Editorial

Here, at last, is another general issue to give a voice to those of you who have sent us valuable contributions whose subject matter fell outside the themes of the special issues on training, livestock and urban areas. This issue includes a variety of newly emerging conceptual and methodological issues. Besides these contributions, there are many novel applications which draw wider conclusions from their specific examples.

· Conceptual reflections

Several of the articles emphasise, yet again, how we, as practitioners of the increasingly widely-used PRA, must keep a watchful eye on how the term is used, and to what it is applied. The first contribution, *Sharing our Concerns and Looking to the Future*, arose from a workshop on developments in the theory and practice of Participatory Rural Appraisal held in May 1994 at the Institute of Development Studies in Brighton. As part of this process, a group of PRA practitioners and trainers discussed their growing concerns about quality assurance, cooption, and ethics surrounding the use of PRA. The group identified basic principles by which 'good practice' could be both realised and identified.

Clas Lindberg, Vesa-Matti Loiske, Wilhelm Östberg and Claude Mung'ong'o provide a detailed case study to illustrate how rapid studies can easily overlook the poorest members of a community, even if they aim to represent their views. Their conclusion is that if a study is to be rapid, methods such as wealth ranking must be used sensitively and intelligently.

Richard Edwards deals with the difficult topic of raised expectations, so often cited as an area of potential danger with PRA. After discussing how to ensure that expectations are not unnecessarily raised, he concludes that if handled sensitively, raised expectations can actually be a motivating force in encouraging communities to participate in their own programmes, and not a liability.

· Methodological innovation

Creativity, innovation and refinement remain a key feature of many of the articles that we receive. For example, Nurul Islam Nazem and Pete Atkins' Grandfather Graph is an innovative extension of David Mosse and Mona Mehta's piece in *RRA Notes* 18 on genealogies and social mapping. Prahlad Mishra and Gayatree Mohanty developed a method for more accurate social mapping in larger villages (more than 500 households) where information is more complex than smaller, more homogenous communities, while Claus Euler adapted a ranking exercise to demonstrate the awareness needed about the timing of visits to rural communities.

Simon Maxwell and Claud Bart provide a clear and insightful critique of the commonly used method of ranking. In a detailed analysis of a number of studies which used the method, they point out that the results should always be interpreted with great care. They use an example from Ethiopia to demonstrate how scoring can be a more useful approach than ranking for discussing relative preferences.

· Thematic pieces

Derek Denniston's description of Andrew Leake's work in Central America graphically shows how participatory mapping can be the first vital step in a sensitive political process - providing recognition for the rights of indigenous peoples and their livelihood activities.

David Adriance describes the use of PRA at the meso-level, within a water and sanitation project. Most PRAs concentrate on a single village or 'community', while the tiered approach presented here generates some interesting lessons. He also warns about the

Source: PLA Notes (1995), Issue 22, pp.3–4, IIED London

far-reaching implications of participatory work for implementing agencies: *"If PRA is not going to have a totally predetermined outcome, the implementing agency must build an element of uncertainty into their project proposals."*

Few articles in previous issues of *RRA Notes* have discussed applying RRA/PRA methods specifically to coastal resource management. Michael Pido describes how a multidisciplinary team used RRA in the Philippines to generate information about problems and opportunities, establish monitoring indicators to determine the impacts of future development, and pinpoint subjects for further research in Malampaya Sound, one of the region's richest fishing grounds. Staying on the subject of water, S. Kaivelu, Rupert Howes and John Devavaram show how PRA can help to make the most of the complementarities between farmers' and engineers' knowledge when rehabilitating minor irrigation tanks. In their experience, farmers knew what problems exist, and prioritised them, while engineers provided the most effective solutions.

Ravai Marindo-Ranganai gives an account of the inventive way in which she used PRA methods to gather demographic data on the Tembomvura people of Zimbabwe. She asserts in her conclusion *"that demography, by its very nature, can not be divorced from quantification. However PRA methods can be used to strengthen demographic data collection by providing flesh for the skeletal figures that are collected by the quantitative questionnaire."*

Savina Ammassari used several PRA methods in one of the largest resettlement sites in Ethiopia. Her main aim was to explore general adjustment problems and constraints, needs and priorities, and the expectations and aspirations of the settlers. At the same time, however, her use of PRA proved a means for encouraging people to become more self-reliant in a development context characterised by 'project dependency'. Her account is also useful methodologically, since she assesses the use of PRA methods for exploring *"phenomena evolving over time and, thus, for the investigation of the dynamic contexts characterised by migration."*

Mick Howes and Chris Roche used an ingenious way to introduce the concept of PRA to the staff of the London Secretariat of ACORD. They encouraged staff members to use PRA methods in an appraisal of their own work as a familiarisation exercise, and at the same time to generate some useful insights into how the organisation was operating and what it was achieving. The article describes which PRA methods were particularly appropriate to this application, and identifies those topics for which there are currently no methods. In a similar vein, employees at the grassroots level of a Community Forestry and Soil Conservation Development Programme in Ethiopia were given the chance to assess, through a ranking exercise, which of the programme constraints had implications for sustainablility. The process is described by Kebede Asrat.

This issue is rounded off with two articles on the use of PRA and RRA approaches with communities living near national parks. John Mason and Elijah Danso used PRA to assess people's perceptions of the benefits and difficulties of their life near Mole National Park in Ghana. They found the approach not only useful but also *"frequently the only approach acceptable to villagers, biased by years of mistrust and conflict with the Ghanaian Department of Game and Wildlife (GWD)."* Their experiences led them to conclude that PRA must be viewed as an important component to any conservation approach. Sarah Pocknell and Danny Annaly also point out that conservation expeditions from the North to protected areas in the South all too often ignore the ecological knowledge of local people. Often the results are not only an inaccurate picture of the local ecology but also overlook local needs when protected areas are established.

Source: PLA Notes (1995), Issue 22, pp.3–4, IIED London

1

Sharing our concerns and looking to the future

Elkanah Absalom et al.

· Introduction

We are an informal group of development practitioners, researchers and trainers from South and North, using, supporting and developing participatory approaches, often known as Participatory Rural Appraisal (PRA). A working description of PRA is *"a growing family of approaches and methods to enable local people to share, enhance and analyse their knowledge of life and conditions, to plan and to act"*. Used well, PRA can enable local people, rural or urban, to undertake their own appraisal, analysis, action, monitoring and evaluation. It can empower women, poor people and disadvantaged people, giving them more control over their lives.

As part of a process of reflection, learning and sharing we have reviewed our experience and current developments. Many donors, government organisations and NGOs are now requesting and requiring that PRA be used in their programmes and projects. This brings opportunities and dangers. The opportunities are to initiate and sustain processes of change: empowering disadvantaged people and communities, transforming organisations; and reorienting individuals. The dangers come from demanding too much, in a top-down mode, too fast, with too little understanding of participatory development and its implications. Annex 1 summarises the symptoms and causes of low quality PRA work.

PRA practitioners have come to stress personal behaviour and attitudes, role reversals, facilitating participation through group processes and visualisation, critical self-awareness embracing error and sharing without boundaries. We believe that these principles and concepts must be placed at the centre of all participatory development activities.

Experience has led us, and many others to recognise the implications of participatory approaches, such as PRA, for:

- personal and professional values, norms and behaviour;
- community issues;
- organisational structures, styles and practices of management;
- approaches and methods in training;
- networking and sharing between all actors engaged in the development and spread of participatory thinking and practice; and,
- the policies and practices of donors.

We recognise that we are only a few among many around the world who are striving to develop and facilitate the spread of participatory approaches. We offer this statement of principles in the hope that others will share their experiences, views, and values in the same spirit so that we can all continue to learn from each other.

We welcome your responses.

- **Elkanah Absalom, Robert Chambers, Sheelu Francis, Bara Gueye, Irene Guijt, Sam Joseph, Deb Johnson, Charity Kabutha, Mahmuda Rahman Khan, Robert Leurs, Jimmy Mascarenhas, Pat Norrish, Michel Pimbert, Jules Pretty, Mallika Samaranayake, Ian Scoones, Meera Kaul Shah, Parmesh Shah, Devika Tamang, John Thompson, Ginni Tym, Alice Welbourn**

May 20th 1994

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· Personal and professional

We strongly believe that, as PRA professionals, we bear a personal responsibility to:

- develop a self-critical attitude, recognising that we are continually learning and welcome rigorous peer review;
- be explicit about whether we are eliciting information for external use, or are engaged in processes leading to community action. We should make this distinction clear to the people with whom we are interacting and document this accordingly;
- interact with others (colleagues, community members, and other professionals) with respect and empathy, transparency, and support;
- recognise the need to acquire both training skills and 'hands-on' experience in carrying out a PRA process in the field;
- make a commitment to value equally the contributions made by all partners (South, North, local, external);
- respect the need for diversity of others' views, and approaches;
- identify, in partnership with communities, appropriate forms of compensation when we are eliciting information for external use;
- ensure that credit and compensation are given where due;
- strive towards a process of empowerment of marginalised people, in which PRA methods can play a part;
- attempt to link-up with existing PRA networks and professionals in every context; and,
- equip ourselves with any necessary skills to recognise, acknowledge and address the existence of diversity of social relations in each context.

These are all signs of personal and professional commitment to pursue development processes which strive to improve the lives of those who are (relatively) marginalised.

· Community issues

Ethics

In relation to interactions with communities, we strive to:

- achieve mutual respect, including a commitment to long - term partnership;
- be honest with ourselves about our own objectives;
- be open, honest and transparent about our objectives with all community sections.

Equity

We recognise that:

- different groups, as defined locally by age, gender, well-being, ethnicity, religion, caste, language etc. have different perspectives;
- there should be commitment by outside organisations to understand different needs and multiple perspectives within communities;
- responding to the needs of the vulnerable involves respect for all groups. This may mean challenging asymmetrical relationships *via* conflict resolution methods.

Preconditions for engagement

- Be honest with the community about what is in it for them;
- PRA activities should lead to direct improvements in the community through:
  - operational development on the ground;
  - changes in higher level institutions (such as research, extension and planning) which have an impact at community level; and,
  - shifts in policy, which have an impact at community level.

  We should also acknowledge that some of these expected changes cannot be guaranteed.

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- There should be no one-off exercises in communities without explicitly defined outcomes as described above.

Practice

- The process with the community should begin with explanations and seeking their permission;
- Timing and pace should be governed by local context of separate sections of the community; and,
- Respect the fact that information is generated by local people and so ask their permission to document, remove and use information. When possible, ensure that original diagrams and copies of reports remain in the community.

Local human resource support and development

This involves a commitment to:

- enhance capacity of local people, on an individual as well as an institutional basis, to be PRA practitioners and trainers in analysis and implementation of developmental activities in their own and neighbouring communities;
- ensure that PRA activities lead to strengthening of existing and/or formation of new local institutions, in order to meet local needs; and,
- ensure follow-up support for community sections and their institutions.

· Institutional aspects

Long-term commitment to process

- Top managers/decision makers need to commit themselves to a long-term process going "beyond projects" to promote a participatory development approach.

Organisational environment and culture

- The organisational culture should provide opportunities to enable learning from experiences and mistakes, and should be flexible enough to allow experimentation.

Institutional management and styles

- There should be a transition from management styles based on hierarchy, inhibited communications, command and obedience relationships to more organic styles that encourage lateral communication, collegial authority, and flexible roles and procedures; and,
- Institutions should create conditions that encourage employees to be participatory in their work with each other, and not just during "field visits".

Incentives/rewards

- Incentives and rewards must encourage staff to be honest, work in the field with communities, stay on as staff, and encourage joint action between institutions and villages.

Organisational procedures and implementation

- Organisational and programme management procedures should be changed so as to enable linking PRA with programme management and implementation (eg. decentralisation of funds management). They should try to build PRA from the start of the programme cycle. PRA and related participatory processes should be initially piloted on a small-scale and should be mainly implemented through local institutions.

Outward linkages

- There is a need to develop effective linkages (eg training exchange; co-management of projects, information flows) outside of institutions to help partners (including donors) understand more and strengthen participatory processes. These linkages must be based on mutual respect, integrity and trust.

Source: PLA Notes (1995), Issue 22, pp.5–10, IIED London

· Training

PRA training should ...

- make a clear distinction between PRA orientation and PRA training. PRA orientation involves familiarisation of principles and methods to non-field based decision makers, policy makers and donors, whose learning can be enhanced through exposure to the field based process;
- take place in a institutional context (research, academic, consulting, donor, development NGO/GO/bilateral/multilateral) which is potentially responsive to participatory approaches;
- be part of an ongoing community-based development process which is field-based and has provision for follow-up action;
- begin with social analysis, attitudes and behaviour and institutional issues followed by the principles and methods;
- focus on field staff, line managers and community analyst who will facilitate the process in the community;
- strive to develop a range of skills and experiences: analytical skills; communication skills; learner centred training skills; knowledge of principles and methods, and training of trainers skills;
- emphasis familiarity with local language, culture and context while encouraging cross-cultural sharing; and,
- clearly specify objectives which may include research for policy and other purposes, subject to community agreement, with feedback to the community development process wherever possible.

· Donors

Donors working with PRA should ...

- focus on PRA as a *process* leading to change, not a product in and of itself. This means commitment to long-term development processes and follow-up activities and support;
- provide more flexible funding and move towards more open-ended, event-focused targets for disbursement and physical achievement;
- promote participatory monitoring and self-evaluation procedures which build in reciprocal accountability (communities, development organisations, donors);
- encourage and support organisations which can move towards participatory training and learning to help other organisations change;
- encourage policies and programmes which offer a range of development options/choices based on locally - defined criteria, needs and priorities;
- encourage establishment of small, self-managed teams of practitioners and trainers within development organisations - where appropriate - with the freedom to experiment, innovate, make and learn from mistakes, and act;
- support pilot learning processes with gradual/phased scaling-up depending on local conditions; and,
- avoid confusing and over-burdening development organisations by harmonising funding approaches and accounting and reporting procedures.

· Networking and information sharing

Networking efforts in relation to PRA should aim to:

- promote and facilitate a decentralised network of Regional Centres;
- develop and sustain Local Networks;
- strengthen networks with training support, exposure and logistical support;
- promote respect towards/recognition of local networks by outside individuals and institutions;
- acknowledge *local* contributions/sources of information;
- encourage willingness to share experiences openly and freely;
- seek ways of breaking communication/language barriers through translation of material to and from local languages; and,
- explore the range of possibilities for information exchange to ensure that it is *accessible to all.*

Source: PLA Notes (1995), Issue 22, pp.5–10, IIED London

ANNEX 1. Symptoms and Causes of Low Quality PRA Work

What?	Why?
OVERALL Assumed that PRA methods equals development and positive change PRA practice without conceptual clarity, transparency and accountability Information extraction with rhetoric of political correctness	OVERALL Historical inheritance of short-cut evangelism; Legacy of focus on rapid terminology/names
PERSONAL/PROFESSIONAL Selling the "PRA service" is a new commercial Activity which can be lucrative, new market niches Ego, ownership disputes, jealousies among PRA practitioners. Inhibit sharing?	PERSONAL/PROFESSIONAL Get rich quick Lack of personal and professional commitment Lack of openness and sharing
COMMUNITY Insensitive vis-a-vis demands and impositions made on the poor during PRA training Resistance to "culture of sharing", eg food; also not budgeted for as part of PRA session Neglect of "costs" to indivi dual livelihoods Unchallenged myths re community harmony Fun elements obscure political realities/divisiveness within community	COMMUNITY Lack of links with social science; analysis of difference Project-led/focused, not community-led and focused Support institutions focus on themselves, not on villagers Inappropriate incentives for institutions and communities Professional biases re village consultants

Source: PLA Notes (1995), Issue 22, pp.5–10, IIED London

What?	Why?
TRAINING	TRAINING
Neglect of behaviour and attitudes	Neglect of behaviour and attitudes in training
One-off training, with no follow-up by trainers and by institutions	One-off trainings with no-backstopping
Classroom-based training in lecturing mode	The word 'training' lacks clarity and is used to cover too many types of sessions
Overemphasis on training of outsiders; neglect training of villagers	Lack of skills in institutional design and contextual understanding by trainers
Insufficient levels of skill-building	Lack of skills and principles of training; training of trainers needed?
Principles of training neglected	Focus on methods/product, not process of development
Lack of in-depth analysis	Limited time allocation
Rigidity and conservatism of manuals	Mixing training with PRA is constraining
Lack of clarity on part of PRA trainers about institutional design	
INSTITUTIONAL	INSTITUTIONAL
Lack of long-term commitment	Lack of institutional (long-term) commitment to follow-up
Poor adaptability of PRA with project planning, implementation, etc	Imposition of project cycle mode and institutional discontinuity
Appraisal: the word is inhibiting	Focus on appraisal, not monitoring and evaluations
Terminology is inappropriate	Contradictions in our own practice/organisational policies with poverty focus
Insufficient linking of PRA training with existing, locally based projects	
No responsibility taken for follow-up in the community	
Middle/line managers not sufficiently exposed to/involved in training	
Lack of clarity about objectives for using PRA	
DONORS	DONORS
Predominance of donor-led initiatives	Donor agenda driven
Agenda driven from outside, not from within	
Donors jumping on bandwagon, following the latest fashion	
Cooption - a label without substance	
NETWORKING	NETWORKING
Inadequate records of who was "trained", where and when	Lack of functioning networks for back-up
Ad hoc, haphazard planning	Lack of information sharing
	Lack of strategic planning by PRA practitioners

Source: PLA Notes (1995), Issue 22, pp.5–10, IIED London

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Handle with care! Rapid studies and the poor

Clas Lindberg, Vesa-Matti Loiske, Wilhelm Östberg, Claude Mung'ong'o

· Introduction

It is now ten years since Robert Chambers argued forcefully for 'putting the last first'. The poorest still have difficulties coming on stage. According to Chambers the *"techniques of RRA, carefully developed and used, can raise awareness and understanding of rural poverty, and improve actions"* but, also that *"one danger with RRA is that it will always be rushed. A corollary of Parkinson's law is that whatever is planned exceeds the time available for doing it. If this occurs, it will once again be the remoter areas and the poorer people who are left out"* (1983). Almost a full decade later Chambers is still worried. 'Rapid' has become a liability, he writes, and suggests that it should be substituted by 'relaxed' (1992) which would be a more appropriate way of working in applied research, and for learning from the poor and empowering them.

As an example, we describe here how rapid research techniques were used by a study team for a bilateral development agency in a study of contemporary change in Tanzania (Booth *et al.*, 1993), and compare this with our own experiences of using RRA techniques in village-level studies in Tanzania (Christiansson *et al.*, 1992).

The agency study draws both on previous studies and field research using 'rapid' techniques in 12 villages from different parts of the country. The authors argue that too often academic research fails to integrate macro and micro levels and also suffers from too long a maturity time to be of real use in development work. They hope to address these shortcomings. They take on two issues that are currently intensively debated in Tanzania, namely the role and consequences of structural adjustment programmes and the introduction of a multi-party system. The authors note that for both these issues polarised camps have tended to form, due partly to different ideological attitudes, but also because the processes are often observed at too high a level of abstraction. By introducing data from community and household levels they hope to demonstrate how people are actually affected by and contend with the processes of change that are occurring.

Implications of the desk study of macro level changes carried out by the study team are discussed as they relate to village level conditions. In our view, the report demonstrates a methodological weakness which makes us question the conclusions the authors draw on how economic liberalisation in Tanzania has influenced *"the poorest groups, women and young people"* (p. iii, also p.117) whose plight was of particular interest in this study. We will argue that the study does not contain information on these groups.

Missing the poor

Ten years ago Barbara Grandin (1983) showed how easy it is to miss the poor in studies focused on local social stratification. She was able to demonstrate how a study of wealth differences in group ranches in Kenya failed to include the poor. The researchers had relied on suggestions from the ranch chairmen to construct the sample. She discovered this by checking the survey results against the results of a complete census which had previously been carried out. Although the researchers were pleased that they had found significant differences between their wealth cohorts and assumed that the sampling technique had thus tapped wealth differences on the ranch, their lowest category in fact corresponded to the

Source: PLA Notes (1995), Issue 22, pp.11–16, IIED London

middle class. This distorted the results of the survey completely. For instance, the researchers had put the mean of cattle owned by poor households at 51, when in fact it was 15. For the whole ranch they had calculated a household mean of 215 cattle, whereas the true mean was 109. Box 1 gives other examples of how the poor can be missed.

During the agency field study, poor people were identified in relative terms (those who make it, as compared to those who do not). The adjective 'poor' was avoided, as it would have had "*connotations of destitution or indigence"* (p. 58). The aim was to avoid giving offence by not talking about destitute people, but in effect this meant that the genuinely poor were excluded from the discussion.

In the villages where we have worked ourselves, the concepts 'those who manage' and 'those who do not manage', are indeed common. To study social stratification we used the well-established RRA method wealth ranking which is designed to identify local concepts of stratification. 'Those who do not manage' are generally taken to mean people who are not able to cultivate all the land they formally had access to, following the land reforms of the 1970s. They often arrange for someone better off to plough their land for them. In compensation the owners of the oxen or the tractor will be given half or more of the land to cultivate themselves. This group of poor farmers will normally survive by doing occasional farm work for others. Although not self-reliant, they are not necessarily destitute.

Below this group of people are, however, those who are described as "people of inferior conditions" *(watu wa hali duni)*, "without anything" *(hana kitu) or* "totally destitute" (*maskini kabisa*). They are commonly known as day-labourers (*vibarua*). Many of them are not farmers at all. Some of them are landless, while others have formal access to land but lack the capacity to cultivate it for various reasons. In the areas we have studied these groups of destitute people form a significant proportion of the village population, ranging from seven per cent to more than half of the households. The lower figure was recorded in a village with high outmigration of poor people.

BOX 1
IDENTIFYING THE POOR

Even when using wealth ranking, precautions must be taken to make sure that the poorest of the poor are included. In *RRA Notes* 15 Pretty et al. provide an illuminating example. During a RRA study in India, villagers systematically excluded those who had huts, not houses, and depended on casual labour (1992). Welbourn, summarising experiences from RRA fieldwork in Sierra Leone, Ghana, Malawi and Bangladesh, observes that the poorest are excluded from meetings, and that their views are not represented (1991). In Ethiopia, Jonfa et al. note that even during modelling, a more participatory technique than a meeting, the finished product did not reflect all groups resident in the village (1991). From India, Chandramouli described particular arrangements made to ensure that the views of the poorest can be included at meetings (1991). The problem is not restricted to developing countries. A RRA study in Switzerland met with similar problems (Scheurmeier and Ison 1992). A large number of examples can be cited confirming that without extra efforts made to include the poorest, their situation will not be adequately understood.

If wealth ranking, social mapping or constructing reliable village rosters are considered too time-consuming, other much quicker methods can be used to identify sub-groups within a village. A Zairean trial is described by Schaefer (1992).

Source: PLA Notes (1995), Issue 22, pp.11–16, IIED London

It appears from the agency report that they never encountered the destitute households in any of the 12 villages visited. Rather, some evidence in the report points in the opposite direction. One passage in particular upsets us. The authors write that *"ease of importation combined with competitive selling means that there is* ***no longer any reason to wear rags"*** (p. 61, our emphasis). If this is to be taken as the study team's view (the wording is somewhat ambiguous), it confirms that they did not come to know of the problems faced by the poorest groups. However, if, as is more likely, it is a conclusion from the focus-group discussions, then it indicates that the poorest groups were not represented on these occasions. By not ensuring the inclusion of the particular target group in the study and not giving them safe opportunities to express themselves, the study team became unduly dependent on what was publicly said about local social stratification. This raises doubts about their conclusion that poorer people welcome economic liberalisation. What they at most are able to state is that they got such opinions from people who in our studies are decisive steps up the social ladder.

We should consider the possibility that destitute people were in fact not present in any of the 12 villages visited by the study team. Could it be that the villages we studied in Babati, Hanang and Kondoa districts were special cases? We do not think so for several reasons. In themselves these villages are quite varied - ethnically, in degree of market involvement, in terms of religion and historically. We had not chosen them because they were known to exemplify particularly dramatic social stratification. Nor did well-informed people in the district administrations know of them as villages with a particularly large number of very poor households. An earlier nationwide survey confirms our findings. Intra-village income inequality was found to be high. Of the total inequality registered, 84 per cent was recorded as due to differences within villages while the remaining 16 per cent resulted from differences between villages (Collier et al. 1986). The agency report also confirms that socio-economic inequalities are significant in Tanzanian villages (p. 71). It notes that the study team not construct a poverty index (p. 58), indicating that they are not in fact so sure that their account gives a comprehensive picture of rural socio-economic stratification.

There are well-known reasons for excluding the poorest. The poorest groups are routinely (consciously or not) left outside discussions of village affairs[1]. They are discarded when it comes to planning for improvements because they are considered not to have anything to contribute. They are never introduced to outsiders. They are, in Robert Chambers' words, "th*e unseen and the unknown"* (1983). As the samples in our study were drawn from the entire village populations we were able to include them. Wealth rankings likewise disclosed their existence.

A tight time schedule (12 villages in six weeks, with about two-and-a-half days per village) sets its limits. The agency authors wrote that: *"While in principle we might have adopted one of a number of approaches which would have minimised undesirable influences on the composition of the groups, none was feasible in the time available"* (p. 49-50). Not finding a feasible approach one ends up dependant on those who are, in Chambers' words, *"less poor and more influential"* (1983), those fluent and easily available while methods to adjust for such biases are available. What benefits accrue to making a study so rapid that there is not even time to use the appropriate RRA methods? The shorter the time in the field, the more urgent it becomes to make sure that one keeps close to the focus of the study, which in this case was the situation of the poor.

Interpreting the results

The authors draw a number of provisional conclusions. This presents the reader with some dilemmas about the value of their statements. How do you go from provisional conclusions to proper conclusions? By including 12 more villages in the study? By using double the time spent in each village? By increasing the number of researchers involved? By spending more time on reading

[1] In one of the villages we studied, the village government denied that the population had increased since the land reforms in the mid 1970s. They did not wish to officially accept knowledge of the considerable number of landless households in the village.

Source: PLA Notes (1995), Issue 22, pp.11–16, IIED London

up? Or by doing something entirely different from what the study team did? And how are we supposed to use such provisional conclusions? As the truth, although not quite proven? Or as half-truths?

These questions are important for all of us who use RRA methods and are involved in applied research to consider, but they are not easy to answer. Having concluded provisionally, as is the case in the report under review, that *"import and domestic trade liberalisation has been good for rural people, including those locally regarded as relatively poor, and perhaps especially poor women"* (p.118), this easily becomes, when quoted in second- or third-hand, an established truth which guides future policies. Equally easily the "provisional" is played down by those whose interests are served by this finding. Who takes the responsibility that provisional conclusions are treated as provisional? No one, of course. The authors cannot guide how their conclusions are used, neither can the agency who commissioned the study.

Our suggestion is to draw conclusions when the data allow that, and to treat the observations that cannot be backed up properly as hypotheses for further studies. To identify important and well-defined questions is no negligible result of a rapid study.

Let us now move on to some of the provisional conclusions. The authors write that *"it is a mistake to think that the liberalisation of foreign and domestic trade since 1984 has benefited only better-off consumers"* (p. 94). Having already argued that those who are genuinely poor were not included in the study we now ask on what basis this conclusion is reached and to what groups of people this refers.

During the group discussions those present said they appreciated that more goods are available in the shops. This remains the one unambiguous fact presented by the authors in support of their thesis. Other possibly positive factors reported are:

- That rural economies are (increasingly?) diversified (p. 94f.), but this may be just an extension of the survival strategies people resorted to during the 1970s and "in the years of national economic difficulty" in the first half of the 1980s (p. 119).

- That this diversification perhaps provides opportunities for women and young people to renegotiate resource flows and power relations. But they write that the diversified economy may not be as helpful to "the poorest rural people" as an agriculturally-based recovery would be (p. iv, 119).

On the negative side other facts are reported:

- During the last decade there has been a substantial decline in education and medical services, even reducing post-Independence achievements to "just buildings" (p. 80f.).

- Because of the break-down of cattle-dip services and lack of veterinary drugs, livestock losses are substantial (p. 87).

- *"Increased production costs are making life more difficult for staple food producers"* (p. 118).

- Infrastructure improvements made since Independence are now in jeopardy (p. 95).

- Environmental degradation is a serious threat to the resource base of the rural population (p. v, 120). This affects, as is well known, particularly poor people.

Given these facts, we doubt that it is reasonable to argue, as the study team does, that they have proved, albeit provisionally, that *"trade liberalisation has been good for rural people"*.

Opinions or facts?

The focus-group discussions register villagers' opinions, and this is indeed valuable. But when the authors tried to explain the reasons behind these attitudes they reveal a limitation of this kind of rapid study. RRA methods are useful for registering opinions. When it comes to establishing material conditions it is only possible to measure the opinions of those who happened to be present when the question was

Source: PLA Notes (1995), Issue 22, pp.11–16, IIED London

raised. It is not one and the same thing that people say that things have improved, and that they *have* improved. Registering attitudes towards change is not the same as measuring changed conditions. Surely the first issue is of interest to know, we do not question that. But it is not the same as the second.

Accepting for the sake of argument that it was unambiguously stated in the focus-group discussions that things have improved because of trade liberalisation; is it thereby established that trade liberalisation has been good for rural people, as the study team writes?

· Conclusions

We have argued that the genuinely poor who constitute, at least in the villages we have studied, a substantial part of the rural population were not considered by the agency study team. Since they were not included in the analysis we questioned the basis for the study team's claim that import and domestic trade liberalisation has been good for the rural poor.

From the report we have summarised various effects of economic liberalisation mentioned by the authors. Putting them on a simple balance sheet we were not convinced that the beneficial effects outweighed the drawbacks. In our opinion, the decline in education and medical services, the increased cost of living, and the long term problems of environmental degradation are most severe setbacks for poor rural households. The study team makes a different assessment. Who is right? The report provides no basis for determining that.

That *"the unseen and the unknown"* (Chambers, 1983) were not included in the study does, however, not imply that their living conditions cannot come to the fore in research using rapid methods. But it does demonstrate that specific efforts need to be made to ensure that it happens.

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3

PRA and raised expectations: potentials and pitfalls

Richard Edwards

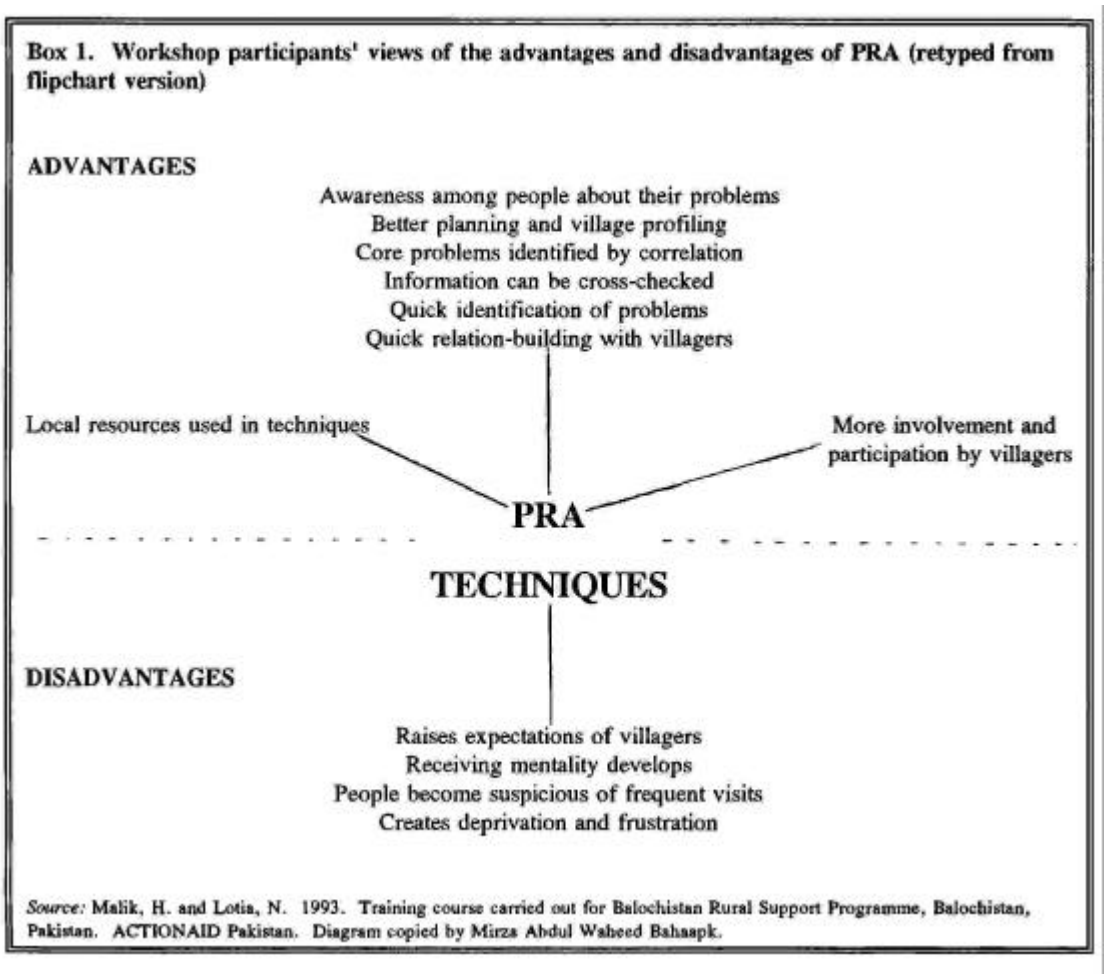
· Introduction

As PRA is increasingly used and promoted, it runs the risk of simply being seen as a one-off diagnostic tool or as a necessary component for getting proposals approved. There is also a tendency to see the output only in terms of a set of diagrams.

But PRA is not just a one-off diagnostic exercise, rather it is an attitude of mind governing how we interact with others throughout the process of development. It uses a range of ways to ensure the development of analytical skills and the mutual sharing of knowledge and aspirations so that communities are actively involved with outsiders in guiding the development process.

Often concerns are voiced about the dangers of raising communities' expectations as a result of PRA. The diagram below (Box 1) shows one example of how the participants of a training workshop held in Pakistan evaluated their perceptions of the strengths and weaknesses of PRA:

Box 1. Workshop participants' views of the advantages and disadvantages of PRA (retyped from flipchart version)



Source: Malik, H. and Lotia, N. 1993. Training course carried out for Balochistan Rural Support Programme, Balochistan, Pakistan. ACTIONAID Pakistan. Diagram copied by Mirza Abdul Waheed Bahaapk.

Source: PLA Notes (1995), Issue 22, pp.17–19, IIED London

Without exception, participants expressed concern that carrying out PRA raised too many expectations. Linked to this was the view that communities should not be used simply as guinea pigs for testing methods. These are indeed real concerns.

Here I argue that these criticisms are only valid when planning is inadequate and there is a lack of transparency in groups working with communities. Further still, I would argue that raising expectations is actually an objective of a PRA process.

The Importance of transparency

Clearly the degree of transparency with which we operate will affect just how valid such criticisms are. It is up to us to explain the purpose and intent of our work. In particular we should be absolutely clear about what we can and can not do for the community concerned. Frequently a lack of transparency creates a distance between the 'insiders' and the 'outsiders' and can place the outsiders in a powerful position whereby the needs of communities are not expressed and interventions not sustained.

There is no doubt that undertaking PRA raises considerable expectations within communities. The potential that initial PRA work has in breaking down barriers, letting villagers see that we are interested in listening and working with them, as well as sharing information about each others' different circumstances and needs is incredible. It is a learning process both for villagers and development agency staff. Raised expectations can generate momentum for the effective participation of the communities in their own programmes.

Often there is some reluctance to be clear with communities about precisely what the programme objectives and limitations are. For example, in one wildlife conservation programme, staff felt it was too risky to reveal to villagers that the area was unique for its biodiversity. It was felt that revealing this would give the communities too much bargaining power. Despite several years of valuable information collection, the project had not moved forward in achieving its objectives. It was only by opening this up through the dialogue of a PRA that it became clear that the raised expectations of the community could be channelled to work out the development needs and ultimately contribute to conserving the environment.

This is not unusual. Examining just what is meant by participation and the implications for us in managing our work is an essential prerequisite.

Villagers interact with numerous outsiders, many of whom have specialised roles. Villagers expect to bargain with the outsiders just as the outsiders in turn expect to bargain with the villagers. Being clear about each other's confines and conditionalities is essential in the negotiation process, as ACTIONAID discovered in one of their project areas (Box 2).

Source: PLA Notes (1995), Issue 22, pp.17–19, IIED London

BOX 2
.**Experiences of ACTIONAID in Pakistan**

In one area where ACTIONAID Pakistan is working (Kalinger, NWFP), villagers had been used to a strong patron-client relationship with interventions based on political affiliation and patronage. These interventions have benefitted only a very few people. When ACTIONAID started work in the area using PRA, villagers were not used to dealing with people who were prepared to listen to them. It took time to change from the tendency to demand a list of needs from the outsiders to one where people began to critically appraise their needs and suggest their own solutions.

The initial PRA raised expectations for work to start immediately. This was strengthened because several people had visited the area in the past to establish its potential as a programme site. However, it took longer to recruit staff, develop an office infrastructure, and more importantly to follow up the initial findings with more detailed thematic studies so as to develop village plans for jointly implementing schemes - in this case water and sanitation. It also required a great deal of discussion amongst ourselves to develop our principles to guide transparency. Moreover it took time with villagers to let them see just how necessary this is and how firm we would stand on our conditionalities. This was exacerbated by the fact that this was our first operational area and our credibility was still unknown.

This is a common situation. In many projects there is often pressure to achieve specified targets by set dates. Pressures from outside can tempt one to pass through this critical negotiation stage quicker and thus undermine the genuine participation of villagers and collaborating line agencies.

The fact that PRA-based work tends to look at a whole spectrum of issues in order to discover underlying inter-relationships, could again raise expectations that the project is there to deal with all issues. A clear explanation of the project's limitations should restore the equality of the relationship with the villagers. If care is taken to explain what you as an outsider can or can not do, villagers will be more accepting and still value specialist knowledge and skills. It is essential for participation to be an integral part of the whole development process; not just at the initial diagnostic stages. Methods and approaches that reinforce the skills of communities to carry out their own analyses and appraisals should be favoured.

· Conclusions

In conclusion, prior to starting work with a community it is essential to clarify the objectives and limitations of the project. As long as one is clear about how one can potentially work with a community, realistically raising expectations becomes an explicit objective of the work because of its ability to generate momentum for active involvement by people in project activities. Failure to make clear the operational confines can lead to disappointment on the part of the villagers. Using a range of participatory methods throughout the project cycle is essential. PRA should not be seen as a one-off diagnostic set of techniques, but instead as an attitude of mind ensuring continuous interaction between villagers and development workers.

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Source: PLA Notes (1995), Issue 22, pp.17–19, IIED London

4

The grandfather graph

Nurul Islam Nazem and Pete Atkins

· Introduction

In 1992 we conducted fieldwork in rural Bangladesh to study the interaction of the rural and urban spheres. The aim was to analyse the impact of the government's decentralised urbanisation policy. As part of the study we decided that we needed a simple method to show how people's occupations have changed in the past 40-50 years. This method would need to overcome a number of constraints, most of which will be familiar to readers of *PLA Notes*.

First, our time and resources were limited so we needed a method which would yield speedy results. Second, we were not aware of any previously-conducted baseline household survey for Faridpur District (our chosen study area) with which we could compare current data. Third, checking published regional data from the past against field evidence proved difficult for a number of reasons:

- A few respondents in Faridpur District had difficulty remembering their own household histories beyond about ten years. Some people do not even know their own exact age. Sometimes it was possible to jog people's memories by referring to a major political event or environmental disaster.
- Very few households keep records in this area, which has a high proportion of poor illiterate people.
- In a country with a youthful population profile, the collective memory in some villages may be relatively short. The scope for oral history of say, fifty years ago, is limited.

After some deliberation we decided to experiment with a simple method that we call the 'grandfather graph'. This is admittedly a rough and ready technique but it yields approximate results that have proved valuable.

· Developing the methodology

David Mosse and Mona Mehta (1993) have written a very interesting paper about the use of genealogies to reconstruct communal history and establish a basis for the study of interactions such as marriage alliances and other forms of social reciprocity. They speak from the viewpoint of anthropologists working on an intensive micro-scale study. Many social scientists are also committed to longitudinal studies but they often find methodological difficulties when wishing to compare the results of sample surveys with larger scale official data such as a population census.

Thus in our Bangladesh study we used Rapid Rural Appraisal, followed by a sample survey of 310 rural and 187 urban households. Our respondents were heads of their household. We asked them their age (or an estimate), and to describe their present occupation and their economic and social relationship with urban centres. This exercise was repeated with reference to the year 1982, ten years before, if necessary taking the father's occupation where the respondent had been a minor.

Further information about family histories was then collected from those who could remember accurately. It was interesting to note the variability between subjects as to the length and detail of their recall. This did not seem to vary with any single variable, such as level of education.

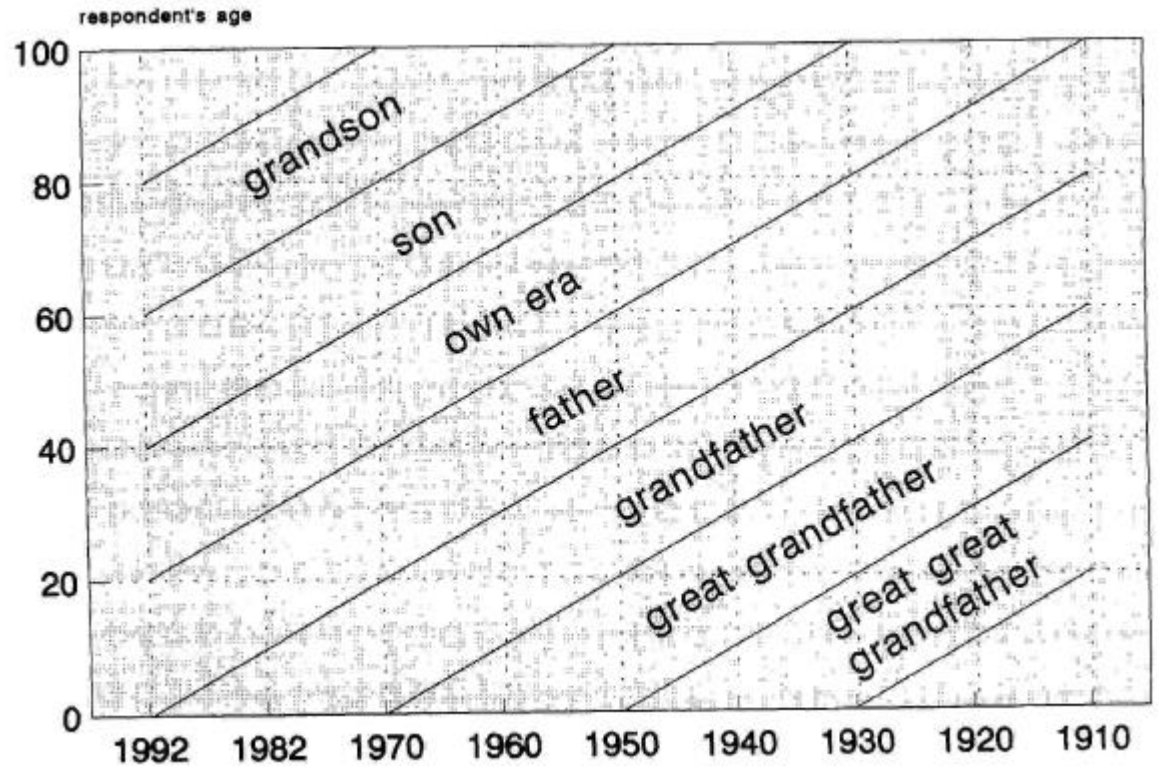
Source: PLA Notes (1995), Issue 22, pp.20–23, IIED London

Where memories were frail about specific years or even decades, we asked the household heads about the occupation of their fathers and grandfathers. This was almost universally known. It was then up to us to estimate the dates when these relatives flourished and we could then add the information about their occupations to our database.

· Results

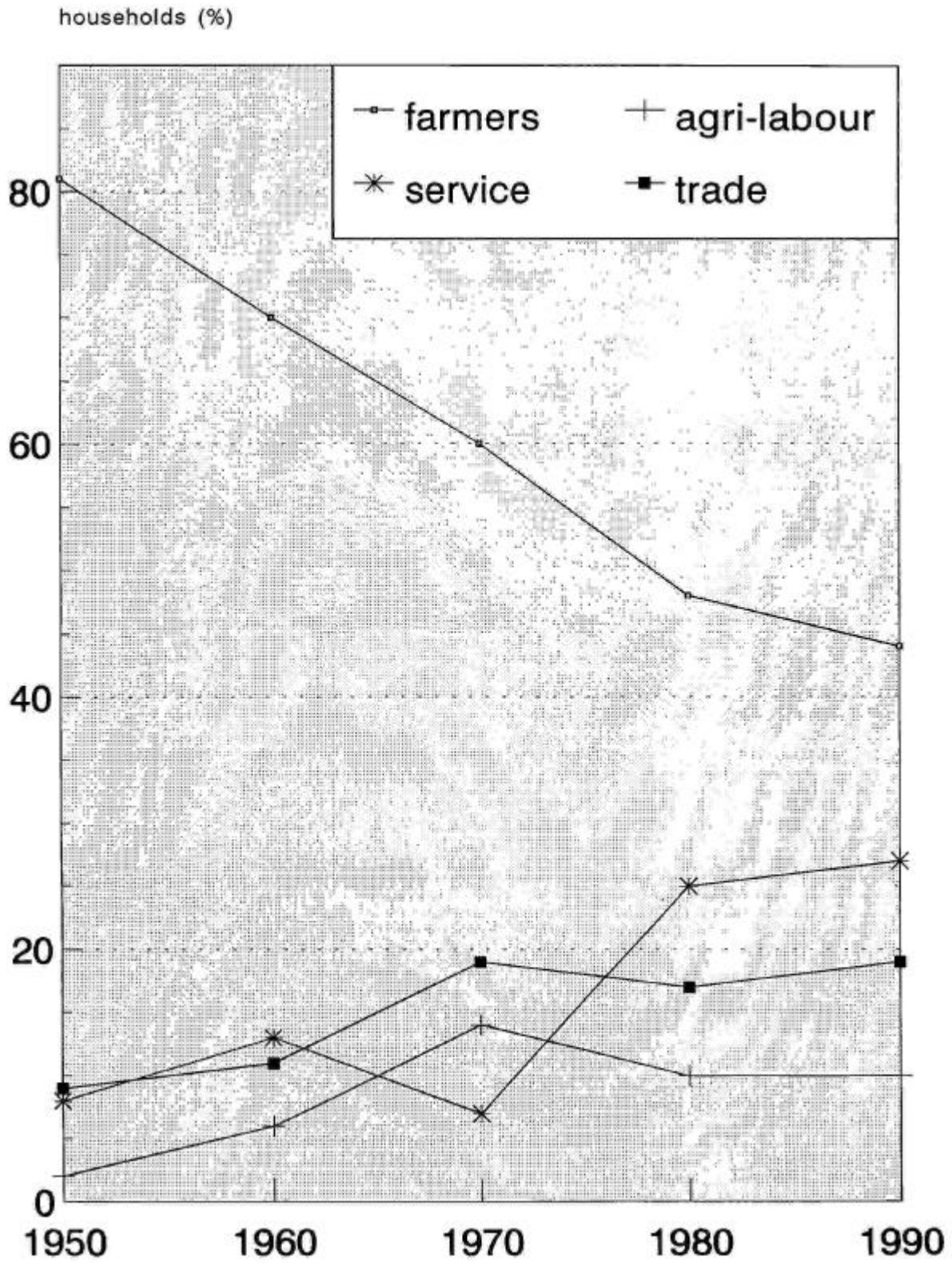
Figure 1 shows generational bands for Bangladesh, assuming a generational average of 20-22 years. In reality this figure has increased over time as the age of marriage has changed. When most respondents referred to their grandfather's occupation they were thinking of a time at roughly the date of their own birth. We are fully aware of course that the grandfather's working life may have spanned several decades but we feel that our technique is nevertheless valuable as a snapshot characterisation of one point in the past.

Figure 1. Generational bands



Source: PLA Notes (1995), Issue 22, pp.20–23, IIED London

Figure 2. Grandfather graph



Source: PLA Notes (1995), Issue 22, pp.20–23, IIED London

We rounded respondents' answers to the nearest decade in order to eliminate from our own minds any spurious impression of accuracy. Figure 2 shows the results for Faridpur District, with four classes of occupation. This is not the place for a detailed analysis, but suffice to say that the falling percentage who were farming on their own account is consistent with the story told by secondary sources. Agricultural labouring, trade and service jobs are also as predicted, including the disruption during the war of independence in the early 1970s when services collapsed and people sought income-earning refuge in labouring and petty trading in the informal sector.

Inevitably there will have been some inaccuracies in the compilation of Figure 2. Nevertheless, it has allowed us to produce a graph for sample households in Faridpur District that can be compared with official statistics. Although we used this method to understand the occupational composition of the rural economy, other uses could also include measuring aspects of economic, social, cultural or political behaviour.

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Source: PLA Notes (1995), Issue 22, pp.20–23, IIED London

5

Social maps and geographical transects: some recent experiences in Orissa, India

Prahlad Mishra and Gayatree Mohanty

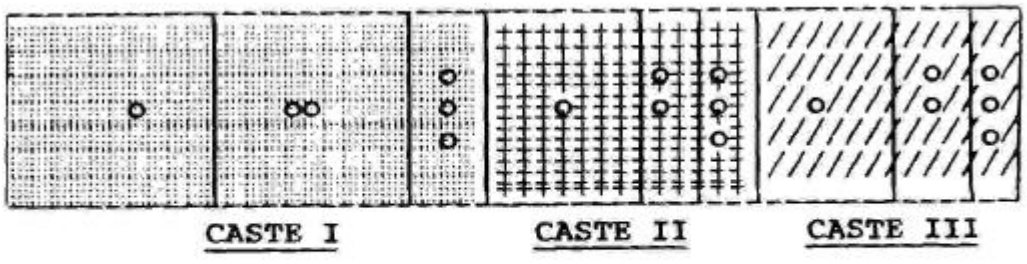
· Introduction

Since PRA is a flexible approach, innovations often evolve during the process. Recently much thought has gone towards finding ways of making the methods even more participatory and innovative. During fieldwork which we conducted in Orissa in 1992, some innovative approaches to social mapping and geographical transects emerged.

· Social mapping

In our experience, maps showing social characteristics of villages such as caste and income levels, are useful and straightforward to make when a village is small. However in recent use of PRA in a larger village (more than 500 households) a social map such as this was highly complex and impossible to transfer onto one sheet of paper. After long discussions with the villagers a modified approach was decided on. First, reference points such as roads and wells were drawn on the ground. The villagers then divided the settlement into clusters of households. We held group discussions on caste and income in each cluster. Then caste and income groups were mapped (using coloured chalk) for each cluster with the help of the villagers (Figure 1).

Figure 1. Social map of village cluster showing caste and income groups*



*The area of each rectangle represents the proportion of households included in each category. Thus in this example, caste I contains the largest number of households, but within this caste, the wealthy make up the smallest number.

Source: PLA Notes (1995), Issue 22, pp.24–26, IIED London

A map like this was prepared in each cluster, and finally the whole village map was completed by putting the cluster maps in their respective places on the overall map. This map was again discussed with the villagers to validate what they saw (Figure 2).

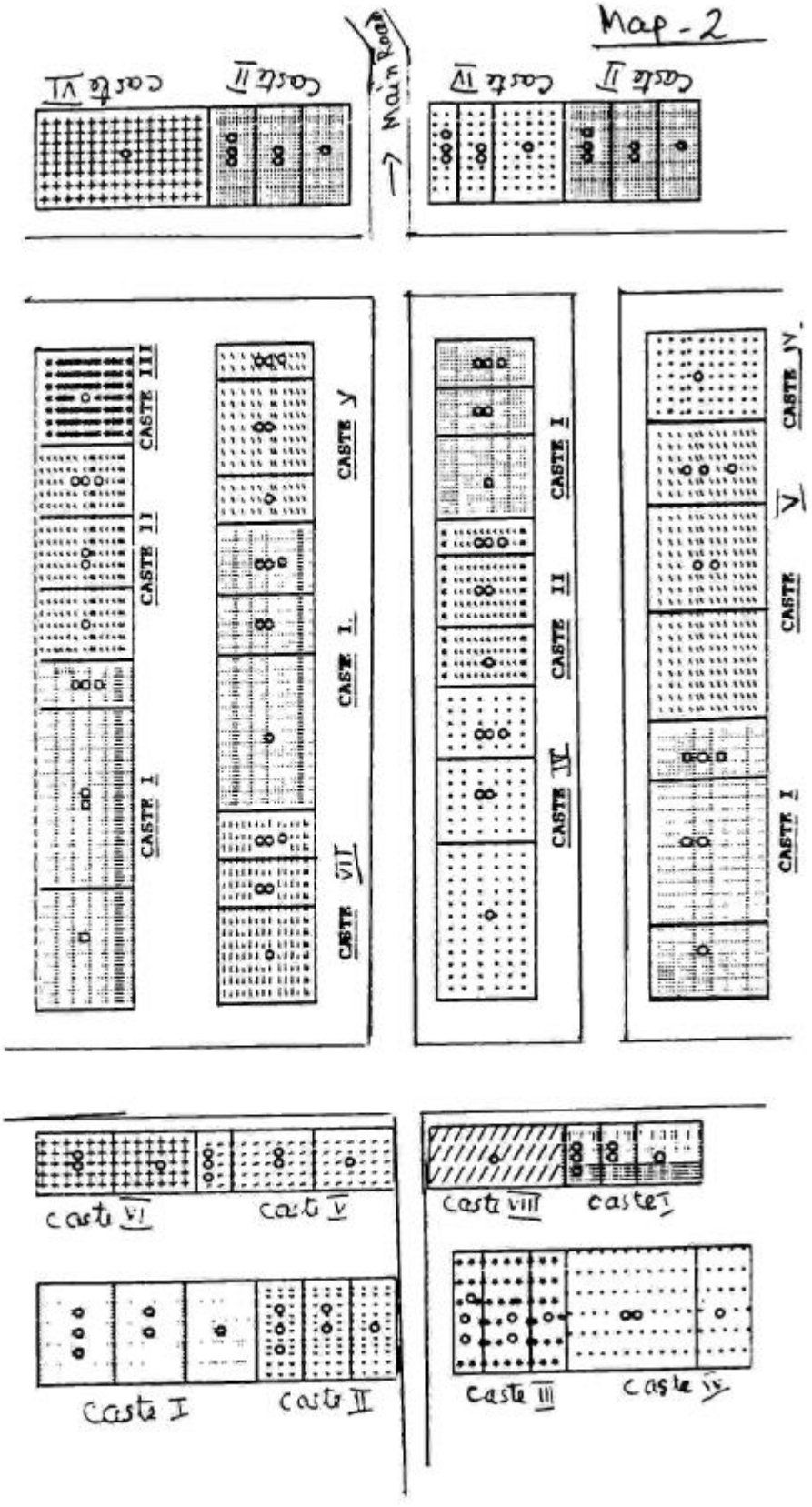


Figure 2. Caste and Resource-Specific Social Map of a Village of More Than 1000 Households

Source: PLA Notes (1995), Issue 22, pp.24–26, IIED London

· Geographical transects: a reconsideration

Geographical transects can give an idea of the whereabouts of soil types, crops, and other natural resources and can reveal problems and prospects in the village. PRA practitioners use three types of transect: a cross transect (east-west or north-south), a *nala* transect (following the course of a stream) or a loop transect. But here is a danger that these transects could be used to provide the basis for a total inventory of the natural resources of the village. Our concern is that these types of transect alone could overlook areas of land that may be highly significant.

We would suggest that a natural resource map of the village and surrounding area should be drawn first, after which the facilitator could accompany villagers to the different land types (*nalas*, ponds etc.) identified on the map. This could be referred to as an "investigative transect" since it does not conform to any of the more familiar transect types.

· Conclusion

There are always opportunities to improvise while carrying out PRA. This is clearly an advantage of the PRA approach over the more traditional approaches. However, one should not lose sight of the purpose in the process of innovation. The methods should always address the purpose for which the exercise is being conducted.

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Source: PLA Notes (1995), Issue 22, pp.24–26, IIED London

6

Women prefer lunchtime

Claus Euler

· Introduction

During a recent training for Project Village Committee (PVC) members in the Rural Family and Child Welfare Project (RFCWP)[1], an exercise was conducted among 27 participants (23 women and 6 men) from three villages of Charghat Subdistrict to find out the best time of day for visits by project supervisors. This note is an account of the method used.

· Method

The participants were divided into three groups according to gender. Two women's groups were formed, to allow a comparison between two different villages and because there were more women than men present. The groups were asked to divide a normal day into nine equal sections of two hours each, from 5 am to 11 pm. They drew the day's nine sections on the floor using chalk. They were then asked to rank (from first to fifth choice) the best time of day for visits, which they did using pieces of broken bricks. After that exercise, the office hours of the government supervisors were added to the floor diagrams, to see how their duty time fits in with the requirements of the villagers.

· Results

The results showed that different gender groups preferred different times. The two women's groups both preferred 1-3 pm, while the men ranked 11 am - 1 pm as being most suitable. For both women's groups their preferred time coincided with the staff's lunch break, which is officially from 1-1.30 pm, but is usually extended to at least a full hour. Women start to prepare the food for lunch at 9 am, and would prefer the supervisors to come after cooking time, when they just have to serve the meal. Considering that travelling to and from the villages takes some time, the women's first choice would hardly ever be met.

During the discussion about the results of this exercise, the men heavily opposed the women's preference, saying that they should be free to serve the food. The men do not want to be visited during this time of the day (1-3 pm), because this is their resting time after heavy work in the morning. The women argued that those men whose wives are engaged in this type of development activity, which is for the betterment of the entire family, should sacrifice a bit as well.

After further similar exercises, a proposal could be put to the government to adapt the visiting hours of project staff to be more convenient for villagers, just as many NGOs are doing. This is one reason why some NGOs can claim that they are more embedded in the villages and are better accepted by the people.

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[1] Implemented by Enfants du Monde (a Swiss NGO), in collaboration with the Department of Social Services and the Ministry of Social Welfare under a bilateral agreement between the governments of Switzerland and Bangladesh.

Source: PLA Notes (1995), Issue 22, pp.27, IIED London

7

Beyond ranking: exploring relative preferences in P/RRA

Simon Maxwell and Claude Bart

· Introduction

In this paper we argue in favour of moving beyond simple preference ranking when exploring preferences in PRA or RRA. The main reason for this is that ranking actually tells us little about preferences. This is often less than we think, because so many of us misinterpret ranking data. But even when interpreted correctly, ranking is not enough. Scoring systems are better, and some are described here, but we shall also introduce two new techniques which help to provide better information about preferences.

· What's wrong with ranking?

Preference ranking has become a common technique in P/RRA. We have reviewed 15 examples, mostly from previous issues of *RRA Notes* (Annex 1). The most common format involves setting up a matrix, with things being considered (tree species, fertiliser types, income-earning opportunities) on one axis, and characteristics differentiating them on the other. A group or individual is then asked to rank the items according to each characteristic. A typical example is shown in Table 1.

Of course, an exercise like this is very useful. It enables participants to define their own criteria for discriminating between items and provides a large amount of information about preferences. However, there are two problems.

Adding-up

The first problem is that the ranking table does not give an overall preference order. Sometimes this does not matter because there are no choices to make, or only limited ones. For example, people may want different trees for different purposes and prefer a mix rather than a single species. Sometimes, however, it may be useful to establish an overall preference ranking, for example if alternatives are mutually exclusive.

A seemingly obvious way of generating overall preference is to add up the ranking scores in the table. In Table 1 for example, *Eucalyptus* would score five, *Grevillea* 12, and so on. Unfortunately this simple solution is impermissible. First of all, it assumes that each of the criteria has the same weight, so that 'speed of growth' is just as important as 'kitchen smoke' in the opinion of the respondent. This is very unlikely to be the case. More important, it is statistically illegitimate to add up ranking scores[1]. This is because the spacing between ranks is unknown. This is discussed in more detail below.

It is perhaps worth noting that of the 15 ranking exercises reviewed, four added the ranks in this illegitimate way. In one additional case, criteria were weighted before adding-up, which overcomes the first problem but not the second. There are better options. The most common method has been to ask participants to give a subjective, overall ranking themselves, listing the trees or whatever from best to worst. This overcomes the problem of weighting different criteria, but again leaves the difficulty of interpreting the gap between ranks. Subjective ranking was used in seven of the cases we reviewed.

[1] For a clear discussion of the advantages and disadvantages of different kinds of data, see Siegel, S. 1965. *Non-parametric Statistics for the Behavioural Sciences*. McGraw-Hill, Tokyo.

Source: PLA Notes (1995), Issue 22, pp.28–35, IIED London

Another alternative[2] has been to ask participants to allocate a fixed number of points between all the items being considered. For example, 100 points might be allocated between the four trees in Table 1, to give an idea of the optimal mix of trees desired.

The relationship between ranks

The second problem has already been mentioned and is in our view the more important. It is that ranking provides no information about the spacing between ranks. Thus, the gap in growth performance will differ from one tree to the next, as discussed above. So will the gap in firewood performance. And there will be no way to compare the gaps in growth performance with the gaps in firewood performance. In technical terms, ranked data are an ordinal scale in which the ratios between any two intervals are unknown. A good example of an ordinal scale is the following sequence: minister, permanent secretary, night watchman. There is a hierarchy, in salary if nothing else, but the intervals differ.

As mentioned above, it is illegitimate to add ordinal data. The reason for this can easily be seen by considering that *Sesbania* might grow only a little faster than *Mululusia*, but *Mululusia* in turn might grow a great deal faster than the next ranked tree, *Eucalyptus*. If this is the case, simple adding-up would give misleading results. We think this provides a real problem when interpreting ranking data. Can it be overcome?

· Approaches using scoring

Scoring is certainly a topic that deserves more attention. Several variants of the scoring method are possible, and all provide more information than simple ranking. Possibilities include:

- *Restricted scoring by column/row*: Allowing a fixed number of points per column or row, for example 10 points for *"speed of growth"*, to be divided between the four trees in Table 1. This will give a good indication of the interval between choices, though it also raises some problems of interpretation. The problem of weighting different criteria also remains.

- *Open scoring by column/row:* Allowing an open-ended number of points per column or row. This may improve measurement of difference within columns or rows, but does not solve the problem of weighting different criteria.

- *Restricted overall scoring:* Allowing a fixed number of points for the matrix as a whole, and not per column or row. Thus, 50 or 100 points could be distributed between all the cells of Table 2. This would enable weighting to be incorporated in the analysis, with more points being allocated to more important criteria. It is likely to be complicated, however, and rather time-consuming, especially for large matrices.

- *Open overall scoring:* As above, but with an open-ended number of points. This will give the strongest statistical result, but again is a complicated exercise.

Food preferences in Merti-Jeju, Ethiopia

In the following example from Ethiopia, we illustrate the scope of scoring and introduce some alternatives. The examples here are taken from an assessment of a food-for-work programme in Merti-Jeju District[3]. The work was carried out with groups of women in two villages and was designed to investigate food preferences, so as to help choose appropriate commodities for the food-for-work programme.

[2] Kailash, B. et al. 1991. *Tree Preference Ranking - Women - Sajankav*. Mimeo. Robert Chamber's collection, October. IDS, University of Sussex.

[3] For details see, Maxwell, S. and Herbinger, W. 1992. Notes on a rapid assessment of food-for-work in Merti-Jeju Awraja, Arsi Region. In: Maxwell, S. *Next Steps in Food for Development: Report on a Visit to Ethiopia*. Appendix 3. Mimeo. World Food Programme, Addis Ababa.

Source: PLA Notes (1995), Issue 22, pp.28–35, IIED London

Restricted scoring

The first exercise was a restricted scoring exercise, allowing ten points per criterion. The results are presented in Table 2. A group of women was asked to identify the main characteristics differentiating six different grains, giving the list of factors across the top of the matrix. They were then asked to allocate ten points per column, giving the figures in the body of the table. Finally, the group was asked simply to rank the six grains, taking into account the relative importance to them of the six criteria they themselves had identified. This ranking is given in column seven.

The data here do provide more detail than simple ranking, but they are not unproblematic. A score of four is obviously higher compared to two, than two is to one. However, it is not obvious that the relative preference implied by similar relative scores is the same in each column. For example, on the criterion of cheapness to buy, barley scores three and sorghum two. On the criterion of multiple use, barley scores 3 and maize 2. Is the relative preference implied by the ratio 3/2 the same in both cases? Furthermore, the zero entries in the matrix certainly do not indicate a true zero. For example, the zero rating for barley and millet under cash value cannot mean that those cereals have no commercial value, because they clearly do.

It follows that neither the scores in individual columns, nor the final summary rankings are clear indicators of the size of relative preferences. It is not possible to say anything precise from the matrix in Table 2 about how much respondents prefer one grain over another. If doing this again, it might be interesting to try open scoring. Instead, however, a different approach was tried and two new techniques were introduced.

Quantified preference

To take the discussion forward, women were asked to indicate choices between different quantities of grain as in a kind of modified pair-wise ranking. For example, would they prefer one kilo of teff or 1.5 kilos of wheat? This was again done as a group exercise so that the results represent a consensus. We did not try all possible combinations but learned enough to suggest that the technique would yield useful information to complement the ranking. One set of results is given in Table 3.

Source: PLA Notes (1995), Issue 22, pp.28–35, IIED London

Table 1. Extract of ranking of characteristics of four tree species by Mrs Zena Ibrahim, Kakamega District, Kenya[4]

Characteristics	Tree species			
	Eucalyptus	***Grevillea***	***Sesbania***	***Mulusia***
Speed of growth	3	4	1	2
Firewood	1	4	2	3
Kitchen smoke	1	4	2	3

Table 2. Scoring of grains in Merti-Jeju

Characteristic / Crop	Cheap to buy	Easy to make *njeera*	*Makes you strong*	*Multi-use*	*Best for bread*	*Cash value*	*Rank*
Sorghum	*2*	*2*	*0*	*1*	*0*	*2*	*3*
Wheat	*0*	*1*	*3*	*3*	*6*	*3*	*2*
Barley	*3*	*1*	*3*	*3*	*0*	*0*	*5*
Millet	*3*	*1*	*0*	*0*	*0*	*0*	*6*
Teff	*0*	*4*	*3*	*1*	*2*	*3*	*1*
Maize	*2*	*1*	*1*	*2*	*2*	*2*	*4*

Table 3. Relative preferences

Option	Selection
1 unit of teff or 1 of wheat	teff
1 teff or 1.5 wheat	teff
1 teff or 2 wheat	teff
1 sorghum or 1 wheat	wheat
1.5 sorghum or 1 wheat	sorghum
1 barley or 1 sorghum	barley
1 barley or 1.5 sorghum	barley
1 millet or 1 sorghum	sorghum
1.5 millet or 1 sorghum	sorghum

4 Source: Chambers, R. 1988a. Direct matrix ranking (DMR) in Kenya and west Bengal. RRA Notes 1. IIED, London.

Source: PLA Notes (1995), Issue 22, pp.28–35, IIED London

Table 4. Results of a shopping exercise

	Good year		Bad year	
Grain Choice	**No. purchases**	**%**	**No. purchases**	**%**
Teff: 1 unit	9	50	2	20
Wheat: 2 units	6	33	5	50
Maize: 2 units	0	0	0	0
Barley: 2.5 units	3	17	2	20
Millet: 2.5 units	0	0	1	10
Sorghum: 1.5 units	0	0	0	0
Total	**18**	**100**	**10**	**100**

Source: PLA Notes (1995), Issue 22, pp.28–35, IIED London

These results show that teff is strongly preferred over all other grains, which confirms the ranking exercise. Barley is marginally preferred to sorghum (which contradicts the subjective ranking) and millet is unpopular. The exercise provides more information than the ranking exercise.

A more careful look at choices in Table 3 shows that teff is more than twice as popular as wheat. Similarly, the table shows that sorghum and wheat are much closer to being substitutes for each other than the scoring would suggest.

Shopping

When we discussed the question further, the women said that their preferred staples were wheat and teff. However, when times were hard, they resorted to barley or millet because they were cheaper. In order to try to quantify this preference, a final exercise was carried out to simulate market choices. The women were offered a choice of grains and real relative prices and were then given two tokens, enabling them to buy up to two piles of grains each. There were nine women so 18 piles were 'bought'. The different size of piles reflected relative prices. For example, wheat was about half the price of teff so for a given amount of money, twice as much wheat could be bought as teff. This was to simulate grain purchase in a good year. The number of tokens was then reduced to one and the exercise repeated to simulate a bad year. An extra woman joined the group, so this time there were ten purchases. The results are shown in Table 4.

The results show that, at current market prices, teff is strongly preferred in good years, followed by wheat and barley. Maize, millet and sorghum find no buyers. In a bad year, however, the picture changes significantly, with a substantial shift from teff to wheat and an increase also in barley and millet preference. Sorghum and maize continue to be the most unpopular grains.

In this kind of exercise voting is used rather than a single group decision. There is a true zero, in the sense that if sorghum, say, receives no votes, that is a realistic outcome. It is also meaningful to talk about barley receiving twice as many votes in a bad year as millet. The data are much stronger in a statistical sense.

The results of the various exercises are not entirely consistent with each other, which suggests that further research may be required. However, there is a strong supposition that barley and millet are technically inferior commodities, whose consumption falls as income rises and vice versa. By contrast, wheat and especially teff are superior commodities. Most important, the additional exercises carried out after ranking provide much better quantitative information than was available after the first round.

· Conclusion

We recognise that it is important in P/RRA not to be blinded by statistics. The process of preparing a matrix is often as important as the product. The discussions that take place while the matrix is being drawn up can be as illuminating as the matrix itself. Nevertheless, we also believe in trying to understand better the techniques we use and in modifying them to generate better information, for both insiders and outsiders.

This work suggests four conclusions. First, while ranking of a traditional kind does provide a great deal of information it also has to be interpreted rather carefully. In particular, ranking results should not be used to make inferences about the size of relative preferences. Nor is it permissible to add scores across rows or columns to obtain an overall ranking. The second rule holds even when criteria receive different weights. If an overall ranking is needed, which is certainly not always the case, a better option is to ask participants themselves to produce a subjective ranking. This will reflect their own implicit weighting of the different criteria.

Secondly, scoring seems to offer an improvement over ranking, particularly if open-ended scoring for the matrix as a whole is possible. In principle, this should give both a true zero and a weighting between criteria, allowing scores to be added and compared.

Thirdly, if a group is involved in the exercise, there is something to be said for voting, rather than consensus. This will give a better picture

Source: PLA Notes (1995), Issue 22, pp.28–35, IIED London

of the range of responses and, again, give greater statistical weight to the results. This could, however, limit the discussions.

Finally, additional techniques need to be used to explore relative preferences. The quantified preference and shopping techniques both provided a useful way to explore real-world preferences in different circumstances. This is important in highly variable situations. The shopping exercise in particular is well-adapted to items with a market value, but also has other uses, wherever there is a constraint on availability. It could be used, for example, to investigate preferences for tree species, taking account of the differential costs of raising different species of seedling in nurseries; or different varieties of grain, taking into account the differential cost of research.

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Source: PLA Notes (1995), Issue 22, pp.28–35, IIED London

· Annex 1. Results of review of 15 examples of preference ranking

Reference	Subject	Who did it?		Scoring system			Overall ranking	
		Group	Individual voting	Rank in col/row	Score in col/row	Open matrix	Adding-up	By participants
Ashby et al. 1987	Bean varieties	x		x			n/a	n/a
Chambers 1988	Fertiliser types	x		x				x
Maxwell 1988	Income-earning opportunities	x			x			x
Tarapoda Ghosh 1988	Vegetables	x		x				x
Bayer 1988	Browse species	x		x			x	
Pretty et al. 1988	Tree species	x						x
Mearns 1988	Land types	x		x	x			
Joseph 1989	Fodder varieties	x		x				None
Cromwell 1989	Constraints to carpentry		x	x			x	
Pretty and Scoones 1989	Tree species	x		x			x	
Kailash Ben et al. 1991	Tree species	x		x				100 votes
Pimbert 1991	Pigeonpea genotypes	x		x				x
Neefjes 1993	Weeds	x		x			x	
Drinkwater 1993	Finger millet varieties	x			x			x
Chambers 1993	Banana varieties	x				x		None

Source: PLA Notes (1995), Issue 22, pp.28–35, IIED London

8

Defending the land with maps

Derek Denniston

· Introduction

In January 1989, two boatloads of *pisteleros* (hired guns for a cattle rancher) came down from the headwaters of the Patuca River in eastern Honduras and pulled up on the shore of Krautara, a village of the Tawakha Sumu Indians. Armed with pistols and submachine guns, they unloaded their chain saws and sacks of food. They proclaimed legal title to all of the surrounding land, even though they carried no papers. For three months, they occupied the Indian village, forcing one family from its home and clearing at least 20 hectares of lush tropical rain forest for cattle pasture. The next year they returned to burn more forest just over the next hill. This was just one of the proliferating bands of cattle ranchers, loggers and landless peasant farmers that in recent years have been encroaching on Indian homelands that cling to the last remote forests, savannas, and wetlands of Central America.

European explorers of the western hemisphere labelled any lands unsettled by their kind as 'uninhabited'. Sadly, this colonial ignorance of indigenous peoples has persisted to modern times. The lands inhabited by Indians are usually considered vacant, and are still not recognised as theirs. Securing legal protection for their homelands is perhaps the most fundamental challenge indigenous peoples face in preserving their way of life - and preserving the ecosystems that are essential to it.

What threatens to make this problem far worse is the expected doubling of the Central American population to 60 million people within the next 25 years. With all arable land now inhabited, the only way for peasants to find new land to log, ranch or farm is to grab it from those not powerful enough to defend it. According to Mac Chapin of Native Lands, a programme that works to secure indigenous land rights: *"conflicts over land rights have become the most incendiary and deadly issue in Central America, and by far the biggest threat to the cultural survival of its indigenous peoples"*.

Two years ago, Indian leaders and cultural activists in the northeast corner of Honduras decided to remedy the political invisibility of the Indians of the Mosquitia region by carefully mapping where and how these Garífuna, Pesch, Miskito and Tawahka Sumu tribes lived. They put together a project[1] that would help the Indians create a detailed, graphic record of their homelands. While land use maps are not border police, they do establish who inhabits a piece of land and how it is being used, to prove that it is not empty and up for grabs.

This project was successfully replicated in the Darién region of Panama, home to the Emberá, Wounaan and Kuna tribes. Because the indigenous leadership in Panama was stronger, the second project was coordinated by an intertribal group of Indians together with the non-governmental organisation Centro de Estudios Acción Social Panameño (CEASPA), but followed the same methodology used in Honduras.

In both the Mosquitia and Darién regions, the rain forests, savannas, or wetlands are so impenetrable that the only access to

[1] The Honduran project was organised by MASTA, a Miskito Indian group, and MOPAWI (an acronym meaning *"development of the Mosquitia"*), a private Honduran development group that had worked closely with indigenous groups on land legalisation projects since 1987.

Source: PLA Notes (1995), Issue 22, pp.36–40, IIED London

settlements is via river. The so-called rainy 'season' lasts most of the year, alternating with a few months of ticks and chiggers. The Indians are sparsely settled along the rivers. While most of the Indians in both regions have so far been largely spared violent confrontations with cattle ranchers, they can often see intruders at the edges of their territory.

· The mapping process

The mapping process included several workshops, land use surveys and finally a national-level forum to present the results. At the first workshops in Honduras and Panama, the project participants gathered to discuss the process. Peter Herlihy, a cultural geographer from the University of Kansas in Lawrence who had studied both regions extensively, served as the cartographic coordinator. He divided the landscape into zones that were of a manageable size for a single 'surveyor' to cover in a few weeks, typically a tract of a few hundred square kilometres. The Indian leaders selected indigenous surveyors for their intimate knowledge of the zone and their ability to speak and write Spanish. Coordinators then worked with them to develop survey questions about land use and to set procedures for administering the surveys and mapping the land-use areas.

Armed with large blank sheets of paper and the questionnaires, each surveyor set out through knee-deep mud to visit all the villages in his/her zone. In each village, the surveyor took a complete census of the population and asked families to describe where they farmed, hunted, fished, and gathered medicinal plants and materials for houses, canoes and crafts. Each village created its own symbols for the various land use activities, and together the villagers and surveyor drew, by hand, a detailed map showing where each of these activities took place, relative to the course of the rivers. Figure 1 shows an example of a map produced in this way. Land that looks like undifferentiated 'jungle' to outsiders proves to be supporting a wide range of sustainable practices by its inhabitants.

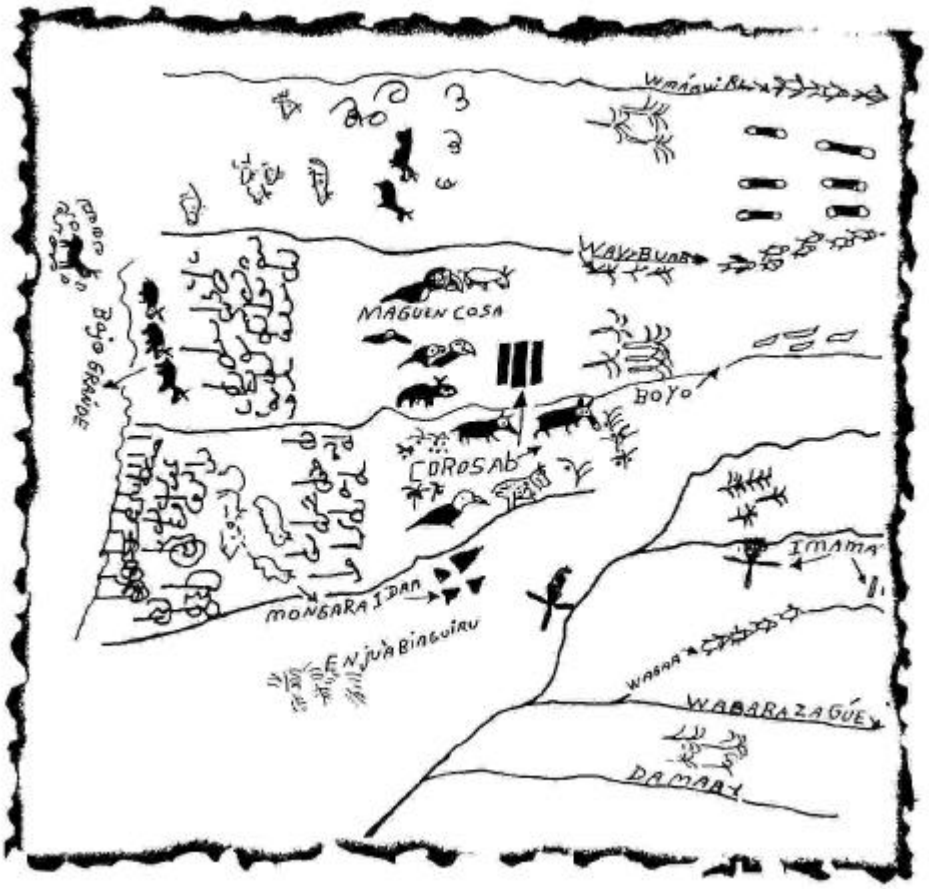
After gathering information from every family, the surveyors gathered for a second workshop with the team of cartographers to organise, clarify, and analyse the information. Making comparisons to aerial photographs and government maps, the team transferred the surveyors' findings to a new, composite 1-to-50,000 scale map. Then each surveyor returned to his/her community to check the accuracy of both the hand drawn and composite maps with the villagers.

In the process of comparing government maps and aerial reconnaissance photographs with the hand-drawn Indian maps, the cartographers found some surprises. Not only were the hand-drawn Indian maps often accurate in their proportions, but the existing government maps were just as often inaccurate. The mapping team found that the areas where the Indians lived coincided almost exactly with those in which the natural landscape had been preserved. Most important was that the Indians' maps provided the first genuine picture of where the Indians lived and how they used this land.

At a third workshop, the surveyors combined their maps under the supervision of Herlihy's team for a final revision of a single 1-to-250,000 scale map. This master map served as the basis for presentations at the concluding events, two-day conferences in the two countries' capital cities, Tegucigalpa and Panama City.

Source: PLA Notes (1995), Issue 22, pp.36–40, IIED London

Figure 1. Portion copied from a hand-drawn land-use map made by an indigenous surveyor and villagers of the Marwa Sub-region, Panama



· Presenting the maps

These forums gave the indigenous groups their first opportunity to present their findings and opinions on land use and settlement patterns, the location of ecosystems, wildlife and threats to their way of life. Listening to the presentations were government ministers, other indigenous peoples, conservationists and local and international non-governmental groups. By centring the forums around the scientific maps and technical evaluations, the Indians had built a graphic and credible base from which to launch political campaigns on several issues, including legalising communal homelands, stemming the incursions of colonisation by settlers and development by multinational companies, and resolving the relationship between Indian homelands and national protected areas.

The meetings proved to be even more of a success than the participants had expected. Mostly as a result of MOPAWI's work, indigenous land rights are now taken seriously for the first time in Honduras by national politicians. In Panama, Kuna, Emberá and Wounaan had never collaborated on this scale. During an informal evaluation of the Panamanian congress afterwards, the regional chief of the collective Emberá-Wounaan territories, said, *"Last night, I could not sleep, my head was so full of all the beautiful things that I have seen during the forum."*

Other Indians at the meetings agreed. Two Miskito Indians from Nicaragua left so impressed that they asked the Indian coordinators of the Panama City meeting to assist them with a mapping effort of their own in December. According to Native Lands field coordinator Nicanor Gonzáles, persuading the Miskito to participate in the land use study and mapping process will be much easier with fellow indigenous peoples organising the project, since this will avoid the cultural

Source: PLA Notes (1995), Issue 22, pp.36–40, IIED London

imposition often created by non-Indian anthropologists.

One of the Kuna coordinators for the Darién mapping, was unable to hold back tears in explaining what the project meant to him: *"It was an extraordinary experience, but as long as the rights of indigenous people go unrespected, there will be no peace in the country."*

While the Panamanian Minister for Government and Justice did surprise listeners at the Panama City forum with his public support for legal recognition of Indian homelands in Darién, the Indians still have good reason to sense trouble. The Panamanian and Colombian governments have been seeking international financing to build the final section of the Pan-American Highway between the two countries - and this highway will cut right through the homelands of the Emberá, Wounaan, and Kuna.

· Conclusion

Down the length of the Caribbean coast in Central America, other native tribes have begun to come together around the issue of land rights. In southern Belize, the Toledo Maya Cultural Council has been lobbying to establish a Mayan homeland. In Nicaragua, the Miskito are setting up a protected area on the Atlantic coast that would ensure their control over the wealth of natural resources in the region. In Costa Rica, the Bribri and Cabécar peoples are forming 'councils of elders' to take a leadership role in the La Amistad Biosphere Reserve near Talamanca. Since it is impossible for conservationists to make informed decisions about which rain forests to save until they know who lives there and how they are using the forest, mapping efforts are the logical first step.

Cartographers from both the Honduran and Panamanian National Institutes of Geography who collaborated in the mapping process stated that the Indian map of the Mosquitia was superior to any maps they could have done. It was not until the Honduran map had been produced that conservationists recognised the scientific value of the Indian maps; only then were project staff able to obtain funding for the Panamanian project from several sources, including the Inter-American Foundation, Wildlife Conservation Society, The Nature Conservancy, Worldwide Fund for Nature, and World Resources Institute.

Mapping indigenous homelands debunks the colonialist myth that these lands are uninhabited and degraded: the areas of remaining forest, savanna and wetland almost perfectly overlap with Indian territories. The political momentum created by the process raised the regional awareness of the Indians, showing them the common ground they shared with other indigenous peoples and empowering them to pursue the legal protection they deserve to their homelands.

· Additional comments

Andrew Leake, project officer for MOPAWI and coordinator of the mapping process in Honduras, has added some comments about the process based on his personal experience:

> *Working with people, particularly in a cross-cultural context, is not always easy. One must not underestimate the socio-political reality within which these projects were carried out. NGO staff had to relate simultaneously to the idiosyncrasies of several different ethnic groups, Indian organisations, local and national government office, the press and so on, whilst remembering at all times to abide by the financial accounting requirements of the donor agencies. Beyond the fact that mapping lands is a politically sensitive issue, the complex logistics, poor communications and relatively large amounts of cash involved in these projects frequently led to situations of political discord, suspicion, racism, inter-institutional jealousy and financial scandals. Each case had to be resolved so as to ensure the successful completion of the project, a task which often fell onto NGO staff and project coordinators.*
>
> *The very fact that these projects required and depended on the cooperation of many different people and organisations is in itself one of the key aspects of this work. The resolution of these conflicts does, I believe, result in greater personal and institutional maturity. And if, as I believe,*

Source: PLA Notes (1995), Issue 22, pp.36–40, IIED London

the success of these projects was the result of individual dedication from all involved, it underlines the fact that development and conservation are about people and how we manage interpersonal relationships. These experiences have shown us a unique method through which to achieve this. An important fact, because at the end of the day it will be people, and not maps, which defend the land.

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The article benefits of additional comments by Andrew Leake, project officer for MOPAWI at the time of the mapping exercises.

9

PRA in a health education, water and sanitation project in Kenya

David Adriance

· Introduction

CARE International is an NGO dedicated to assisting the poor in over 40 developing countries around the world. CARE has been working in Kenya since 1968, and in Siaya District since 1980. This case study describes the Siaya Health Education, Water and Sanitation (SHEWAS) project, first implemented in 1990, and focuses particularly on its use of PRA as a means of stimulating community participation in the identification and planning of water and sanitation micro-projects.

Siaya District was selected as an intervention area for three main reasons. First, the District is one of Kenya's poorest and has one of the highest infant mortality rates in the country. Secondly, in 1989 over 85 per cent of the District's residents did not have access to clean water. Finally, CARE had been working for 10 years in Siaya and had established good relations with the government and many communities. Within Siaya District, Boro Division was selected because there were only 18 improved communal water points serving a population of nearly 180 000 people (compared with neighbouring Ukwala Division where there were 241 improved water points for a population of the same size).

The initial focus of the project was on eight sub-Locations of Boro Division (a sub-Location is a small administrative unit) selected using indicators such as incidence of water-borne diseases, presence (or rather absence) of health facilities and personnel and accessibility to protected water supplies. This level of focus was innovative, in that most PRAs concentrate on a single village or 'community'. The teired approach presented here, first selecting a cluster of sub-Locations, then moving to a single sub-Location, then on to a single village, generates some interesting lessons.

· The SHEWAS approach

PRA is used by SHEWAS as the initial point of interaction with target group communities, specifically at the sub-location level. Identification of actual sites for project intervention, as well as the specific nature of the interventions themselves (albeit with a predetermined range of possibilities), is determined by the target groups themselves as outlined below. Typical interventions include the construction of roof catchment tanks (mostly at schools), hand-dug wells with hand pumps, spring protections and ventilated improved pit latrines.

When entering a sub-Location for the first time, SHEWAS staff meet with the Divisional Officer, Locational Chief and sub-Locational assistant Chief to introduce themselves and discuss the project. Next, the SHEWAS extension worker (who lives and works in the sub-Location concerned) addresses a community meeting to discuss the project and PRA in general terms. If the community members present agree to being involved they are asked to choose between five and ten people to represent them on the PRA team. They are encouraged to select a diverse team of men, women and youths whom they have confidence in, who are respected and who represent a majority of (if not all) the villages in the sub-Location. Representatives are chosen by voting (with the candidates' backs turned to the gathering), a process that invariably elicits a good deal of talking and

Source: PLA Notes (1995), Issue 22, pp.41–44, IIED London

excitement. Civil servants from relevant Ministries are also requested to participate as PRA team members.

A two-day orientation is held on-site to discuss the PRA methodology and techniques with the team members. Emphasis is placed on breaking down inhibitions and barriers between locals and outsiders, and on the fact that the PRA should be a learning experience for everyone. Dancing is one good way of breaking the ice and is used extensively. At the beginning of a PRA, SHEWAS staff also try DIY - Do it Yourself - in which we, as outsiders, try to do some of the tasks that local people do, such as thatching and ploughing. The value of this is in our learning that there are many skills the community members have which we do not, and demonstrating to people that we are there to learn as well as to share our knowledge.

PRA techniques used by the project include mapping, transects, household discussions (instead of interviews - and no questionnaires!), timelines, collection of technical data, institutions analysis, problem ranking and decision matrices (for selecting water systems technology). As SHEWAS staff become more experienced with PRA, increased efforts have been made to reduce the use of markers and newsprint which many of the community members may not be comfortable with, and use instead locally available materials such as seeds and stones.

During the two or three weeks that the PRA is conducted, feedback on the results obtained is given by the PRA team at weekly meetings with the Assistant Chief. Presentations are given by community representatives and inevitably provoke discussion and often revisions.

The process culminates in 'site selection day', the selection of a number of sites where CARE will assist villages or institutions to construct water and/or sanitation systems. Proposals are made by the PRA team and then a consensus is reached by the participants at the meeting. Detailed planning on project implementation, including the respective contributions to be made by CARE and the villages concerned, is deferred to village-level consultations with the CARE extension worker.

Despite attempts to encourage village representatives to share their experiences and findings with others, SHEWAS has found that awareness of what occurs during the PRA process does not filter down to the village level. Thus, when it comes to actual project implementation at the village level, the feeling may persist that the project is imposed from the outside.

To address this gap, SHEWAS now conducts a number of PRA exercises at the village level (called PRAV - more jargon!), after the sub-Locational PRA. These exercises include mapping, mini-transects and seasonal calendars (including gender task analysis). In addition, SHEWAS has begun incorporating other tools, especially those adapted from the PROWESS (UNDP) programme, eg. pocket chart voting, three-pile sorting and so on. All fit well into the PRA approach as they are visually-oriented and participatory methods, controlled for the most part by the participants themselves.

· Achievements and results

The results of the PRAV have been quite exciting for all concerned. Extension agents find that it opens up new vistas of understanding in the villages where they work. Community members appreciate having a say in a project which will directly affect them. It is notable that the turnouts for the PRAV meetings are frequently larger than for the sub-Locational PRA. It seems that PRA is truly appreciated by community members for the simple reason that local viewpoints, ideas and decisions are incorporated into project identification and planning. Not surprisingly PRA was most appreciated by those who were involved most, ie. the members of the community who were actual team members. PRA team members also proved to be the most vociferous in ensuring that projects are implemented as planned.

The use of PRA helps to incorporate the project target group into the planning stage of the micro-projects in a meaningful and important way. From the perspective of the implementing agency, a great deal of valuable information is gained in a comparatively short period of time. Sub-Location mapping

Source: PLA Notes (1995), Issue 22, pp.41–44, IIED London

exercises for example, have provided detailed maps showing population density, water points, siting of construction materials and so on in the space of just two hours.

PRA appears to be a significant step towards involving the community in decisions concerning the identification of problems and opportunities for addressing them (within the scope of the implementing agency). A successful PRA assists tremendously in establishing trust and credibility with the target groups. It is useful for avoiding the top-down syndrome which usually accompanies the introduction of a new project or agency. Nevertheless there is at times a lack of understanding, on the part of leaders especially, about why the PRA process should even be gone through. The attitude is one of: *"you are the experts - tell us what you are going to bring us and then do it"*. Often it is those very same leaders who become the most enthusiastic supporters of the PRA approach when they see that their viewpoints are taken seriously.

In terms of cost-sharing, PRA helps communities to recognise the resources which they have access to and are able to mobilise with a bit of organisation. From the point of view of the implementing agency, it becomes easier to talk about realistic cost-sharing when PRA exercises have been done hand-in-hand with community members.

Finally, in discussing achievements it is important to remember that the point of view expressed here is that of the 'outsider' much as we may feel that we have overcome the barriers inherent in being outsiders, we still remain outsiders and it would be valuable (and intellectually honest) to look at the issue from the point of view of the community themselves.

· Lessons learned

The lessons learned by the SHEWAS experience are many and constitute the most important part of this case study:

- *Successful PRA must be innovative and encourage creativity*. SHEWAS found that it was sometimes using certain PRA methods *"because they were in the book"*. Occasionally information gathered was left unused. Information should only be gathered when the PRA team feels that it will be useful and the implications can be seen by everyone. Furthermore, the PRA process, while usually fun and enjoyable, should not take up more of people's time than is necessary - people have their own lives to lead!

- *The inherent bias of the implementing agency is an issue that must be addressed.* As a water and sanitation project, SHEWAS tends to look at situations from the point of view of water and sanitation. The bias is further enhanced by the community members themselves in that they already know of SHEWAS as the project which will *"bring us water"*. If PRA is viewed as an approach to incorporate the community in project planning, this bias is not necessarily negative, as long as the community is under no illusions that PRA will address *all* their problems (or even the most important ones). We were concerned that PRA's full potential for assisting a community to address the range of its problems was being underutilised; CARE is thus in the process of incorporating staff from the Agroforestry Extension and Women's Economic Development projects in a pilot PRA to see how a multi-sectoral approach might work.

- *PRA team members from the community should be recognised as valuable allies following the PRA exercise.* The insights gained during PRA, as well as the camaraderie and team spirit, make the team members potential allies during the implementation stage and beyond. They make excellent facilitators for PRA work in other sub-Locations and can also form a team for monitoring and evaluating the implementation of the projects which were identified.

- *Giving communities power to choose their own PRA team representatives is vital.* This is true not only in terms of team credibility, but also because the people whom outsiders would assume should be representatives (leaders) are

Source: PLA Notes (1995), Issue 22, pp.41–44, IIED London

sometimes not viewed that way by locals. On the other hand, by including formal local leaders in the process from the beginning, an outside agency can minimise the risk that the process will be subjugated for one reason or another. Being selected is not only perceived as an honour for the chosen team members, but also as a responsibility. Despite the significant demand on team members' time, most participated fully during the two to three weeks the process takes. This is also testimony to the fact that PRA is enjoyable and exciting.

- *Some development professionals are reticent and even actively resist participation in PRA.* The core of a good PRA is the attitude and behaviour of the people. Especially the 'outsiders'. It requires self-awareness, self-criticism and the ability to listen and learn. If barriers are not lowered between outsiders and locals than the flow of information will be distorted, with outsiders being told what locals think they want to hear.

- *PRA is useful for promoting community ownership but introduces an element of uncertainty into project planning at the macro level.* If PRA is not going to have a totally predetermined outcome, the implementing agency must build an element of uncertainty into their project proposals. One cannot know in advance that *x* number of wells will be dug or *y* number of trees planted. This requires donors to be willing to accept that community participation is critical for project sustainability and is usually at odds with the blueprint approach to project planning.

· Future challenges

There are a number of challenges which must be addressed if PRA is to become more useful to both implementing agencies and communities:

- *Setting the agenda* PRA as it is currently being practised by SHEWAS is still basically an approach for encouraging meaningful participation by community members in an agenda already set by outsiders. Is PRA capable of being more than a tool for implementing agencies? Are we ready, and willing, to let the community control the agenda?

- *PRA for PRA's sake.* We must be careful that we don't fall into the trap of practising PRA as an end rather than as a means to an end. This requires honest self-criticism and relentless innovation and creativity. PRA must not become the latest development fad or just a series of steps to follow.

- *Moving beyond the planning stage.* It is easy to fall into the trap of implementing PRA, arriving at a set of plans on which all parties agree and then falling back into the same top-down approach for the follow-up. We need to find ways to sustain the participatory learning that takes place in the planning stages into implementation and beyond.

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Source: PLA Notes (1995), Issue 22, pp.41–44, IIED London

10

In coastal resources planning: Malampaya Sound, The Philippines

Michael D. Pido

· Introduction

In the Philippines, RRA has been extensively applied in agriculture and forestry but its application in coastal zone planning and management is still limited. In 1990 RRA[1] was used in Malampaya Sound to generate information about problems and opportunities, establish monitoring indicators to determine the impacts of future development and pinpoint subjects for further research. Malampaya Sound was chosen because, although it is Palawan's richest fishing ground, its resource base is threatened. The resource use conflicts between large scale and artisanal fishermen are escalating. Logging and upland agriculture inflict serious environmental damage on the lowland agriculture and downstream fisheries.

· Methods

The RRA team was composed of six technical specialists: an environmentalist, economist, statistician, fishery specialist, agriculturist and civil engineer. (The author served as the environmentalist and team leader). All had background training in RRA and were familiar with the study area. The team first reviewed available secondary information and formulated guide questions and checklists covering biological condition, fishery, agriculture and socio-demographic characteristics. Seven *barangays* (villages) were chosen for surveys using the following criteria: concentration of the population, types of economic activities, resource use conflicts, topography and navigability by boat.

Field activities

A one-week field trip was conducted to appraise the seven villages. The following routine was more or less followed for every village visited:

- Courtesy call to the *barangay* captain (village headman) and other members of the village council;
- Key informants were chosen with the help of the village headmen to give a broad picture of the coastal village concerned. The team also interviewed other people to ensure a balanced perspective;
- A transect was drawn representing four major resource systems: coastal/marine, lowland, brushland and forest;
- Semi-structured interviews (SSIs) were conducted in three pairs by the six members. Key informants interviewed were grouped as: a) *upland*: upland farmers, forest dwellers, gatherer of minor forest products; b) *lowland:* lowland farmers, traders, students, interest groups; c) *coastal/marine*: artisanal fishermen, large scale operators, middlemen;
- Each evening there was a brainstorming session on the day's work.

After the field trip, a report was prepared consisting mainly of diagrams depicting the coastal resource use, problems and

[1] The survey was funded by the Palawan Integrated Area Development Project Office, a government agency mandated to orchestrate the sustainable development of the province of Palawan.

Source: PLA Notes (1995), Issue 22, pp.45–48, IIED London

opportunities in four patterns: space, time, product flows and decision making (following Conway's[2] approach to agroecosystems analysis).

A validation workshop was conducted for each of the seven villages. The village headmen called a community assembly in either the village hall or public school to discuss the findings. The workshop started by informing the people present of the relevance of the study. Then, the designated members of the team presented the prepared diagrams. After the presentation, an open forum followed which provided the community members with an opportunity to comment on the diagrams.

Network diagram of problem interrelations

From the discussions, a network chart summarising the problems for the entire sound was formulated (Figure 1).

Low income was taken as the main problem caused by four major factors: low fishery production, low prices, low agricultural production and poor health. The declining fishery production is attributed to the destruction of the resource base. Activities like illegal fishing (blast and cyanide) and mangrove cutting have been contributing to habitat destruction. Siltation brought about by forest denudation has likewise damaged the seagrass beds and coral reefs. Low agricultural production is often caused by insect pests like black bug and other plant diseases. In certain villages, the intrusion of salt water into the rice fields has damaged the crops. Moreover, the tilling of untitled lands hampers agricultural production as it gives the farmer no security.

The third contributing factor to the low price issue is price monopoly with traders or middlemen dictating the price of products. Inadequate transportation/communication facilities and the low quality of products (brought about by lack of post-production facilities) have resulted in a pricing scheme unfavourable to the producers. Poor health also leads to low income. A substantial segment of the population are suffering from malaria and other water-borne diseases. The lack of health services and facilities have aggravated the existing health problems.

Problem and solution matrix

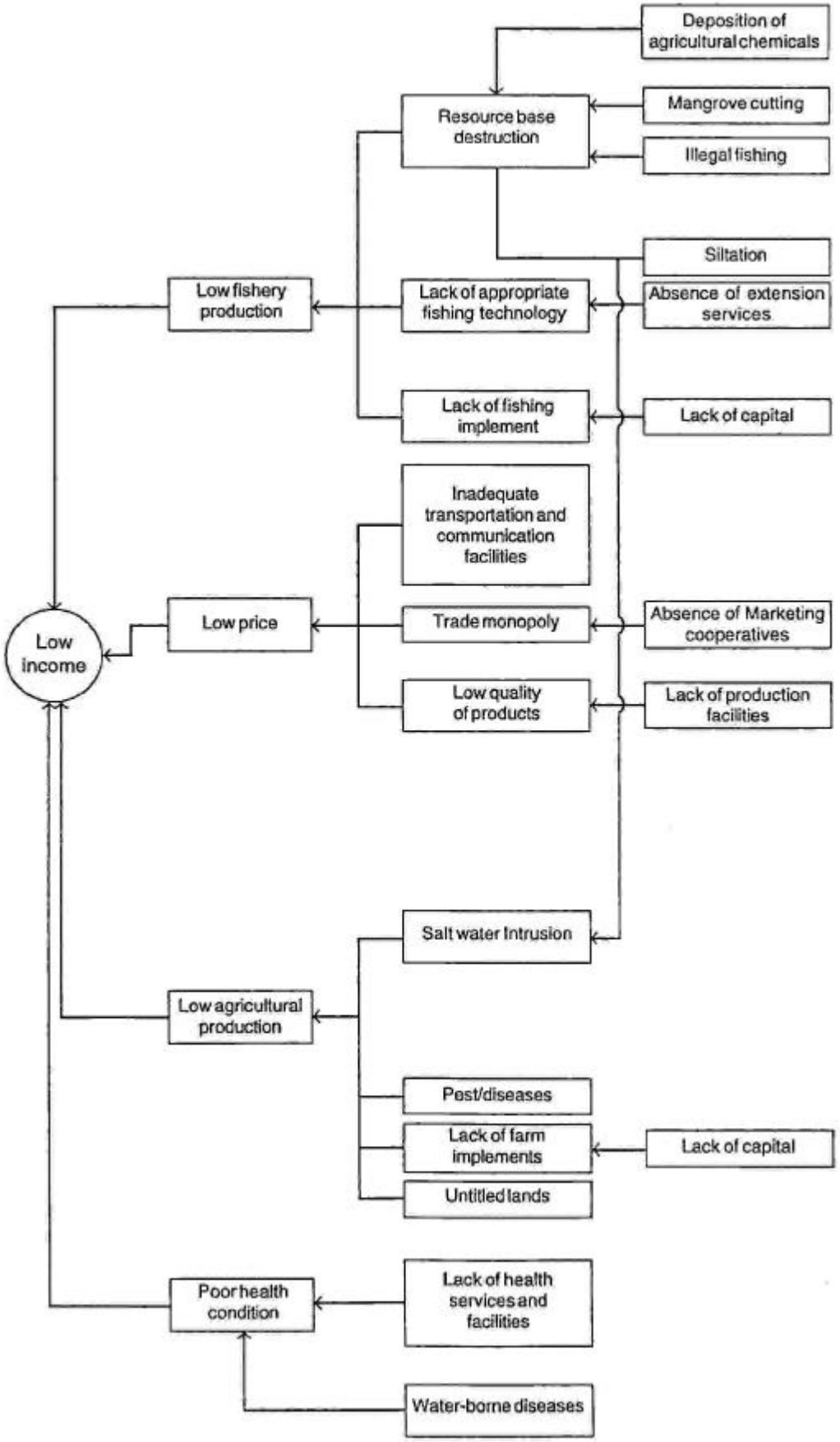
A matrix was compiled listing the main problems, informants' perceived solutions and proposed projects to implement solutions. Table 1 shows an extract from this matrix[3].

[2] Conway, G.R. 1986. *Agroecosystem Analysis for Research and Development*. Winrock International/Agricultural Development Council, Bangkok, Thailand.

[3] For more details, see Pido, M.D. et al. 1990. *Rapid Rural Systems Appraisal of Malampaya Sound, Taytay. Final Report.* Palawan Integrated Area Development Project Office, The Philippines.

Source: PLA Notes (1995), Issue 22, pp.45–48, IIED London

Figure 1. Network analysis of problem interrelationships in Malampaya Sound (Pido et al. 1990)



Source: PLA Notes (1995), Issue 22, pp.45–48, IIED London

Table 1. Extract of matrix of problems, informants' perceived solutions and proposed projects for Malampaya Sound (not prioritised)

Problems	Perceived Solutions	Proposed Projects
Siltation	Forest protection	Integrated social forestry and riverbank protection
Tenurial status	Land titling	Land survey and titling; stewardship contract
Illegal fishing	Review and enforcement of existing fishery laws	Patrol boats; environmental education; communal fishing ground management

· Lessons learned

RRA in the coastal zone. The coastal zone, as the transition zone between land and sea, is more complicated than a typical land-based agricultural system. It is an area in which environmental processes, coupled with diversified human activities, are most intense. Although the typical RRA 'tool box' was found useful in identifying the problems and opportunities of Malampaya Sound, modified or new RRA tools have to be developed for application to the coastal zone.

Field activities. A RRA field trip is very exacting, both mentally and physically. Day time fieldwork and the nightly brainstorming take their tolls particularly on patience. Hence, the team must devise ways of relaxing. Changing interview partners is a good idea during the field work. Also by switching interviewees, eg. a farmer in the morning, fishermen in the afternoon, a trader the following day, we kept a high level of interest.

Data management/report writing. We were careless about keeping all the drafts of the questionnaire and checklist used in the field. Although most of these have been incorporated in the final report, the form and substance have been diluted. We also failed to note the names of all informants we interviewed. The significance of this is only realised now when the experiences and lessons are being documented.

Cost-effectiveness. The RRA was very cost-effective. The team only spent about 150,000 pesos (US$6,000), which covered both the salaries and field expenses of six members. The RRA document is currently used as a useful reference. In the past, PIADPO has had costly surveys which were never fully analysed or used at all.

An RRA study becomes more exciting when participated in fully by the community. It was very touching to find people more than enthusiastic to talk to us because they had never met government extension workers in their entire lives.

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EDITOR'S NOTE

There is a fledgling network for participatory research methods for coastal resource management being coordinated by the Bay of Bengal Programme for Fisheries Development. Write to: R. Roy, BOBP, Post Bag 1054, Madras 600 010, India.

Source: PLA Notes (1995), Issue 22, pp.45–48, IIED London

11

The use of PRA in rehabilitating minor irrigation tanks

S. Kasivelu, Rupert Howes and John Devavaram

· Introduction

As for much of India, the State of Tamil Nadu is characterised by numerous small irrigation tanks. These tanks, most of them rainfed, often cover a large area of apparent wasteland and generally have the capacity to irrigate 20-40 hectares of farmland. During the dry season it is often difficult to distinguish severely deteriorated tank-bed land from non-tank land. Lack of maintenance, accumulated siltation, and the disappearance of traditional tank management practices (*Kudimaramath*[1]) have resulted in a widespread and significant reduction in tank storage capacities. Consequently agricultural output and employment opportunities have also declined. To combat this the Agricultural Engineering Department (AED) of the Government of Tamil Nadu has undertaken a Standardisation of Minor Irrigation Tanks (SMIT) programme. The programme aims to restore tank capacity and improve overall water management. In this sense, standardisation means rehabilitation, rather than the imposition of a single package of beneficial measures.

This article describes the use of PRA in the rehabilitation of an irrigation tank at Vadapalai village. The specific advantages gained from the use of participatory methodologies in the programme are identified and contrasted with the department's previous approach to tank standardisation.

[1] *Kudimaramath* refers to the traditional system of tank management widely practised before independence. *Kudi* means the villagers, *maramath* means maintenance work. A village elder, assisted by a committee, would coordinate and motivate the local community to maintain the irrigation structures. Villagers provide their labour freely.

· Bridging the knowledge gap

The successful rehabilitation of a minor irrigation tank depends on effective communication between the farmers and SMIT programme personnel. Farmers possess a wealth of knowledge about their local environment and the peculiarities of their irrigation tank. External engineers and specialists would be hard pressed to gain anything like this knowledge without several field trips (spaced over several weeks), clearly neither feasible nor realistic given time and cost restrictions. However, the officials concerned with the standardisation work are trained and expert in macro-level planning issues such as ways of estimating peak flow rates, duty of water, and techniques on standard specifications for restoration works. Knowledge on the latest advances in water management such as the optimum flow concept and rotational water supply can also help to ensure that the maximum benefit is obtained from the project. The expertise of both farmers and engineers are clearly complementary and need to be fully utilised.

· The old approach: participation and participation

The need to consult and actively involve local people in the SMIT programme has always been recognised. However, this involvement was previously limited to individual and group discussions with local farmers before undertaking a formal engineering survey. Such discussions typically generated a considerable amount of information. However, the information obtained was often in a form that could not be marshalled readily or digested easily and so often caused confusion. Failure to obtain certain key facts or to understand the

Source: PLA Notes (1995), Issue 22, pp.49–52, IIED London

local situation fully often necessitated return trips to the village, which caused delays.

Much of the information needed to prepare detailed cost estimates for completing the standardisation work was obtained from a variety of secondary sources. These included maps of the tank and its feeding gullies, location of Ayacut lands, irrigation channels and so on. Information was also collected on survey bench marks, the full tank level as originally designed, maximum water level, top bund levels, bed level of the sluice and size of the sluice barrel. Site surveys were carried out to determine the present level of the various tank structures, thus enabling estimates to be made of the amount of work involved to restore them to their original design levels.

Despite the dialogue with the farmers the approach was not truly participatory as it did not fully involve them and their knowledge in design and planning. In the minds of the farmers, the technical measures appeared to be the sole remit of the government

· The New Approach: the use of PRA in the standardisation of the Vadapalai Tank

In August 1992 the AED and personnel from SPEECH, a local Tamil Nadu based NGO, used PRA for the first time in the SMIT programme. The village of Vadapalai is in the Aruppukottai Taluk of Kamarajar district. There are approximately 850 tanks in Kamarajar district with a total command area approaching 15,000 hectares.

The villagers were informed by SPEECH about the PRA programme some time before the planned visit. On the appointed day officials of the Agricultural Engineering Department and a number of SPEECH volunteers met the villagers in Vadapalai to introduce themselves and explain about the standardisation work and what it would entail.

Over the course of the day the villagers prepared a resource map and model of the tank. A detailed seasonal calendar provided a wealth of information on labour availability, water flow, rainfall, rainfall intensity, frequency of storms and so on. The transect walks provided a good opportunity for the villagers and AED staff to get to know each other. Three transect walks were made, each by a group of 15 or so farmers, three AED staff and one or two SPEECH personnel. The transects covered the feeding channels, waterspread area, and the tank bund and command areas.

The knowledge shared by the farmers through the use of PRA revealed the following:

- The farmers were able to mark and locate the feeding channel requiring repairs; specific spots requiring stone revetments; the exact location in the irrigation channel where division boxes needed to be constructed and the boundaries of unauthorised irrigated land. The maps produced by the farmers were later found to be extremely accurate and realistic when compared to survey maps.
- Rehabilitation of the tank would enable all 20 hectares of the command area to raise a paddy crop of 110 days duration.
- The farmers were able to pinpoint exactly what repairs and alterations were needed to the infrastructure of the tank.
- There is frequently a lot of siltation in the water spread area, especially the northern side, causing substantial loss of live storage.
- The 20 hectares of registered command area were divided into 80 parcels of land owned by about 65 farmers. However, the tank was also being used to irrigate a further 13 acres of unauthorised command land. This clearly placed a considerable strain on limited water reserves and frequently resulted in water shortages and crop failure. The farmers had no idea how this problem of unauthorised irrigation could be resolved.
- The water drawn through the sluices is divided into small streams of about 0. 10 to 0. 20 cusecs and used for irrigation by 8 or so farmers at a time. It would take 15-24 hours to irrigate one acre (0. 4 ha). Farmers would compete with each other to irrigate their fields as often as possible, unaware that less frequent irrigation and use of water would actually increase yields. The farmers were also unaware that the irrigation time of 15-24 hours/acre could be reduced to 2-3 hours/acre if the flow was not split and a

Source: PLA Notes (1995), Issue 22, pp.49–52, IIED London

rotational watering programme was adopted.

The complementarity of the outsiders' and farmers' knowledge is further illustrated by a specific problem the farmers were experiencing but were unable to explain. When full, land bordering the tank was becoming waterlogged and unmanageable due to excessive water seepage through the tank bund. Not only did this represent a waste of stored water but it also created a minor health hazard. Following completion of the engineering survey it was established that the bund was not wide enough at the base, causing water to seep through. This was a problem that the standardisation work was subsequently able to resolve.

· The advantages of a participatory approach the SMIT programme

The use of participatory methodologies based on open attitudes and behaviour was found to be more effective than the conventional approach based on the collection of statistics collection and the soliciting of farmers' participation. Under the conventional approach, despite the farmer discussions, participation of the local community had still been limited to the extraction of information, for subsequent analysis away from the village.

The new approach enabled the farmers and the AED personnel to develop an effective working partnership. Everyone involved was more aware of what was required and the value of each other's contribution to the process. Collection of data was more rapid and the information obtained was more concise, targeted and relevant to the project. Consequently, AED personnel were not required to make repeated trips to the village to collect further information.

The resource maps and models provided an excellent visual record of the tank and current state of its structures. The maps also provided a good basis for planning the subsequent engineering survey, which saved time and money. By enabling farmers effectively and clearly to communicate their detailed knowledge about the local environment and condition of the tank, the use of PRA undoubtedly reduced the overall time from inception to project completion. The farmers clearly derived a lot of satisfaction from being involved in the planning and decision-making process for the rehabilitation of their tank, as demonstrated by their greater enthusiasm for taking part in the actual restoration work.

The use of PRA was also helpful in exposing the areas which were too technical for the farmers. This included the water seepage through the tank bund, sub-optimal flow resulting from the division of the sluice flow, and the excessive irrigation. By bringing these issues into the open they could be discussed and resolved. Similarly, the farmers were unaware that an existing informal organisation in the village was capable of dealing with the unauthorised irrigation.

· Conclusion

The use of PRA in the SMIT programme provides a good example of the effectiveness and potential of adopting a more participatory approach in the execution of Government development projects. By establishing a more equal partnership between the Agricultural Engineering Department and villagers, resources were more effectively targeted and the completion time of the project reduced. This maximises the benefits of Government investment and helps to bring about more long term and sustainable benefits to the village community.

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Source: PLA Notes (1995), Issue 22, pp.49–52, IIED London

12

Diagrams for demographic data collection: examples from the Tembomvura, Zimbabwe

Ravai Marindo-Rangana

Introduction

Participatory Rural Appraisal (PRA) methods have not been popular in demographic data collection. The need for quantification as well as the worry about large representative samples have made demographers concentrate on precoded questionnaires which can be used to collect large amounts of sometimes irrelevant but easily quantifiable data. Many demographers are, however, aware of the deficiency of the data collected using questionnaires and have started using alternative methodologies.

This study discusses how visual methods used in PRA were used in demographic data collection among the Tembomvura people of Zambezi Valley in 1992. The study examined not only the demographic measures (which could be obtained from a quantitative questionnaire) but also the opinions of the population and how they perceived their fertility, mortality and population growth.

The Tembomvura

Originally from Mozambique, the Tembomvura people are a group of hunters and gatherers who have recently been resettled in Chapato ward, close to the borders of Mozambique, Zimbabwe and Zambia. Although expected to be cultivators, they still persist with hunting (clandestinely) and gathering. Hunting has been banned and heavy jail sentences are given to any person found in possession of traps or game meat. Gathering is controlled because most of the edible roots and tubers, such as *Dioscorea bulbifera* (*Manyana*) and *Tacca leontapetaloidas* (*Bepe*), are found within the game reserve and anyone found loitering inside is arrested on suspicion of poaching.

The severe drought of 1989 to 1992 destroyed all prospects of cultivation, making survival even more difficult. The community's fear of being arrested as well as poverty and hunger made fieldwork in the area extremely demanding. The population is also very mobile, often making it difficult to identify a fixed village.

Methods

The following PRA methods were used in combination with a demographic questionnaire to collect information on fertility, mortality, migration and health behaviour in a hunting and gathering community: mapping of the area; group interviews; local seasonal disease calendar; modelling of retrospective fertility and mortality; pie-charts of common sources of treatment; and diagramming of issues relating to animal conservation.

Mapping the area

In order to obtain a useful and reliable map of the area, respondents were asked to draw it themselves. Because illiteracy is high, the respondents were very reluctant to show their 'ignorance' on paper. After staying with the community for some time this initial reluctance was overcome.

To model the area, respondents were asked to use local materials, which included sticks,

Source: PLA Notes (1995), Issue 22, pp.53–61, IIED London

stones, leaves, fruit and animal bones. Men and women produced two maps of the area which were very difficult to decipher. This called for a process of 'unlearning' for the researcher since I had been used to reading maps which showed the cardinal points and could not understand a map drawn from a different perspective.

An interesting feature of the maps is how the men's map is a romantic depiction of a past life, of the way the area used to look when the community was engaged in hunting (Figure 1). The women's map was more contemporary and indicated a knowledge not only of their area but of significant places like the clinic, school and the grinding mill, as well as the location of houses (Figure 2).

The lessons learned from area mapping were:

- Respondents had a very detailed knowledge of their area which they were reluctant to show. They had to be convinced that whatever they knew was important.
- The amount of detail given on the maps by the villagers increased as I stayed longer in the village.
- Cultural beliefs determined the kind of information that was shown on the map. For example the initial maps did not show the position of waterholes and places of initiation until I settled in the village and some kind of trust was established.

Group interviews: common childhood diseases

In examining common childhood diseases in the community, informal group interviews were carried out. Local disease names and taxonomies were collected. Medical names were provided by the clinic staff in the area. Men and women differed in their perceptions of childhood diseases (Table 1). The women were good at distinguishing subtle differences in diarrhoea while the men assumed that those diseases which affected them, such as TB, swelling of the body and attack by wild animals, also affected children.

Local disease calendar

To examine the prevalence of particular diseases during certain seasons, the groups were asked to rank each disease on a scale of one to ten (using seeds), according to the frequency of occurrence of the disease during a particular season. The information was used to design a local seasonal disease calendar[1] (Table 2).

[1] This was based on a method described by A. Kumar 1992. Trends in health care. *RRA Notes 16. Special Issue on Applications for Health*. IIED, London.

Source: PLA Notes (1995), Issue 22, pp.53–61, IIED London

Figure 1. Women's map (copied from model made on ground over two months)

Figure 2. Men's map

Source: PLA Notes (1995), Issue 22, pp.53–61, IIED London

Table 1. Common childhood diseases and the number of groups mentioning them

Common Diseases	Males	Females	Total
Katyotyo: measles	8/8	10/10	18/18
Kamkumpa: neonatal tetanus	2/8	10/10	12/18
Nhova: severe diarrhoea with depressed fontanell	6/8	10/10	16/18
Manyoka eghazi: diarrhoea with blood	6/8	9/10	15/18
Manyoka emhepo: diarrhoea, cough	8/8	10/10	18/18
Kwezvaimoyo: whooping cough	7/8	9/10	18/18
Cough with blood - referred to as TB	8/8	5/10	13/18
ARI	8/8	8/10	18/18
Kushinhirwa mwana: sickness due to witchcraft	8/8	0/10	8/18
Snakebite, attack by wild animals	8/8	10/10	18/18
Starvation	8/8	10/10	18/18
Swelling of body - probably due to poisoning	8/8	4/10	12/18
Kupisa muviri kwembudud: fever due to malaria	6/8	8/10	14/18

Table 2. A local childhood disease calendar

Disease	Hot and Dry 1991	Hot/wet 1991/2	Cold 1992	Windy
Measles				
Diarrhoea with depressed fontanell				
Diarrhoea				
ARI				
Fever				
Neonatal tetanus				
Whooping cough				

Source: PLA Notes (1995), Issue 22, pp.53–61, IIED London

It was encouraging to note that the local prevalence pattern fitted an epidemiological seasonal prevalence of diseases like tetanus, ARI and whooping cough. The community had very detailed knowledge about the relationship between the weather and some of the diseases.

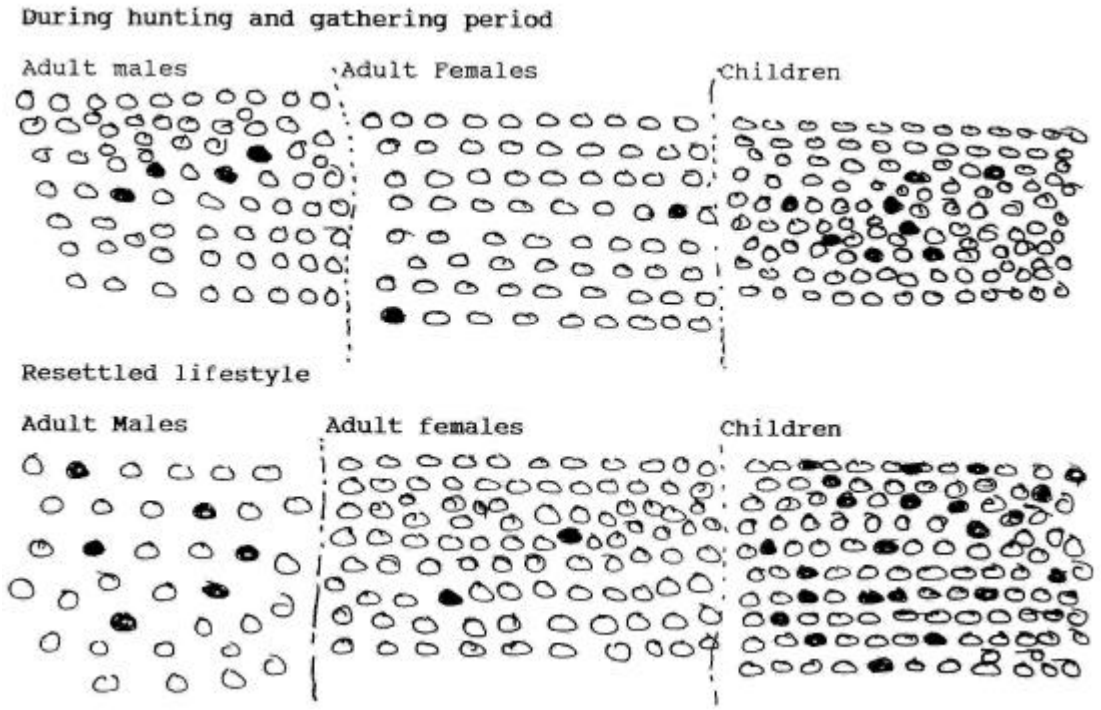
· Demographic issues

Mortality

Modelling the changes in the size of the population

We examined the elders' perceptions of the change in the size of the population from the time they lived as hunters and gatherers to the time they resettled. The size of the population was modelled using the fruits of *Ziziphus mauritania* which is locally abundant. We examined the average number of people that died per year (Figure 3), indicated by the black circles.

Figure 3. Population model



Source: PLA Notes (1995), Issue 22, pp.53–61, IIED London

Results from modelling the mortality situation included the following:

- Male adult mortality has been on the increase since resettlement. The change in diet from meat during the hunting period to maize since resettlement is considered unhealthy for men;

- Female mortality has been low and stable during both periods. The women said they are used to eating inferior foods so the change of lifestyle does not affect them; and,

- Infant and childhood mortality have increased since resettlement. This contradicts other research findings which say that infant and childhood mortality normally decrease when foragers are resettled since resettlement is associated with development of modern medical facilities[2]. The community's explanation of the contradiction was that the clinic is the source of disease and should only be used as a last resort.

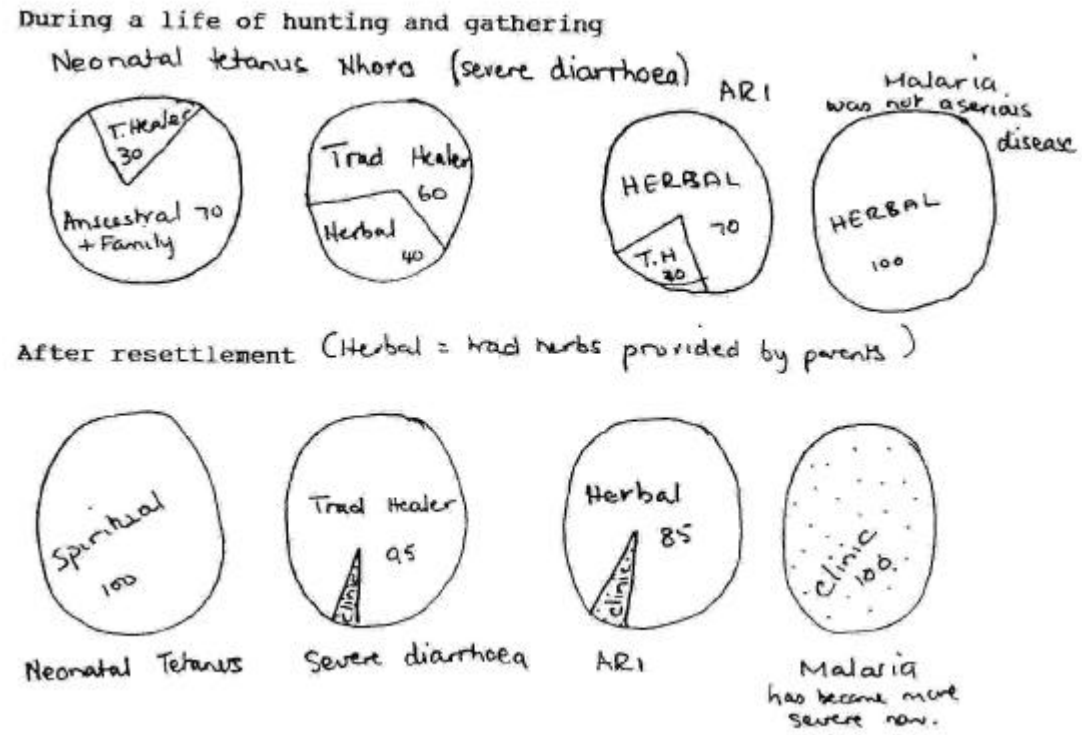
Examining the most common sources of treatment

What are the most common sources of treatment used for childhood diseases? Have these differed during the different lifestyles? Results obtained were shown in a pie-chart drawn on the ground by the researcher and filled in by respondents.

[2] For example, see N.G. Blurton-Jones 1992. Demography of the Hadza, an increasing and high density population of savanna foragers. *American Journal of Anthropology* 89: 159-181.

Source: PLA Notes (1995), Issue 22, pp.53–61, IIED London

Figure 4. Examining the most frequent types of treatment for serious childhood diseases



The pie-charts indicate that resettlement has not been associated with the use of modern medical facilities which might explain why there has not been any real improvement in child mortality since resettlement. Malaria is considered to be a fairly new disease. I interfered in the process by suggesting ways in which the pie-chart could be completed. I could not resist the temptation of 'holding the

Fertility

The most exciting exercise was the collection of lifetime fertility for the women in the community. The process was confused and hilarious and it brought the researcher and respondents to a closer appreciation of their different worlds - one is a world of no figures and no counting and the other a world of neurotic quantification. Estimation of the age of children, when they were born and when they died was a long process which could take up to two days with each respondent.

Dramatisation

To reconstruct the lifetime fertility of some of the women in the community, the following exercise was done. We asked children and some adults from the population to stand in front of the woman whose lifetime fertility was being constructed. We than asked the woman to use actors to represent her own children and then try to arrange them into a fertility record. The problem was that some of the actors did not take kindly to being told they represented a dead person. This exercise was useful and we called it 'dramatisation'.

In cases where visualisation could not be used, we modelled the whole family using *Ziziphus mauritania* seeds to represent female children and *Tamarindus indica* for male children. (Men use this fruit to increase sexual potency!)

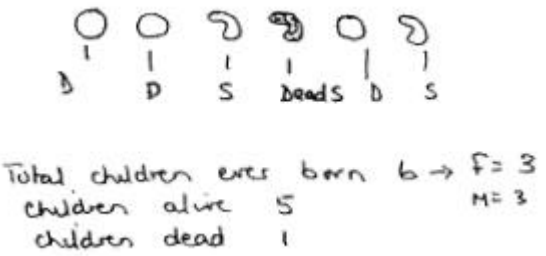
Females:
Green fruits: children under 10
Orange fruits: over 10 but not married
Ripe red: females of reproductive age

Source: PLA Notes (1995), Issue 22, pp.53–61, IIED London

Brown: post reproductive
Dead children were represented by dry seeds

Males:
Green fruits: children under 10
Greenish-brown: 10-20 unmarried
Ripe brown: married
Dry seeds: dead

Figure 5. An example of an individual woman's record of lifetime fertility



The exercise was interesting but exhausting. The children particularly enjoyed eating some of the orange *Ziziphus mauritania* fruits. This was followed by quarrels as to who ate who! It must be stated that the limited size of people with which this method was used made the exercise manageable. If the number had been greater, the method would have been very complicated.

· Animal conservation and human survival

We examined the change in the animal population from the villagers' point of view since there were recurring complaints about animals pushing people out of their original homes.

· Concluding discussion

The villagers' view

"We did not know that we had all this information. Tell your government to ask us this way and we will tell them our view."

"One does not need to be able to write in order to be able to translate thoughts into concrete actions."

"At first we thought you were crazy, playing with mud and stones and we did what we could to humour you. But later, especially after the area modelling exercise it was exciting to see one's village on the ground".

"You are a very good teacher. Can you come and teach our children?"

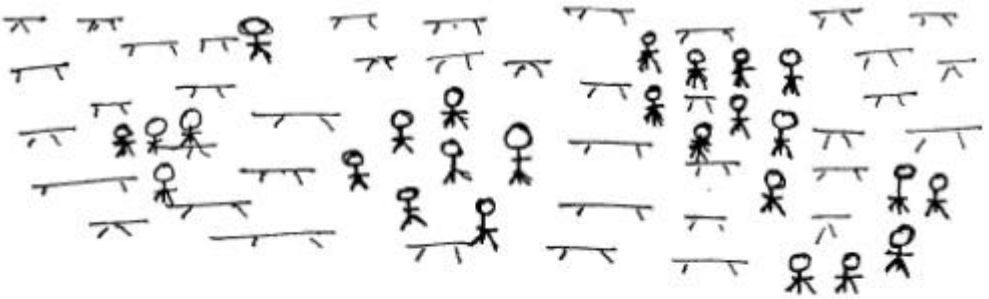
From the village traditional healer: "*You are very convincing. Maybe you and I should work together in future*".

The villagers had a sense of humour. After my hut was destroyed by a gas fire, the villagers made a small fire on the model of the village. The children went as far as dramatising the fire shouting *"my papers, my papers! Leave the clothes, bring out the papers!".*

Source: PLA Notes (1995), Issue 22, pp.53–61, IIED London

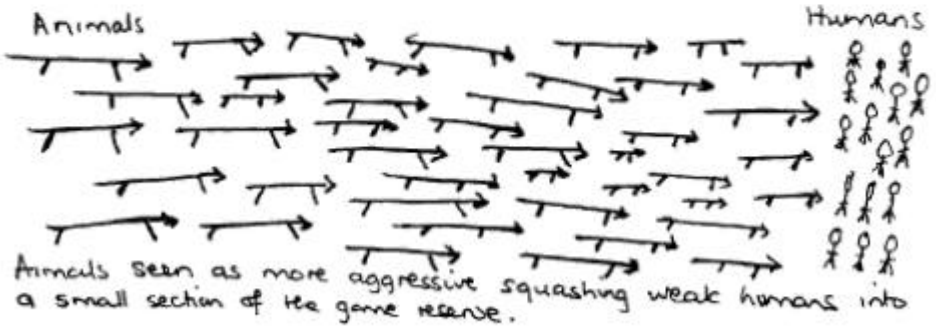
Figure 6. Modelling the animal population

Hunting Period



"Although we lived side by side with animals, we respected each other. We were big and strong. We killed animals for food and each time before we killed we asked for permission from our own ***mhondoro*** *clan ancestral spirit who communicated with* ***Mudzimu yesango*** *spirits of the forest. Each knew his place. That is the law of our existence. This is both our land and animal land."*

After hunting was banned



"There is no order. If you protect animals too much, they will keep on multiplying and become more and more arrogant. Now they sense our weakness. They know we are not allowed to kill them. So, they do what they like and try to push us out of our villages."

Lessons learned from PRA

PRA is difficult; it is more than application. It is a process of 'unlearning' from being the 'knower' to sharing and learning new ideas. To a demographer, this is an extremely painful exercise which challenges the conventional process of gathering demographic data. At the same time, PRA is so logical. One wonders what research used to be like without letting those who knew the information (the villagers or respondents) define it and conceptualise it for the researcher.

It is extremely difficult to let go and let the respondents do things at their own pace. One of the psychological implications of the demographic questionnaire is the illusion of control - of doing everything according to your schedule. It is difficult to let go of this illusion.

It must be stated that demography, by its very nature, can not be divorced from quantification. However PRA methods can be used to strengthen demographic data collection by providing flesh for the skeletal figures that are collected by the quantitative questionnaire.

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Source: PLA Notes (1995), Issue 22, pp.53–61, IIED London

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NOTE

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13

PRA for self-reliant rural development: the case of a resettlement area in Ethiopia

Savina Ammassari

Introduction

The Tana Beles area in Gojam, Ethiopia, is one of the largest conventional resettlement sites in Ethiopia. In the mid 1980s almost 80 000 people from different parts of the country were transferred here. Its core, the Beles Valley, covers an area of 220 000 hectares. The resettled population have come from very dissimilar geographical areas and are having to face severe difficulties adapting to the new environment. Most troublesome are the changed climate, farming practices, consumption patterns and food habits as well as the struggle with unfamiliar diseases. Malaria, the most common cause of death in the resettlement area, and trypanosomiasis, the most widespread livestock disease, did not exist at all in the places most settlers originated from.

In 1986 a huge project was initiated in the area by the Italian government to provide physical and social infrastructure. This was capital-intensive and top-down in its approach. When, in 1991, all foreign projects in the Beles Valley were suspended, they left behind a strong material and psychological dependency of settlers on external aid and assistance. The absence of a gradual and balanced development process has brought about severe problems of adaptation, integration and effective assimilation into the local ecological conditions, the fluid socio-economic situation and the new cultural reality.

Therefore the major challenge at present is to redirect policy interventions to enhance the transition from emergency aid to self-reliant and self-sufficient development. However, autonomous community development and its sustainability in the long term demand the effective participation of the beneficiaries in the decision-making process.

Comitato Internazionale per lo Sviluppo dei Popoli (CISP), an Italian NGO, is operating in the Tana Beles area, and as part of their Multisectoral Programme in Support of the Resettled Population in the Beles Valley, PRA-based fieldwork was carried out by the author, with the assistance of Solomon Shone. Since PRA is a flexible methodology, sensitive to heterogeneous local circumstances, this approach appeared to be highly promising for research in such a complex project setting.

PRA of resettlement issues

The major objective of the fieldwork was to explore general adjustment problems and constraints, needs and priorities, and the expectations and aspirations of the settlers. It also aimed to explore the economic activities performed in the village communities to reveal the significance of non-agricultural income-generating activities. However it was also hoped that a participatory approach would be a powerful means to encourage the settlers' self-awareness about their important role in their own development process and to foster confidence in their capacity to take initiatives on their own.

Fieldwork strategies

Before starting the fieldwork, we collected information from a variety of secondary sources. This helped us to clarify the general objectives and identify crucial issues for the investigation. After a thorough preliminary examination of the local situation, we

Source: PLA Notes (1995), Issue 22, pp.62–68, IIED London

established the criteria for selecting the target villages for the fieldwork. Criteria used included ethnic features of the communities, economic activities and evolving migratory trends.

Based on a pre-arranged check-list of topics, several informal and semi-structured interviews were carried out with different target groups, key informants, families and individual settlers. The topics addressed ranged from socio-economic, agricultural, health, nutritional, political and institutional matters to family planning and gender issues. The settlers were also actively involved in transect walks, or the drawing of maps, matrices, graphs, seasonal calendars, pie charts (*enjera* diagrams), flow and Venn diagrams.

Breaking the ice

Before we started the interviews, the greatest challenge seemed to be to establish an open, confident and sincere relationship with the settlers. This was not an easy task. Some of them have developed a suspicious attitude towards outsiders while others were well aware of their ability to manipulate information to their advantage. To gain acceptance by the people, we looked for a key person who could introduce us to the villagers and show us around. This person needed to be someone enjoying great respect, and on whom the villagers relied. In one village the orthodox priest gave us valuable support and helped us establish a rapport with people.

We also found it helpful to make an effort to reverse the usual relationship between outsider professionals and local beneficiaries, stressing that we came to learn form them about their personal and family problems, the hardships they were experiencing at home and in the village community, the suggestions they wanted to put forward, and the hopes they had for the future. In order to create a relaxed atmosphere, to show our sincere intentions and to gain their respect, we found it was useful to participate in daily community and family tasks such as helping farmers to harvest rice and going to church when there was a village festivity. People were very busy with harvesting and food processing, so our participation in their daily activities provided opportunities to carry out spontaneous and informal interviews without interrupting their duties. There were also more spontaneous situations suitable for breaking the ice. Once, for instance, to get in touch with reluctant town dwellers, we joined in a card game with them.

Inevitably the settlers were interested to know where this research would lead. We had to be careful because people's expectations are all too easily raised. We emphasised that we were not directly in charge of decision-making and that our task was only to assess the situation and to offer some guidelines for future policy interventions.

As the majority of settlers had been involved in conventional questionnaire surveys in the past, it did not take much time for them to notice the different approach. They were surprised by our behaviour, but appreciated our interest, curiosity and enthusiasm and were usually keen to participate in the analytical exercises.

Attitudes towards self-reliance

Attitudes towards self-reliant development varied amongst the resettled population. These variations were largely related to where people lived before resettlement, why resettlement occurred and the way it took place. In the case of the Amhara people, the conditions in their areas of origin were so desperate that most of them felt they could only gain from resettlement. On the other hand, the settlers belonging to the Kambata and Hadiya ethnic groups originated from rich, fertile rural areas. The previous government had wanted to balance population densities. Their area was considered too densely settled so they had been persuaded to resettle through promises of land, labour, housing, health care and so on. Such promises raised the settlers' expectations and provided a strong feeling of reliance on external aid and assistance rather than on personal achievements.

Source: PLA Notes (1995), Issue 22, pp.62–68, IIED London

Figure 1. Transect of village L24

Figure 2. Transect of village L5

Source: PLA Notes (1995), Issue 22, pp.62–68, IIED London

This also had an impact on the degree to which people were active in the PRA. The first category of settlers seemed to participate more actively and sincerely in the interviews and discussions. With the second category of settlers it was more difficult to establish a confident and open-minded relationship. Many people were primarily interested in obtaining the project's future help and assistance. As a consequence they were keen to stress their major problems and needs, but did not seem very interested in the joint discussion of opportunities, proposals and solutions.

A significant example occurred during transect walks conducted in two villages: L24 which is situated far away on the borders of the resettlement area and L5, which is located close to the project headquarters. From the first transect walk, undertaken with illiterate, subsistence farmers belonging to the Amhara ethnic group, very detailed information emerged (Figure 1). In fact, the participants were very involved in the general description of the salient features of the area and pointed out major problems and constraints, as well as potential opportunities and solutions.

From the second transect walk, undertaken with four literate farmers (one was the chief of the village) belonging to the Kambata and Hadiya ethnic groups, much less discussion resulted. Indeed, from the summary of the transect it can be seen that the participants were good at formulating their needs, but did not spend much time on the inherent opportunities or on the description of the characteristics of the village surroundings (Figure 2).

· Reflections on the PRA methods used

In this section I shall discuss the suitability of PRA methods for the exploration of phenomena evolving over time and, thus, for the investigation of the dynamic contexts characterised by migration.

Maps

The drawing and colouring of maps on the ground gave an overview of the village, its infrastructure and its institutions. Of course it would have been particularly interesting if different groups (men, women and children) had separately drawn maps of the same village. People appeared to have difficulty in imagining a bird's-eye view of the village and in using rough indicators for wealth, health or other attributes of single households. Such detailed illustration would have been very time-consuming. It did not seem convenient to extend the exercise longer than one and a half hours.

Transects

It was easy to involve people in transect walks, and as discussed above, these were useful for understanding people's perceptions about the general characteristics of the villages and surrounding areas.

Seasonal calendars

These were helpful for analysing the monthly trends throughout the year in human diseases, crop prices and labour demand. After a preliminary discussion we asked the participants to put seeds in a line on the ground to represent each month of the year. In the Ethiopian calendar there are 13 months, so these were depicted. Participants sketched the trend lines using a different colour for each topic. However it seemed difficult for the participants to illustrate the tasks performed during the year (ploughing, sowing, weeding etc.) because of the continuous overlapping of several activities.

However, their interpretation of labour as labour-intensity on the actual days worked rather than the total number of days was thought-provoking. In fact, even though the thirteenth month of the Ethiopian calendar has only seven days, the greatest amount of labour was attributed to this particular period. The reason was that since this month has so few days, and the majority of these days are religious holidays, only two or three days are left over to carry out all the work.

The seeds (chick-peas, peas and different kinds of beans) that I had brought from Italy attracted much attention among the participants. In fact, not only did the imported seeds turn out to be a subject of great interest, but also became an excellent reward for people at the end of an exercise. The farmers were

Source: PLA Notes (1995), Issue 22, pp.62–68, IIED London

looking forward to sowing them during the next agricultural season.

Venn diagrams

This was a convenient method to describe the institutional changes that had occurred in recent times. Political decentralisation has taken place on the national and the regional level but, of course, also on the local level. The diagrams were drawn by two literate men who were members of the village Peasant Association. While I was surprised to find that most PRA methods can easily be handled by illiterate people, I have doubts about this being true for Venn diagrams.

Scoring

To identify people's preferences in the use of food staples we carried out a scoring exercise with five small subsistence farmers. All the participants were illiterate. The criteria for evaluation were identified during a long preliminary discussion that started with health issues and led on to matters such as nutrition and consumption patterns. Progressively the criteria were defined more precisely in order to fit into the matrix (Figure 3).

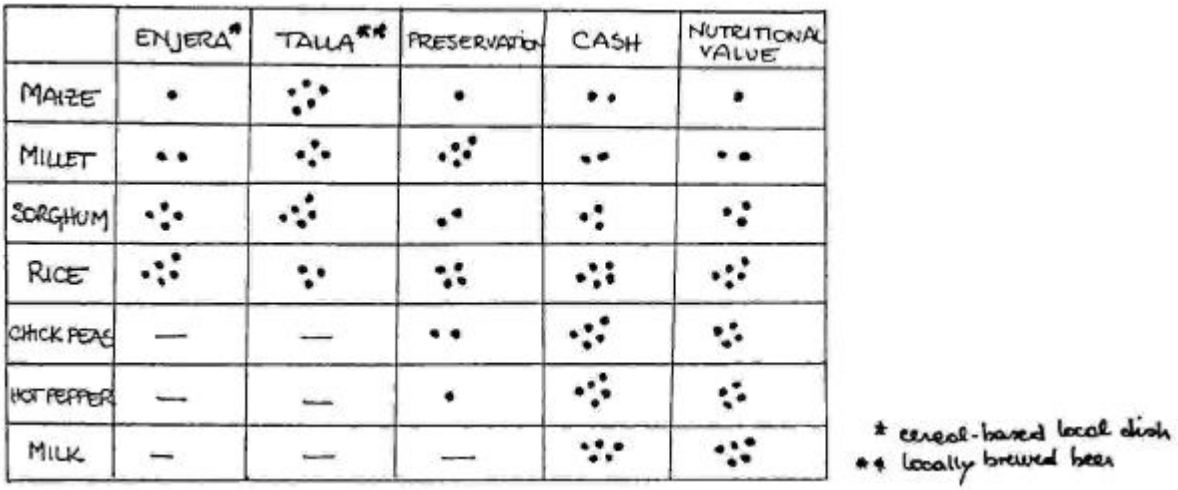
Interesting information emerged about the settlers' preferences for particular food, their perceptions regarding nutritional values (defined as being beneficial for the body) but also the cash income that different staples produce as well as their ability to keep. The classification of milk according to this last criterion provoked a thorough discussion among the participants. Processed milk in the form of butter (boiled and spiced) could be preserved up to four years and would thus have got the absolute highest score. However the participants eventually agreed that if milk was considered in its liquid form it could not be classified as it goes bad within a few days.

Pie charts

These were particularly suitable for expressing changes which had occurred over time. The diagram was drawn by two literate farmers, but other people also got involved in the discussion. We facilitated the diagram by giving a simple example and discovered that the people understood immediately the notion of proportion. In fact, they sketched the circles (as an *enjera*, the Ethiopian circular cereal-based dish) and they set the central point to cut the wedges properly.

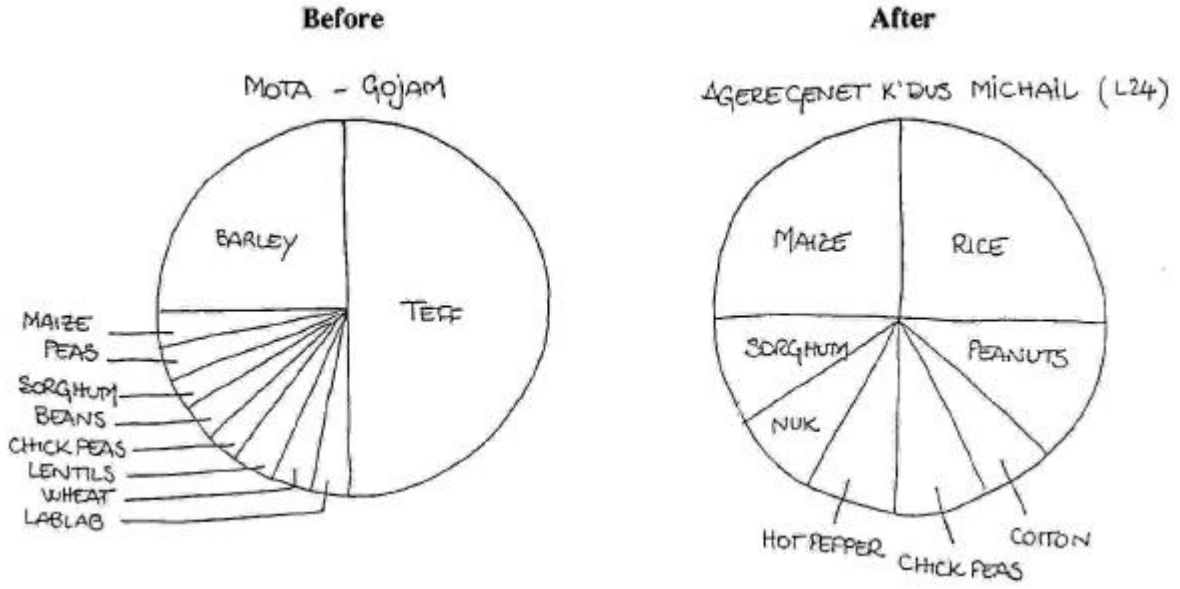
This exercise enabled the farmers to show us what crops they used to produce in their area of origin, and what they produced after resettlement (Figure 4). From these diagrams it is clear how people had to adapt to significant variations not only in crop production but also in related consumption patterns and food habits.

Figure 3. Scoring exercise: food staples and their uses (village L24*)*



Source: PLA Notes (1995), Issue 22, pp.62–68, IIED London

Figure 4. Pie Charts showing crop production before and after resettlement



In another interview, the respondents used this type of diagram to show how their sources of income had changed since resettlement. In their area of origin, they gained their income exclusively from agriculture and livestock. In the resettlement area, due to the very low productivity in agriculture and because of the widespread livestock diseases, they turned to handicraft production (iron and pottery) to earn supplementary income.

Comparisons between conditions before and after certain events can be made using different PRA methods. Usually pie and Venn diagrams need to be represented separately for expressing changes over time, while diagrams such as seasonal calendars and matrices allow all the information to be represented in the one image.

Lessons learned: avoiding biases

To ensure frank and spontaneous discussions, we found it was better to avoid announcing visits in advance and to improvise daily programmes. The only time we made a mistake in this respect was when we announced our visit at a feeding-centre. It was very revealing to observe how the visit had been taken over by some of the villagers who hoped to gain support for the feeding centre. After that experience, we tried to go into villages without attracting too much attention.

The transect walks undertaken with farmers in L5 revealed how the literate, better-off and more powerful villagers impose themselves as major interlocutors to outsiders. This shows how carefully target groups should be chosen.

Biases can also arise when certain persons inhibit and interfere with group discussions. For instance, when we asked the school children to draw a map of the village, their teachers kept giving them suggestions. The outcome was that, besides buildings and institutions relevant to them, the children also drew their teachers' houses very big. These kinds of problems can be easily solved if different persons or groups can work independently.

Finally, language barriers represent a very real obstacle. During our fieldwork we had to talk through an interpreter. Sometimes, when people did not speak the official language, a double translation was necessary. However well a translator is chosen, information will inevitably get lost.

• Conclusions

The results have confirmed that PRA is an appropriate approach to explore knowledge at the grassroots level as well as to enhance the self-awareness of the local people involved.

Source: PLA Notes (1995), Issue 22, pp.62–68, IIED London

Many PRA methods proved to be useful in the particular context of resettled peoples, and good results could also be expected from other techniques such as historical profiles and trend analysis. However, starting from the basic assumption that the aim is to discover 'rooted knowledge', one might question the usefulness of PRA methods in a setting where migration has occurred and social, economic and cultural disruption has taken place. One could claim that the knowledge and perceptions of people who do not yet have much experience of their new environment might not be revealing.

I would rather argue that in this specific context of general upheaval, PRA represents a particularly useful approach to understand how people react to such disruption and develop new coping strategies. Furthermore, PRA offers an essential approach to development contexts characterised by 'project dependency', because it introduces a valuable external stimulus favouring self-awareness and a crucial means for encouraging people to become self-reliant.

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NOTE

The findings, interpretations and conclusions contained in this paper reflect the author's views only and should neither be attributed to CISP nor to UNICEF.

Source: PLA Notes (1995), Issue 22, pp.62–68, IIED London

14

A Participatory organisational appraisal of ACORD

Mick Howes and Chris Roche

· Introduction

ACORD (Agency for Co-operation and Research in Development) is a consortium of northern NGOs which seeks to facilitate the emergence of strong, autonomous and independent indigenous non-government structures which will improve the economic and social conditions of some of the poorest people in Africa. It is currently running 29 programmes, located in a range of countries. The majority entail an extended period of support, which in certain instances exceeds 10 years.

A small number of ACORD programmes started to experiment with PRA in 1990, and by 1992 it had become apparent that there was considerable potential for it to be used more extensively. The difficulty was that, with the exception of Chris Roche, nobody from the Secretariat in London had a very clear idea of what PRA was about. In order to increase awareness among staff and to place them in a position where they would be able to take informed decisions about how it could be used in other programmes, the idea emerged of running a two day workshop, where staff would be introduced to PRA through an appraisal of their own work and organisational relationships.

Thus at first, taking ACORD as a subject was merely a way to familiarise staff with various methods, and giving them a sense of what it would feel like to participate in a PRA process. We recognised that useful insights about the organisation were likely to be generated at the same time, but regarded these largely as by-products. However, when the idea was put to ACORD's director, he saw it as an opportunity not just to introduce PRA as a methodology, but also as something which could feed into the strategic planning process upon which the organisation was about to embark. We were therefore presented with a much more demanding task than we had originally envisaged but decided, with some trepidation, to go ahead.

What follows is an account of how we proceeded and of the successes and difficulties which we encountered along the way. We hope this will be of value to others interested in the use of PRA for the purposes of organisational assessment and planning.

· The workshop

A few weeks before the workshop took place, staff were invited to a preliminary meeting where the broad outline of the exercise was discussed. The workshop programme reflected the feedback received on that occasion. The workshop was held in September 1992, with 19 out of the 27 Secretariat staff taking part. Apart from a receptionist, who fielded phone calls, and a secretary, who provided back-up support, the normal functioning of the office was suspended to create the necessary space for group work and presentations.

Introductory and concluding sessions dealt with aspects of the strategic planning process which did not lend themselves to investigation by PRA methods and will not be discussed here. We shall focus only on the core of the workshop where a PRA type approach was followed.

Source: PLA Notes (1995), Issue 22, pp.69–73, IIED London

· Matrix ranking

The first PRA exercise was a matrix ranking. Robert Chambers' note, which uses the example of sorghum varieties, provided the basis for a preliminary briefing. Three groups were then formed, each comprising a mix of people who knew about the topics to be explored, and those who did not. One ranked the quality of ACORD programmes in the Southern African and Horn Regions. Another carried out a similar exercise for East and West Africa. A third focused on the organisation's leading funders.

Overall this seemed to go quite well. People commented that it had given them a new perspective on important questions, bringing issues to the surface which had not previously been appreciated, sharpening perceptions and providing a good way of summarising key characteristics for those who were previously less well informed about particular aspects of ACORD's work. Others, however, felt that the method left no room for disagreements between group members to be expressed, and that there was sometimes a tendency for those who knew little about the subjects to be marginalised.

For most of the rest of the workshop, participants were divided into two working parties, one dealing with the internal workings of the Secretariat and the other with its external relationships.

· Internal aspects

The 'internal' group, comprising secretarial, clerical and some non-managerial professional staff, worked mainly with Mick Howes and focused on the aspects of the Secretariat with which they were familiar. At the outset, they were split into two groups and were offered a menu of methods with which to work.

- *Office Model.* Group One chose to start by producing a model of the office. This was intended to generate a discussion of the physical environment, and to provide a basis for the subsequent exploration of internal communication networks. The exercise was conducted with little difficulty and was useful for learning the method. It failed, however, to yield any important substantive insights. It was difficult to say exactly why this should have been so, given that this is normally a very fruitful exercise under rural conditions. The smallness of the area in question, its relative simplicity, and the apparently limited scope for change perhaps provide a partial explanation.

- *Informal Hierarchies Chart.* Group Two constructed charts comparing the formal hierarchy of the organisation with what they perceived as the 'real' or 'unofficial hierarchy', using this to generate a discussion of how decisions were taken and how information of different types flowed around the system. Initially, given the lack of any ready made method in the PRA 'tool kit', this proved problematic. But once suitable approaches had been devised, a lot of useful discussion was generated.

- *Individual Communications Charts.* Complementing the earlier efforts of Group Two, and using a similar approach, Group One now turned its attention to communications as viewed from the perspective of individual actors located at different points in the organisation. Once again this proved quite fruitful.

- *Time Use Charts*. Meanwhile Group 2 conducted a number of exercises on the time use of various members of staff. Some constructed seasonal calendars, while others sorted coffee beans into piles to represent different activities. They then summarised the results on pie charts. This led on to a discussion of the types of work which the individuals concerned either enjoyed or did not enjoy carrying out, and the drawing of further charts, which made it possible to compare individual satisfaction ratios.

  This was not without its difficulties. Daily time charts work quite well, for example, with rural women, but less so in an office setting, where far fewer activities fall into a repetitive daily sequence, and the amount of time devoted to one activity, as opposed to another, is

Source: PLA Notes (1995), Issue 22, pp.69–73, IIED London

far more likely to vary through time. Again, alternatives could be devised, but in the limited time available we were only partially successful in innovating during the process.

· External relations

The other team, comprising the management and the remaining professionals, worked mainly with Chris Roche, and dealt with external relationships. As with the 'internal' team, once again here, participants were sub-divided into two groups.

- *Communications Charts and Problem Trees.* Group 3 was asked to look at external communications. Hampered, like the internal groups, by the lack of a purpose-built method in the 'tool kit', and confronted with quite complicated phenomena, members of this group struggled to find the right medium. They settled eventually for drawing network and communications charts, which explored relations within the East African and Horn regions and the connections between these and the Secretariat.

These revealed quite significant differences between the regions in terms of information flow, the number of visits from head office, and the number of new initiatives launched. The use of the visual medium of the network maps led to the quite rapid formulation of conclusions. It seems unlikely that this could have been achieved as quickly through purely verbal means.

The team then extended its analysis of the constraints on information flow by drawing a problem tree. A series of difficulties relating to resource availability, formal and informal systems of communication, and differing cultural expectations were identified and debated. This in turn helped to distinguish areas where remedial action could feasibly be taken from those where it could not.

- *Programmes and Client Groups* (using Venn Diagrams, Problem Trees and Timelines). Group 4 was asked to explore the strategic issues posed by choice of client group. Here again, some difficulties arose in getting going, but these were overcome more quickly and good progress was made thereafter.

  The group working on a Venn diagram, which located individual projects in relation to ACORD's priority target groups, stimulated a discussion of the discrepancy between those whom the organisation intended to support and those whom it actually ended up working with (Figure 1).

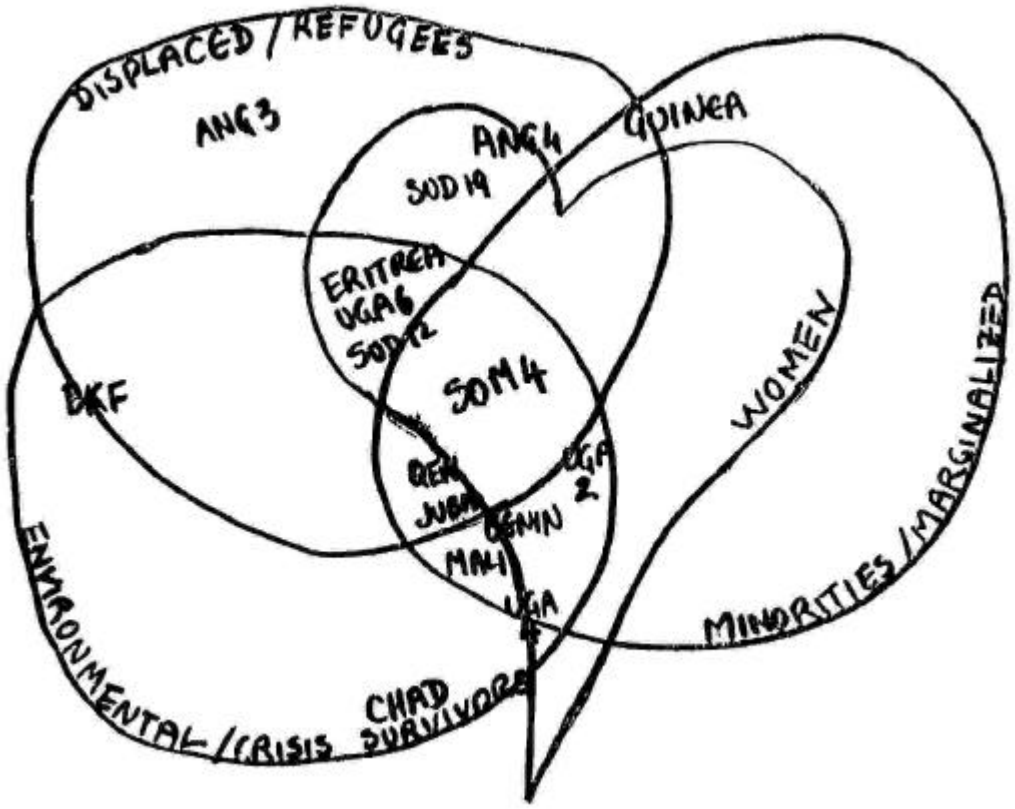
  They then went on to construct a problem/option tree, which led to a more systematic analysis of the issue and contributing factors. The complexity of the relationships between donors, headquarters staff, field staff and client groups was clearly demonstrated. This analysis was then extended by focusing on some causes of the problems, establishing broad strategic options for future remedial action and thinking through their implications through the construction of impact flow charts.

  The group then finished its work with a timeline reconstructing earlier developments in ACORD policy, which was helpful in defining the nature of the organisation's 'core business'.

  Taken as a whole, this set of activities hung together rather well, providing the best example during the workshop of the effective sequencing of exercises to be achieved.

Source: PLA Notes (1995), Issue 22, pp.69–73, IIED London

Figure 1. How programmes relate to gender and client groups



· Assessment

Did we achieve what we had intended? and would the exercise be worth repeating in different contexts? How important was the specific PRA component within the wider package of activities? Comments received in the various monitoring and evaluation exercises, together with our own observations of group and report back sessions identified a number of positive outcomes.

Firstly, the workshop helped to improve mutual understanding. The general level of awareness about internal problems and the issues about which various members of staff were concerned was raised. Non-programme staff welcomed the opportunity to learn more about what the operational people were doing, and people involved in different programmes were able to understand each other's work better. Those in non-managerial positions were provided with an opportunity for expressing their frustrations, which enabled management to arrive at a better understanding of their perspective. The need for the organisation to pay more attention to the promotion of good internal communications was highlighted.

Secondly, those already involved on the operational side gained new insights into their individual programmes. At a more strategic level, the need for a greater clarity of vision was identified. A large amount of information was generated and a number of concrete ideas were produced which helped to define future strategic options.

Thirdly, many participants felt that they had gained a reasonably good impression of what PRA was about, that it was unlikely that as much information could have been generated by alternative means, and that visual representation had helped to move discussions forward which would otherwise have become blocked.

Despite the widespread perception that the workshop had been helpful, there were also problems.

Firstly, whilst certain PRA methods worked very well, others, such as the seasonal calendar

Source: PLA Notes (1995), Issue 22, pp.69–73, IIED London

and the physical map, adapted less well to an organisational setting. There were also certain topics, most notably relationships between people and organisations, which needed to be explored, but for which no PRA method was available.

Secondly, whilst there appeared no reason, in principle, why PRA types of visualisation should not be used to address strategic planning issues, it was certainly too much to expect people to learn PRA and to apply it to quite complicated problems within such a short period. To some extent, therefore, it was inevitable that we should fall between two stools. It was probably also over-ambitious to try to involve all categories of staff in a single exercise of this type.

Despite the various difficulties encountered, and the obvious scope for improvement, the majority of those who took part felt by the end of the workshop that the effort and time expended had been worthwhile. A lot of important issues had been raised, and a start had been made to identify elements of a strategy based on the inclusion of all members of staff. At the same time, whilst nobody could be expected to 'master' PRA in a two day workshop held in a London office, key individuals within the organisation had at least been given a better feel for the approach and its possibilities

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NOTE

Chris Roche was formerly with ACORD.

Source: PLA Notes (1995), Issue 22, pp.69–73, IIED London

15

Ranking constraints in a community forestry and soil conservation programme

Kebede Asrat

In East Harerge administrative zone in the eastern part of Ethiopia, high population density coupled with rugged topography have exposed the highlands to degradation through deforestation and soil erosion. A workshop was held for the agricultural extension workers (DAs) and catchment technicians (CTs) employed by the Community Forestry and Soil Conservation Development Department (CFSCDD). The aim of the workshop was to allow the employees at the grassroots level of the department to identify the constraints in the department's forestry and soil conservation activities and to suggest possible solutions to encourage sustainability in the future.

The 14 DAs and 18 CTs participating in the workshop were asked to suggest the constraints which they felt most hindered the success of the community forestry and soil conservation programme. These are listed in Table 1. The participants were then asked to group the constraints into three categories of importance:

Table 1. Constraints ranked by grassroots level staff

Constraint	Most important		Next most important		Least important	
	DA	CT	DA	CT	DA	CT
Unnecessary involvement by politicians and administrators	0*	1	3	4	3	3
Existence of 'Food for Work'	3	2	1	0	3	0
Decision-making by Peasants' Association's executive committee on activities and benefits of the programme without consent of peasant members	0	1	0	0	0	0
Lack of involvement of agricultural extension workers in planning and implementing programme activities	0	0	3	1	2	2
Lack of farmer participation	6	8	0	6	5	3
Involvement of technical staff in activities which are disliked by farmers, such as the villagisation programme	0	0	2	1	1	3
Lack of defined land use and forestry policy	5	6	2	5	0	2
Lack of security of getting benefits from CFSC activities	0	0	3	1	0	4
Recommended measures are not technically suited.	0	0	0	0	0	1

* figures show the numbers of respondents

Source: PLA Notes (1995), Issue 22, pp.74–75, IIED London

This shows that the most important constraints were felt by the majority of respondents to be the lack of farmer participation, the lack of defined land use and forest policy and the existence of 'Food for Work'. Both DAs and CTs felt that the area in which most improvement was needed was in enabling better participation with farmers.

Ranking by extension workers to assess their own programmes is a useful application of the technique. Furthermore, consulting those at the interface between the programme activities and the farmers themselves enables an accurate picture of the effectiveness of a programme to be obtained. This approach could also help to formulate solutions to the biggest constraints. As the participants were drawn from the grassroots level they are not only closer to the problems, but also to the solutions, than other staff members of the Department.

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Source: PLA Notes (1995), Issue 22, pp.74–75, IIED London

16

PRA for people and parks: the case of Mole National Park, Ghana

John J. Mason and Elijah Y. Danso

· Introduction

In 1993 we used Participatory Rural Appraisal (PRA) to assess people's perceptions of the benefits and difficulties of their life near Mole National Park[1]. The assessment was meant to initiate a planning process involving local people in the on-going management of the park. The output of the work is being incorporated in the overall park management plan.

This article is written to encourage others working in wildlife issues to consider PRA approaches in all aspects of 'peoples and parks' research. At times it is difficult to convince scientifically oriented individuals of the validity of a PRA approach, but the authors found PRA useful and frequently the only approach acceptable to villagers, biased by years of mistrust and conflict with the Ghanaian Department of Game and Wildlife (GWD).

· Study context

The study area consisted of 27 villages surrounding Mole National Park in the Northern Region of Ghana. The villages are remote, with vehicle access limited to dry season paths only. There are few services available in the villages and high levels of poverty and malnutrition persist. The major activities in the area are subsistence agriculture, hunting and gathering.

We found a situation of mistrust, resentment, and in certain villages outright antagonism toward GWD. Six villages were evicted from the park in 1964 and resettled in the surrounding area. The eviction, together with the general loss of access to traditional hunting, gathering, farming areas and religious sites, were expressed as the main sources of these feelings. Our challenge was to build new bridges between the communities and GWD. PRA was the most appropriate approach offering opportunities of restoring a level of trust, dignity and respect.

· Methods

We made a minimum of three visits to each of the 27 villages: a preliminary introductory visit; a major assessment visit; and a follow-up/feedback visit averaging three days in each village. We held village meetings to conduct open discussions on issues identified by the villagers as being crucial to their cooperation with GWD. Meetings were held separately with both women and men.

The following methods were used: local histories, resource and social mapping exercises, time lines on agriculture and water and food availability, non-formal livelihoods, and transect walks of village water and land resources. Initially we also attempted to use a semi-structured questionnaire but this was soon abandoned as it generated high levels of suspicion among the villagers whose previous experience with questionnaires was in connection with the forced evacuation of six villages from the park in 1964.

[1] As part of an IUCN (World Conservation Union)/Department of Game and Wildlife (GWD) park management planning team.

Source: PLA Notes (1995), Issue 22, pp.76–79, IIED London

· Problems encountered

We encountered a number of difficulties in our work but the most significant was the suspicion of and antagonism towards GWD by the villagers (see Box 1). Our experience with PRA shows that such barriers can be overcome with patience and the open honesty necessary for the approach. Two other problems encountered during the exercise were time constraints and language barriers. Given the time period within which the management plan for the park was to be produced, not enough time was available for an exhaustive interaction with each village. Since each village had its own history of relations with the park, progress was not equal everywhere. At least four to five full days' residence in each village would have been preferable to overcome extreme levels of distrust and conduct a fuller interaction.

Working in 27 villages with nine different languages and little understanding of major Ghanaian languages or English presented communication problems in some of the communities. In such cases there was the tendency for dominance by a few individuals or complete deference to the village chief. We worked most successfully with interpreters resident in each of the villages rather than taking interpreters along. Notwithstanding the limits of these constraints, we received a greater level of cooperation and information from the villagers than might have been expected.

BOX 1

THE CASE OF MURUGU

Murugu is a Hanga village on the southeast border of the park in which the PRA was carried out. Although unique, Murugu typifies many of the other communities around the park. The people lost significant farm lands during the formation of the reserve. In 1957 and again in 1969 the boundary line was moved to enclose larger portions of their land. Unlike the six evacuated communities, their village has never been moved. Their assumption, following our initial visit, was that GWD was coming to assess what would be required to move the village so the park could be further expanded.

Thus on our second visit we found ourselves in a difficult situation. Working against us was not only the historical animosity toward GWD but an additional suspicion of the true purpose of our presence in the village. Pent-up frustrations toward the park were thrust at us in two hours of bitter recounting of past relations.

We were able to move beyond the frustrations by asking the village elders to narrate the history of the village and the history of relations with the department through the creation of the reserve and its on-going management. During this narration the key issues from the village's perspective were identified and we were then able to develop interest in addressing them. By showing interest in the historical account of the formation of the village and its ongoing relations with the conservation area we encouraged broader participation in the discussion and people began to freely share their views.

The village was most upset about the park because the majority of their gods had been left inside the reserve and they were not given access to perform regular sacrifices. They felt the park had not only taken away their best farm land, restricted their hunting activities and disturbed their subsistence gathering sites, but had also stopped them from going to perform regular sacrifices to their gods. The villagers stated that their inability to *"satisfy their gods make their matter no correct"* (failure to sacrifice adversely affects their living conditions).

Following that visit Murugu became the most open and trusting of the park villages. We attribute the dramatic change to the trust building capacity inherent in the PRA approach.

Source: PLA Notes (1995), Issue 22, pp.76–79, IIED London

· Lessons learned

We learned important lessons during this process. The first was that PRA is a useful approach for building trust in latent antagonistic situations. When the conservation traditions of people are recognised, acknowledged and appreciated, people are often more likely to trust the 'foreign' element among them.

The importance of making no promises or raising any hopes in our conversations was crucial. Since we were attempting to understand better the difficulties and benefits of living in the area around the park we did not encourage any particular issues. This confused the villagers because most people who had previously come to talk to them were only interested in one issue: water supply, health, roads or education. Thus they wanted to know what GWD was going to bring them so they could tell us what we wanted to know. When told that we were not bringing anything but were in their villages to learn from them about their lives, they were confused. When we assured them that we would be reporting exactly what they told and showed us, they were very anxious to narrate and demonstrate their everyday conditions. Thus we felt an honesty which may have been missed if an agenda had been obvious.

It was particularly important that PRA provided opportunities for the elderly in each village to pass on local histories and traditions to young people. We frequently realised the successful transition from RRA into PRA when our presence no longer mattered; the elders were teaching the young and we had taken the role of members of an audience. Our visits were thus making genuine contributions to the natural processes of information transmission within the village societies; a process which is increasingly threatened through the breakdown of these traditional societies.

PRA also allowed the villagers to reflect on their daily lives and to appreciate things normally taken for granted, such as picking *dawa-dawa*, shea nuts, raffia, thatch, medicinal herbs and the continued existence of animals to hunt. Initially villagers did not consider these items as benefits of living in the area. Usually the first person to mention such items would be rebuked by others. But as we encouraged them to speak about anything, the villagers would begin to consider daily products and benefits which they normally thought too trivial to mention and took for granted. It was also an opportunity for them to assess the usefulness of some of the wild resources available to them and a challenge to use them to better their living conditions.

While it is important not to assess people for whom there is no intention of assisting or empowering, it is equally important to allow villages to prioritise their own needs without the bias of what any given organisation attempts to address.

We also realised that the growing pressure to institutionalise the PRA approach would limit its applicability. Using the approach in 27 different villages, we had to remember that each community was unique and may need to be approached in a different manner from previous villages. So while our goals in each community remained consistent, discussions were held to suit the village rather than what was convenient for us. PRA must remain extremely flexible if it is to evolve and adapt to the ever growing number of situations to which it may be applied. Despite the obvious benefits of having a very structured approach in gaining increased legitimacy within scientific realms, too much structure may bring PRA more toward science than it will bring science toward PRA. If PRA remains flexible and adaptable, then science will not be able to ignore it for too long.

Furthermore, while not underestimating the value of structured or semi-structured questionnaires in PRA, it is important to assess the past experience of people with such survey instruments and their probable reaction to them before using them. Our experience shows that in an area of distrust and suspicion, documentation (including note taking) must be approached rather carefully, and always with the permission of the people.

Source: PLA Notes (1995), Issue 22, pp.76–79, IIED London

· Conclusion

The communities around Mole National Park have been made, over the years, to feel that they only have a negative impact on conservation and do not have much to offer GWD. But PRA builds confidence and self-appreciation. The villagers around Mole National Park have already begun to request input into the management of the area. This bodes well for the future of the park. The current trend toward involving local people in protected area management can only work when peoples' confidence is strengthened and they are empowered. We found PRA to be a better approach to building such confidence and empowerment than any other previously applied. If obtaining community participation is crucial to ensuring the sustainability of protected areas then PRA must be viewed as an important component of any conservation approach.

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NOTE

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Source: PLA Notes (1995), Issue 22, pp.76–79, IIED London

17

The use of RRA in conservation expeditions: experiences from Sierra Leone

Sarah Pocknell and Danny Annaly

Introduction

Northern conservation expeditions and surveys in the South often concentrate on recording rare species or habitat types using conventional ecological methods, ignoring both the resource of local peoples' ecological knowledge and the ecology of indigenous resource use. The result can often be that government bodies and conservation groups ignore the needs of local people when planning protected areas and that a less than accurate picture of local ecology is obtained.

In Sierra Leone, as part of a graduate expedition[1] to the Mount Loma Forest Reserve, we used RRA techniques to obtain information on local land use patterns and ecology from villagers living adjacent to the reserve. The Loma Forest Reserve is in the north-east of Sierra Leone and was designated as a protected area by the Forestry Department in 1951. The indigenous Kuranko people are prohibited from farming or hunting within the reserve boundaries. They grow rainfed rice in a bush fallow rotation system, supplemented by vegetables and cash crops grown in river swamps and tree crops grown within the forest. The Forestry Department regards the Kuranko's land use system as detrimental to wildlife and their habitats.

To make realistic conservation proposals, it was felt that a survey of Kuranko land use was vital. No such survey had previously been carried out. We decided to use RRA as we wanted to obtain detailed information in two months and needed a flexible approach that would involve local people. We wanted to investigate:

- The distribution of habitat types in and around the reserve;
- Changes in land use and habitat distribution in villagers' lifetimes;
- The importance and source of non-agricultural resources;
- Sustainability of current land use practices and economic trends likely to affect them; and,
- Attitudes to the reserve and to conservation.

Preliminary visit

A reconnaissance survey was first carried out. Two days were spent selecting a study village (Sinkoro), making contact with chiefs and assessing logistics. We found this time to be extremely useful. After preliminary interviews with a few local people and village chiefs, we discarded some methods and objectives, decided which issues to concentrate on and drew up our initial question checklists. This survey also enabled us to find a Kuranko person able to translate our concepts as well as our speech into Kuranko. This was fundamentally important in our work, as was the fact that he was well known and respected in local villages.

Building trust

The Kuranko are extremely suspicious of outsiders. Their only previous contacts have been with white tourists passing through or Forestry department staff, whom they dislike.

[1] From the Department of Environmental Sciences, the University of East Anglia, UK. A report stating the initial findings of the expedition is available from the authors.

Source: PLA Notes (1995), Issue 22, pp.80–83, IIED London

We were initially suspected of working for the government or of being connected with Liberian rebels. An initial explanation of our motives to a village meeting did much to help us, as did the fact that we lived in the village, used Kuranko greetings and participated in village activities.

Our interpreter was essential in this process as his explanation of our presence was trusted. We were eventually regarded as friends and had cooperation we would not have received had we merely visited for a few days. Work in neighbouring villages was also made easier as word spread that we were not trying to cause trouble.

· RRA methodology: strengths and results

The approach decided on was to spend several weeks studying Sinikoro combined with additional, quicker surveys of surrounding villages. The use of a range of methods made triangulation easier and consequently our results more reliable. Methods that were particularly useful are described below.

Mapping

Mapping was always the first activity to be carried out and was the reference point for all future work. A group of villagers, chosen by the chief, sketched a plan of the village and surrounding areas in the dust of a communal area, taking it in turns to 'use the stick'. We asked to be shown rivers, areas of farming, swamp gardens and vegetation types. This proved to be a quick and fairly accurate technique of land surveying. Strengths of the exercise included the following:

- We were able to dismiss our previous assumption that the forest reserve was an area of mature forest being eroded inwards. The vegetation pattern was a more complex mosaic of habitats;
- Mapping brought to our attention the existence of deserted villages within the reserve. These sites were later found to be of conservation importance;
- Disparities between our background data and the map were noted eg. river names, which prevented later confusion;
- Much discussion was generated about the reserve as a result of drawing the boundary;
- We were able to discard low priority information from our checklists eg., soil types, which are uniform around Loma; and,
- The map determined the transect routes.

Transects

Transects were carried out along farm tracks around the study villages, guided by a local farmer. These were intended to establish the limits of mature forest, permit an intensive study of the surrounding forest and allow observation of agricultural practices. Through questioning and observation we were able to note species indicative of disturbed and undisturbed forest which increased the effectiveness of the transects. Other advantages of using transects included:

- Discovering that villager classification of 'high' forest did not match ours. They included 15 to 20 year old secondary forest in their description of mature or primary forest. This saved confusion during interviews;
- Verifying and improving details on the map. For example, during one transect walk we discovered a large area of culturally protected forest outside the reserve that had not been included on the map; and,
- Using farm tracks meant we would meet several people during a walk which allowed for spontaneous interviews.

Ethnobotanical collection

We found that establishing a plant collection with the help of villagers was an effective participatory method of discovering medicinal and food uses. We asked villagers to bring us

Source: PLA Notes (1995), Issue 22, pp.80–83, IIED London

samples of plants so that we could preserve them to identify later. We got a good response, and our contributors gave us thorough explanations of the plants' preparation and properties. Although not strictly an RRA technique, this produced far more discussion than checklists and ensured greater accuracy.

Other methods used during the study included oral histories (narrated by elders of three villages and which included their perceptions of vegetation change over time), short questionnaires, semi-structured interviews and group discussions. Of these, the semi-structured interviews produced the most detailed information on cropping systems, while the group discussions increased the accuracy of our conclusions by allowing for triangulation.

It was found that the Kuranko use a range of agro-forestry practices on land cleared primarily from 8-9 year old farm bush. This makes their agriculture sustainable at current population and technology levels. They also had a sound understanding of ecological processes occurring between forest and savanna areas, and sometimes manipulate savanna areas around their villages towards forest succession - an apparently recent innovation.

Reflections and lessons learned

- Mapping seemed to be an alien concept to the Kuranko. We had to prompt the exercise far more than we would have liked. Villagers' vegetation classifications are inevitably different to those of ecologists. Thus transects are vital to give a 'third dimension' to ecological zoning and land use mapping.

- As most people were busy in their farms when we visited, group events were arranged by chiefs. They were therefore biased towards the older male farmers. We also found group discussions difficult to operate. We felt it was due to our inexperience that they developed into question and answer sessions rather than debates.

- Women, despite our requests, were not included in mapping groups. All-female discussions eventually drew a crowd of watching men who made disparaging comments about the women's ability to answer 'properly'.

- Not all the farmers were keen to complete the brief questionnaire and so the whole process was tedious for both interviewers and interviewees. The results were later found to be inaccurate, especially those relating to the ratio of bushels of rice planted to those harvested. An explanation could be that people were reluctant to reveal the extent of their wealth to others in the community.

- For longer visits, a reconnaissance visit is essential. Indeed an unannounced visit would have been seen as impolite and suspicious.

- Working through a local person greatly increased the amount of trust and cooperation received. However the pressure on them of mediating between their own people and strangers must be recognised.

- Although Robert Chambers[2] has emphasised the *"importance of being unimportant"* this was almost impossible in a situation where people had little experience of foreigners and so treated us as honoured guests. This was not negative as the interest we generated ensured greater cooperation and involvement.

· Application of RRA to conservation surveying

Conservation projects in the South would benefit from far greater cooperation with local people. The RRA approach enabled us to gain insights into local ecology, resource use and attitudes that a conventional expedition would not have obtained. We felt that the major value of RRA was in providing a quick yet thorough feel of the main processes occurring, rather than in providing figures to be acted upon.

Perhaps most importantly, RRA allowed the needs, attitudes and aspirations of local

[2] In Rural Development: Putting the Last First. 1983. Longman, London.

Source: PLA Notes (1995), Issue 22, pp.80–83, IIED London

villagers to be given a voice in the context of future conservation objectives.

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Source: PLA Notes (1995), Issue 22, pp.80–83, IIED London

18

Tips for Trainers

Robert Chambers

• Non-verbal sequences

Objective

To enhance awareness of non-verbal ways of showing dominance, submissiveness and being nice.

Time

15-20 minutes

Procedure

In the following sequence, watching and discussing slides leads to a lively group-forming exercise which leaves participants animated. Steps (1) and (3) can also be used on their own.

1. Participants sit in pairs and are shown a sequence of slides of interactions (dominance, submissiveness, finger-pointing, sitting listening and so on). They are asked to discuss and reflect on the non-verbals they see.

2. Form larger groups (5-10 people each depending on numbers) and ask each group to stand in a circle facing inwards.

3. One person removes a shoe and puts it in the centre. The group chooses a person to count the mimes. Groups then compete by thinking up the largest number of mimes illustrating behaviour which is dominant or superior. When a team member has an idea, he or she picks up the shoe and places it in front of his/her feet. She/he must then demonstrate the non-verbal. All others then repeat it together at least once. Only when all the group members (including the counter) have repeated the mime does it count in the score. Continue until the groups are running out of ideas.

4. Ask for the scores from each group, then ask each group to choose the best mime and show it to the others.

5. Repeat for submissiveness, and then finally for being nice.

6. At the end, Raul's[1] three rules for village work can be shown on an overhead:
1. Be nice to people
2. Repeat rule no. 1
3. Repeat rule no. 2

Comments

Encourage the use of props (sticks, chairs etc.). Demonstrate a mime with the group, for example wagging your finger to show dominance.
Be careful that *"being nice to people"* does not become *"being too nice to people"* (especially with mixed cultures and sexes).
In discussion, encourage reflections. If no one else picks it up, mention the importance of how we indicate feelings through our eyes, since this is usually missed in the exercise.

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[1] From Raul Perezgrovas.

Source: PLA Notes (1995), Issue 22, pp.84, IIED London