Participatory Analysis of the Village Agroecosystem

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A case study from India

Some degree of local participation is relatively easy to achieve in the information-gathering stages of rural development planning. The local inhabitants are able to participate as information providers and if an informal interviewing approach is used (i.e. without a fixed questionnaire) the respondents can also help determine what topics are investigated - i.e. the ones which they feel are most important.

But how can they play a more active role as information gatherers and what about the analysis and presentation of the information - what mechanisms are there to incorporate their participation during these stages too? It is in these later stages that the important decisions are made about the appropriate development activities/innovations for the area, so participation by the inhabitants of the area is most vital here.

These issues were considered and several participatory mechanisms tested, in recent Rapid Rural Appraisal (RRA) work in Gujarat. This article will describe how the analysis and presentation, as well as information collection, was contributed to by the villagers, and will briefly outline some of the issues which arose concerning the participatory objectives.

The primary objective of the work, undertaken by staff of the Aga Khan Rural Support Programme (India) and the author, was to develop a framework for participatory village-level planning for the agency. Two villages were investigated for about one week each, by a multi-disciplinary team of 5 or 6. Before starting either of the RRAs we (the RRA team) paid an informal visit to each village. We consulted the Sarpanch (village headman) and asked his permission to conduct the RRA. We also met with leaders of each of the main communities in the village to explain the purpose of the RRA and to gauge the level of receptiveness towards our work. Once the RRA began visits to the village simply wandering around and introducing ourselves to the villagers, to make our presence known and to try and avoid any misunderstandings or suspicions about our intentions in the village.

Villagers join the RRA team

As we talked about our work during these first visits, we were also able to make contact with three or four villagers who were interested and available to join us for the early information-gathering stages. Also on the first day, we studied the secondary data (village census records, map etc.) with some villagers, to verify the figures and check for any changes which had occurred since the data were produced (encroachment of village grazing land, expansion of the housing area etc.) We used the map for discussions to find out more information such as the ownership, productivity and problems of the different areas within the village.

We also used the map to help choose a representative transect line through the village - that is, a route along which we would pass through all the main zones within the village agroecosystem. We then walked this general route during the next several days, and noted down the characteristics and conditions of each zone. Again, the villagers were actively involved at this stage of information gathering. A group of two or three villagers joined us as we walked the transect. Their knowledge of the different zones was an essential supplement to our own observations, and during interviews with other villagers encountered along the transect walk this group also joined in the discussions. Where possible we tried to work with this same core group of villagers for several days; as they became familiar with the kinds of issues we were interested in we benefitted more and more from their approach. Indeed as the mystique of our work was removed this group of farmers in turn could tell other villagers of what was going on. As well as these benefits of participation by some of the villagers, we obtained an extra bonus in one of the villages, where one of the villagers accompanying us, a member of an untouchable caste, turned out to have a postgraduate training in sociology - a discipline which our team had been lacking!

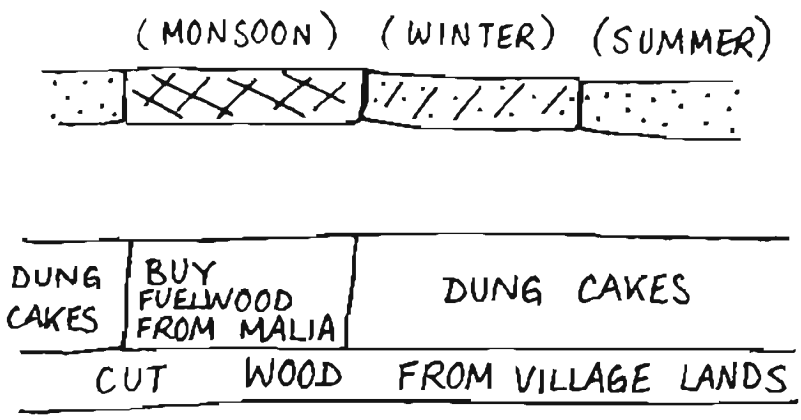
After a couple more days of interviewing (using a checklist of issues which we had drawn up previously), we withdrew from the village as we reached our 'optimal ignorance' level i.e. when we felt we had gathered enough information and detail to get a reasonable picture of the village.

Diagrams for Two-Way Communication

As we discussed among ourselves the new information we had collected, we began to firm up our ideas as to the key problems and opportunities in the village and possible initiatives to help alleviate the problems and/or make use of the opportunities. While we wanted to hear the villagers' views as to whether they felt these were the real issues, and what activities they felt could help the situation, we were unsure of how to go about this. As a first step we drew a set of diagrams to illustrate our findings.

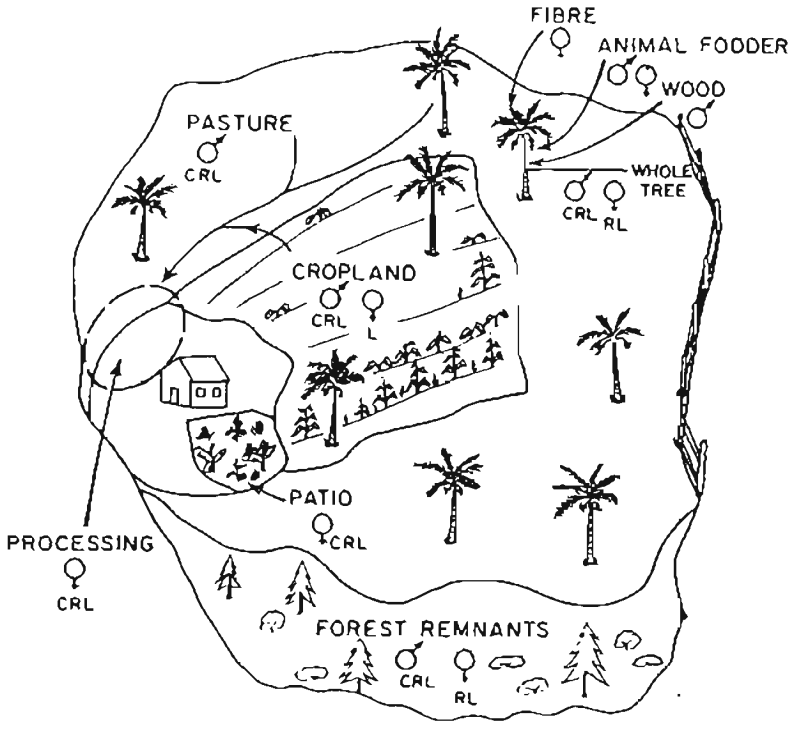
In addition to the map and transect these diagrams were mainly seasonal calendars showing the availability of the village's main resources. Problem periods were highlighted and opportunities were also marked. We then drew these diagrams on large sheets of card and tried to make them as understandable as possible by

The village headman uses a diagram to make a point, during a preliminary analysis session. (Photo: Jennifer McCracken).



The women spoke out against this representation of their fuel problem

minimizing the amount of text (Gujarati) and using colour-coding wherever possible. The seasonal calendars for example, were simplified, by changing the axis of individual months to 3 blocks of different colours, each representing a season. We were still not sure of how easy it would be to communicate our findings and ideas with these diagram to the villagers, so as a trial we invited the leaders of each of the main communities to a small group meeting, outside the village. The actual identification of these people was quite straightforward. We simply asked members of each community for the name of their respected leader, and then visited that person, to invite him to the meeting. We also made it clear that it was very important for some women to attend, and tried to find those women who would be most comfortable in speaking out at such a meeting. It proved difficult to convince the men of the value of this, and to convince the women that they had something to contribute, but in each of the two RRAs, the women who attended did speak up, especially when issues such as fuelwood were being discussed. As we presented each of the diagrams to the group, they helped us to amend any incorrect diagrams (for example, by showing on the map where areas marked as village grazing land were in fact government revenue land) and to fill in information on incomplete diagrams (for example, adding an extra crop to the cropping calendar, or adding another problem to one part of the transect). We also began at this stage to discuss with the group the issues represented in the diagrams and to get their ideas of the many opportunities.



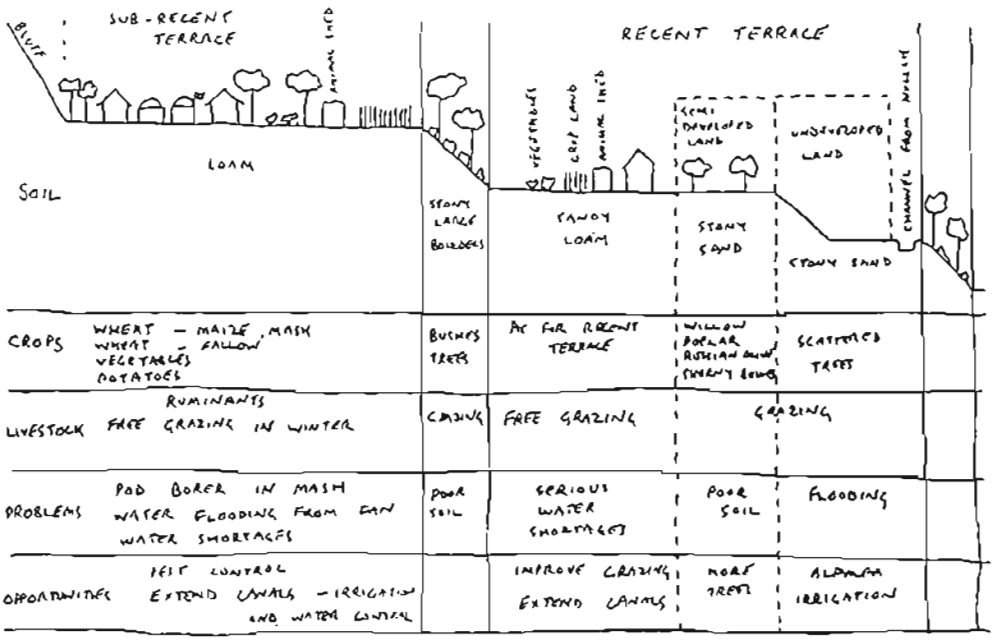
Example of a map of the Pananao Sierra, Dominican Republic. Key: R = responsibility to provide a product to the household; L = labour input for establishment, maintenance of harvest; C = control of resource or process. (Poats, 1988).

Analysis and discussion in the open

After this meeting, we felt ready to go to the rest of the villagers with our findings. But in each village the leaders suggested it would be better if they themselves showed the diagrams to the other villagers: 'You will not be able to make these issues clear enough. Let us make the presentations, and we will use these charts to explain what you are trying to say.' We welcomed these suggestions wholeheartedly and accompanied the leaders to a general meeting in the village, where they presented the findings. In the first village in which we tried this approach, we expected about 60 or 70 villagers to attend, but in the event 500 or 600 turned up! The leaders stood up on a platform and held up and described each diagram in turn, and the issues being represented. The first diagram shown was the sketch map and the team watched as the elderly Brahmin who was presenting it hesitated each time he was showing a feature on the map. Then, realizing the problem, he turned the map upside down and continued more confidently with the presentation. *Obviously the team's north-oriented map was not how he envisaged his village!*

The village meeting went on for some two hours. After sorting out the map, the Brahmin leader held up a transect diagram - a pictorial cross-section through the different areas of village land with notes on the conditions found there and special emphasis on the specific problems in each area. As he read out the notes, the other villagers began to shout out mistakes in the diagram: 'You have left out an important problem in the grazing land; many people are mining the soil and that is why there is so little grass left. And in the housing area: none of those handpumps are working now.'
Other leaders held up calendars showing when the water scarcity limits crop production, when it is that many of the villagers must buy fuel and fodder from outside the village, and when the landless labourers have to borrow money to see them through the slack period.

As well as enabling the team to correct their findings, each of the diagrams also provided a focus for discussion of the particular issue which it represented. Indeed they turned out to be a valuable means of ensuring that each key issue was discussed. At one point the Sarpanch, who was helping with the presentations tried to show the fuel calendar very fleetingly and without commenting on it and was ready to move on to the next diagram which he obviously considered more interesting or important. But one of the villagers shouted out 'Just a moment, Chief! Its clear that getting enough fuel is not a problem for you. In fact neither is it a problem for me. But it is a problem for many of the people in our village. So put up that diagram again, and let's talk about it!'
The fuel calendar (shown above) was one of the diagrams which gave the women a chance to join in the



Example of a transect, a village in Northern Pakistan (Conway, 1987).

discussions, as it dealt with a topic very relevant to their daily work. They were quick to point out mistakes. 'That calendar shows that we collect wood from around the village; that's not true. There are virtually no trees left here to cut and we have to buy all our fuel from outside at that time.'

After all the diagrams had been presented the discussion turned to ideas for dealing with some of the problems. A checkdam was the most popular option for many of the wealthier farmers with large landholdings near the river. But their wives argued that a bridge was more important. At present they have to wade across the river or make a long detour to the nearest crossing point, to bring food from their homes to their families working in the fields. We began to respond to the ideas which were being shouted out, sometimes throwing back questions for the villagers to consider: 'That checkdam site will bring most benefit to farmers on an area of disputed land; that will cause problems for getting government approval for funding.' We also began to discuss with the villagers some of our own ideas such as biogas plants to help the fuel problem and an animal husbandry programme to provide income for both the land-owning and landless members of the village. The discussions continued and the meeting finally ended with the villagers deciding to form a Village Organisation to look into these various ideas with the staf of the Aga Khan Rural Support Programme.

Unanswered questions

During this work we came up against the following issues and questions on participation:

1. For real participation by the villagers, time needs to be set aside especially at the beginning of the work to make clear what we are doing and to seek their help and involvement.
2. We need to be especially careful if the expectations of the villagers are not to be raised inappropriately. I feel there is more danger of this in the case where villagers themselves are involved in the RRA, as they have invested their own time in the work. Yet if the team talk frankly with the villagers about the possible follow-up (and possible non follow-up) of the RRA, this risk should be minimised.
3. How can the diagrams be improved as a means of (1) communicating the findings to the villagers, (2) filling in gaps in their information and analysis of their village, (3) positively reinforcing the information they already know and the tests and experiments they have already tried?
4. Can we further increase the level of participation for example by involving the villagers in compiling the checklist of issues to be investigated and in drawing the diagrams?
5. What is the best form for the village meeting? Should a smaller meeting be held later to discuss each innovation/suggestion in more detail?
6. How much should the village meeting discussions be limited to projects which are within the scope of the agency, and how much should the agency staff stress their normal 'menu' of projects?

These and other questions have no doubt arisen before in other participatory analysis work, and the author would welcome comments and ideas on how others have tackled them.

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More information:

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