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Participatory rural appraisal: potential applications in family planning, health and nutrition programmes

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• Introduction

The terms participatory rural appraisal (PRA) or participatory rural learning embrace a series of techniques, many of them recently developed in India, for using local people's knowledge and skills to learn about local conditions, identify local development problems and plan responses to them. This discussion paper first sets out the origins, advantages and drawbacks of PRA in general. Part II discusses specific potential applications in family planning, health and nutrition programmes, using as case examples the Indian family planning, maternal and child health and nutrition programmes. Part III suggests steps which could be taken to experiment with and institutionalise the approach, again using the example of India, if its potential seems worthwhile.

• PRA: origins, principles, advantages and drawbacks

Origins

PRA approaches have developed out of the Rapid Rural Appraisal (RRA) techniques which were first systematised in the late 1970s, and which had become academically respectable by the end of the 1980s. RRA techniques in turn developed out of a dissatisfaction with large scale questionnaire surveys which gave delayed and questionable results; and, on the other extreme, out of equal dissatisfaction with the unreliability of impressions gained during the brief field visits made by urban based professionals which came to be known as 'rural development tourism'.

RRA techniques include, among others, secondary data review; direct observation in field situations; taking part in rural activities; semi-structured interviewing; workshops and brainstorming; taking transects across rural areas through group walks; mapping and aerial photography; ranking and scoring (rather than quantifying with statistical significance); developing chronologies of local events; and making portraits or case studies of people or situations. As these and other techniques were systematised, it became apparent that the results they gave were not only faster and cheaper than previous methods, but often produced a greater range of information and greater accuracy.

Many of the RRA techniques were developed for agroecosystems analysis, and by the Universities of Chiang Mai and Khon Kaen in Thailand. But by the end of the 1980s, they had been applied in a wide range of sectors in more than 25 countries, and articles on RRA were being published in respectable journals. In the health and nutrition sectors, Rapid Assessment Procedures (RAP), a similar set of techniques developed by Scrimshaw and Hurtado, also gained rapid currency. RAP uses anthropological methods, including systematic recording in field notes, informal interviews and conversations, participant observation and focus groups (Scrimshaw and Hurtado, 1987). Within the World Bank, a form of rapid appraisal based on a combination of structured interviewing and participant observation and known as 'beneficiary assessment', was also developed during the 1980s. The approach is summarised in 'Listen To The People' (Salmen, 1987). By 1991, this methodology had been applied in several countries in the population, health and nutrition sectors.

Participatory rural appraisal grew out of a concern that RRA was essentially an 'extractive' approach. Outside researchers came to villages, learned from the people, left, analysed the data, and drew up development plans. PRA uses many of the same techniques as RRA, but in a participatory manner, so that local people identify their own problems and are involved in planning how to resolve them. PRA has been developing rapidly since 1988, and the most active research is going on in India and Nepal. It has mainly been applied so far in the natural resource development sectors, especially watershed development and social forestry, but applications are being made to health and nutrition. Three Indian NGOs, Aga Khan Rural Support Programme in Gujarat, and MYRADA and ActionAid in Bangalore, are the main pioneers in these sectors.

Principles of PRA

The following principles of PRA are quoted from a paper given by Robert Chambers at the Silver Jubilee Celebrations of the Nutrition Society of India (Chambers, 1990):

- learning rapidly and progressively, with flexible use of methods, improvisation, and iteration, not following a blue-printed programme but adapting in a learning process;
- offsetting the biases (spatial, project, person, seasonal, professional, diplomatic...) of rural development tourism, and not rushing but relaxing;
- learning from and with rural people, directly and face to face, seeking to understand their perceptions, priorities and needs;
- triangulating, meaning using more than one, and often three methods, sources, locations, positions in a distribution etc to cross-check and for a balanced perspective;
- optimizing, relating costs of learning to the useful truth of information, with trade-offs between quantity, relevance, accuracy and timeliness. The principles apply here of optimal ignorance - not trying to find out more than is needed; and of appropriate imprecision - not trying to measure what

does not need to be measured, or not measuring more accurately than is necessary for practical purposes; and,

- critical self-awareness and doubt, reflecting on what is being seen and not seen, who is being met and not met, what is being said and not said, embracing and learning from error, and consciously exercising judgement.

Advantages

PRA has three broad advantages in addition to the speed and cheapness which it shares with RRA. First, the information it provides tends to be highly accurate. This is partly because, as experience has shown, local people's knowledge of local conditions is often greater than had been supposed, as is their capacity to map, model, estimate, rank, diagram and plan. This is also because participatory approaches to describing local conditions and planning allow local people to discuss and cross-check each others' knowledge on the spot.

Second, plans drawn up in a participatory manner by local people are more likely to work than plans drawn up by outsiders. This is because they will automatically take account of and be adapted to local conditions, whether ecological, social, cultural, financial or political.

Third, and potentially most important of all, the participatory nature of the process is a development benefit in itself, in terms of empowering local people. At best, PRA can increase local people's understanding of their problems and opportunities; increase their control over development choices and plans; and initiate a process of community participation that can continue through programme implementation-either in terms of community management of local initiatives, or at least in terms of community monitoring of government schemes.

Potential drawbacks

The success of PRA depends upon the behaviour of the outsiders who come to villages and slums to initiate the process, and the quality of the rapport that the outsiders can establish. PRA requires not only a technical understanding of the techniques to be applied,

but also the capacity to listen, to stay in the background, to be critically self-aware, to allow local people to dominate discussion, to be taught rather than to teach. Learning such behaviour can mean significant and difficult reversals of engrained attitudes and approaches for development researchers used to traditional methods. Such reversals are still more difficult for government servants running local development programmes, whose field trips have traditionally been inspection tours in authoritarian style.

The major potential drawback with PRA therefore is whether the quality of the work can be maintained as its use spreads outside the NGOs who are pioneering it, and who have a comparative advantage in using it because they already have a strong rapport with their clients. In particular, the question is whether PRA can or should be institutionalised in the government bureaucracies responsible for major rural and slum development programmes. At the very least, it is clear that scaling up the use of PRA will be a challenging task, which should be approached slowly and carefully on an experimental basis.

- **Potential applications in the Indian family planning, health and nutrition programmes**

The Indian family planning and maternal and child health programme is known as the Family Welfare (FW) programme. The key field level worker is a Multi-Purpose Health Worker (MPHW), working out of a Health Sub-Centre, at the ratio of one to 5,000 population. The main Indian maternal and child nutrition programme is known as the Integrated Child Development Services (ICDS) Scheme. It provides nutrition education, growth monitoring and supplementary feeding through a network of Anganwadi Workers (AWs), working out of Anganwadi Centres (AWCs), at a ratio of about one per 1,000 population.

Both the Family Welfare and ICDS programmes have been criticised for their rigid design, and their failure to elicit community participation. With regard to the former, both schemes are centrally designed and funded, and a standard package of services is delivered in a standardised manner, with little regard to meeting the varying needs of different social

and demographic groups. With regard to the latter, both programmes have failed to mobilise communities to contribute resources in cash or kind, to help in service provision or health and nutrition education, or even to monitor service delivery. Given the nature of these problems, the principles and approaches of PRA are in principle ones which could help to tailor programmes to better meet local needs, and involve communities more.

The challenge, however, is to move from this general statement to a set of specific techniques which are useful to the programmes, and clear and simple enough to be applied on a routine basis in the field. Given the difficulties of training field staff to use these techniques sensitively, implementability is the key test to be applied. For this reason, it may make sense to divide the possible applications of PRA into three categories: (i) those which are simple enough to be applied on a routine basis in every village, with the local health or nutrition worker acting as facilitator; (ii) those which are more demanding, because they require more understanding or more sustained community involvement, and hence should be introduced only after successful experience with the first category; and (iii) those which require specialist outsider input, and hence which should be attempted on a small scale in sample villages rather than on a large scale by field workers as part of programme implementation.

The following specific applications are suggested as appropriate for systematic testing in the field in the context of the government programmes, rather than in NGO-run schemes. They are presented according to the three 'categories of complexity' proposed above. They should be critically reviewed from two perspectives: are they useful enough to be worth the time, money and energy needed to train and supervise workers/researchers in them? And can they work on a large scale in the real world of the Indian health and nutrition development bureaucracy?

Category one: for routine use in every village

Four distinct types of application are suggested here: group interviewing to get clients' perceptions of the local health and nutrition situation; village mapping to identify target

clients, non-users of services and local health care providers; individual and group interviews to get qualitative feedback on service performance; and verbal autopsies to establish what went wrong in the case of deaths from preventable/curable illness or malnutrition.

Clients' perceptions of the health/nutrition situation

Systematic conversational interviewing can be used to get clients' perceptions of the local health and nutrition situation. Providing this is structured so that all the main social groups in the village or slum are consulted, this can be useful in at least three ways:

- a. Perceptions of the importance of different local health problems. This is worth inquiring into, because local people's perceptions of what is important may differ significantly from health professionals' perceptions of what is important from an epidemiological point of view. For example, poor people may attach more importance to transient disease which prevents them from working and earning, than to leading causes of death which may be viewed with a degree of fatalism. Or, people may simply not know how serious a local problem actually is: the classic case in point is malnutrition, which parents often do not recognise in their children, and if recognised, is seldom seen as a major contributor to illness or death. Understanding such perceptions is important to health workers in at least two key ways. First, it can help them vary the standard package of health interventions to meet locally felt needs. While this is important in itself, it may also improve programme impact - it may make good sense to give priority to treating diseases of low epidemiological but high local importance, if this will increase the health worker's credibility in changing undesirable health behaviour that relate to 'more important' diseases. Second, it is essential for the design of health and nutrition education messages that are relevant to the local situation.
- b. Knowledge about seasonality. Local people will have detailed knowledge about

the importance of different diseases at different seasons; how disease interacts with seasonal peak labour demands; and how family food security varies seasonally, and interacts with both disease and labour peaks. This information is essential for varying services and education messages by season.

- c. Knowledge about trends. Local people will know about trends over time in the incidence of diseases and in food security for different social, income and occupational groups. This information will not be available from any other source, because sample surveys will not be valid for the local level, and service statistics do not distinguish between different groups in the village or slum.

Village or slum mapping

Experience in over 100 villages in different states of India has shown that local people can map, diagram or model their village or ward extremely accurately; it is clear that Indian villagers carry with them a much better mental map of their surroundings - physical and social - than do urban westerners. In general, a small village can be mapped in chalk or rangoli powders on the ground in about twenty minutes by two or three people. The experience is that two or three villagers, helped by others watching, can then very rapidly fill in the numbers, ages and sexes in each household (using sticks or stones of different sizes), together with caste and occupational groups (using colours or symbols). This is done with a high degree of accuracy, because of the cross-checking by on-lookers.

Such maps/censuses, which would with traditional techniques require an expensive and time-consuming house to house survey, could be used for at least three important purposes:

- a. Identifying clients for service delivery and education. For example, particular client groups might be 0-3 year old children for outreach visits under the ICDS scheme; pregnant women for ante-natal care; or women in their first years of marriage for education about birth spacing methods. Being able to identify clients spatially on a

map facilitates the planning of outreach visits;

- b. Targeting non-users of services. Mothers preparing a village map will know who are the non-users of services - something which is impossible to find out from records kept at Health Centres or Anganwadis, which naturally focus on service users. Knowing, for example, which children in the Anganwadi area have not been weighed, or who are malnourished but not coming for supplementary feeding, is of critical importance; and,
- c. Targeting high risk individuals and groups. Village mapping can be combined with wealth ranking to identify the poorest people, most prone to illness, malnutrition and premature deaths. Experience with PRA has shown that local people can quickly and accurately rank the wealth of those in their village or slum, and identify the neediest. They can also identify families with special problems which may put them at risk - for example, the single parent family, or the woman with an alcoholic husband. Again, knowing the location of high risk clients facilitates the planning of special service delivery or educational efforts, or their referral for participation in credit or income generation programmes run by other departments.

Qualitative feedback on programme performance

One weakness of both the FW and ICDS programmes is that monitoring information is mainly quantitative, in the form of service statistics; but these do not give a picture of service quality or client satisfaction. In both programmes, however, service quality is recognised to be low; clients are often unaware of the full range of services to which they are entitled; and, even if aware, service utilisation is low. In these circumstances, using conversational interviewing to get regular qualitative feedback from clients on their awareness of and satisfaction with services would provide dual benefits. It would provide FW and ICDS programme managers with a clients-eye view of their programmes; and it

would help to increase the accountability of local service providers to their clients.

Verbal autopsies

The birth and death registration system in India works unevenly; but even when it works, it is only the proximate, medical cause of death which is reported. More important, from the standpoint of preventing future deaths, is to know what was the underlying cause of death. Was it that the dangerous nature of the disease was not recognised by the parents? Or was it recognised by the parents, but the child was not referred? Or was the child referred but not treated properly? Was the child anyway more likely to succumb because it was malnourished, or unprotected by Vitamin A prophylaxis? A participatory discussion - or verbal autopsy - of the underlying causes of each death in the village, involving the family of the deceased, the local health worker and her supervisor, and one or more village leaders, could have three important benefits:

- a. the local health worker and her supervisor would understand what had gone wrong, and be in a position to take corrective measures to prevent a recurrence;
- b. supervisors could compare notes on deaths at monthly meetings, and wherever patterns of inappropriate care emerged repeatedly, training programmes for local workers at the local level could be arranged to correct the particular problem; and,
- c. local people and local leaders would gain a better understanding of local health problems and how the health system should respond, and would be in a more effective position to monitor service performance, and assist in health and nutrition education of local families.

Category two: using PRA for programme monitoring and management

The applications of PRA described above are essentially one-off or intermittent interventions, whether for reorienting the package of primary care services, checking on client satisfaction, or investigating a death. But

wherever these applications of PRA were established and working well, consideration could be given to a more advanced use of PRA in which these techniques would be applied on a continuous basis to enable communities to monitor and manage the performance of health services in their own villages. While this would be an ideal for every village, because this would help to empower communities, it might be difficult to sustain the degree of community participation required, at least in the Indian context, because:

- a. clients, especially poor clients, may not be willing to make the time available on a continuing basis for this;
- b. village leaders or particular caste groups in the village may not be willing to encourage greater control over local services by poorer groups or other castes; and,
- c. health workers may not wish to sustain the process either for the bad reason that it increases pressure on them to perform, or for the good reason that they fear polarisation of the local community as in b) above.

For these reasons, it would be preferable initially to limit continuous PRA to communities which had already worked successfully with 'category one' approaches, and through them strengthened cooperation between community and health service. Continuous PRA would be useful for two main purposes: continuously adjusting local health care priorities, and monitoring and managing service use and service performance.

Adjusting local health care priorities

A combination of continuing verbal autopsies of all village deaths, plus involvement of local people in the growth monitoring of children would give clients greater insight into changing local disease patterns and hence the need for changing health care priorities (growth monitoring is particularly valuable in this regard not only for the insights it gives into under-nutrition, but also into the links between malnutrition, dehydration and measles). This could help local communities to set community-specific, time-bound, evolving

health improvement goals. For example, a tribal village in Orissa where malaria is a major cause of child mortality and lost adult work-days might give malaria priority in year one - an intervention with visible results whose success might encourage the community to tackle a less obviously visible malnutrition problem thereafter. On the other hand, verbal autopsies might lead a village in Uttar Pradesh to concentrate on reducing neo-natal tetanus first and malaria later, and villages in Tamil Nadu, where tetanus has all but been eliminated, to concentrate on reducing maternal mortality as a health care priority.

Monitoring service performance

While service statistics are necessary for reporting performance up the managerial line and for recording trends over time, they are not easily accessible to clients, especially poor, illiterate clients. For this reason, it would be useful to experiment with the maintenance of permanent, continuously up-dated village maps showing local health care performance. At a glance, it would be possible for the local health worker, her clients and her visiting supervisor to see the type and location of families not using services or with persistent problems. This could have a powerful impact in terms of concentrating care where it is needed; of generating cooperative discussion on how to help particular cases; and of increasing the accountability of health workers both upwards and downwards.

Category three: using PRA to facilitate research and development

In a small way, each application of PRA in the above categories is an exercise in R&D: research into what people think and what is happening at the village level, and development of more relevant and effective local services. But PRA can also be used in a more formal way to contribute to solving programme-wide, rather than local design or management problems. Because such research may lead to changes in national or regional programme approaches and the content of national training curricula, a very high premium attaches to getting the findings right, and therefore to ensuring that these PRA efforts are carried out with appropriate specialist skills. This kind of PRA therefore needs to be approached in a very intense way,

with highly trained staff, in a small number of representative field locations.

One example of such an application in India might be to gain clients' input into why obstetric emergency cases are referred too late. What are the social and financial disincentives to referral? What can the health system do to counter them? Another might be to explore the factors behind the persistence of small numbers of severely malnourished children even in areas where ICDS is rated successful. To what degree are these cases due to health complications which could be tackled by better case management, and to what degree due to social factors which may be beyond the capacity of a nutrition programme to modify? While each health worker will come across such problems, and will do her best to deal with them with her resources, these are problems so complex that they require a national or regional level R&D effort which puts together local people and specialist operations researchers.

• Institutionalising the process

FW and ICDS field workers in India number in the hundreds of thousands, so there is no question of sending these workers away for special training in PRA by the NGOs who have pioneered the approach. And in any case, the best way to train workers in PRA is likely to be in their own environment, working with their local health and nutrition team, and their local people. To make it financially feasible, PRA training must be integrated with the normal in-service training operations of government; to make it technically feasible, these must be carried out at the local level.

Fortunately, in the case of both FW and ICDS programmes, in-service training is currently being reoriented and decentralised, so that a suitable institutional framework will soon be in place in many states. For FW, decentralised, block level training is being developed in eight northern states under Population Projects 6 and 7, and will be developed nation-wide under the proposed Child Survival and Safe Motherhood project. For ICDS, decentralised training is being developed under the First and Second ICDS projects in several states.

Given this emerging framework, the next step is to train the trainers who will train the workers.

This means training the state and district level training teams which are being set up for both programmes; these in turn would be responsible for training FW and ICDS supervisors and workers down the line, at the block level and below. The unknowns here are how well the training team staff will respond to the ideas of PRA, and whether the orientation and quality of PRA can be maintained as these trainers in turn train workers down the line. Because of these uncertainties, it is suggested that this be experimented with initially in one or two districts within the field areas of the NGOs which have been developing PRA in India.

The approach recommended is that the pioneering NGOs be contracted to train one District Training Team each; to observe how these teams handle the process of training workers down the line; to document the strengths and weaknesses of the training; to document the subsequent usefulness or otherwise of PRA in the area; and to make recommendations for improvements to both the training process and the PRA approach itself in the context of the government health system.

Assuming the approach was evaluated as useful and the training feasible on this scale of activity, the main challenge would be to replicate this on a wider and eventually national scale. One lesson on how to do this may perhaps be learned from UNICEF's experience with participatory mapping in urban slum areas for water and sanitation schemes. Here, government staff has been trained in how to help slum-dwellers develop water and sanitation maps of their areas, and this has been successful on a large scale. However, the tendency has then been for the government staff to take these maps away and itself draw up water and sanitation implementation plans for the areas, thus undermining the concept of the participatory approach.

Given the natural tendency of government to revert toward extractive data-gathering or paternalistic implementation, it seems essential to maintain a central role for NGOs, which are more oriented toward community participation, in the expansion process. Therefore, the speed of expansion should be governed by the rate at which suitable NGO support for the process can be made available. It is suggested that in Phase Two of the expansion the pioneering NGOs

should pick those NGOs in other states which they feel have most potential to foster the PRA process, and train them in the approach in the initial pilot districts. During Phase Two, these satellite NGOs would begin training of Training Teams in their own states, with a watching brief being kept on their activity by the pioneering NGOs.

In a third phase of expansion, the best of the satellite NGOs would be picked to train other NGOs to help support the adoption of the approach in more districts. Once all training teams in a state had been trained, the NGO role would become a quality monitoring one, with each NGO being allocated a number of districts to monitor and support.

If external assistance was required for either pilot or expansion phases, this could be readily made available either from the IDA-assisted FW and ICDS projects; or from UNICEF. Another possible source of assistance might be CARE in the case of the ICDS programme. In addition, UNICEF and CARE, with their network of field staff in the states, might play a useful role in assisting the implementation process in the field.

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