period of several weeks, in which no farm work can be done, is needed after the operation.

FAMILY PLANNING METHODS	CRITERIA		
	RELIABLE/AVAILABILITY IN USE	SIMPLICITY	RESISTANCE TO SIDE EFFECTS
Condom	5	4	4
Vasectomy	3	1	5
Injectable	2	1	3
Female Sterilisation	3	3	4
Other	4	4	4
	4	5	3
	3	2	2

DEPARTMENT: SAK K. DOKOTA
AGE: 31 YEARS
DATE: 16-4-910

• Slide 114

Preliminary Findings

1. The awareness of these introduced family planning methods dates back only to 1980 in the Lumle area.
2. Generally villagers understand family planning as permanent sterilisation.
3. The use of temporary family planning methods is very limited. Over 80% of acceptors were sterilised, mainly men.
4. There is a belief that the use of permanent family planning methods leads to general weakness.
5. Despite one failed case of vasectomy this is still the most preferred method in the village.
6. The male interviewers felt it was difficult to discuss a sensitive issue like family planning with female participants.

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Participatory methods for research on women's reproductive health

Report of a workshop in Karnataka, India

Elizabeth Tolley and Margaret E. Bentley

• Introduction

There are many examples of the use of participatory methods and techniques for agricultural research or community-based rural development programs. The use of PRA/RRA/RAP methods in health and nutrition, although much less in comparison, is at an exciting stage of development. There is a need for more application and documentation of the participatory methods for health-related programs and research.

In March 1992, the Johns Hopkins University School of Public Health (JHU) and the Ford Foundation/India (FF) sponsored a training workshop on the use of participatory approaches for women's reproductive health. The workshop was hosted by MYRADA, an India-based NGO that has pioneered the use of PRA methodology for rural development projects in India.

The participants of the workshop were individuals from NGOs and academic institutions that belong to an informal *women's health research network*, a project funded by the Ford Foundation in India and implemented by Johns Hopkins University (Bentley et al, forthcoming). The organisations are all involved in applied research for women's reproductive health. The project involves activities that assist the groups in the use of qualitative research methods for program development and evaluation. The project promotes systematic techniques and methods to 'listen and talk with women' and to include their voices in the design of program interventions for women's health. A key

objective is to provide community-based data that will influence program and policy decisions for women's health.

The *women's health research network* meets for regular training workshops and each group contributes to a quarterly newsletter, *Qualitative Research Methods*, which is edited and distributed by the Department of Health Services Studies, Tata Institute of Social Sciences (see *References*). Previous workshops have focused on the theoretical concepts of more formal qualitative research methods, such as ethnographic techniques, key informant interviews, focus group interviews, direct observation, systematic note-taking and analysis.

The objective of the workshop was to adapt some of the participatory methods developed within agriculture for conducting PRA exercises on women's health. With years of experience using PRA methods in their agro-forestry, irrigation, and rural development projects and with a solid record of training workshops, MYRADA was an excellent group to organise and host the workshop. The groups from the network brought vast experience in community-based health care service delivery and research, along with their recent experience in the use of qualitative research methods.

• Workshop design

The five-day workshop was conducted in a rural area of Karnataka, H.D. Kote, where MYRADA has a training centre. It was designed to achieve several goals. In keeping with its theme, the first goal was *participation*.

Workshop members 'learned by participating' in PRA exercises in a field setting. The participants were divided into four groups and several MYRADA staff members joined each group as translators. In addition to some informal classroom sessions, each group conducted one afternoon exercise with traditional birth attendants - *dais* - and two half-day field exercises in nearby villages. To encourage flexibility and creativity, the groups were given more and more freedom over the course of the workshop to design their own field exercises and activities. This allowed participants to pursue personal or organisational interests and encouraged experimentation.

An important goal of the workshop was to thoroughly document the experiences of the participating groups. After each field visit, groups were asked to write up the planning process and content of the activities and exercises, as well as any 'lessons learned' and to plan the activities for the next day's fieldwork.

- **PRA methods for health research**

Over the course of the workshop a number of participatory methods were tried. All four groups incorporated 'body mapping' into discussions with local *dais* (traditional birth attendants), and all worked on village mapping skills during visits to the field. In addition, some groups used transect walks, seasonality charts, venn diagrams, *dosa* or pie charts, timelines, histograms and other techniques to supplement their talks with local villagers. A description of some of the group experiences follows.

- **Body mapping**

We had received a draft document explaining how to do 'body mapping' by Andrea Cornwall, who adapted a technique for use in Zimbabwe that was earlier developed by Carol MacCormack for research in Jamaica (Cornwall, 1992). As Cornwall states, "*body mapping can be used to explore people's perceptions of a range of bodily processes and the effects of medical interventions in the body*" (4). We adapted the technique for our interactions with *dais* to explore their

perceptions of the reproductive tract, labour and delivery practices, and delivery complications.

At least two *dais* in each group worked together to draw the body maps, but in most groups the first drawings were conceptual, rather than physiological. This may have been because of the way questions were phrased or related to the *dais'* previous experiences with pictures and diagrams. One group had wanted to ask the women birth attendants to draw a picture of how they imagined the inside of a pregnant woman's body looked. Instead, the question asked by the translator was, "*How does the baby grow inside the mother?*". The question diverted attention from structures inside of the body and the position of the baby to an emphasis on uterine growth.

Foetal growth was represented in a similar manner by several *dais*. One group produced drawings of nine consecutive circles, each one slightly larger than the previous one. Another drew a long vertical rectangle with a horizontal line drawn across it about a quarter of the way from the top. This line, the drawer explained, was the pregnant woman's waist. A series of nine dots descended from just above the line to the bottom of the rectangle. In both sets of drawings the circles or dots were said to represent the monthly development of the foetus. The women explained that the baby was 'the size of a peanut' in the first and second month, the size of a lemon during the third month, an orange in month four and a coconut in month five. Some *dais* referred to these stages when describing other markers of foetal development. One group said the baby got 'life' or *jeeva* during four, while another said that this happened in month five. A different group reported that the baby 'kicked itself to turn around' with its head pointing downward in month nine. It was later learned that many of the *dais* had been taught this fruit analogy of foetal growth during a training workshop several years before. The trainer, who was present at the PRA workshop, explained that the concepts were based on traditional beliefs, which had been incorporated into her classes.

Some anatomically-related drawings were also done. This led to an interesting discussion of nutrition and contraception. The baby was shown in its own sac, separate but connected to the mother's stomach. When asked how the food eaten by the mother reached the baby, one

dai stated that there was a hole in the sac and food came in through the hole. Another disagreed, saying that *naramba* (translated as tube or nerve) connected the baby's sac to the mother's stomach. Food was conducted through this tube. Another *dai* continued that the food, upon reaching the sac, entered the baby through the soft spot, or fontanelle, in its head. Another referred to the diagram saying that there were a number of nerves or veins connecting the baby's sac to the stomach, and food reached the baby through them. She then said that if the woman had too many children, she could go to a doctor who would 'overturn' the sac. This would stop reproduction. If the nerves were cut (between the sac and stomach), this would also stop pregnancy. One of the other women added that it was important for the right nerve to be cut.

- **Village mapping**

One field visit was spent on village mapping. Participants found mapping to be both fun and useful. Villagers enjoyed the festive atmosphere created as they cleared away space for the map and gathered seeds, coloured powders and other materials. In most cases, the domination of a few individuals early in the mapping exercise gave way to much greater participation as the map progressed. As local people approached the map to verify that their houses were correctly located or to answer questions regarding certain households, they often remained standing to assist those who were drawing the map.

Individuals in the groups discovered that a great deal of information could be recorded on these maps traced on the ground. General census information was usually recorded first. This included the number of households and number of families in the village, as well as population statistics - numbers of adults and children, caste groups, education levels and types of employment. In addition, some of the maps revealed a wide array of health information. Villagers marked the houses of blind or handicapped persons, people with various illnesses and malnourished children. The houses of pregnant and lactating women were marked. Later, further information on pregnant women and the age of breast-feeding children was also recorded. For example, the location of pregnant and lactating women on a village map

led later to a construction of pregnancy time-lines detailing the types and quantities of food consumed during the various stages of pregnancy, as well as the amount of work women do while pregnant.

A group interested in food security issues located small holder farmers and landless labourers on their map and then asked the farmers to show cropping patterns and the amount of food available for local consumption over the various seasons.

One group collected information on family planning acceptors/non-acceptors and infertility. They also attempted to find out about abortion using the village map, but found this topic too sensitive to discuss in a large group. During this groups' exercise, some of the villagers did locate couples who did not or could not have children. Two 'infertile' men present during the exercise were brought forward. During a subsequent group discussion session, concern was raised that the mapping technique might not be appropriate for collecting very sensitive information. Group participants questioned whether the two infertile men might have felt ashamed by being identified and questioned in such a public way.

There was general consensus that the maps helped raise topics that could then be explored in more detail using other techniques. For example, after locating the local resources of health care on the map, one group asked villagers to list other health care alternatives and to indicate the importance of these resources and their physical distance from the community by drawing a Venn diagram. For general treatment, the Venn diagram showed that the government primary health centre, at a distance of five kilometres and costing Rs.1 on the bus, was commonly used for general medical treatment. This centre was much less important, however, for deliveries, when the local trained *dai* was called. Once the diagram was completed, workshop participants were surprised at the number of resources available and the complex factors that influenced the choice of one over another.

- **Comments**

The workshop revealed a number of ways in which PRA methods could be applied to

research and program development for health. However, most participants felt that when applied to research rather than for community motivation or project identification, certain considerations were vital. Triangulation, or the ability to quickly cross-check information obtained, should be an important aspect of PRA. This requires the researcher to understand which groups or individuals are participating, and whose 'voices' are not being heard. For a complete picture, representatives from different strata of a community must be present and actively participating. In addition, the information collected on a given day should be presented back to the community and further verified. During several of the mapping exercises, whole new sections of villages were added to maps on the second 'go'; and in one case the population of a village doubled after it was explained that the individual who gave the village population count was a local politician, interested only in the votes of adult villagers. He had left out all children under 18 years of age.

Participants felt that a successful PRA exercise required planning. Information should be elicited in a logical way, with general information first, followed by more detailed or sensitive information. Attention should be given to the way in which questions were asked, taking care not to introduce biases from the researcher's perspective. During the sessions with the *dais*, several groups asked about complications of child delivery.

Although none of the *dais* immediately listed excessive bleeding as a complication, almost all of the participant groups went on to ask if this was a problem. Perhaps because of time

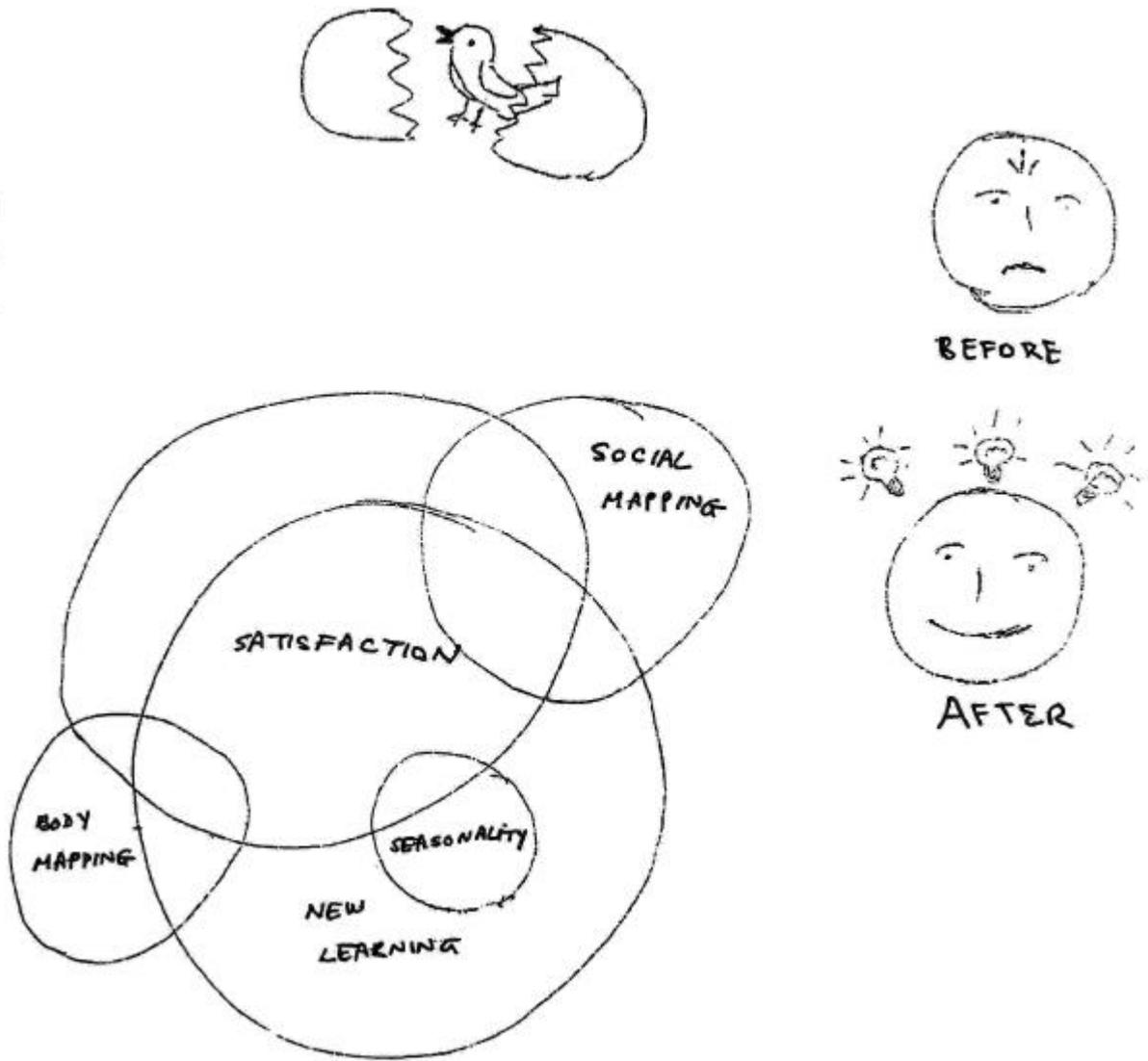
constraints or greater concentration on the process rather than the content of the activity, none of the groups, however, reached an understanding of how the *dais* defined 'excessive' bleeding - at what point bleeding was seen as abnormal and requiring some kind of intervention.

Good research - of any kind - should pay attention to the language and terms that people use. This may require special attention and a lot of extra note taking in PRA, where activity is often fast-paced and a number of people may answer questions or comment at once. If translators are needed, they should be included in planning sessions and be attentive to shades of meaning in the words, phrases or expressions that participants use.

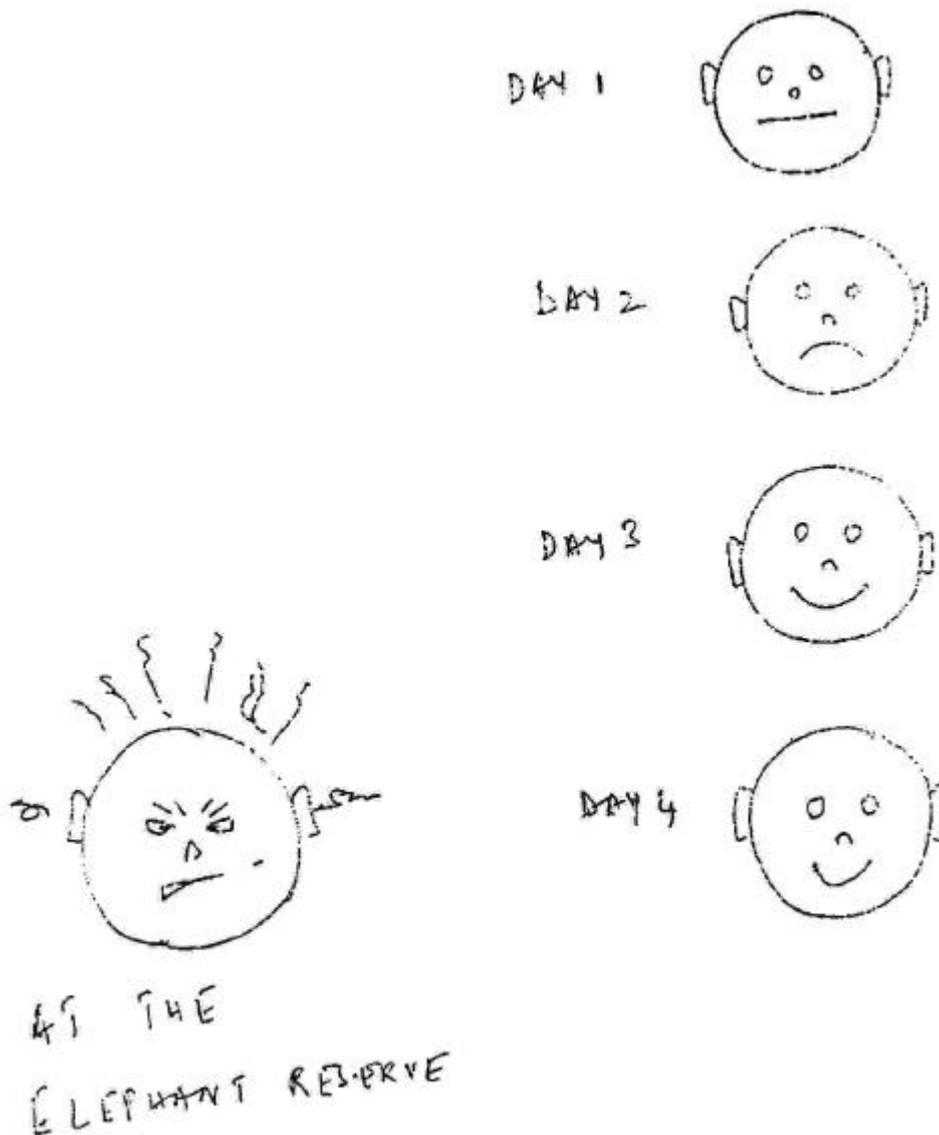
There will be a follow-up workshop in October 1992 of the network participants, hosted by the Institute of Health Management in Pachod, Maharashtra. Each of the NGO groups will report on the use of the new methods learned in their program development or research and how they plan to 'institutionalise' a more participatory approach in their work.

A longer report of the March workshop will be completed soon and will be available through Johns Hopkins University or the Ford Foundation/India. Until then, we leave you with a few of the pictorial evaluations that were done by the participants of the workshop - in keeping with one of the principles of participatory assessment, even completing an evaluation should have an element of fun!

7. Make a visual representation of our experience here over the last few days:



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12

Body mapping in health RRA/PRA

Andrea Cornwall

• Introduction

Maps and models have been used in PRA/RRA to locate features of ecological and social environments, as a guide to people's perceptions of the spaces in which they live and work and as a shared source of reference for interviews and discussions. In this article I would like to share my experiences of working with women in a rural area of southern Zimbabwe where we used maps of the body to share our versions of anatomy and physiology (Cornwall 1990; see MacCormack 1985, for earlier use of this technique in Jamaica).

By using body maps - diagrams which represent part or all of the body, drawn by women on paper or on the ground - to examine women's knowledge about reproduction and their interpretations of non-indigenous contraception, we were able to work together towards explanations of contraception which were locally appropriate.

Body mapping has a range of potential uses not only as a research method but also in training health workers in RRA/PRA approaches. Issues raised for training and possible applications in other health fields will be examined briefly, in conclusion.

• Mapping the body

Medical anthropologists have drawn attention to the different ways in which people within any culture or community gain, hold and use knowledge about bodily processes. Understanding people's accounts of their bodies and their interpretations of western medical interventions is being recognised as important in making health care and education more responsive to expectations and needs among users.

Yet people's knowledge about their bodies is often difficult to access from verbal descriptions without prior knowledge of the terms of reference used. Particularly in the case of anatomical knowledge, assumptions of a shared meaning for terms such as 'womb' or 'heart' may mislead. Asking specific questions from a western medical frame of reference can bring the biases and assumptions of health researchers into the encounter. This, in addition to other factors, can undermine people's confidence in what they know.

Body maps can be used for gaining access to people's perceptions of their bodies and to the explanatory models which people bring into encounters with health care workers. Representing this information visually can help to clarify ambiguities and provides a rapid shared reference point. By using people's own representations of their bodies as a starting point from which to explore particular medical issues, body mapping can facilitate a less directive interviewing style than would otherwise be possible. People's own classifications and visual descriptions can be used as a basis for probing.

Body maps can be drawn by individuals or collectively by groups in focus group or workshop discussions. Ideas and issues can be explored which may be more difficult to access through verbal discussion alone.

• Background

The study which I would like to draw on was aimed at exploring local understandings of the body in order to find ways to bridge local knowledge and western medical explanations of non-indigenous contraception. My attempts to provide sex education at the school where I was teaching led me to interview female relatives of

the girls I taught and into discussions about contraception. Women confided their fears, reported the rumours about the pill and asked me for more information. I soon became aware that the kind of information I was able to provide was only by using a western medical model of the body and its processes, which did not seem adequate to answer their questions.

Women in rural Zimbabwe gain knowledge about their bodies from a wide variety of sources; dissection of household animals used for food, talking with peers, advice from older female relatives, experiences of pregnancies, the media, as well as from interactions with health care services. In order to examine how extension messages were being interpreted within this wider network of knowledge acquisition, I interviewed a sample of women in two areas on what they had been told and what they themselves thought about oral contraception. I found that certain similar versions were given independently of whether women had received information from hospitals, clinics or the local extension worker.

Some women had been given no explanation, only instructions, yet had clear ideas about how contraceptives worked. Several women told me what they had been told and then went on to discuss their own theories on the matter. Just giving instructions was clearly not enough. While women were clearly sharing knowledge among themselves about contraception, I also found that some women had been given explanations by health workers (nurses in clinics and the local community-based distribution agent (CBD)) which conformed more to aspects of local knowledge than the western medical model.

Interviewing a CBD, it emerged that she was all too aware of the lack of fit between the western medical version she had been taught and what women in the area knew. She told me: "I learnt

all about contraception on a course. But how do I talk about these things to the women in this area? They are not educated. They do not understand when I talk about ovaries..". Her recognition of the difficulties in finding an appropriate explanation and her efforts to bridge what she had been taught with what she knew inspired this research.

- **Using body mapping in research and extension**

Body maps were used in discussions with individual women and with focus groups of women in workshops, grouped according to age. Maps were usually drawn on the ground with a stick and then copied, or directly drawn onto paper. After an initial discussion, women were asked to draw where conception took place and describe the processes from fertilisation to birth, referring back to the structures they drew to discuss processes (see Figure 1.). The map was then interviewed in more detail and discussions on methods of preventing conception were prompted.

Later, in workshops, women were placed in small groups of similar age and asked to draw a map together. The discussions which arose in this exercise were animated. While the group member deemed 'most educated' often ended up holding the pen, as all women had already drawn their versions earlier in interviews they were somewhat more confident about revealing their ideas. Maps drawn by a group often reflect the ideas that dominant members have about what should be shown. In this case, individual maps had already shown what individuals wished to represent to me. The group mapping exercise enabled me to observe interactions between women and the influences on what they collectively produced - what they chose to represent to each other. Some examples of group maps are shown in Figure 2.

Using body maps in this way, it became clear that women's descriptions of their bodies often differed significantly from the western scientific version. For example: in several accounts, the womb (*chibereko*) acted as a

'gateway' through which semen and eventually the mature foetus passed; its major function being the regulation of blood in the body. The foetus was frequently conceptualised as growing in a structure termed the *butiro*,

glossed as amniotic sac, outside the *chibereko*. Many women stated that the *mafundo* (sing. *fundo*), glossed as ova and often described as small child-like structures, were limited in number. Often the *mafundo* were located inside the *chibereko*, or alternatively in various arrangements outside this structure (Figure 1). These accounts had implications for the ways in which women interpreted the information given to them about non-indigenous contraception, as well as for acceptance and use.

To illustrate this, some examples of how the pill was interpreted may be useful. The most prevalent explanation was that it 'chased away the semen', either mechanically or by working in the blood. This could and did lead to irregular use of the pill by some of the women with migrant husbands. It seemed fairly common knowledge that taking a handful of pills after sex could prevent pregnancy - the 'morning-after' effect. It was unclear to what extent this was actually practised, although I understood it was common among schoolgirls.

Some women suggested that the pill killed the *mafundo*, which those who were anti-contraception took up as an argument and those who did not want any more children saw as positive. This explanation gave rise to rumours and anxieties among other women and their husbands. Others suggested that the pill made the womb weak'. This connected with the noted frequency of women seeking 'strengthening' treatments from local herbalists when they wanted to get pregnant and was a source of anxiety. Lastly, some women contended that the pill 'protected the *mafundo* from being fertilised'. One of the most significant findings was the frequency of concerns voiced about effects on menstruation, something which is rarely given attention in information provision.

There were often considerable differences between versions, as can be seen from Figure 1. Sufficient commonalities emerged, however, for explanations of contraception to be developed making reference to women's knowledge while accommodating the western medical model. Body maps were used both to elicit relevant information and as a source of reference for experimenting with solutions with a range of women. Through this it was possible to assess rapidly the appropriateness of messages as well as to explore the range of

concerns women had about non-indigenous contraception.

• Sharing ideas

For several women this was the first time they had drawn anything and for most the first time they had thought about their internal anatomy in such a way. Similarly, although I had studied physiology and worked as a science teacher, it was the first time I had reflected on the representation I had been educated to produce. Before I started using mapping, I had made a number of assumptions about the function of particular organs, such as the womb, and had been puzzled by what women told me. It became clear that I had carried a lot of biases into research. The emphasis which I placed on locating processes within structures the women themselves provide was an important part of the exercise. This helped to avert biases about shared referents. The discussions we had came to have a wider scope than I had originally imagined.

Most women readily drew the maps, although some needed encouragement to reveal what they regarded as their 'ignorance'. It was important to stress that this was not a test of whether they could do it 'correctly' but a way of exploring perceptions. This raises questions about the situation in which women drew the maps; what they expected me to want from the exercise and the dynamics of the encounter itself. As a European and a teacher, assumptions were made at first about my supposedly 'superior' knowledge. Women expressed their fears that I would judge their diagrams according to my book-learned knowledge and find them silly or ignorant.

One way of making mapping less intimidating was to share my ignorance with them. As a childless woman, I had much to learn. Drawing and discussing my version after women had produced theirs led to stimulating discussions on the differences. Women 'interviewed' my version, which was drawn in as close an approximation as possible to the pictures used in family planning education. This proved to be a good way of noting responses to this type of representation. I was able to offer my own specific cultural experiences in discussion, which generated further insights. Women became participants rather than mere

informants in what came to be referred to as 'sharing ideas'.

- **Using body maps: issues to consider**

Three points are worth making here as regards the drawings. The first is the possibility of women producing ad hoc drawings so as to satisfy me - something I discounted when regular similarities arose from the drawings. Secondly, the issue of interpreting the exercise requires attention. Body maps, and statements about bodily processes in interviews, are products not only of a particular cultural context but also of the interaction that leads to them being made. It is vital that this is given consideration and that such interviews are sensitively handled; sharing 'ignorance' as well as 'knowledge'. Thirdly, and I would wish to place great emphasis on this, interpretations of the diagrams themselves must be set within the discussions which body mapping facilitates; 'interviewing the map' plays a vital part in this exercise, whereby the map acts merely to generate themes for further commentary.

- **Lessons learned**

Body maps, in this context, provided a guide to women's perceptions of their bodies and a way of locating explanations. Using the maps to work from and using women's own terminologies, aspects of accounts which appeared to be contradictory could be situated with regard to wider social processes, such as relationships with men and expectations within the community. Rumours about harmful effects of contraception as well as explanations of contraceptive function 'made sense' within these broader frames of reference. The maps acted to free interviews from being unduly intrusive yet generated themes for discussion which went beyond the biological.

If interviews had proceeded using only verbal descriptions, however, few of the complexities of women's models would have become apparent. It would have been all too easy to regard explanations as confused, rather than as alternative versions. Key differences between women's and western scientific versions would have been obscured by assumptions of common reference. Moreover, discussions could have

been confined to considering physical aspects without exploring social issues and connections. A number of important social issues arose that may have otherwise been overlooked.

- **Building bridges: local knowledge and western science**

Asking health care professionals to take people's models of their bodies seriously, when they are clearly erroneous from a western medical point of view, obviously requires a fairly major attitude change. Western scientific models of the body are often regarded as if they were somehow culturally neutral, abstracted from both experience and social relations. There are significant parallels here with attitudes towards agricultural knowledge and extension. Anatomy, like agronomy, is assumed to be an 'objective', factual subject which provides one correct version to which others may be matched and found lacking. Regarding the knowledge of rural, often illiterate, people as legitimate bases for research and development involves moving from seeing the body as something which can be known 'objectively', what is there, to looking at the kinds of representations people make of their knowledge and the many different ways of knowing (including what is done).

Moreover, the issues of power involved in the use of explicitly western scientific approaches in extension need to be considered. Taking rural people's knowledge seriously can be read in terms of relinquishing an important source of status for local extension workers. Changes in perspective are, perhaps, less difficult to achieve than changes in behaviour; the two do not necessarily go together. The history of an asymmetrical power relation between western science and local knowledge as played out by local actors needs to be taken into consideration. This is so pervasive that well-intentioned attempts on the part of the powerful to 'understand' are always necessarily located within relations of inequality. The important issues involved cannot be considered in more detail here, yet have considerable bearing on approaches to 'indigenous technical knowledge' (ITK).

There are many situations in which understandings are radically divergent from the

western medical model and we need look no further than the UK for examples. The point I would like to make here is a practical one. An approach to knowing which considers only abstract technical facts is patently not enough. Strategies are required both to explore divergences in terms of how people interpret and act on information they are given and to attempt to bring about the changes in behaviour required (such as boiling water for babies, wearing condoms etc). Where interventions involve the use of western scientific approaches or technologies, problems which have arisen in practice through the lack of fit of different ways of knowing need to be addressed.

It makes little sense to 're-educate' people if their ideas are not harmful; equally, it makes little sense to reject using local metaphor and concepts if they are means of providing the kind of information required, even if they are based on quite different premises. This is not to argue that no attempt is to be made to inform people or to bring to their attention the fact that some of the ideas they have are potentially harmful to their or others' health. What is being suggested here is not a replacement of western medical ideas with local ideas but a bridging process, where possible; using local knowledge and idiom as building blocks from which to construct versions which 'make sense' in local terms.

Body maps, as I have suggested, provide one strategy among others in facilitating communication. As such, body mapping is a device which is used as part of an approach which aims to find ways of improving access to appropriate information. Yet, given the issues raised here, it is clear that in order to use this approach, some of the basic assumptions on the part of those who employ this technique may need to be challenged. I would like to conclude by considering issues for training PRA/RRA practitioners.

- **Changing attitudes: issues for training**

PRA/RRA exercises have gone some of the way towards considering what have been termed 'intriguing beliefs and practices'. Western scientific biases have often led to considering the aspects of such practices which conform either in approach or content to

practices informed by that perspective. This has often involved side-stepping the issues which surround knowledge as part of social processes, as well as failing to challenge a view of western science as a single, universally 'correct' version of events.

The drawing out of such 'beliefs' in training emerges from accounts of PRA/RRAs as an almost cathartic process. While such an exercise could be developed into a means of promoting a sensitivity to the variety of ways of knowing that people from all walks of life use, it appears not to have been taken this far. The rather abstract lists which are produced separate knowledge not only from its context, but also from its carriers. While this arguably fails to address the biases that 'professionals' have about other ways of knowing, the relationships trainees have with the statements they contribute to discussions are also not explored. Such 'beliefs' are located within social processes of which trainees are also a part.

PRA/RRA training can involve a wide range of people, each of whom have experiences of the acquisition of different kinds of knowledge: technical, cultural or experiential. Exploring the diversity of participants' own knowledge is the first step in sensitising them to the ways in which that of others can be used as a foundation for development work. Where those who have received formal training in western scientific knowledge often hold themselves to be superior not only to rural people, but also to 'less educated' extension agents, a range of strategies is required to facilitate sharing.

Asking a mixed group of people to draw body maps may be intimidating at first, if the issues raised about ways of knowing are not raised beforehand. A simple example such as colds could lead to discussion of sources of knowledge about the body. This would be aimed at bringing out the multiple ways in which people acquire and hold information. Rather than approaching particular versions as right or wrong, or indeed as a series of related and unitary 'facts', the - often contradictory and interrelated - knowledge people can hold simultaneously can be explored. Using network or pathway mapping, trainees can explore ways of representing the sources and contexts for different ways of knowing and practices.

Following this exercise, body maps could be used to explore some of these issues in more depth. Here are a couple of brief suggestions: Maps can be drawn not only by trainees, but also by their trainers, to reveal the variety of versions that even so-called 'professionals' produce. Alternatively, trainees could be asked to draw maps as if they were a member of the community in which they work. This would produce versions which reflected the perceptions trainees have of people they are working with, as well as, no doubt, their own ideas. It is also less potentially threatening for a mixed group.

Such maps can then be used to reflect on several points, which go beyond considering the content of the maps themselves:

- the context in which maps are produced and the anxieties people feel about exposing their versions;
- what they felt was expected and how they produced their drawings to conform to this;
- the relationship of book-learned knowledge to their own experience of their bodies;
- ways they communicate their ideas to others in different situations (e.g. to partners, relatives, doctors as well as the people they work with) - different ways of bridging;
- how the map which is drawn relates to what people actually do; what kinds of contradictions there are between what people say they know to particular others, what they think they know and what they do? and,
- other issues which arise.

Through considering the complexity of knowing and doing, trainees may be able to draw on their experiences and those of their peers in a less threatening and more constructive way. Such an exercise would prepare them for fieldwork as well as provide a basis for examining potential bridging issues. Bringing this process into the workshop would allow more careful consideration of the communication issues involved. In addition, the multiple versions which can be found in any 'community' can be highlighted as an important training point for fieldwork; leading into an exploration of difference. Most of all, body mapping can provide a way of affirming

trainees' own knowledge as a resource in itself in a more directed and personalised way than the suggestion of random 'intriguing beliefs and

• Other applications

There are many potential applications of this method in the health field. Examples include: Mapping stages of foetal growth, generating themes for discussion from ante-natal care to sources of nutrition during pregnancy; clarification of what patients anticipate when undergoing surgery or expectations of voluntary surgical procedures such as vasectomy and tubal ligation; and perceptions of cancers, heart disease, intestinal and stomach disorders and so on.

Body mapping enables people to provide their versions of processes and structures, and to reflect on and articulate their concerns. Their own knowledge can form the basis for active engagement in securing the information that both users of services and health workers, as providers, require for effective health care extension.

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13

Notes from a food and nutrition PRA in a Guinean fishing village

Judith Appleton

• Introduction

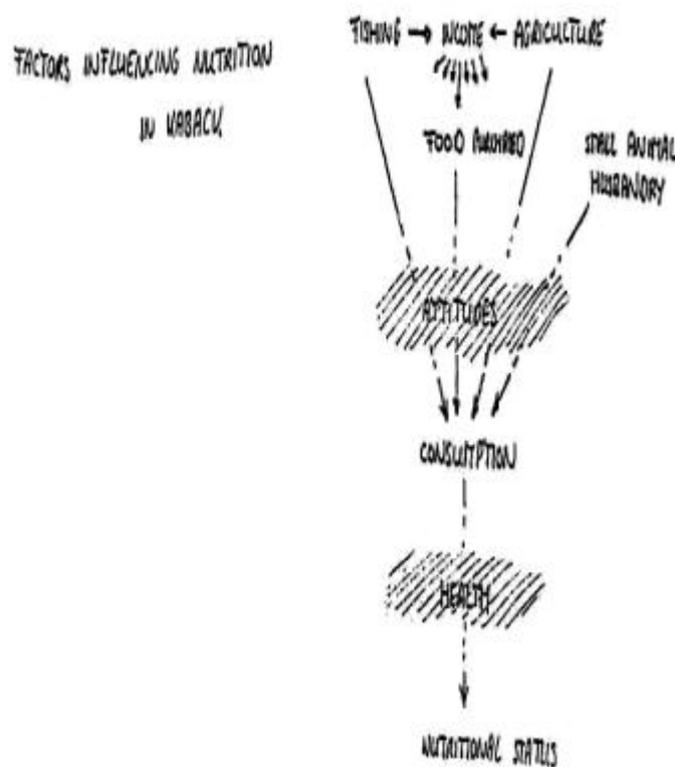
In an ongoing FAO artisanal fisheries project in coastal Guinea, on-the-job training in PRA for local project staff focused on food and nutrition, a theme about which these technicians and administrators knew little. The training and the exercise, including boat transport between villages and fixing up eating and sleeping arrangements, took two and a half weeks, and led to action on food and hygiene, both by the population and the project.

The actual assessment exercises highlighted food and health gaps and needs to be worked on together as opportunities arise. The PRA experience also left the whole team with a critical awareness of our own outsider judgmental attitudes, and increased our understanding of constraints on livelihood improvement and our respect of fisher household decision-making. One of the more important gains for the villagers was the simple visualisation of issues, which they constructed and so were *'writing our own papers'*.

Two international nutritionists led the training and assessment. The PRA team consisted further of a project manager, an administrator, an electrician and a biologist-turned-community development officer. All four were local Soussou or Soussou speakers, the electrician being the son of a Kaback fishing and farming family. Two of the six team members were women. The training and team sessions were conducted in French, and the actual PRA sessions in local Soussou.

The principle of participation started with the trainees' involvement in determining the content and extent of the training and the actual PRA. Their and the nutritionists' ideas on what

'nutrition' is and how to find out about it were combined, first into a master-checklist, and then as opinion statements of where nutrition problems in Kaback lay, which became known as our 'hypotheses'. From this, checklists of actual topics of conversation and related questions were formulated, as were eventually the choice of techniques and informants. The team defined the context for this thematic PRA as follows:



Working hypotheses

Nutritional status is poor because:

- diets have insufficient variety, due to absence of vegetable gardens;
- women have no time to devote to the nutritional needs of the family;
- environmental sanitation is poor due to poor quality water and poor hygiene; and,
- health (especially child health) is not priority for household expenditure.

The training continued for a week with examples and pictures from RRA exercises elsewhere, reworked in Kaback with a view to encouraging greater participation in problem identification and solving by the villagers. Half of the PRA team was already working with them on fishing-gear improvement, credit, processing and marketing, and community financing but not with agriculture, health or education yet. So the exercise was seen as a continuation of project work.

To practise seasonal calendars, we spent time comparing our twelve-month calendar with Soussou seasons. Considerable time was also spent on 'un-learning' direct questioning and reinforcing an open-ended approach. Six visualisation techniques were presented, discussed, practised and allocated to a type of situation envisaged. One week was allocated to visits to two villages, and two days to discussions with those and a third village, where the project office was based.

Precise maps of each of the villages existed already, so we concentrated our first efforts in each village on '*focused walk*', an adaptation of the transect walk. For this we identified types of sites of functional interest in food, health and hygiene discussions: the beach, noting all uses; latrine sites; fish-cleaning sites; fish-smoking sites; kitchen areas; other housing; water sources; food sources; traditional health-care. We jotted down notes in a matrix comparing sites with functions. The focused walks led to suggestions by team members of how to investigate access to food and other

entitlements, as well as specific topics of health and hygiene which could be discussed with key informants and focus groups. The way we tackled food and household budgets, 'thinness', time-allocation and household reproduction are described separately below.

The final meeting with villagers from all three sites started with a simple description by us of what we had observed. With no prompting, this led to further explanations by the villagers of their calendars and charts which were reproduced as posters. Their comments, and in particular their suggestions of what to do about problems, and who should do it were written on a large wall-chart, which was later made accessible to everybody by Alseny's interpretation of them in drawings. The main recommendations for immediate action were:

- ◆ investigate feasibility and costs of stocking Kaback rice;
- ◆ Khunyi women will encourage covering of drinking water and beach cleaning;
- ◆ Khunimodiya's Imam encouraged following Koranic hygiene rules, and teach them in Koranic schools; and,
- ◆ a project officer will work with girls as well as mothers on ways to encourage better child feeding.

Tale of a food calendar (Figure 1)

Having heard about a 'hungry season' during the Khunimodiya focused walk, we decided to investigate the general diet and seasonal variation by constructing a calendar of foods with a group of five poor-to-average-income women fish-processors who also grew crops on their own or others' land behind the beach.

The village project contact, Tidiane, arranged this to take place during a slack afternoon (before high tide and the landings), under the coconut palms between the houses and fields recently ruined by salt-water invasions. Tidiane had not met these people before, so asked if they would mind telling him about food in the village, what they had eaten that day and how it was prepared, followed by questions about the availability of each ingredient they mentioned.

CALENDAR OF MAIN ELEMENTS OF HOUSEHOLD BUDGETS, KUNI MODIYA
(S WOMEY, KONIMODIYA, 1-10-1991)

SEASON	MIST + FOG			HOT AND DRY		EARLY RAINS		RAINS		LATE RAINS		CLAR SKIES	MIST AND FOG		
	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F
OWN RICE TO EAT	●●● ●●● ●●●			●●● ●●● ●●●		●●		●●				●●● ●●● ●●●	●●● ●●● ●●●		
FISH FOR SMOKING	●●			●●●		●●		●●●		●●●		●●● ●●● ●●●	●●●		
CASH IN	●●●			●●●		●●●		●●●		●●●		●●● ●●● ●●●	●●●		
CASH OUT	●●			●●●		●●		●●●		●●●		●●● ●●● ●●●	●●●		
DEBT CYCLE	REPAYMENTS							HIGHEST DEBTS					REPAYMENTS		

Catherine, a team member, drew out a six-season calendar framework in the sand as the women talked about their main staple food, rice, marked the top line with a grass frond to represent the rice, and allocated palm-nuts in each of the six sections according to the women's remarks on availability. *‘Is that our rice you’re writing about?’* was one rapid reaction. The conversation stopped while they explained the ‘writing’ to each other. Discussion ensued about Catherine's allocation of nuts, and they insisted that one season be left empty, not because they have nothing to eat then, but because their own rice has been eaten or sold off to repay debts. They buy ‘foreign’ rice for that period.

The next constant item in the diet is fish. *‘If there’s no fish we don’t eat’*. However, the frequency of fish consumption is more or less constant throughout the year, making for a steady line on the calendar. The conversation about fish livened up with the women bringing out the seasonal variation in actual landings. *‘Give me those nuts’* said a lady in red, *‘we can do this kind of writin’*. She and the other women took over the calendar, identifying the different seasons according to the relative amounts of own rice eaten (i.e. the top line). One of the children sitting watching fetched his

toy-boat when we started talking of fish (an enchanting coconut model, complete with sail and outboard motor) and offered to lend it to mark the fish on the calendar.

When the fish availability line was complete, the conversation was so far removed from the idea of a food calendar, that we did not return to foods. But having established that fish was the main and almost exclusive source of cash for household use in the village, we asked instead how income from fish-smoking varied during the year. The women explained about fluctuations in purchase and selling prices, before summarising how total income for fish varies and producing a pattern on the calendar which largely follows the fishing seasons.

The lady-in-red sat back and dusted the sand off while we all studied the document in the sand before us. Someone on the team pointed out there were far more outgoing than income in the slack season. Another women explained.

‘Well, we have to eat. That’s when we borrow to buy foreign rice ... How do we pay it back? After the rice harvest of course. That’s why we don’t have any left later!’

“But you have a lot of household expenditure then too.”

“Of course! After the harvest we all eat well and party, and that's when people get married, in a good year”.

We continued comparing the income and expenditure slots for each season, with the PRA team listening to their analysis of the permanent debt cycle whose contours were outlined in the sand.

Both the women and the PRA team discovered new information in the calendar while making it. The village women talked for a quite a while about how the post-harvest feasting related to debt, and discussed how cutting down on some of it would reduce debts later. However, when this idea was raised at the PRA village meeting it was not popular with those who had not done the calendar. Since then project staff have used the calendar to discuss household and community finances further. The project staff learned that women view the existing project credit scheme as available only for fishing and processing, while consumption and health-care loans had to be arranged elsewhere, and thus irrelevant to their household needs.

For the team it became clear that ‘hungry season’ in this village meant lack of own rice to eat, and that the absence of a preferred food led to eating less. However, it was the villagers who suggested how to tackle this at the final village meeting. The men brought up the project rice-bank, an arrangement whereby the project bought local rice against immediate payment or future credit. *“But it is the men that sell the rice”* piped up one lady, *“And if it's food we are talking about, we want a bank of our own rice, not a money arrangement”*. Many voices chimed in. Ten minutes later the project manager offered to hold a separate meeting immediately afterwards to discuss how to fund, set up and manage such a rice-store within the current village management structures.

- **Nutrition surveys can be kid's stuff**

The staff of the FAO artisanal fisheries project in the PRA team jumped into the preliminary discussions about “what is nutrition anyway, and how do we study it?” by claiming that the nutritional status of children in the Kaback

coastal fishing villages really is very bad. The expatriate nutritionist/trainers pointed out that the children we could see walking around the village looked OK, but that if they insisted we would have to find a way of examining this, a way which also involved the villagers.

Part of the problem with standard nutrition surveys is that they do things to people that mean nothing to them, and frequently do not mean much to the people hired to do them. Clinical tests are seen as ‘doctor's stuff’, and anthropometry (weighing and measuring and calculating) is frequently a mystery, or *“must be for the coffins”*.

However, nutritionists do have a standard method in their repertoire that makes sense to most people. MUAC, mid-upper arm circumference, may be a very rough-and-ready measure, but it does actually look as though you are trying to see how thin someone is. As such it lends itself admirably to RRA, and even to the PRA. We trained project staff to carry it out in Kaback, although it did need adapting for an illiterate and innumerate population.

When we got to Khunyi, one of the things Aboubekar, a PRA team member, raised in our introductory chat with the elders, was whether we could also work with the children. They were horrified that we might ask them for information, but we made it clear that we just wanted to keep the bigger, noisier ones busy with a game, measuring the thinness and fatness of their little brothers and sisters, while we talked business with the adults. That was fine, and as it turned out, everybody in the village took part in it somehow or other the next day, making it the most participated-in technique we used.

The long beach village of 200 houses had four natural divisions. So four local teams of four 10-12 year olds were selected (all boys as their sisters were busy with chores). Each was allocated one of the specific tasks of selecting, measuring and recording.

Selection

The team-leader made sure they visited every house with children, and asked the mother or child-carer if they could feel the arms of the small children. Ages are not important in

Kaback, as they are not known, so instead of asking for 1-5 year olds, the children asked for any child already able to stand alone and take at least one step (approx. 1 year) and still no taller than one of Aboubekar's poles measuring 95 cm (the tallest of some identifiable 5 year olds we measured on the spot).

Measurement

The second child held one of the short sticks (15 cm long) that Aboubekar and Alseny had shaved to 12.5 cm diameter, the recognised cut-off point for malnourished 1-5 year olds. The technique was to encircle the children's upper arms with thumb and forefinger, without squeezing them, and compare this 'measure' to the stick, pronouncing them 'thin' or 'not so thin'.

Recording

The shortest child in each team popped a palm-nut into the bag we had provided him with every time the measurer pronounced a child 'thin'; the fourth child in each team was in charge of 'counting' the not-so-thins in the same way.

When all the 1-5 year olds in the village had been measured (apart from 2 whose mothers objected to the sticks; and 11 who were absent for the day), the teams reported back to the village project contact, who counted the palm-nut records and noted down how many refusals there had been and the reasons for this. The results did indeed show a lot of thin children: over one-third had a MUAC of 12.5 cm or less.

This result surprised the nutritionists, who could only conclude that most of them belonged to so-called invisible smaller children, i.e. those hidden inside cloths on their mothers' back or sleeping or playing inside the smoke-houses.

It was not difficult to discuss 'thinness' since everyone was now measuring everyone else's arms. Our questions about thin infants were treated in focus group discussions with women of different ages as well as with individual child-carers. In addition to the diseases they volunteered to describe, we asked about feeding. Soussou children do not necessarily receive any other food than breastmilk before

the age of 2 years. Although nutritionists think that this can result in undernourished children who succumb more easily to disease and get even thinner, Kaback women see no connection between food and the state of the body. They do see one between disease and thinness, although thinness is also seen as a disease. Furthermore, there was little awareness that poor environmental hygiene could make people sick, and therefore thin.

Although the discussions of 'thinness' went on for some time among villagers at every level as a result of the arm measuring, they raised more questions and problems for the team to consider and investigate than answers and solutions. Is there a positive motivation for late weaning? For example, are women aware of the contraceptive benefits? Would feeding an infant on supplements to breastmilk encourage earlier weaning from the breast, and consequently shorter birth intervals? Ideas on how to tackle these issues other than through conversation would be welcome.

Whether or not this is a way to control fertility, nutritionists are left with devising ways of tackling the 'information' gap on the link between food consumption and nutritional status, the basis for advice on weaning practices. In the case of Kaback one of the project officers proposed to work with young girls who look after their siblings to explore this further, and to look for experience among health educationists elsewhere in Guinea. The project should also pursue the discussions it has started through the PRA on economic decision-making, and find a way to link the advantages of well-fed and healthy children with the advantages of having time to make more money, a conclusion one could draw from such statements as, *'He just hangs round my skirts all the time when he's ill, stopping me getting on with things'*.

Why not surveillance by children? There are many places where populations have marginal nutritional status at the best of times, far too many places to mount the sophisticated type of nutritional surveillance recommended by UN committees for early warning purposes. This type of community measuring, by the children, could be developed as a first-indicator approach, triggering other, more sophisticated investigations when needed. The most

important community function of this kind of monitoring would nevertheless be that of involving all types of people throughout the community in keeping an eye on the state of their children.

- **Time-lines and women's work**

The local Guinean team disagreed early on over possible reasons why many small children are malnourished in these fishing villages. One contested hypothesis was that women have no time for childcare: one male team member was honest enough to say maybe they were just lazy.

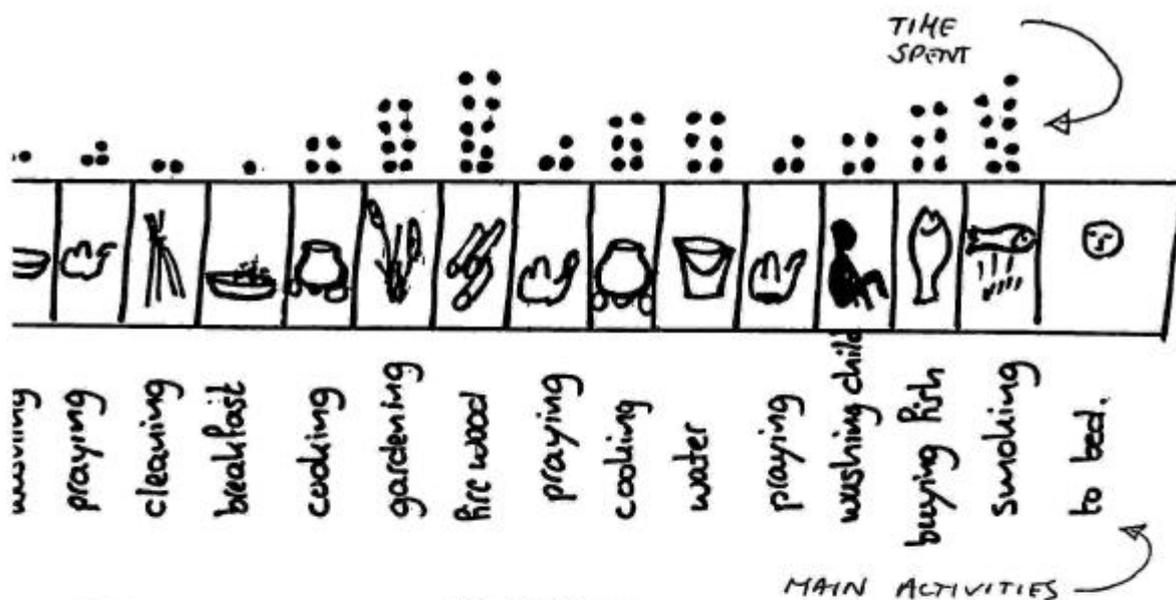
The nutritionist/trainer proposed to use a time-line as visualisation technique around which to discuss time use with women and other household members who neither own watches nor are literate. The team accepted the suggestion that we approach the issue as twenty-four hour recalls, in a linear representation of time, rather than dividing up a predetermined whole into proportional parts. We would deal with proportion and actual time spent through a comparison of time spent on identified activities, distributing nuts to each rather like one can distribute nuts etc. to show relative amounts in a calendar or a matrix ranking. We consequently prepared to involve a key informant (fish-smoker with small children including one under three) and her neighbours.

The question of how much time village women actually spend on work related to fish processing first came up naturally towards the end of one day in Khunimodiya as the team sat chatting about child-health to a woman in her dark smoke-house while she laid out the day's catch, gutted and slit, over the fire. Catherine asked questions about the sequence of her main activities through the previous day's catch, prompted by Tidiane from the ground where he was scratching a long time-line across the banda floor, representing her different activities

by line drawings. However, the light faded before we got through the 'day'. Since the small oil lamps used to inspect the progress of the processing were insufficient to see the drawings in the dirt and we had not brought our torches, the session was wound up. None too soon in the event, for the lady had become reticent when neighbours gathered round, clearly making her uneasy about publicising a visit she had made outside the village the day before.

The next time we took up the theme was on an overcast morning in Khunyi, while talking to a group of women neighbours after they had smoked and stacked the previous day's fish landed at high tide the evening before. They were able to sit out in the open comfortably, where it was easy to see drawings on the ground. Tidiane scratched two long lines 50 cm apart across the yard, as Catherine enquired into household chores, eventually asking the lady of the house for yesterday's sequence of main tasks. Each activity was either drawn or represented by an object. The lady herself offered her kettle to denote (washing before) prayer time in the Muslim village, her broom to denote cleaning time, pots to denote cooking time, twigs for time spent collecting firewood, and her toddler was placed on the line as she told us about fetching water and washing her towards the end of the day. She then fetched a dried fish to represent time on the beach waiting for the boats to come in at high tide, time spent haggling over prices, then cleaning, gutting and slitting them, and she constructed a tiny model of a smoking banda to represent the time spent watching the fire and turning the fish before banking down the fire and going to bed (see Figure 2).

Asked about who took care of the small children while she was busy, she smiled broadly "*I have to do more than one thing at a time most of the day!*" Her even broader smile when asked how much time she rested during the day evoked "*None*".



The next step was to determine relative amounts of time spent on each major activity. Catherine asked which activity took least time, and which the most, placing one palm nut against 'breakfast' and ten against 'collecting firewood'. Relative time was judged according

to these two indicator values, and the lady put down the appropriately sized pile of nuts for 'more', 'the same' or 'less' than the adjacent activity. Aboubekar did rough mental calculations to check whether there were approximately equal amounts of time between

prayer sessions (which is a very useful measurement of time in Muslim societies), and how time spent tallied with the tide and the fish-landings. The tide was our other fixed point on the clock, not just because we had tide-tables, but because the beach was so shallow and the tide so long that the boats timed their return for within an hour of high tide. From this information he and Alseny, the only fisherman on the team, judged that she got up around 5.30 am and went to bed around midnight, then went through the whole sequence with her again to check how far the activities tallied with the total time.

Although the group that had gathered added instructive comments and corrections, we were anxious to have some discussion of choice in time-allocation. Catherine asked the lady what she would spend more time on if she had more, and offered her ten more palm-nuts saying she could put them anywhere she liked on the time-line. She took a couple of minutes to look it over again before bending over and putting a pile against 'collecting wood' and another pile against 'buying fish'. Why? *"I can always get enough wood for myself, but there are women here who don't so I can sell any extra to them. You see I always need cash for something or other for the family."* And what about the fish? *"The longer you haggle, the lower the price goes, so I can get more for the same, and make more money that way"*. A further handful of palm-nuts were offered, but she laughed. *"After all that I'd just have to rest!"*

Asked whether she had enough time to look after the children, she explained that she occasionally had to drop everything if a child was really ill, but she only did that in an emergency, because she had to make some cash every day to keep going. The neighbouring women who had gathered round concurred that their days are equally hectic. A similar group elsewhere in the village was asked on another occasion about the frequency of cooked meals for younger children, and they confirmed the general view that they do not have time to cook, i.e. eat, more than twice a day; many cook, i.e. eat, only once a day. The whole conversation, including making the time-line around which it focused, took just over one hour.

The teams' round-up discussion showed that the men were now convinced that many women

have little time for exclusive child-care. All team members admitted that they were somewhat idealistic about women needing special child-care time in the day to ensure their health and nutrition; they now felt that the economic arguments relating income to food consumption and variety in the diet are at least as important for family well-being. All team members were surprised how very clearly the women's choices about time-use were economically determined.

Other reflections provoked by the exercise concerned the request the project had received for a health service. The project staff had hitherto associated this with a clinic service in one spot. They now realised that time constraints meant that any service would have to be mobile, particularly if any preventive health care was to be involved. The community costs would probably be no higher than what fisher families already pay for their own transport individually each time they judge that they urgently need help.

At the PRA final meeting with fisher people from all three villages visited, the villagers had tabled topics for the agenda, including health and disease. However, they were so eager to discuss the Koran on hygiene practices, and ideas about rice-banks (see *Tale of a food calendar* above), that health services were relegated to a later date. The ideas and reflections of the project staff arising from this exercise will be carried forward in discussions between project staff and Ministry of Health over the form of health services to set up, with the project staff now much more aware of perceived health priorities, and of some of the constraints to imposing 'our' organisation of health services on 'them'.

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14

A note on the use of disease problem ranking with relation to socio-economic well-being: an example from Sierra Leone

Alice Welbourn

An RRA training exercise was conducted by ActionAid staff in a village in Kambia District, Sierra Leone in October 1991. The exercise was conducted with separate groups of old men, young men and women in the village. Female ActionAid staff worked with the women - who commented that they had never been consulted before. Male ActionAid staff, particularly the older ones, worked with the old men; and a second group of male ActionAid staff worked with the young men.

Four half-days were spent conducting intensive fieldwork with the community. On the second day of the fieldwork a well-being ranking exercise was carried out, which allowed us then to further sub-divide groups into better-off and worse-off members of the community.

On the final two days of fieldwork, with these smaller groups, ranking exercises such as sources of income, sources of credit, food preference and disease problem ranking were carried out. These exercises were most revealing, since they made it clear that the problems and solutions of the worse-off differed from those of the better-off in the community. It clearly illustrated how talking to the better-off older men alone, the normal practice of most development project staff, was *an entirely inadequate way* of gauging the complexity of a community's needs.

An especially graphic example of the differences was provided by the disease problem ranking of the women of the village. The two diagrams produced by the better-off

and worse-off women are shown below (see Figure 1).

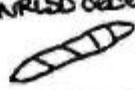
Whilst the better-off women mentioned four illnesses, with measles considered as the worst problem, the worse-off women interviewed in the same village mentioned six illnesses. These included eye infections which were also considered as their worst problem. Better-off women had not mentioned eye problems at all.

Such a diagram does not of course provide conclusive evidence of the connection between eye problems and poverty for these women. Nonetheless the findings of this exercise certainly warrant further investigation. Such tools of analysis provide an excellent starting point for 'interviewing the diagram', further discussion and exploration of health issues in relation to socio-economic conditions. These and other diagrams produced by the women in the village contained no writing initially and were entirely understandable to all concerned.

A final note of caution, however. One of the ActionAid staff members was a nurse by training. She had to be dissuaded from wearing her nurse's uniform on this exercise. But she still could not resist interpreting what the women described in her own professional terms: hence the mention of 'generalised oedema' on the diagram! It is strongly recommended that informants' own words for illness or disease be used in such diagrams, to avoid the immediate imposition of our own western concepts on their problems.

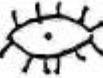
ACTION AID SIERRA LEONE, 16/10/91. BUBUYA. BETTER-OFF WOMEN.

DISEASE RANKING

DISEASES	MEASLES 	GENERALISED OEDEMA 	COUGH 	WORMS
WORMS	\	..... .....	..... .....	X
COUGH	\		X	X
GENERALISED OEDEMA	\	X	X	X
MEASLES	X	X	X	X

MEASLES - 3 WORMS - 2 COUGH - 1
GENERALISED OEDEMA - 0

BUBUYA. POORER WOMEN.

SICKNESS	MEASLES 	ABDOMINAL PAINS	HEART COMPLAINT 	MAUNUTIN 	WHISTLING COUGH 	EYE INFECTION 
						X
		.....			X	X
		.....		X	X	X
		.....	X	X	X	X
.....		X	X	X	X	X
	X	X	X	X	X	X

EYE INFECTION - 5 MEASLES - 4 ABDOMINAL PAINS - 3 HEART - 2 MAUNUTIN - 1

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15

Exploring the potential for primary environmental care: Rapid Appraisal in squatter communities in Salvador da Bahia (Brazil)

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• Introduction

This paper discusses the methods of collecting information in a field-study carried out in the summer-fall 1990 in Salvador da Bahia (Brazil). The study was developed in the health district of Pau da Lima (municipality of Salvador) within a cooperation agreement among the Brazilian authorities, the Coordination of Italian Health Cooperation in Brazil and the 'International Course for Primary Health Care Managers at District Level in Developing Countries' (ICHM)¹ based in Rome (Italy). A group of postgraduate ICHM students (a Brazilian nurse, a Palestinian M.D. and an Italian M.D.) carried out the study with the support of an ICHM staff and several local advisors. The study was meant to provide a learning experience for the students and material for their final dissertation (de Colombani, Irshaid and de Melo, 1990) as well as to explore the local potential for Primary Environmental Care (DGCS, 1990; Borrini, 1991; WCSP, 1991) and produce a number of recommendations of interest to local bodies.

The study investigated possible actors, conditions, means and resources to promote Primary Environmental Care (PEC) within the Pau da Lima district. PEC is defined as a process by which local communities - with varying degrees of external support - organise themselves and strengthen, enrich and apply their own means and capacities (know-how, technologies and practices) for the care of their environment while simultaneously satisfying

their needs. In short, PEC is about the integration of three components: empowering communities, protecting the environment, meeting needs. In short, PEC is about the integration of three components: empowering communities, protecting the environment, meeting needs. The ICHM team was particularly interested in identifying *ways by which the local health district could support squatter communities engaged in PEC.*

The first step of the field-study was a preliminary identification of present and future potential actors in PEC in the Pau da Lima district. By definition, the actors of PEC are local community members, as individuals, in extemporaneous groups or in community organisations. They can, however, be effectively supported by a variety of external bodies, such as governmental services, non-governmental organisations (NGOs) and private organisations, groups and individuals who have a stake on environmental care at district level (stakeholders). Among those, our interest focused on - but was not limited to - the local health services at district level (DSPL) and other health-oriented bodies. In all, we identified ten stakeholders and assessed them in terms of interests, current and past work, possible future contributions and conditions to support community-based PEC activities.

A Rapid Appraisal (Chambers, 1981; Scrimshaw and Hurtado, 1987; McCracken et al, 1988; Chambers, 1990) was carried out in three squatter communities within the district. We chose to study squatter communities because in urban areas they are the ones most seriously affected by environmental problems and related health and social problems

¹ICHM is a collaborating Centre for Training and Research in District Health Systems of the World Health Organisation.

(Harpham et al, 1988; Hardoy and Satterthwaite, 1989; Tabidzadeh et al, 1989; Hardoy et al, 1990). According to local informants, the most salient differences among local squatter communities relate to length of settlement, a factor we tried to account for by selecting three communities ('Cristo e Vida', 'Dereito de Morar' and 'Baixa da Bica') who settled at different times (March 1990, February 1989 and early 1975). The focus of the Rapid Appraisal (RA) was on felt problems, interests and priorities in PEC, forms and conditions of community organisation, and instances and conditions of community-based action. We prepared a basic checklist on the physical and social environment (PEC checklist, table 1) and used it while collecting data with various RA methods. We will now list and briefly discuss those methods.

- **Rapid appraisal**

Review of secondary data

We obtained data about the health district and the 'PEC problems' of the basic checklist from district statistics, reports, academic dissertations (University of Salvador) and local media (television and radio programs, newspapers). Among these sources, academic dissertations from different faculties of the local university proved to be particularly interesting and useful to offer multisectoral views. During our field-study, the Salvador media were very active in describing environmental and social problems in the city because an electoral campaign for the state governmental elections was under way. Without any pretence of collecting 'objective' information, we believe that following the media was a good RA exercise.

Informal discussions with informants

Whenever possible, we held informal discussions on the matter of the study with a variety of people in the district. Notes were taken in log-books after the discussions, and then used to triangulate information or help in the interpretation of data collected with other methods.

Direct observations

We carried out observation walks in each of the three communities. We noted results following the PEC checklist and took pictures of salient environmental features whenever possible. During the first contacts, our team was introduced to the communities and accompanied by members of local NGOs. Without their help, collecting information in squatter settlements may have proven much more difficult.

Laboratory analysis of samples

During the observation walks, we took samples from the main sources of water used by residents in the squatter communities. The Bacteriological Department of the Secretaria de Saude do Estado da Bahia performed drinking quality analyses.

Life history interviews

We collected a number of brief life histories among the people living in the squatter settlements, to gather clues on mechanisms by which people get to become and remain squatters. The people who provided us with information were identified in the focus groups meetings (see later) or during the observation walks. Our selection was not guided by specific criteria except length of residence in the squatter community at stake and willingness to talk. During the interviews people were stimulated with an introductory question and then with a few other questions if necessary. At the beginning, the aim of our study was explained and they were invited to speak freely. We collected information in writing and with the help of a tape recorder.

Focus groups including a ranking exercise

We held three focus groups meetings (one with women, one with men, one with youth of both sexes under 20 years of age), including ranking exercises, in each squatter community. The ideal number of participants in the meetings was set to be between 6 and 12 and session time to be one and a half hours. In practice, we worked with a minimum of 5 and a maximum of 13 people, and at times the meeting lasted more than 2 hours. The

meetings were planned well in advance, but it always proved difficult to gather the people on time. The meeting place was chosen as close as possible to the area of settlement and neutral (e.g. a school rather than a church) to facilitate participation and prevent 'conditioning' the discussion. We offered refreshments at the end of each meeting. The Brazilian member of the ICHM team always played the role of facilitator, to arouse people's confidence and ease communication. A local collaborator, fluent in Portuguese, took notes of the issues raised in the meetings, following a prepared guideline. The other two members of the ICHM team took notes on group dynamics and on the results of the ranking exercises.

The focus group meeting began with an introduction and explanation of reasons for the meeting (collecting data for a dissertation study). The community spontaneous point of view on what constituted an 'environmental concern' was then explored by asking a simple question ("what are the positive aspects and problems in your environment?"). Answers were noted down. A number of specific questions were then raised by the facilitator, following the PEC checklist. These 'less spontaneous' answers were also - separately - noted down. We listed the major problems on a billboard or on large sheets of paper, and discussed them openly. We then asked: "Between problem A and problem B, which one is more important to solve first? And why do you believe that A (or B) is more important than B (or A)?" The criteria expressed by the group were noted (possibly maintaining the exact wording of the speakers) and taken as indicative of the interests underlying a felt problem. A list of priorities among the problems was then drawn by asking each individual group member to tally the five most important problems, and then counting the total number of tallies attached to each problem. Whenever time allowed, the people in the focus group were asked to draw a 'risk map' of their community on which they would geographically locate the problems mentioned in the discussion.

In the second part of the meeting we explored community organisation and action in PEC by posing questions that raised general discussion. This subject proved to be

particularly difficult to develop because of semantic and perhaps also conceptual reasons (what is a 'community organisation'? what is a 'community action'?). The fact that an electoral campaign was under way complicated our task considerably. It may have even introduced a bias in the results, in so far as people seemed to be most interested in describing vindications to political authorities (preferred activities in a pre-electoral period) rather than autonomously-run actions to solve particular problems.

Meeting in focus groups was the main method we used to identify felt problems in PEC and assess interests and motivations for community action. Discussion in a group produced a shared 'responsibility' for the answers and was a motivating factor. Moreover we could record several opinions, thus enriching and diversifying our information basis. In urban squatter settlements - where different micro-environments can be distinguished in the same area, e.g. on hill sides and at the bottom of valleys - it is very important to collect views from various sources. About community organisation and action, the focus groups provided us with limited information (compared, for instance, with what we obtained by interviewing key-informants), but allowed us to identify interesting differences in points of view. Women, for instance, seemed to have less information about community organisation and action than men, but stronger determination to be involved in the future and often made many good suggestions for possible actions. Observations such as these confirmed to us that it was right to gather focus groups with people of different gender and age, possibly interested in different kinds of PEC activities to carry out in the future. It seemed to us that different focus groups, for instance with people belonging to different socio-economic levels within a same squatter settlement, would have been less informative. Finally, discussion in a group seemed always to raise new consciousness about the resources available within the community. This gave to our study a taste of 'action-research' and we hope to have facilitated even in a minimal way a process of local organisation for self-reliance.

We encountered several difficulties in organising and managing the focus group meetings. Some local people had prejudices against us because of prior poor experiences with people from outside the community. Men and young people were often far from the settlements for most of the time, and it was extremely laborious to get them to gather at a fixed time schedule. Existing shelters were overcrowded, and the lack of community organisations often meant lack of communal meeting places as well. On top of this, social conflicts and disagreements among participants prevented us - at least on one specific occasion - to meet in some private houses. Women groups were difficult to manage because many women wanted to speak at once, and crying babies were omnipresent. Commonly, participants seemed tired after one hour of discussion. As mentioned before, the proximity of political elections influenced people to stress the need for vindications to political authorities rather than the need to organise and work together within the community, and probably influenced as well the expression of priorities (political opportunity may have overshadowed felt need or likelihood of achievement).

The ranking exercise was the core of the focus groups. Unforeseen criteria for priority came from the two-way comparison. Criteria were interpreted by us as expressions of the interests of participants and of their willingness to be involved in PEC activities. In this sense, we believe it was much more informative to ask an indirect question (such as "Why A rather than B?") rather than a direct question ("Why A?"). At times, it seemed to us that people conveyed their priorities on the hypothesis that some external help would be available to them. If specific activities would have to follow the RA, new priority matrices would have to be constructed in collaboration with whoever could and would be willing to offer concrete support to the organised communities (this process has been referred to as Microplanning, see later).

Semi-structured interviews with key informants

The same issues raised in the focus group meetings were investigated by interviewing at least 2 key-informants in each squatter

community. In addition, the informants helped us to understand the historical development of each settlement. Informants were identified during the observation walks and following visits, according to criteria such as length of residence in the community (the longer the better) and relevance of their role inside the community (e.g. past member of a local commission). The Brazilian member of our group interviewed the informants with the aid of a checklist of questions and a tape recorder. The subject raised in the interviews included items about which information had already been collected by direct observation and in the focus groups (triangulation). These key-informant interviews are considered a basic method of data collection in urban areas (Annet and Rifkin, 1989). Yet only with regard to the issues of community organisation and action, did they provide us with somehow richer information than the focus groups.

Institutions

Ten institutions interested and competent on environmental activities in the district (stakeholders in Primary Environmental Care) were selected among the potential many in the city or in the district and interviewed following a checklist of questions. A few (the district management, the Italian NGO locally involved in health cooperation) were included because of the particular interest of the study in the integration of PEC and Primary health care at district level. For the others, the main criteria of choice were; experience in environmental action and experience in working with communities. Among the ones selected were a local environmental association, an official organisation of the Catholic Church, a Lawyers' group and a federation of local resident associations. Besides general information on the stakeholder, we explored the type of activities carried out jointly with local communities and other work partners, the respective roles in those activities, the results accomplished, the means of communication used in relating with local communities, the willingness to be involved in future PEC activities. It was always laborious to set up and actually achieve a meeting with busy officials, but we generally experienced an excellent degree of collaboration from them.

Theoretically, the great part of environmental stakeholders in the district are municipal institutions. We interviewed only two representatives of these institutions because of the proximity of political elections. In fact, on the one hand the representatives of most institutions were going to change after five months, and, on the other, in the electoral context the likelihood of obtaining reliable and meaningful information from some of them was deemed quite poor. At times, we were able to 'triangulate' with one stakeholder the information collected from another one.

Feed-back meeting

All members of the three communities and, in particular, the people involved in previous data collection, were invited to a common feed-back meeting on the study's preliminary results. The meeting, in which representatives of the health district management and the coordination of Italian health cooperation in Brazil also participated, was widely attended. A unified gathering for the three communities proved to be a good occasion to share experiences and facilitate the process of building self-confidence among not homogeneous and often divided groups such as squatter settlers. The Brazilian member of the ICHM team acted as facilitator and presented the historical profiles, positive environmental aspects, PEC problems, PEC priorities and forms of organisation and action expressed by the three squatter communities in the RA. While information summarised in lists or other 'verbal' formats was easily accepted and understood, the squatters had difficulties with the graphic representations (e.g. transects and maps) we had prepared. Topographic symbols for ground levels and vertical cuts such as the transects had to be illustrated repeatedly.

A lively discussion developed on the results of the study and on a number of possibilities for community action. It was very rewarding for us to notice that the process of Rapid Appraisal had fired a great interest in environmental issues among the locals. However, despite our prior straightforwardness about the limited

objectives of our RA, the district communities seemed to expect that some concrete help would follow it. These expectations, coupled with the imminence of political election, may have affected our results in ways difficult to assess.

The analysis and presentation of data

Information obtained with the methods illustrated above was summarised with the use of historical profiles (example in Figure 1), transects (Figure 2), maps (example in Figure 3) and conceptually clustered matrixes (examples in Figure 4 and 5). Matrixes were structured (Miles and Huberman, 1989) according to both the questions made during data collection and the study objectives. As much as possible we set into the matrices only information 'triangulated' from different sources. We must stress that much of our interpretation of the data was carried out in this process of constructing the matrices and fitting information in particular rows and columns. It was a laborious task that required several iterative steps.

A suggestion that may be of some value to people involved in similar activities is to prepare a matrix of 'desired' rows and columns *before* preparing the tools and collecting data. No doubt this will be changed later on, but it may be an important way to clarify what is needed from the initial perspective of the study investigators. This suggestion is not valid in all cases. For instance, it is not valid for the matrix that grouped the criteria raised during the two-way comparison of the PEC problems, since its columns are ad hoc categories (see Table 2) identified on the basis of information collected in the focus groups. It was quite unexpected for us to find that squatters were interested in environmental improvements not only for the sake of preventing diseases or for economic advantages, but also to improve quality of life and social status, and because environmental improvements are linked with the solution of other problems. Clearly, these categories were better identified after and not before the collection of information.

Figure 1. Historical profile of Direito de Morar

Historical profile of Direita do Morar

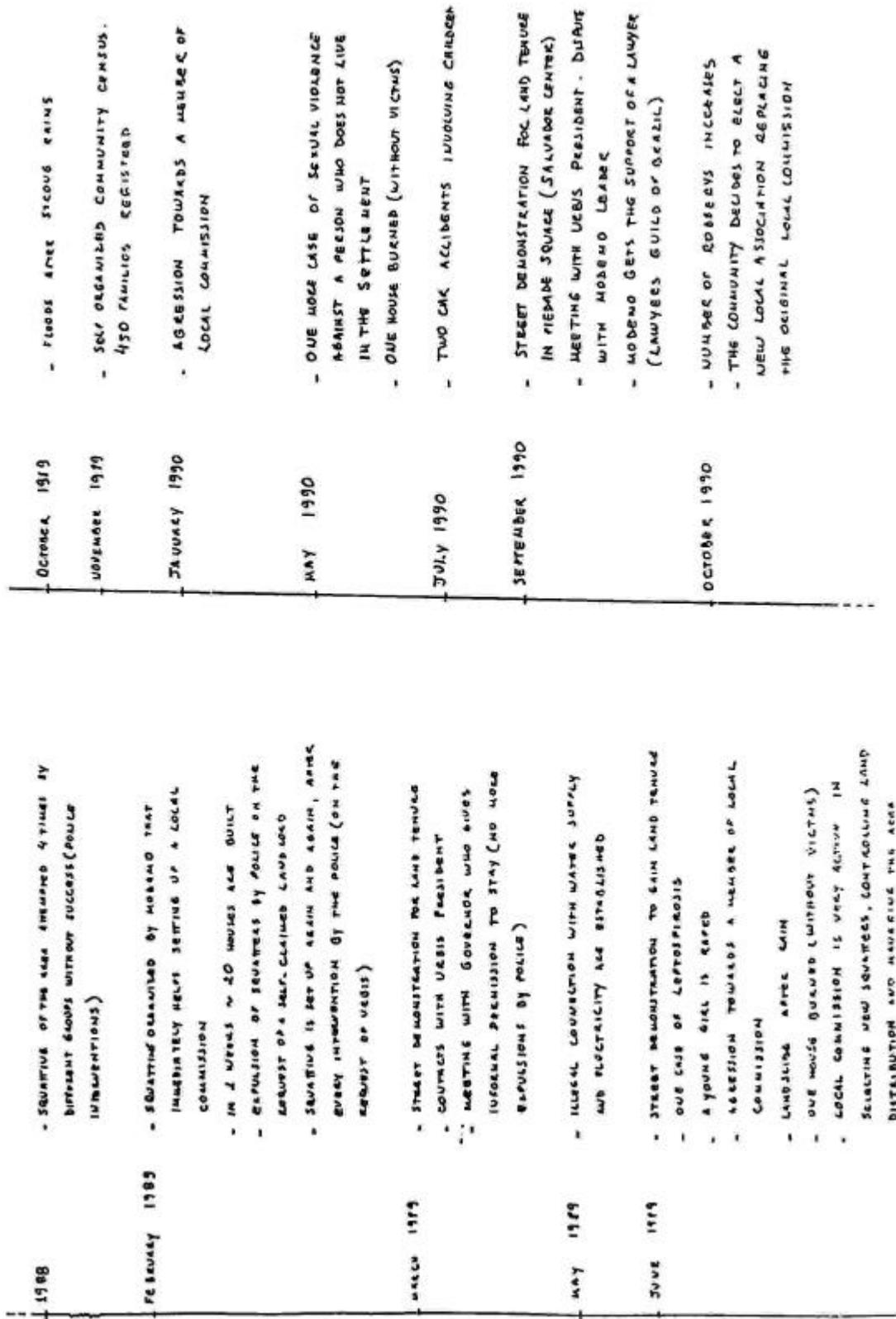


Figure 2. Transect of Direito de Morar

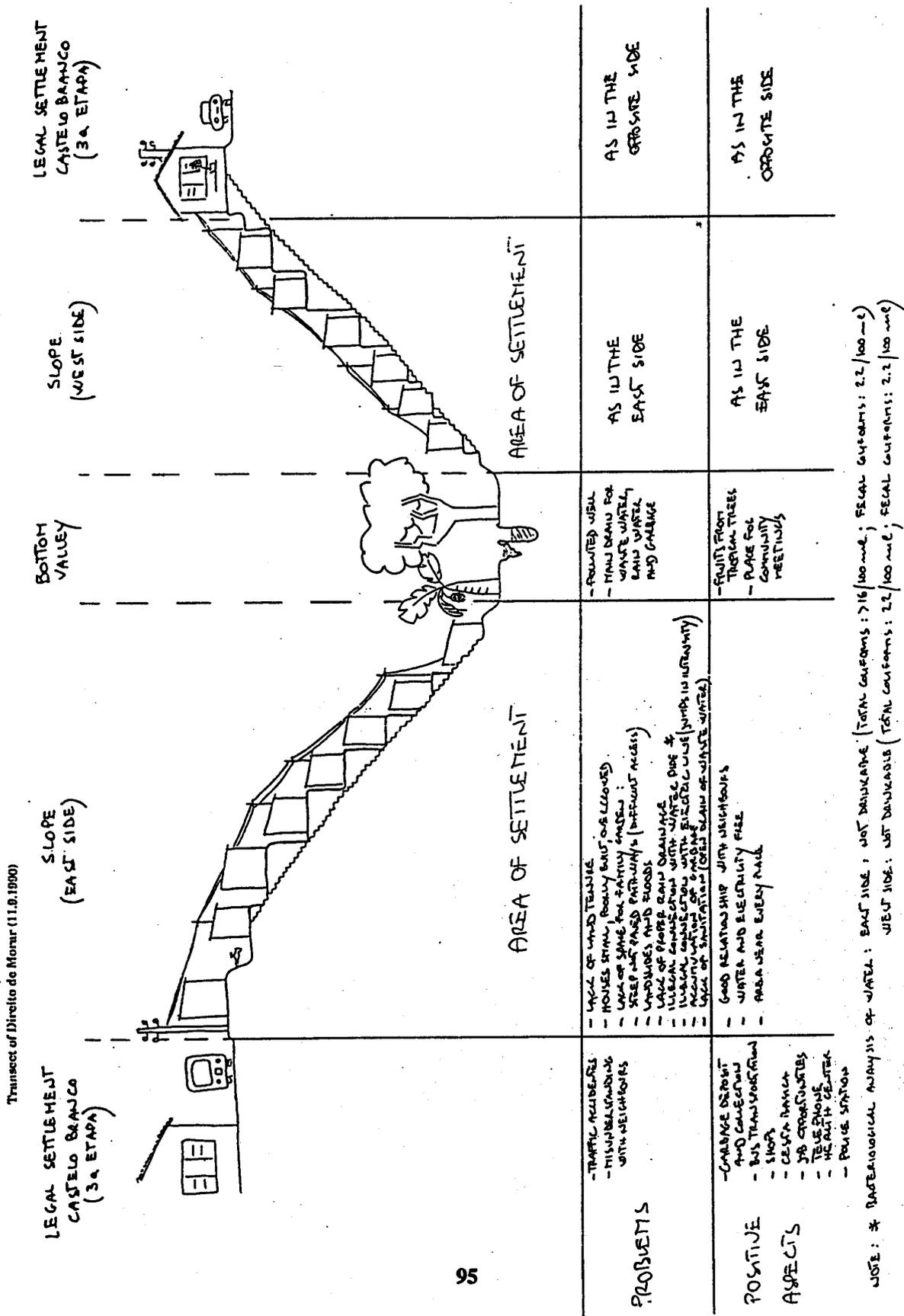


Figure 3. Sketch map of Direito de Morar

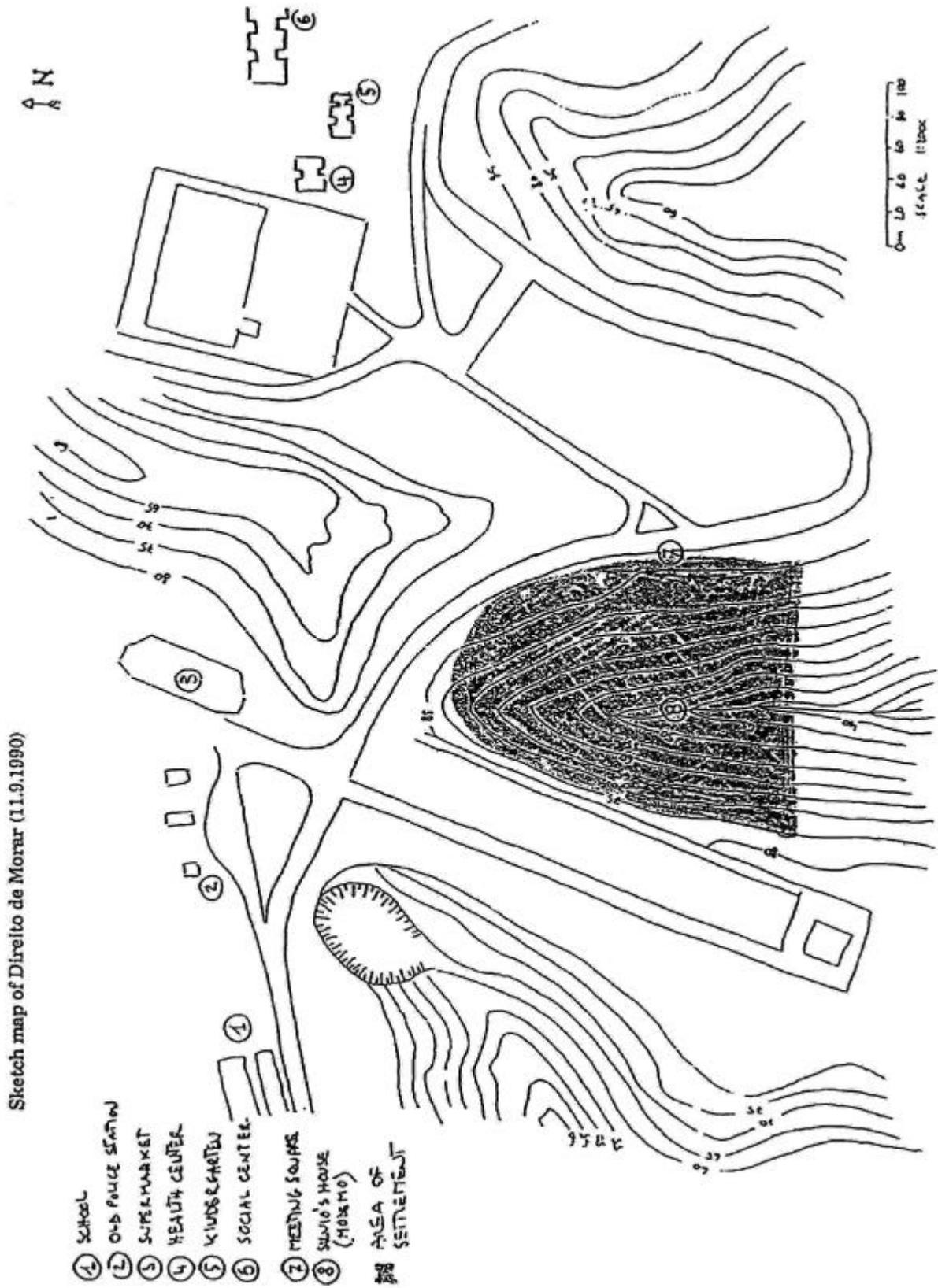


Figure 4. Discussion matrix of Direito de Morar**Direito de Morar: community environmental awareness and PEC priorities**

Positive aspects		
Women	Men	Youth
<ul style="list-style-type: none"> • Easy transportation • Presence of a supermarket and a pharmacy in the area • Working places are near • The health facility is near • No rent to pay • The school is near • Thieves and murders are unusual 	<ul style="list-style-type: none"> • The neighbours are nice friends • Nice social environment • Good people cohesion • Supermarket, health facility, pharmacy, bus stop are near • Easy transportation • The friendship • There is a house for meetings • Quiet environment • There is a police station • There is a place where to live 	<ul style="list-style-type: none"> • Quiet environment • Safety at night • Good relationship with neighbours • Water and electricity are free • Absence of drug users • Nobody pays for water and electricity • There are no drug users • No rent to pay • The area is near to many places
Environmental problems		
Women	Men	Youth
<ul style="list-style-type: none"> • Lack of water • Lack of sewage system • Unfair distribution of land • Lack of latrines • Illegal electricity connection • Lack of proper stoves 	<ul style="list-style-type: none"> • Illegal electricity connection • Lack of water • Lack of sewage system • Lack of proper pathways 	<ul style="list-style-type: none"> • Lack of land tenure • Social conflicts • Poor housing • Illegal electricity connection • Lack of water • Lack of sewage system • Lack of pathways pavementation • Garbage accumulation • Lack of latrines • Well pollution • Lack of school • Too large families • Landslides • Lack of health care • Lack of kindergarten • Poverty • Hunger
PEC priorities after discussion		
Women	Men	Youth
<ol style="list-style-type: none"> 1. Land tenure 2. Housing 3. Sewage system 4. Electricity supply 5. Water supply 	<ol style="list-style-type: none"> 1. Land tenure 2. Water supply 3. Electricity supply 4. Sewage system 5. Control of drug problem 	<ol style="list-style-type: none"> 1. Land tenure 2. Sewage system 3. Health care facility 4. Employment opportunities 5. Garbage collection

**Figure 5. Basic PEC interests matrix from focus group discussion
Cristo & Vida: basic interests in PEC expressed during the focus group**

Priorities	Basic need	Categories of motivations for priorities					
		Prevention of disease	Quality of life	Condition to solve another problem	Economic interest	Social interest	Opportunity/feasibility
Land tenure	To have a place where to leave (Y)			To be able to improve the building (W-M) To get water and other services (Y)	To stop being afraid to loose our properties (W-M-Y) To leave the house to our sons (W)	To give identity to our community (M)	It is a good moment to revendicate it now, before elections (Y)
Water supply		To take care of our personal hygiene (W-M)	To do domestic work (cleaning, cooking, etc.) (W-Y) To avoid difficult transportation of water (W-Y-M)		To pay less for the water (W)	Because a person has forbidden the use of the well (W) To avoid depending from other people for the water supply (W-Y) To avoid stealing water from EMDASA (unpolite) (M)	
Sewage system	Because we have no place where to put excreta (W-Y)	To avoid children playing in dirty places (W)	To have privacy (W-Y) To avoid the bad smell (Y)	To prevent pollution of the well (W) To prevent attraction of the insects (M)		To avoid the embarrassment of living in dirty places (M) To avoid throwing the stools away (Y)	
Health care facility	Because we can die before reaching the health facility (W-Y-M)		Because the health facility is far (Y-M)				Because we need external support to solve this problem (M)
Job services and employment	To find work (M) Because a formal work is very difficult to find (An informal job is easier) (M) To be able to buy the food (W)		To improve the quality of life with money (W)	To build a better house	To support our families (W) To help our husbands in supporting the family (W)		
School facility	To give the necessary education to children (M)	To learn individual hygiene (M)	Because as it is the school does not work well (M)	Because it is impossible to find a job without studying (Y) Because at school children can learn what to do about garbage (M)	Because we cannot pay for a private school (W) To get help from children after certification (W)		
Garbage collection			To avoid the bad smell (Y) To live better (M)	To prevent pollution of the area (Y) To prevent land slides (garbage blocks water drainage) (Y) to prevent attraction of animals (Y)			Because we can solve this problem without external help (M)
Policy facility						To avoid conflicts with the neighbours (Y)	

Reflections from experience

While for the results, conclusions and recommendations of our study we refer to our ICHM dissertation (de Colombani, de Melo and Irshaid, 1990), we would like to summarise here a few reflections on the methods we have applied. We believe that Rapid Appraisal is very suited to study fast-changing realities like urban squatter settlements (see also Peattie, 1983 and Yach et al, 1990) and excellent to stimulate people to communicate with one another and identify matters of common concerns. In fact, the RA methods employed in our field-study provided a much needed occasion for squatter communities to gather and talk about common concerns rarely discussed in a formal way. Among the squatters there is a strong desire to talk about their own situation, to become credible to others, to make others understand the reasons why they are in many ways forced to be 'second class', 'illegal' citizens (life histories were particularly illustrative of these aspects). A common feeling among the squatters is that they are 'abandoned' from the rest of society, that no one wants to hear about their problems, nor cares about them. In this light, if the governmental services would initiate community-based RA exercises, they may obtain relevant returns in public image and credibility. This, however, may also be a risky activity, since the expectations of a community can be raised -substantially and hopelessly - if the limitations and constraints of the exercise are not perceived and accepted. If the interested community would clearly understand that the aim of RA is building a participatory community diagnosis, building a 'risk map', gathering information to plan new services, discussing ways to set up a resident association, or introducing the PEC approach, we believe that the methods would be very appropriate. The usual RA methods, however, may not be sufficient to identify community-based solutions to specific problems. What is needed is a forum where not only problems can be articulated, but also strategies to solve them can be identified, options discussed, different needs mediated and specific projects, activities and tools agreed upon. A set of techniques that go under the name of *Making Microplans* (Goethert and Hamdi 1988) provide an example of how this second, more

action-oriented phase could proceed. The link between Rapid Appraisal and Microplanning is strong, since they both emphasise process rather than 'product', and are concerned about rapidity of analysis, local relevance of activities and partnership building among the many individuals and institutions who have a stake in a project. Moreover, both RA and Microplanning are problem-driven, and promote community leadership and self-reliance. In summary, we recommend that the PEC strategy build upon RA and Microplanning as successful integrated processes of community empowerment: a process of self-recognition, clarification of problems and needs, decision-making and action in full partnership with other interested parties.

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16

Actual or potential uses of RRA/PRA methods in health and nutrition

Robert Chambers

On 13 November 1991, the 23 members of IDS Study Course 20 *Implementing health for all: health sector reform for primary health care* listed potential practical applications of several RRA/PRA methods. On the second day of the IIED/IDS Workshop on PRA Applications in Health and Nutrition, 14-15 November 1991, small groups brainstormed about actual and potential applications of particular methods. We benefitted especially from the work of SPEECH (Madurai), ActionAid (Bangalore), the Jamkhed Project (Maharashtra), and Activists for Social Alternatives (Trichy), and the reports and innovations of John Devavaram, Sam Joseph, Sheelu and others. This note summarises experience and ideas from these sources, with a few additions.

• **Participatory mapping and modelling**

This refers so far to maps made by people on paper, the floor or the ground, and to three-dimensional models on the ground. Used or usable for identifying, presenting, checking, analysis, planning and monitoring to cover the following, showing numbers and locations:

People

- census-type information on men, women, children, age cohorts, and compiling a community register;
- key informants;
- health specialists - TBAs, herbalists, traditional health practitioners, therapists, etc.;
- social groups (ethnic, caste, clan etc);
- household characteristics;
- handicapped;

- the sick, by types of disease (TB, cataract, etc) by location and social group;
- pregnant women and month of pregnancy (one seed per month);
- alcoholic husbands;
- widows;
- children who do/do not go to school;
- women who do/do not go to the clinic;
- child marriage;
- deaths, by category; and,
- malnourished children.

Social

- dowry;
- ownership of assets;
- wealth/wellbeing status; and,
- marriage from outside the village.

Natural resources

- community natural resources; and,
- land use.

Facilities

- community facilities - schools, temples, churches etc.;
- clinics, health posts;
- medical shops;
- water supplies;
- street lighting; and,
- communications (roads, paths etc).

Hazards

- pollution;
- zones of defecation;
- places where mosquitoes breed;
- drains;

- no go and problem urban areas;
- ghetto areas;
- street lighting; and,
- road-racing problems (UK).

Utilisation

- who uses health services, and where they live;
- immunisation status of children;
- family planning status (sterilisation);
- who receives assistance; and,
- participants in a programme, those targeted.

Useful for

- establishing rapport;
- starting point of entry with community;
- part of analytical process of better understanding the health/nutrition situation;
- demographic - census, household survey, baseline etc;
- identifying vulnerable groups;
- identifying health risk factors according to household and area;
- visible ranking of households according to wealth/well-being/health;
- ad hoc investigations in the community;
- identifying risk factors;
- awareness and planning by the community;
- participatory location of facilities; and,
- monitoring by the community, graphical representation of changes in health/nutrition over time.

• **Seasonal diagramming and analysis**

- Rainfall;
- labour in agriculture;
- crop/harvest;
- food availability;
- illness by type and prevalence;
- gender perceptions of disease-prone periods;
- water supply;
- fuel sources;
- access to facilities; and,
- stress, happiness.

Useful for

- awareness and planning: community and health worker awareness and planning for health initiatives in relation to disease trends, times of stress, etc.;
- timing of interventions in conjunction with variations of:
 - water supply;
 - disease;
 - type and availability of food;
 - income;
 - migration;
 - festivals; and,
 - how busy/free people are;
- monitoring - by them, and by us;
- health workers' and communities' monthly monitoring of biggest problems.

• **Matrix ranking and scoring**

- health care providers vs diseases;
- types of illness vs access and utilisation;
- scoring characteristics of health providers;
- scoring characteristics/effectiveness of types of treatment by type of illness
- characteristics of diseases;
- food availability/food use: what is there vs what is used;
- health/nutrition problems;
- food preferences and characteristics;
- sources of credit and characteristics;
- sources of income and characteristics;
- reasons for needing credit (illness, funeral, hunger etc) vs. choice of sources (husband, sister, moneylender etc.);
- areas according to health/disease status;
- patterns of health service usage;
- patterns of service supply/drug availability; and,
- vulnerability/debility (linked to income, food supply, etc.).

Useful for

- part of analytical process, including values placed on the non-tangible as well as physical things;
- people's own analysis, sharing knowledge etc.;

- people identifying and expressing priorities, and options for action; and,
- targeting, and allocation of resources.

- **Sequence matrices**

- sequence of going for consultation and treatment; and,
- sequence of a disease, with characteristics and treatments.

Useful for

- agenda for discussion, participatory definition of needs and priorities; and,
- learning how services can be improved.

- **Causal and flow diagramming**

- tracing the sequence of a disease and action taken at each stage;
- causal diagram - impact of a cash crop;
- food chain;
- what happened after immunisation; and,
- sequence of weaning practices in relation to seasonality and food availability.

Useful for

- analysis of processes, sequences of action, causes, choices, and potential effects;
- planning sequences of shorter and longer-term actions;
- 'what if' analysis, before and after, understanding what has happened and what might happen...; and,
- evaluation.

- **Chapatti (venn) diagramming**

Also 'interviewing stones' used in the UK for individuals concerning family relationships. Rough, smooth, chipped, damaged etc stones. Therapist does her own stones first. Very useful for personal interpretations of psychological problems. Could be used in communities for how groups see themselves and others.

- institutions and linkages;
- access to linkages;

- social groups, key individuals; and,
- health service organisations, local health care providers (inside and outside village) and which act on immediate causes, which on longer-term.

Useful for

- conflict identification and resolution; and,
- identifying sources of health advice and treatment.

- **Case histories**

- acute/longer maturing diseases - tracking leprosy, TB etc treatments, what done etc.;
- history of an illness in the area;
- history of an illness episode and treatment in an individual;
- history of drought and its after effects on particular families;
- project case histories from villagers' point of view;
- status change in people working on projects; and,
- verbal autopsies.

Useful for

- learning about the above;
- communicating perceptions of illness; and,
- communicating to managers through quotations, recordings, video.

- **Wealth/wellbeing ranking**

- wealth or wellbeing ranking;
- health ranking, leading to what is health/malnutrition; and,
- health ranking, leading to what is health/malnutrition (criteria, characteristics) etc.

Useful for

- targeting;
- sampling;
- research comparing different groups;
- correlations between sickness and socio-economic etc status; and,

- identifying focus groups by wealth/well-being/health.

- **Time lines and trend analysis**

- time line of events to provide framework;
- major changes in the past;
- trends in time spent fetching water, fuelwood;
- incidence of disease;
- trends of epidemics;
- changes in access to services; and,
- changes in environment.

Useful for

- establishing rapport;
- building on previous successes/failures;
- helping people analyse and make sense of what has occurred;
- conflict resolution; and,
- identifying focus groups.

- **Focus groups**

- mapping/modelling;
- seasonal diagramming and analysis;
- perceptions of health and health problems;
- matrices; and,
- chapattis.

Useful for

- enabling homogeneous groups, especially the poorer, more deprived, women, etc to express and analyse their knowledge, perceptions, problems, needs, preferences, priorities...

- **Body mapping**

- people draw or diagram 'maps' of their internal organs.

Useful for

- enabling people to show how they perceive their bodies, leading to more appropriate programmes (e.g. for family planning).

Combinations and sequences of methods

Combinations and sequences of methods can be strong. For example:

- map/model leading to wealth/health ranking on the map or model; and,
- wealth/health ranking leading to focus group discussions leading to seasonal diagramming, causal diagramming, matrix ranking and scoring, all leading through analysis to action.

Dangers

- Putting practical people off. Long lists like these can intimidate. They could inhibit practical people. But they are a menu, not a syllabus. Practical people can pick and choose what they want, and start, experiment, adapt, invent, and learn to do better as they go.
- Instant 'fashion'. Donor agencies, Government departments, and large NGOs are in danger of sudden, widespread adoption of some RRA/PRA approaches and methods. It is probably better to learn piecemeal, to experiment and test, to allow and encourage practical people to invent and adapt what seems to fit local needs and conditions, learning from successes and failures as they go.

Hopes

- that practical people in the field will be encouraged to try out some of these methods and combinations, adapt them, invent others, and share their experience;
- that these participatory methods, such as diagramming and then 'interviewing the diagram' will be less intrusive and disturbing than some others, will strengthen rural and urban people's own analysis, and will help better communication of their priorities and needs to managers.

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NOTE

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17

Tips for trainers saboteur

Alan Margolis

- **Purpose**

- To show how communication and group work can be easily disrupted;
- To create a group norm about sabotage and strategies to deal with it; and,
- As an energiser and equalizer.

- **Time**

15 minutes or longer, depending on the length of feedback.

- **Materials**

Groups of three chairs.

- **Steps to follow**

The participants are divided into groups of three. Each sub-group is divided into three roles: the speaker, the listener and the saboteur. The speaker and listener face each other to talk, while the saboteur can move. The speaker is asked to talk on any topic, possibly a problem, to the listener. The saboteur is asked to try to sabotage (i.e. disrupt) this conversation in any non-violent manner. Roaming saboteurs can move between groups; these may include the trainer plus any others who did not join groups when the full group was divided. After two minutes ask participants to change roles, and again after two more minutes, as it is essential for all participants to have the opportunity to play all three roles. Everybody should know what it feels like to be a saboteur and to be sabotaged.

- **Comments**

Discussion after this exercise is essential. To establish a group norm, it is necessary to get participants to reflect on how they felt.

“What was it like to be a saboteur or be sabotaged?”

“Did you find it easy or difficult to disrupt the conversation?”

Then ask everyone to call out the different types of saboteur and put these on a flipchart sheet. Examples include: interruptions with answers/questions, joking, rudeness, silent, taking over with enthusiasm and physical distraction by fidgeting.

Then ask the participants to reflect on ways to deal with such sabotage, i.e. *sabotaging the saboteurs*.

“How have you or could you deal with saboteurs?”

“What are the ways groups can deal with saboteur individuals (outsiders or team members)?”

Write these strategies on another sheet. Examples include:

- Ignore politely;
- Polite/clear interruption;
- Definite stopping of the interview;
- Talk it out (publicly or personally);
- Acknowledge and postpone;
- Divert attention (form subgroups or set task);
- Use saboteur for debate;
- Ask others for help; and,
- Simply allow it.

These can be stuck to the wall for all to see and can be referred to during the rest of the workshop.

This exercise and discussion may be particularly useful if there are particularly disruptive group members. Such an exercise may be an opportunity for them to reflect on their behaviour and for the group to develop ways of dealing with the disruption. It can also prepare the group well for potentially difficult interviewing situations in the field.

More important, though, it introduces the notion of sabotage to the whole group, as well as focuses on strategies to deal with it. During the rest of the workshop, the trainer can guarantee that participants will self-regulate without any trainer input needed. Any group interruption will be greeted by calls of '*Sabotage!*'.

- **Alan Margolis**, Hampstead Training.

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End notes

- **Errata**

In our first Tips for Trainers we forgot to mention the source of the exercise. Our apologies to Alan Margolis of Hampstead Training who first told us about *Fruit Salad*.

- **Recent publications on health and methodology**

Although we do try to provide you with as many free or low cost publication references as possible, health issues appear to be expensive business. This list of recent publications includes more and less costly items but we feel they are of particular relevance to this special issue of the RRA Notes.

Oxfam's Gender and Development Unit produces the *GADU Newspank* twice per year. Issue No 15, June 1992 focuses on women's health issues and includes valuable bibliographic information. It is available free of charge from: GADU, Oxfam, 274 Banbury Road, Oxford, OX2 7DZ, UK.

Issue No.7 of the Oxfam Practical Health Guide series by Helen Young is called *Food Scarcity and Famine: Assessment and Response* (121 pgs, 1992). She discusses how to judge what information is necessary for decision making and presents a range of approaches to collecting this information. Rapid assessments are discussed, including the use of wealth ranking to complement nutrition survey data. Practical suggestions are given for organising teamwork and analysing findings. It is available for £5.95 from: Oxfam Publications, 274 Banbury Road, Oxford OX2 7DZ, UK.

Soundings is a communication exchange newsletter published twice a year in English. In the Summer 1992 newsletter several

publications are mentioned that will be of interest to many health professionals. One such publication is a series of Spanish language health training guides while another concerns integrated reproductive health activities in Nepal. The newsletter can be received free by recipients in the South. Annual subscription of recipients in the North is US\$5.00 per year. Write to: World Neighbours, 4127 NW 122 Street, Oklahoma City, OK 73120-8869, USA.

The Tata Institute of Social Sciences, Department of Health Services Studies, produces a Ford Foundation funded newsletter called *Qualitative Research Methods*. The Newsletter is a forum through which methodological experiences relating to women's reproductive health and health seeking behaviours are shared and disseminated. Write to: Editors, Tata Institute of Social Sciences, P.O.Box 8313, Deonar, Bombay 400 088, India.

A special issue of *Health Policy and Planning*, March 1992, is called "Rapid Assessment Methods for the Control of Tropical Diseases". It takes a critical look at a variety of rapid assessment methods and their potential for application in the Third World. It is available from: Customer Services (ED), Oxford University Press, Southfield Road, Eynsham, Oxford OX8 1JJ, UK. Personal subscription rates for Third World readers for Volume 7 (1992) of four issues is US\$65.00 if payment is made by personal cheque or credit card (institutional rates for Third World US\$112.00). For RRA Notes subscribers we have negotiated a special price for **the March 1992 issue only** at US\$25.00 (all other single issues cost US\$42.00).

TALC (*Teaching-aids At Low Cost*) provides a wide selection of low cost books on a range of health issues, including health care services, AIDS education, mother and child care, and

disability and appropriate technology. They coordinate the innovative Child-to-Child Trust which encourages children to spread health messages to younger children and other community members, which was awarded with the 1991 UNICEF Maurice Pate Award. They also supply many low-cost slide sets on a variety of health topics. Write to: TALC, P.O.Box 49, St. Albans, Hertfordshire AL1 4AX, UK.

The *Institute of Development Studies Bulletin* Vol.23, No.1, January 1992 is called "Gender and Primary Health Care: Some forward looking strategies". The articles address limitations of current health policies in dealing with the needs of women both in terms of their own health and as agents of health care within households, communities and the state delivery system. It is available for £7.00 from: IDS, University of Sussex, Brighton BN1 9RE, UK.

Tools for Community Participation: A Manual for Training Trainers in Participatory Techniques is a detailed and invaluable guide on participatory training approaches. It is based on extensive field experiences in PROWESS/UNDP activities and is accompanied by a short video. The package (in English - Spanish and French forthcoming) is available for US\$35.00 plus shipping from PACT, 777 UN Plaza, New York, NY 10017, USA. PROWESS/UNDP produces other relevant health focused material, obtainable free of cost from: 304 E 45th Street, 12th Floor, New York, New York 10017, USA.

• Call for articles

A reminder to all readers on two upcoming special issues for which we would greatly welcome experiences and reflections from the field.

- the use of RRA/PRA approaches in *livestock production and animal health*.
- *training strategies and styles* to enhance learning and institutionalising R/PRA.

• Discussion paper on rapid appraisal

Robert Chambers has just finished a discussion paper on the development of PRA from RRA. "In RRA information is extracted; in PRA it is shared by rural people and much more owned by them." In *Rural Appraisal: Relaxed, Rapid, Relaxed and Participatory* he presents a range of applications and highlights both advantages and dangers. More importantly it touches on new challenges in the spread of PRA to ensure reliable outcomes and sustained institutional change. A limited supply of copies are available free from Robert at: IDS, University of Sussex, Brighton BN1 9RE, UK.