

Editorial

At the end of 1991 a series of IIED/IDS seminars identified several issues that merited extra attention in the RRA Notes. We plan to produce several theme issues, starting with this one on wealth and well-being ranking. The next issue will focus on applications in health and we plan one on training of PRA. Wealth ranking has sparked much interest recently as identifying the poor and 'poorest of the poor' continues to be necessary and prove difficult. The myth of relative well-being as a sensitive topic is being challenged and has led to innovations such as the visualisation of poverty on maps produced by large groups. The main ideas that arose during the seminar on well-being and wealth ranking are presented in *The Elusive Poor*.

The use of wealth ranking by card sorting is described in several articles. (A short description of the process can be found in 13. *A User's Note on Wealth Ranking by Cards*). Marie-Therese Sarch writes about her use of the cards to evaluate technology testing initiatives in The Gambia. It clearly shows how the impact of interventions can be monitored. She interviewed separate groups of women and men in two villages, and discusses how and why the process differed. In neither of the villages were the poorest compounds involved in the testing of agricultural technologies.

Neela Mukherjee discusses the problems of the use of official poverty line indicators to identify the poor. She describes her work in two villages in West Bengal where mapping was used to identify different strata of poor people. The villagers' perceptions of poverty include a much greater range of indicators, such as access to common property resources and quality of land which are not related to income levels. She cautions against the use of

a single, income-related indicator to target the poor in poverty alleviation programmes.

A variation of card-sorting using beans is written up by Stefanie Schaefer, who used it in Zaire. The project sought more detailed information about sub-groups within the target population better to adapt the projects' activities to different needs. She used a pile of beans that was divided into smaller heaps. This led into discussions about each group, and although not providing information about individuals, it was an easy and valuable method to understand sub-groups within a large community.

Privatisation of state co-operatives in Mongolia is having a major impact on the largely pastoral households, hitherto assumed to have a large degree of economic equality. Robin Mearns and his colleagues used wealth ranking by cards to investigate this alleged equality and whether slight 'wealth' differences now would lead to greater inequality later, due to new economic opportunities. Local people's definition of key production constraints were explored to identify potential policy options to ease such constraints. Wealth ranking also proved to help convince the research team of the value of participatory field research for informing policy.

It is not easy to identify the poor, let alone finding out who the poorest of the poor are. A team from Tamil Nadu University describes how during a PRA, the team needed two days and a sequence of exercises and interviews to finally discover the most marginalised group in the small town. The process took them through a number of mapping exercises, transects and wealth rankings to lead them eventually to the most vulnerable and downtrodden. The key lesson learnt was that PRA methods depend upon appropriate

probing and sensitive attitudes and practice for success.

Mauro Ghirotti describes using housing conditions in Ethiopia as a proxy for income. He compares the classification of households using housing conditions with estimated household incomes and shows they proved quite significant. He concludes by mentioning advantages and disadvantages of such proxy indicators.

Farmers of differing wealth will have different problems and needs and varying ability to adopt proposed technologies. FARMI/ViSCA in the Philippines used wealth ranking with cards to understand better what research priorities and innovations were needed for different groups. Banlina and Tung focus on their experience with the card sorting and highlight some important lessons.

Wealth ranking is often considered a sensitive topic and therefore would require extra sensitive behaviour. In Nepal, forestry is a difficult issue to discuss, wrought with confrontations between officials and villagers. Don Messerschmidt describes the preparations they made for a Forest User Group study to avoid the anticipated difficulties and to ease the way for open discussion.

As Kassaye Hadgu, Mohammed Yisehak and Girmay Tekle describe, not only wealth related information but accurate livestock details are also difficult to obtain. With a cartoon they show how by simply shifting to interviewing the animals rather than their owners, discussion becomes easier and information more detailed.

During a recent PRA in Gujarat, Ranjit Ambastha and Meera Shah of AKRSP in India discovered a local architect. Though never having worked with pen and paper before, one villager, Mansingh, provided valuable information of design alternatives. If agencies involved in constructing shelter for the poorer people, local designers like Mansingh could provide a local perspective and help to design more appropriate and useful structures.

Away from the tropical climate, we include an article about the use of RRA in Switzerland to explore changes in the farming community.

Scheuermeier and Ison recount their experiences with mapping, transects, key informants and community meetings. A number of analysis tools are presented, such as the 'mind maps' and cards on pinboards. Part of the work involved finding the forgotten farmers, those that do not milk the all important cows. Phone books, maps and the post office route were sources of information to find the 'minorities' and 'eccentrics'.

To end with a new feature, we introduce *Tips for Trainers*. We hope to have a focus issue of the RRA Notes on training soon and to start sharing experiences in training have added this new feature. Any ideas that have helped you to conduct successful training are welcome. We start with Fruit Salad, an excellent energising game that also helps form groups. It has never failed us! For those sending in articles, it would be of great help to receive your contributions on disk in WordPerfect. This speeds up production of the *RRA Notes* considerably. We still welcome experiences from those without access to computers.

Finally, as we are still reviewing the RRA Notes mailing list, we would like all readers who have not yet sent in a renewal notice to use the blue sheet at the back to do so. Those who have already sent in a Readership Survey and a previous renewal notice have already been put on the new list.

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1

The elusive poor: a wealth of ways to find them

Report on IDS/IIED Seminar on wealth and well-being ranking

Irene Guijt

• Background

During the autumn of 1991, the IDS (Institute of Development Studies, Sussex) and IIED (International Institute for Environment and Development) organised four seminars¹ on key developments in the use of PRA. At the first seminar, the participants exchanged experiences on recent innovations with wealth and well-being ranking.

Recently, much has changed, and subsequently spread, in methods to identify and understand socio-economic groups within a community. Since Barbara Grandin developed the card sorting by informants it has been applied worldwide and been followed by innovations such as social mapping. The importance and ease of such methods have led to greatly effective use in:

- targeting poorer groups for specific activities;
- monitoring the impact of aid distribution;
- removing biases in investigation by identifying informants from different socio-economic groups;
- for focused research and understanding specific constraints of different groups; and,

- understanding local criteria of wealth and mobility in wealth.

The purpose of the seminar on wealth and well-being ranking was to exchange ideas on new applications since Barbara Grandin published her now famous 'little blue book'². The need to understand social and economic dimensions of rural research have led to a wide range of applications, from The Gambia to Bangladesh for monitoring, planning and training purposes. Despite the important contribution of these applications, wealth ranking is not able to overcome all problems of investigating social and economic dimensions of rural life. Certain aspects remain difficult to understand and need to be addressed by other methods or innovations.

To share and compare experiences and methods, eight presentations were given which are summarised below. Discussion followed, based on the main difficulties and successes identified and addressing the gaps and remaining limitations of existing methods.

A wealth of rankings

Wealth ranking (see Sarch; Mearns, this issue) by card sorting was pioneered by Barbara Grandin during work in Kenya with pastoral communities, for which she needed to select a limited number of households for a more detailed survey. What had initially been feared as an intrusive method was in fact enjoyed by

¹ The other seminars focused on applications in health, the importance of sequences in PRA, and experiences in institutionalising PRA. The next *RRA Notes* will focus on the experiences shared at the health seminar.

² *Wealth Ranking for Smallholder Communities: A Field Manual* by Barbara Grandin, ITDG, 1988.

both the researchers and informants. It is based on individual interviews with people, who are asked to list the household and then sort cards, one for each household, into groups of relative wealth and status³. Much discussion ensues about local terms for wealth and what distinguishes different groups of wealth. Variations on this include:

- card sorting done by a group of community members;
- card sorting of individuals rather than into groups, when a small group of community members is involved; and,
- piles of beans, stones etc to form groups from which certain individual households can then be identified (see Schaefer, this issue).

Social mapping is a more visual method, pioneered by various groups in India, and conducted with a group (see Mukherjee; Pretty et al, this issue). First a map of the community is drawn, identifying each household. A group discussion follows on what constitutes wealth and well-being and agreement is reached on the main criteria. Next, each household is assessed using these well-being criteria, for which symbols are placed on the map. For example, people identify ownership of draught animals, level of schooling, size and type of house, labour, etc. In this way a visual map of socio-economic differences is created with group consensus.

Public meetings 'Pass the pen', is described by Chandramouli in *RRA Notes 14*, as a successful way to get reliable information about who the poorest of the poor are. In rural areas of Andhra Pradesh, the pen is identified with Saraswathi, the goddess of truth and learning. At the meeting, it was agreed that those holding the pen would speak only the truth. The group was asked to identify the poorest household who was handed the pen. After describing their conditions, which the group considered true, they then identified another of the poorest households who was next given the pen. In this way, the poorest are identified by common agreement.

³ See A User's Note on Wealth Ranking by Cards, this issue.

• Presentations

Barbara Grandin: The background of wealth ranking

Barbara highlighted the main steps of the card-sorting (see *A Users' Note: Wealth Ranking by Cards*, this issue). She was especially interested in the development from individual interviews into group interviews, reflecting on the popularity of the exercise with the local people she was working with. The need for privacy is not as important as it first seemed, being largely an apprehension in the minds of researchers rather than a taboo topic for local people.

The strengths of the method include detailed discussions on wealth and specific problems of wealth groups that concretises the informant's concepts on wealth. The success of the method hinges on identifying the most appropriate categories to be ranked, which should be a commonly understood unit of social organisation. This is especially important where women and men function in separate economic units, and not in a homogenous household. Barbara also stressed the importance of checking the outcome which might lead to the repositioning and reshuffling of some of the households. Questions she remains with include:

- Do different people use different criteria?
- Do different people in the hierarchy rank people in a consistently different manner?

Marie-Therese Sarch: Adoption of new agricultural technology in The Gambia

Marie-Therese presented the main learning points from her work in The Gambia (see Sarch, this issue). She had used wealth ranking by cards in two different villages, ranking different units in both. One village was too small to rank compounds (made of multiple households) so *dabadas* (farming units) were chosen. While in the first village group interviews had been possible, the onset of rains influenced the ranking procedure in the second village where individual interviews were necessary. Overall well-being was related to how long food supplies would last within each compound, and the availability of traction and of labour. The final results were an

amalgamation of the men's and the women's groups and showed, in both villages, that new agricultural trials had eluded the poorest: in Boiram 8 of the 11 trials were within the richest group, while in Yonna the trials were reaching the middle of the range. Marie-Therese signalled the need to investigate more on intra-household perceptions of well-being.

Verona Groverman: People's participation programme, Swaziland

Since 1985 the FAO has been involved in Swaziland with group promoters. In 1989, Verona worked with helping them better to target the poor. Due to male out-migration, she encountered problems in identifying clear households and communities. They did eventually use the names of the male heads of households. Much time was spent on training the group promoters to use wealth ranking, which included role plays, as they had limited research experience. In total the entire process, including analysis, of wealth ranking took 4 to 5 months, partly because the homesteads were very far apart and interviews were limited to 3 per day. After Verona left the project, wealth ranking continued to be used to start up work in certain areas but is not yet being used to target poor people. (See Groverman, *RRA Notes 9*).

Ian Scoones: Wealth ranking in Zimbabwe

Ian presented a comparison of qualitative and quantitative data collection methods for 71 households in Zimbabwe. He focused on the divergence of 3 rankings and on the clustering of data. Of the 71 households, 10 were ranked differently by the women, men and researchers, with the women ranking all higher. Particular criteria of these households give clues as to why this was the case:

- 5 had few material assets but received cash remittances, which are important to women;
- 3 had other forms of income, especially during the dry season; and,
- 2 were female headed households, with cash earning activities.

The three rankings had each produced 4 piles of wealth groups. Then, using a statistical

model, 8 variables were chosen to force the 71 households into 4 clusters. These variables included grain yield/sales, house type, cattle yields/sales, cash income. In the statistical model, the variables were not weighted which had been the case with the wealth ranking by the farmers. Three were ranked higher by local growers than the statistical model. These were households who were highly respected and had power. One of the households had been assumed to receive a higher income by fellow villagers. Of the two households that had been ranked lower by farmers than in the statistical model, one case was a recently widowed person who was rich now but would be less rich in future. The other household depended on occasional employment but was unemployed at the time of the wealth ranking.

There was a relatively high correlation between the wealth ranking and the statistical analysis. One of the key differences between the two approaches seems to be that the qualitative, i.e. wealth ranking, method can include intangible variables, such as power and the potential for income earning. Wealth ranking relies on recall and certain assumptions about wealth, allowing for the analysis of divergence between men and women. Finally, from the statistical model it became apparent that caution was necessary when using proxies to identify wealth, as the correlation was not always positive.

Alice Welbourn⁴: Applications in the analysis of difference

Instead of wealth ranking, Alice proposed socio-economic dimension ranking (SEDR) as a more accurate, though admittedly cumbersome term. For example, an Imam, though owning few assets, has access to many and would therefore score high with SEDR as opposed to wealth. Alice has been using wealth ranking by cards in training development workers to identify differences within the community for a range of purposes, from assessing who benefits from an intervention to monitoring attendance of meetings. Although she has been particularly interested in gender aspects, differences due to age, gender, ethnic group or well-being also

⁴ See RRA and the Analysis of Difference, Welbourn, RRA Notes 14.

differ for each situation. For example, in Ghana, she found that while the young men had more consistent rankings, the older men had more divergent opinions. The older men came from different backgrounds and used different criteria. In Sierra Leone, where the male patron-client relationships were very strong and crucial for survival, she looked at the differences between men's and women's rankings. She found that their responses during the process were partly related to the roles they have: women were more open than men, who saw ActionAid as a potential patron. Using a Spearman rank correlation, she found that the rankings from the men and the women were not consistent and, if used alone, would be inadequate. Rather than determining who is correct, such differences should be seen as a springboard to further discussion.

Robin Mearns: Wealth ranking in Mongolia

Wealth ranking was used in Mongolia (see Mearns, this issue) to overcome the pervasive 'average block', probably linked to the official ideology of equality, which has led to a dearth in any differentiated data. Robin used wealth ranking within the largely pastoral communities to better understand existing differences in vulnerability and the attitude towards risk and risk management. Indirectly it also served to generate interest in more participatory forms of research.

Helen Young and Suzanne Jaspers: Wealth ranking and nutritional surveys

In Darfur, Sudan, wealth ranking was used in a nutritional survey during a period of chronic food insecurity. The same communities were visited several times and involved with other RRA techniques and anthropometrical studies, linked to a one-off distribution of oil and lentils. It proved a very valuable technique, providing much new information that was not ascertained by other methods, while being less dependent on the interviewing style than other questions were. They found that wealth is not static, with households moving in and out of wealth groups, for example due to loss of livestock or a reaccumulation of assets through migration. This was confirmed by a longitudinal study based on random sampling. Remittances from Libya seemed to be of

particular importance. A particularly interesting finding was that families with malnourished children were spread over all wealth strata and did not always correspond to the list of neediest people drawn up by the village committee. The use of wealth ranking affected the targeting practice with a compromise being made between the needy and the malnourished.

Parmesh Shah: AKRSP (India), Gujarat

The Aga Khan Rural Support Programme (India) has used wealth ranking in the appraisal process, with continual monitoring to evaluate the impact of its work on natural resource development activities (see *RRA Notes 13* for more details). Wealth ranking is used in a sequence of mapping exercises which starts with a street household map. AKRSP has found a high correlation between this and caste/economic groups. The households are grouped and a geographically focused assessment of wealth is carried out. They have found wealth ranking with cards to be a problem in the heterogeneous societies they work in, unless it is done within a street where one caste is concentrated. There are two possible sequences: with the discussion on wealth groups/criteria following or preceding the ranking. AKRSP have used four types of well-being ranking:

- the classic clustering with cards;
- social mapping;
- group discussion; and,
- asset mapping, where less eye-to-eye contact has reduced inhibitions in discussions.

They usually start with identifying low extremes of well being, with other families placed within that continuum. AKRSP have found it to be especially useful for:

- encouraging community discussions in planning and making decision about scarce resources;
- application as a sampling technique; and,
- increasing the effectiveness and reliability of all other subsequent RRA methods.

• Plenary discussion

Following the presentations, discussion developed on six key issues:

1. Qualitative vs. quantitative ranking: how to cluster groups with the card sorting, validity and dangers of grouping;
2. Sensitivity of the method to 'correct' application: need for sequences and rapport, degrees of detailed/accurate information;
3. Definitions of method and units: unit of wealth ranking, criteria of wealth;
4. How informants influence results: gender, age, groups vs individuals, divergence in comparative studies;
5. Applicability: for vulnerability analysis, possible limitations for urban use, to encourage attitude shift, for sampling or evaluation; and,
6. Limitations: well-being status changes over time, divergence of rankings, processes, order of magnitude.

Most comments and queries focused on definitions, applicability and sensitivity.

Definitions

The term 'wealth' ranking is not an ideal term. It implies a mainly materialistic focus on assets. Barbara Grandin originally focused intentionally on 'assets' for her research, forcing people to understand that there was no homogeneity while avoiding the vaguer term 'wealth'. Socio-economic dimension ranking, though more accurate, is a rather unwieldy term. Referring to 'well-being' ranking would encourage a reorientation towards the idea of quality of life, while vulnerability analysis implies a negative characteristic.

The final choice of appropriate local units to rank is context specific, and depends on practical aspects such as the size of the community. There are no examples written up of ranking of women (not just by them) as compared to the standard ranking of men as heads of households, which hides inter-household differences in areas where polygamy is practised. To understand such distinctions and how these contribute to individual well-being or development potential, it would be necessary to rank the

sub-units within which wives and co-wives are organised.

Applicability

Wealth ranking is a means to help target the poorest of the poor. It can encourage an attitude change within agencies better to consider who they can realistically help: those with direct welfare needs and/or those with development possibilities. However, in communities where everybody is subject to considerable stress such as is the case with refugees, wealth ranking seems to provide irrelevant details. There the differences in well-being would seem to be increasingly marginal and wealth ranking less suitable. Its use for people in distress should probably be avoided. Beyond a certain limit, attempting to pick out variations in stress, malnourishment and misery would appear to be irrelevant.

Can wealth ranking be used to help people understand their relative position as a basis for action? Do villagers themselves learn from wealth ranking? Wealth ranking allows local criteria for well-being to determine the grouping of households/individuals. Its potential to help people understand their own socio-economic position could be considered as a means of conscientization. In a recent survey, it appeared that where ActionAid had been using RRA, there was a more positive response from communities than where they had not been using it. But most of this evidence remains anecdotal and would require more research to understand the long term impact.

Scaling up wealth ranking for use in larger communities or for example at district level, seems difficult. As it is based on people's knowledge of each other, this would prove more difficult in larger areas. Where mobility of the population is high, the 'community' is more difficult to define. Further use of wealth ranking in urban areas is needed to understand whether it can be an effective and accurate method.

Sensitivity

During her work in Sudan, Helen Young was identified with the relief agencies and the one-off distribution of food aid. What happens to

the integrity of future wealth ranking by cards if the community sees that only certain groups benefit from it? Experiences from India (see Shah above and Chandramouli, *RRA Notes 14*) indicate that this does not have to be a problem, as consensus is reached by large community groups. But not all villages are the same. If we assume there are basically two types of villages: one based on exploitation and one based on congenial relationships despite wealth differences, it is clear where the use of wealth ranking would be less smooth!

Hesitance in the use of wealth ranking seems to be a problem more for outsiders, who consider wealth a sensitive topic, than for local community members. The key appears to be that such rankings are always relative comparisons of wealth, and do not require discussion of absolute income or numbers of livestock. The increasingly common and straightforward use of card-sorting with a group of people rather than individuals bears this out.

Questions left unanswered

Wealth ranking offers a snapshot socio-economic picture of the community. But what happens over a 5, 10, 15 year period? In some cases, people have probed successfully about mobility between the groups by asking, for example: *Does anyone from pile X ever move to pile Y (richer) or pile Z (poorer)? When, how often, why does this happen?*

Are there alternative ways to map out different types of relationships, such as the patron-client links that influence well-being and vulnerability? (see Howes, *RRA Notes 12* for some ideas).

Wealth ranking seems to be one of the more difficult ideas to pass on to community facilitators. This is probably related to the perceived sensitivity of a topic such as wealth. Also, while providing a list and grouping of households, it then seems to be difficult to probe further about why this differentiation of wealth occurs. How can this be resolved in training? We eagerly await tips!

Who does the survey? What type of biases enter if different people conduct the interviews? How does the outsider, in specific,

influence the process - beneficially, as someone who will not stay and abuse the information, or negatively, as a stranger you do not confide in?

How can wealth ranking be used over a large area, such as for nationwide surveys? Can wealth indicators for use in survey design be derived by discussing the criteria? What is its value for organisations that have a district or provincial focus? How can it be linked to development planning at these levels or be used to rank a cluster of villages?

There is one particular danger of wealth ranking that has been recently noted. It relates to the collection of information about individual households. If the assets and components of households are recorded in reports against the names of households, then this is exactly the kind of information that could be used or misused by various authorities, such as income tax, governments, police etc. It has been recommended that reports with this information should contain only codes for households, and these codes be kept under lock and key by the investigating institutions.

Please let us know of any experiences related to these questions and to well-being ranking in general.

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2

Wealth ranking in the Gambia: which households participated in the FITT programme?

Marie-Therese Sarch

• FITT programme in the Gambia

The Farmers' Innovation and Technology Testing (FITT) programme was initiated by the Gambian Department of Agricultural Research (DAR) in 1989. The project was intended to enable Gambian farmers to assess new farming technologies (such as new varieties, or new farming techniques) that were being developed by scientists at the DAR. It was also hoped that the farmers' assessments of new technologies would ensure that subsequent adaptations to the technologies would be adapted to farmers' requirements.

The FITT programme was originally inspired by the success of the Agricultural Technology Improvement Programme (ATIP) in Botswana¹. The ATIP had set up farmers' groups in Francistown and Mahalapye, where there was considerable enthusiasm for testing new technologies. In The Gambia, DAR decided to try the same approach with farmers' groups that had been set up by some NGOs. Of the eight non-governmental development agencies that had participated in the FITT programme, two villages with farmers' groups that ActionAid The Gambia had worked with were investigated. The overall objective of the study was to evaluate the value of the FITT Programme for all the farmers in the two villages. ActionAid had selected the farmers' groups in Boiram and Yonna to participate in the FITT programme. Both groups had been operational since 1985/6 and were renowned

for their responsiveness to ActionAid's previous interventions.

The first step in FITT involvement had taken place in 1989, when staff from the DAR and ActionAid met with the farmers' groups in Boiram and Yonna. The various technologies being developed at the DAR were discussed with both groups and each group made a selection of the technologies they wanted to try. The groups chose two types of trial: trials of new seed varieties, for example groundnuts, sorghum, rice & cow peas; and trials of new farming methods, such as groundnut-cereal intercropping, maize-cow pea relays. After a few initial hitches, ActionAid delivered the relevant seeds and additional information to each group. The farmers' group then allocated trials to selected group members. The majority of the trials were done twice, simultaneously by different individuals.

• PRA in Boiram and Yonna

The wealth ranking described here was part of a wider Participatory Rural Appraisal (PRA) exercise to evaluate the value of the FITT programme to all the farmers in each village. The ultimate objective of the wealth ranking was to find out who had participated in the programme. Another important topic of investigation was what actually differentiated households from each other.

The villages of Boiram and Yonna are very different in terms of size, ethnicity and farming systems. Boiram is a large Wolof village with 101 compounds, or *dabadas*. Its land overlies a sandstone plateau and the main food crop is early millet. Yonna is a smaller Mandinka village with only 17 compounds. Its

¹ Norman D., D. Baker, G. Heinrich, F. Worman (1988) Technology development and farmer groups: Experiences from Botswana. *Experimental Agriculture* 24 (3) 321-331

land straddles river swamps and the gentle escarpments away from the river. Its main food crops are rice and maize. In both villages groundnuts are cultivated as a cash crop. The ActionAid groups differed considerably in their coverage in both villages. In Boiram, less than half the women were members, whereas in Yonna every married woman and some men were members of the group.

- **Wealth ranking by cards in action**

In both villages, introductory meetings were held with separate groups of women and men. The meetings were held as soon as possible after arriving in the village - the women's meeting was held on the second day and the men's on the third day in both villages. At each meeting, the local extension worker² and myself explained why I was staying in the village and the nature of the PRA techniques I was hoping to use. We spent about an hour explaining the techniques, giving examples and answering questions. At this stage, any similarities in the studies of each village ceased.

In Boiram the introductory meetings were lively and well-attended with over 35 participants at both meetings. After a discussion of the techniques, the women's meeting was keen to start with the wealth ranking. This was the last technique to be explained and discussed. I had left this until last in case it proved to be insensitive. However, this was not the case. There was some initial hesitation over who should be the respondent but soon the whole group joined in. The next day, the men had heard all about the wealth ranking, and after the meeting they were keen to start also.

In Yonna the atmosphere was completely different. The rains had started and everybody was working very hard to plant their crops. As

a result, the introductory meetings were less well attended, less than 20 participants, and after an hour or so the participants were keen to go. There was no time for an hour and half of group wealth ranking. The local extension worker and myself therefore fitted visits into the busy schedules of different individuals during the evening and morning after the women's meeting. As a result the wealth ranking was finished before the men's meeting.

- **In Boiram**

The first step of the wealth ranking involved a decision about what unit to rank. The compound is the largest family unit and consists of all the people living within an area enclosed by a common fence. The head of a compound is usually the oldest male and he will allocate farming land to the other men and women in the compound. A *dabada* is a farming unit, or a group of people within a compound that farm together to provide food for a communal store. A *sinkiro* is the group of people within a compound but not necessarily within a *dabada*, that eat from the same cooking pot. Each of these units are common groupings in most Gambian villages. After discussions with the village extension worker (VEW) and two of the primary school teachers, we decided to rank the village by compound rather than by *dabada* (there can be one or more farming units within a compound). This decision was mainly dictated by the large number of compounds in the village as working with smaller units would have become a cumbersome task. Landing Sanyang, the VEW, then wrote the name of the head of each compound on separate pieces of paper.

In Boiram, the rains had not arrived and most of the village was anxiously waiting for the rain to start. This meant that they had slightly more time for group discussions than in Yonna. At the end of the first meeting with the village women, the group was keen to get on with the wealth ranking immediately. We asked for volunteers and a few group members hesitantly came forward. However, everybody had decided to stay and listen and within 15 minutes several women were shouting out their opinions from the back of the group. The introductory meeting with the men was held

² In the first village, Boiram, the local extension worker was Landing Sanyang, the Ministry of Agriculture village extension worker. It was he, rather than the Action Aid extension worker, who had supervised the FITT trials. In the second village, Yonna, the local extension worker was Kantong Marrenah, the ActionAid Agricultural Assistant. He supervised the FITT trials in Yonna.

the next day, Friday, after two pm prayers. Having heard all about the women's meeting the day before, all the men stayed behind to participate in the wealth ranking.

After agreeing with each group on a Wolof term to describe 'well-being', George Mendy, a school teacher who was interpreting, read out the names of two compounds to the group. He asked the group to compare them and to say which compound was better off. This was done for every compound and two initial groups of compounds were derived. This pair-wise comparison was useful to get the participants 'into the swing' of wealth-ranking. However as pairs of compounds were compared at random, if two poorer compounds were compared and then two richer compounds were compared, each group of the two piles would contain a range of compounds from richest to poorest.

Next the compounds from one pile were named and it became clear that they did, in fact, vary widely. The group was asked to create groups of compounds that had similar levels of well-being, and the groups of compounds were arranged in ascending order of well-being. Several piles were created by both groups. Throughout the wealth ranking with both groups, there was much shouting,

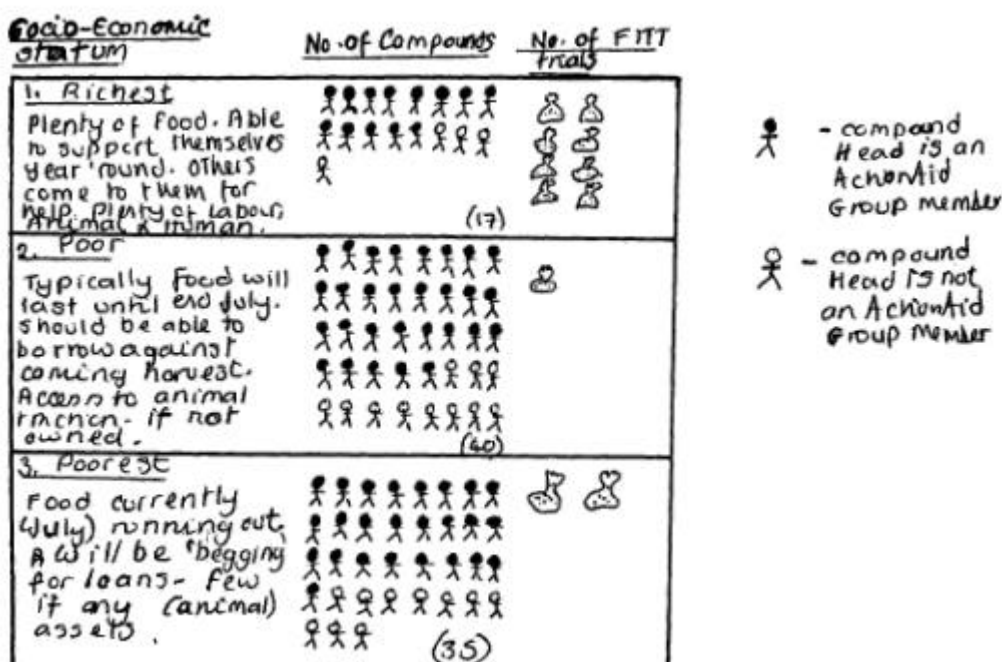
laughter and discussion about how well off particular compounds were. They were clear about ranking compounds rather than individuals: *We're not talking about the money under his bed, we're thinking about his family*".

After all the compounds had been sorted into groups, the names in each pile were read out and checked with the informants. Each household was given a separate score for the rank it was given by each group. The eventual ranking was derived from the average of the two scores given by the men's and the women's groups. The results are shown in Figure 1.

• In Yonna

When I arrived in Yonna, the entire village was working nearly every day-light hour. The rains had been late and had just started. It was difficult to arrange meetings and discussion groups and so the wealth ranking had to be done with individuals 'caught' at the beginning or end of their day on an opportunistic basis. Also the informants in Yonna seemed to be more at ease in their own homes rather than at the village meeting place.

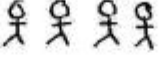
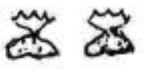


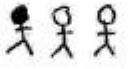





Figure 1. Results of wealth ranking in Boiram, July 1991






As there were only 17 compounds in Yonna, the ActionAid agricultural assistant, Kantong Marrenah, and I decided to rank the 25 *dabadas* (farming units) in the village. At the first introductory meeting with the village women, they rushed off to their rice fields as soon as we had finished talking. The village men were also very busy and their introductory meeting had to be postponed until after the women's wealth ranking altogether.

Kantong and I facilitated wealth ranking with five individual informants in separate sessions. The names of *dabada* heads and the Mandinka term for well-being were discussed with each informant. The informants placed the cards directly into groups of ascending order of well-being, without first doing a pair-wise comparison. The small number of cards made this possible.

Figure 2. Results of wealth ranking by dabadas in Yonna, July 1991

status or Ranking of Group	Number of Dabadas	Number of FITT Trials
1		
2		
3		
4		
5		

-  - one dabada
-  - a dabada where there is a male member of the AA group (There were female members of AA group in every dabada)
-  - represents one FITT trial undertaken

As in Boiram, each *dabada* was given a score for the rank it was allocated by each informant. The final rankings were an average of these five scores and can be seen in Figure 2. The names of the farmers that had undertaken FITT trials were obtained from ActionAid records and cross-checked with the extension workers and the farmers themselves. The extension worker then worked out which compound or *dabada*, the farmer belonged to and for each trial that had been done by a member of the compound or *dabada*, a mark was made beside that unit on the wealth ranking chart, as can be seen in Figure 2.

In both Boiram and Yonna the calculated rankings were drawn up in the form of pictorial charts, just as in Figures 1 and 2, and presented to the villagers at feedback meetings.

- **Different process and results**

The process of wealth ranking in each village was quite different. In Boiram, groups were happy to spend time discussing the relative - well-being of the compounds in their village, whereas in Yonna, farmers were busy planting their crops and were reluctant to spend more time than absolutely necessary in group discussions. The most immediate explanation is the fact that in Boiram farmers, were waiting for the rains to arrive and had more time than the farmers of Yonna to spend in group meetings. However there are many other differences between the villages, for example their size, their ethnicity, and farming systems, which could have some bearing on nature of the wealth ranking exercises in each village.

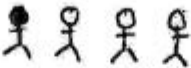

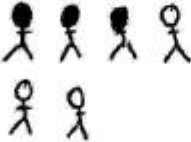
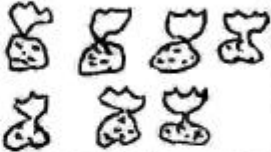




In Boiram we found that the main determinant of well-being was the availability of food and,


to a smaller extent, the availability of animal labour. The richest households had year round food security while the poorest were currently begging for food. The chart in Figure 1 shows that a large majority (8 of the 11) of the FITT trials involved the richest households.


In Yonna, the main differences between *dabadas* was their consumer to worker ratio, i.e. a *dabada* was well of if it had plenty of hands-to-help in comparison to mouths-to-feed. Another important differential was the possibility of remittances from outside the village. For example, the Gambian rock star, Demba Conteh, was born in Yonna and had sent several people from the village for the Haj in Mecca. As can be seen in Figure 2, the allocation of FITT trials was more even in Yonna.


One theory for the difference in the well-being differentials between the villages is that because it had rained in Yonna and everybody was working very hard, this made labour seem much more important than it might have done if Yonna was still waiting for rain as the people of Boiram were. The different wealth groups may also be because in Boiram, compounds were compared whereas in Yonna, *dabadas* were compared. Figure 3 shows the ranking of only those *dabada* heads that are also compound heads in Yonna. In this case, as in Boiram, there is a clear bias of FITT trials participation by the richer households. However in Yonna this was explained by the ActionAid group president who said she had rigorously allocated FITT trials to the hardest working households. As the availability of labour determines well being, this would explain the concentration of trials in those households at the top of the scale.

Figure 3. Results of the wealth ranking by compounds, Yonna, July 1991

Status or Ranking of Group	Number of compounds	Number of FITT Trials
1		
2		
3		
4		

 - one compound.

 - a compound where there is a male member of the AA group.

 - represents one FITT trial undertaken

- Pros and cons of wealth ranking by cards**

The wealth ranking in both villages clearly demonstrated which households were participating in the FITT programme. However the wealth ranking did not shed any light on the distribution of ActionAid group membership. Figure 1 shows relatively comprehensive village membership. The fact

that less than half the village women in Boiram were members was not highlighted by the wealth ranking. This leads me to ask how wealth ranking can be used to investigate intra-household issues.

The two wealth ranking exercises have shown that there are advantages and disadvantages of working in groups and working with individuals. There is a trade-off between the ability of a group to correct an informant when

there is disagreement and the ability of the group to inhibit informants from being frank. On the other hand, with individual interviews there is a trade-off between the ability of an individual to exaggerate, for example, and the freedom she/he has to speak her/his mind.

The wealth ranking in Boiram was enjoyed by all the participants and has shown that it can be both fun and informative. However in Yonna, the exercise took up the valuable farming and relaxation time of the informants. It is important to consider the time available for the wealth ranking exercise, or any other investigative method, and think about how to use that time most efficiently.

• **Conclusions**

Three key aspects appeared from the wealth ranking exercises I carried out in Boiram and Yonna.

Firstly, I noticed a large difference in attitudes, in appropriate ranking procedures, and even in results. It is difficult to ascertain the reasons for this diversity. The arrival of the rains definitely had some effect, but how did tribal customs influence these? How attributable was the diversity in the wealth ranking to the size of the village or the size of the ActionAid group?

In answer to these questions, I would say that the arrival of the rains, which were late and sorely needed (the previous years' harvest had been minimal), was a critical influence on the ability of farmers to participate in group discussions. Thus it would be impossible to accurately attribute these differences to any other factors. However, the different sizes of the villages did affect the size of the units that were ranked and it is likely that the depth of respondents' knowledge of the well-being of different units affected the criteria and accuracy of the wealth ranking exercises.

Second, the wealth ranking showed that in neither village did the FITT programme reach the poorest households. Wealth ranking identified a problem and to solve it, more explicit targeting of those most in need would be needed to offset the existing bias.

Finally, the different experiences with wealth ranking in Boiram and Yonna show the need to be flexible in the application of the process, but also to be aware of the effect of the process on the results of the wealth ranking.

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3

Villagers' perceptions of rural poverty through the mapping methods of PRA

Neela Mukherjee

• Summary

Villagers' perceptions of rural poverty and the official poverty line to identify poor households may or may not converge in practice. For villagers, poverty is much more than a mere demarcation of poor households by a poverty line based on money income. As a policy issue it is important to bridge the gap between the official poverty line and the villagers' description of poverty since the latter group constitutes the clientele of poverty alleviation programmes. Their views will affect how such programmes work.

In this study the Participatory Rural Appraisal (PRA) methods of mapping and ranking have been used in two Indian villages to study villagers' perceptions on rural poverty. The maps were used to help the villagers identify the poor households in the village, rank them and also to understand the basis of such ranking. Through the mapping technique, the villagers identified different indicators to rank households in terms of poverty. They take into account not only living conditions and assets of the household but also their accessibility to food, employment, public services and common property resources. This makes for variations in ranking of poor households which the villagers perceived easily and clearly.

In practice, the official poverty line is essentially based on income which can act as a 'proxy' variable for many aspects of poverty which are strongly correlated with income. However, when poverty measures indicate variables that go beyond income, the poverty line no longer serves as an effective policy

tool to reflect the complexities and field realities of poverty.

• Background

There are standard indicators of poverty on the basis of which a certain line is drawn and a household is classified as either poor or not poor. This is related to the definition of poverty on the basis of relative indicators which is different from measuring poverty which seeks to aggregate the amount of poverty into a single statistic¹. This paper is concerned with relative poverty as perceived and described by the villagers and their ranking of rural households on that basis.

Any standard definition of poverty, arrives at a poverty line based on some conception of welfare. This may be broadly described as the minimum amount of goods and services necessary to live a decent life. The common focus on money income for measuring poverty has major flaws because access to basic needs is ignored in the process. We can use the criterion of per capita or household consumption, in value terms or in calorie terms, adopt the food ratio approach (which is a fraction of household budget spent on food) or use the basic needs approach (Glewwe and Vander Gaag, 1990). However, none of these criteria of poverty is fool proof. Each suffers from drawbacks regarding measurements and data requirements which can be complex, voluminous and not always available.

¹ Glewwe, P. and Gaag J. Vander, 1990. Identifying the poor in developing countries: do different definitions matter? *World Development* p. 804.

For India's rural development and poverty alleviation programmes, the official measure of poverty line relates to a cut-off level of income. The cut-off level is based on calorie norms translated in money terms. The official poverty line is an annual income of Rs. 6400/- per household (consisting of five members) at 1982-83 prices, below which are the poor households, consisting of small farmers, marginal farmers, agricultural labourers, rural artisans and others. Small farmers are defined as those cultivators with a land holding of 5 acres or below, the marginal farmers have a land holding of 2.5 acres or below, whereas an agricultural labourer is a person without any land other than homestead and deriving more than 50 percent of his income from agricultural wages. Below the poverty line there are four groups²:

- the destitute with an income below Rs. 2265;
- the very, very poor with an income range between Rs.2266 to Rs.3500;
- the very poor with an income range between Rs. 3501 to Rs. 4800; and,
- the poor who have an income range of Rs. 4801 to Rs.6400.

Annual income surveys of households at the village level help determine the poverty line.

• Villagers' perceptions

The issue is how the villagers identify poor households and on what basis they rank different groups of households. Is it different from what the official poverty line attempts to capture? To what extent is the official poverty line a realistic measure of identifying poor groups? Is it able to capture the poverty of households in the rural areas as perceived by the villagers? Perhaps it is a standard of reference constructed by urban experts who perceive poverty as related merely to income. It is important to account for the villagers' perceptions on poverty and to recognise major differences with the official poverty line. This would improve the selection of intended beneficiaries and, therefore, the performance of poverty alleviation programmes by incorporating more field-level realities.

PRA techniques were used to study villagers' perceptions of poor households and their ranking of poverty. The study had three aims: (i) to identify poor households through villagers' perception; (ii) to know why and how the villagers consider them to be poor; and, (iii) to document the discrepancies, if any, between the villagers' perception of poverty and the official ones used for targeting beneficiaries of poverty alleviation programmes. Some isolated villages with less than 100 households were selected, which were considered backward and poor. An account of the experience in two villages is given below.

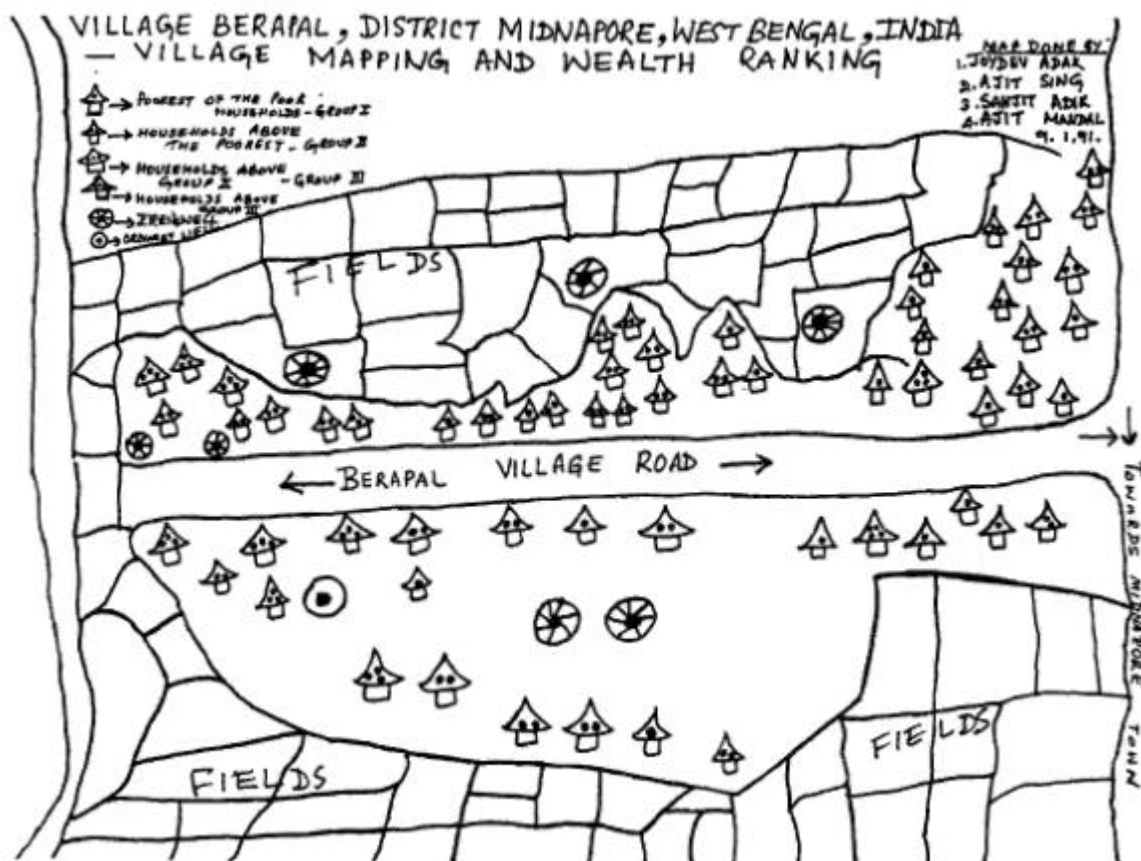
The methodology

The process started by drawing the villagers together near a village school or a tea stall. The villagers were asked to map the entire village. Then they were requested to identify the 'poorest of the poor' households in the village. This they did by marking the households which they considered to fall in that category. They were also asked to describe the characteristics and reasons which put these households at the bottom. They described the conditions of the identified households, explaining the causes which made them poor.

After identifying the 'poorest of the poor' the villagers were asked to identify the next group of poor households. The question posed to the villagers was: "Which group of households is slightly better than the 'poorest of the poor' and what are the causes of that and characteristics of such households?" The villagers marked each set of households with different symbols. They identified different layers of poor households, ranking them from below, and also enumerating their characteristics until all households from the village were marked. The entire exercise of mapping and ranking was done by the villagers.

• ² Based on the 38th Round of N.S.S. Consumer Expenditure Survey, Delhi.

Figure 1. The village map with wealth ranking of Berapal



Berapal village experience

Berapal lies in Sadar block of Midnapore district in West Bengal, India. Well-irrigation, both by private households and government agencies, has helped increase the productivity of the area. The village consists of mostly small and marginal cultivators and landless labourers.

A village map consisting of households, roads and fields was drawn by some villagers after a large number had gathered at a central place in the village (see Figure 1). The other villagers checked the map while it was being done. Using the village map the villagers attempted to rank the households. They marked the households which they felt were the poorest. These included the households which had widows as heads of households and had practically no assets, no regular source of income and not enough to eat throughout the year. Others in this group included agricultural

labourers having neither any land nor any regular source of income or food.

The villagers explained that poverty was accentuated by environmental degradation in the area. The forest which provided substantial back up during lean periods as a source of food and fuel wood was increasingly degraded, aggravating the hardship of the poorest of the poor who were more dependent on the forest products.

The villagers marked the group of households above the extreme poor group, distinguishing it from that group on the basis of some ownership of land. The households in the higher group would have been even better off with fewer dependents. This meant that the number of dependents was taken as an indicator of poverty. This also implied that the villagers had some notion of average income per head per household.

The group of households next identified was described as having better production from

land. They had more land and better quality of life despite having large families. The production from the land helped them in meeting their household consumption requirements as well as procuring income by selling some produce. Many of the households from the last two groups were also beneficiaries of official income-generating projects.

Kalsigeriya village experience

Kalsigeriya is an isolated village situated in Block I of Kharagpur in the district of Midnapore in the state of West Bengal, India. This village has a single cropped area and is affected by floods every year. There are 42 households, all belonging to the Scheduled Caste³.

Using the household map, the villagers distinguished three different groups of poor households. The extreme poor group had no land, little food availability during a year, not many working hands and a large number of dependent family members, both young and old who were not capable of productive work. They were all deficit households. They hardly had enough to eat during the year and, due to environmental degradation, went without food on several days.

According to the villagers the next poor group of households had a little land, about one or two acres. They had some working hands who contributed towards household income, all efforts together allowing the households to just fulfil their consumption requirements.

The third group had around 4 acres of land. Some of the household members had jobs outside the village and they were much better off in terms of household income, food availability and purchasing power. Many of the households from the last two groups were also beneficiaries of official poverty alleviation programmes.

The entire village agreed on the indicators of poverty. Before ranking the households the villagers discussed the indicators to rank the households. The process of triangulation based on the socio-economic map was quite obvious with the villagers checking and cross-checking with each other for each indicator. In case of disagreement the villagers discussed until they resolved the issue.

- **Comparison of official definition of poverty and villagers' perceptions**

The villagers identified poor households on the basis of the conditions and causes of poverty prevailing in the households. Food consumption was a major indicator in these semi-starved villages. The villagers would strictly rank poor households by the criterion of food availability over a year because it was a particularly scarce commodity. This was linked to common property resources, like forests and ponds being principal sources of sustenance in the lean season once the harvesting season was over. Households at the bottom of the poverty line were those which had the least availability of food on an annual basis.

The size of landholdings and its productivity was another important consideration for the villagers but land alone was not enough. Its productive capacity was equally important. It should be mentioned that certain aspects of the quality of land have been considered in the official guidelines for selection of poor households as beneficiaries under the rural development programmes like the IRDP (Integrated Rural Development Programme). However, the guidelines are not able to capture the minute variations in the quality of land holdings which villagers are able to do easily. Such variations can make a major difference in the livelihood of poor households. Apart from landholdings and food availability, the number of dependents was also an important consideration in the two villages.

It appears there are major problems associated with the use of income as a 'proxy' indicator of poverty. First, villagers' perceptions of poverty go beyond the income indicator. They take account of factors like the size and quality of land, food availability, the dependence on

- ³ Scheduled Caste has been recognised officially to constitute a set of selected backward castes in the caste hierarchy of the Hindu society in India.

common property resources, the harvest, the number of dependent family members and others. Such aspects of poverty are not properly reflected through a standard poverty line which is too perfect a line to capture the dimensions of both qualitative and quantitative variables determining poverty.

Second, there is the choice of considering either current or permanent income, both which have their own problems. There are major problems in estimating permanent income while current income can vary from day to day, season to season and year to year. Hence measured income in any one year or one season may not reflect the underlying living standards of the households concerned.

Third, there are serious problems of gathering data on rural income from the field with household questionnaire surveys. They are time-consuming to process and restricted, often based on questions reflecting urban perceptions of poverty rather than rural realities. The 'biases' of project, space, season, person and occupation are quite well known and it is not unnatural to expect the existence of such biases in field situations to appear when investigating income. Furthermore, rural livelihoods are diverse and complex. Any imputation of income to economic activity of the rural poor can suffer from estimation 'biases' and will fail to reflect the real picture.

Finally, the question is of contribution of poverty indicators to policy-making for poverty alleviation. The nature, causes and conditions of poverty vary from village to village. Any indicator which does not represent the diversity and complexity of poverty can at best be taken as a starting point and improved upon by incorporating field realities. In this way it can increase its effectiveness for better understanding of policy goals and redesigning the appraisal and evaluation of associated programmes.

• **Concluding remarks**

In case the indicators of poverty as used by the villagers are closely related to income, then income can be taken as a representative variable. There would then not be major discrepancies between the villagers' perception and the official poverty line and

one is justified in using the poverty line based on income for identification of rural poor.

However, problems arise when villagers use indicators which go beyond income such as education, accessibility to public services, dependency on common property resources, size of holdings and its productivity, social criteria or even the size of the household. The traditional poverty line based on current income can work in theory but in practice it is difficult to relate to field realities. The poverty line is a neat and precise indicator but this is exactly what the manifestation of poverty is not in practice. It may not be easy, or indeed relevant, to translate the diversity and complexity of poverty into a single indicator and arrive at an 'average' picture of poverty.

The use of PRA methods, in this case well-being mapping, in understanding rural communities' perceptions of poverty clearly shows their value in exploring the causes and conditions of poverty and ranking of households on that basis. PRA methods can be ideally used by planners and administrators to restructure the poverty line, incorporating villagers' perception of what constitutes poverty. In this way it is possible to arrive at appropriate micro-level interventions for poverty alleviation.

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4

The 'Beans-Game': experiences with a variation of wealth ranking in the Kivu Region, Eastern Zaire.

Stephanie S Schaefer

• Background

This variation of a wealth ranking exercise was used in the context of a mid-term field survey. It involved socio-economic analysis and differentiation of the target population of a rural development project in Zaire and was funded by GTZ (German Governmental Agency of Technical Cooperation). The survey was carried out by a multidisciplinary team of postgraduate students from the Centre for Advanced Training in Agricultural Development (CATAD), Technical University of Berlin, Germany.

The project area is located in the most densely populated part of Zaire. The population faces severe problems of degradation of resources which the project tries to tackle. The purpose of the analysis and differentiation of the target population was to adapt the project's activities to the needs of the people through having more detailed information about the different sub-groups.

• The procedure

The exercise was conducted with self-established self-help groups of about 10-20 participants of mixed sex. These groups have developed from religious groups with social development goals and are comparatively homogeneous in socio-economic terms. One exercise was carried out in each community included in the research.

A small heap of beans (a major staple in the region) was put in the middle of the circle of participants. A short story helped to explain the exercise:

"These beans represent all the members in your community, which have assembled at the chief's house. The chief says: 'I know that the people in our village are not all the same, some are richer and some are poorer than others. I would like to know how many groups of the same level of well-being there are, so please divide yourselves into groups of similar wealth'".

We avoided giving examples of possible ways to group the beans. The group was then asked to divide the beans into smaller heaps. When this was done, each heap was identified as a group of villagers (landless, farmers, merchants, etc) and they were ranked according to wealth by asking: "Which heap represents the poorest?".

To cross-check, the group was asked whether they all agreed with the division of the beans and whether some people or groups had been forgotten. (The size of the different heaps - or wealth groups can also be corrected at this point.). When this was done, questions about the characteristics of each group, their sources of income, etc. were be posed. Later the relationships between each of the groups can be explored. Questions we asked included: How can one move up the social ladder? Who will seek assistance/credit with whom? Which groups can intermarry? Which group employs members of the other groups for what sort of work? What means of payment exist?

After this discussion, changes in the community can be explored by asking: has the size of the different groups changed during the last years/decade? In which way and why? Have the relationships changed?

The findings

The results of the beans 'game' provided insights into the social and economic relationships between the different sub-groups within the communities and rough estimates of their size. They provided qualitative information and gave clues about the differentiation of the target population. This was then linked to the quantitative data that was obtained by a standard questionnaire and measurement of fields.

Local criteria for differentiation included:

- capacity of families to send their children to school (quantified in years);
- professions; and,
- frequency of employment of agricultural workers or employment by others.

Why beans?

The beans helped to make an abstract question more tangible. The participants were animated and thought using beans as a focus of discussion was unusual and fun. The game-like process of the group interview made it easier to discuss potentially sensitive topics like social stratification and segregation without having to mention names.

Suggestions for improvement

As the process of making piles was not directed by the interviewers, the different groups produced very different results. Both the criteria for differentiation and the number of piles of beans varied widely. Two major shortcomings of the procedure became evident:

- the results of the different groups were too different to allow comparison; and,
- the composition of the discussion-groups was fairly homogeneous and only one group was interviewed per community.

Results could be cross-checked by conducting several exercises per community with different social groups. The results could be reassessed by the discussion groups themselves, by presenting the other groups' results to each group. In this way, more can be learnt about

the relevance of the criteria used to distinguish groups and the assessment of socio-economic relationships by different social groups. These changes would produce more reliable estimates of the size of each sub-group and its proportion of the overall population of the community.

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5

Direct and indirect uses of wealth ranking in Mongolia

Robin Mearns, D. Shombodon, G. Narangerel, U. Turul, A. Enkhamgalan, B. Myagmarzhav, A. Bayanjargal and B. Bekhsuren

This paper describes why and how wealth ranking was used in the early stages of a collaborative policy research and training project in Mongolia. The Policy Alternatives for Livestock Development (PALD) project aims to facilitate the transition from a command to a market economy in the extensive livestock sector which dominates the Mongolian rural economy. The training and fieldwork (fully documented in Mearns, 1991) took place during July-September 1991, and involved a team of eight researchers from the Mongolian Research Institute of Animal Husbandry, the Mongolian Institute of Agricultural Economics, and the Institute of Development Studies. This paper addresses the role and value of wealth ranking by card sorting (Grandin, 1988) in the research and training process, and its sequencing with other activities, rather than the technical details of the method itself.

Wealth ranking served two principal purposes, one direct and one indirect. Its direct purpose was: (i) to identify locally important criteria for distinguishing households according to wealth, status and power; and (ii) to stratify the populations of the sample production brigades, as a first step in understanding differences in the ways richer and poorer herding households manage their herds, gain access to key natural resources, and respond to risk. It enabled the team parsimoniously to target the use of other research methods in subsequent rounds of fieldwork by means of purposive sampling.

The indirect function of wealth ranking was its role in training the research team. Wealth ranking, more than the other PRA methods used, did most to 'win over' an initially sceptical research team to the value of participatory field research in posing, and

beginning to answer, questions of relevance to important economic policy decisions. It did much to change attitudes and behaviour among the research team members. There are also signs that after the research team reported to their superiors, some attitude changes were started among certain key policy-makers. They saw the PRA/RRA methods to have facilitated not only quicker but also better research results than the more conventional methods they were used to.

• Why wealth ranking? The research context

The Mongolian economy is currently undergoing a profound transformation. Over the last forty years, rural production and marketing has been organised through large-scale cooperatives and state farms which are now being privatised. This process, while likely to increase production incentives to individual herders as intended, is also likely to increase hardship for herding households who face the most severe production constraints, under what are extremely variable and unpredictable environmental conditions for all herders.

Until very recently, the cooperatives effectively operated as state organisations. Herding members were paid a salary for meeting plan targets for live animals, meat, dairy products etc from the herds they looked after on behalf of the cooperative. They also have private herds from which they meet a large part of household consumption needs, and which are currently growing in size as state animals have been redistributed. Production to meet plan targets has always been at or near the maximum potential from each household unit so that, for most herding

households, the possibility of producing a surplus for sale was limited. Apart from meat sold to the inhabitants of rural towns, most surplus production had to be sold through state marketing channels at unattractive prices since virtually no other opportunities were available.

The co-operatives, and ultimately the state, carried much of the production risk, by investing in winter and spring stockyards and shelters, and providing labour and animal feed supplements at critical times. With privatisation, much of the burden of risk is being shifted back onto individual herding households, who will have to provide inputs from household resources or the market.

This combination of factors - low production incentives with a high measure of risk borne by the state - contributed to a situation where the level of direct economic inequality (as measured by income and physical assets, including animals) between herding households was relatively small. A question still remains as to just how small this in fact was. A central research hypothesis was whether 'wealth' differentials between households took on other forms under such a system, with some households better placed than others, for example, to gain access to valued grazing areas at key moments. If so, much higher levels of inequality could quickly re-emerge with the opening up of new, market-based economic opportunities. While some households may be able to exploit some of these 'hidden' advantages in wealth, status and power, others will be more limited in their ability to respond to new opportunities.

For the research team then, it was important to identify:

- the nature of differences in 'wealth' - defined broadly to include dimensions of status and power - between households, as seen through the eyes of local people themselves;
- whether key production constraints (e.g. labour, access to forage resources) were related in any way to wealth as defined by local people; and,
- potential policy options for easing constraints to productivity, for managing risk, and for the provision of 'safety nets'

for poorer herding households (Mearns and Swift 1991).

• Direct use of wealth ranking

Detailed field research was concentrated in a single brigade within each of two co-operatives in contrasting ecological zones: forest/mountain steppes and Gobi desert. The brigade is the organisational unit that most closely approximates a 'community' under Mongolian nomadic conditions. With around a hundred households, it is the largest permanent group within which all members still know each other, an essential requirement for wealth ranking using the card-sorting method. The research team camped near or stayed overnight with herding families in their felt tents, which permitted interviews to be carried out well into the evening, at times when herders are less busy. The team divided into pairs or groups of three to conduct semi-structured interviews, participatory diagramming sessions and wealth ranking.

Participatory mapping and transects from the saddle were used by the team to gain a general introduction to each brigade, and to begin to identify grazing and other key resources, nomadic patterns etc. The large distances involved in covering transects through brigade territory required some team members to travel on horseback. Doing transects from the saddle with local herders proved to be an invaluable ice-breaker in discussions with other herders met along the way. Wealth ranking was also among the first methods to be used as a way of systematically building up an accurate profile of each brigade.

Two aspects of the wealth ranking are of primary interest. One is the nature of wealth, status and power differences between households as revealed in the criteria used by the informants. The other is the way key issues emerged in relation to important production constraints.

A wide range of criteria was used by the informants in distinguishing between the piles of cards used to represent different wealth status groups. Always the first to be mentioned were productive asset holdings: numbers and species-mix of private animals. Species-mix partly relates to household consumption

patterns: a high premium was placed on self-sufficiency in meat and dairy production for consumption, so a good mix of large as well as small stock was desirable. Species diversification is also central in managing risk, by reducing vulnerability to shocks caused by climatic variation. Crude animal numbers varied by a factor of ten in Tsagan Hutul brigade in the Gobi desert (20-30 to 200-300 per household); less in Hukh Nuur brigade in the wetter, central forest/mountain steppes.

Besides productive assets, important material wealth indicators included possession of jewellery and other gold and silver valuables, especially saddle and bridalware decoration, and drinking bowls; levels of bank savings; and household goods such as number and quality of saddles, items of furniture, and (rare) high value goods such as a motorcycle or a diesel generator. Consumption patterns were mentioned in addition to food self-sufficiency, including quality of snuff, and quality of material used in making *deel*, the traditional tunic; Chinese silk was most favoured of all.

But further probing some telling distinctions between households that were unrelated to material wealth. Often, after the first round of card-sorting, an informant would end up with a very large pile of cards representing herding households that were considered to be 'all the same'. When asked to subdivide further, the criteria that emerged often related to differences in status and power and, as a result, level of vulnerability. For example, one informant explained how one sub-group included the more articulate herders who "have friends in high places; they can get help whenever they need it". In addition, this sub-group, as well as richer herders, are able to get credit from other individuals. For example, if they need to use transport urgently they may do so and pay (in kind) later.

Life cycle stage emerged as an important factor in wealth status of household. Unsurprisingly, recently established households are generally poorer. Many of these include inexperienced or 'lazy' herders - often young men recently returned from military service - who, while not necessarily materially poorer, lacked respect and therefore 'wealth status' generally. Not all younger

herders fall into this category, but those that do are far less likely to gain access to transport or other inputs on credit through social contacts at critical times. Two informants specifically mentioned the problems of large, young families. These tend to be poorer because their consumption needs are higher, while they have too little labour to manage comfortably. Other life cycle-related criteria included inheritance. An elderly couple or single man or woman, even if they owned large private herds, were regarded as poorer if they had no children who could inherit their wealth.

The second important aspect of wealth ranking is the way key issues emerged relating to production constraints. The team was able to follow these up using other research methods, at times by means of a purposive sample of brigade households stratified by wealth class. Two brief examples are given here.

Indebtedness

First is the issue of indebtedness. One of the informants for the wealth ranking in Hukh Nuur brigade in a remote forest/mountain steppe area was Purev, one of the herder representatives on the cooperative management committee. He was asked to subdivide a very large pile of cards that he said represented 'poor' herders. On doing so, the new 'poorest' pile he made were younger households who not only had few private animals but were also in debt to the cooperative for failing to meet production targets. The research team considered this to be an important issue in the context of cooperative privatisation, and so followed it up in a semi-structured interview immediately after the wealth ranking.

Discussing the issue of indebtedness gave the team an invaluable insight into the local politics of agricultural reform. Purev reported that at an exceptional meeting in 1990 of the cooperative management committee, it was decided to forgive the debts of the poorest households, including some 30 or so in Hukh Nuur brigade. In addition, these households were each given 30 young sheep and goats, in recognition of the difficulties they faced under economic reforms. At the same time discussions had begun to take place locally as well as nationally on whether the herding

cooperatives should be disbanded altogether, rather than simply restructured. The management committee decision to redistribute some small stock in anticipation of future changes seemed to be at least in part a political gesture, to earn the favour of members most likely to lose out as a result of the higher level of economic risk they faced with the onset of privatisation.

Availability of labour

A second key issue that emerged in wealth ranking was the availability of labour. Of the two research areas, seasonal labour constraints were most severe in the dry East Gobi, close to the Chinese border. The high labour demand for watering animals during an especially dry summer is one such constraint. One consequence of privatisation with implications for labour demand is herd species diversification at household level. This shift to a more diverse herd structure is a response to the higher level of risk borne by individual households. But different animal species have different herding and management requirements, which increases labour demand and worsens specific bottlenecks. Such bottlenecks are most acute in households with a young age structure, and therefore a low ratio of workers to dependents. The poorer groups in this area included many large, young households, some of them also female-headed households.

Following the wealth ranking, the research team attempted to draw seasonal labour profiles, with men and women separately, for households selected from each wealth class. This was a partial success, although the labour profiles were insufficiently accurate to reveal significant differences between different types of households. The research team have already been investigating patterns of labour allocation for men, women and children using more detailed participant observation methods to record time/activity budgets over sample 24-hour periods in different seasons. To add a further dimension to this work they now intend to stratify their household sample using wealth ranking.

During the period of field training, the issue of labour availability was followed up in other ways. Simple demographic data on all brigade

households were obtained from district records that could be compared with the wealth ranking. This was used to test the hypothesis that the availability of family labour is related to household wealth status. Table 1 shows the results of the wealth ranking for Tsagan Hutul brigade in Dornogobi province, listing the households from richest to poorest.

Figure 1 summarises the available data on this relationship. It shows average total household size in each of the four broad wealth classes identified in the wealth ranking (see Table 1), and of this total, the ratio of workers to dependents¹. These data suggest that on average, poorer families have larger families but more dependents than richer families. Within the richest group of households, approximately two-thirds of household members are full working members, while this proportion falls to about a half among poorer households.

To gain a deeper insight into the relationship between availability of labour and household wealth status, data were obtained from households and from district middle school records on known rates of absenteeism among schoolchildren from herding families. Reported cases of those known to have left school altogether are a small proportion of total absenteeism, which would include erratic attendance at school. The available data indicate that children - all boys - from five families have left school permanently to stay at home to help with herding. For ease of reference, the numbers of these households are ringed on the wealth ranking, Table 1.

¹ Other household members' in Figure 1 are dependents, i.e. non-workers. From data on household composition, it was assumed that all children over 15 years of age contribute fully to family labour, and are included as 'workers'. In households with dependent elderly relatives, those older than 70 years of age were counted as dependents. People older than 70 years of age but living independently were considered to be workers.

Table 1

WEALTH RANKING: TSAGAN HUTUL BRIGADE, ERDENE SUMUN, DORHOGOSI AIMAG							TABLE 1
Position	Household No.	Informant ranking scores				Average ranking score	
		INF 1	INF 2	INF 3	INF 4		
1	28	25	17	20	34	24	Wealth class 1a
2	50	50	17	20	17	26	
3	35	50	17	20	17	26	
4	38	50	34	20	17	20	Wealth class 1b
5	11	50	34	20	17	30	
6	47	25	67	20	17	32	
7	17	50	50	20	17	34	
8	8	50	50	20	17	34	
9	*39	50	34	20	34	35	
10	28	50	34	20	34	35	
11	52	25	67	20	34	37	
12	7	50	67	20	17	39	
13	21	50	50	20	34	39	
14	32	50	34	20	50	39	
15	54	50	67	20	34	43	Wealth class 2a
16	36	50	67	20	34	43	
17	14	25	17	40	100	46	
18	5	50	50	20	67	47	
19	32	75	84	20	17	49	
20	15	75	84	20	17	49	
21	26	75	84	20	34	53	Wealth class 2b
22	56	50	84	20	67	55	
23	51	50	84	20	67	55	
24	*23	50	67	20	84	55	
25	48	50	84	40	50	56	
26	46	50	84	40	50	56	
27	74	25	84	100	17	57	
28	33	75	84	20	50	57	
29	75	75	84	20	50	57	
30	16	50	84	40		58	
31	69	75	84	40	34	58	
32	41	75	84	20	67	62	Wealth class 3a
33	44	75	84	20	67	62	
34	20	75	84	20	67	62	
35	68	75	100	40	34	62	
36	18	100	67	20	67	64	
37	40	75	84	80	17	64	
38	45	50	84	60	67	65	
39	73	75	100	20	67	66	
40	71	75	84	40	67	67	
41	65	75	84	40	67	67	
42	*64	75	84	60	50	67	
43	37	75	84	60	50	67	
44	9	75	84	60	50	67	
45	63	75	84	80	34	68	
46	42	75	84	40	84	71	Wealth class 3b
47	3	75	84	40	84	71	
48	57	75	84	60	67	72	
49	55	75	84	60	67	72	
50	4	75	84	80	50	72	
51	(66)	75	84	60	67	73	
52	27	100	84	80	34	75	
53	13	100	84	80	34	75	
54	24	100	84	100	17	75	
55	30	75	84		67	75	
56	1	75	100	60	67	76	
57	70	75	84	80	67	77	
58	72	75	84	80	67	77	
59	58	75	84	80	67	77	
60	10	75	84	80	67	77	
61	*53	75	84	80	67	77	
62	59	75	84			80	Wealth class 4a
63	2	75	84	80		80	
64	61	100	100	20	100	80	
65	19	75	84	100	67	82	
66	29	75	84	80	100	85	
67	*49	100	100	40	100	85	
68	60	75	100	100	67	86	
69	34	75	84	100	84	86	
70	67	75	84	100	100	90	Wealth class 4b
71	*22	75	84	100	100	90	
72	62	100	100	80	84	91	
73	12	100	84	100	84	92	
74	43	100	100		84	95	
75	25	100	84	100	100	96	

Note: * indicates households for which detailed income and expenditure data and lease agreement forms are available
 cRinged numbers indicate households with known cases of children permanently absent from school.

Figure 1

Tsagan Hutul Brigade, Dornogobi Wealth ranking & labour availability

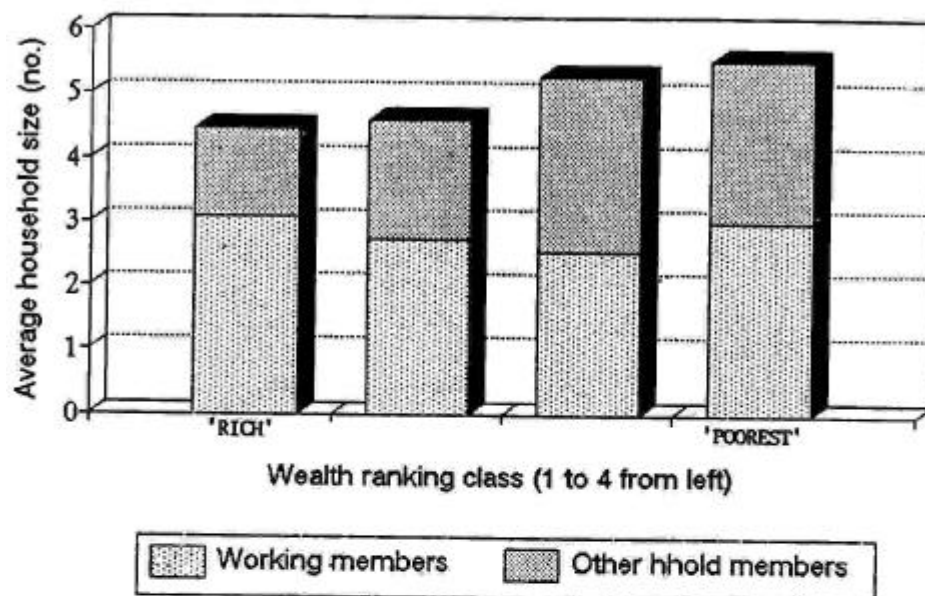
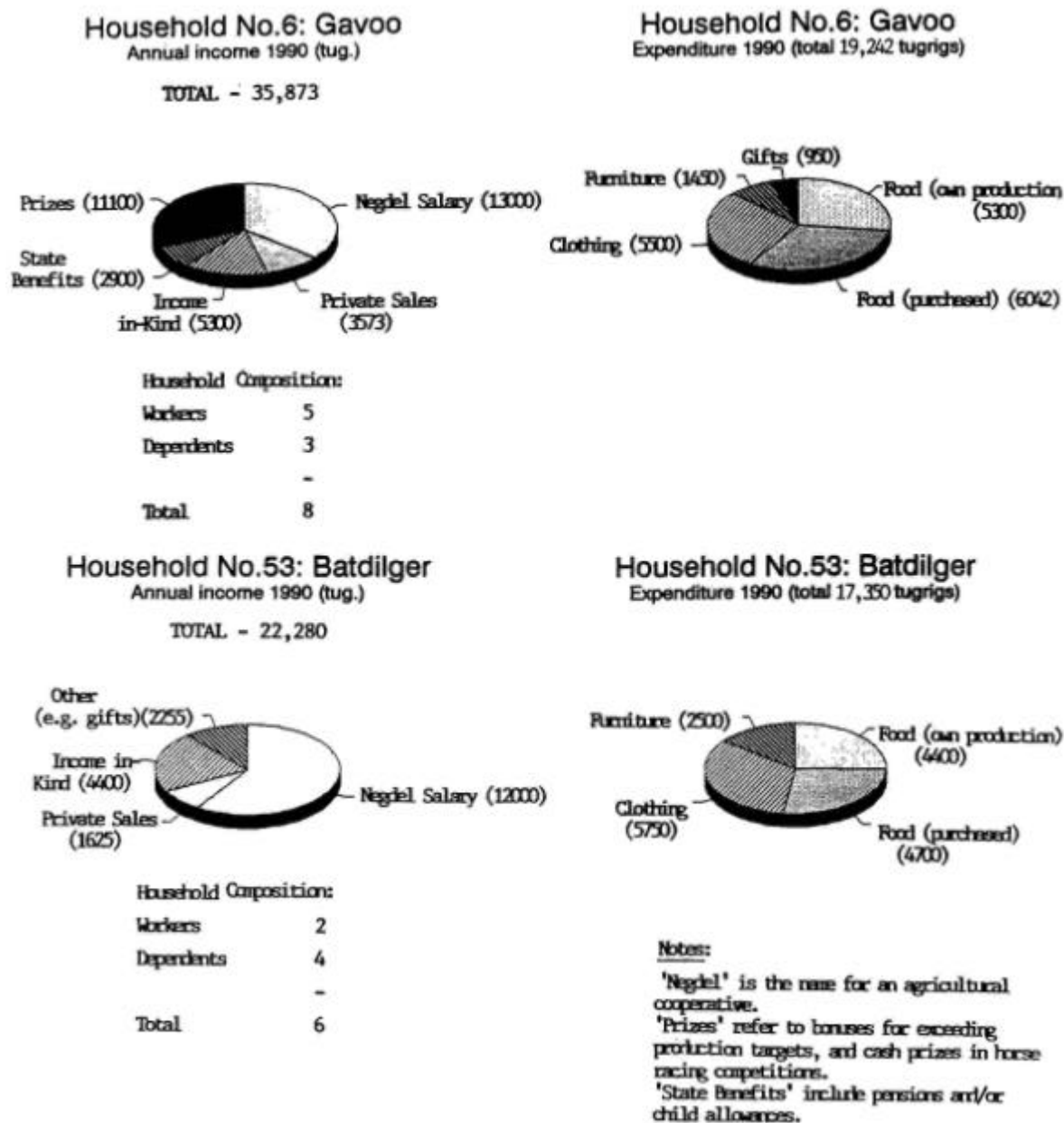


TABLE 2
WEALTH, LABOUR AVAILABILITY AND SCHOOL ABSENTEEISM:
TSAGAN HUTUL BRIGADE, DORNOGOBI

		Workers as a percentage of household size (%) (No. households per quartile)			
		0-25	26-50	51-75	76-100
Wealth Category (No. households in Category)	1 (richest)	0	4	3 *	7 *
	2	0	6	4	7
	3	2	17 ***	5	6
	4 (poorest)	0	7	5	2

* Indicates households with a child known to be permanently absent from school.

Figure 2. Comparison of annual income and expenditure data from a 'rich' and 'poor' household in wealth ranking



Taking the analysis a stage further, Table 2 shows how school absenteeism is related both to wealth category and to household size, or to the ratio of workers to dependents. The worker/household size category is shown along the top. Those households falling in the lower quartiles have relatively more dependents, or larger total household size. The numbers in the matrix indicate the frequency distribution of households in each wealth and household size category. Each asterisk

represents a household with a child absent from school.

Although the sample size here is very small, these data show a bimodal distribution. Households with absentee school children fall either in the 'poorer, large' (bottom left) quadrant, or in the 'richer, small' (top right) quadrant of the matrix. Those in the 'poorer, large' category need additional labour because they have few workers relative to dependents. Those in the 'richer, small' category need

additional labour because they have larger herds overall, while adult children have begun to leave to find work in towns. The labour constraint in herding is becoming more severe generally, as virtually all households diversify their herd structure as a response to the higher risks they face under privatisation. But these data indicate that it takes different forms according to the wealth status, size and life cycle stage of the household - a finding which in turn has implications for policy.

Wealth ranking was used by the team to structure the research process in this way for several other issues. For example, simple household income and expenditure surveys were conducted using a sample stratified according to wealth status as given in the wealth ranking (see Table 1). The point was to include estimates of income earned in kind, mainly from food and clothing produced within the household, as this information is not otherwise available. Figure 2 illustrates the kind of results this generated. It shows annual income and expenditure for 1990 for two households in Tsagan Hutul brigade. One, headed by Gavoo, several times acclaimed a national champion herdsman, was identified as the richest. The other household ranks as one of the poorest, headed by the much younger man Batdilger. Data on household composition are also given so that these data can be compared. These figures show that although Gavoo's family is larger, some of his children are now adult workers, while Batdilger's four children remain dependents.

- **Indirect uses of wealth ranking: a 'hidden agenda'**

In Mongolia the idea of learning from rural people is not new; volumes of historical importance have been written on 'indigenous technical knowledge' in herding, not least by a former national leader. But it has been suppressed by bureaucratic and professional culture over recent decades, and there are few signs as yet that the enthusiastic pursuit of the market economy is giving rural people a more powerful voice in national policy-making. Attention among policy-makers is currently focused more on foreign advisers and their policy 'models' than towards ways of adapting policies to suit domestic conditions.

The initial scepticism of the research team towards participatory methods is not surprising in a political and administrative culture used to responding to directives from above. The strong Soviet influence over Mongolian education and professional training during the last seventy years has produced some very competent technical scientists, but no framework within which social scientists can respond critically in areas of policy formulation. The relationship between research and policy-making in Mongolia is an extremely weak one. Agricultural policy is not on the whole responsive to research findings from the research institutes accountable to the Ministry of Agriculture. Neither have research efforts been directed at areas relevant to overall policy, and still less have these research efforts been prioritised according to the needs of herders themselves. A major objective of the PALD project is to strengthen this relationship, and to show how research - not least participatory research in rural areas - can inform the process of identifying practical policy options.

Wealth ranking is proving extremely important in this hidden agenda, in starting to bring about what Robert Chambers calls 'reversals' in thinking and behaviour (e.g. Chambers 1991). First, it uses numbers. It gives every appearance of being the kind of 'hard' statistical method that Mongolian researchers and bureaucrats, like their counterparts in many parts of the world, have been professionally socialised to use and expect. A danger is that, having been introduced to wealth ranking, researchers may adopt only the mechanics of the technique to produce lists of average ranking scores, without making use of its real potential that lies beyond the numbers, for revealing some of the complexity in how people think about wealth and status. But this is a potential danger with all PRA/RRA techniques and other aids to decision-taking, including cost-benefit analysis. The onus is on the trainer to show how the value of the insights gained from particular techniques relates to the way they are used.

Second, by contrast, the team was initially sceptical about the value of diagramming techniques, including participatory mapping, transects, seasonal calendars and labour

profiles. It seemed to be an issue of cultural sensitivity. At first, they said such techniques would be more appropriate for use in contexts where informants were illiterate, but were relatively less useful in rural Mongolia where there is almost full adult literacy. Some of the team said they thought the diagrams added little that they did not already know perhaps due to inadequate probing. For most of the team, a change in attitude came when they began to use diagramming techniques in sequence with wealth ranking. For example, the comparison of labour profiles drawn with different members of households identified in the wealth ranking as 'richer' or 'poorer' began to reveal differences in labour distribution not previously acknowledged by the team. Although the results were not unequivocal, the team did begin to believe in the potential of the diagramming techniques.

Third, and perhaps most important of all, was the value of wealth ranking for getting round the 'tyranny of averages'. Primary data in Mongolia - on numbers of animals, income, fodder production etc - are collected in large quantities at various administrative levels, but are rarely processed. Virtually the only form of summary statistic used to present raw data for individual cooperatives is the mean. So one encounters statistics of doubtful value - the 'average age of Mongolians' was solemnly reported during one high-level workshop.

The widespread use of the mean appears to legitimise the official but thinly-veiled myth that 'all herders are equal in Mongolia', which is always quickly exploded in any reasonably sensitive discussion of wealth status. However, once the research team began to use wealth ranking to explore and discuss the wealth and status variations within cooperatives that they knew to exist, they were relieved to find a method that reliably lent weight to their own perceptions. A whole new dimension seemed to open up for the research team when they began to use the results of the wealth ranking within a given brigade for targeting other research methods, including diagramming, in deliberately seeking out differences.

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NOTE

A preliminary version of this paper was presented at an informal workshop on wealth and well-being ranking hosted jointly by IIED and IDS, and held at IDS on 3 October, 1991. It has also benefited considerably from helpful comments by Jeremy Swift.

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6

Finding the poorest in a Tamil Nadu village: a sequence of mapping and wealth ranking

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• Introduction

Tamil Nadu Agricultural University is collaborating with the Ford Foundation in exploring the applicability of recent advances in farmer participatory research and extension methods to rainfed conditions in Tamil Nadu. A recent review found that the university had been able to make a significant contribution to agricultural development in the better endowed irrigated lands, but had less success in the diverse and risk-prone drylands. Accordingly, a participatory on-farm programme with a farming systems perspective was recommended as a means to trigger both larger institutional as well as personal changes. Two workshops on PRA were held in December 1991 to orient senior agricultural researchers from throughout the TNAU system. The first was held at Aruppukottai Regional Research Station near Madurai, the second at Paiyur Regional Research Station near Bangalore. Full reports on both these workshops will be jointly published by TNAU and IIED during the course of this year (edited by R. Vijayraghavan, A. Paliniswamy, Jules Pretty and K.C. John).

This short piece reports on exercises conducted over two days in Kalkaruchi village near Aruppukottai. It describes a sequence of participatory social and resource mapping exercises combined with wealth ranking that enabled us to discover the poorest people in the village.

The main lessons for us were that PRA methods reveal hidden complexity and can bring the poorest to the attention of

investigators. But it is the attitudes and practice of the team that are critical. These methods revealed an apparent complete picture of wealth groups in the Harijan community, but it was only with persistent triangulation and probing that we found our original picture to be inaccurate. Good use of the PRA methods is not necessarily guaranteed by the methods alone.

Social mapping and other participatory methods

We arrived at the village to find a bustling small urban centre. At first the team were nervous and walked through the lanes without interacting. By the end of the afternoon, the group was relaxed and laughing with other groups of local people. One sub-group started a social map with a group of women by asking one to draw a map of the village, so “we can know about your place”. They used different rangoli powders¹ to indicate roads, canals, temples, cinema, shops, health centre, cooperative society, industry and housing. The group was joined by the rest of the team as they concluded interviews elsewhere. The numbers of local people involved also grew, and several people holding sticks made a series of sequential changes. The Harijan colony only appeared towards the end of the exercise and even then they were reluctant to add detail of paths and approach roads (Figure 1). Individual houses were not marked as there were 1500 altogether. One old man said “if we start marking all the houses, it will be dark by the time we finish”. When the map was

¹ Coloured powders, locally used during festivals to make decorative pictures on the floor.

concluded, the team divided into separate sub-groups, one interviewing about the map, another producing seasonal calendars with a group of men, another with a group of women, another various pie diagrams. The methods and interviews flowed naturally and with great ease. At the end the teams set off on two transect walks, accompanied by groups of local people.

Transects and seasonal calendars

The team began the day with a review meeting from 0800 until 0945. This focused on what we had learnt the previous day, gaps, and methods proposed for today. We arrived at the village by 1020, and split into two sub-groups to proceed on transect walks. A range of interviews focused on livestock rearing, dryland farming, children and nutrition and labour patterns. During an interview with two farmers met while walking between fodder sorghum fields, one of the team members began marking the months of the year on the ground with a stalk. He then broke some stalks and laid them out to represent monthly labour demand as the two men commented on labour. Another team member then squatted down to comment and point. One farmer then started to point at and comment on the diagram. Another man arrived along the path. All then squatted down together - 3 interviewers and 3 farmers. Attention was now firmly focused on the calendar, and a series of sequential changes were made. Some of the sticks were lengthened, some shortened. The process was repeated twice, month by month.

Social mapping and wealth ranking in the Harijan community

Following further interviews and lunch, we decided to walk to the Harijan colony on the far eastern side of the urban area. This was *Bharathi Nagar*, the community missed off the previous day's social map until near the end of the 'anything else?' prompting. We arrived in the colony and stopped by a lime kiln, near a large shady *Prosopis* tree. We already had a plan to produce a map, so the place near the path and by some irrigated vegetable fields was ideal. Getting started is always difficult.

The process began with a group of only two young men. We asked them to mark their community, and one took the stick and started to draw in the sand under the tree. First the approach roads were drawn, then the lime kiln and tree, the temple, the fields, wells, trees, houses and drainage channel. As the men were drawing in the sand, the group grew to about 20 adults and numerous children in 10 minutes. The women took over with the rangoli powders, and the older men stayed on the fringes of the group. The women used pink for roads, blue for active wells, orange for dry ones and the temple, green for the fields, and yellow for the kiln. In the second phase, the men started to point and suggest changes. Tree leaves were added to show major tree species. Slowly those on the outside were drawn into the map making process, which was about 3x4 metres. An increasing number of people had rangoli powder on their hands. We asked them all to put a stone for each house, and everyone was very interested in putting their own house. The map became a focus for discussion about farming and farming techniques.

The numbers of people actively involved began to decline as the map making was drawing to a conclusion. At this point the team divided into 4 sub-groups, one leaving with some women and children for venn diagramming of institutions, the others for interviewing various parts of the map with 2 or 3 people each. We then asked 3 young boys to add all the remaining houses, with the aim of moving towards a wealth ranking. Once all the stones were present, we asked them to put the houses into different wealth classes by marking them with different coloured powders. They began with yellow for the wealthy, as 'yellow is flourishing'. These households had a TV or radio, owned 2-3 acres of land, and had a relative working outside in a government post. Annual income was said to be of the order of Rs 2500. The second class was marked in pink - they had 1-2 acres, bullock carts and cattle, and an income of Rs 1500. The last group were green - the landless labourers earning less than Rs 1000 annually. There were 7 yellow, 10 pink and 29 green.

This then struck us as curious, as we had heard there were more than 60 households in the village. Perhaps there were more than one per house? Or had some been missed off? We probed the large group of women and men who were by now involved, and after some discussion discovered that the missing were “only huts, we didn't count those, they are the downtrodden who depend on daily labour”. The group then added a further 16 stones, and gave them an orange colour (the triangles in Figure 2).

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These were the class below the poorest, in the poorest and most disadvantaged group of the village, the Harijans. We asked about the difference between the ‘greens’ and the ‘oranges’. In fact the ‘greens’ had small plots of less than 0.5 acre, and it was the ‘oranges’ who were completely landless. Many of these had been better off with some livestock, but in the past 10 years several bouts of disease had devastated herds and threatened whole livelihoods. The whole process, beginning the previous day with the first social map, showed how easy it is to miss the poorest.

This mapping and wealth ranking then led us to focus interviews on both on-farm and off-farm livelihoods, including visits to the match factory employing children and the weaving community. It was clear that a strategy for participatory agricultural research would have to take account of significant and rapid economic change as well as the different needs and perspectives of farmers and landless in the different wealth and caste groups.

Finding the poorest had not been easy, but the most important lessons we learned related to using sequences of methods to find the poorest and ensuring we do not give up too early.

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7

A simple method for scoring housing conditions as income proxy in Ethiopia

Mauro Ghirotti

• Introduction

Wealth is a major indicator of the distribution of resources within a community and consequently a major determinant of social and cultural differences. Land and livestock ownership, as well as production strategies, particularly husbandry practices, are strongly associated with wealth (Grandin 1983). Income may influence the distribution of diseases and other factors which result in the lowering of health status (e.g. malnutrition), as well as food production, consumption patterns and utilisation of health services (Victoria and Vaughan 1985; Ghirotti 1988). The estimation of wealth is therefore one of the primary variables to be investigated in household studies. It is, however, a long and difficult task.

Recently, a variety of methods have been developed to quickly estimate wealth ranking, but their application can be jeopardized by the extremely delicate nature of the subject (Grandin 1983). Farmers (and others) are often reluctant to openly discuss their assets. Furthermore, under certain conditions a reliable list of households in the village may not be available, thus making identification of who owns or control which resources difficult. Nevertheless, housing condition is a widely accepted income proxy which is extremely useful when its scoring is based on widely agreed principles and it is not the result of exceedingly subjective evaluations (Abramson 1984; Honadle 1979).

A simple method to housing condition is described here. It was developed on the basis of observations carried out in Ethiopia in 1985-86 among the Oromo and Gurage people

of the Central Highlands, and the Hadere and the Dankil of the Rift Valley, as well as in Zambia in 1986-87 among the Ila, the Tonga and the Lozi. It was also tested in Sidamo, Southern Ethiopia, among the Sidamo and Guji people in 1988.

The house classification is based on a few practical principles:

- The house serves primarily for protection against adverse environmental conditions and as social point. Therefore, its condition depends on a combination of practical and cultural factors. Regarding its protective function, the availability and possibility to purchase building materials are fundamental. Such purchased building materials are primarily used for the roof.
- Among rural people of sub-Saharan African, houses of three main types are found: hemispherical, quadrangular and cylindrical with a sloping conical roof. Such archetypes are also followed in most modern house building in the region.
- On average, most types of traditional houses last about 6-8 years (except those of pastoral people which may last much less) so they must be maintained, repaired or rebuilt periodically. The performance and extension of these operations depend on the care exercised by the owner, the availability of money and building materials, and where communal labour is involved, on the social status of the head of the household. Cash availability may influence: (1) the type and quality of the building materials; (2) the number of rooms in the house; (3) the possibility to sub-divide space; and (4) the provision of accessories (e.g. pictures and decorations).

Tables 1 and 2 show a 5-grade and a 3-grade score classification based on the above principles.

Table 1. A five-grade housing condition scoring

	1	2	3	4	5
Roof in good conditions	-	+	+	+	+
Walls in good conditions	-	-	+	+	+
Good building material	-	-	±	+	++
Well kept	-	-	±	+	++
Large	-	-	-	±	+
Sub-division of the available space	-	-	-	+	+
Presence of decorations	-	-	-	±	+

Table 2. A three-grade housing condition scoring

	1	2	3
Roof and/or walls in good conditions	-	+	+
Good building material	-	±	+
Well kept	-	±	+
Large	-	±	+
Sub-division of the available space	-	-	+
Presence of decoration	-	-	+

• Materials and methods

During a study in Sidamo, the conditions of 102 houses were compared with the estimated household income. The income of each of the different families was estimated by making an inventory of the previous year's agro-forestry and livestock ownership and production, plus other sources of household income such as casual labour or handicrafts (Ghirotti 1988). The inventory was then converted into monetary figures (i.e. Ethiopian Birr (1US \$ = 2.05 Ethiopian Birr in 1988).

• Results and discussion

In Figures 1 and 2, household income expressed in Ethiopian Birr is plotted against a 5-grade and 3-grade score house conditions, respectively. The difference between the

recorded means is more significant in the latter ($p < .001$ versus $p < .0001$).

The advantage of this method for income estimation is that it does not involve questioning people on delicate matters but requires only quick, methodical observations on the house conditions during household visits. A more straightforward division in three groups of house conditions (poor, average and good) which correspond to three income levels (low, average and high) appears to be preferable to the 5-grade score one since it shows less overlap among the different categories and more significant differences. Therefore, Table II could be used as a simple guide for estimating household income through dwelling scoring following the order of priorities given in the table. For example, a large house with some space division but with a roof or the walls in poor condition would be ranked as poor.

Figure 1. Five scores house condition

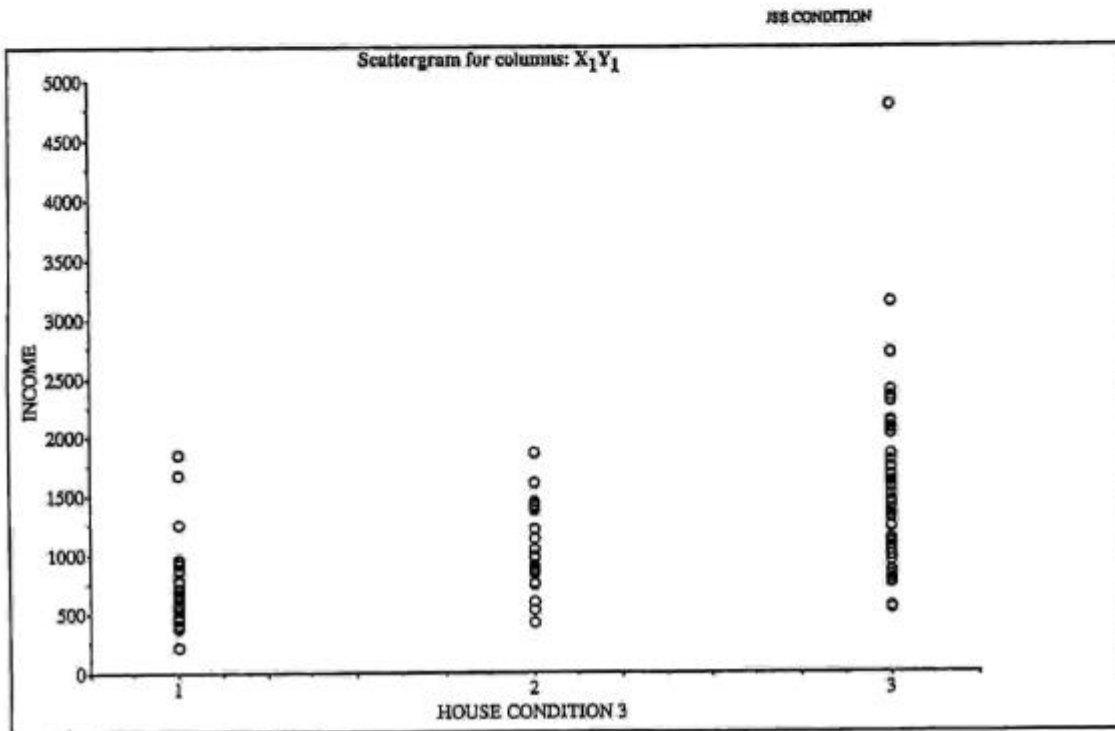
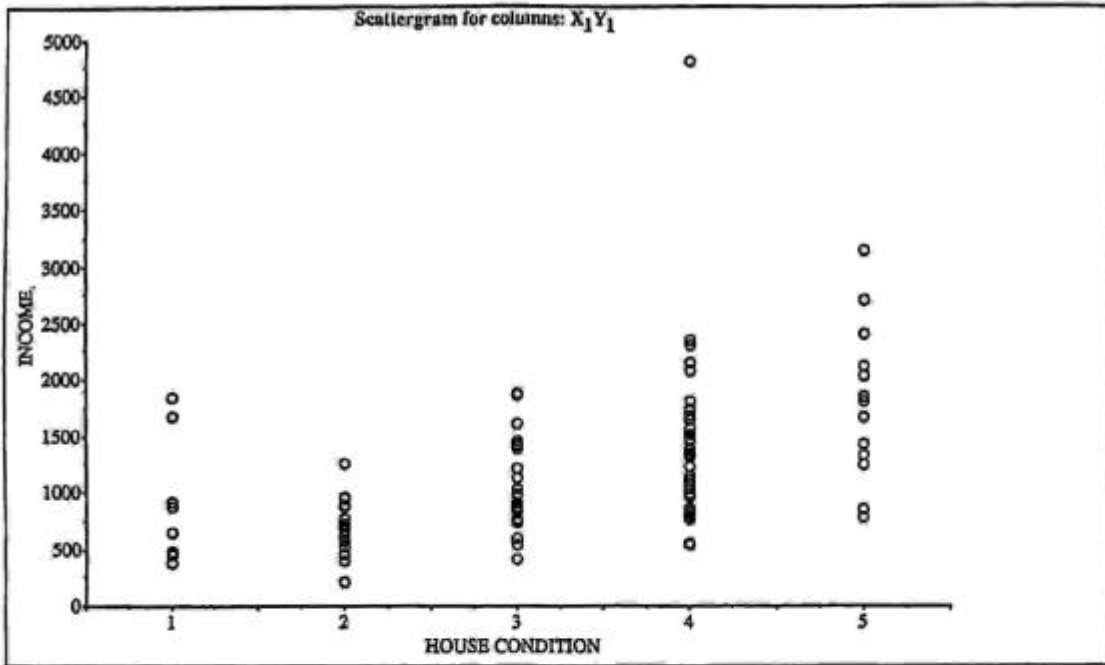


Figure 2. Three scores house condition

It must be remembered that the state of housing is an ambiguous proxy for income since it depends not only on the availability of money (and other resources) but also on the willingness of the head of household to invest in the dwelling. Nevertheless since it is also an indicator of the physical well-being of the family, the housing condition can be quite useful, for example, when investigating risk factors in malnutrition for income-related husbandry practices. In Sidamo, we found that it was a very good and easy indicator for identifying households at risk of malnutrition (Ghirotti 1980). If one is more interested in cash availability, housing conditions should be coupled with other income indicators (e.g. number of livestock or ownership of some luxury items).

Although this method was developed in tropical Africa, I believe it can be adapted to household studies in other cultures. In such cases, the categories should be based on the people's own perspectives and local conditions. Honadle (1979) for example, found the method useful in rural Java. Before a survey, local key informants could provide information on which features are considered essential to a good house or on how many levels of wealth exist in that community. The direct observation of this indicator need not exclude a participative analysis of the mechanisms involved in wealth distribution within a particular community.

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ACKNOWLEDGEMENTS

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8

FARMI's experiences of wealth ranking in the Philippines: different farmers have different needs

F.T. Banlina and Ly Tung

• Introduction

Farmers of differing wealth will have different problems and needs and varying ability to adopt proposed technologies. Agricultural research and development must take such differences into account to determine research priorities and to develop relevant innovations. In 1990 FARMI/ViSCA started an Upland Agriculture Project in Matalom, Leyte where we wanted to try out wealth ranking. We decided to test this method in three *sitios* of an upland village, San Salvador: Pong-on, Barrack and Cogon.

We had first read about wealth ranking with cards from the RRA Notes and from Grandin's booklet, and so learnt about the three basic steps:

1. preparation: defining key concepts, list of households;
2. card sorting and discussion with informant; and,
3. computing the average and grouping.

• Preparation

We first obtained a list of households from the *barangay* captain, the political head of the village. This was based on a November 1990 census, showing 37 households in Pong-on, 43 in Barrack and 16 in Cogon. We assumed that there was no need to update the list as the census was recent. However we later encountered problems with the list!

We prepared all the cards (see Figure 1 below) and selected informants for each *sitio*. We had chosen to interview five in each location, starting with the *barangay* official. We asked

the official to nominate the other 4 using these criteria:

- knowledge about the *sitio* residents;
- a mix of rich, average, poor households; and,
- a gender mix.

Figure 1. Preparing the cards

for
researchers
use

KI no.	1	2	3	4	5
Pile/ Category					

household
head
nick-
name
cards

NAZARIO GILO
"SARIO"

Before starting with the interviews we discussed what term in the local dialect could be used for 'wealth ranking'. We chose *Pagbana-bana sa kahimtang*, which means 'estimates of economic status'. This term turned out to be relevant and familiar for all the informants. We contacted the informants, explain the objective of the exercise and made appointments to meet with them.

• Card sorting by informants

Each of the informants sorted the cards into 3 to 5 piles indicating the different wealth groups. After they had finished, we asked them to review the piles and make any changes they wanted. We noticed that this was important because they in fact did make changes, transferring cards from one pile to another. In some cases the actual number of

piles was reduced or increased after the review.

After the review the informant were asked to give principal features of each household's livelihood. These were crop production, animal production, receiving remittances (from family members working elsewhere) and others such as fishing, gathering of *tuba* coconut wine, gathering and selling of firewood, and working as hired labourers. This then led into a discussion about the major differences in wealth between the piles. Table 1 is an example from *sitio* Barrack, showing the four groups and how they are different.

• **Lessons learnt and recommendations**

We found the ranking exercise quick and simple. While producing very valuable results, the interview was very enjoyable. With about 50 households per *sitio*, each informant completed a ranking in about half an hour.

Our first mistake was assuming the official list was accurate. In fact, we discovered our mistake as we were verifying the validity of the results of Table 1. After selecting a few households per category to check, we wanted to make sure that these selected households are physically located throughout the *sitio*. Therefore, a spot map had to be prepared first, with the help of the residents. We found that the map included a few households not found on the list we had used. There was also some confusion about whether a certain household belonged to this *sitio* or another because they were adjacent. We recommend that you make

sure a list of households is complete and accurate before starting the interviews.

Other lessons we found important include:

- Ask if someone is commonly known by a nickname. We found that many of the informants knew the other residents by their nicknames rather than by their formal name;
- We found some households were ranked completely differently by different informants, e.g. richest by one and poorest by another. It is important that you check this, probing about that household, instead of relying on the final average score;
- Although it is important that the informant can do the ranking without too much interference, we found that family members can facilitate the process;
- As there are so many local dialects, it is good to discuss the appropriate local term thoroughly with each of the informants; and,
- We found that the informants who were in the middle/last categories felt quite comfortable about ranking themselves.

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Table 1. Major indicators of wealth sampling among households in sitio Barrack

Pil e/C at.	House hold no.	Indicators
I	43, 42, 38, 36, 34, 28, 41, 35	<ul style="list-style-type: none"> – Mostly landowners – Some houses are made of permanent materials – Own more number of livestock (cows, carabaos, pigs and chicken) – Mostly receiving remittances from children working either in Manila or abroad
II	39, 37, 27, 22, 20, 19, 17, 33, 21, 18	<ul style="list-style-type: none"> – Mostly either tenants or tenants at same time land owners of small land parcels – Mostly own a number of livestock (cows, carabaos, pigs, chicken) – Mostly receiving remittances from children working in Manila
III	40, 31, 26, 25, 23, 16, 7, 4, 2, 30, 24, 15, 1	<ul style="list-style-type: none"> – Tenants of small land parcels – Hired laborers – Majority don't have carabao and other livestock – Old folks dependent upon children's support
IV	32, 29, 13, 12, 10, 9, 3, 5, 6, 8, 11, 14	<ul style="list-style-type: none"> – Majority are not cultivating any land parcels – No carabao (as draft animal) – Dependent mostly on any of the following sources of income: <ul style="list-style-type: none"> • Fishing (small scale) • Tuba gathering (small scale) • Gathering and selling firewood/charcoal • Hired labor/maids

9

Cultural sensitivities on the Rapid Appraisal team

Donald A. Messerschmidt

As part of rapid appraisal training for a Forest User Group study in Nepal, certain personal, cultural, and communications factors emerged which the team members felt we must discuss. It turns out that our group is very sensitive (that's good) to Nepali cultural nuances and to the way in which we insiders and outsiders present ourselves so as to cause minimum impact in remote villages. We have discussed how we should dress (both the woman and the men) - modestly, conservatively. We have also discussed the use of certain hand signals which, in Western society, might conveniently signal transitions during the interviewing process (e.g. when to tighten up the discussion, close the group, and pass the ball - in Khon Kaen RRA terms). Some hand signals in the Nepali context sometimes have vulgar connotations: a thumb up, two fingers up, or using thumb and forefinger to make a circle - an 'okay' signal in North America. It turns out that these are sexually suggestive in Nepal.

Certain other body language, such as particular forms of eye contact and eye signals which Euro-Americans commonly use can be interpreted differently than expected, sometimes offensively, and we have had to work out ways to avoid them. We Americans on the team pointed out to our Nepali teammates that holding one's arms across the chest, as Nepalis sometimes do, can be interpreted as offensive in the West (signalling disdain or boredom or a show of superiority), while in Nepal it is a polite and accepted posture with no apparent negative connotations. The members of our team are learning from one another even as we proceed in the field.

Sometimes issues arose of what to say and how to say it, and what to avoid saying in normal conversation. For example, we talked

long time about how to introduce ourselves personally and how to state our study objectives in simple terms, especially in the villages. (This issue is not quite as critical when working with more educated, cosmopolitan project officers). We had thought naively that we could simply tell villagers that we had come to discuss forest user groups with them and to 'ask' (*sodnu*) them 'questions' (*prashna*) about their forest. However, this approach can be taken as highly officious and after serious discussion, we changed it. We now tell them that we've come *sallah garnu*) or simply 'talk about' (*kura garnu*) the subject, and to seek 'information' (*jaankaari*). They are our teachers, we say, and we are the students and we want to learn from them. The 'ask you questions' mode suggests to villagers a kind of confrontation, as in a court of law or with an officious forest ranger who has perhaps come to find out which villagers have been cutting illegally in the forest. When Nepali villagers meet anyone in the forestry business they are understandably suspicious and we want to avoid instilling all such fears and suspicious.

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10

Interviewing cows**Kassaye Hadgu, Mohammed Yisehak and Girmay Tekle**

It is very hard to get information on fertility and mortality rates, disease incidence and livestock management practices in an extensive livestock production system where herd productivity and health data are not properly handled or not gathered at all. If you ask a farmer: "How many animals died from your herd?", he will not tell you the real numbers but what he imagines the figure to be which will make the interviewer feel sorry for him. But interviewing cows can help in finding reliable data on this subject.

The cow can be asked using the owner as an 'interpreter'. Questions like: "how many times she calved, the years she calved, the fate of her calves (i.e. sold, given away, died of which diseases etc)" can be asked.

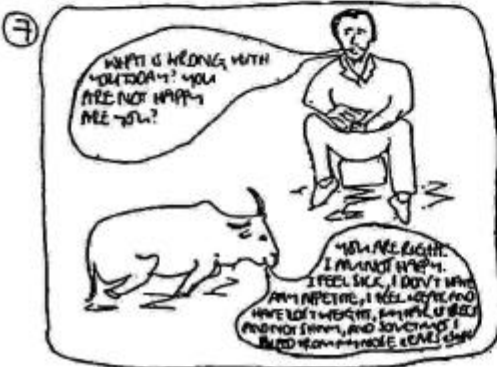
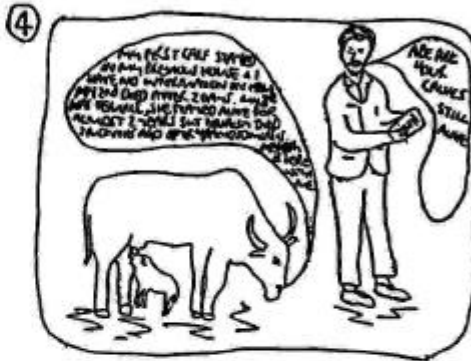
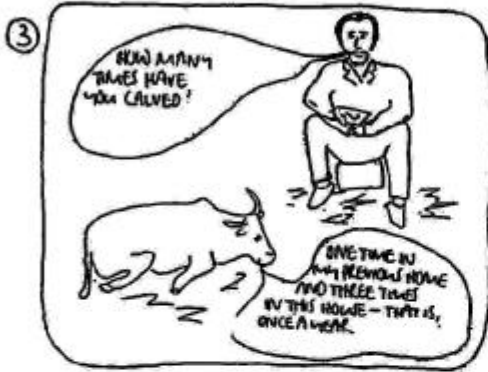
This method was useful in determining estimated survival and mortality rates for a sample of farmers during an RRA exercise in Abela Sipa Peasant Association, near Soddo,

southern Ethiopia. Farmers' cows were interviewed in order to learn about cattle productivity and disease patterns, so as to better design animal health care and livestock management programmes in the area. Refer to the cartoon for one example of such an interview, presented here as a case study.

- **Kassaye Hadgu**, Soddo Zonal Veterinary Diagnostic and Research Laboratory, PO Box 82 Wolayta, Soddo, Ethiopia, **Mohammed Yisehak**, and **Girmay Tekle**.

NOTE

More details of this RRA exercise can be found in: *Farmer Participatory Research in North Omo, Ethiopia*. Report of a training course in Rapid Rural Appraisal, Farm Africa-Ethiopia/IIED, London, October 1991. This is available from IIED or Farm-Africa.



11

An architect from a different school**Ranjit Ambastha and Meera Shah**

Ladwa is a remote village. Located on the periphery of the forest, it is accessible only by crossing 'Taral' river on foot. During the monsoon season one can reach the village only by wading through the neck-deep water under a villager's guidance or by swimming across it.

AKRSP first contacted the villagers of Ladwa in January 1991, when a general PRA was conducted in the village. Following this, development efforts were supported in the village in taking up afforestation and soil and water conservation activities. After one year it was decided to conduct an evaluation PRA in Ladwa to understand the impact, if any, of the programmes undertaken till then.

It was while an active debate was going on as to how the change in cropping pattern and crop productivity could be depicted pictorially (so that the illiterate could also participate) that Mansingh Dungarjee was spotted. He had been quietly watching the group discuss how to draw the difference between a '*desi*' (local) and hybrid variety of cotton. Towards the end of the discussion he was offered the pen and asked whether he would like to try, so as to involve him in the proceedings. He looked confused as he replied, "... *maybe, I don't know ... have never done it before...*" while he hesitatingly held the pen in his hand.

On being asked what he did for a living, he informed us that he designs homes for the villagers. All houses in this area are built around a basic wooden frame. Around the frame the mud and bamboo walls come up and a roof is placed which can be tiled or thatched. Mansingh creates the wooden frames for the people and hence acts as a designer cum

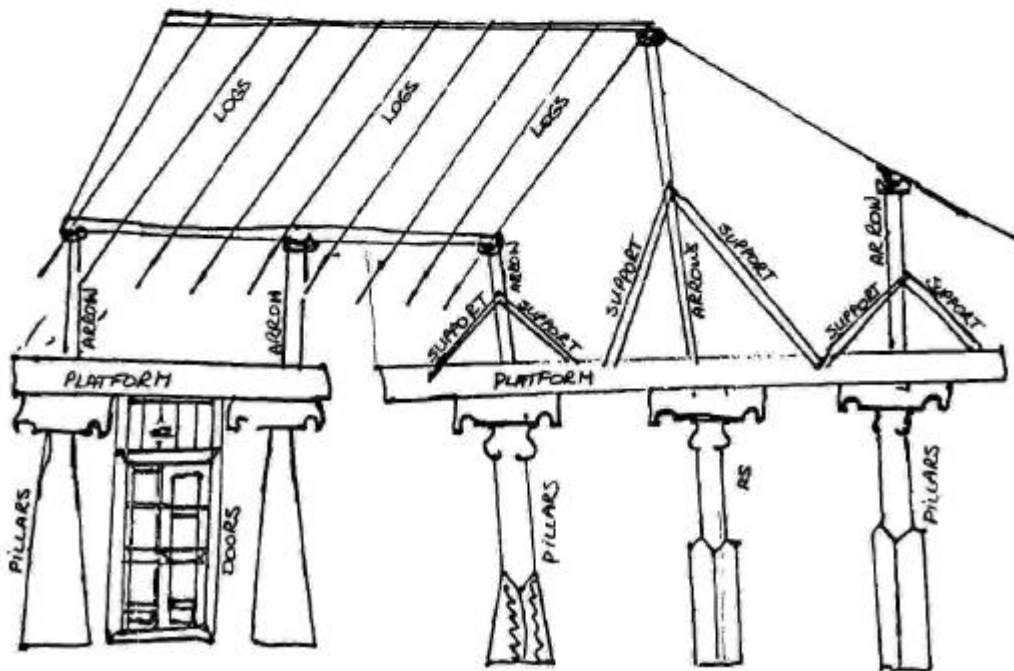
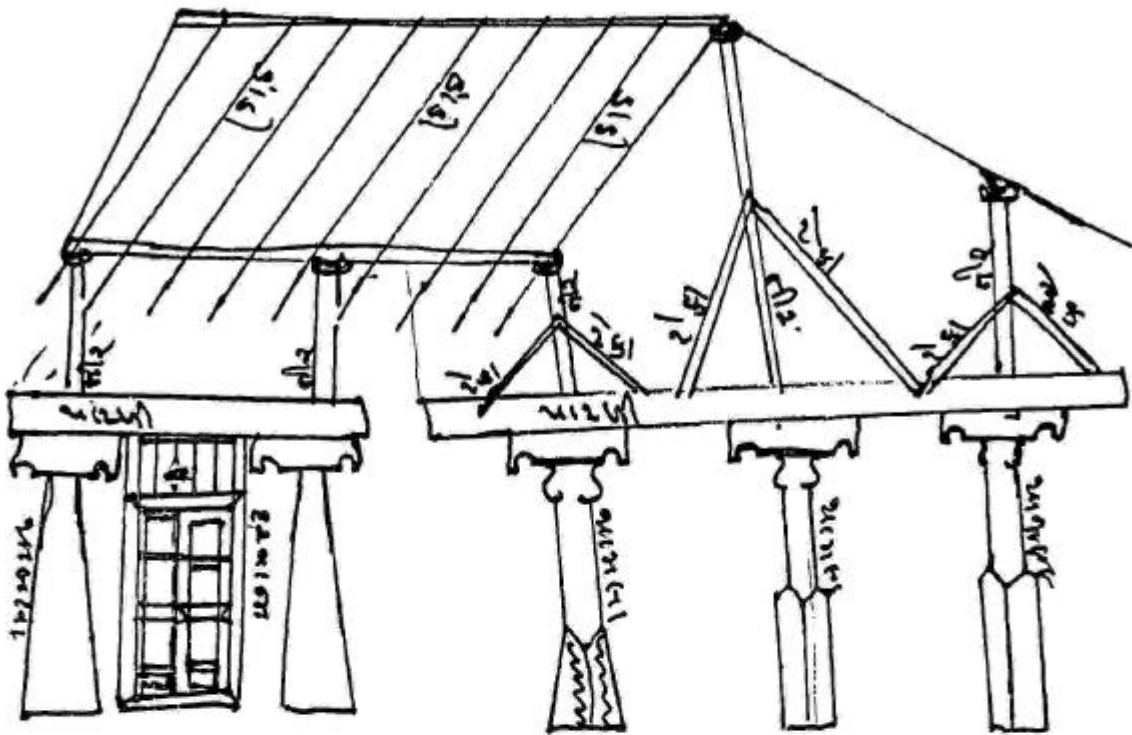
consultant for them. Not only does he decide the quality of wood to be used but he also does

the interiors for them. We were getting interested in what he had to say (though we were not there for this purpose) and he was asked whether he could draw the different types of houses he designs and constructs. Mansingh was not sure. He had never before drawn what he constructed on paper. Nor did he keep a blueprint in front of him. His creativity comes in a free flow matching his client's needs and the size of his pocket! However, Mansingh was willing to try. One sheet of chart paper and one sketch pen was left behind with him to draw out his designs.

One week later the secretary of the Ladwa Village Development Association turned up at the AKRSP office with the output. Drawn out neatly were 8 drawings of different types of houses he has designed. They had to be seen to be believed. Asked if he could do more of these, the answer was YES - but he had run out of paper! One more sheet of paper was sent to him which he again filled up with designs as seen from different elevations and from different angles. These could have been done by a trained professional.

Not only did Mansingh mention the quantity of wood required for the different designs but he also mentioned the approximate cost of each structure and the time it would take to get ready (in labour days). Also included were designs for interiors with beautifully carved pillars for those who could afford it.

We plan to give back a copy of these outputs in a folder to Mansingh so that his clients can choose from the different designs and Mansingh is able to show his clients what they could expect.



Only if people like Mansingh could be identified and tapped by agencies like the government which construct shelters for the weaker sections of society, could these programmes be developed to suit the requirements of the local people using local technology. Programmes like the INDIRA AWAS YOJNA have set up houses which are rarely used for the purpose they were built. Some villagers use these for cattle sheds or to store grass rather than stay there themselves. In other cases brick and concrete walls are knocked down to be replaced by the more familiar bamboo and mud walls which enable better ventilation and lighting. Would it not be better if these houses are designed by people like Mansingh rather than professionally trained architects who design these homes far away from the rural scene and have very different ideas about the user's requirements?

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12

Together get a grip on the future: an RRA in the Emmental of Switzerland

Ueli Scheuermeier and Raymond Ison

• Introduction

“Let’s do an RRA in Switzerland!”. The thought struck two extensionists in Switzerland, who had considerable experience in developing countries. It was time to try out something new in Swiss extension (*beratung*). A visit to LBL (*Landwirtschaftliche Beratungszentrale Lindalu*) by an Australian and a New Zealand agriculturalist familiar with RRA in ‘developed’ country settings acted as a further catalyst.

• The project

The institutional context

LBL is mainly engaged in training extension workers, and in some research into socio-economic matters. As a service centre for all official extension services in the German- and Rumantish-speaking parts of Switzerland, it was the ideal place to take an initiative on RRA, which it did. A partnership was struck between LBL and the extension service of the Emmental region in Switzerland. The local extension service was involved from the start in developing the RRA, due to their being trusted by the local farming population, and due to their own interests in developing new methods.

The area

The Emmental is a rural area near the capital Berne. The terrain is hilly, often quite rough, with forests and isolated farms. A farm with more than 20 ha is considered large. The RRA took place in the Gohl valley, a tributary to the main Emmental valley. The whole catchment is roughly 15km², with about 70 households.

The team

The team consisted of 12 people of different backgrounds:

- 7 agriculturalists;
- 1 socio-economist;
- 2 foresters;
- 1 ethnologist; and,
- 1 home economics trainer.

Of these 7 were men and 4 women; 6 of the team worked with the local population. Five people were from the ‘outside’, all with extensive experience in developing countries. All team members except one understood the local dialect. This was Raymond Ison from the University of Sydney. Being an Australian with no knowledge of the local language, but with experience in RRA in a developed country environment, he was able to contribute an unbiased, ‘outsider’s’ view and insights into RRA methodology.

• The process

a. First, a considerable input was needed to explain to Swiss extensionists what RRA is and aspires to achieve. This was done in a careful and non-threatening manner, resulting in: “yes, let’s try it out”.

b. A tour through the area by some of the outsiders, led by the local extensionist. Informal observation and discussion to get a feel of the area.

c. Planning workshop (1 day) with local extension workers, people from LBL and Raymond Ison - all members of the RRA team. The objectives became clear to

everybody, methodological questions were clarified and the preparations for the intensive week were organised.

d. Preparation (1 month) included:

- secondary data reviews;
- key informant interviews;
- finalise team composition;
- selection of households to be contacted for semi-structured interviews (SSI), based on information from key informants combined with other socio-economic information available; and,
- logistics.

From this, we compiled a 'reader' on the Gohl valley and inhabitants, as a reference for the team, made a list of households to be contacted and had a rough programme.

e. Intensive week with whole team

Monday (half day)

Getting acquainted - all team members; planning, introduction to SSI.

Tuesday

Transects across the valley in two groups. Evening: meeting some 'progressive' farmers who helped validate some of the first concepts and questions cropping up from the SSI's.

Wednesday & Thursday

SSI (2-4 hours each) in alternating teams of two visiting individual farming families on their farm. Of 70 households 29 were visited - they were contacted beforehand, and all agreed to discuss their farming system with 'outsiders'. Exchange of information and reshuffling of interviewing teams during midday-meals and evening (a la Sondeo). Write up of ideas arising on cards, for later team analysis.

Friday

Evaluating and collating the information on the cards into general 'themes' to be discussed with Gohl inhabitants in the evening. Visualisation on pinboards.

Evening

All persons contacted during the week plus anybody else living in the Gohl (e.g. local press) were invited to check on the results of the work of the RRA team. More than 60 people turned up from about 30 households. Participants were invited to discuss in small focus groups on the themes of their interest. A group member reported back in a plenary session on discussion and outcomes. Supper concluded the evening.

The suggestions and propositions generated in the individual SSI's were clarified and ranked by the local people interested in taking up the ideas. We used the pinboards and cards for this. Future action strategies were developed.

Saturday (half day)

Checking and photos of the pinboards of Friday evening. These photos were photocopied as the report on the RRA (a photoprotocol).

Reflection/Evaluation (2 hours) by the team:

- on the results, on the methods used;
- defusing any remaining group dynamic problems within the team; and,
- discussing what would we do differently next time, etc.

f. Follow-up

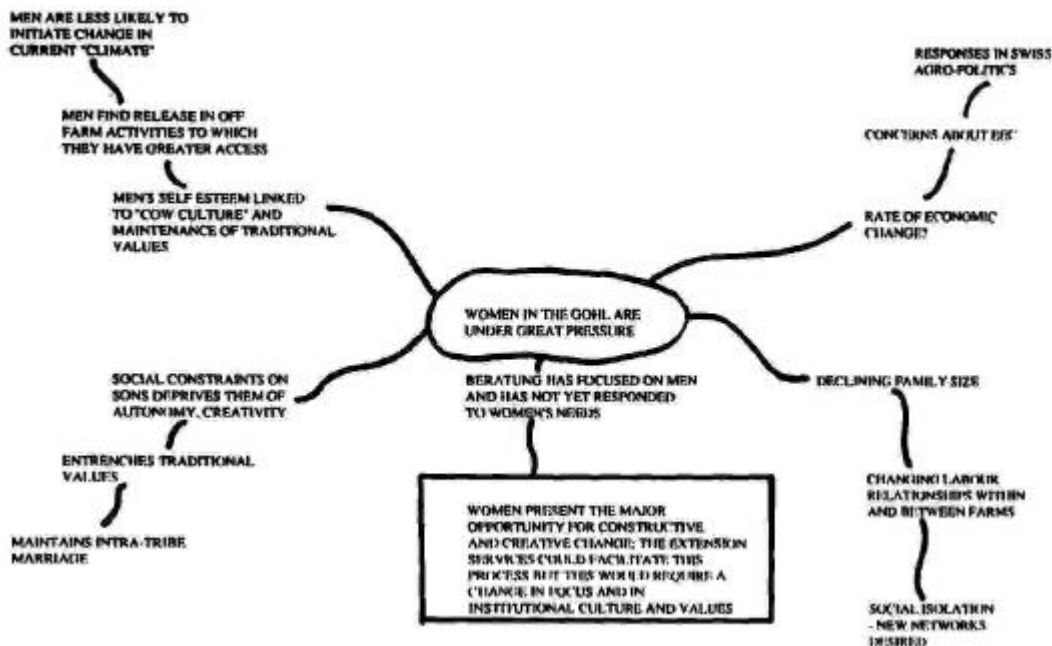
The ideas for action generated by the RRA were pursued by the farming families of Gohl valley and the local extension service (presently under way).

• **Highlights of the RRA**

Mind-mapping as a tool for formulating hypotheses

Mind-mapping starts by writing a 'hunch' on some topic in the middle of a sheet of paper. Freely associated thoughts are added to the 'hunch', resulting in several 'lines of thought'. Finally a hypothesis on the 'hunch' is formulated, taking into account the various lines of thought. The mind-map (Figure 1) can lead to a hypothesis (the box in Fig. 1) which arises from this line of thinking.

Figure 1. Mind-mapping based on the team's realisation that women in the Gohl Valley were under great pressure - leads to hypothesis (see box)



This particular issue came from group insight and raised the questions of whose learning is important (local people, team members or both?) and how this learning might best be shared or used in action.

Mind-mapping for setting up a 'motivation system'

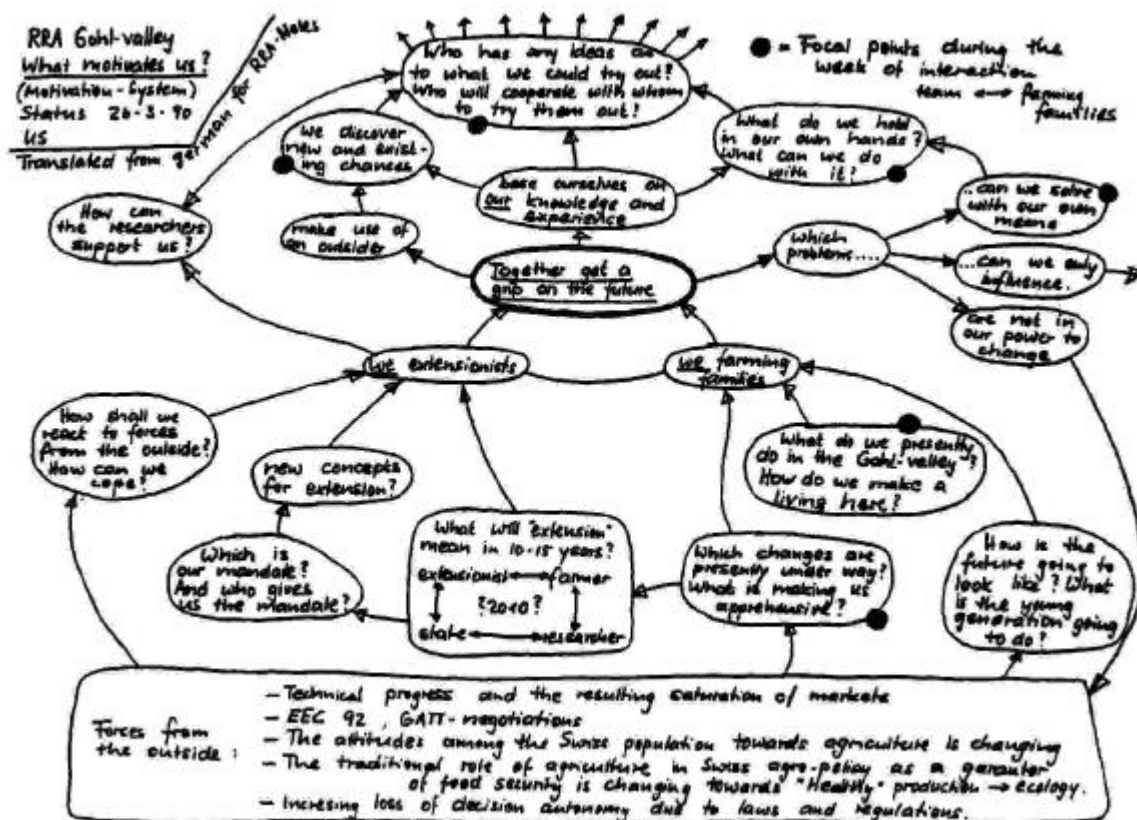
Mind-mapping also turned out to be very useful to reach a consensus on our team motivation for doing the RRA. A draft was presented by one member of the team, which was amended during the planning workshop (see Figure 2). Starting again from a central 'hunch' on what this RRA was all about, the reason why we wanted to do this led to a rough causal relationship. Doing something together, and clearly defining who we were, were two important issues. This resulted in a clear focus on interaction between farming families and team members - rather than farming families as analysed by outsiders. This also clarified those problems we could not do much about, and those which were in our power to change, on which we concentrated.

The figure (jokingly referred to as our 'motivation mandala') was used to recruit more team members, and in discussions with the people of the Gohl to explain why the RRA was taking place. It was also an important hand-out to local journalists!

Transects in opposing directions

The team split into two groups. Both groups walked the same route, but in opposite directions. The route itself went down one side of the valley and up the other, and took about 3 hours. This traversing in opposite directions had some interesting effects. The groups saw different things and talked with different people (spontaneous way-side discussions) - but on the same path. Exchanging experiences during the transects gave us a broader perspective and exposed cultural and value judgements. The transects helped as a team-building exercise, and for 'outside' team members to understand the lay of the land.

Figure 2. Our "motivation mandala"



Semi-structured interviews for identifying potentials

Before setting out, interviewing skills were developed in two ways. The first evening a role-play of a 'typical' SSI was presented (using a local extensionist playing the role of farmer) and discussed. A group of 8 farmers assisted on the second evening in getting the team members to practice their conversation skills. These farmers were well known to extensionists for being open-minded and helpful. They gave valuable tips on what to ask, and above all how to ask without offending.

For the interviews we formulated a common, rough checklist. Each interview was structured along these lines:

- Starting with the history of the farm. The older generation talked about the old days, when "work was a lot harder, but we had much less stress".

- This led naturally to the changes taking place now, and their possible and probably repercussions on farming and the present way of life. Here the young entered the discussion.
- Finally, the discussion turned to ideas for the future. Good questions to encourage the positive thinking about the future were:
 - What new things did you try this year, and why did you try them? What do you expect out of them? Why?
 - What do you do when you are not thinking about earning money? Why?
 - What have you been thinking of doing for a long time now, but have never come around to doing? Why?
 - Consider having a full week off, what would you do? Why?
 - Which are your 'crazy' ideas? Why are they crazy?

One third to one half of the interview focused on this searching for ideas, which were also

ranked. This was because the local extensionists wanted a strong active impact to come out of the RRA - as opposed to a more systematic analysis of the status quo. It turned out that people did get excited about this. Straight after each interview the ideas and suggestions which cropped up, plus any major new insights gained, were written on cards and pinned to the wall in the team room.

Triangulation with secondary data: cross-checking key interviews with maps

- Maps. In Switzerland cartography has a long and famous tradition. The oldest easily accessible map (1:25,000) of the Gohl valley is 100 years old. Since 1955 such maps have been updated regularly (every 5-8 years), the newest being from 1986. The maps are the same as used by the military (therefore highly accurate), and are available to the public at reasonable cost in most bookshops.

Maps of 1885, 1955, and 1986 were compared and analysed. This resulted in so-called 'difference maps', whereby changes in infrastructure and forest boundaries were drawn in by hand onto the 1955 map. The insights gained were partially expected: forest had advanced considerably in the last 100 years to the detriment of grazing land. Some insights were surprising: e.g. the number of farms which had disappeared from the landscape in the first half of this century, and the extent of road building in the last 30 years.

- Economic data on single farms. The local extension service has detailed data on about 15 farms in the Gohl valley. This is because the extension service has to ensure proper use of public funds for construction purposes on farms. Farms receiving government funds have to maintain proper bookkeeping. This bookkeeping data is computerised and easily accessible, provided the data remains anonymous. Bar diagrams etc. were made, various management strategies compared, and shared main issues highlighted (i.e. cost of mechanisation, importance of area of privately owned forest). This effectively eliminated the

need for detailed economic questions during the SSI's.

- Key informant interviews turned out to be a mixed blessing. The questions concentrated on identifying the various types of people living in the Gohl in order to cover as many types as possible. This generally worked well, but agricultural resource people tended to 'forget' people who didn't milk cows (cows obviously having a strong traditional prestige, which borders on the ritual). The information from the key interviews was crosschecked with the map to identify forgotten households. Difficult cases for extension also tended to be forgotten. Finally a matrix was set up with households linked to key criteria emerging from key interviews (i.e. future secure, future insecure, specialist, big, small, etc). From this matrix the 29 (of 70) households for SSI were chosen.

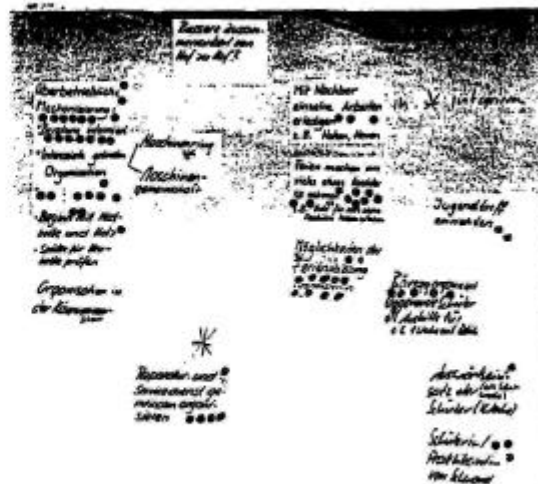
In retrospect, the combination of key interviews with accurate maps and with the telephone book (each farm has a phone - we checked with the map) was very useful to detect 'minorities' and 'eccentrics' within a community. Use the map to detect households that nobody mentions - and then ask "*Who are these people?*".

A lot of effort could have been saved if we had known from the beginning that the local post office had a detailed map with the daily routes of the postman marked in, with the houses where mail is delivered! Where seasonal migration from valley to Alps and back occurred, the postman would also be a prime source of information as to when people were where.

Visualisations: cards on pinboards

Swiss extension has a history of the use of cards (different shapes, sizes and colours) to facilitate group work and provide a visual record of the group process (adapted from the German ZOPP system). Cards are pinned to paper-covered pinboards until agreement is reached about the content/process. Cards are then glued to the paper, photographed (usually late at night; 35 mm colour) and the paper removed to be placed on a wall, stored etc.

Figure 3. a) Friday group work on "living on a farm"
 b) Using dots to indicate priorities on "better cooperation between households"



Photocopies of these photographs, photographs taken in the field (a freelance photographer accompanied the team) and appropriate text are then combined to produce a 'photoprotocol' for the activity. This allowed both content and process to be reported on in an accessible style.

Simple rules for writing cards: a) write BIG; b) no more than three lines per card; and, c) one idea per card (for easy rearrangement). Cards can be sorted into thematic bunches as in Figure 3. These sheets were used to focus for the Friday evening workshop; coloured dots (different colours for men and women and different priorities) were used by group members to rank priorities from the SSI's (see Figure 3b). The theme of 'better cooperation between households' was the most popular amongst local participants and was discussed by two groups in the evening. Within this theme both groups decided cooperation in mechanisation was the top priority, followed by the need to organise a system whereby farming families could take short vacations.

The outsider effect to broaden the perspective

The Australian team member, Raymond Ison, had very scant knowledge of Swiss agricultural conditions for production, nor of the official policies in place. He also did not understand the local idiom (all the other team members did). However, we saw this as an asset. Ray was given the explicit task of asking any question which came to his mind, no matter how 'silly' or 'provocative' they may have been to the local people or to the other team members. This outsider was actually regarded as a prerequisite for a successful RRA because of bringing a completely new perspective. He saw and heard things which the locals (including the Swiss team members) no longer perceived due to their culturally-fixed behaviour.

We assumed that:

- our outsider would look at an existing situation from an unconventional perspective;
- he would be able to convey his perception (all other team members understood English well!); and,

- he would be allowed to get away with saying and suggesting things which a local person would not dare say for fear of antagonising others or making themselves ridiculous.

It worked. Ray did perceive things in an 'outlandish' and unconventional way, and could also convey his perception. Most of his questions were easily answered because they were trivial for the local people. However, sometimes quite awkward head-scratching resulted within the team, because they realised that the usual answers couldn't stand up to persistent probing. For instance, it turned out that the usual off-the-cuff reason for the Swiss policy on agro-subsidies was not really convincing. This led to considerable soul-searching and analysis of the real reasons for the policy.

Ray could also say things the other team-members would not have dared to say i.e. the suggestion for policy-makers seriously to consider giving up farming in extreme locations and let 'the wild' take over was acceptable for an Australian. Had a Swiss said this, he might have been driven out of the valley. Farmers could also accept from an Australian that maybe they were a bit blind to alternatives to milking cows. Any Swiss person would have more problems raising this issue with farmers. It was not only farmers who were culturally blinkered. Ray was able to challenge conceptions amongst team members as to their definitions of 'good' and 'bad' farmers and also to help keep the importance of women (both as team members and in the Gohl community) on the agenda.

This experience suggests that one might use and develop the 'outsider-effect' for RRA's which are mainly run by locals (i.e. people from within the culture in which an RRA takes place). In our case, conventional thinking and reasoning was sufficiently rattled to require rethinking along more innovative lines. The conditions for the effect to take place seem to include:

- the outsider must have a solid professional background and experience in dealing with rural people;
- the outsider must be able to win the confidence of local team-members - and yet still be cheeky enough to be provocative;
- the outsider's role of asking provocative questions in a sincere way (which doesn't exclude a humorous approach!) must be accepted by all other team members, the other team-members must feel relaxed and appreciative of this role;
- at least half the team members must be sensitive enough (and capable linguistically) to spontaneously assist in crossing the communication gap; e.g. translate a spontaneous joke made by a farmer, which is often more a linguistic exercise - and often very revealing for an outsider!; and,
- at least some local team members must have the skill to absorb the toughest provocations by translating the content into a locally acceptable form.

At any rate LBL considers the increased costs of having an outsider in the team a justified expenditure, and has decided to include outsiders in any future possible RRA's in Switzerland. This also includes experienced professionals from developing countries.

• Concluding comments

We would now define our activity as a Participatory Rural Appraisal (PRA) but we are left with concerns about the degree of participation (by local farm families) and other methodological issues which include:

- how to achieve genuine interdisciplinarity;
- how did the 'outsider' experience his role;
- team versus local learning;
- team selection and institutional setting - it will be rare, in our experience, that issues of gender and institutional culture/value constraints do not emerge; and,
- the intensity (for team members) of the activity. Time pressures can bring forth creativity, and with due attention to process, can help resolve conflict.

Of course we have our own ideas on all these issues; they shall have to wait until other papers. The bottom line for all participants was that it was a stimulating, positive

experience with useful outcomes PRA has a role to play in 'developed' countries also!

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A user's note: wealth ranking by cards¹

Irene Guijt

• Introduction

Wealth ranking by card-sorting is a method to understand relative wealth within a specific area. It helps to learn how richer and poorer households (or individuals) in an area differ from each other and about local criteria of well-being. It is particularly useful to identify informants from different socio-economic groups and to investigate the impact of an intervention on these different groups. Wealth ranking is best done with up to 100 households (or other unit) who know each other well. Three informants should carry out the exercise for the same community to reduce bias.

• Preparation

First:

- discuss the way families are organised within the community to determine how it is sub-divided and what the most relevant local unit is to rank, e.g. household, cooking unit, production unit, and find the best local term or phrase [NB household used in this text]; and,
- discuss local criteria and terms for well-being and identify the best local word or phrase.

• Preparing the cards

Making a list of all households to be ranked can be based on a social map of the community and by finding out who lives where. You can also ask different groups or individuals from the community to name the households. If based on local health records or a census, the list will need to be checked to ensure it is complete with the first informant. Each informant must check the list to make sure it is complete.

Then:

- obtain names of all households (or other unit) and write them down; check this and give a code number to each;
- write the name and number of each household on a card (e.g. an index card);
- find a willing and able informant, who knows the community; and,
- find a quiet place to discuss well-being.

• Introduction to the informant

Each informant should understand the purpose of the exercise well, especially that the discussion is about relative wealth and not absolute overall well-being or a sub-set of wealth, such as cash, number of cattle etc.

¹ Adapted from: *Wealth Ranking in Smallholder Communities: A Field Manual* by Barbara E Grandin (IT Publications, 1988) and *Introduction a la Méthode Accélérée de Recherche Participative* by Bara Gueye and Karen Schoonmaker Freudemberger (IIED, 1991).

Discuss:

- the purpose of your research and of the exercise;
- the general difference between rich and poor in the area;
- general differences of problems between rich and poor;
- the local word/phrase for well-being (you must have a common understanding of its meaning);
- the unit being ranked;
- the list of households being ranked to check; and,
- the name on each card and ensure it stands for the whole household, not only the individual.

- **Card sorting**

- Explain that the informant will be asked to put the cards into piles (or rows), each of which is a different level of well-being; that they can make as many piles as possible and change the number of piles or location of a card during the exercise;
- Shuffle cards;
- If the informant is not literate, explain you will read out the name on each card and that they can put them into the different piles;
- Simply put down the first card, reading the name on the card (if the informant is not literate);
- For each card, read out the name and ask the informant to place it below or above, to the left or the right of existing piles/rows, considering in which pile it belongs. If necessary, read out the names of all the cards in each pile so that the informant is clear about who is in which pile/row;
- One by one, the informant puts cards into piles/rows;
- At the end, review each pile with the informant, reading out each card in the different piles to check the cards have been grouped correctly. Start with the pile of the richest or poorest and continue with the pile/row next to it. If necessary, the informant should make changes;

- If one pile is very large, ask the informant if that pile can be sub-divided; and,
- Write down the household numbers by pile on a recording sheet (see example below).

- **Follow-up discussion**

- For each pile/row, ask the informant what characterizes those households (or other unit) in terms of well-being;
- Write down the responses for each pile/row;
- If you are investigating a specific issue, ask the informant to identify particular households relevant for your research, for example: those households that have a latrine, those that have received credit/inputs, those that have school-going children, those that have a pregnant woman or a case of tuberculosis; and,
- Other possible questions to probe with are: *Are there any cases of households moving from one group to another? For example has anyone moved from the poorest pile upward, or vice versa? How has the situation changed in the past 10 (or so) years?*

Repeat the introduction, card sorting and follow-up discussion with two or three more informants (individuals or groups).

- **Computing and grouping**

- Calculate the score for each household for each informant. This is easiest by calculating the score for each pile/row for each informant (see Sheet 1 below).

$$\text{The score} = \frac{\text{Pile number of household in which household is located}}{\text{Total number of piles made by that informant}}$$

- Write the household numbers in a line and use this to record the scores (see Sheet 2 below). Do not include any households that were ranked by less than two informants.
- Calculate the average score for each household.

$$\text{Average score} = \frac{\text{total of its scores}}{\text{number of scores}}$$

- Find any unreliable scores, where one informant gave a low score and another gave a much higher score. As they are unreliable, they should be treated with care and could be investigated further to understand why they have such different scores.
- Write the average score for each household on the cards you used for the exercise.
- Put the cards in order from lowest to highest average score (rich to poor).
- Make a second recording sheet by copying this row of households on it (see Example 3 below).
- Divide this list of households, ranked according to relative well-being into groups. This can be done by looking for large gaps in average score (which implies a big jump in difference of well-being) and

making that a dividing point between two categories of well-being. You can also take the average number of piles used by the informants (never more! as this would be false accuracy) and use any large gaps in average scores to divide it into that number of groups.

NB Great care must be taken about where results are recorded and kept, who uses them and how they are used. If the data is misused, you will lose the community's trust and it will be impossible to use this type of well-being ranking in future.

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WEALTH RANKING BY CARD SORTING
Record Sheet 1

(Record Information from the Informants Piles)

INFORMANT #1 (Divided Cards into 3 piles)	WEIGHT *
Pile 1 (Richest) : Cards 10, 4, 14, 19, 13, 5, 18	$\frac{1}{3} = .33$
Pile 2 : Cards 1, 6, 9, 15, 20, 7, 17	$\frac{2}{3} = .66$
Pile 3 : Cards 2, 8, 12, 16, 3, 11	$\frac{3}{3} = 1$
<hr/>	
INFORMANT 2 (Divided Cards into 5 piles)	
Pile 1 (Richest) : Cards 9, 14, 4, 6	$\frac{1}{5} = .20$
Pile 2 : Cards 10, 5, 18, 13, 1, 15	$\frac{2}{5} = .40$
Pile 3 : Cards 9, 20, 17, 7	$\frac{3}{5} = .60$
Pile 4 : Cards 16, 8, 11	$\frac{4}{5} = .80$
Pile 5 : Cards 2, 12, 3	$\frac{5}{5} = 1$
<hr/>	
INFORMANT 3 (Divided Cards into 4 piles)	
Pile 1 (Richest) : Cards 14, 6, 1, 15, 12	$\frac{1}{4} = .25$
Pile 2 : Cards 4, 9, 13, 5, 8, 20	$\frac{2}{4} = .50$
Pile 3 : Cards 7, 17, 20, 19	$\frac{3}{4} = .75$
Pile 4 : Cards 3, 11, 16, 3, 2	$\frac{4}{4} = 1$

* Now calculate a score for each pile.
If there are three piles, the richest pile gets a weight of $\frac{1}{3} = .33$.
The middle pile gets $\frac{2}{3} = .66$
The poorest gets $\frac{3}{3} = 1$

If there are four piles proceed in the same way except now the denominator in the fraction is four. The richest pile gets a weight of $\frac{1}{4} = .25$, the 2nd gets $\frac{2}{4} = .50$; the 3rd gets $\frac{3}{4} = .75$ and the poorest gets $\frac{4}{4} = 1$.

Note that in this system, the poorer people have higher numbers!

WEALTH RANKING BY CARD SORTING
Record Sheet 3
(To classify the cards according to wealth)

Average Score	Card Number
.1	2
.1	3
.93	8
.93	11
.78	16
.75	12 ?
.67	20
.67	17
.67	7
.59	9
.51	6 ?
.44	15 ?
.43	1 ?
.41	10
.41	5
.41	18
.41	13
.34	4
.26	14
.18	19 ?

Poorest

Richest

Now go back and divide the list into different wealth groups. Note those where there were discrepancies on Sheet 2.

WEALTH RANKING BY CARD SORTING

Sample Record Sheet 2
(To Calculate the Average Score Each Card)

Card	Score from Informant 1	Score from Informant 2	Score from Inf. 3	Average
x 1	.66	.40	.25	.44
2	.1	.1	.1	.1
3	.1	.1	.1	.1
4	.33	.20	.50	.34
5	.33	.40	.50	.41
x 6	.66	.25	.51	.48
7	.1	.80	.75	.51
8	.66	.60	.75	.67
9	.66	.60	.50	.58
10	.33	.40	.50	.41
11	.1	.80	.1	.27
12	.33	.1	.25	.23
13	.33	.40	.50	.41
14	.33	.20	.25	.26
x 15	.66	.40	.75	.61
16	.1	.60	.75	.45
17	.66	.60	.75	.67
18	.33	.40	.50	.41
x 19	.66	.20	.75	.44
20	.66	.60	.75	.67

Calculate an average score for each card.

Example Card 1: Add the scores given by the three informants (.66 + .40 + .25 = 1.31) and divide by 3 to get the average $1.31 \div 3 = .43$

Find any discrepancies where one informant gave a low score and another gave a higher score. Circle these cases since they are not reliable rankings.

Tips for trainers

Fruit salad

Purpose

- To get the group active and awake, especially good after lunch or during a lengthy passive session
- To form sub-groups for further exercises

Time

10 to 15 minutes, including setting up the chairs

5 minutes if chairs are set up

Materials

Circle of chairs, one less than the number of participants

Where

Any large, open space nearby, preferably in the shade

Steps to follow

- Step 1 Decide on the number of groups that are needed -this will determine the number of fruits. Set up a closed circle of chairs, one less than the number of people who will do the exercise.
- Step 2 Ask participants to sit in the chairs. You can join in by standing in the middle. Explain that this is an exercise to energise them.
- Step 3 Let the participants name as many fruits as you need sub-groups, eg. 3 fruits if you want to form 3 sub-groups. Go around the circle, asking the participants to call out the listed fruits in turn until all have identified themselves with one of the fruits – eg.

apple, orange, melon, apple, orange, melon, etc.

Step 4 The person in the middle calls out the name of one of the fruits. All the participants who are that fruit must change chairs -no exceptions! The person in the middle will try to secure a seat.

Step 5 The person who remains in the middle then repeats the process by calling out another (or the same) fruit. When “fruit salad” is called, then everyone must change seats.

Variations

There are endless variations: vegetable stew, meat stew, animal zoo, ocean of fish, agroforestry, rainbow (of colours), all types of mixed salads. Make sure everyone is familiar with the different items. We once tried potato variety salad without success -the non-potato experts were not familiar enough with the potato varieties to join in freely.

Comments

If possible, it is best to have the circle set up beforehand in a separate space or room. The ‘fruit changes’ can be repeated as many times as the group seems keen to continue. Do not extend it too long- 4 or 5 rounds will have forgotten most people moving and laughing. Make sure everyone understands Steps 4 and 5 well, as it can be uncomfortable for those who did not understand if they end up in the middle. Everybody should know of the option to call “fruit salad”.

All those of the same fruit are now a sub-group and work can be started in these new groups. The exercise can be repeated the next day and the next, with one of the variations.