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RURAL ECONOMY

**Process, Perception and Power: Notes from “Participatory”
Research in a Zimbabwean Resettlement Area**

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Staff Paper 96-18

STAFF PAPER



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Allison Goebel is a PhD student in Sociology at the University of Alberta. Her thesis is on tree tenure, institutions, gender relations and power in natural resource use in a Zimbabwean Resettlement Area. This paper is based on part of the field work undertaken for her thesis during 1995-6. Acknowledgement is given to the International Development Research Centre (IDRC) for support through the Value of Trees Project, and the Young Canadian Researchers Award. This research is also supported by the Social Sciences and Humanities Research Council (SSHRC), and the University of Alberta. This paper was presented at the 1996 Learned Societies Conference held at Brock University, for the Canadian Association for Studies in International Development (CASID), June 2 1996. Thanks to Marc Epprecht, James Murombedzi and Donald Moore for their useful editorial comments.

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Introduction

"Participatory" methods in research, development projects, and rural extension in developing countries have been gaining popularity. Rapid Rural Appraisal (RRA), Participatory Rural Appraisal (PRA), and Participatory Action Research (PAR), for example, have developed alongside the growing interest and respect for indigenous knowledge, and challenges to top-down approaches to development projects and extension (Chambers, 1994: xiii). Meanwhile, in the social sciences and humanities, theoreticians have destabilized the construction of the academic as "collector" and "scientific" analyser of knowledge, of "facts". Instead, the researcher is pictured more as a facilitator of knowledge creation, a self-conscious interpreter of complex and often competing "stories". For radical research, this shift demands the use of methodologies emphasizing the interaction between researcher and "research subjects", and interrogating the categories and biases imposed by the researcher.¹

Parallel to these largely progressive changes, is the desire, particularly in the world of donor-initiated development projects and rural extension bodies, to get quick social-cultural information to satisfy the requirements of a project document or a departmental decree. Conscious that many project failures in the past have been related to lack of attention to social

¹ Feminist theory and research has been making these epistemological challenges for some time. See Geiger 1986, Harding 1987 and 1992, Hawkesworth 1989, Jagger 1983, Personal Narratives Group 1989 for a few examples of a vast literature that seeks to destabilize the "neutral" voice of scholarship, reveal silenced voices, and unearth hitherto uninvestigated relations of power. Also relevant is the growing influence of postmodernism and "Third World" perspectives in development literature. See Braidotti (et al) 1994, Dubois 1991, Harcourt 1994, Kinnaird and Momsen 1993, Parpart 1993, Slater 1992, Spivak 1988, Moghadam 1994 and Mohanty 1991 for some examples. The relevant point here is that disillusionment with "grand theories" of either the Marxist or Liberal variety, has promoted greater attention to the local, specific, the individual. As such, many researchers are seeking more detail and complexity in fieldwork, rather than searching for "representativeness", the general.

and cultural factors, large development institutions such as the World Bank and FAO have adopted RRA and PRA in hopes of improving on this disappointing history (Cornwall, Guijt and Welbourn, 1994: 109).² The "rapid" aspect of the methods appeals especially to project efforts that are predominantly technical, and the project developers are largely foresters, soil scientists, agriculturalists, or biologists. In these efforts, there appears to be a desire to limit social investigation due to its "messiness", and the way it detracts focus from more interesting and important technical issues.³ Thus, while expert literature on R/PRA sees the approach as a package of investigative techniques that would take repeated visits to complete,⁴ much technically driven donor efforts seem to break off a discrete part of R/PRA from the package and make it stand for the "social dimension" in the project process. Similarly, the concept of "participation" appears to be truncated. It comes to mean "a way to get people to do what we want", rather than a means fundamentally to change the project idea or construction, or a means to involve and

² In relation to social forestry and agroforestry projects see Cook (World Bank) 1989; Gregersen et al (World Bank) 1989; Raintree (FAO) 1991.

³ For example in agroforestry, of species selection and development, soil types, etc. In International Centre for Research in Agroforestry (ICRAF) publications, the need to include social and cultural factors is expressed in a promotion of a "Diagnosis and Design" approach, which emphasizes investigating indigenous knowledge, understanding local needs and uses for trees, links with markets, etc (see ICRAF Annual Reports up to the present). The dominant thrust in agroforestry, however, remains scientific research on tree species and forms of interaction between trees, soil, non-woody plants and animals, etc. See for example, Steppler and Nair 1987, and Gholz 1987. Both texts give only one chapter to social issues. Little success has been reached in attaining interdisciplinary research, resulting in the relative isolation of social researchers such as Fortmann and Bruce 1988, Hoskins 1987 and Rocheleau 1987.

⁴ This "cluster" of methods could include:

imaginative use of key informants, group interviews, and chain interviews, mapping and aerial photographs, diagrams, ethnohistories, ranking procedures, stratifying procedures, stories and portraits, secondary data review and others (Cerneia, 1991: 514.)

respect local knowledge on equal footing with foreign, particularly scientific, expertise (Chambers, 1991: 516).

In academe, some of these "shortcuts" are also gaining some currency. For example, in natural resources research at the University of Zimbabwe, a "portfolio" of PRA techniques consistently appears at methodology workshops and training exercises. While the Centre for Applied Social Sciences (CASS) has a long history of in-depth, longitudinal applied social research, some of its researchers are also becoming "PRA Experts". There is a danger that as PRA techniques are absorbed into academe, social researchers, particularly in developing countries, could be called upon by donor institutions to "do PRA" to satisfy the social requirements of a project cycle. Thus PRA could become a tool through which academic energy is made to serve an effort to simplify and minimize what is, essentially, complex and contested: social worlds. This could compromise academic integrity, as well as aid in the disempowerment of the "subjects" of the donor project through the containment of their input to a set PRA package.

The growing popularity of participatory methods is thus associated with two essentially contradictory approaches. The one seeks to reveal and validate local knowledges, destabilize the notion of outside expert as the only true "knower", and include communities on equal footing in planning and implementation of rural improvement. The second approach adopts the language and some of the methods of RRA and PRA, without adequately acknowledging the complexity of social realities, or properly absorbing or practising the intended notions of "participation".

This paper argues, that even in cases where the intent of research lies with the first approach, and the research is academic rather than "project driven", the use of RRA and PRA can obscure rather than reveal social complexity, and validate dominant views which become

portrayed as the common view, a monolithic "local knowledge" (Mosse, 1994; Chambers, 1994).

This is especially the case when R/PRA is used in an abbreviated form, such as one or two day sessions, focused on group work. Further, while the methodologies may indeed make it easier for people to express things to the researcher, there is little in the methodology that helps to interpret why people express what they do. The puzzle of meaning remains.

I use my own research using PRA in a Zimbabwean Resettlement Area, to examine how knowledge is created through this particular type of research act. I explore how the methodology interacted with power relations among participants, with villagers' expectations and notions about the researcher, and with politics and conflicts surrounding the subject of the research. The use of PRA data as "quantitative data" is also discussed. Finally, I assess the gendered perspectives produced in the PRA work.

PRA Methodology: What, How and Why?

PRA (Participatory Rural Appraisal) has grown out of the older "RRA" (Rapid Rural Appraisal), which was developed to replace the "quick and dirty" so-called "development tourism" described and critiqued by Chambers. RRA was developed in the 1970s as a means to increase the quality of socio-cultural information gathered for project use, while respecting the time and budget constraints of donor efforts. RRA was designed to be essentially "extractive" in nature. Project staff were to get information, which they would then take away and plug into already designed (or at least conceived) projects. Throughout the 1980s and 1990s, however, awareness grew among scholars and practitioners that greater involvement by recipients than was built into RRA was needed in both project design and implementation. Greater focus on participants' knowledge, needs, circumstances, and the necessary elements required for their

ongoing participation in the project effort was needed. PRA, which emphasizes recipient control of problem definition and solution design, gained popularity as a means of improving project performance.

In academic research, using PRA rather than RRA means increasing the space for participants to express and control the knowledge being created. The researcher tries to limit the imposition of analytical categories in data collection, and consciously to evaluate the impact of the categories or organizing ideas that are inevitably imposed. These categories could be any major organizing ideas from definitions of "development", to ideas about what causes "deforestation", to an imported understanding of what constitutes gender relations.⁵ While academic research will remain essentially extractive in nature (ie there is no project/action to follow), the PRA researcher looks for ways to promote positive change (empowerment) through the research process.

Examples can be providing training and employment for local people by hiring local assistants, providing people with information that is difficult for them to access such as names and addresses of donors or government departments if requested, validating and respecting local knowledges and realties, and facilitating local dialogue on problems.

PRA is commonly understood as a group of methods and activities designed to promote information gathering and sharing in rural settings in developing countries. Since significant portions of rural populations are often illiterate, the use of survey questionnaires and other formal

⁵ On a faulty definition of "deforestation" in Zimbabwe see discussion of the World Bank funded Rural Afforestation Project in post-Independence Zimbabwe in McGregor 1991 and Brigham 1994. This large project, which consisted primarily of the development of eucalyptus woodlots, was based on a misunderstanding of deforestation in rural Zimbabwe as a "fuelwood crisis". Subsequent research has shown deforestation in rural Zimbabwe as largely a result of land clearance for cultivation. Rural people for the most part do not yet perceive a fuelwood shortage.

methods involving paper and pens that are controlled by the researchers, are thought to be alienating, and afford little opportunity for people to express ideas in their own terms.⁶ In their place, PRA emphasizes **control and definition of information by villagers, visualization** and use of **local materials**. Some common exercises can achieve all of these. For example, a group of villagers could be asked, in their own language, to draw a **map** of their village and surrounding area on the ground, using a stick to draw, and rocks, twigs, leaves and so on to mark features on the map. The object of the exercise is not to produce an "accurate" map of the area, which could be compared to a topographical map from a government survey department. Instead, the value is in seeing what people draw, in what order, in what detail, and with what accompanying comments. If groups are divided by gender, the exercises can be compared. Differences may reflect the different values placed by men and women on different areas, resources, or social spaces. Women, for example, are often seen to draw houses first, sometimes with great care and with labels for each family, whereas men emphasize roads, fields and pastures (Fortmann, 1995).⁷ A visual product, the map, is easy for people to discuss, argue about, add to or change.

Another common activity is the drawing of different types of **matrices**. My research focuses on natural resource use and management, particularly trees and their products. One part of the research investigates the extent to which these resources are commodified, and if there is any selling of products, who controls and benefits from the income gained. Thus in one exercise, I asked people to name woodland products they gather, either for domestic use or for sale. These

⁶ These "long and dirty" methods, as Chambers calls them, are also often irrelevant, not cost-efficient, never analyzed or published, or if so, available too late to be of any "applied" benefit (Chambers, 1991: 516-518).

⁷ This also happened in my own research.

products were listed on a large piece of chart paper. The different uses for each product were then listed in a second column. Finally, people were asked to compare the portion of the product that is consumed to that sold, by dividing ten stones between the two last columns. A sample matrix of a women's group from one of my study villages follows:

**Table 1. Products, Uses and Commodification.
Women from Village 3.**

| PRODUCT | USES | Consumed | Sold |
|----------------------------|--|----------|------|
| Firewood | cooking, warming, making fire | 10 | 0 |
| Poles | gardens, kraals, <u>matara</u> *, fencing | 10 | 0 |
| Thatching Grass | thatching house, compost, selling | 2 | 8 |
| Herbs (Medicine) | bachache, diarrhea, eyes, headache, abortion, luck, concoction to make husband enjoy sex | 3 | 7 |
| Vegetables (Garden) | eating, selling | 2 | 8 |
| Fruits | eating | 5 | 5 |
| Fish | eating, selling | 8 | 2 |

*A structure built of poles and thatch to store unthreshed maize cobs out of reach of goats and cattle.

The chart can be any size depending on how many products are named, and the column for "uses" can also be as large as necessary. Because the chart is not pre-drawn, but produced in the process, it attempts to maximize the freedom of people to contribute information.

Another common exercise used is **Wealth Ranking**. The object of the exercise is to determine indicators of wealth as defined by the villagers. These indicators give important social and economic information in themselves, but can also be used, as in my case, in later stages of the

research such as in a household interview schedule. In the exercise I used, I also aimed to get stratification profiles of the villages. The approach uses the actual names of the village households as a starting point. Participants are asked to group the names according to their well-being or standard of living. The group is told neither how many groups to use, nor which criteria with which to sort the names. When the names are sorted, the group is asked to say why individuals were placed in the groups they were. Each group is discussed in turn. Through this questioning, the indicators are noted. The list of indicators is then put on a matrix, and the indicators are ranked through a **pairwise ranking method**. In this method, each indicator is compared with each of the others in turn, and the group is asked to say which of each pair is more important as an indication of wealth or well-being. In the end, a list of indicators in order of rank is produced, as are wealth categories. Finally, each individual household has been placed by name into a wealth category, which may be useful later, either in testing the wealth ranking itself, or in providing information for selective sampling for interviews. The advantage of this exercise is that the values are elicited from people themselves, rather than imposed by the researcher.

This discussion neither gives a full account of the activities I completed, nor the full spectrum of methods commonly described as "PRA".⁸ However, it does give a sense of the types of activities referred to, their purpose, and the underlying methodological arguments for their use.

Interpreting the "Findings"

PART ONE: Power and Process

Power Relations: Revealing and Concealing Processes in PRA

⁸ See Chambers 1991 and 1992, McCracken, Pretty and Conway, 1988, Cornwall, Guijt and Welbourn, 1994, and the journal RRA Notes for longer lists and discussions of methods.

Scholars of development are increasingly aware that attention to "indigenous knowledge", to "farmer first", etc, is not enough. Knowledge is embedded in power relations. There is thus no one "indigenous" or "local" knowledge, but competing perspectives. Some dominate, while others are marginalized (Chambers, 1994: xiv-v; Scoones and Thompson, 1994: 2; Cornwall, Guijt and Welbourn, et al, 1994: 109; Mosse, 1994).

PRA can provide an opportunity to observe some power relations in action. In the exercises, people interact. In my work, for example, when we had general village meetings women constantly had to be invited and reinvited for their views, while men consistently regained control once a woman had spoken. In discussions, dominant voices can be listened for. Whose views hold more weight? What positions do they hold in the village or area? In gender segregated groups, I found that men's groups tended to be very argumentative, even to the point of nearly capsizing the exercise. Each man wanted his own view on the chart. Women tended to be much more agreeable about a common view. Is this because women share similar views? Or is it because the rules of interaction for men and women are different? Whatever the answer to these questions, doing public exercises like those in PRA give the researcher a privileged opportunity to observe villagers interacting, and hence gathering information on social dynamics.

The process can also help to reveal a second set of power relations: those between the researcher and the study participants--the villagers. Holding public meetings and public exercises gives the researcher high visibility, and an opportunity for explanation and clarification of the research. Villagers have the opportunity to discuss the researcher together and ask directly the purpose, scope, possible benefits and so on of the research. In terms of ethics, this allows for clear establishment of the nature of the research: particularly whether or not it is linked to a

development project, or funding of some kind to follow. One of my toughest early tasks was to convince people that I was not a "donor in disguise". Similarly difficult was the task of explaining the nature and purpose of research that is not tied to a specific project. Most importantly though, was the effectiveness of the PRA in making me known in the area, and in establishing my identity as a researcher.

Notwithstanding these positive aspects, PRA can work to hide local relations of power. Emphasis on group work, on consensus in data expression and presentation, is particularly prone to the silencing of marginal or "dissident" views.⁹ Awareness of this has lead some researchers to divide participants into groups, such as men and women, "elites" and "commoners" (Fortmann, 1995). However, a researcher may not know enough about a community to know what forms local power relations take. I started with the view, based on previous research in the region, living experience in rural Zimbabwe, and review of secondary literature, that women would tend to be silenced, and their views marginalized in mixed groups. I wanted to hear the views of both men and women, so divided groups by gender. As later research revealed, I was not mistaken in this initial view of gender relations. However, later research also revealed other important divisions or clusters of power. Totem or clan, wealth, relationship to the ruling party, and witchcraft, all emerged as important. These other relations of power were hidden in the PRA process.

Investigating power relations and clusters is part of an effort to challenge the construction of rural communities as harmonious and homogenous places. This construction, common in "community development" literature and project efforts, has long been challenged by gender and

⁹ "Consensus", by definition, means just that: an agreement manufactured through the relative persuasive power of individuals or factions in a group.

development critiques, which point out the differential power and perspectives of men and women in communities. Marxist scholars have also done much to uncover the extent to which many rural populations are differentiated by wealth and access to resources. Yet Marxism and feminism have their own essentializing and exoticizing tendencies. Against these, some scholars adopting a "Third World" perspective, have uncovered other power differentials and complexities hitherto unimagined by western scholars.¹⁰ Recent work in Zimbabwe by local scholars has made a big contribution in this area, underlining the importance of supporting research and publication by local scholars, who have the advantage of "insider" knowledge.¹¹

In PRA, the emphasis on group work, such as the production of group maps, matrices and diagrams, can promote a mistaken view of commonalities and harmony among residents. To combat this, gathering local histories can help reveal some of the less transparent power relations and attendant social complexity. In my research, the communities are interesting partly because they are relatively new communities, having been formed in the first wave of resettlement after Zimbabwean Independence in 1980. Records kept in the Resettlement Office revealed that settlers came from numerous villages in neighbouring communal lands, some nearly 100km away. Unlike in the Tanzanian case, where whole villages were moved, the Zimbabwean system selected individual households, based on individual land needs. This meant that villagers may not necessarily know each other when first forming the village, and may come from areas with

¹⁰ For prominent "Third World Feminist" perspectives that challenge the "imperialism" of first world feminism, see Mohanty 1991, Ong 1988, Spivak 1988.

¹¹ See for example, Mukamuri 1995, Matose and Mukamuri 1994, Scoones and Matose 1993, Matose 1994. James Murombedzi, Calvin Nhira, Alois Mandondo, Bev Sithole and Nontokozo Nabane are a few of the other excellent Zimbabwean researchers working at the University of Zimbabwe on social issues in natural resources.

different social and other rules. This could have implications for how new elites or powerful cliques are formed.

Even more interesting is the complex story behind the selection process for settlers in 1980. Early resettlement was officially based on the need to give land to the landless, particularly those displaced by war, or those living in over crowded Communal Areas (Zinyama, 1991: 100). In my case study, it was true that the "landless" constituted the first wave of settlers in 1980-81. But this label "landless", and the connotations of simple land allocation to the needy, hides much socio-political complexity. This particular Resettlement Area was formerly a commercial farm owned by a white Rhodesian. He was chased out by guerrillas during the 1970s, so upon Independence, the land lay unoccupied. Officials given the task to settle black farmers on the land visited kraal heads in villages in the adjacent "Reserve". Far from people eagerly clamouring for a plot on the scheme, people were very reluctant to go, not trusting that they were actually going to be given land. In fact, people felt it was a trick to force them to perform labour on the farm, as in the past, when the white farmer had forced them to work on his irrigation dam in payment for their cattle straying onto his land. Hence, there were no willing takers of this free land. In the end, it was the local kraal heads who filled in forms for people they had selected. These people fell into three groups. The first were "landless", in the sense that they were not descendants of those villagers entitled to be allocated land there. In this sense they were social misfits. The second group of people were those whose behaviour was "bad" from the perspective of the kraal head. Thieves and suspected witches were sent to Resettlement. The third group were those from ruling lineages who had failed in a leadership bid. Some of them went of their own accord, while others were pushed out by the kraal head for fear of competition. It was not until people saw that the

new settlers were actually given the five hectares as promised, and cement houses were built for them, that a second wave in 1982-3 went voluntarily, and genuinely for land.¹²

This story gives some indication of the complex social make-up of the study villages. In addition, the story needs to be interpreted in light of the teller. As the secondary school Headmaster having to deal with what he finds as troublesome parents, the story explains the uncooperative nature of the locals. His other identity as a member of the chiefly lineage of the area both partly explains his knowledge of the history, as well as gives him a bias. Whatever the "truth" is, the Headmaster's view is "real" in the sense that, as an influential person, the Headmaster is one of the figures with the power to define the "truth" of the area.

This story has given some taste for the complexities of the local social dynamics, which are all bound up with the history of the relationship between blacks on the reserve and the former white owner of the farm that became the Resettlement, the social dynamics of people's villages of origin, as well as local dynamics developed in the sixteen years on the scheme. These latter include the widespread power and influence of individuals active in the armed struggle, who after Independence were appointed as party officials in local party cells, and in positions in the Village Development Committees (VIDCOs). Doing PRA as social research does not give much room for pushing deep into these waters, yet to me, some of the important social characteristics of the communities, such as their tendency to suspicion of each other, and weakness in cooperative ventures cannot otherwise be explained. Only through talking to people over many visits, formally and informally, did this information emerge.

R/PRA is a public event. As such, people will decide to put a certain slant on information,

¹² Field Notes. Key Informant Interview April 11 1996.

depending on the goal they want to achieve in the process of information sharing. As mentioned, people were initially convinced that I was attached to some donor or project. In early village meetings, they consistently portrayed their communities as "recipients", with certain development "needs", such as dams, electricity, better roads and access to transport, fencing materials and so on. This problem is also illustrated by the experience of the Wealth Ranking exercise.

At best, doing Wealth Ranking is a highly sensitive and potentially dangerous exercise to undertake. Villagers are asked to place their neighbours **by name** into the different wealth categories they have created.¹³ In one village, women refused to participate, saying that their neighbours would be furious with them if they found out where they had been placed. Using a small group of people in this exercise is usually recommended to help minimize these problems. More to the point here, however, was how people's mistaken perception of me as a "donor in disguise" influenced the ranking process. In one village, people wanted to be put in a lower wealth group, so they would "get something". In another village, people wanted the status of being in a higher wealth group. What is clear is that great care is needed in analyzing the "findings" from this exercise. This is not transparent "data" and needs to be cross checked using other methods and sources.

A second aspect of the "public" nature of PRA, is the possibility of being accompanied by local officials. While this may compromise the "independent" status of the researcher, cultivating good relations with local officials may be crucial in maintaining permission to carry out the

¹³ This exercise can be somewhat desensitized by not using actual names. People can be asked to create categories and indicators for their village. However, this method provides less concrete basis for the development of categories, and precludes the production of stratification profiles of the villages, and the opportunity to test the indicators in household interviews.

research. In a few cases I had different officials with me, which awakened people's suspicions concerning how the information will be used. This is related to the final point of this section, the politics of the research topic.

People in my study area have fears about the way the information will be used. The research often ventures into illegal activities in resource use, such as cutting live trees, the sale of natural resource products like firewood, hunting game and netting fish. People's fears mean that the information on rules and their breaking could be distorted. There is a tendency in the study area to blame resource depletion on "outsiders", specifically neighbours in Communal Lands, whose own resources have long been depleted. Getting a clear picture of people's practices will involve much more than asking them, in a public setting, to describe them.

PART TWO. Using PRA Data as "Quantitative Data".

One of the qualities of PRA that PRA enthusiasts like to promote, is the ability to collect quantitative as well as qualitative data. In my research, for example, I asked people to use numbers or relative quantities to express seasonality in resource use, historical trends in resource decline, and proportions of resources sold as compared to consumed. These exercises were indeed useful in getting some indication of general trends in these matters. Yet, the temptation can be strong to use the numbers generated in PRA as if they were properly collected quantitative data. There are several compelling reasons to regard this as a danger, but above all is the tendency of group work in PRA to promote a false sense of consensus, or a sense of collecting data already in aggregate form. In order to check the validity of PRA information on the extent to which natural resources were commodified, I compared it to data gathered through an interview

schedule with the same question, administered to individuals.¹⁴ Striking differences in the results is enough to throw the "quantitative rigour" of the PRA data into question. Table 2, below, shows the results from the PRA exercises in all four villages and the two gender groups on the extent to which natural resources are sold in the villages.

This table suggests that commodification of thatching grass, medicinal herbs and fruits (particularly exotic) is significant. Only small amounts of poles and firewood are sold. The high percentage of garden vegetables sold shows the ability to take advantage of existing markets.

Turning now to the individual interviews, the first important finding is that not all people or households gather or use all of the listed products, and even fewer are involved in the selling of the products. A key assumption behind the numbers generated in the group PRA exercise, then, is untenable. This assumption is that everyone gathers and uses all the products, and that everyone is involved in selling at more or less the same rates. The individual interviews point out the large variability among individuals, households and villages that is masked by the generalizing PRA process.

¹⁴ These interviews were done with twenty men and twenty women from each of the four study villages.

Table 2. Commodification of Forest and other Natural Products.
PRA Data for four Villages on Proportions Sold
(number out of ten).

(For proportions sold, women's score appears above the line in the cell, men's below).

| PRODUCT | V1 | V2 | V3 | V4 | AVERAGE (ALL GROUPS) | AVERAGE (WOMEN) | AVERAGE (MEN) |
|---------------------------------|-----------------|----------------|----------------|----------------|----------------------------|--------------------|------------------|
| Firewood | <u>0</u> 0 | <u>3</u> 0 | <u>0</u> 2 | <u>3</u> 0 | 10% | 15% | 5% |
| Poles | <u>0</u> 0 | <u>2</u> 0 | <u>0</u> 2 | <u>2</u> 0 | 7.5% | 10% | 5% |
| Thatching Grass | <u>9</u> 3 | <u>7</u> 2 | <u>8</u> 3 | <u>1</u> 0 | 41.3% | 62.5% | 20% |
| Herbs (Medicine) | <u>8</u> 4 | <u>3</u> 6 | <u>7</u> 5 | <u>5</u> 3 | 51.3% | 57.5% | 45% |
| Vegetables (Garden)* | <u>7</u> 5 | <u>6</u> -- | <u>8</u> -- | <u>8</u> -- | 68% | 72.5% | 50% |
| Exotic Fruits* | <u>3</u> -- | <u>--</u> 2 | <u>5</u> -- | <u>--</u> 3 | 32.5% | 40% | 25% |
| Wild Veg- etables* | <u>--</u> -- | <u>--</u> 0 | <u>--</u> 4 | <u>--</u> 0 | N/A | N/A | 10% |

*partial data only; missing groups did not score these products.

Table 3 illustrates this point by showing the percentages of people interviewed who gather and sell each product. For simplicity I have taken women in Village 1 as an example.

Table 3. Percentages of women involved in gathering and selling natural resource products in Village 1.

| PRODUCT | PERCENTAGE OF PEOPLE WHO GATHER/USE THIS PRODUCT | PERCENTAGE OF PEOPLE WHO SELL THIS PRODUCT |
|----------------------------|--|--|
| FIREWOOD | 100% | 9% |
| POLES | 100% | 0% |
| THATCHING GRASS | 100% | 36% |
| HERBS (MEDICINE) | 50% | 9% |
| VEGETABLES (GARDEN) | 100% | 95% |
| FRUITS (EXOTIC) | 68% | 14% |
| WILD VEGETABLES | 100% | 0% |

Table 3 reveals that while all women in Village 1 report gathering firewood, poles, thatching grass and wild vegetables, only very small percentages of people report selling any of these products. If people's reports are accepted at face value, then at the very least the PRA data can be said to give a false picture of generalized selling patterns. The PRA data is more likely to reflect the activities of the few individuals that are in fact involved in selling, while those who do not sell (the majority), remain silent.

A further complication revealed by Table 3, is that everyone is not even involved in the consumption or gathering of all products. Herbs and exotic fruits are not gathered by all. In the case of herbs, many people claim that because they are Christians, they do not use them, while in other cases, the gathering of herbs is left to specialists who then sell to others. With exotic fruits, while most people have planted fruit trees in their homestead areas, many were destroyed by

termites, or are not yet mature. Hence, once again the PRA data gives a false sense of commonality among villagers, in this case as regards to the use of certain products.

The overall effect of these inaccuracies in the PRA process, is to produce an inflated picture of the extent to which natural resources are commodified in the study area. Table 4 displays figures for proportion of products sold using the data from individual interviews.¹⁵ I include only those products used or gathered by everyone.¹⁶

Table 4. Commodification of Forest and other Natural Products. Data from individual interviews for four Villages on Proportions Sold (number out of ten).

(For proportions sold, women's score appears above the line in the cell, men's below).

| PRODUCT | V1 | V2 | V3 | V4 | AVERAGE (ALL GROUPS) | AVERAGE (WOMEN) | AVERAGE (MEN) |
|------------------------|------------|------------|------------|------------|----------------------|-----------------|---------------|
| Firewood | .45 .3 | .4 .4 | .3 .5 | 0 .6 | 4% | 3% | 4.5% |
| Poles | 0 0 | .7 .2 | .3 .4 | 0 .1 | 2% | 2.5% | 1.5% |
| Thatching Grass | 1.7 .3 | 4.6 4.2 | 2.6 2.2 | 1.1 1.4 | 23% | 25% | 20% |
| Vegetables (Garden) | 5.6 4.6 | 7 5.9 | 6.4 6.4 | 4.8 6.2 | 59% | 59.5% | 58% |

Looking back at Table 2 which shows the PRA data on this topic, it is clear that the

¹⁵ The figure for proportion of product sold is reached by summing the figures for proportion sold from the individual interviews, and dividing this figure by the total number of respondents x 10. That is, if 2 people say they sell 5/10 of a given product, and 18 people say they use 10/10 of what they gather, then the total proportion sold for that group would be

$$(5+5)/(20 \times 10) = 10/200 = .05 \text{ or } 5\%$$

Expressed as a number out of 10, this becomes .5.

¹⁶ I exclude those such as herbs and exotic fruits, which are not used by everyone, as the calculations rapidly become too muddled to be of value in comparing to the PRA data.

individual interview method produces significantly lower figures for the extent to which the resources are commodified. It would appear that the PRA data wildly overestimates the extent to which natural resources are commodified at the aggregate village level. Only with garden vegetables are the figures in the same ball park. This is a result of the fact that unlike with the other products, nearly all people are involved in the growing and selling of this product. Hence the PRA exercise which aims for the "common view" is close to the mark in this case.

This discussion has shown that accepting PRA data as sound quantitatively is a risky move. While the data may give some indication of trends, it should not be accepted as "hard" in a numbers sense.

It should be added here, that the use of individual interview techniques on this particular topic may also produce faulty quantitative data. The illegality of selling some of the products, such as firewood and poles, could lead to underreporting in individual interviews. The fact that there are no rules against selling thatching grass, however, which also receives a significantly lower commodification score in the individual interviews, suggests that the higher scores in the PRA data result from another source. Another potential complication is the possibility that the main sellers of products are not the people interviewed. Subsequent key informant interviews in my research suggest that it is the youth in the area who are mainly involved in illegal selling of firewood and poles to Communal Area neighbours. Since I interviewed fathers and mothers of households, I would have missed this group entirely. This group was also not much involved in the PRA process. To conclude, particularly sensitive topics may require informal, even clandestine methods of data collection, in most cases which can yield qualitative rather than quantitative data.

PART THREE. Interpreting Differences in Perception: Gender.

Using PRA methods, there is no way to "disaggregate" the information collected. People work in groups, and while disagreements can be noted, individual interviews are not a systematic part of the process. Dividing people into groups is the only means of rough disaggregation. As discussed earlier, groups could be divided along perceived power lines, such as gender, wealth, clan, leadership positions and so on. In my case, I divided groups by gender. As one of the "fault lines" of power and perception in the local context, gendered stories and perceptions can serve as an example of how competing stories will emerge. These different perceptions are difficult to interpret without collecting information beyond the PRA exercises. Interpreting these differences is the subject of this section of the paper.¹⁷

Gender Differences in the PRA Data

The general topic of my PRA exercises was natural resources: their availability, use, commodification, and rules for use. Following the drawing of a resource map, whereon participants indicated major resource areas for their village, a product list was developed. The first gender difference occurs here: men and women mentioned different resource products. For all four villages in the study, for example, only women mentioned fish, and in three villages only women mentioned herbal medicines. Meanwhile it was only men--in all four villages--that mentioned bush vegetables.

¹⁷ My interest in gender does not preclude looking at other power relations. I accept the arguments increasingly found in gender and development literature, that gender and "woman" as categories need to be problematized, localized, and detached from dominant western notions of gender relations (see Mohanty, 1991; Ong, 1988; Gerrard, 1991; Kinnard and Momsen, 1993; Parpart, 1993; Spivak, 1988). Nevertheless, I still feel that if used critically, gender is a useful and powerful analytical tool that can reveal fundamental power divisions.

The product lists were used to develop **seasonality diagrams**. Groups were given twenty stones and asked to distribute them by month for each product to represent the relative amount used or collected over the calendar year. Gender differences appeared for the four products common to all groups: poles, thatching grass, wild fruits, and firewood, but were most extreme for poles and thatch. Differences are illustrated in Tables 5 and 6.

Table 5. Seasonality Diagrams for Poles.
(Women's scores appear above the line in each cell,
men's below the line.)

| POLES | J | F | M | A | M | J | J | A | S | O | N | D |
|------------|---|-----------------|------------------|---------------|-----------------|---------------|---------------|----------------|---------------|-----------------|---------------|---------------|
| Village 1 | | $\frac{9}{2}$ | $\frac{4}{14}$ | $\frac{3}{4}$ | $\underline{2}$ | | | | | $\underline{2}$ | | |
| Village 2* | | $\underline{2}$ | $\underline{10}$ | $\frac{1}{3}$ | $\frac{1}{3}$ | $\frac{1}{6}$ | | | $\frac{1}{4}$ | $\frac{8}{4}$ | | |
| Village 3 | | | $\underline{9}$ | $\frac{5}{6}$ | $\frac{2}{5}$ | | | $\frac{1}{1}$ | | $\frac{4}{3}$ | $\frac{1}{3}$ | $\frac{1}{2}$ |
| Village 4 | | | $\underline{5}$ | $\frac{1}{3}$ | $\frac{1}{3}$ | $\frac{1}{3}$ | $\frac{1}{1}$ | $\frac{12}{3}$ | $\frac{1}{4}$ | $\frac{3}{3}$ | | |

*Men in Village 2 included fibre as part of poles.

Table 6. Seasonality Diagrams for Thatching Grass.
(Women's scores appear above the line in each cell,
men's below the line.)

| Thatch Grass | J | F | M | A | M | J | J | A | S | O | N | D |
|--------------|---------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|------------------|---------------|---------------|---------------|---------------|
| Village 1 | $\frac{1}{3}$ | $\frac{1}{3}$ | $\frac{1}{5}$ | $\frac{1}{5}$ | $\underline{2}$ | $\underline{5}$ | $\underline{8}$ | $\underline{5}$ | | | $\frac{1}{2}$ | $\frac{1}{2}$ |
| Village 2 | | | | | | $\frac{1}{17}$ | $\frac{10}{3}$ | $\underline{10}$ | | | | |
| Village 3 | $\frac{1}{1}$ | $\frac{1}{1}$ | $\frac{1}{2}$ | $\frac{1}{3}$ | $\frac{1}{3}$ | $\frac{6}{2}$ | $\frac{10}{1}$ | $\frac{3}{1}$ | $\frac{1}{1}$ | $\frac{1}{1}$ | $\frac{1}{2}$ | $\frac{1}{2}$ |
| Village 4 | | | | | $\frac{1}{1}$ | $\frac{5}{3}$ | $\frac{1}{4}$ | $\frac{8}{6}$ | $\frac{3}{3}$ | $\frac{3}{2}$ | $\frac{1}{1}$ | |

Gender differences also emerged when groups were asked to identify the resource areas or **sources** for the different products. Men and women and the different villages all mentioned the same types of resource areas, except for "bush" identified by men's groups only, and "dams" by women's groups only. In the exercise, people were given twenty stones and asked to place them for each product according to the relative amount obtained from the different resources areas. Taking the example of firewood, Table 7 shows the gender differences in source areas for each village.

Table 7. Sources for Firewood by Village and Gender.
(Women's scores appear above the line in each cell,
men's below the line.)

| FIREWOOD | K | F | R | G | D | W | W MT | P | B |
|------------------|----------------|----------------|---------------|---------------|---|---------------|---------|---------------|----------|
| Village 1 | <u>5</u> 4 | <u>7</u> 8 | | <u>2</u> 2 | | | | <u>6</u> 6 | |
| Village 2 | <u>2</u> 2 | <u>14</u> 6 | <u>2</u> | <u>3</u> 3 | | <u>1</u> 1 | | 1 3 | <u>3</u> |
| Village 3 | <u>4</u> 5 | <u>8</u> 6 | | <u>5</u> | | <u>1</u> 1 | | <u>3</u> 3 | <u>5</u> |
| Village 4 | <u>10</u> 9 | <u>5</u> 2 | <u>1</u> 2 | <u>2</u> 3 | | | | <u>2</u> 4 | |

Resource Area Key

K=Kopjies

F=Fields

R=Rivers

G=Grazing Areas

D=Dams

W=Wetlands/Veld

W.Mt=Wedza Mountain

P=Plantations (Gum) B=Bush

Table 7 shows that mostly the same sources for firewood are mentioned both by the different villages and the two genders. However the proportions are different. For example, Village 2 relies less on kopjies and heavily on fields; Village 4 relies less on fields and heavily on kopjies. For men and women, in Village 1 there is almost no difference in perception. For Village 2, women

emphasize fields much more, while men spread more out into other areas such as plantations, bush and wetlands. In Villages 3 and 4, women chart grazing or fields more heavily, whereas men's scores show up in the bush area. In three of the four villages, women perceive a greater reliance on fields as a source for firewood. When all products and areas are considered, there are slight differences in the relative importance of resource areas to men and women. The most important difference is in the relatively high importance of bush as an area where men gather high proportions of many products, and as an area where women do not venture at all.

Gender differences appeared again in an exercise that asked people to list the different uses for natural resource products. Table 8 illustrates this for Village 3 in the study.

Table 8. The Uses of Products. Village 3.

| PRODUCT | USES (WOMEN) | USES (MEN) |
|-------------------------|---|--|
| Firewood | cooking, warming, making fire | cooking, brick-making, selling |
| Poles | gardens, cattle pens, <u>matara</u> , fencing | houses, fowl runs, cattle pens, granaries, selling |
| Thatching Grass | thatching house, compost, selling | thatching, brooms, mats, compost, hay, selling |
| Herbs (Medicine) | backache, diarrhea, mupfuhwira (husband taming), eyes, headache, abortion, luck, potion to make husband enjoy sex | curing, selling |

The interesting gender difference in Table 8 is the greater detail given for uses of different products by either of the two groups. Men say more about uses for poles and thatch, while women give more detail for medicines.

When asked what proportion of products was consumed domestically, and what proportion sold, gender differences showed up again. Table 9 shows the proportion sold as given

for all villages and groups.

In Table 9, major gender differences appear for all of the products listed, the largest gaps appearing for thatching, and herbs.

Table 9. The Commodification of Natural Resources by Village and Gender. Data for four Villages on Proportions Sold.

(For proportions sold, women's score appears above the line in the cell, men's below).

| PRODUCT | V.1 | V.2 | V.3 | V.4 |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|
| Firewood | <u>0</u> 0 | <u>30%</u> 0 | <u>0</u> 20% | <u>30%</u> 0 |
| Poles | <u>0</u> 0 | <u>20%</u> 0 | <u>0</u> 20% | <u>20%</u> 0 |
| Thatching Grass | <u>90%</u> 30% | <u>70%</u> 20% | <u>80%</u> 30% | <u>10%</u> 0 |
| Herbs (Medicine) | <u>80%</u> 40% | <u>30%</u> 60% | <u>70%</u> 50% | <u>50%</u> 30% |
| Fruits* | <u>30%</u> -- | -- 20% | <u>50%</u> -- | -- 30% |

*partial data only; missing groups did not score these products.

Analysis. In keeping with the earlier discussion, the gender differences can not be evaluated quantitatively. Nevertheless, the consistency with which they appear throughout the exercises indicates that significant differences of perception of natural resources and their use exist between women and men in the area. These differences are difficult to analyze without gathering information beyond the PRA exercises. I therefore designed an interview schedule on the division of labour and gender relations in the household, including natural resource use, major agricultural activities, and income and expenditure and decisions connected to these. This schedule was used to interview small groups of women and men in each village. I also carried out

key informant interviews and general observations over the next six months.

Emerging from these studies is a picture of the study site as an area where a strict gendered division of labour, gendered expenditure responsibilities, gendered income possibilities, gendered mobility patterns, and elements of marital tension and mistrust, are well-entrenched. These social patterns affect and reflect, to a certain extent, people's relationships to natural resources. Men and women live in somewhat different "resource worlds". For example, the mentioning of "bush" as a resource only by men (Table 7), reflects a gendered mobility pattern. Women's close relationship to the homestead and women's domestic duties of cooking and childcare, their dominant roles in the fields, where women do most of weeding and harvesting, and even some of the ploughing, and their responsibility with market gardens, preclude wandering farther afield. By contrast, men's and boy's involvement with cattle herding and hunting, takes them into these "bush" areas.

Differences in men's and women's Seasonality Diagrams (Tables 5 and 6) and Uses Matrices (Table 8), reflect the fact that men and women collect things separately, and sometimes use them for different purposes. For example, women dominate in collecting thatching, but then use it mostly for sale, whereas men use collected thatch to perform domestic building tasks. Also, some products are predominantly used and collected by only one gender. Poles are largely the domain of men, while herbs are much more frequently known, gathered, administered and sold by women. On firewood, while men and older boys can be involved in transporting heavy loads by scotchcart, the gathering of firewood is still perceived as women's work.¹⁸ These divisions of

¹⁸ This was also found in the only other major study of wood products in Resettlement in Zimbabwe (Elliot, 1994: 26).

labour are also reflected in differences in perception of the commodification of resources (Table 9). In all cases, the divisions of labour could mean that one group mistakenly reports on activities that are dominated by the other gender. Clearly, since gender emerges as figuring strongly in resource use, getting a clear picture of use patterns requires an investigation of the division of labour.

The divisions of labour should also be understood more broadly in the context of gender relations in the area, particularly as they relate to differential power and control. Unlike in many Communal Areas in Zimbabwe, where male household heads migrate to work in towns, men are required by the rules of resettlement to stay on farm as full time farmers. Although these rules have been bent, most men are present.¹⁹ Hence, there is a different gender dynamic in Resettlement Areas as compared to Communal Areas (Jacobs, 1991). Men are actively involved in farming and intensive cattle raising, as their major, and often only, sources of income. Many farmers produce as much as seven to eleven tonnes of maize in a good year (families require about two tonnes for consumption), and have herds of above ten cattle. A beast can fetch between \$1,500 - \$3,000 (Zim) from private buyers who then sell to the Cold Storage Commission.²⁰

Some authors²¹ have claimed that the constant co-habitation of husbands and wives in Resettlement has improved the power position of women, and softened the division of labour. My

¹⁹ Interview with Resettlement Officer. The bending of the rules has been especially prevalent since the hardest crunch of Economic Structural Adjustment Program (ESAP) hit in Zimbabwe in the early 1990s, which was also a period of severe drought.

²⁰ This season (1996), the maize price is set at \$1,200 per tonne. A household requires about \$20,000 (Zim) per year to live adequately in Resettlement, according to the Resettlement Officer.

²¹ Jacobs, 1991; Elliot, 1994.

research suggests that changes have occurred, but that the effects are contradictory. Husbands and wives work side by side in Resettlement, and the nuclear household appears to have firmer boundaries against the extended family than in Communal Areas. Women are involved in their own right on the two irrigation schemes, and in some cattle fattening projects. Nevertheless, women report a decrease in their autonomy with husbands around all the time. In Communal Areas, where men are away often, women run the farm. On Resettlement, women report, the husband must give approval for everything. Furthermore, the love between them can sour more easily, as the man gets bored of being with his wife day in and day out. A man working away in town, comes home "hot" for his wife. Most importantly, inspite of a few advances, women's position is still defined by lack of economic resources, in comparison to husbands. Men still control the major income earners of maize and cattle sales. While women control their gardens and women's crops of beans and peanuts, income from these is tiny compared to men's. There is little polygamy in the area, but divorce rates are high. Divorced women must leave the homestead to make way for the new wife, losing access to her fields and gardens. There is a high consciousness (and presence) of AIDS in the area, but women often feel powerless to control the activities of their husbands. This powerless is in one way expressed by the very "hot" topic of "husband taming" herbs. These herbs are mentioned frequently, and with great hilarity by women, and greatly feared by men. The herbs allegedly allow a woman to "call" her husband from anywhere, keep him confined to the house, or control his behaviour in different ways. As gender relations remain predominantly in favour of male power, this "unfair" power of women over men seems more an expression of powerless than any real challenge to the gender hierarchy.

One ray of hope is the situtation of widows (who constitute the only category of "female

headed households" in the study site). As the area has an aging population of settlers, there is a growing number of widows.²² Government law prohibits the eviction of widows on Resettlement, even if their productivity is low.²³ Although there are no specific programs to support the special difficulties in their farming efforts, the fact that they can stay on the stand means that many of them are doing quite well. Their success depends largely on the number of grown children whose labour they can exploit, and their own industry. To be a widow does not necessarily mean being at the bottom of the wealth totem pole, as they are characteristically in Communal Areas.

This discussion of gender relations is important to the issues of natural resource use and the PRA data in two main ways. First is to dissuade an "equal but different" approach to the gendered division of labour. Using gender segregated groups in PRA can reveal the importance of investigating the gendered division of labour. However, only extensive inquiry into how this division of labour is embedded in unequal power relations completes the picture of men and women's relationship to resources. For example, it is not enough to know that women build, maintain and sell produce from their gardens. The fact that husbands have been known to steal vegetables for sale from their own wives gives socio-economic context to the human system of garden production. Gendered divisions of labour are entrenched in a system of gendered power relations that shape local social and economic systems.

Secondly, the broader picture of gender relations, and the socio-economy of households, points out that while natural resources are important to household livelihoods, they provide only a

²² Percentages of households headed by widows in the four study villages are 9.8%, 22.5%, 11.1% and 33.3%.

²³ Interview with Resettlement Officer.

small part of the major survival activities in Resettlement, and only a tiny part of the cash economy. Topic-specific PRA exercises do not provide enough space to gather enough relevant contextual information. Other methodologies, such as interviews and observations are required. Specific topics of research must always be inserted in the wider socio-economic context in order to be understood properly.

CONCLUSIONS

For academic research, PRA methodologies have potential to meet several positive research goals. First, the public nature of PRA provides an opportunity for a researcher who is a stranger to be introduced to the study communities, and to explain the research project. In rural communities, people are often used to meeting as a village group, and important events, processes or decisions, are often thought best discussed in public. PRA exercises can provide preliminary information regarding the communities that could otherwise take a long time to gather. The geographical layout, major resources and other general information can be gathered with some confidence of reliability. PRA exercises also create an opportunity for the researcher to observe some sets of power relations in the village. Leaders or influential individuals can be identified. Gender relations can also be observed.

On the other hand, the public nature of PRA and the emphasis on group work can also hide power relations, and give a false sense of homogeneity in the group. Marginal or unpopular views can be suppressed. In addition, communities may shape the information to suit a "public" agenda, such as presenting the community as a "project recipient". Furthermore, the popularity in PRA of different types of matrices that use numbers, can promote a false sense of quantitative "hardness" in the data produced. Finally, the different perspectives that may be produced by

dividing participants into groups does provide a challenge to the notion of rural communities as harmonious places, containing something monolithic called "indigenous knowledge". However, these differing perspectives can not be properly understood unless further research is done exploring the power relations in which these different views are embedded.

In the final analysis, PRA should be viewed as a qualitative methodology. Data gathered should not be taken as transparent, but as a set of clues and beginnings to guide further investigations. For project driven research, the evidence from this paper should make it clear that PRA, especially in a truncated form, should never be made to stand as the "social element" of a project cycle. It may be wise to keep a critical eye on the creation of "PRA Experts" in academe, as they may be used to legitimate a sidelining of more in-depth social research in processes of planned change.

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