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Wealth ranking for agricultural research purposes in the Eastern hills of Nepal

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• Introduction

RRA Notes are received with much interest here. The presentation of novel approaches to, albeit, often old problems, makes for an entertaining read. On the other hand, we are also of the opinion that many of the contributions to RRA Notes tend to concentrate far more on the methodological and procedural niceties of PRA/RRA exercises than, say, the uses to which the information has subsequently been put. To some extent this is understandable. For many, RRA/PRA provides a novel range of methodologies, frequently capturing this enthusiasm for the new and innovative.

Here we describe briefly our recent attempts to carry out wealth ranking exercises in two districts of eastern Nepal. The first part of the paper concentrates on those methodological and logistical issues referred to above. Judging these aspects alone, the exercises were a success. The second part of the paper looks more critically at some of the issues that are now being faced in trying to utilise gathered data. Here, we have neither failed nor succeeded since it is early days yet. By making apparent some of our concerns regarding the application of data derived from RRA/PRA techniques, we hope to elicit a response from other practitioners who have faced similar difficulties (see Joshi and Rai, forthcoming).

• Pakhribas agricultural centre and farmer outreach

Pakhribas Agricultural Centre (PAC) is responsible for agricultural research in the 11 hill districts of eastern Nepal. The agricultural production systems in these areas are complex,

diverse and predominantly resource poor. The production of improved agricultural technologies necessitates a research planning process which is responsive to variations in both the physical and socio-economic environments.

PAC was established in 1973 and has over time developed a better understanding of the determinants of farming strategies, including the differential access to resources of farmers living within the same physical environment. It is believed that this will enhance PAC's ability to produce appropriate technologies.

A critical input to this process is the identification of different farmer clients and their respective problems and priorities. The Social Research Group at PAC is currently attempting to develop existing notions of recommendation domains, defined on the basis of agro-ecological criteria, in order to reflect variations in the access of farmers to resources.

Promising agricultural technologies are first tested and modified, if necessary, at PAC's on-station and on-farm sites; both stages of testing are managed primarily by members of the research staff. The potential of a technology is determined mainly in terms of its physical and economic viability. If approved, the technology is then passed to the Outreach Programme for assessing its acceptability among farmers.

The Outreach Programme has three immediate objectives:

- farm-level technology verification under prevailing biological and socio-economic conditions;

- the provision of feedback information from farmers and extension agents to PAC research staff regarding the use, adaptation and adoption of PAC technologies;
- improving existing collaborative links between PAC and the district line agencies and non-government organisations for the purposes of research planning and technology verification.

These objectives aim to improve the understanding among PAC staff of the appropriateness of existing recommendations, indicate where modifications might be necessary for greater farmer acceptance and, ultimately, provide guidance regarding the direction of future research projects.

The Outreach Programme is relatively new, having started in July 1990. It is, however, fully integrated with the National Outreach Research Programme. To date, the Programme has been operating in seven out of PAC's 11 designated districts. The process of technology generation and the potential pivotal role played by the Outreach Programme is illustrated in Figure 1.

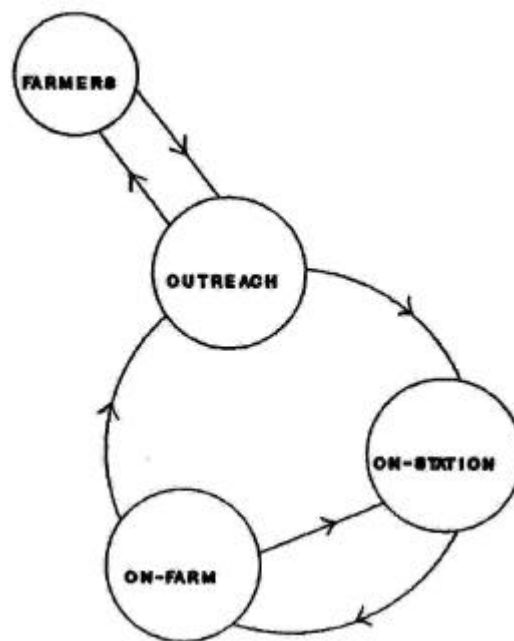
Given the logistical problems associated with having to support research activities scattered throughout the hill areas, it is considered impractical to operate the Outreach Programme in all parts of each district. Instead, representative sites have been selected for the verification of PAC technologies (Joshi et al, 1990). At each Outreach site, participant farmers are identified and provided with a new crop/variety or animal/breed for testing. The performance of that technology and its use by participants are monitored by Outreach Programme staff based in each district. Findings are reported back to PAC during the course of the 'trial' period.

Until recently, one of the major weaknesses of the Outreach Programme has been its concern mainly with the physical merits of a particular technology. There has been only a limited attempt to understand the relationship between farm household type and technology acceptance, but this has not been done systematically.

At one extreme each farm household is unique, but clearly it is difficult for PAC to act

on the basis of this level of diversity. A more pragmatic response is to attempt to categorise farmers on the basis of relevant shared characteristics in such a manner as to enable research agendas to be formed upon the bases of these. Wealth ranking as developed by Grandin (Grandin, 1988), was thought to be a likely method whereby these farmer-determined categories could be identified and developed.

Figure 1. Representation of the process of agricultural technology generation at PAC



The wealth ranking exercise

The wealth ranking exercise was conducted at the Outreach sites in two Koshi Hill districts, Terhathum and Sankhuwasabha. Each site is located in a Village Development Committee (VDC) which is made up of nine wards. Given that one VDC can consist of between 500 to 1,000 farm families, the rankings were undertaken on a ward basis. In each ward four to ten key informants were selected by local technical assistants to participate in the exercise.

Following the introduction of team members and a briefing on the objective of the ranking exercise, an important 'ice-breaking' part of

the process was the updating of the voters' lists. Existing lists were checked and local names substituted for the official record where the individual was more generally known by his/her nickname. This procedure often resulted in great hilarity as local names were revealed. The opportunity to provide information to PAC researchers appeared to lend confidence to the participants.

Card sorting started by dividing the key informants into two groups. Each sub-group was requested to make piles of cards based on their understanding of the differences between categories of villagers within a ward; across rankings, the number of piles varied between three and nine. Discussions were then held with each sub-group about the basis for their categorisation of farm families. Finally, the two sub-groups were brought together for a round-up discussion to compare differences in their preliminary ranking of cards and for the compilation of a single, overall ward set of farm household categories.

Group interviews arranged on a household category basis were conducted the following day in each ward. These discussions were to verify as far as possible the key informants' initial rankings and to identify issues of concern to specific groups of households.

Lessons learned

This was the first time that many of the researchers had conducted a wealth ranking exercise. Its successful implementation was encouraging, although perhaps not so surprising given the Centre's long experience of using the *Samuhik Bhraman* - interdisciplinary group treks - as part of its farmer-oriented research strategy (Chand and Gibbon, 1990). Although the composition of the teams changed between the two districts to expose more staff to wealth ranking, experiences gained from the first attempts at wealth ranking were used to modify subsequent approaches.

Upon returning to PAC, members of the two survey teams discussed the outcome of the fieldwork and areas for future improvement and further consideration. Firstly, a number of issues were raised regarding the practical

aspects of applying wealth ranking. These are described briefly below.

Use of secondary data

It was agreed that a better review of available secondary sources of information, including anecdotal knowledge of local field staff, would enhance the quality of the wealth ranking exercises. Notwithstanding the need for open-mindedness, team selection would be improved since representatives of those disciplines which appeared to be of particular importance could purposefully be included.

Key informant selection

This was identified as a weak point. Although women farmers appeared to take an interest in the card sorting, none had been formally invited as key informants. It is not clear, however, whether the inclusion of women in mixed key informant groups would be the most effective way of eliciting the specific views of women. A number of possibilities for improvement exist which will be tested in the next phase of research:

- although aware of the dangers there might be for marginalising women's issues, ensure that female researchers are included in the survey teams;
- simultaneously conduct a wealth ranking exercise using only women as key informants; and,
- attempt to identify more confident females as key informants.

Similarly the eastern hills of Nepal contain a wide variety of ethnic groups although little explicit consideration was made of this in the wealth ranking exercise.

Team selection

As mentioned above, existing information can be used to guide the selection of team members to ensure specific research disciplines are included. However, care is required to ensure that by doing so the results of the exercise are not, in effect, pre-determined.

Household name checking

On average this took between three to four hours for each ward. While recognising that it is useful for establishing rapport between farmers and researchers, it could usefully be done in advance by local staff. At the same time such staff could use the opportunity to discuss major areas for concern with key informants to enhance further the team selection process.

Key informant briefing

There is always the danger that the briefing can bias key informants' responses. To minimise this risk, particularly as more staff use wealth ranking and other such tools as part of their research activities, it will be essential to ensure that the philosophy, and not the methods per se, of participatory research are well understood.

Key informant discussions

The division of key informants into sub-groups worked well. However, the subsequent merging of the two card sets into a unified ward ranking did not appear to further the researchers' understanding of key issues.

Key informant expectations/feedbacks

There is little doubt that the arrival of a team of highly qualified scientists in a ward raised the expectations of farmers. Even before this, there was no control over what was said about the impending exercise by those requested to invite key informants and farmers for the discussions. This problem can be mitigated with a carefully prepared briefing (see item e above) and, in follow-up interviews, by encouraging farmers themselves to work through solutions to problems that they raise. It was also felt that in future, copies of PAC agricultural bulletins, produced for the government extension service, could be distributed to emphasise the extent and limitations of PAC's work.

No attempt has been made so far to report back the outcome of the wealth ranking exercise and subsequent group interviews to the local people, partly because we feel that

we need more time to assess what we can do with the data collected. Follow-up visits will be made during the next season. If a real sense of participatory research is to be encouraged, it is essential that farmers are given the opportunity to respond to the initial analyses made by the research team.

The interpretation and application of wealth ranking data

The Outreach Programme is conducted across all nine wards of a VDC. Farmers are presently chosen on the basis of the altitude and aspect of their farm site; two criteria which allow for inter-site comparisons.

Preliminary results from the exercise suggest that farmers used 'food availability' as the basis for the classification of farmers. 'Food surplus' farmers were perceived as being in the top category, heavily 'food deficit' households made up the bottom group. The number of categories defined and, in some cases, the parameters that farmers used to define 'food availability' varied from place to place.

Accepting that 'food availability' was regarded by farmers as the most appropriate basis for categorisation, the question which then arose was how to ensure that a category 'A' farmer in one ward might not be a 'B' farmer elsewhere. Two options appeared open to us. One was to use the farmers' categorisations on a ward-by-ward basis, accepting that, in some areas there may be four categories, and elsewhere seven. This would have meant that direct comparisons between, say 'A' farmers in one ward and 'A' farmers in another would not be possible without further data. The resulting 'inconsistency' of feedback information offered by Outreach to the Centre's technical sections would have made it difficult for them to incorporate 'trial' results in their research planning activities: the data would be too site specific.

The other main option was to accept the idea of 'food availability' as a starting point, acknowledging our limited understanding of the underlying processes of production. For the practical purpose of managing the flow of information from Outreach farmers back to the Centre, our own definitions would then be

applied; say, for example, four categories ranging from food surplus, food sufficient, one to six months deficit and more than six months deficit, or whatever. This would allow for cross-site analysis and facilitate the provision of more easily understood Outreach 'trial' results to the PAC technical sections.

We were concerned that the imposition of such a rigid structure, even as a proxy, might distort the original concepts derived from the farmers. The second option, therefore, also necessitated further research to test the assumptions implicit in the approach.

'Food availability', however interpreted, is a reflection of underlying structures of production, in this instance based upon the household. For example, 'food surplus' farmers may derive their surplus from agricultural production or, say, from sources of off-farm income. The further we explored the issues around using the wealth ranking data, the more we felt ourselves to be still at the stage of description, rather than analysis. A more critical understanding of these underlying structures of production is essential if, ultimately, the agricultural research programme at PAC is to be more carefully targeted.

• Conclusions

It is essential that the process of conducting a wealth ranking exercise is not seen as an end in itself. On the face of it, asking key informants to sort cards into different piles appears very simple! There is, therefore, the danger that because wealth ranking is perceived as being a tool that is easily applied, and 'results' are, apparently, rapidly obtained, the necessary in-depth understanding of farmer perceptions is not sought. Ironically, as the use of wealth ranking and other RRA/PRA methods grows, researchers may feel that they have become 'experts' in their use. But, as we have indicated above, the real expertise is needed at the stages of data collation, interpretation and application.

We certainly have a great deal more work to do in our attempts to develop meaningful farmer categorisations to promote a better understanding of the specific needs of rich and poor men and women farmers. But however

we tackle the issue, we must do so in a manner that is amenable for the planning and development of future agricultural research.

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