

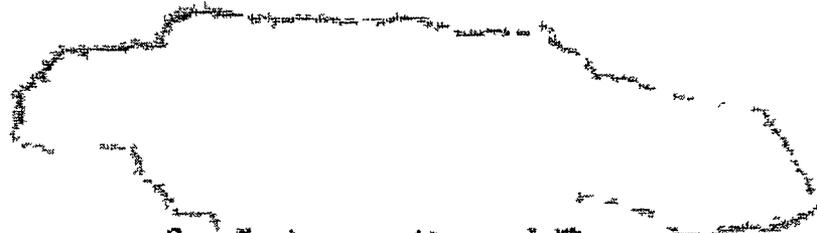
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*PARTICIPATORY RURAL APPRAISAL  
FOR NATURAL RESOURCES MANAGEMENT*

*A MANUAL OF TECHNIQUES*

*February 1998*



*U.S. Agency for International Development*  
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*Natural Resources Conservation Authority*

*Technical Support Services, Inc.*  
*Technical Assistance and Training Contractor*



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## FOREWORD AND ACKNOWLEDGMENTS

And with the best leaders  
When the work is done  
The task accomplished  
The people will say  
We have done this ourselves

*Lao-tzu, China, 4000 BC*

### Acknowledgments

"Parks, People and Professionals Putting Participation into Protected Area Management," M Pimbert and J Pretty, UNRISD Discussion Paper 57, 1995

Participatory Learning and Action A Trainer's Guide, J Pretty, I Gujt, I Scoones & J Thompson IIED, 1995  
PRA Tools and Techniques Pack IDS, Sussex

Special thanks to Professor Robert Chambers, Institute of Development Studies

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## **GLOSSARY OF ACRONYMS AND ABBREVIATIONS**

CIDA	Canadian International Development Agency
DEMO	Development of Environmental Management Organizations
ENGO	Environmental Non-Governmental Organization
EU	European Union
NEST	National Environmental Societies Trust
NGO	Non Governmental Organization
NRCA	Natural Resources Conservation Authority
PRA	Participatory Rural Appraisal
UNDP	United Nations Development Programme
USAID	United States Agency for International Development

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## PREFACE

This manual is designed as an aide memoire to consolidate the knowledge of the 24 trainees who attended the workshop on PRA methods, at the Wyndham Hotel on 4 and 5 December 1997. The workshop was sponsored by the USAID-funded Development of Environmental Management Organizations (DEMO) project for the project's principal clients, the Natural Resources Conservation Authority (NRCA), the National Environmental Societies Trust (NEST) and member environmental non-governmental organizations (NGOs).

The DEMO Project has worked with the NRCA and the NGO community to develop the foundation for an extensive system of protected areas for Jamaica. The expanded system will help ensure conservation of the island's biodiversity. However, this ambitious vision can only be fully realized if those who are now dependent on that biodiversity become effective managers, profiting from appropriate and sustainable husbandry of natural resources. With the support and encouragement of the DEMO project, the Protected Areas and Coastal Zone Management units within the NRCA have become involved in community-based natural resource management. The authors of this manual were engaged by the DEMO Technical Assistance Contractor, Technical Support Services, Inc. to assist the NRCA in collaborating with NGOs to encourage the participation of communities and resource user groups in environmental management strategies and small-scale resource focused projects.

Like the DEMO project itself, the wider purpose of the PRA manual is to build the capacity of the NRCA and the environmental NGO community to help achieve Jamaica's goal of sustainable environmental development. A necessary component of meeting this goal is enhancing the ability of field and programed staff to translate community knowledge of resource use and management into environmental action plans and projects which can be locally-managed.

The manual also acts as a reference point for those seeking a summary of PRA techniques. It is not a self-teaching guide to PRA. As the trainees now appreciate, PRA is an intricate and subtle methodology, which must be taught by experienced professionals in both classroom and guided fieldwork sessions.

The manual consists of distinct but interrelated sections arranged in two parts. In Part I, Section 1 provides an introduction to the principles of PRA, the Jamaican context and experience of the methodology and a brief history of the emergence of PRA as a necessary tool for meeting community-based development objectives.

The second section demonstrates practical PRA methods used to guide field practitioners in eliciting information from communities on natural resources and as a planning tool for adopting sound environmental practices. The following section examines the lessons learned from the training course. Part II shifts focus to the institutionalisation of PRA within the NRCA. It examines opportunities to use PRA to expand and strengthen Jamaica's System of Protected Areas by cementing partnerships within and between communities, NRCA and donors. An analysis of the ramifications of this for donors concludes this section.

The methods highlighted in the manual are flexible and practical. We hope that they will be applied regularly on that basis and that they will encourage creative thinking and discussion about the more complex issues that surround environmental management.

Technical Support Services, Inc  
Washington, D C

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## **PART I: PRA AND PRA METHODS**

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### **PRA AND DEVELOPMENT**

#### *What Is PRA?*

Participatory Rural Appraisal (PRA) is a range of field-based anthropological research methods which have been devised to enable people with low literacy skills to express themselves using their own terms and indicators. It is described by its originator<sup>1</sup> as a “growing family of approaches and methods to enable local people to share, enhance and analyze their knowledge of life and conditions to plan and to act”

#### *Where Does it Come From?*

Participatory Rural Appraisal originated in the south and has grown out of a dissatisfaction with traditional forms of field-based research techniques. Questionnaire surveys and other formal research methods are often long, costly and prone to sampling errors. They may involve haphazard data collection and superficial contact with target beneficiaries and local elites. These research methods measure ‘objective’ information, based on categorization by outsiders who are divorced from the situation studied. PRA methods aim to avoid the deficiencies of traditional styles of investigation by exploring stakeholders’ perceptions, attitudes, priorities and motivations.

The range of participatory approaches practice today<sup>2</sup> has evolved from several sources and encompasses a growing range of approaches and techniques with strong methodological and conceptual similarities.

• for more information, see Appendix I

### **PRA IN JAMAICA**

Participatory methodologies have spread from academic and research institutions in the United Kingdom and North America, and are now employed world-wide by major development agencies such as UNDP, USAID, EU and the World Bank. Several successful Protected Area programs, particularly in Africa and Asia, use PRA in the community participation component of their management strategies. However, PRA techniques have seen limited use in Jamaica.

Other than the recent DEMO training course, the only training delivered by experienced professionals occurred in 1995 when Meera Shah ran an orientation course for twelve members of the Department of

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<sup>1</sup> Robert Chambers. Professor at the Institute of Development Studies. University of Sussex

<sup>2</sup> See Appendix II & III for Terms for Participatory Approaches to Learning and Action and Origins of Participatory Approaches

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Sociology at the University of the West Indies Shah's 'Participatory Study of Urban Poverty and Violence in Jamaica' for the World Bank formed the baseline data in preparation of the Jamaica Social Investment Fund Unfortunately, Professor Chevannes, contact point for Shah and Dean of the Faculty of Social Sciences, feels that this corpus of trained facilitators is fragmented to the point of being non-existent in practical terms

Dr Anita Spring's 1995 report on 'Human Activities and Environmental Contaminants in the Black River Lower Morass' and the British High Commission's 1997 study of Jones Town both rely on elements of RRA However, these were extractive exercises focusing more towards rapid information gathering than developing local capacity to use participatory techniques

The activities carried out under the DEMO Project represent a significant contribution to the bank of knowledge on PRA in Jamaica, involving the facilitation of PRA and RRA in community level discussions as well as training for NRCA and NEST staff and wardens Participatory techniques were extensively deployed in the Black River SITE intervention, and were vital in investigating local perceptions of environmental issues and identifying potential pilot projects Using RRA techniques to bridge the gap between social and environmental sectors, the authors explored the possible impacts of the proposed Negril Marine Park on the livelihood strategies of six fishing communities One of these communities took the unusual step of faxing the DEMO office to say that they had never been contacted by an institution in such an open way and to express appreciation at the non-hierarchical approach employed

The recent PRA course broke new ground in Jamaica in that it trained staff *in situ* Intimate knowledge of NRCA as an institution allowed the trainers to carefully tailor the course to the aims and duties of staff members The focus was specifically on using the kinds of tools that environmental fieldworkers need and the kinds of situation in which the tools would be needed This is a situation unprecedented in Jamaica The DEMO project is the first to comprehensively employ these techniques outside an urban setting and a poverty alleviation context

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## THE PRINCIPLES AND PRACTICAL APPLICATION OF PRA

### ○ *Purpose*

PRA is concerned with translating people's reality into a form of information that can be used in offices  
It is the interface between local people and outsiders

☛ refer to cartoon in Appendix II, what does each caption make you think of?

### ○ *The philosophy behind PRA relies on three things*

➤ There are no experts

An 'expert' can learn from an 'uneducated' person, knowledge is not exclusive to universities. This process requires the outsider to be humble, to share information and to accept multiple perspectives

➤ Local problems require local solutions

We must accept difference, diversity and complexity and resist the temptation to seek a standardized 'quick fix' solution. Tolerance of a range of indicators, rather than a single 'truth'

➤ Development means a change for the good

Office staff cannot force people to do things that they do not feel an incentive to do. Partnerships for development should promote long-term self-help initiatives by working with local people's incentives for change

○ *Questionnaires* are often used by fieldworkers, but have several limitations. They can be daunting, hostile, formal, generalized, irrelevant, insensitive, and inaccessible to respondents. The interaction involved in filling questionnaires is oppositional, emphasizing the difference between 'us' and 'them'. It is not a shared exercise, a problem to be solved together. Questionnaires guide people towards particular responses and may provide the answers to their own questions. Questionnaires rely on categorization - the idea that the world can be put into boxes

○ *Outsiders' perceptions* of other people's lives can be misleading. PRA is designed to counter the biases that outsiders have when they investigate village-level issues

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These biases often result from the fact that outsiders are likely to

- visit places which are accessible, near capital city, urban, roadside (In Jamaica one may add aesthetically pleasing)
- talk to men rather than women, the powerful and affluent rather than poor
- gather a snapshot impression by visiting for a short period of time at a particular time of year/day
- be deterred by courtesy from asking important questions (although we note the necessity to be sensitive at all times)
- be deflected by an artificial, office-bound perspective The constraints of project frameworks, the simplification necessary to push information up the hierarchy, and pressures to visit places where other projects are already happening all militate against seeing reality clearly

○ *The following six concepts are essential to PRA's approach*

- ❶ **T**riangulation cross-checking (constantly) for verification of information Implicit here is the fact that a community is not a solid, monolithic entity, but rather a collection of conflicting perspectives and agendas
- ❷ **V**isual-Verbal visual representation is more effective and does not alienate people who are not confident with a pen
- ❸ **L**ocal Tools use accessible objects such as the ground sticks and stones, seeds
- ❹ **H**and over the Stick/Pen let the local people represent themselves in their own way There may well be an uncomfortable few minutes before they get involved Be patient Resist the temptation to fill the silence by initiating action Relinquish the symbols of authority, stick/pen, chair, voice
- ❺ **S**eek Diversity include all groups of the community Children's contributions can be extremely revealing
- ❻ **A**llow adequate time sleep, eat and live (if possible) in the area Ideally, PRA is gradual At least three visits to a community are recommended before the first meeting

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Avoid 'shopping list' consultation, the easy option of simply asking people to list their problems or needs. Such information is likely to be inaccurate, misleading, pertaining to one (probably powerful) group in the community, and wrongly implies that people are powerless to help themselves.

Facilitators must be open, honest and clear about the purpose of the fieldwork. This is the point of departure for all successful contact with a community. The presence of outsiders asking questions is never perceived neutrally. People are likely to be suspicious of outsiders' motives and will collaborate more effectively if they are (briefly but fully) informed of the background, intention, and possible future ramifications of the meetings.

There is a temptation for outsiders to assume that, if local people perceive that their participation will not benefit themselves, information will not be forthcoming. In fact, the only danger fatal to the process is if people believe that their presence is valuable and subsequently come to realize that they were 'consulted' under false pretenses. The interplay between donor, facilitator, local people, and the development process is typically convoluted and it is extremely rare for the facilitator to be in a position to guarantee that the process will be taken to its logical conclusion.

- If the field work is for information extraction, general research or some other reason which is unlikely to directly benefit the informants themselves - say so
- If the data gathered is intended to benefit the community, but projects have not yet (and may never) be approved - say so
- Honesty is respected and brings its own rewards

Similarly, it is vital that informants feel a sense of ownership over the information revealed.

- If a diagram has been created, leave it, or a copy, in the community
- Return to update people on progress, even (or especially) if the process is slow
- If possible, give copies of reports that use people's information back to community members

The importance of communication, of keeping people informed, cannot be underestimated. It may be useful to produce a synopsis that is accessible to the original informants, despite the fact that donors often fail to understand that this small token may safeguard the future of the community dialogue that they have already invested in. Too often outsiders renege on their commitment to follow up on community issues, being side-tracked by the personal prestige, project deadlines or institutional apathy that can accompany and stifle the outreach process.

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## **PARTICIPATORY RURAL APPRAISAL TECHNIQUES**

### *O Techniques*

This section details the practical methods which make up the PRA 'toolkit' and should form the basis for group exercises. The techniques are presented in the following order:

Semi-Structured Interviews, Transects, Mapping (physical & conceptual), Time Charts (Seasonal Calendars, Daily Schedules, Timelines), Venn Diagrams, Network & Flow Diagrams, Ranking & Scoring Matrices, Others (Pie Charts, Wealth Ranking)

### **I SEMI STRUCTURED INTERVIEWS**

Semi-Structured Interviews (SSIs) are guided conversations in which only the topics are predetermined and new questions arise as a result of the discussion. They form the background against which all other techniques are projected and replace the traditional questionnaire. Despite the relaxed name, this tool demands exhaustive preparation as all possible avenues of discussion must be thought through in advance.

#### *O Care must be taken over*

- the selection of informants

A mix is necessary of selective and random types of key individual, individual, focus group and group interviews, covering a range of age, social status, gender, etc. Informants may be selected because they have particular knowledge or because they represent a subgroup. Alternatively, they may be selected randomly either to validate information already gathered or to provide orientation at the outset of fieldwork. If randomly chosen, many informants should be approached in order to reduce any bias in the sample. Key individuals may be interviewed because they have specialist information or because they act as a 'Gatekeeper' to introduce outsiders to the community. Individuals are interviewed to check group consensus. Focus groups can be used to investigate a particular topic, reveal minority views, or for triangulation. Group discussions allow information to be shared and build consensus, but may conceal tensions between members of the same community.

- the setting of the interviews

A private area may relax participants but can exclude some individuals. A public area may allow passers-by to comment on proceedings and may permit an open discussion on neutral territory but may have wider associations - a meeting in the Community Centre may be unbalanced by the football team members who regularly gather there, for example - and may intimidate or prevent the shyer people from speaking. There are no right answers.

- 
- the behavior and attitudes of the interviewer(s)

- Body Language

- Sensitivity, Listening Skills
  - Protocol and Friendliness
  - Awareness of Social Difference between interviewees and between interviewer and interviewee,
  - Personal Values committed to equitable development,
  - Timing and Length of visit showing respect to their way of life not our working day

- *Be aware of* 'Saboteurs' and 'Dominators' in the discussion

- *Avoid Leading, Yes/No, Ambiguous and Double-barreled questions* The most powerful words to start a question with are How, Why and Tell me about

SSIs can be used to examine any issue, and should be employed constantly throughout fieldwork. There is no substitute for sensitive curiosity. Keep posing the same questions to different people and different questions to the same people, in order to verify the information revealed.

- ☛ refer to Appendices V & VI for points on Sensitive Interviewing and Typical Communication Blocks. Appendix VIII provides a bad example of questions asked during an SSI. Can you improve on it?

## II. TRANSECTS

Transects are walks around the community's area guided by local people, during which the outsider uses SSI techniques to gather information on the immediate environment.

Transects can form part of the introduction to a community and may reveal marginalized groups or minority interests. They are mostly used to track changes over time. Individual Transects drawn from memory should work from the present backwards to construct a series of comparable images through time. Memories are better activated if respondents are asked about events or conditions in significant years. For example the present may be contrasted with the year of Hurricane Gilbert and the year of Independence.

- Older people should be deliberately selected as informants on historical change
- Specific issues efficiently addressed through Transects include deforestation, soil erosion, population levels and changes in income generation strategies

- ☛ refer to Appendix VIII for an example of a transect

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### III. MAPPING

Mapping exercises are useful for initiating discussion, identifying which elements are important to which groups, developing a basis for comparison between perspectives, creating a baseline of information on the local environment, and assessing change

○ *Several types of map can be defined, although there are many variants on these themes*

➤ Physical maps

locate houses, services and infrastructure and identify the social composition of a community through analyzing conditions such as household composition, social status, livelihood strategies, pollution, land tenure, and informal boundaries (see wealth ranking, below)

➤ Resource maps

reveal the resources that are perceived as important, patterns of resource use, control over and access to resources, abandoned or fallow land, income sources, common property resources, and unexpected privately owned items that could benefit the wider community

➤ Mobility maps

focus on the movement of people or the flow of resources and often naturally follow on from *resource maps*

➤ Topical maps

examine specific issues such as water resources, agriculture, livestock or the sea as a resource. For example, a series of forestry maps may reveal natural products and their uses, tree types, access, topography, destructive trends, and even clandestine activities

As with all of the PRA tools, the quality of the discussion generated while people undertake the activities is equally or more important than the task itself. This is because the process of discussion adds a level of analysis, a map might show soil types, but the argument necessary to draw it reveals the dynamics and history of soil erosion and traditional methods of erosion control.

Groups of up to 50 people are (just) manageable, but the quality of information discussed is likely to be higher with groups of up to 15. Encourage wide participation by suggesting that people develop labels, impact flows<sup>3</sup> or other annotations. Physical maps can become more conceptual in nature as they are developed. The outsiders should copy the map onto paper when they leave, so that the community owns the original.

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<sup>3</sup> Flows illustrate the effects of particular activities or circumstances and qualitatively assess the relationships between action and reaction (see VI Flow Diagrams)

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Different groups include or highlight different aspects of their lives in the maps they construct. The difference between male and female perceptions can be revealing. Maps drawn by women may emphasize the market rather than the shop, animal grazing land rather than the football field, the school/health center/water supply rather than the bar. Similarly, the contrast between official and informally drawn maps is often interesting.

- Some weaknesses of Mapping may be the difficulty of getting started, overemphasis on a perfect looking map rather than on the simultaneous discussion, diversion into emotive and contentious issues such as boundaries or tenure rights, suspicion over outsiders' motives (especially with regard to *ganja* cultivation, for example)
- Some strengths of Mapping may be providing a clear structure to be discussed and to which varying levels of complexity can be added, becoming a basis for continuing monitoring of conditions, being interesting and fun for participants to create, locating the community as the central object of discussion, being left abandoned to be extended by people who were absent from the meeting

Mapping exercises are used as a preliminary overview of the area and an introduction to issues that are of particular concern to the community. They may investigate a variety of issues, including Natural Resource Usage, Land Use and Tenure, Ecological Conditions, Cropping Patterns and Social Status. They may also be refined and elaborated to contribute to a formal data base and analytical studies of the suitability of human uses and activities.

☛ refer to Appendix IX for an example of a Resource and Mobility Map

#### **IV TIME CHARTS**

Time Charts are employed to discover information on historical changes, to monitor the impacts of such changes, and to identify patterns of significant events. They develop a context within which to propose solutions and analyze trends.

##### *○ There are two types of Time Chart*

##### *➤ Timelines*

involve matching dates to events or activities. Participants place symbols or objects along a line representing a certain amount of time. They record information relating to the issue discussed, in order to build up a picture of events through time. This exercise works best when investigating either a very specific point or a trend. It can be readily combined with many other tools. Limitations of this method include the (in)accuracy with which people remember the past, and the fact that it lends itself to pen-and-paper style interaction.

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➤ Yearly, Daily, and Weekly Calendars

reveal demands made on people's time. Participants are free to order the day/year according to their perception of how time is divided. People often bypass conventional categorizations, such as twelve regular segments to a year (fishermen in Negril divided the year into three unequal, weather-dependent periods and the day according to tides), and this illuminates their conception of reality.

Calendars are useful in identifying peak labor demands, conflicts over time use, and appropriate timing for outside intervention. Particularly revealing are the seasonal dimensions of poverty (outsiders' brief snapshot of people's lives conceals the vulnerability of households at certain times of year) and differences between the workload of women and men (and the perception of each about the other). Several calendars can be combined to compare issues and identify influences and patterns; collating calendars of weather conditions with shrimp demand and supply done by groups of fishermen and female higglers showed the network of relationships among these three factors. Doing the same exercise with several subgroups may be valuable. Limitations include the human tendency to remember the past with nostalgia, and the fact that some activities are not regular enough to be represented.

☛ refer to Appendix X for an example of a Daily Routine Chart

## V. VENN DIAGRAMS

Venn diagrams involve the depiction of linkages, spheres of influence and degrees of contact between people, processes and institutions. They may be slightly conceptual or abstract in nature and therefore more challenging to conduct than many of the other techniques.

These relationships are represented by circles, which may interlink. The circles can be drawn on the ground or paper, or be symbolized by pieces of card cut into circles of several sizes. A central circle represents the community, for example, and participants then draw or place the appropriately sized circles at distances from the center that illustrate their perception of the importance of the issue or entity discussed. A large circle placed far from the center would indicate an important organization with which the group has little contact while a small circle placed nearby would indicate a less powerful organization with which they had frequent contact.

- Participants may want to show the relationships between and among all of the circles
- Where card/paper is used, the participants should cut the circles themselves
- Complex circles and chains of circles can be devised to illustrate complicated relationships, such as past, present, potential, weak, or strong links. Flow lines can be added to indicate direction of influence. Scoring to weight the influence of the various institutions can be incorporated into these diagrams by placing counters on top of the circles. Colors or shading can show other differences.

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There is a danger that this tool becomes dominated by the outsider, unless clearly explained. It is important to use knowledgeable informants who are familiar with all of the issues or institutions described. This presents another danger, however, as the overbearing role that such individuals may play in the group discussion means that their own agendas could be promoted under the guise of consensus.

This technique can reveal remarkably complex information, which can be verified by presenting diagrams back to other, larger groups. It is particularly useful for revealing people's perceptions of the importance of, and links between, institutions but can also illustrate cause and effect, roles and responsibilities and conflicts.

☛ refer to Appendix X I for an example of a Venn Diagram

## **VI FLOW DIAGRAMS**

Flow (also called 'network') Diagrams investigate impacts, causes, linkages and outcomes. They highlight the systemic nature of processes and uncover the reasons why particular events happen as they do.

Participants brainstorm to produce a list of possible relationships and then arrange them so as to show the direction of causal flow. Impacts can be weighted (use colors or differing types of line) to reveal relative importance, sorted into primary/secondary/tertiary, past/present/potential, and negative/positive links. This method can be applied to conceptual issues such as reasons for and impacts of alcoholism or car accidents, for example, or to more immediate concerns such as environmental pollution or the impact of a project or institution.

Diagrams can be sketched swiftly, to spontaneously explore a specific issue in greater detail, or more comprehensively, identifying the ramifications of events. The exercise can become too complicated to allow reasonable analysis. It is important to ensure that significant or negative links are not ignored. Flow Diagrams are helpful for rapid triangulation and are good subsidiary exercises alongside other tools because they avoid deflecting informants from the task in hand.

This is a useful educational tool for explaining linkages inherent in the natural world, or human intervention in biological energy cycles. It can be highly effective in collaboratively planning an agenda for action.

The 'Problem - Solution Tree' is a variant on this exercise, in which flows of problems and their consequences are matched to appropriate solutions.

☛ refer to Appendix X II for an example of a Physical Map and Flow Chart

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## VII RANKING & SCORING MATRICES

This type of exercise is probably the most potent tool for analyzing information. Matrices reveal the criteria and assumptions which underpin people's behavior, choices and perceptions. They can be used to discover the varying importance that people attach to particular belief and perspectives.

A matrix consists of a column of comparable items and a row of criteria by which each item will be measured. For example, tree species could be discussed in terms of fruit, fodder, fuel, shade, cost, growth speed, availability and aesthetics. A matrix works best with less than seven items. The items are cross-referenced to the criteria and a number indicating relative importance of each criteria is placed in every box. This number can be a *rank* or a *score*.

- If ranking is used, the numbers refer to the rank order in which the items are perceived relative to each other and relative to the particular criteria used.
- Scoring can be conducted in a number of ways. Each box can be scored out of a fixed number (5, 10 or 100 are common), or a fixed number of counters can be distributed for each column or row, or a fixed number of counters can be distributed for the entire matrix. This is called closed scoring and works well in promoting consensus because the group must decide (and discuss) together how many counters to distribute to each box.
- Alternatively, no limit may be placed on the number used in any box. This is called free scoring and generates a wider range of scores which may exaggerate differences or may focus discussion on the most important issues. Free scoring is most useful at the opening stages of a discussion or when unfamiliar issues are raised. Summing the numbers across rows or columns is unworkable because each criterion has different importance. This could be offset by weighting the criteria themselves, but is likely to become mathematically incoherent.
- *Preference Ranking* is a type of matrix in which each item in the list is ranked against each of the others. This allows the emergence of consensus on which of the items is preferred over the rest. It is vital to be sure that comparisons are valid and choices complementary. This exercise is best conducted with groups rather than individuals and can be used to discuss possible options.

Keep things simple. It is vital to ensure that all of the criteria are expressed in a positive sense. For example, a matrix which scores income sources according to money gained, reliability, and investment needed will be fatally flawed because investment needed is actually a negative way of describing one criteria where the other criteria are put positively.

Scoring matrices in several different ways with the same group (or in the same way with different groups simultaneously) can reveal biases and inconsistencies in the weighting of factors. For counters, use local materials, such as stones and seeds (flat ones do not roll away). The matrix outline can be etched into the ground. It may be necessary to ensure that the person placing the counters is not a domineering character who manipulates the group's consensus.

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Matrices can be used to examine a large range of tangible issues as well as more conceptual aspects, such as conflict and political power. They are helpful in filtering out possible choices in the final stages of a decision and choosing between alternative action strategies. The process of filling a matrix forces the outsider to listen to the discussion, lends itself to triangulation, is accessible to all, and reduces people's nervousness by focusing attention on the exercise rather than person to person contact. Limitations include the fact that criteria are not weighted, the matrix only compares items which are already similar, the difficulty of explaining the process of constructing the matrix, and getting started.

☛ refer to Appendix XIII for examples of Ranking Scoring and Preference Ranking Matrices

## VIII. OTHERS

- *Pie Charts* are circles divided into segments to represent proportions of the whole. They are especially useful as rough estimates or quick exercises to check information and can be helpful for people who are reticent about public speaking or using a pen.
- *Wealth Ranking* is a complex exercise, used for social research and poverty reduction programed. Each household in a community is noted on separate pieces of paper. These sheets are ranked in order depending on the criteria that local people use to describe well-being or wealth. Symbols may be developed to represent assets. This is useful for grouping community members according to wealth and for assessing local perceptions and indicators of poverty. Sensitivity is important in initiating this tool because the discussion generated can intrude on people's privacy.

While vital for social sector programs, wealth ranking may hold limited use for NRCA except where checking on whether the benefits of a project are socially equitable or on the relationship between wealth/poverty and environmental practices.

Several exercises have been tailored to suit 'Participatory Evaluation', in which local people may provide feedback on the progress of a project or may independently monitor changes in the local environment. This process has ramifications for NRCA's environmental wardens and could strengthen outreach or decentralization initiatives (contact the authors for more information).

There is an enormous variety of warm up exercises which focus, for example, on group dynamics, listening skills or building rapport between facilitator and informant.

☛ refer to Appendix XIV for an example of Wealth Ranking

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## VIII. SEQUENCING OF METHODS

Flexibility and the usage of combinations of tools are vital to successful PRA. Much of the strength of participatory techniques is derived from the way in which the process and outputs of one method can lead into and reinforce another. This continuity enhances the quality of discussion and allows for further probing questions. It is important to be creative with the order in which the exercises are introduced. Be prepared to switch to another exercise if the current one is problematic. Allow more time for sequences of methods than you expect will be necessary.

The following should not be understood as a fixed guideline, but rather as a series of suggestions which must be customized to suit the needs of each situation.

- SSIs must be used continually during fieldwork. Interview the diagram and the people. The diagram reveals as much about those who drew it as about the issues represented.
- Transects may be a good starting point or may follow from discussions concerning changes over time.
- Mapping exercises are frequently used in the preliminary stages of fieldwork and can lead either to or from Transects. *Resource maps* may be followed by matrix exercises. A map tends to adapt and expand as the meeting continues and it can be useful to refer back to it to clarify issues that arise subsequently.
- Time Charts are often used in conjunction with Transects and typically lead into matrices or flow diagrams.
- Venn diagrams can be followed by matrix exercises which break down the participants' perceptions of the importance of certain relationships into prioritized components.
- Flow Diagrams may follow from maps, Time Charts and matrices, to investigate wider issues or specific points in greater detail. They may also be used to initiate discussions.
- Ranking and Scoring Matrices are generally used after other exercises (especially maps and Transects) to order and analyze the information revealed. They are good activities to fall back on if discussions falter or become entrenched because they help to clarify the meeting's purpose. Preference Ranking may be used as an introduction to a more detailed matrix or as a means to reach a final decision by rejecting the more unsuitable options.

There are several advantages of doing group exercises on the ground rather than on paper. Diagrams drawn on the ground are erasable and easily changed or extended, are accessible so that all can see and contribute, become the focus of attention and reduce nervousness, do not marginalize people who are not confident with a pen. This process stimulates debate, allows triangulation to check information, reveals the potential for consensus, and empowers people to think in terms of what they have rather than what they do not have. Information presented visually reinforces the spoken or written word and allows a simple representation of complex issues.

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## PREPARING FOR FIELDWORK

### ○ *Selecting Teams*

Groups should be chosen so as to consist of men and women, experienced PRA facilitators, a mixture of technical knowledge (for example, forester with sociologist and economist) and of local knowledge, and people of differing seniority who have an appropriate personality. Pairs or groups of three seem to be the most flexible.

### ○ *Writing Up*

As we discovered, it is efficient for one facilitator to prompt discussion while another takes notes. An unobtrusive, subtle, small pad is best. It is vital to write up field notes as soon as possible, distinguishing between the *information gathered* and *your impressions of the process of gathering it*.

### ○ *Five stages of report writing*

- Collect the Information by Objective. Prepare thoroughly for fieldwork,
- Organize the Information. Group it by subject, and outline the report (one or two pages),
- Analyze the Information. What is important? Surprising? What are the implications? What should be checked or reinvestigated?,
- Write Up. Divide sections between the group.
- Review Report. Together as a team.

Hold review sessions to critically examine both the information and your own behavior. Attribute diagrams (or copies) to the participants, noting dates and informants' names.

### ○ *Logistics*

Make all practical arrangements ahead of time, but be aware that things never go according to plan.

### ○ *Last minute things to remember*

- Clarify each facilitators' role and decide how to introduce the group's purpose,
- Think about how to deal with saboteurs, dominators, and potential problems,
- Discuss the 'Panic Factor' (i.e., the uncomfortable five minutes),
- Analyze yourself, your motives and expectations,
- Wear appropriate clothes. No Sunglasses,
- Listen, Don't Lecture. Be Relaxed.

***Embrace error, Fail forwards and USE YOUR OWN BEST JUDGEMENT AT ALL TIMES***

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## LESSONS LEARNED DURING THE WORKSHOP

Most of the trainees had never been exposed to participatory research methodologies. This short course functioned as an orientation, rather than comprehensive training. Many issues were dramatically simplified. The workshop aimed to familiarize participants with a limited range of the tools and philosophy involved in this intricate and subtle technique.

- *While no participant should claim specialist knowledge of PRA based on the two days of exposure, important principles and lessons were learned during the workshop including*
  - The technical tools are reinforced by a cohesive and pragmatic philosophy of participation, and *vice versa*
  - The facilitator's role is as catalyst and co-analyst, not leader of the discussion,
  - Sustained contact with communities is vital,
  - Communities are not monolithic, but divided into indistinct and overlapping groups. Facilitators must be aware that several politicized agendas may (co)exist,
  - Reality can only be understood from several perspectives simultaneously
  - Personal qualities, such as sensitivity, intuition and integrity, are important in facilitators,
  - Local people must reach their own decisions themselves,
  - Discussion is more important than consensus,
  - The mechanics of project cycles and institutions hamper effective PRA
  - Outsiders must resist the temptation to order reality according to their own preconceptions and objectives,
  - PRA is evolving across the world in many forms and relies on sharing good practice between facilitators

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## **PART II: CHALLENGES FOR A NEW VISION OF PROTECTED AREA MANAGEMENT**

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### **INSTITUTIONAL CHALLENGES IN ADOPTING A PARTICIPATORY APPROACH**

The institutionalisation of PRA in a manner which positively affects office culture is a major challenge. Organizations tend to standardize, centralize and impose top-down targets which impede or prevent the open-endedness, flexibility, creativity and diversity of effective PRA. The institutionalisation of PRA within the NRCA and other organizations requires a reversal of this tendency.

#### **RESPONSIBILITIES OF MANAGERS AND DECISION MAKERS**

○ *A long term commitment to process*

- going 'beyond' projects to promote a participatory development approach

Focus on process as well as products. Managers should highlight the importance of process through the design of appropriate institutional mechanisms which promote the spread of participatory methods within the organization. Support from influential managers is vital for enabling participatory approaches to become core professional activities.

○ *Change in Procedures and Implementation*

- adjusting to the needs and dynamics of modern conservation

Participatory approaches need to be incorporated into the procedural and operational practices that make up the organization's operating system and must be linked to aspects of program planning, management and assessment.

PRA should be built into Protected Area programs at the beginning of efforts to expand the capacity of communities, user groups and organizations to be effective co-managers of the environment. PRA and related participatory approaches should be piloted on a small-scale initially and implemented primarily through local institutions.

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○ *Reform of Institutional Management and Styles*

- restyling office culture to meet the demands of community-based development

There needs to be a transition from management styles based on hierarchy, inhibited communications, and management by directive (command and obedience relationships) to more organic styles that encourage lateral communication, collegial authority, and flexible roles and procedures. Management by objectives should create conditions that encourage employees to be participatory in their work with each other, and not just during field visits. Commitments among staff to encourage joint actions between Protected Areas and local communities should be rewarded and incentives provided. The organizational culture should also provide opportunities to expand the body of corporate experience through action-research and be flexible enough to enable experimentation.

## **RESPONSIBILITIES OF PROGRAM AND FIELD STAFF**

○ *Action-Research Response Teams*

- extending participatory methodologies to the field

In an effort to meet environmental management objectives, it is recommended that the NRCA establish small, self-managed interdisciplinary teams (integrating various levels of the hierarchy) of practitioners and trainers in participatory approaches. The teams must have knowledge and experience of PRA or associated methodologies. They will also require the capacity to deal with complex community-based environmental issues in collaboration with Protected Areas staff, local environmental partners and communities. These teams could support pilot learning processes with gradual/phased scaling-up, depending on local conditions and environmental options.

○ *Focus of Regional Centres*

- decentralization

The first NRCA regional offices are about to be established to monitor environmental activities and increase environmental awareness. Active lines of communication are planned to link regional offices with NRCA headquarters staff. This should enable Environmental Wardens to liaise closely with Action-Research Response Teams in assisting development of community environmental management.

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○ *Networking*

- expanding dissemination networks to encourage the spread of ideas and techniques

Mainstreaming participation is constrained by the difficulties of sharing information. Networks are an important instrument for disseminating information and organizing action for institutionalizing participatory concepts and practices. Action-Research Teams will require the capacity to exchange information with other institutions involved in dealing with environmental issues, arrange and carry out workshops, and, promote good practice through dissemination of information. In this way, participation in Protected Areas can become an important instrument for developing and implementing strategies for institutional change.

☛ Refer to Appendix XVIII

### **ENABLING PARTICIPATORY STRUCTURES**

Training alone will not convert a conventional technically-oriented institution into a people-centered one. In adopting a participatory approach the three areas outlined above must be addressed, namely, the creation of a new methodology for field work, new learning environments for professionals and local people to develop outreach capacities, and new institutional structures which improve linkages with environmental partners. Figure 1 below highlights these three areas as intersecting circles which represent the three fundamentals of institutionalizing participation: technical knowledge of the methods, freedom to innovate and, organizational support. The most effective actions lie in the overlapping central sector.

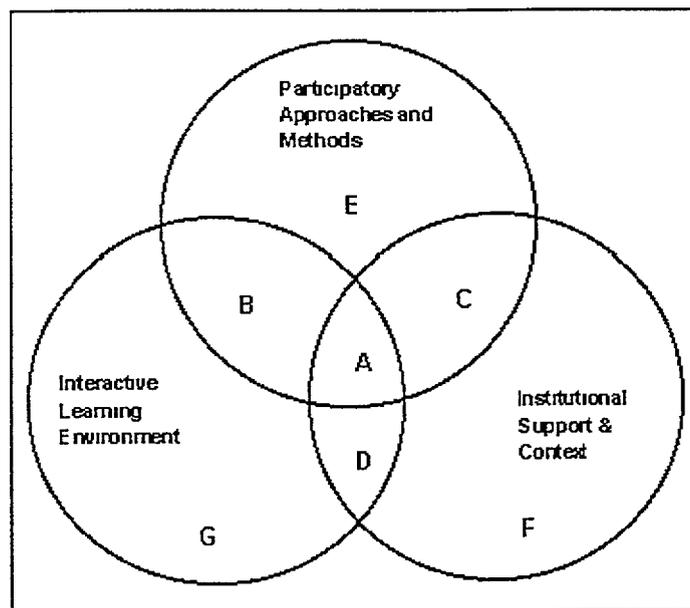


Figure 1 Institutional Facilitation of PRA

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- ***Participatory approaches and methods*** - the support of local innovation, respect for diversity and complexity, and the enhancement of local capabilities, represented by the ECAB circle
  - ***Interactive learning environment*** - encouragement an open-minded and sharing attitude, commitment and interest, contributing to experimentation and action represented by the GBAD circle
  - ***Institutional support and context*** - the spread of participatory methodologies between and within institutions This is represented by the FDAC circle which occurs when a whole organization shifts towards participatory methods and management, and where there are informal and formal linkages between different organizations

### ○ *Additional Considerations*

The institutional adjustments which NRCA must make in order to adopt a participatory approach are not without obstacles. The rigid cyclic nature of programmed and scheduled input and output targets, sometimes self-imposed, sometimes imposed donors, all militate against sustaining the momentum of process driven participation objectives. Development partners must be aware of NRCA's responsibilities to meet targets of sustainable development, even if this requires adjustment to project targets. If the agenda for action is too deterministic, PRA can easily become marginalized or inappropriately used, and institutional objectives to supporting localized management regimes will be unsustainable.

Intensive training of programmed and field staff in participatory techniques is a precursor to institutionalizing environmental co-management options with communities and local NGO partners. Orientation in participatory methodologies for key personnel will assist in the support of community-directed field based activities and should be encouraged.

- For more information, please refer to Appendix XV, Common Organizational Constraints

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## **PRA AND CO-MANAGEMENT OF NATIONAL PARKS AND PROTECTED AREAS**

Co-management refers to an appropriate division of responsibilities for natural resource management between specified national and local governments, civic organizations and local communities. The concept of co-management has grown out of recognition that centralized forms of control over resources have failed to halt resource degradation and that local level control may be more effective where there is a vested interest in exercising management rights. Authority is distributed between interested parties so as to promote both macro level policies and local requirements. This kind of partnership means the sharing of products, responsibilities, control and decision making authority between users and institutions.

The devolution of Protected Area management to local communities does not mean that state agencies have no role. A central challenge will be to find ways of allocating limited government resources so as to obtain widespread replication of community initiatives in protected area management.

Management options range from the delegation of authority to NGO partners to enhance local capacity to manage resources, to direct hands-on support for community based projects which promote environmental awareness and reduce resource degradation. However, the ability to cement effective partnerships requires a commitment to a decentralization process that actively includes and values local knowledge and ability. This necessitates a responsive government in which local people's claims and interests are taken seriously, to the advantage of all parties.

○ *Participatory Appraisal techniques are vital to this process in several ways*

- recognizing local systems of knowledge and management

Despite the pressures that increasingly undermine local knowledge and skills, Protected Area plans must start with what people already know and do well, so as to secure their livelihoods and sustain the diversity of the resource base on which they depend.

- forming representative institutions and social organization

Experience shows that, where the development of community based organizations is a priority, the flow of benefits from a project is likely to remain constant or increase after external funding is withdrawn.

- assuring local rights to resources

If people understand that their specified use of the local environment is safeguarded, they will be more interested in supporting protection measures, possibly including a role in enforcement of legislation that they perceive as benefiting themselves.

- 
- increasing the resources available to meet fundamental needs

Greater self reliance and reduced dependency on external resources may result from activities which attempt to satisfy local needs alongside broader policy objectives

- promoting participation in planning, management and evaluation

Where local communities fully participate in the design, implementation and monitoring phases of environmental management strategies, the results are likely to be more sustainable and effective than plans imposed by outside 'experts'

- forming efficient, workable, flexible projects

Local people are encouraged to maintain a stake in project goals and contribute towards indicators of success only where these projects are perceived as appropriate. This may mean low initial funding disbursements yet long-term community contact

Without secure rights of access to Protected Areas' resources, communities will consider these areas as lost resources that are not worth conserving for the future. Protected Area policies should allow local people to adopt a more central role in determining what is conserved, when, how and for whom. This means recognising that a community establishes a Protected Area in order to protect land *for* rather than *from* use

This vision of conservation implies new roles both for staff and local people. It calls for a greater emphasis on training in communication rather than technical skills. Professionals must learn to work closely with colleagues from different disciplines or sectors, as well as with rural communities

- For more information, please refer to Appendix XVI, A Typology of Participation

## **DONORS AND PRA**

At an Inter-Agency Group on Participation<sup>4</sup> meeting in 1997, representatives identified internal contractual and procurement procedures as one of the major obstacles to mainstreaming participatory processes. Staff feel constrained by what they perceive as overly centralised and bureaucratic processes. Donor reliance on product oriented and externally defined indicators, pegged to timelines of anticipated inputs and outputs, does not accord any measurement to the process of achieving set objectives. This lack of clear criteria to judge sustainability or success in meeting conservation and development goals, has clearly prejudiced aid recipients in the form of governments, NGOs and CBOs. The procedural and contractual models applied by donor organisations need to be revised if sustainable participatory development is to take place

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<sup>4</sup>

The Inter Agency Group on Participation (IPG) comprises representatives from member bilateral and multilateral donor agencies (World Bank USAID CIDA UNDP) as well as southern and northern non governmental international development organizations

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○ *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 achievements. Provide mechanisms which enable multiple procurement procedures linked to project size. Explore the use of decentralised funds which may have more flexible rules and procedures,
- Promote participatory monitoring and self-evaluation procedures which build in reciprocal accountability (communities - development organizations - donors),
- Encourage policies and programs which offer a range of development options based on locally defined criteria, needs and priorities,
- Encourage the establishment of small, self managed teams of practitioners and trainers within development organizations with the freedom to experiment, innovate etc ,
- Support pilot learning processes with gradual/phased scaling-up, depending on local conditions

Donors increasingly rely on some type of participatory study before releasing funds to support projects. This brings dangers as well as opportunities. As the corpus of PRA practitioners increases, quality of work may decline, PRA may be manipulated to licence 'top-down' activities, excavation of a community's power structure can leave vulnerable groups exposed, if contact is not followed through. In the long term, it may be better not to employ participatory strategies at all, then to employ them badly. NRCA should insist on an effective participatory component to programs that donors offer to support financially.

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## APPENDIX I

### BACKGROUND NOTES FOR NRCA TRAINING COURSE

#### WHAT IS PARTICIPATORY RURAL APPRAISAL?

Participatory Rural Appraisal (PRA) is a range of field-based anthropological research methods which have been devised to enable people to express themselves using their own terms and indicators. It allows people with low literacy skills to analyze their conditions and aspirations and prepare their own agenda for action. The methods employed allow the preferences and perceptions of community members to be elicited. This process often challenges the prevailing misconceptions and biases held by outsiders of local people's lives. Properly managed, PRA can promote the sustainability of genuinely empowering initiatives by imparting a sense of project ownership to the communities involved.

PRA has grown out of the interface between Social Anthropology and the process of development which seeks to decentralize planning and devolve responsibility onto community groups. It is a response to the growing awareness of the failures of conventional development approaches to meet the needs of fragile environments and communities. As such, it focuses on local capabilities and skills, alternative methods of resource management and indigenous planning. PRA is more than an academic research method. It is a process, a vital component in a style of development which can be characterized as actively involving local people, being socially equitable, non-bureaucratic, inclusive, 'bottom-up' and multisectoral. The value of these characteristics is now recognized not only in international universities and NGOs, but also by major donor institutions such as the World Bank, United Nations and ODA.

There is a typical PRA process. The method is necessarily flexible to suit local situations and relies on the integrity, ingenuity and intuition of the practitioners. This course provides an orientation in PRA methods and explores the ways in which NRCA can use these techniques. PRA has a beguiling appearance of simplicity. It is an intricate and subtle methodology and thorough training by experienced personnel is essential before the techniques are employed in the field.

#### PRA AS RESEARCH METHOD AND CATALYST FOR CHANGE

Formal research methods traditionally measure 'objective' information which is based on the categorizations of people divorced from the situation studied, is subjected to tests of statistical significance, is quantifiable (at least in principle) and allows simplified comparisons between sample groups. PRA is an informal method which is used to explore the stakeholders' perceptions, attitudes, preferences and priorities. It attempts to portray the reality of villagers themselves and, if it fails to achieve this, the failure is often instructive. The focus is on the relationships between institutions and society and on the dynamic interactions between people and their environment. Emphasis is attached to listening skills, multidisciplinary, verification through triangulation checking, visual presentation of information and local participation in the collection *and analysis* of data. PRA supplements and extends formal methods by allowing the people to set the research agenda which examines their own behavior and by working with their incentives to manage change.

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Participatory research is a collaborative activity between facilitators and informants. It frequently involves a reversal of the traditional development process as, for example, outsider 'experts' learn from villagers and local people make decisions on management frameworks. The quality of communication with informants, rather than the statistical rigor of findings, is privileged. Samples are typically small and discussions open-ended. Research teams are generally comprised of professionals from a variety of backgrounds so that several intellectual perspectives are tied together in the problem solving exercise and so that the officials have direct contact with informants, instead of analyzing data collected about others by others. Women should always be represented on the team and, where possible, a member of the local community. Periods of fieldwork of between four days and several weeks are recommended and living, eating and sleeping in the study area is important.

## THE PRA PROCESS

The techniques often involve the presentation of information in visual forms, maps, models, diagrams and matrices. Experience shows that methods of research must be adopted to suit local cultural conditions. The medium used is rarely limited to paper and pencil and includes any local material that the community feels comfortable with, stones, lines on the ground, bottle tops and sticks are all valid methods for the transfer of information and have the added advantage of being erasable so that amendments and input from quieter individuals can be incorporated. Diagrams on the ground are more accessible to large groups. Copies of the information can be made to paper at the end of the session but an important assumption of the PRA process is that the community owns the data. Visual representation democratizes the flow of data by encouraging those who might be overshadowed by the group dynamics of a more formal discussion. The reliability of such information is assured by 'triangulation', using a variety of sources and methods to cross-check the veracity of the data.

The techniques outlined here are neither definitive nor fixed. They are highly context-specific. Indeed, the key to successful participatory research lies less in the use of certain tools than in the attitudes and flexibility of the facilitators. The outsiders must examine their own (conscious and unconscious) preconceptions and pre-empt the possibility of distortion due to differences in status, expectation and culture. The training of PRA researchers involves the honing of interpersonal communication skills as much as the acquisition of technical procedures. Stress is placed on building good rapport with informants, picking up non-verbal messages, adopting a listening and learning (not lecturing) mode and showing respect for, and interest in, the knowledge and status of informants. There is no orthodox method, the quality of the discussion prompted is at least as important as any particular methodology. Indeed, one of the major strengths of this technique is that it elicits informed spontaneous discussion and information on topics that would have been impossible to predict. The stock phrases of 'embrace error' and 'use your own best judgement at all times' reveal much about the philosophy behind PRA.

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## THE PRA TOOLKIT

The following is intended as basic information and will be fully explained during the course

### Semi-structured interviews

PRA assumes that conventional questionnaires may provide misleading information because they are inflexible and often prepared according to an outsider's agenda, rather than to reflect conditions on the ground. Semi-structured interviews involve a checklist of issues which may be used to guide discussions, allowing emerging points to be explored in depth. There is no substitute for sensitive questioning. Special attention to the facilitator's body language may be necessary - rather than hiding behind clipboards, the questions should be presented as a problem to be solved together. *Individual interviews* may be suitable for discussing sensitive topics, for exploring key people's views, or to build up representative samples. *Group interviews* may indicate the potential for consensus building. Groups may be encountered casually or by invitation and sub-groups should be set up if one section dominates the discussion. Focus groups can elicit information on special interests and may be necessary to bring out minority views.

### Ranking and scoring

Ranking yields a relative (rather than absolute) measure of the importance of a particular issue. This can be useful in structuring discussions, assessing the weight attached to certain activities or problems, probing implicit or complex decision or classification criteria and examining sensitive subjects (such as wealth). There are at least six of these exercises.

### Maps and diagrams

These are effective ways to record and transmit information, and the process of creation provides a forum for discussion and the development of consensus. Many of these techniques are suitable for resource use and livelihood studies. Participatory mapping provides data on the geography of an area as well as how people think in terms of the immediate environment. In this, as in most exercises, informants must be left alone to design the map in their own way. Historical maps reveal changes over time. A variety of diagramming techniques can be used to explore the influence of, for example, institutions or seasonality and may reveal perceptions on complex relationships and underlying causes.

The techniques themselves have been well known to anthropologists for many years. PRA is nothing new. The achievement is simply to have intellectualized these ideas and refined them for use by fieldworkers.

## INVOLVING LOCAL PEOPLE THROUGH PRA

PRA contributes to lowering project costs through community inputs, avoiding expensive mistakes derived from outsiders' misperceptions of local problems, as well as promoting participatory input into planning and post-project sustainability.

Community concerns are used as 'the thin end of the wedge' through which to promote larger and more

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generalized issues. Trust between communities and donors is methodically built up so that a compromise between local and strategic needs can be brokered. This approach can lead to a trade off between incorporating local and strategic development issues into projects, creating a space for local management.

PRA shows communities that they have a stake in the development process and prepares them to take responsibility in the planning and management of projects. By strengthening the community participation component, PRA works towards ensuring that villagers clearly understand that it is in their best interests to take control of their local environment once outside support is withdrawn. It empowers them to take an active role in the development of their community.

PRA is part of a continuing process involving local people in the design and implementation of initiatives to address their priorities. This process educates people to think in terms of group action and encourages natural leaders to emerge. The act of consensus building is instructive in itself and can mitigate or resolve wider conflicts of opinion. This is often the first step towards establishing a Community Based Organization.

By revealing relationships surrounding the people affected, the PRA process involves the communities themselves in seeking appropriate solutions to local problems. This means that interventions are based on locally managed initiatives which are likely to be low cost, appropriately targeted and sustainably managed by the people themselves. By allowing people to describe their lives in their own words, PRA focuses on processes and relationships in a way inaccessible to indicators that are static and unresponsive to the changing conditions which vulnerable people face.

## **PRA AND THE NATIONAL SYSTEM OF PROTECTED AREAS**

The local management of local environments has special resonance for NRCA's proposed system of environmentally protected areas. The PRA process prepares the ground for a style of management where local people are entrusted as guardians of protected areas. NRCA should be aware of the value of involving communities in this way. The course will fully explore the opportunities to promote co-management of natural resources, through PRA.

## **PRA IN JAMAICA**

The only extensive use of PRA to date was 'A Participatory study of Urban Poverty and Violence in Jamaica', carried out by Meera Shah (a colleague of the course facilitators) in 1995 for the World Bank. This report formed the baseline data in the preparation of the Jamaica Social Investment Fund. Shah trained a handful of UWI students during her fieldwork, but Professor Chevannes (Dean of the Faculty of Social Sciences and contact point for Shah) feels that the existing corpus of PRA knowledge on the island is fragmented to the point of being non-existent in practical terms.

The course facilitators successfully and consistently employed PRA techniques in the community development component of their work for NRCA in the Saint Elizabeth watershed.

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## IN SUMMARY

RRA is a package of closely related techniques which aim to portray the conditions of local people using their own terms, rather than externally imposed indicators. The aim is to avoid the biases inherent in outsiders' perceptions, often derived from fieldwork which tends towards researching a) places that are accessible by road and near major towns, b) at accessible times of the day and year, and c) people who are affluent enough to offer refreshments or powerful enough to dominate the discussion and influence events to their own advantage.

PRA explores underlying factors and processes. It accepts that the state of society or the environment is not static and reflects the complex and changing nature of the events which lie behind the real world. It does not attempt to reorder the world to suit the form of externally imposed viewpoints. Planning which ignores the fickle human dimension of life risks undermining its own foundations.

Jacqueline Grant & Toby Shillito  
Course facilitators  
October 1997

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## APPENDIX II

### TERMS FOR PARTICIPATORY APPROACHES TO LEARNING AND ACTION

- § Agroecosystems Analysis (AEA)
- § Beneficiary Assessment
- § Development Education Leadership Teams (DELTA)
- § Diagnosis and Design (D & D)
- § Diagnostico Rural Participativo (DRP)
- § Farmer Participatory Research
- § Groupe de Recherche et d'Appui pour l'Auto-promotion Paysanne (GRAAP)
- § Methode Active de Recherche et de Planification Participative (MARP)
- § Participatory Research Methodology (PRM)
- § Participatory Rural Appraisal (PRA)
- § Participatory Rural Appraisal and Planning (PRAP)
- § Participatory Technology Development (PTD)
- § Participatory Urban Appraisal (PUA)
- § Planning for Real
- § Process Documentation
- § Rapid Appraisal (RA)
- § Rapid Assessment of Agricultural Knowledge Systems (RAT)
- § Rapid Catchment Analysis (RCA)
- § Rapid Ethnographic Assessment (REA)
- § Rapid Food Security Assessment (RFSA)
- § Rapid Multi-Perspective Appraisal (RMA)
- § Rapid Organisational Assessment (ROA)
- § Rapid Rural Appraisal (RRA)
- § Samuhik Braham (Joint Trek)
- § Soft Systems Methodology (SSM)
- § Theatre for Development
- § Training for Transformation
- § Visualisation in Participatory Programmes (VIPP)

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## APPENDIX III

### ORIGINS OF PARTICIPATORY APPROACHES

The participatory approaches used today have evolved from several sources and traditions. Five of these have been particularly important:

**Activist Participatory Research** Inspired by Paulo Freire (1968), this approach uses dialogue and joint research to enhance people's awareness and confidence and to empower them to take action. Although its special focus on the underprivileged and on political action has limited its spread, its key contributions to the current approaches lie in its recognition that poor people are creative and capable and should be empowered, while outsiders have a role as catalysts and facilitators.

**Agroecosystem Analysis** Developed by Gorton Conway and colleagues, this approach draws on systems and ecological thinking, combining the analysis of systems (productivity, stability, sustainability, equity) with pattern analysis of space, time, flows and relationships, relative values and decisions. Among its major contributions to current approaches are its use of transects, informal mapping and diagramming and the use of scoring and ranking to assess innovations.

**Applied Anthropology** Although conventional social anthropology has been mainly concerned with understanding rather than changing, applied anthropology became more recognized in the 1980s as a legitimate and useful activity, especially in its ability to help development professionals to appreciate better the richness and validity of rural people's knowledge. It also emphasizes the benefits of unhurried participant observation and conversations and the importance of attitudes, behavior and rapport.

**Field Research on Farming Systems** Two branches of this discipline simultaneously revealed on the one hand the rationality of small and poor farmers and on the other their activities as experimenters. Farmers' participation in agricultural research therefore became a focus, especially in the context of complex, diverse and risk-prone farming systems.

**Rapid Rural Appraisal** Emerging in the late 1970s, this was a reaction to general dissatisfaction with the biases inherent in the "rural development tourist" approach, which tended to hide the worst poverty and deprivation. It was also a reaction to the tediousness, expense and frequent inaccuracy of the conventional process of questionnaire surveys. In answering the question "*Whose Knowledge Counts?*" it sought to enable outsiders to gain insight and information from rural people about rural conditions in a cost-effective and timely manner.

APPENDIX IV

CARTOON



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## APPENDIX V

### TEN POINTS FOR SENSITIVE INTERVIEWING

- 1 Prepare as a team and agree a Team Contract
- 2 Use a Checklist or Interview Guide
- 3 Be Sensitive and Respectful to everyone involved
- 4 Use Visualization methods to enhance participation and dialogue
- 5 Listen and Learn
- 6 Ask Open-ended Questions using the Six Helpers  
**Who? What? Why? Where? When? How?**
- 7 Probe Responses Carefully
- 8 Judge Responses - Facts, Opinions, Rumours
- 9 Verify through Triangulation (cross-checking)
- 10 Record responses and observations fully

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## APPENDIX VI

### TYPICAL COMMUNICATION BLOCKS

#### **Solution or advice**

We imply indirectly "You are too stupid to figure out the problem, so do it my way your feelings are not important"

#### **Orders**

Giving orders can provoke resentment as people are not given a choice and their feelings have not been considered

#### **Threats**

We use our power to tell people what will happen if they don't do it our way Their feelings are not important

#### **Moralising or Lecturing**

When we tell people what they should or ought to do, we value our own values more than their feelings

#### **Criticism or Ridicule**

We deny people's feelings by telling them that they are bad people and do not have the right to feel the way they do

#### **Praise or Sympathy**

We try to substitute or cover up their feelings with another feeling These statements avoid the real issue

#### **Questioning**

By trying to get people to think logically, we deny their feelings

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## APPENDIX VII

### TRICKY TRANSCRIPT

Please read the following passage and think about whether the questions are posed well or badly. Can you phrase them in a better way? What types of bad/good questions are there?

**Field Visit, December 1990 Group of Old Men, Googu Village, Ghana**

Q What is the meaning of Googu?

A It is the name of their clan and the clan to which their ancestors belonged

Q Over the past few years has the harmattan changed? Is it later or earlier? If there was a change, what has brought this about?

A There have been no rains, and this has caused the harmattan to delay. This time it should have been very cold, people would not even want to bathe. This time it still looks warm, this is because the rain still wants to fall since it hasn't rained enough.

Q Is the size of the population increasing or decreasing?

A It is always increasing.

Q If it increases, is this good for you?

A Well yes.

Q Why is there a shortage of land? A Because of the influx of people in the area.

Q Is the population only increasing because of the influx from outside, or is it also because of a higher birthrate?

A Well the number of births is also increasing.

Q When was there no school here, where did your children go for schooling?

A Sepeliga.

Q How were the children able to go that far?

A If there was a car we'd go by vehicle, otherwise we'd walk.

Q Are there any traditional healers or herbalists in the village?

A Yes there are.

Q What fees do they charge, and how does this compare to government services?

A The traditional healers charge less.

Q So do you find the traditional healers better than government health services?

A No the hospital is good, much better. But sometimes you have to have someone lead you/help you. If there is someone there to help you it's okay, but otherwise you might not get treatment.

Q Do you mean you need someone to pay bribes, or someone very influential to help you?

A No, it's not the money, but you need an influential person to talk to the doctors to make sure you get assistance.

Q Most of you don't like to go to hospital. Is it because the drugs are very expensive, or do you need someone to lead you there?

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A It is because they don't have influential people to help them. Others don't like the idea of going to hospital, some don't like the drugs and don't trust them. Sometimes if someone dies after taking medicine, others come to lose trust in those medicines. The herbalist comes to treat you at home. Whether you get well or die, at least you die at home.

Q For some traditional practices have there been changes over time? Or is it still like the time of our grandfathers?

A It has changed. In the past, funerals took 12 days. Nowadays it may take seven.

Q What has caused this change?

A If you do it for 12 days, other things may come in, and take longer. It takes a lot of food. It is expensive to do this.

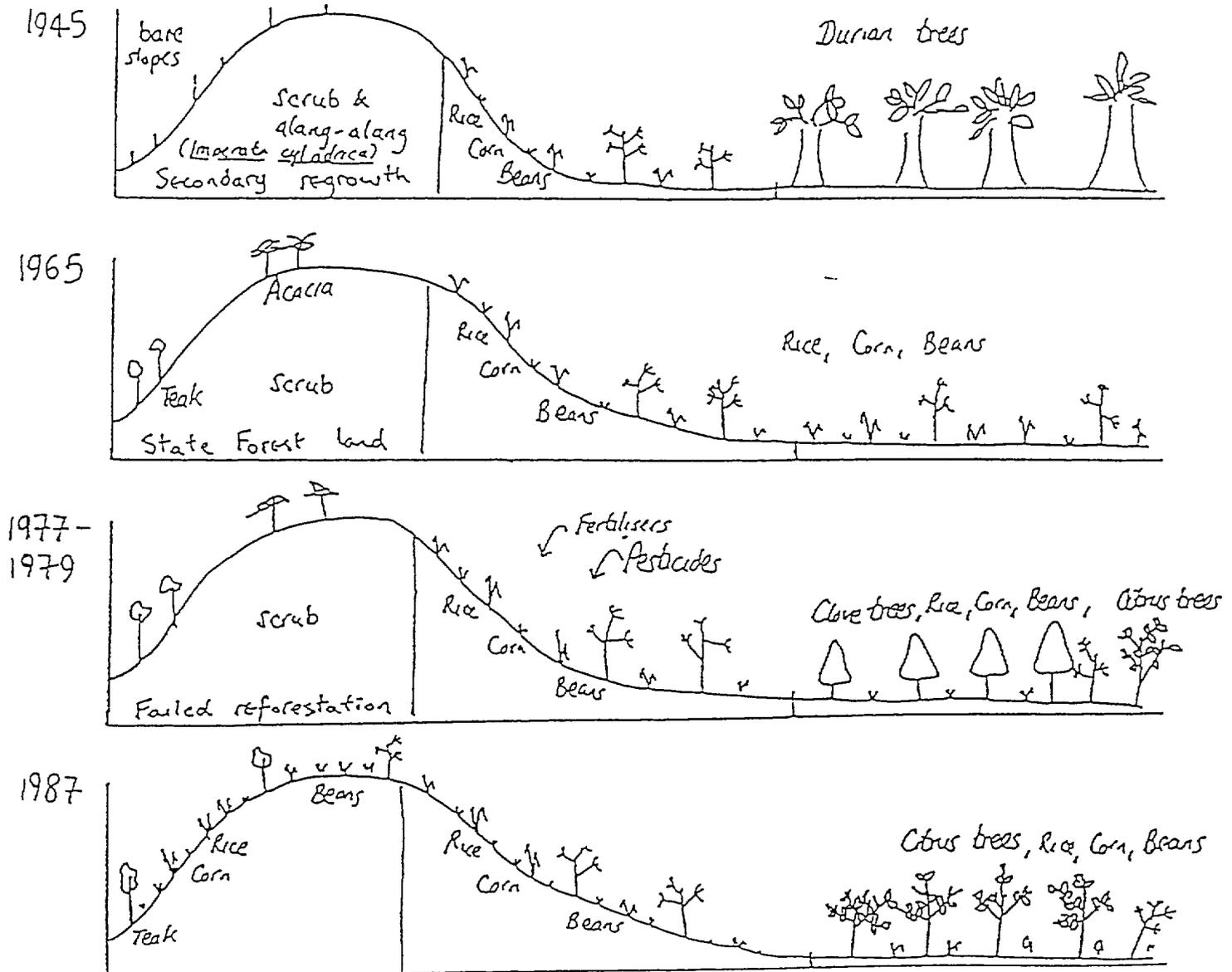
Q Why did your fathers make it 12 days? Did they have more food, or was it that there wouldn't be any problems during this time?

A No. It was just because they had enough food that they made it 12 days.

## APPENDIX VIII

### TRANSECTS THROUGH TIME:

#### Land use trends in Kate's Village - Java, Indonesia (1945-1987)

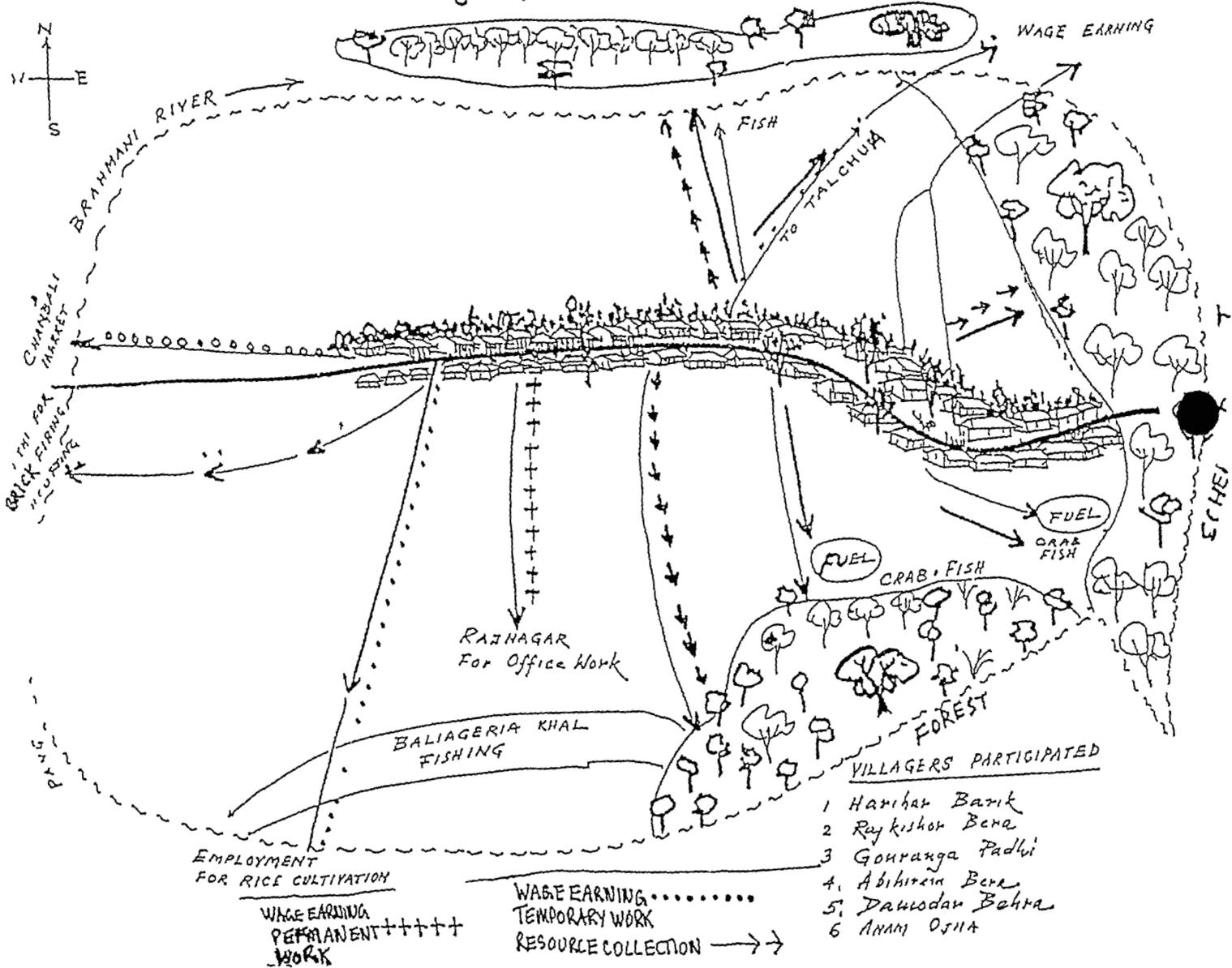


Historical transects Previous landscapes as a series of transects This example illustrates the numerous experiments with tree production on the agricultural land, following felling of the fruit trees, and the changing land use on the upland slopes, after deforestation during Dutch colonial times These historical transects can be drawn either during interviews with old women and men, or can be constructed by the investigators after interviews and discussions in the field

APPENDIX IX

RESOURCE AND MOBILITY MAP

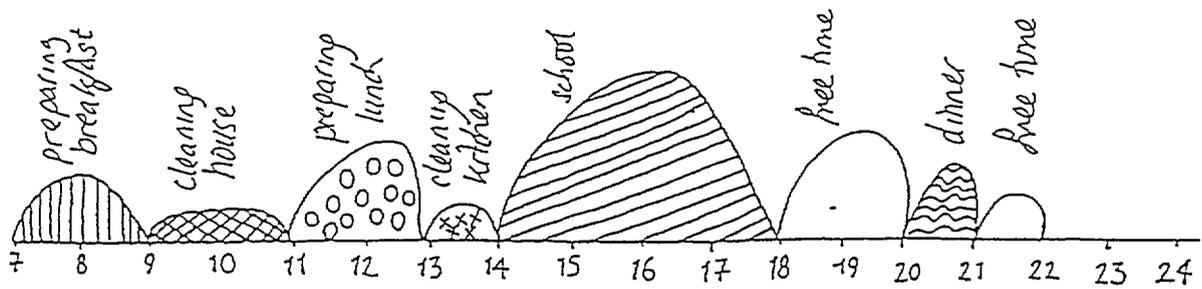
RESOURCE & MOBILITY MAP (MEN) OF DANGMAL VILL. OF BHITARKANIKA AREA



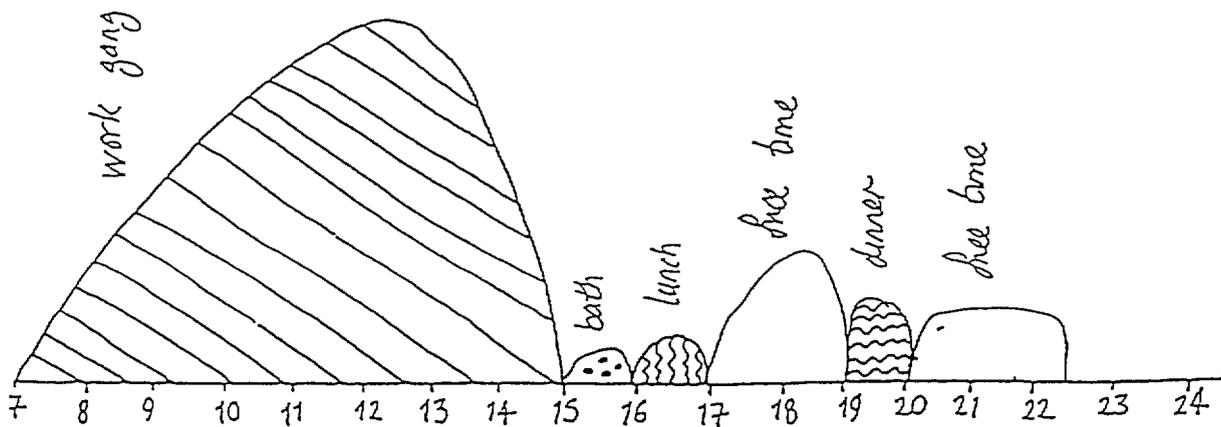
## APPENDIX X

### Daily routine of a young woman in a village in Cape Verde

Guyt I (1992) Gender Differences and PRA. IIED



### Daily routine of a young man in a village in Cape Verde



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**APPENDIX XI**

**VENN DIAGRAM**

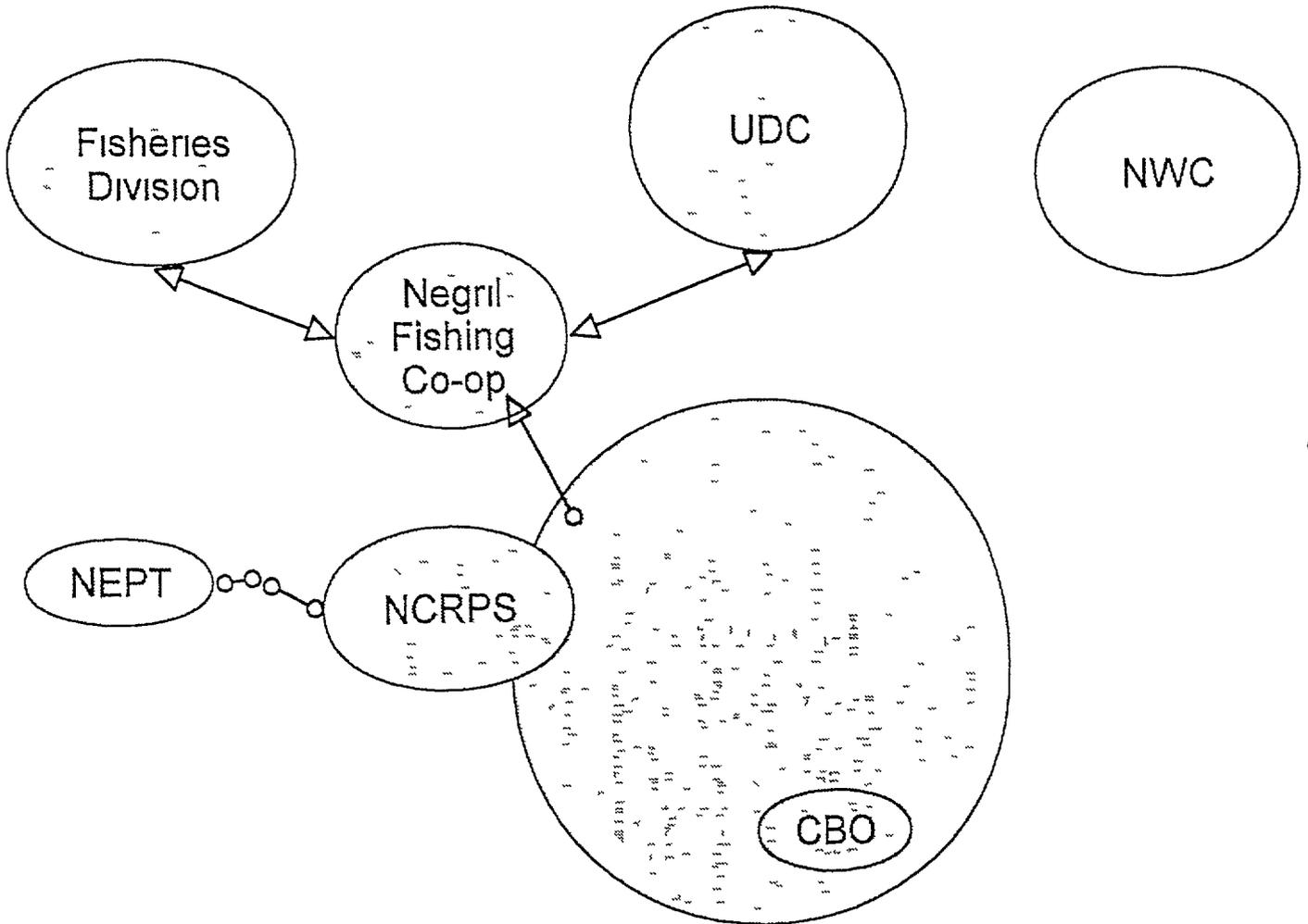
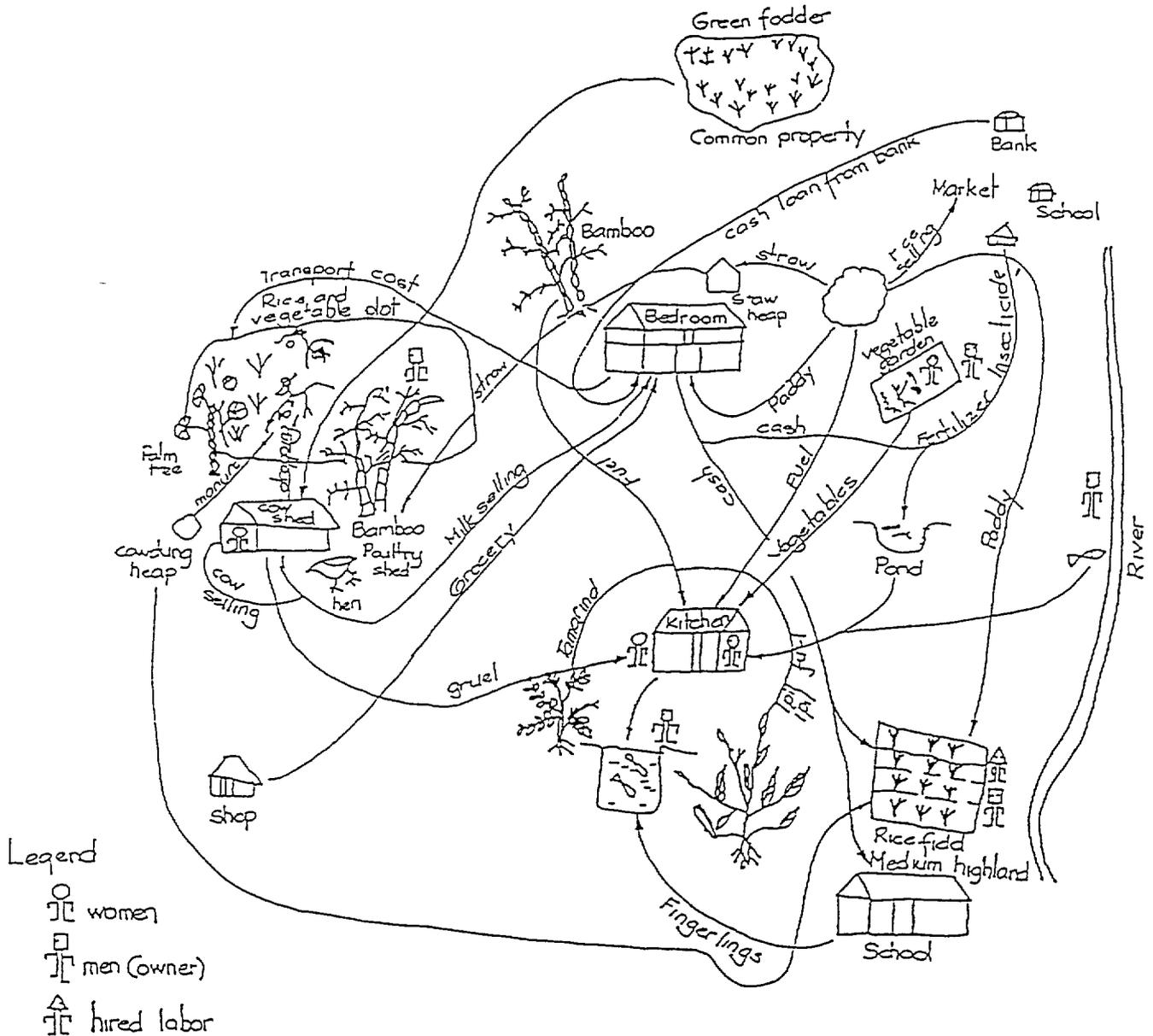


Diagram showing Little Bay Communities perception of institutional representation

size of circle = perception of importance of institution, spatial distance = degree of representation & contact, Arrows show perceived linkages between institutions - where arrows omitted, link is weak or non-existent Chain link between NCRPS & NEPT = community perception of them as one entity CBO refers to the Community Group at Little Bay

## APPENDIX XII

### FLOW DIAGRAM & PHYSICAL MAP



This diagram shows a wide diversity of enterprises exploiting own and common property resources like the river and grasslands. Linkages off the farm with banks, schools and markets are also shown. For most enterprises, specific persons involved (i.e. male, female, children or hired labour) are indicated. However the linkages between enterprises indicate flows of biological materials and cash and no gender relationships. Plot layout symbols for crop enterprises give little indication of the type or quality of the land resources being used.

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**APPENDIX XIII**

**The next three pages are  
Ranking, Scoring and Preference Ranking Matrices**

## HANDOUT

### Criteria and Ranking for RICE VARIETIES

Farmer's Criteria	RA SI	IR-50	IR-36	HIRAMO II	MASURI	NAGRASAL
Resistance to Pests	1	6	5	4	3	2
Drought Resistant	1	3	4	2	5	6
Length of Straw for Thatching	4	6	5	3	2	1
Market Price	4	3	3	4	1	2
Suitable for Light Soil	1	2	1	2	-	-
Eating Quality	4	2	2	3	5	1
Suitable for both Kharif and Rabi	1	1	1	-	-	-
Recovery of aged seedlings	4	4	4	3	2	1

1 = BEST , 6 = WORST

Scoring of Forest Species by Use

SCORES OF EIGHT TREES ACCORDING TO FIVE CRITERIA. <span style="float: right;">GROUP-1A</span>								
PHOOLWARI VILLAGE MATRIX RANKING TREES. <span style="float: right;">1 MINIMUM 6 MAXIMUM</span>								
	TEAK	HALDU	KHAIR	KALLAH	SADAD	BAMBOO	MAHUA	EUCALYPTUS
TIMBER	☆☆☆☆☆ ☆	☆☆☆ ☆	☆☆☆ ☆☆	☆☆☆	☆☆☆	☆☆☆ ☆	☆☆	☆☆☆
FODDER	NIL	***	**	***	***	***	NIL	NIL
FUELWOOD	NIL	NIL	☼☼	☼☼	☼☼	NIL	☼	☼☼☼ ☼☼
AGRICULTURAL IMPLIMENTS	△△△△△	△	△△△	NIL	NIL	NIL	△△	△△
MEDICINE	🌿🌿	🌿🌿	🌿	NIL	NIL	NIL	NIL	NIL
OTHERS	NIL	NIL	NIL	NIL	NIL	♣️♣️♣️♣️	♣️♣️♣️ ♣️♣️♣️	NIL

# PREFERENCE RANKING

PLUM TREE						
SPICE TREE	PT					
MANGO TREE	PT	ST				
READFRUIT TREE	PT	BT	BT			
ORANGE TREE	OT	OT	OT	OT		
ACKEE TREE	PT	AT	AT	AT	OT	
	PT	ST	MT	BT	OT	AT

- | RANKING           | SCORING |
|-------------------|---------|
| 1 ORANGE TREE     | 5       |
| 2 PLUM TREE       | 4       |
| 3 ACKEE TREE      | 3       |
| 4 BREADFRUIT TREE | 2       |
| 5 SPICE TREE      | 1       |
| 6 MANGO TREE      | 0       |

## APPENDIX XIV

### WEALTH RANKING (YOUNG WOMEN)

COMPOUND NO	AVERAGE SCORE	NOTES ON CLASS DIFFERENCES
33 1	8 12	large labour force livestock, money, big market more farming implements, food less intensive farming
11 3	24 26	labour force relatives abroad farming implements, some livestock + draught animals some amount of food available
7 39	33 37	some livestock + labour force but less than above some carpenters, masons farming implements, draught animals productive farmers
12 22 40 5 19 18 36 2 47 32 10 20 14 9 16 34 6 35 48 37 31 7 15 30 25 24 21 23 43 46	41 42 43 45 45 45 47 47 49 50 52 52 54 54 54 55 55 56 56 61 63 63 64 65 66 67 67 67	farm implements, civil servants small runnants + draught animals, livestock, skilful people, some labour
27 44	71 71	some cash, little bit of labour force, some livestock, no implements, draught animals
8 29 13 18 41 17 26	77 77 78 81 82 83 85	low labour force food difficulty cobblers, blacksmiths, no draught animals, no implements
45 39 42	95 * 97 * 100	old age no labour force, unhealthy, no draught animals, no implements, involved in farming on a minimal scale lack food no heirs, helped by relatives and neighbours

\* Compounds not involved in the village garden due to 38 + odd age, 43 → have own backyard, 45 → not static settler, 46 → new migrant

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## APPENDIX XV

### COMMON ORGANISATIONAL CONSTRAINTS

- Institutions are frequently organised on authoritarian rather than participatory management styles
- Management positions are often held on basis of seniority or research ability rather than management skills
- Creative innovation is rarely tolerated, for which disincentives are more common than incentives
- Institutional learning is difficult with a rapid turnover of staff
- Staff development is frequently in the form of refresher training where new facts are transmitted, rather than personal development encouraged
- Status divisions may be rigidly followed, e.g. researcher versus extension worker, social versus natural scientist, and limit sharing of perspectives and generation of new ideas
- Group work is frequently only seen in terms of meetings that actually stifle innovation rather than enhance it
- Participatory approaches are seen as being too demanding and challenging in terms of personal commitment and human resource investments, and therefore, too professionally risky
- Institutions focus on product, measurable results, rather than on process, the manner and means of achieving those results
- Lack of training to strengthen capacity leads to disillusionment and frustration of those organizations keen to use more widely the new participatory approaches

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## APPENDIX XVI

### TYOLOGY OF PARTICIPATION

#### 1 **Passive Participation**

People participate by being told what is going to happen or has already happened. It is a unilateral announcement by an administration of a project management without listening to people's responses. The information being shared belongs only to external professionals.

#### 2 **Participation in Information Giving**

People participate by answering questions posed by extractive researchers using questionnaire surveys or similar approaches. People do not have the opportunity to influence proceedings, as the findings of the research are neither shared nor checked for accuracy.

#### 3 **Participation by Consultation**

People participate by being consulted, and external people listen to views. These external professionals define both problems and solution, and may modify these in the light of people's responses. Such a consultative process does not concede any share in decision-making, and professionals are under no obligation to take on board people's views.

#### 4 **Participation for Material Incentives**

People participate by providing resources, for example labour, in return for food, cash or other material incentives. Much on-farm research falls into this category, as farmers provide the fields but are not involved in the experimentation or the process of learning. It is very common to see this called participation, yet people have no stake in prolonging activities when the incentives end.

#### 5 **Functional Participation**

People participate by forming groups to meet predetermined objectives related to the project, which can involve the development or promotion of externally initiated social organization. Such involvement does not tend to be at early stages of project cycles or planning, but rather after major decisions have been made. These institutions tend to be dependent on external initiators and facilitators, but may become self-dependent.

#### 6 **Interactive Participation**

People participate in joint analysis, which leads to action plans and the formation of new local institutions or the strengthening of existing ones. It tends to involve interdisciplinary methodologies that seek multiple perspectives and make use of systematic and structured learning processes. These groups take control over local decisions, and so people have a stake in maintaining structures or practices.

#### 7 **Self-Mobilisation**

People participate by taking initiatives independent of external institutions to change systems. They develop contacts with external institutions for resources and technical advice they need, but retain control over how resources are used. Such self-initiated mobilisation and collective action may or may not challenge existing inequitable distributions of wealth and power.

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## APPENDIX XVII

### TEN MYTHS ABOUT PRA

A wide range of myths about participatory methods, and particularly about participatory rural appraisal (PRA), have grown up and continue unchallenged by development practitioners, donors and academics alike. Here are ten myths that can be used for further discussion and debate (Scoones, 1995)

1 **That it's Quick**

While many of the techniques associated with PRA may be relatively cost-effective methods of encouraging dialogue, joint analysis and learning, the processes of participatory development that PRA and similar approaches encourage are slow, laborious and complex

2 **That it's Easy**

PRA methods are appealingly simple. This is partly why they have attracted so much attention. They are accessible to a wide range of actors, from villagers to field practitioners to academics. However, as any experienced PRA practitioner will note, the successful application of the approach requires many other skills, especially communication, facilitation and conflict negotiation skills

3 **That anyone can do it**

Anyone can carry out a matrix ranking, transect walk or mapping exercise with some success, but this does not mean that open learning leading to action will result. Attitudes and behavior of participants, the organisational context for planning and action and the wider political economy all affect opportunities for success. The fact that consultancy groups and large international aid bureaucracies are embracing the concepts and rhetoric of participatory development does not mean that their actions in the field will be successful. Wider issues of organisational change, management and reward systems, staff behavior, ethics and responsibilities have to be addressed too

4 **That it's *just* fancy techniques**

The popular and visible image of PRA is the array of techniques that have emerged over the past decade or so. These have proved effective and widely applicable. However, methods are only part of a wider shift being seen within development agencies, both government and non-government. These have much more far-reaching and radical implications than the adoption of particular approaches. Apparently success appears to be based on a constellation of interacting factors which combine the adoption of participatory approaches and ways of working, shifts towards a learning environment within organizations, and enabling institutional and policy frameworks that allow space for change and room for innovation

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**5 That it's based on particular disciplinary perspectives**

PRA has not grown out of universities and academic departments, it has grown from responses to practical experiences in the field. The main innovators have been field workers based in the South (but increasingly in the North too). PRA has deliberately drawn from a variety of disciplinary perspectives. This lack of disciplinary focus is sometimes seen as threatening (interpreted in various ways: not rigorous, unpublishable, unacceptably soft, etc) by academia. While students and practitioners demand support in these approaches, the teaching professionals have sometimes resisted. As a result, across the world, the universities have been the last to take up PRA and other approaches in course curricula and teaching/learning styles.

**6 That it has not theoretical base**

PRA is associated very much with practical situations and has been taken up most by people engaged in practical development activities. But this does not mean that it is without a rich theoretical underpinning. PRA is based on an action-research approach, one where theory and practice are constantly challenged through experience, reflection and learning. The dominance of theory over practice in most academic disciplines ensures that praxis-oriented PRA approaches are often not taken seriously. This is a shame as recent work has shown that issues thrown up by participatory approaches resonate with a range of philosophical debates within the social sciences.

**7 That it's a new invention**

PRA has evolved and continues to do so. It is not a magical package that has suddenly appeared from nowhere. As with all major shifts in thinking and practice, PRA has converged around dispersed and dislocated debates in a number of areas. Its lineage can be traced to early anthropological work (notably the methods used by the Manchester School in southern Africa from the 1940s), to qualitative research approaches prior to the hegemony of statistics and quantification, or as far back as two centuries to the Rural Rides of William Cobbett in England.

**8 That training is the answer**

One response to new ideas is that everyone should be trained in their application. The demand for training in PRA is phenomenal. This is potentially dangerous. Why? First, the demand far outstrips the supply of trainers jeopardising quality and follow-up. Second, the notion of training as a simple solution is flawed. Too often, organizations wanting training for staff have not examined their motives thoroughly and they have not explored the implications for their organization in terms of follow-on post training. Training is often conceived of simply as the putting on of courses (the shorter and cheaper the better). Ways of encouraging new ways of learning within organizations are rarely fully addressed. Training courses may be part of the answer, but they are not the only one.

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**9 That social actors involved are neutral**

Any engagement carries with it implications. Actors are never neutral, whether they are village participants or external agents. Interrogating the consequences of this is central to any action-research activity. The myth of the neutral, detached, participant-observing researcher/practitioner is deeply flawed. All actors are participants in some way or another, and these roles are unavoidable and need to be addressed. This necessarily affects the information gathered and the analyses performed. In PRA, all participants have responsibilities for their actions. The political and ethical implications of participatory action-research and development must therefore be unpacked, discussed openly with all and responded to.

**10 That it's non-political**

Actors involved in participatory research-action (or any research/development, activity for that matter) are not neutral, their actions necessarily carry with them political consequences. Power, control, authority are all part and parcel of the negotiation of engagement in participatory processes. Conflicts, disputes and tensions may be raised through engagement. All participants must be aware of this and not ignore it. Dealing with issues of power and control, conflict and dispute must necessarily be part of an action-research approach to development. This may mean taking sides, or it may mean taking a mediating/negotiating role. In whatever case, these are political acts.

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## APPENDIX XVIII

### PARTICIPANTS IN THE DECEMBER 1997 WORKSHOP

Name	Position	Organization
Novlette Douglas	Env Education Officer	NRCA Public Education Branch
Krishna Desai	Environmental Officer	NRCA Coastal Zone Management Branch
Sandra McKenzie	Environmental Officer/ Project Leader	NRCA Coastal Zone Management Branch Palisadoes-Port Royal Project
Tracey Powell	Assistant Team - Leader	NRCA Coastal Zone Management Branch Palisadoes-Port Royal Project
Michael Johnson	Conservation Officer	NRCA Watershed Management Branch
Selvyn Thompson	Conservation Officer	NRCA Watershed Management Branch
Wendell Miller	Section Head	NRCA Watershed Management Branch
Carla Gordon	Director	NRCA Protected Areas Unit
Frances Blair	Env Protection Officer	NRCA Protected Areas Unit
Nicole Smith	Environmental Officer	NRCA Pollution Control and Waste Management Branch
Charles McKenzie	Environmental Warden	NRCA Regulatory and Compliance
Michael Spence	Environmental Warden	NRCA Regulatory and Compliance
Anthony Gooden	Environmental Warden	NRCA Regulatory and Compliance
Gregg Wiggan	Environmental Warden	NRCA Regulatory and Compliance
Evan Gray	Environmental Warden	NRCA Regulatory and Compliance
Nedson Gardner	Environmental Warden	NRCA Regulatory and Compliance
Headley Clarke	Investigator/Enforcement Officer	Regulatory and Compliance
Winsome Townsend	Project Manager	NRCA-DEMO Project
Nella Stewart	Data Manager/ Coordinator	CDC-J
Paulette Jude	Technical Assistance Officer	NEST
Paul Burgess		NEST
Terence Cover	Public Relations Officer	NEST (STEPA)
Decton Hylton	Director - Sustainable Dev	NEST (ISJA)
John Meeks		NEST

PRA relies on informal networks of interested facilitators Please keep in touch and share your views and news

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