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Direct and indirect uses of wealth ranking in Mongolia

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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

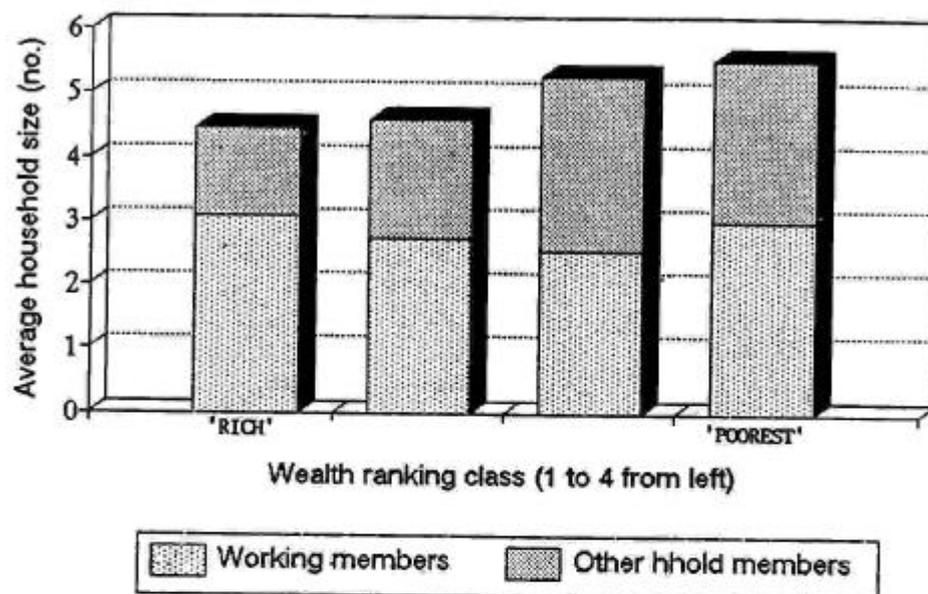
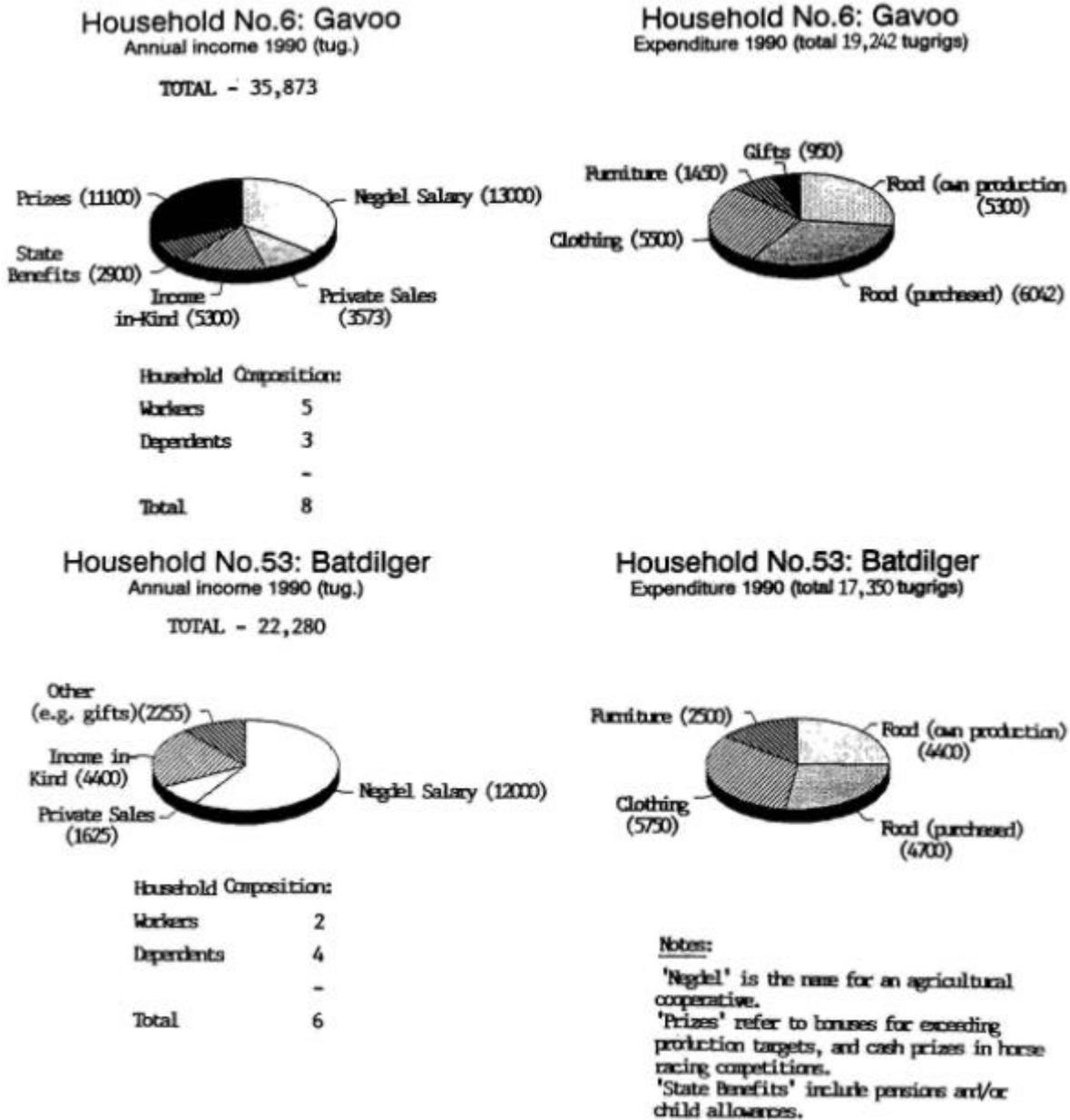


TABLE 2
WEALTH, LABOUR AVAILABILITY AND SCHOOL ABSENTEEISM:
TSAGAN HUTUL BRIGADE, DORNOGOBI

| | | 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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