

Participatory Numbers: experience, questions and the future¹

(Working draft)

Conference on Combining Qualitative and Quantitative Methods in Development
Research

July 1-2, 2002

Abstract

Participatory approaches and methods can generate quantitative as well as qualitative data. Mainly since the early 1990s, a quiet tide of innovation has developed a rich range of participatory ways, often visual and tangible, by which local people themselves produce numbers. The methodological pioneers have rarely recognised the full significance of what they have been doing. The approaches and methods have variously entailed counting, mapping, measuring, estimating, valuing and comparing, and combinations of these. Some of the better known methods are social and census mapping, and aggregation from focus groups. The methods are independent of discipline and profession.

Experience to date raises issues of getting the best of both qualitative and quantitative worlds, of methodology, and of professional conservatism and of ethics. Questions are raised of replacing questionnaires, of ownership and of how participatory processes generating numbers can be empowering. A big challenge is to spread good practice, benefiting from serious professional interest, learning from the pitfalls of PRA, and through a code of ethics.

Contents

Scope and Background

Evidence and Experience

Analysts, analytical activities and applications

Ways of generating numbers

Scale, aggregation and statistics

aggregation from groups

comparative analysis of secondary data

numbers from participatory spatial analysis

Disciplines and methods

Questions

¹ Parts of this paper are derived from "The Best of Both Worlds?" written for the Workshop on Qualitative and Quantitative Poverty Appraisal: complementarities, Tensions and the Way Forward", convened by Ravi Kanbur and held at Cornell March 15-16 2001. The papers of that workshop are being published as Ravi Kanbur ed. forthcoming 2002. For comments and contributions to that and this paper I am grateful to many people, too numerous to name individually. This includes those who have taken part in recent workshops at IDS Sussex, at the Statistical Services Centre, Reading University, and the International HIVAIDS Alliance, Brighton, on "Party Numbers" (numbers from participatory approaches and methods). Most of the others who have contributed will know who they are. I hope all concerned will accept my thanks in this general form. The usual disclaimers apply.

The best of both worlds?
Metrological questions
Professional conservatism: questionnaires rule!
Ethics

Issues for the Future

Alternatives to questionnaires?
Empowerment, and the best of all worlds?
Spread and good practice

Scope and Background

This paper seeks to explore evidence, experience and questions concerning the generation of numbers using participatory approaches and methods.

It confronts two assumptions which are still quite common: that participatory approaches only generate qualitative insights; and that quantitative data can only or always best be produced by questionnaire surveys or scientific measurement. Especially since the early 1990s experiences have multiplied which show both these assumptions to be false. At the same time, increasing attention has been paid in recent years, as in this conference, to combining qualitative and quantitative methods in research (e.g. Booth et al 1998; Marsland et al 2000; Kanbur forthcoming 2002), especially through depth and detail from qualitative research (in fewer cases) and representativeness from quantitative methods (across a larger range).

There is no pretension to reviewing here all the evidence or the whole subject of deriving numbers from participatory approaches and methods (sometimes known as “party numbers”). But some purpose be served if the incompleteness of this paper encourages or provokes readers add their own evidence and improve the tentative and provisional categorisations and analysis which follow ².

Evidence and Experience

Analysts, analytical activities and applications

There are now many examples of deriving numbers from participatory approaches and methods. Many of these use visuals and tangibles and are associated with PRA/PLA. They can be described in terms of analysts, analytical activities, and applications.

The analysts involved can be almost any people. To give a sense of the range they can be, for example, rural or urban, poor or non-poor, children, youth, women, men, people in a particular occupation, farmers, labourers, traders, local officials, people who are disabled, prisoners, drug addicts or refugees, or people working in an organisation. Analysis is either by single individuals (less common) or by a single group, or by a number of groups.

By way of illustration, some of the analytical activities can be:

² Please contact me at r.chambers@ids.ac.uk

- Mapping
- Modelling
- Pile sorting
- Pie diagrams
- Card writing and sorting
- Matrix ranking and scoring
- Linkage diagramming

Applications of activities like these are innumerable. Some of the more common are:

- Resource mapping
- Social mapping
- Mobility mapping
- Household listing
- Wellbeing ranking
- Trend and change analysis
- Livelihood analysis
- Seasonal diagramming
- Causal linkage analysis

and comparisons of many sorts.

There are now many variations of activities and applications, and many others besides these. Neela Mukherjee's (2002) latest book is entitled Participatory Learning and Action with 100 field methods.

Ways of generating numbers

Analytical activities and applications can generate numbers through counting, measuring, estimating, valuing, ranking, and scoring. Comparing things is often involved, giving numbers or scores to indicate relative values.

Examples of *counting* are social and census maps, which have tended to be very accurate for identifying and listing households, for headcounts and for household characteristics which are common knowledge (for seven cases see Chambers 1997: 143-5). Community censuses from participatory mapping in 56 communities in Malawi are an illustration of how this can be done at scale (pers comms. Carlos Barahona et al), and how marked the inaccuracies (in this case undercounts) can be in a national census.

Examples of *participatory measuring* can be found with timber stocks, water flows, arm circumferences, and land use areas from participatory GIS modelling (Rambaldi and Callosa-Tarr 2001) (though it is not clear that the measurements on the modelling were made in a participatory manner).

Examples of *estimating* are often associated with *comparing* and *relative proportions*, as in historical matrices (e.g. Freudenberger 1995; PRAXIS 2001: 98 and 102) which indicate trends and changes; seasonal food calendars which show seasonal variations in things like amount and type of food consumed (e.g. Mukherjee and Jena

2001: 51) and health problems (Shah 1999: 61) ; and proportional piling for income and food sources (e.g. Watson 1994, Eldridge 2001a and pers. comms Stephen Devereux and Henry Lucas), or for many other applications as in the Ten Seed Technique (Jayakaran 2002) or the use of 100 seeds, stones or other counters to give percentages.

Examples of *valuing* occur often with preference ranking, matrix ranking and matrix scoring (Jones 1995). Applications range from crop varieties in Zambia (Drinkwater 1993) and India (Manoharan et al 1993) to contraceptive methods, from markets in Bangladesh (Kar and Datta 1998) to political parties, from girls' preferences for sex-partners in Zambia (Shah 1999: 51) to wild plants collected for winter feeding of goats in Afghanistan (Leyland 1994). Examples in the UK include health providers and candidates interviewed for a university post.

Comparing which combines *estimating* and *valuing* is also common. Perhaps the best known and most widespread example is wealth or wellbeing ranking, where analysts group households according to their judgements of personal or household conditions (see e.g. RRA Notes 15, 1992 for an introduction).

Scale, Aggregation and Statistics

Local people can generate numbers by all the above without assistance apart from, usually, facilitation by outsiders. Outsiders' skills are, however, usually needed where participatory activities occur on a scale which requires aggregation, with or without statistical analysis³. The outcomes are often presented in tables which look (and are) similar to those generated by questionnaire surveys. There are now numerous examples. A few illustrations can indicate the sort of thing that has been done, and by implication, future potential. At this stage, there seem to be three main categories:

1. comparative analysis of secondary data

Karen Brock (1999) gathered findings from participatory research on poverty. She then analysed work with 58 groups and individuals in 12 countries who had been asked to identify key criteria for poverty, ill-being or vulnerability. She then used the NUDIST programme to classify and count these by criteria, separated into urban and rural, and into men and women, and presented the results diagrammatically to show frequency of mention as percentages (ibid 9-13).

Since other examples, and the issues involved, are likely to be covered in other papers, I will not elaborate on this category.

2. aggregation from individuals and groups

This is the main category considered in this paper.

³ Statistical analysis can sometimes be carried out by competent local people. This has happened in villages in the UK

- ◆ A pioneering effort in Kenya used wealth ranking to enable pastoralists to separate out three groups – rich, middle, and poor. A ranking game was then played for the relative importance of problems, and the results averaged for 24 rich, 17 middle and 27 poor groups. There were sharp differences. Livestock management scored 87 for the rich but only 7 for the poor (Swift and Umar 1991: 56).
- ◆ The earliest case of a large-scale survey with participatory visual analysis and no questionnaire was probably in 1992 with ActionAid’s use of PRA-related methods, mainly mapping, classifying and counting, in over 130 villages in Nepal (ActionAid-Nepal 1992). This was a survey of utilisation of services. It covered the whole population in the villages and generated 13 tables similar to those from a questionnaire. The population summed to 35,414.
- ◆ An SCF (UK) study in 20 Districts in Malawi, Zambia and Zimbabwe used pile sorting and other participatory methods for a retrospective study on how individual poor farmers coped with the 1992 drought (Eldridge refs). The resulting tables were similar to those from a questionnaire survey.
- ◆ Aggregating from focus groups has been a feature of some Participatory Poverty Assessments, for example Bangladesh (UNDP 1996) where poor women and poor men’s priorities were elicited separately, and Tanzania (Narayan 1997)
- ◆ Focus groups have undertaken participatory studies of urban violence in Jamaica, Guatemala and Colombia with identification of different types of violence, their seriousness, and the importance, positive or negative, of different institutions (using Venn diagramming) (Moser and Holland 1997; Moser and McIlwaine 2000a; Moser and McIlwaine 2000b; and Moser 2002). In the Guatemala study this led, for example, to a table derived from 176 focus group listings which showed the frequency of mention of 22 different strategies for coping with violence (Moser and McIlwaine 2001: 140)
- ◆ Aggregation from focus groups was also undertaken in the Consultations with the Poor (now known as Voices of the Poor) study (Narayan et al 2000) in 23 countries. This involved aggregating the views of many hundreds⁴⁵ of discussion groups in some 272 communities on directions of change in violence against women (ibid: 124-131) and of characteristics of institutions (ibid: 184 and 199-202).
- ◆ a participatory study was undertaken in Malawi of the “starter pack” [of seeds, fertiliser etc] programme and of small farmers’ ideas of sustainability (Cromwell et al 2001). In each of 30 villages, analysis by 3 focus groups, each of a different category of farmer, included pairwise ranking of the relative importance of 15 indicators of sustainability. The results were combined in a table of mean values across villages by region.
- ◆ Participatory techniques were used with 24 focus groups in Western Kenya to evaluate agroforestry dissemination practices. Pile sorting to score with 100 beans or grains of maize was used to evaluate the usefulness of, for example, 7 external providers of information, and 10 media used (Adato and Nyasimi 2002). Similar methods have been used in other countries as part of poverty impact research

⁴ A precise figure cannot be given for two reasons: the total number of discussion groups was not recorded for every country though it was probably over 1,500 (Narayan et al 2000: 298-305); and not all discussion groups produced relevant comparable data suitable for analysis.

⁵ A precise figure cannot be given for two reasons: the total number of discussion groups was not recorded for every country though it was probably over 1,500 (Narayan et al 2000: 298-305); and not all discussion groups produced relevant comparable data suitable for analysis.

coordinated by IFPRI for the Consultative Group for International Agricultural Research.

It seems that practices like these are becoming more common.

The methodologies of these studies are described in the various sources. Usually a developmental phase has been important to evolve and pilot test the approach and methods and to identify issues of concern, followed by hands-on field training of facilitators.

3. *participatory spatial analysis: aerial photographs, GIS and 3-D modelling.*

Participatory spatial analysis can be a step towards generating figures for different local categories for areas. The analysis of aerial photographs by local people (Sandford 1988; Dewees 1989; Mearns 1989), drawing their local knowledge on transparent overlays, has proved powerful. It can provide precise location and area data given for different land tenure and uses, soils, soil-vegetation associations and the like. Various forms of participatory GIS have also been explored (Abbott et al 1999; Jordan 1999). Perhaps the most remarkable is a series of innovations in the Philippines and which have now been applied also in Vietnam. The participatory process developed enables local people to combine their knowledge with digital contour data to make very detailed and spectacularly coloured 3-D models. These locate areas under different land uses and provide area data which are considered to be very accurate (Rambaldi and Callosa-Tarr, 2000).

Disciplines and methods

Claims to novelty can usually be faulted by finding antecedents. This is surely the case here. Nevertheless enough has happened, challenging and complementing more established methods, to indicate that something new is happening, at least in terms of frequency. An attempt to analyse the differences from conventional approaches is presented diagrammatically in figure 1.

[diagram - figure 1 - about here]

Typical established methods are qualitative participant observation in social anthropology and quantitative structured questionnaire interviews in economics, with sociology spanning the two. The new and more participatory methods, especially analysis by groups with visuals and tangibles, have origins including social anthropological practices and agroecosystem analysis (Conway 1985), and can generate both qualitative and quantitative data. Among their advantages are that they have not been appropriated by, nor do they belong to, any discipline or profession. To the contrary, they provide neutral ground on which different disciplines and professions can meet. The examples of aggregation from groups, with which we are mainly concerned here, are located in the largely neglected and overlooked NE quadrant of the diagram.

2. Questions

The Best of Both Worlds?

One question is whether, to what extent, and in what contexts, we can have the best of both qualitative and quantitative worlds with these approaches and methods: insights into the realities of poor people needed for understanding and relevance; good numbers needed for representativeness, magnitudes and credibility; and both insights and numbers for policy influence.

On insights and realities, these approaches and methods have given access to sensitive or surprising information that would have been difficult to obtain through questionnaires. A participatory study in India gave the castewise breakdown of number of families with addiction to alcohol (PRAXIS 2001: 33). Moser and McIlwaine's work in nine urban communities in Colombia elicited numerous types of violence, and (2000a: 24) produced the unexpected finding that 54 per cent of the types of violence identified were economic, as against only 14 per cent political, contrary to the common belief that political violence was the bigger problem (Moser forthcoming 2002).

Other examples can illustrate the sorts of findings from these approaches. The SCF study in Southern Africa found that in any year the poor spent more on mealie meal and maize than the rich, had more income-generating activities than the rich, and were especially hit because these non-agricultural activities were reduced during the drought. The starter pack study in Malawi found farmers short of crops and varieties, keenly seeking new sources of seeds, and unlikely to follow the current recommendations for agroforestry. The UNDP PPA in Bangladesh found that across groups of poor urban women their first priority for "doables" was, perhaps not surprisingly, water, but then their second was private places where they could wash, and their third that something should be done about dowry (UNDP 1996:68). Brock's comparative analysis of participatory studies of poverty found that inadequate access to water was mentioned frequently in urban conditions, and dramatically more often in urban than in rural⁶⁷ (1999: 10). The participatory 3-D modelling in the Mount Pulag National Park identified discrepancies with satellite data: the 3-D model at 1:10,000 had 27 per cent of the area under farmland compared with 0.4 per cent from satellite imagery, and 40 per cent under forest cover compared with 57 per cent. The authors concluded that "pooled people's knowledge" was more accurate and useful for community based analysis than information maintained in official circles (Rambaldi and Callosa-Tarr 2000: 40-41).

⁶ This finding is qualified, however, in a footnote: "Inadequate access to water has a surprisingly low rate of mention for rural sites. This is largely because of the bias of the work; in many cases, rural respondents were living in communities where water services had been improved through their interactions with NGOs"

⁷ This finding is qualified, however, in a footnote: "Inadequate access to water has a surprisingly low rate of mention for rural sites. This is largely because of the bias of the work; in many cases, rural respondents were living in communities where water services had been improved through their interactions with NGOs"

These are of course examples selected because they make the “best of both worlds” point. Nevertheless, a balanced view may be that, especially with careful and sensitive pilot testing, getting much of the best of both may be quite commonly feasible.

Methodological issues

Technical, often statistical, questions arise concerning rigour, validity and trustworthiness, and how numbers can be generated or derived, and then analysed and used. These present intriguing challenges. These questions demand the combined skills and insights of different disciplines, not least statistics. Some examples of aggregation, and exploration of methodological issues are as follows:

- ◆ *Causal diagrams.* Diagrams of the causes and effects of poverty generated in the Voices of the Poor (Narayan et al 2000) were counted and aggregated (Brock 1999b). Methodological and especially statistical issues in aggregation and analysis of causal diagrams have been explored by R.W. Burn (2000).
- ◆ *Matrix ranking and scoring.* This has given rise to considerable debate about how the scores in matrices can and cannot be interpreted and used (Maxwell and Duff 1995; Fielding et al 1999; Fielding and Riley 2000), with a recent full treatment by Savitri Abeyasekera (2001).
- ◆ *Preference ranking.* Aggregation of preferences expressed by groups has been quite common. For example, Volume 3 Poor People’s Perspectives of the UNDP 1996 Report on Human Development in Bangladesh was based on 159 sessions with focus groups of poor people who identified and ranked their priorities for “doables”. A final ranking and scoring, attempting to summarise the “underview” of poor people, used a statistical technique described as a Prioritised Problem Index of Poor Communities (UNDP 1996: 36- 37). Another example is the Starter Pack study in Malawi (Cornwell 2001).
- ◆ *Wellbeing grouping or ranking.* Ranking, as in wealth or wellbeing ranking of households, has a growing literature and has been subject to various comparisons and statistical analyses (see e.g. Grandin 1988; RRA Notes 15,1992, especially Mearns et al; Richards et al 1999; Simanowitz 1999, 2000; Temu and Due 2000; McCulloch 2002). It raises difficult questions of aggregation, interpretation and validity especially if comparisons are sought of levels between different communities. There is here much fertile and fascinating ground for further exploration.
- ◆ *Venn diagramming.* (Moser and McIlwaine 2000a)⁸

Many questions are raised about methodology, epistemology, validity, credibility and ethics. These are to varying degrees considered in the sources above. Some which stand out are:

- *Commensurability:* trade-offs between the rigidity of preset categories and a diversity of open-ended categories resulting from participatory processes. David Booth has expressed concern that the exploratory, responsive and reflexive enquiries will be sacrificed through

⁸ To be checked. The source is not to hand at the time of writing.

standardisation to permit aggregation upwards (Booth forthcoming 2002). The issue is serious and likely to be a perennial. To date, a partial solution has been progressive participatory piloting and evolution towards degrees of standardisation.

- *Trade-offs between standardisation and empowerment.* The more standardised the process, the less empowering and accommodating of local priorities and realities it is likely to be.
- *Trade-offs of scale, quality, time, resources and ethics:* the issues here are far from simple. Smaller scale, more time and more resources can allow for higher quality and better ethics, and vice versa.
- *Group characteristics and dynamics:* groups may be unrepresentative, or dominated by one or a few, or by one sort of person (for example, men in a mixed group of men and women). Care in selection, in judging size of group, and observation and facilitation of process can offset these dangers. Groups are often derived from different wellbeing groups. In the Malawi starter pack study, groups were convened by farming practice (Cromwell et al 2001).
- *Quality of facilitation:* the process is sensitive to quality of facilitation. Good selection, training and commitment of facilitators are vital, as are adequate time and resources devoted to training.
- *Relative costs:* assessments of relative costs of participatory approaches and questionnaires have tended to show that the participatory approaches are cheaper but an up-to-date collation and analysis of evidence is desirable
- *Credibility:* for those familiar with the processes, numbers generated may be highly credible. For those not familiar, it can be important to describe, and if possible for them personally to observe, the processes in the field.

Professional conservatism: questionnaires rule!

The evidence invites those in the quantitative mainstream to take these participatory approaches and methods seriously. There are not yet many indications of this happening. It is of practical importance to understand reasons for the lack of professional interest. At the March 2001 Cornell Qual-Quant workshop (Kanbur forthcoming 2002) those in the quantitative mainstream showed virtually no overt interest in participatory numbers. Was it because of inadequacies in the paper (Chambers 2001) or in how it was presented, because the evidence and argument were weak or wrong, or for some other contextual reason? More broadly, could the lack of interest be something to do with overwork, habit, institutional inertia, preoccupation with issues within the questionnaire paradigm, isolation from field realities and innovations, or a weak tradition of epistemological self-criticism on the quantitative side? Or a combination of several or all of these?

Two explanations invite reflection.

First, questionnaires are professionally and institutionally embedded – in the literature and manuals, in teaching, training and practice, in professional mindsets and institutions and in personal capabilities. Teachers and trainers in universities and

colleges, researchers, consultants, statisticians, policy analysts, and whole institutions where they work- lender and donor agencies, government departments, research institutes and consultancy firms- all have questionnaire competences, habits and reflexes. In contrast, the same people are, in the main, unfamiliar with participatory approaches. There are, moreover, venerable textbooks on questionnaires without equivalents for participatory numbers.

Second, much of the innovation with participatory numbers has been in countries in the South, in the NGO sector, and by younger professionals who do not realise the significance of what they have done, and neither have nor aspire to academic status or clout.

To the extent that these explanations have force, they make it easier to understand the failure to appreciate the unrecognised potential of participatory numbers.

Ethics

All research involving people raises questions of ethics. Participatory research with poor people in order to generate numbers does so quite acutely for three reasons in particular:

- (i) Blocks of people's time are taken. These have opportunity costs. At some seasons (e.g. when weeding is needed) these may be very high indeed.

Examples of what can be done:

- Meet at seasons, times and places which people say are convenient for them. This often applies more with women than with men
- Bring food. In the Rwanda PPA facilitating teams bring three days food to communities for the three days of the exercise (pers. comm. Sam Joseph)
- Pay the unemployed. In the Bolivia Consultations with the Poor, unemployed men were paid for their time (pers. com. James Blackburn)
- Do not repeatedly return to the same communities or people unless they are welcoming. In Malawi, researchers are abstaining from returning repeatedly to the same communities (pers. comm. Carlos Barahona)⁹
- Try to ensure that processes lead to action whether by participants or outsiders, as appropriate

- (ii) Expectations are liable to be raised. Participatory approaches are vulnerable because of the interest and enthusiasm often generated. People may participate from a mixture of politeness, curiosity, social

⁹ One person told me that some villages in Malawi had been "carpet-bombed" with PRA, another that many communities are never visited at all. The research teams cited in this paper sampled communities systematically, but for others roadside and accessibility biases may have operated. A Nepali Forester told me that on approaching a village in Nepal a man came out and immediately started drawing him a map. "Have you ever done this before?" "At least a hundred times".

pressure or expectations of benefits. With PRA/PLA generally it is lamentably common for expectations to be raised and then disappointed. Participatory research to generate numbers is not likely to be an exception.

Examples of what can be done:

- Explain repeatedly and with transparent honesty what can and cannot be expected. However, again and again even when this is done people do not really believe it, and still hope for and expect something
 - Ensure that there are benefits. These can be immediate (food, payment, contribution to a community fund), or longer term with assured follow-up (easier to promise, difficult to ensure). In the Rwanda PPA, there is \$1,000 for each community that produces a good plan (pers. comm. Sam Joseph)
- (iii) In the enthusiasm of a process people may reveal information which is sensitive or exposes them or others to danger. Children are especially vulnerable to “giving away” information damaging to others, such as their parents. Outsiders frequently object to wealth and wellbeing ranking, saying that it will be humiliating to some. Opinions will continue to differ on this. I can only say that I have been repeatedly surprised by how little this seems to be the case in communities where what is revealed is common knowledge. So
- Be observant and sensitive. Stop a process or change the topic if needed. In participatory research into violence it has been necessary on occasion to halt a process in order to protect participants.

Issues for the Future:

Innovation and spread have already taken place on some scale. The work of the Statistical Services Centre at Reading University is one example, as are others cited above. There is surely much that has not been written up, and which even if written up I do not know about. Participatory monitoring and evaluation (Estrella et al 2000) is spreading and is fertile ground for the seeding and growth of these approaches and methods. Yet because this is not a recognised subject, and because many of the early innovators were more in the NGO than academic sector, the power and prevalence of the approaches and methods have been slow to be recognised. It is difficult to imagine, though, given all the evidence, that spread will not now be widespread.

Questionnaires as a last resort?

The examples cited show that participatory approaches and methods can generate data and numbers on numerous topics similar to what comes out from questionnaires. The main difference is that the figures appear usually to be more accurate, sometimes

spectacularly so. The case no longer needs to be argued that participatory approaches and methods can *complement* existing practices. They can indeed *calibrate* them, as with the Malawi census. The issue now is to what extent they can and should *replace* them. We can ask: is your questionnaire survey really necessary? Questionnaires will surely always have a value, done well in some contexts (for example, perhaps, the National Sample Survey in India).. But faced with the evidence we now have, should questionnaires be seen for many purposes as a second best, or a last resort? There is a reversal here of mental set and reflex, with participatory approaches, not questionnaires, as the first option thought of when numbers are needed.

Empowerment and the Best of All Worlds?

It is striking to me, in writing this paper, how quickly and easily one can slip into an extractive and top-down mode of thought and expression. Much of the potential of party numbers, though, lies in empowerment. The opportunity is presented now to seek not just the best of the first two worlds – qualitative and quantitative, but also of a third world of ownership and empowerment. The questions:

Who is empowered?
Whose research is it, and for whom?
Whose monitoring and evaluation?
Whose indicators?
Whose numbers?
Used by whom?

can be asked of every process, and again and again.

Empowerment in varied forms, and gains by participants as researchers, may be less improbable and difficult than appears at first. To an extent easily overlooked, people enjoy and learn from the processes of analysis and sharing of knowledge, values and priorities, and feel good at discovering what they can show and express, and having their views heard¹⁰. A typical observation is that “People participating in the groups seemed to enjoy the discussions and exercises and most stayed for the entire duration” (Adato and Nyasimi 2002: 6).

Building on and going beyond enjoyment and learning, the question is to what extent the processes can be people’s own, the extent to which it is research by them, on what concerns them, with their criteria and concerns, with their outputs owned by them, empowering them, and with follow-up determined by them. In good PRA practice there is a tradition that the data – the maps, matrices and diagrams – belong to those who created them. In most PRA practice, sadly, it seems that this is honoured only in the breach: outsiders in an extractive more than empowering mode mine and remove data for their own analysis (which may be justified, but which many would describe as RRA not PRA). The question with party numbers is who is empowered, who owns

¹⁰ It is something just to be heard, even if there is no action. Though not generating numbers, I cannot resist mentioning my great pleasure at a participatory process in the village where I live in the UK (in which my wife and I were at first the only local participants - it was convened between 1300 and 1500, perhaps the least convenient time of day for “us”) and being able to bellyache at length about bicycle paths, even though I know it is unlikely anything will be done.

the data, how it can be shared, and whether as a minimum local analysts can substantially gain themselves..

There are encouraging pointers that party numbers resonate with and support decentralised and democratic governance and local empowerment. Examples from the Philippines stand out (Nierras, paper to this conference). There, grass roots health workers made their own classifications and disease maps, conducted their own analyses, and produced village figures at variance with official statistics, but which officials came to accept. Moreover, they identified priority actions which led in a matter of months to a dramatic decrease in mortality. Or again, participatory investigation of land holdings in the Philippines led to revisions of figures which doubled local government takings from the land tax which was the principal source of revenue. These compelling examples from the Philippines open one's eyes to what appears to be a widespread potential.

Spread and good practice

If these approaches and methods are to become more common, how can they maintain and enhance quality as they spread?

Party numbers seem set to spread. It is more than a straw in the wind that the International and Rural Development Department and the Statistical Services Centre at the University of Reading are this September convening a workshop for PRA/PLA practitioners on "Dealing with data from participatory studies: Bridging the gap between qualitative and quantitative methods". Some of the conditions are similar to those in the early days of RRA in the late 1970s (Khon Kaen 1987), and PRA in the late 1980s and early 1990s, when it was becoming clear that something was about to happen on a wide scale. Both RRA and PRA challenged and presented alternatives to professionally embedded methodologies. Both proved accurate and useful. With both there was excellent, and even inspiring, good practice as they spread. But there are dire warnings, especially from PRA. With rapid spread and heavy demand, many claimed to be PRA trainers and practitioners who lacked experience, and whose behaviour and attitudes were, to put it mildly, inappropriate. Much practice was not just mediocre, but plain bad – routinised, insensitive, unimaginative, unusable and unused, and unethical.

Two differences from the early evolution and spread of PRA give grounds for hope.

The first is the serious professional and academic interest in the qualitative-quantitative issues and going to scale, including the applications of group-visual methods.. This is evident in recent publications such as Booth et al 1998, the papers of the Statistical Services Centre at Reading University, NRI 2001 and the Cornell Qual-Quant workshop papers (Kanbur forthcoming 2002) and this Swansea Conference. And this is only part of a burgeoning literature which also has a prehistory. This may mean that some of the worst errors will be avoided.

The second difference is that the application of party numbers approaches requires more serious preparation than PRA. Almost anyone can do almost anything participatory and call it PRA. To generate numbers, however, requires more thought, preparation and discipline.

The ethical dangers may be as great or greater, but these two factors may reduce the dangers of practice which is technically bad. All the same, we can ask what can be learnt from the earlier experiences of PRA that can improve the chances that quality will be maintained and enhanced as party numbers spread?

Different observers will have different prescriptions. Many good ideas can be found in statements from workshops in Sussex in 1994 (Absalom et al 1995), Bangalore in 1996 and Calcutta in 1997 [all three published in PRAXIS 1997]. Here is a personal short list. Time, resources, patience and good practitioners run through them as recurrent themes:

- Donors, governments and INGOs to be warned repeatedly of the dangers of too much, too fast, and with too few resources
- Support for further technical and ethically sound R and D and training [the researcher/trainer's typically self-serving recommendation]
- Care in selecting sensitive, experienced and committed innovators to explore, pilot and develop appropriate approaches and methods to fit each case, and assuring them adequate time and resources (not so impossible, as there are now many more capable, experienced and suitable people around)
- Care in the selection and training of facilitators, with adequate resources and time, recognising that training will be a substantial proportion of expenditure, and will bring other long-term benefits through capacity building
- Independent monitoring and evaluation by community members of party numbers processes combined with self-critical reflection built in
- A code of conduct drawn up in a participatory mode for party numbers sponsors, trainers and practitioners, and widely shared, adapted, and further developed. Participatory work on this by practitioners has already begun. Participants in this conference are warmly invited, on behalf of those who have brought it thus far, to contribute your suggestions.

27 June 02

Robert Chambers

References

- Abbot, Jo et al 1999 "Participatory GIS: opportunity or oxymoron?" PLA Notes 33: 27-33, International Institute for Environment and Development, London
- Abeyasekera, Savitri 2001 Analysis Approaches in Participatory Work involving Ranks or Scores, Statistical Guides Series, Statistical Services Centre, University of Reading, P.O.Box 240 Reading RG6 6FN, UK www.reading.ac.uk/ssc/
- Absalom, elkanah et al 1995 "Participatory methods and approaches: sharing our concerns and looking to the future", PLA Notes 22: 5-10

- ActionAid-Nepal 1992 Participatory Rural Appraisal Utilization Survey Report Part 1: Rural Development Area Sindhupalchowk, Monitoring and Evaluation Unit, ActionAid-Nepal, P.O.Box 3192, Kathmandu, July
- Adato, Michelle and Mary Nyasimi 2002 “Combining Qualitative and Quantitative Techniques in PRA to evaluate Agroforestry Dissemination Practices in Western Kenya” draft, International Food Policy Research Institute, Washington DC, June 10
- Booth, David. and Jeremy Holland, Jesko Hentschel and Peter Lanjouw, and Alicia Herbert 1998 Participation and Combined Methods in African Poverty Assessment: Renewing the Agenda, Report commissioned by DFID for the Working Group on Social Policy, Special Program of Assistance for Africa
- Booth, David forthcoming 2002 “Towards a better combination of the quantitative and the qualitative: some design issues from Pakistan’s Participatory Poverty Assessment”, in Ravi Kanbur ed. Qual-Quant
- Brock, Karen 1999 “It’s not only wealth that matters – it’s peace of mind too”: A Review of Participatory Work on Poverty and Illbeing, Consultations with the Poor, prepared for Global Synthesis Workshop September 22-23, 1999, Poverty Group, PREM, World Bank, Washington D.C.
- Brock, Karen 1999 (unpublished) Analysis of Consultations with the Poor wellbeing ranking and causal diagramming data, Participation Group, Institute of Development Studies, University of Sussex, UK
- Burn, R.W. 2000 Quantifying and Combining Causal Diagrams, Statistical Guides Series, Statistical Services Centre, University of Reading, P.O.Box 240 Reading RG6 6FN, UK <http://www.reading.ac.uk/ssc/>
- Chambers, Robert 1997. Whose Reality Counts? Putting the First Last, Intermediate Technology Publications, London pp 122-161
- Chambers, Robert forthcoming 2002 “The Best of Both Worlds?” in Ravi Kanbur ed. Qual-Quant
- Conway, Gordon 1985 “Agroecosystem Analysis” Agricultural Administration 20: 21-55
- Cornwell, Elizabeth, Patrick Kambewa, Richard Mwanza and Rowland Chriwa with KWERA Development Centre 2001 Impact Assessment Using Participatory Approaches: “Starter Pack” and Sustainable Agriculture in Malawi, Network Paper No 112, Agricultural Research and Extension Network, Overseas Development Institute, January
- Deweese, Peter 1989 “Aerial photography and household studies in Kenya” RRA Notes 7: 9-12
- Drinkwater, Michael 1993 “Sorting Fact from Opinion: the use of a direct matrix to evaluate finger millet varieties”, RRA Notes 17: 24-8, March
- Eldridge 1995 methodological notes, instructions to facilitators, household responses to drought study in Malawi, Zambia and Zimbabwe, Save the Children UK
- Eldridge, Chris 1998 Summary of the Main Findings of a PRA Study on the 1992 Drought in Zimbabwe, Save the Children UK

- Eldridge, Chris 2001a Investigating Change and Relationships in the Livelihoods of the Poor Using an Adaptation of Proportional Piling, Save the Children UK, 9 March
- Eldridge, Chris 2001b Brief information on the development of the “Two-dimensional scoring” approach, Save the Children UK
- Estrella, Marisol with Jutta Blauert, Dindo Campilan, John Gaventa, Julian Gonsalves, Irene Guijt, Deb Johnson and Roger Ricafort eds 2000 Learning from Change: Issues and experiences in participatory monitoring and evaluation, Intermediate Technology Publications, London
- Fielding, William J., Janet Riley and Ben. A. Oyejola 1998 “Ranks are statistics: some advice on their interpretation” PLA Notes 33, October 35-39
- Fielding, William J. and Janet Riley 2000 “Preference ranking: a cautionary tale from Papua New Guinea” PLA Notes 37: 113-117
- Freudenberger, Karen Schoonmaker 1995 “The Historical Matrix – Breaking Away from Static Analysis”, Forests, Trees and People Newsletter, 26/27:78-9 April
- Gladwin, Christina H., Jennifer S. Peterson and Abiud C. Mwale 2002 “The Quality of Science in Participatory Research: a Case Study from Eastern Zambia”, World Development 30 (4) 523-543
- Grandin, Barbara 1988 Wealth Ranking in Smallholder Communities: a Field Manual, Intermediate Technology Publications, London
- Guijt, Irene 2000 “Methodological issues in participatory monitoring and evaluation”, in Estrella with others eds Learning from Change pp 201-216
- Jayakaran, Ravi 2002 The Ten Seed Technique, World Vision China, ravi_jayakaran@wvi.org
- Jones, Carolyn 1995 Matrices, ranking and scoring: participatory appraisal “methods” paper, Participation Group, IDS, University of Sussex
- Jordan, Gavin 1999 “Public participation and GIS: report back” PLA Notes 34: 16-17
- Kanbur, Ravi ed forthcoming 2002 Qual-Quant: Qualitative and Quantitative Poverty Appraisal: Complementarities, Tensions and the Way Forward, Permanent Black, Delhi
- Kar, Kamal and Dipankar Datta 1998 “Understanding market mobility: perceptions of smallholder farmers in Bangladesh” PLA Notes 33 54-58
- Khon Kaen 1997 Proceedings of the 1985 International Conference on Rapid Rural Appraisal, University of Khon Kaen, Thailand
- Leyland, T. 1994 “Planning a Community Animal Health Care Programme in Afghanistan”, RRA Notes 20: 48-50
- Manoharan, M., K. Velayudham and N. Shunmugavalli 1993 “PRA: an approach to find felt needs of crop varieties”, RRA Notes 18: 66-8, June
- Marsland, N., I.M.Wilson, S. Abeyasekera and U.K.Kleih 2000 A Methodological Framework for Combining Quantitative and Qualitative Survey Methods,

Statistical Guide, Statistical Services Centre, University of Reading, P.O. Box 240 Reading RG6 6FN, UK <http://www.reading.ac.uk/ssc/>

- Maxwell, Simon and Bart Duff 1995 "Beyond ranking: exploring relative preferences in P/RRA" PLA Notes 22: 28-35
- McCulloch, Neil 2002 Wellbeing Ranking – an Economist's Perspective, typescript, Institute of Development Studies, Sussex, 25 February
- Mearns, Robin 1989 "Aerial photographs in rapid land resource appraisal, Papua New Guinea" RRA Notes 7: 12-14
- Mearns, Robin, D. Shombodon, G.Narangarel, U. Turul and others 1992 "Direct and Indirect Uses of Wealth Ranking in Mongolia" RRA Notes 15: 29-38
- Moser, Caroline, forthcoming 2002 "'Apt Illustration" or "Anecdotal Information"? Can Qualitative Data be Representative or Robust?" in Ravi Kanbur ed
- Moser, Caroline and Jeremy Holland 1997 Urban Poverty and Violence in Jamaica, World Bank Latin American and Caribbean Studies Viewpoints, World Bank, Washington
- Moser, Caroline and Cathy McIlwaine 2000a Urban Poor Perceptions of Violence and Exclusion in Colombia, Latin American and Caribbean Region, Environmentally and Socially Sustainable Development Sector Management Unit, the World Bank, Washington D.C.
- Moser, Caroline and Cathy McIlwaine 2000b Violence in a Post-Conflict World: Urban Poor Perceptions from Guatemala, Latin America and Caribbean Region, Environmentally and Socially Sustainable Development Sector Management Unit, the World Bank, Washington D.C.
- Mukherjee, Neela 1995 Participatory Rural Appraisal and Questionnaire Survey: Comparative Field Experience and Methodological Innovations, Concept Publishing Company, A/15-16, Commercial Block, Mohan Garden, New Delhi 110059
- Mukherjee, Neela 2001 Participatory Learning and Action, with 100 field methods, Concept Publishing Company, New Delhi 110059
- Mukherjee, Neela and Bratindi Jena eds 2001 Learning to Share: Experiences and Reflections on PRA and Other Participatory Approaches.. Volume 2, Concept Publishing Company, A/15-16, Commercial Block, Mohan Garden, New Delhi 110059
- Narayan, Deepa 1997 Voices of the Poor: Poverty and Social Capital in Tanzania, Environmentally and Socially Sustainable Development Network, World Bank
- Narayan, Deepa, Robert Chambers, Meera K. Shah and Patti Petesch. 2000. Voices of the Poor: Crying Out for Change, Oxford University Press for the World Bank, August
- NRI. 2001 Combining Quantitative and Qualitative Survey Work: Methodological Framework, Practical Issues, and Case Studies, NRI Report No 2591, Natural Resources Institute, DFID, and Statistical Services Centre, University of Reading, March

- PRAXIS 1997 PRA Reflections from the Field and Practitioners, Institute for Participatory Practices, 12 Pataliputra Colony, Patna 800 013, India (also available from Participation Group, IDS, University of Sussex, Brighton BN1 9RRE, UK)
- PRAXIS 2001 The Politics of Poverty: a tale of the living dead in Bolangir, Books for Change, SKIP House, 25/1 Museum Road, Bangalore 560 025
- Rambaldi, Giacomo and Jasmin Callosa-Tarr. 2000. Manual on Participatory 3-Dimensional Modeling for Natural Resource Management, Essentials of Protected Area Management in the Philippines, Vol 7, NIPAP, PAWB-DENR, Philippines [available from Protected Areas and Wildlife Bureau, DENR Compound, Visayas Avenue, Diliman, 1101 Quezon City, Philippines] <http://www.pawb.gov.ph/p3dm.htm>
- Richards, Michael, Jonathan Davies and William Cavendish 1999 “Can PRA methods be used to collect economic data? A non-timber forest product case study from Zimbabwe” PLA Notes 36: 34-40
- RRA Notes 151992 Special Issue on Applications of Wealth Ranking, International Institute for Environment and Development, London
- Sandford, Dick 1988 “A note on the use of aerial photographs for land use planning on a settlement site in Ethiopia” RRA Notes 6: 18-19
- Shah, Meera K. 1999 “Chapter 2: A Step-by step guide to popular PLA tools and techniques” in Shah et al eds Embracing Participation in Development :31-78
- Shah, Meera Kaul, Sarah Degnan Kambou and Barbara Monahan eds 1999 Embracing Participation in Development: Worldwide experience from CARE’s Reproductive Health Programs...., CARE, 151 Ellis Street, Atlanta, Georgia 30303, USA
- Simanowitz, Anton 1999 “Pushing the limits of mapping and wealth ranking”, PLA Notes 34: 4-8
- Simanowitz, Anton 2000 “Targeting the poor – comparing visual and participatory methods”, Small Enterprise Development, 11,1: 29-39
- Swift, Jeremy and Abdi Noor Umar 1991 Participatory Pastoral Development in Isiolo District, Socio-economic research in the Isiolo Livestock Development Project, Final Report, EMI ASAL Programme, Kenya
- Temu, A. and J/Due 2000 “Participatory appraisal approaches versus sample survey data collection: a case of smallholder farmers wellbeing ranking in Njombe District, Tanzania”, Journal of African Economies 9 (1) pp 444-62
- UNDP, Bangladesh 1996 UNDP’s 1996 Report on Human Development in Bangladesh, Volume 3 Poor people’s perspectives, UNDP, Dhaka
- Watson, Kathy 1994 “Proportional piling in Turkana: a case study”, RRA Notes 20: 131-132

World Bank 1999 Consultations with the Poor: Process Guide for the 20 Country Study for the World Development Report 2000/01, Poverty Group, PREM Network, The World Bank