

To Empower Children and the Poor: potentials in participation and visual analysis

22 August 1999

Over the past decade the rapid spread of the rhetoric of participation has not been matched by changes in reality. All the same, there have been some striking developments which seem to hold promise for children, poor people, and education. Some of these have emerged from the experiences of PRA [participatory rural appraisal or participation reflection action] which includes combinations of participation and visual analysis. This paper discusses actual and potential applications in education and invites others to judge to what extent any of this is new or helpful.

Some of the issues and clusters of questions about potentials are:

1. the use of visuals for the presentation and analysis of diverse complexity, and their introduction into education.

How significant are "group-visual synergy" and "the democracy of the ground"? Are children and the less educated better at visual presentation and complex analysis than those who are older and more educated? Is visual analysis a faculty for life analogous and complementary to linguistic and mathematical skills? Should it be part of curricula?

2. reversals of learning. *Are there ways in which the flows of teaching and learning could and should be balanced more by reversals, with more learning by adults from children, and with policy-makers informed and influenced more by field realities?*

3. the use of PRA approaches, behaviours, attitudes and methods by communities and teachers. *What are the potentials in community planning and action? Are there ways in which participatory approaches and methods involving parents, other community members, and teachers, can reverse declines in educational performance, including declining numbers of teachers, non-attendance by teachers, and poor performance by them?*

4. personal behaviour and attitudes. *How key in all this are changes in personal behaviours and attitudes? If they are belatedly being recognised in development thinking and practice, and moving fast up the agenda, what implications does this have for education?*

The Setting

During the past decade there has been a big spread of participatory rhetoric in development. Most notably, the World Bank has sought to mainstream participation, including launching participation flagship projects. Many methodologies are involved. Among these PRA [participatory rural appraisal originally, now more appropriately perhaps participation reflection action] has perhaps been the most widely mentioned. Most donor agencies have, to varying degrees, required PRA in projects and programmes which they support. International NGOs use it widely. Consultants who claim to train for PRA have come out of the woodwork all over the place. Networks of PRA practitioners have formed. The periodical PLA Notes covering participatory methodologies, in practice mainly PRA, is published three times a year and has a circulation of several thousands. Most of the practice of PRA is still quite bad, and some of it abusively bad. But at their best and near best, PRA practitioners have shown a capacity to do many of those things that are thought to be good in development: empower the poor, enhance self-reliance, generate sustainable initiatives, change behaviour and attitudes, and evolve more understanding relationships between outsiders and members of communities.

PRA takes many forms¹. Practitioners define it for themselves. Most would probably agree that it is a family of approaches, behaviours, attitudes and methods to enable people, especially those who are in some sense "lowers" (poor people, children, often women.....) to present, share, enhance and analyse their knowledge of life and conditions, and to plan, act, monitor and evaluate. Most practitioners would probably also agree that there are commitments ethically to equity, and behaviourally to facilitating, to "handing over the stick" and empowering. PRA is, though, most popularly identified not with ethical commitment or participatory behaviours and interactions (see appendix A), basic though these are, but with "visuals" - maps, diagrams, matrices and the like which people create to express, present and analyse their realities.

The evolution and applications of PRA began in community appraisal and planning, natural resource management, poverty programmes, and health, but quickly spread to almost every domain of local development, urban as well as rural, and to countries of the North as well as of the South. The first prominent application in education was REFLECT (Regenerated Freirian Literacy through Empowering Community Techniques) (Education Action; Archer 1995; Fiedrich 1996; PLA Notes 1998; Phnuyal, Archer and Cottingham 1998;), using PRA visuals with adults.. This has now spread to at least 50 countries [check]. Aspects of REFLECT are also increasingly being adopted in non-formal education (NFE), for example in Uganda and Bangladesh. Other applications of PRA have concerned participatory research on girls' education and educational policy in Africa (Kane 1995: 195-230; Sey 1997), and community primary education planning, especially and on a large scale in India (Kumar 1999). Participatory Poverty Assessments (Norton and Stephens 1995, Robb 1999) using PRA approaches, behaviours and methods have generated insights with implications for educational priorities and policies. Use of PRA-type techniques by teachers themselves has probably always been there at least in a scattered way and on a small scale, but they are nowhere yet to my knowledge, substantially part of a formal (as opposed to NFE) curriculum."

The Purposes

The purposes of this note are threefold:

- to share some of the experience to date
- to ask questions and promote debate
- to invite contributions from others

The second and third purposes reflect my sense of stumbling into an area where there is a mass of relevant experience, and a danger, even likelihood, that parts of what I say and suggest will be either familiar or wrong. What is new and exciting to me may be old hat to others. But that is no reason for keeping quiet.

There are four areas of application to describe and explore.

1. The Use of Visuals for the Presentation and Analysis of Diverse Complexity, and Their Introduction into Education.

How significant are "group-visual synergy" and the democracy of the ground? Are children and the less educated better at visual presentation and complex analysis than those who are older and more educated? Is visual analysis a faculty for life analogous and complementary to linguistic and mathematical skills? Should it be part of curricula?

Visuals, complexity and participation

The literature on visuals appears to have been mainly concerned with how "we" (teachers, educators, extensionists, fieldworkers, and the like) can communicate messages to inform and teach others.. Visual literacy is "the way people understand pictures" (Bradley 1995:1). The concern has been how we can design visuals that people will understand. PRA visuals are differentⁱⁱⁱ. Activities – for example mapping, listing items and criteria and making and scoring a matrix, or making a seasonal calendar - may be suggested by a facilitator. But what happens is presentation and analysis by local people themselves. The symbols, lists, criteria, content, and much of the form of representation are theirs, often using local materials which they choose. The communication is not from "us", outsiders, to them but from them to one another and to us. However, the idea of us communicating to them is so deeply embedded in educated minds that in conversation with professionals this point sometimes has to be repeated two or three times. What we are concerned with is enabling poor people, children and others make their own visuals, their own representations of reality, sharing these, and analysing them. When they have made visuals themselves, almost by definition they understand them. Communication is from "them" to "us", not the other way round. It is we who have to do the understanding. The basic frame of the representation may have been suggested by an outsider but the content and the detail are those of the participants.

The extraordinarily rapid spread of PRA visuals calls for explanation. Most obviously, they arrived on the scene at a time when participation was rising on the development agenda, and suitable approaches and methods were being sought. Four other reasons stand out. PRA visualisation processes usually:

- are fun: people usually enjoy them
- empower and build confidence: people often do not know they are capable of mapping, matrix scoring and so on, and are delighted when they find out what they can do.
- present interesting information and insights
- transform the relationship between the outsider and those in the community, requiring the outsider to be not teacher or talker but facilitator and listener

The first four are now commonplaces of the experience of good practice. But why they occur has received less attention. Two aspects stand out. These are social processes in small groups^{iv}; and the representation of complexity.

i. *social processes in small groups: group-visual synergy and the democracy of the ground*

The social process of generating PRA visuals usually involves a group of people, often on the ground, often making a map or diagram. The group can be children, youth, women or men, or some mix of these. Group-visual synergy is an inelegant term [a better one is invited] to describe the process [****figure 1 about here. This is on page 160 of Whose Reality Counts? Best not redrawn on a computer but photocopied?*]. As the process develops, more get down and take part. The representation is built up cumulatively, by adding or moving something, or removing, rubbing out, or changing. . Several people can be active at the same time. The final visual is more than any one person could have done alone, and has usually been cross-checked, corrected and added to in the process.

The social act is expressed in a democracy of the ground. What often happens is that those who are too stiff or important to get down are marginalised. Those who normally dominate verbally find themselves less powerful with a physical, visual medium. Those who are tall lose the advantage of their height. There is little eye contact when all concentrate on the ground. So normal patterns of power and dominance are weakened or reversed.

ii. *complexity*

The expression and analysis of complexity through visuals is a fascinating subject. With visuals there is a shift in how information is shared. The contrast between verbal and visual sharing of information is summarised in table 1. [****table 1 – page 150 of Whose Reality Counts? – about here*].

The utility of visuals for complex analysis cries out itself for analysis.^v Visual arrangements, tools and materials can be combined in many ways and so applied in many forms. The arrangements, tools and materials include maps, models, cards, lists, symbols, diagrams, matrices, counters, the ground, chalk, paper, pens. In PRA practice these are often movable things. New combinations are continuously being improvised and invented. Analysing visuals in terms of what people do, six main activities stand out: mapping and modelling; listing; sequencing; sorting and ranking; using numbers to count, estimate and score; and linking and relating. [****insert table 2 from page 135 of Whose Reality Counts?*] [*include the footnote to ordinal, in smaller print, immediately under the table*]

Complexity rises somewhat exponentially with the number of dimensions or related activities in a visual. Whenever there are three of these, the complexity is considerable. A pupils' matrix scoring of the subjects for which they have lessons has two lists – the subjects, and their criteria for assessing them, and then scores in the boxes of the matrix^{vi}. Complexity can also be represented through listing and linking, as in causal and linkage diagramming by villagers in Shinyanga Region in Tanzania to show causes and effects of poor education (see appendix diagrams. Other illustrations are: daily time use analysis by girl and boy pupils (Sey 1997); seasonal analysis of children's farm workload, family income, and school expenses; and teachers' mapping and analysis of their interactions in the classroom with pupils followed by ranking the pupils for socio-economic status.

A faculty and skill for life?

To a lay observer, some of the main skills and activities in primary school are linguistic or verbal (talking, listening, reading and writing) which is linear; mathematical (measuring, calculating, geometrical drawing) which is precise with right answers; and drawing and art, which are free and expressive. None of these seems capable of the forms of analysis possible with visual diagramming. Neither the linearity of words, nor the precision of numbers and geometry, nor representational drawing, whatever their other values and strengths, permits or provides a frame for the personal or group expression of locally complex relationships, estimates, or comparisons. Nor do they permit the free and flexible cumulative build up of a set of patterns, scores and/or relationships which embody judgements of space, time, quantity, or value. The word “free” may here be a key to something, opening up to imprecise non-linear approximations and representations which correspond with so much of human experience.

Do we then have here a useful set of components of tools which can be used creatively for complex forms of analysis?

Are these life skills which are useful but which are at present barely used?

I want to fly a kite, and suggest that the answer to both questions is yes.

When we (normal professionals and others) are faced with complex decisions, it is rare to use matrix scoring. Yet it is a powerful, quick and efficient aid. In an Appointments Board we had several candidates. When we had interviewed them, somewhat to the evident amazement of the chair, we made a matrix, listed criteria, and scored the candidates against each criterion with beans, out of five in each box. The process was fun, fast, iterative, cumulative and non-conflictual. My estimate is that we came to a good decision in about one third of the normal time, and with much less tension and stressful argument than usual.

Highly educated professionals rarely use these methods. More than that, there is a strong impression that ability to use these methods varies inversely with level of formal education. In India, for example, farmers have drawn far more complex, informative and useful farming systems diagrams than scientists. The complexity and detail of farm nutrient flow diagrams drawn by farmers in Kenya has been quite astonishing. I do not know of any serious comparative study but I have the impression that people who are not literate or not too “highly” educated have the edge over those who have had an extended education. In this respect it is a matter for research whether the Dphil/PhD process is especially damaging..

One obvious reason could be the loss of ability to play and have fun which is so marked in most healthy, happy children, but which so often diminishes with age and learning. This could be one aspect of Dr Seuss’s observation that “adults are obsolete children”^{vii}. Does another inhibition of the highly educated concern measurement and mathematics? Does training to be precise deter professionals from making approximations and comparisons? In normal professional practice, a trend is identified by two or more measurements at different times. In PRA practice it is far more usual to use counters or lengths of stick to compare. There are no measurements or absolute values, but often numbers – of stones, beans or other counters to make the comparisons. In many life contexts, this is all that is needed for useful information. It also empowers those with less education or status to express their realities^{viii}.

Scientists, however, want to know what numbers “mean”. In Eritrea, over a period of about two hours, three farmers identified and mapped on a mud floor six agro-ecological zones in their village, discussed and named seven crops important to them, drew a matrix with chalk on the bottom of a metal pan, and scored the zones for the relative importance of the crops by zone, using a total of 100 grains of maize as counters [see appendix diagrams]. Participants at a meeting of the Eritrean Association of Agricultural Scientists two days later spent an hour questioning the matrix and arguing about the figures. They tried to understand the scores as measurements – the area under the crop, volume of production, or economic value. But the scores were none of these. They were [in translation] *importance*. To the scientists they were “unscientific” and “subjective”. In fact, they were composite judgements of comparison based on life experience, and hugely informative about the farmers’ realities. They also empowered the farmers, who had earlier prudently agreed with the Government’s proposal for land consolidation, to explain why it would not work, because they needed land in several of the agro-ecological zones.^{ix}

The big question then is whether PRA-type visuals should be introduced into mainstream education, into curricula and into teacher training, to add to our repertoires for thinking, analysing, communicating and living?

There are two obvious ways this could be done.

The first is the use of analytical diagramming in existing subjects. The potential applications seem innumerable. No doubt a good deal is already done by innovative and creative teachers in a scattered way. The issue is whether this could become more widespread to the extent that both diagramming and related inventiveness became normal.

The second is treating analytical diagramming as a subject in its own right. This need not mean divorcing it from other subjects, but simply recognising that it has its own range of topics and skills, and allocating it its own time and place.

The case for this is the utility of diagramming for the presentation and analysis of complexity, as suggested above. Visuals can do much that is impossible verbally or through mathematics or drawing. Giving diagramming more academic respectability would also mean greater acceptance and use in later life. Those who experience extended education would be less inhibited and disabled. The effect could then be to widen the repertoire of diagramming and diagrammatic thinking for individuals.

For among those who do use analytical diagrams, the range for any one person seems to be typically narrow. To an extraordinary extent, intelligent people seem to get fixed on favourite patterns. These they then reproduce again and again. Realities which they express are fitted into the shapes and relationships of the mentally preset diagram. This is evident in authors as varied as Anthony Giddens, Eysenck, Peter Senge, and Jules Pretty. While there is some similarity between the Giddens^x and Eysenck preferred diagrams (circles divided into four quadrants), Senge (in *The Fifth Discipline*) again and again uses two circles of arrows, meeting at a point, and Pretty uses three overlapping circles to good effect. Nor is this limited to the intelligent. I have been alarmed to recognise in myself a repeated tendency to diagram either three or five circles connected with double-headed arrows, but never four. Whatever reality I am trying to represent has to have three or five categories^{xi}. This makes for nice diagrams (at least in my view) but cannot always be optimal as an expression of realities.

Ranges of potential diagrams and diagrammatic relationships can be found in various sources (for example Delp et al 1977; Waddington 1997; Buzan 1992; UNICEF 1993)^{xii}. Tony Buzan has gone further than most, with his mind mapping, which may well already be taught. But even Buzan, in the one source (1992) consulted, has quite a restricted range.

The question is then whether, in our education, we could and should be exposed to a much wider range of free diagrams and diagramming, and practice and embed these; and whether these could be a prophylactic against the reductionist addictions of much normal professionalism which force reality into simple boxes or single measures. The vision is that each educated person would have an extensive repertoire to fit different needs and conditions.

2. Reversals of Learning

Are there ways in which the flows of teaching and learning could and should be balanced more by reversals, with more learning by adults from children, and with policy-makers informed and influenced more by field realities?

Reversals of directions of learning are fundamental to participation, and part of the core of PRA. Uppers (those who in a context are superior or dominant) learn from lowers (those who in the context are inferior or subordinate). This is not to negate teaching of lowers by uppers. But it demands time, space and facilitation to enable lowers to express their realities, to analyse for themselves, to share those realities and analyses with uppers, and that those who are upper understand these, and respect and act on them.

Children's realities

There is now extensive experience with PRA and children (see e.g. Johnson, Hill and Ivan-Smith 1995; PLA Notes 25 (1996); Sey 1997). In *Stepping Forward* (Johnson, Ivan-Smith, Gordon, Pridmore and Scott 1998) abundant evidence is presented showing that in a participatory mode children have greater capabilities than most adults have supposed. PRA-type activities and diagramming are a part of this. In the words of Charity Munyao describing applications of PRA with children living in difficult circumstances in Zimbabwe "Children thrive on exploratory, open-ended exercises. It is their inquisitive nature that influences them to venture into the unknown" (Munyao 1998:71).

Many insights for adults about children's realities have resulted. In Ethiopia, when men, women and children made maps of their village area, it was only the children (who herded the animals) who represented the grazing areas (Andrea Cornwall, pers. comm). In Uganda, when five groups – old women, young women, old men, young men, and children – analysed problems in education, it was only the children who mentioned drunken teachers (Redd Barna, from memory, reference to follow). In Malawi, daily time use analysis by girls and boys revealed visually the sharp gender differences to the disadvantage of girls (Sey 1997). In Zimbabwe, following the use of PRA methods with children, facilitators concluded that "In general, the wealth of knowledge coming from the children both about their environment and their social situation was specific and extensive. Children are a great resource for information pertaining to their own situation and the community's" (Redd Barna 1993:85).

Reversals, with adults learning from children, are spreading, with ideas, for example, of special sessions at conferences where children are teachers of VIPs. On such occasions, the preparation and presentation of visuals can be empowering, and gives the presenters confidence. The potential for empowering children through their own visual analysis seems considerable.

Policy influence

PRA approaches, behaviours and methods have been used in Participatory Poverty Assessments (PPAs) designed to influence policy in countries as varied as Bangladesh, Egypt, Ghana, Mozambique, South Africa, Vietnam and Zambia^{xiii}. A documented case of participatory research in a PRA-type mode influencing Government education policy comes from The Gambia (Colleta and Perkins 1995 see box; also Kane et al 1998).

"The Gambia: Participatory Research Uncovers Reasons for Low Enrollment and High Dropout

... Thirteen local researchers, including statisticians, Ministry of Education staff and teenage girls (to interview their peers) were trained in PRA methods. After trials in three villages, the team carried out a series of projects in seven villages and seven urban schools. Focus group discussions were held, where community members were asked to explain their problems and how education related to those problems. Villagers constructed matrices of community and educational problems, drew seasonal diagrams on income and expenditure, constructed social-educational "maps" of the village, identified households with girls of school age, and provided a wealth of socioeconomic information.

These techniques elicited a variety of new insights into the perceptions of villagers concerning the education of girls, including information which could not have been obtained from interviews and questionnaires alone. One of the most startling results was the discovery that one quarter of all the school-age girls (those who were pregnant, married, or about to be married) had been missed by enrollment statistics since they had not been counted by villagers in the initial census. Costs to parents, including hidden costs and the timing of school fee payments which coincided with the season of lowest income, were seen as the biggest problem associated with education. As a result of this research, various measures have been introduced, including a change in the timing of fee payments"

Source: Colleta and Perkins 1995:14 Box 7

The timing of the payment of school expenses has been found, using PRA approaches and methods, to be at bad times of the year not only in The Gambia but also in countries as diverse as the Philippines, Nigeria (pers.comm. Somesh Kumar), and Zambia (Norton, Owen and Milimo 1994; Milimo, Norton and Owen 1998: 108). These are typically in the rains before harvest at a time of shortage of food, sickness, high work demands, and indebtedness, in Zambia compounded by the costs of Christmas.

For policy influence, the reversal of learning is effective especially when senior policy-makers are involved in the fieldwork. Official views of rural realities can be transformed³⁴. In The Gambia, the participation of an official from the Ministry of Education played a significant part in the change of policies which resulted. The World Bank's immersions for senior managers, with a week in a village or slum, are reported to have had considerable personal impacts. Strangely, this is a rare case of a World Bank idea and innovation which has not, apparently, spread. Its potential for policy influence over the long term would, though, seem immense.

PPAs can be sectoral or general. Both have their part to play. ActionAid and Oxfam have combined to support national NGOs in Mozambique, Uganda and Nepal in sectoral Participatory Education Assessments as part of processes of learning and advocacy. General PPAs continue. The on-going Uganda Participatory Poverty Appraisal Process is of special interest here, as it explores the potential for PPAs to become linked with on-going participatory monitoring and evaluation, with a continuous feedback to policy in the major sectors.

3. The Use of PRA Approaches, Behaviours, and Methods by Communities and Teachers.

What are the potentials in community planning and action? Are there ways in which participatory approaches and methods involving parents, other community members, and teachers, can reverse declines in educational performance, including declining numbers of teachers, non-attendance by teachers, and poor performance by them?

There is already a huge experience of community participation in education. Moves in these directions have occurred in many places and taken many forms. The BRAC schools in Bangladesh are an example. In India developments have been on a very large scale, notably with the District Primary Education Programme (DPEP) in states which include Bihar and Andhra Pradesh, in both of which PRA approaches and methods have been part of the programme. In Andhra Pradesh some 120,000 community members were trained in the use of PRA for the preparation of Village Primary Education Plans. The training, initiated by PRAXIS (an ActionAid-supported organisation) followed a cascade, starting with 36 trainers who in turn trained 120 who in turn trained 2,000. Quality assurance was sought through systems of mentoring between levels in the cascade (pers.comm. Somesh Kumar). In a three day activity in each village, members of the Village Education Committee were to carry out social mapping, seasonal analysis, daily activity schedules, and Venn (institutional) diagramming, and prepare a Village Primary Education Plan. The procedure was detailed in a manual in Telugu. As with all scaling up, it is important to learn from these experiences about what actually happens, and how continuous improvements can be sought.

Often with primary education now the bigger challenge seems to be quality rather than scale. The bad practices and depressing trends in some countries are well known. They are perhaps especially serious in parts of SubSaharan Africa and South Asia. In countries with high incidence of HIV/AIDS, and in countries where future high incidence can be anticipated, the numbers of teachers may drop sharply: and many deaths will mean fewer teachers, especially trained teachers since they are harder to produce. The challenge is already, and will be increasingly, how to assure a reasonable combination of quality and scale of education with fewer formal teachers. The scene can be set by this recent (1999) description by villagers of their rural primary school in Malawi:

“We hear the government introduced free primary education and provides for all essential requirements, note books, pens and pencils. The pupils have never received these items. We still have to provide them ourselves. We strongly believe it is not the government's fault but it is sheer malpractice on the part of the school's management. We have seen several teachers going around selling note books and pens. In addition the teachers are not dedicated to their duty. Often pupils go back home without attending even a

single lesson. We hear they [the teachers] are demotivated by poor working conditions. Their salaries are particularly inadequate. It is not surprising that they divert free primary education resources to supplement their miserable salaries. This has adversely affected the standards of education at school. Only ten pupils have been selected to secondary schools in the last six years....the government should consider increasing teachers' salaries so that they should be satisfied and serve our pupils with dedication and confidence. The majority concentrate on private tuition in order to supplement their salaries"

Malawi 1999:78

Several points stand out: the parents' concern, their mixture of blame and understanding for the teachers, the low salaries of the teachers, and the passing of the buck to the government. The question is whether these could be combined more creatively. To pass the financial buck to the government may be unrealistic: the money may simply not be there. It can be asked though whether a combined operation by community and teachers might not open the way for a win-win situation. This would entail members of the community becoming involved more in the teaching, accountability of teachers to the community, and community funds, ideally contributed mainly by those who are less poor, supplementing the teachers' salaries. Other measures such as adjusting terms to fit better with agricultural seasons, so that teachers can cultivate without prejudicing teaching.

There must be widespread experience already with such approaches, as with Colombia's *Escuela Nueva* programme (briefly described in Colletta and Perkins 1995:19). There might be a tendency to suppose that such participation would only be possible in a well organised educational system. In bad conditions, introducing visual diagramming and reversals of learning may sound unrealistic, seeking to run when the problem is to walk. But the contrary question can be asked: could it be precisely where the educational system is in bad shape, under-resourced, and with low teacher morale and performance, that the incentives to parents will be especially strong and make more community involvement and management more widely feasible? And where the empowering effects of PRA methods could enhance the confidence of parents and other community members to make bigger contributions?

Could participatory approaches and methods, including those of PRA, act then as a focus or attractor to make this more practicable? With the crisis in education, might there be a movement for more and more communities, in varying modes, to play a bigger part? Could this combine community-level planning and management, involvement of community members as facilitators and teachers? Could this link with a shift of syllabus towards local life and environment about which members of the community and pupils themselves are knowledgeable? What is there to learn from NFE initiatives, like that in Mubende District in Uganda, which use REFLECT?

What examples are there of such initiatives, and what can be learnt from them?

4. Personal Behaviour and Attitudes

How key in all this are changes in personal behaviours and attitudes? If they are belatedly being recognised in development thinking and practice, and moving fast up the agenda, does this have implications and raise questions for education?

Finally, personal behaviour and attitudes are belatedly rising in importance as concerns on the development agenda. It is increasingly being recognised that what sort of people we are, as development professionals, and how we behave and interact, are crucial for development as good change. Imperious attitudes and behaviours of those in authority, in which "we" know and "they" are ignorant are much of the problem. The shifts of role envisaged are from teacher to facilitator, and of activity from transferring knowledge from uppers to lowers to empowering and enabling lowers to analyse, share and learn for themselves. In good PRA training and practice (see e.g. Kumar 1996), and in earlier and other on-going participatory methodologies like Training for Transformation (Hope and Timmel 1984), attitudes, behaviour and self-critical awareness are central concerns. If development activities are to become more participatory and empowering, bureaucratic organisations have to change, as do those who work in them. Those who have been schooled, and schooled for longer, tend to have more of an upper-lower teacher-student orientation. When they who enter and staff bureaucratic organisations, they then reinforce

hierarchical cultures. In long-term change, then, much will depend on the orientations brought to development and to development organisations by those who are completing their formal education; which suggests that for long-term bureaucratic reorientation, educational systems are a key place to start.

A massive change in how many, perhaps most, teachers behave in and out of the classroom, is implied. From a PRA perspective, teachers are among the more disabled people in the world: they are expected to teach, not facilitate; to get children through exams, not empower them; to transfer knowledge, not elicit it; in short, to dominate. No doubt there is a huge body of knowledge about teacher behaviour. The question is whether there are any new practical approaches and tools to enable them to change in ways which they, their pupils, and members of the community, would welcome. One candidate is a combination of classroom observations and PRA activities by pupils using methods such as classroom mapping, seasonal calendars, daily activity profiles, transect walk, causal diagrams, pie charts, criteria matrices, problem/solution matrices, Venn diagrams, card sorts, and school maps, as outlined in a recent manual – the Classroom Observations and Participatory Learning for Action Activities Manual (COPLAA) (Sey and VanBelle-Prouty n.d.[?1998]). Perhaps the crux is the words “in ways which they, their pupils, and members of the community, will welcome”. PRA is not a magic wand. But there are now enough examples of its combinations of empowerment, bringing different people together, surprises of learning about others’ realities, fun, and changes of behaviour and attitudes in other domains to justify further exploration of such applications in education.

The long-term potential contribution of teachers and of educational processes generally to participatory development would seem immense; but the reversals and changes needed are deep. There must surely be many islands of innovation and creativity with participatory approaches. So the final questions are: could PRA-type visuals, behaviours and attitudes reinforce these, and play a part in a movement for the massive transformations which are needed? And what experience, already, is there to draw on to answer that question?

21prabeh.doc Word Count 229 Wednesday, May 12, 1999
Draft. Can be copied. Use at your own risk. Improvements requested.
****perhaps add an inset note about each item.
More work on sequence. Add an introduction.

21 PRA BEHAVIOURS

There are a few DON'Ts,

DON'T

- * rush
- * teach
- * criticise
- * interrupt
- * dominate
- * sabotage

but there is much more that is positive with 21 DOs

DO

1. Use your own best judgement at all times
2. Introduce yourself. Establish rapport
3. Respect, be nice to people
4. "Ask them"
5. Facilitate
6. Empower - be confident that "They can do it"
7. Hand over the stick
8. Be sensitive
9. Share
10. Watch, listen, learn
11. Abandon preconceptions. Unlearn.
12. Be self-critical and self-aware
13. Embrace error, learn from mistakes
14. Relax
15. Triangulate
16. Seek optimal ignorance
17. Be honest
18. Improvise

- 19 Be optimally unprepared and flexible
- 20 Have fun. Enjoy
- 21 Innovate and invent - try new things, be bold, take risks.

Among other sources this draws on papers compiled and edited by Tilly Sellers as part of the Young People and Sexual Health Project, Department of Public Health Medicine, University of Hull, December 1995, which include the following:

"Facilitators should

show respect
 establish rapport
 abandon preconceptions
 hand over the stick
 watch, listen, learn
 learn from mistakes
 be self-critical and self-aware
 be flexible
 support and share
 be honest "

RELATIVE IMPORTANCE OF MAIN CROPS BY AGRONECOLOGICAL ZONE

Diagram 2.

ADI-KTEKLA VILLAGE, MENDEFERA, ERYTREA.

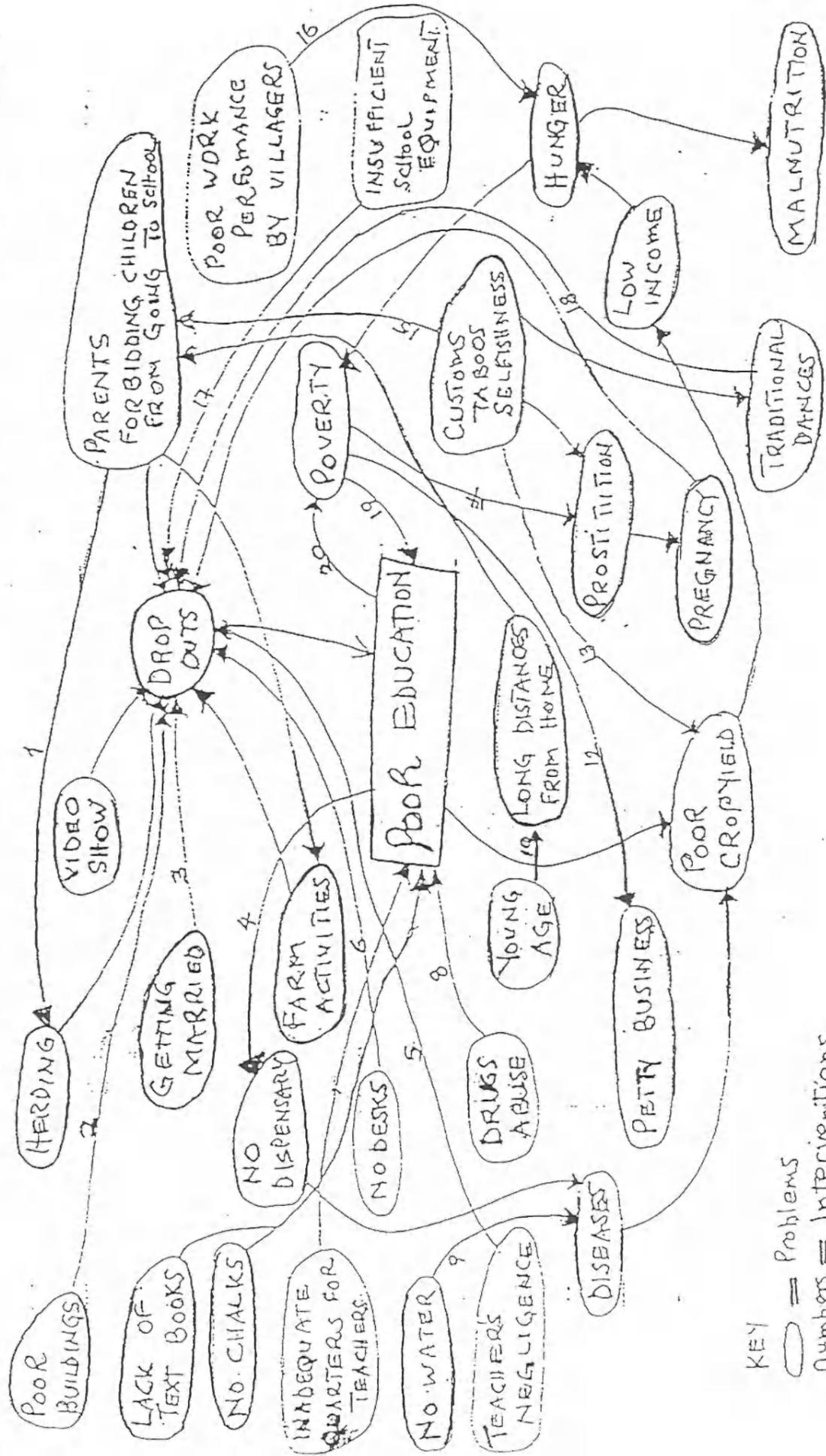
	MAIZE	BARLEY/TEFF	WHEAT	SORGHUM	MILLET	PEAS	FINJER BEANS AND	TOTAL
GEDENA	3	3	5					11
MEMBER		15	8	6		6		35
ZAGIENA		4		4		4		12
TSEBARIA				9	5			14
WALEHA			7	6		6		19
HUZA					4	5		9
TOTAL	3	22	20	15	9	21		100

METHOD: LISTING AFTER MAPPING THEN SCORING WITH 100 MAIZE GRAINS ON A MATRIX DRAWN

ANALYSTS:

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Diagram 3. Linkages and Solutions to the Education Problem in Songambele, Shinyanga Rural.



KEY
 ○ = Problems
 □ = Interventions
 Numbers = Linkages

Diagram 4. Solutions to the Problem of Poor Education

Solution	Where	Who	When	Resources Required	Source of Funds
Improvement of school by building classrooms, complete primary school desks, furniture	Matongo Nhelegani Nyambula Kangeme Businda	Community Government	1997	Building material Furniture Labour	Government/Community Government/Community Community
Building permanent houses for teachers	Nhelegani Songambebe	Community Government	1997	Building material Labour	Government/Community Community
Use by laws to force children to go to school	Mwamalole Nyambula	Village Government	1997	–	–
Build pre-school	Nhelegani	School authority/village government	1997	–	–

Source: Participatory Poverty Assessment: Shinyanga Region, Tanzania, Chapter 11, Village Action Planning by Mulaga Lukomlo et al, Second Draft, January 1998.

Below is a flow diagram from Songambebe, showing the causes of the poor education and suggesting 17 different solutions.

Number	Interventions
1	Educate parents on the importance of going to school. Advise parents to look for other alternatives for herding.
2	District Executive Director, and village government to build better buildings. Seek support from Donor agencies.
3.	By laws strengthening.
4.	Adult education, seminars.
5.	Ministry of Education, District Executive Directors to use rules and regulations.
6.	Village council to buy desks.
7.	District Executive Director and the village government to build good and enough quarters for the teachers.
8.	By laws, education on effects to the pupils
9.	The village government to seek more information from Domestic water supply project and other sources on how to get a long term measure for water problems.
10.	The District to build one more school because the village is large and scattered (6km from school).
11.	More intervention to be strengthened out from the village to district level on how to support the poor.
12.	Educating people on good crop husbandry (modern).
13.	Education to parents.
14.	Having a dispensary for the sick
15.	District Executive Director and the village government to supply school equipment.
16.	Educating parents by laws.
17.	Implementing all interventions set.

Table 1. Verbal and visual compared

	<i>Verbal (interview conversation...)</i>	<i>Visual (map, model, matrix, diagram...)</i>
Outsider's mode and role	Probing investigator	Facilitating initiator and catalyst
Insider's mode and style	Reactive respondent	Creative analyst and presenter
Investigative style	Extractive	Performative
Insider's awareness of outsider	High	Low
Eye contact	High	Low
The medium and materials are those of:	Outsider	Insider
Detail influenced by:	Etic categories	Emic categories
Information flow	Sequential	Cumulative
Accessibility of information to others	Low Transient	High Semi-permanent
Initiative for cross-checking	Outsider	Insider
Ownership of information	Appropriated by outsider	Shared; can be owned by insider
Utility for complex analysis	Low	High

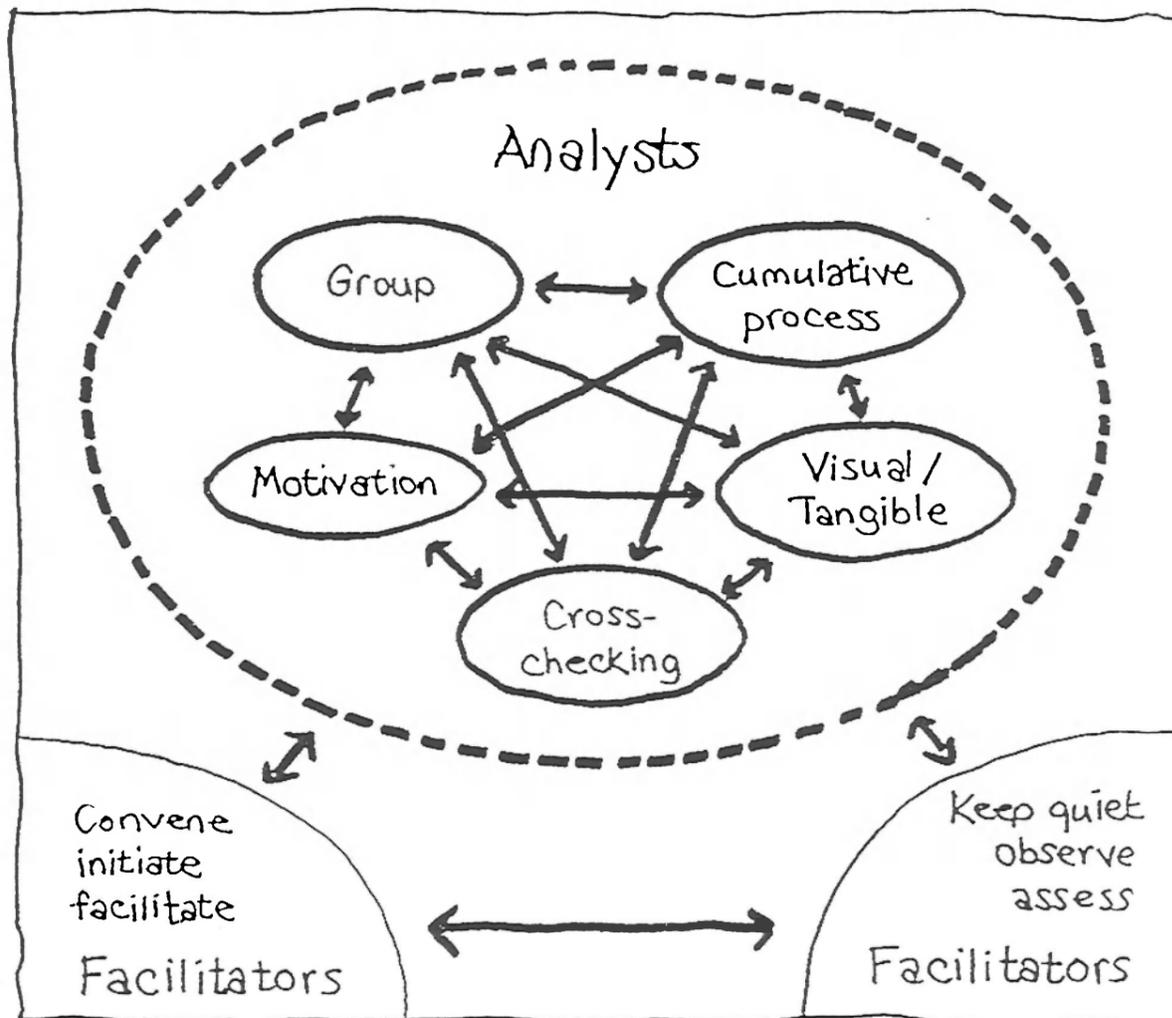
Source: Chambers, 1997:150

Table 2. Dimensions, activities, forms and materials

<i>Dimension/character</i>	<i>Activities</i>	<i>Forms and materials</i>
Spatial	Mapping and modelling	maps on the ground or paper, chalk, pens, symbols
Nominal	Collecting, naming, listing	collections, cards, symbols, lists
Temporal	Sequencing	ground, paper, cards, symbols
Ordinal	Sorting, comparing, ranking	cards, symbols, matrices
Numerical	Counting, estimating, comparing, scoring	seeds, stones, sticks, matrices
Relational	Linking, relating	Venns, cards, symbols, lines

Source: Chambers, 1997: 135

Figure 1. Group-visual synergy



Source: Chambers, 1997:160

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ⁱ There is a large literature, much of it grey. Collections are accessible to visitors at the International Institute for Environment and Development, 3 Endsleigh Street, London WC1 (near Euston Station), and in the Participation Reading Room at the Institute of Development Studies, University of Sussex, Brighton, and at Resource Centres in other countries. Please see the Sources and Contacts sheets which will be available at the conference. For a review of the origins and nature of PRA as perceived by one participant/observer see Chambers 1997.

ⁱⁱ A recent review has been carried out by Vicky Johnson and Robert Nurick (1999) and will be the basis for a presentation at this Conference, complementing and adding to what is in this paper.

ⁱⁱⁱ For a perceptive analysis of PRA visuals and processes in the light of literature and insights from social anthropology and visual literacy, see Robinson-Pant 1996. For an entertainingly iconoclastic view, pointing out that pie diagrams are cultural specific (Westerners slice pies, South Asians tear chapatis), see Gill 1993.

^{iv} Some of the criticisms of PRA have been based on observations of community meetings, with their well known biases and problems. Most PRA practice is in smaller groups, often with a degree of homogeneity, for example all women, all men, or all children.

^v The remainder of this paragraph is from Chambers 1997:135, in a chapter which has further discussion of these and related issues

^{vi} My impression is that when PRA visuals are used, lowers' analyses of uppers' performances is relatively anonymous, honest, fun and acceptable to uppers (who can find this a rivetting form of feedback). This observation is based partly on university students' choices to matrix score their lecturers or courses, as they have done to my knowledge in the UK at East Anglia, LSE, Reading, Sussex and Swansea.

^{vii} I remain puzzled by the reluctance of adults to use these methods. My family have a strong resistance to matrix scoring. Yet when we scored individual matrices for different camp sites on a camping van holiday, it at once became clear that our criteria differed sharply, explaining why we argued so much, and showing us others' points of view. . Family dynamics, and standing up against the would-be dominance of dad, may however explain the resistance more than education and age.

^{ix} This experience has been written up and is available on request from Annie Jamieson, IDS, University of Sussex, Brighton BN1 9RE

^x At the time of writing I cannot find the Giddens book, on modernity, on which this statement is based

^{xi} Four may be preferred by those who have had a Jungian analysis (I have not). Any advice on how to become a more successfully recovering pentaphiliac will be appreciated.

^{xii} I have heard of computer programmes which provide the user with a range of diagrammatic forms for the organisation and analysis of information and ideas. I would be grateful if any reader would supply me with details

^{xiii} For reviews of PPA experience see Norton and Stephens 1995, Holland with Blackburn 1998:91-146, and Robb 1999. As of July 1998 the World Bank had been involved with 43 PPAs. UNDP and several bilateral donors have also sponsored and promoted PPAs.

^{xiv} For a striking example of a change of officials' perceptions see Karen Schoonmaker Freudenberger's (1998) account of fieldwork related to land tenure undertaken with and by Government officials in Guinea.