

# POLICY ALTERNATIVES FOR LIVESTOCK DEVELOPMENT IN MONGOLIA (PALD)

A Research and Training Project

Research Report No. 8

## **Liberalisation of the Mongolian Pastoral Economy and its Impact Within the Household - A Case Study of Arhangai and Dornogobi Provinces**

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**GLOSSARY OF MONGOLIAN TERMS**

<u>aimag</u>	province
<u>airag</u>	fermented mare's milk
<u>argal</u>	fuel (firewood or fodder)
<u>arkhi</u>	vodka
<u>buuz</u>	meat dumplings
<u>deel</u>	national costume
<u>ger</u>	felt tent, household
<u>horshoo</u>	marketing cooperative
<u>khot ail</u>	traditional unit of social and economic organisation at local level
<u>naadam</u>	national holiday and festival (11-14 July)
<u>nair</u>	marriage
<u>negdel</u>	agricultural cooperative
<u>sum</u>	administrative district
<u>suur</u>	herders base camp
<u>tasag</u>	seasonal team for dairying in summer
<u>urum</u>	cream
<u>zoder</u>	small handmade ball of fodder

## 1. INTRODUCTION

This paper is concerned with the differential impact (by age and gender) of economic liberalisation on herding households in Mongolia. The findings are based on five weeks field work in Dornogobi and Arhangai provinces carried out between August and October 1992. The discussion focuses on changing income, expenditure and consumption patterns of herding households and considers the present and future impact of these changes on women, children and older people. The framework for this discussion will be a consideration of the household from a gender perspective and will include relevant data concerning household division of labour and time use, the relative position of men and women in household decision-making and the position of female headed households.

## 2. BACKGROUND

Since 1990, Mongolia has experienced rapid economic and political change as it moves from a centrally planned to a market-based economy. A major part of its programme of economic transformation involves reform of the agricultural sector, made up largely of extensive livestock husbandry or semi-nomadic pastoralism.

The aim of the Policy Alternatives for Livestock Development in Mongolia (PALD) project is to facilitate these reforms through training, research and policy analysis. This involves (1) describing and analysing the Mongolian pastoral livelihood system, with a focus on production and distribution issues at household and local level, (2) developing a social science research capability in Mongolian research institutions and (3) monitoring changes and generating information to direct policy choices in the future.<sup>1</sup>

This work is being conducted around three main research themes: household and intra-household economic strategies, environmental management, fodder and natural resource tenure and the macro-economic implications of liberalisation and the management of transition. Research is being carried out by a joint UK-Mongolian research team from the following institutions: the Mongolian Institute of Animal Husbandry (RIAH), the Mongolian Institute of Agricultural Economics (IAE) and the Institute of Development Studies (IDS) at the University of Sussex, UK.

## 3. BACKGROUND TO THE PASTORAL ECONOMY IN MONGOLIA

Mongolia is made up of three broad ecological zones; the desert and semi-desert regions of the Gobi in the South, the eastern and central steppes and the forest mountain steppe zones in the North and North West. The climate is extremely continental. Annual mean temperatures vary between 40-50 C, with a maximum temperature of 45 C and minimum of -40 C. In the Gobi there are up to 130 frost free days in the year in the mountain and steppe regions only 80-90. 80-90% of the total precipitation falls in

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1 See Mearns R. and Swift J., 1991, Liberalisation of the Mongolian Pastoral Economy: Policy Issues and Options PALD Working Paper No.3

summer, but annual precipitation is very low with 300 mm in the mountains, 200-300 mm in the steppe and less than 150 mm in the Gobi.<sup>2</sup>

Mongolia has a population of two million, over half of which is urban, living in the capital Ulaanbaatar or other major towns. About 42% of the population is involved directly in livestock production living a semi-nomadic lifestyle in felt tents (gers) and making seasonal movements according to the grazing requirements of their livestock.

The livestock population of Mongolia is around 26 million, and is made up of horses, cattle (including yaks), camel, sheep and goats. Species distribution varies across the different ecological zones. Camels, sheep and goats predominate in the Gobi, cattle and sheep in the Steppes and cattle and sheep as well as fodder and cereal crops are dominant in the northern forest steppes. Horses are found in all areas and yaks rather than cattle are found in the high mountain areas.

Livestock production dominates the rural economy and makes a significant contribution to the economy as a whole. The consumption of milk, meat and other animal products forms the basis of rural and urban diets, while the processing and export of a range of animal products such as meat, wool, cashmere and other fine hair, make up a large proportion of local industries, and are a major source of national income and employment.

#### **Organisation of production in the rural economy**

Administration of the rural economy takes place at the levels of central government, province (or aimag of which there are 18 in total) and district (or sum of which there are 303 in total). Up until 1990, when Mongolia began the process of economic liberalisation, the rural economy was organised through a range of private and collective production and marketing activities existing alongside these administrative structures.

From the mid-1950s onwards all members of the rural population were collective (negdel) or state farm employees. The negdel was primarily an economic unit responsible for marketing livestock products, supplying inputs and consumer goods as well as fodder and transport services to its members. The negdel covered the same territory as a single district (sum), itself responsible for providing health, education and veterinary services.

Negdels were divided into production brigades or teams, which were further broken down into suuri; individual production units made up of between one and four households. The negdel set production targets for each suur determining the quantity of meat, wool and other products to be supplied according to the annual state procurement order. Each suur was generally involved in the production of single species herds for which a monthly salary was paid. Households also owned a small number of private animals which could be sold or used for their own consumption.<sup>3</sup>

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2 Swift, J., 1990, Introduction: Some Lessons from Mongolia For Pastoral Development in Other Countries, Proceedings: International Workshop on Pastoralism and Socio-Economic Development, Mongolia 4-12 September 1990, FAO.

3 Mearns, R., 1991, Transformation of a Pastoral Economy: a Local View from Arhangai and Dornogobi Provinces PALD Working Paper no.2: 4

### The privatisation process

In September 1991 the negdels were privatised as part of a major programme of economic liberalisation undertaken by the Mongolian government. Privatisation took place in two stages and did not take place uniformly across the country. 30% of negdel assets (animals, wells, shelters etc.) were distributed among negdel members according to their period of negdel membership. A further 10% of negdel assets was distributed to all sum inhabitants (sum administrators, health workers etc.) in the form of animals. The remaining 60% of negdel assets was formed into a limited company. The company took over the major responsibilities of the negdel, leasing animals and providing other services to individual herders who became shareholders.<sup>4</sup>

By August 1992 the transition from negdel to company was complete in most areas and parallel developments in the liberalisation of livestock marketing were underway. The newly created Agricultural Commodities Board has taken responsibility for the operation of the state procurement order with commodity brokers operating at aimag and sum level. They are responsible for making contracts with companies and individual herders to supply wool meat and other products.<sup>5</sup>

In some areas the limited company remains a popular and viable means of organising herding production. In other areas, companies have broken up to be replaced by more localised units of cooperation among herders. This represents a move back to customary levels of organisation which is necessitated by changes in herding practice brought about by liberalisation.

### Changes in the organisation of production

In the absence of state subsidies for inputs and other services, and general uncertainty about how services to herders are going to be managed in the future, livestock production is becoming increasingly risky in what is already a risk-prone environment. As a result herders are reverting back to traditional risk-management practices by developing multi-species herds, and cooperating with other households in herding tasks so as to cope with the increasing labour demand that a diverse herd structure requires.

This co-operation takes the form of the khot ail - a level of household cooperation which existed prior to collectivisation whereby households move, live and work together as an autonomous herding unit. These units are often, but not necessarily based on kin relations, since associations between people 'with common interests' are just as important.<sup>6</sup> Just as with the suuri, the size of the khot ail varies according to the seasons and across ecological zones. In the Gobi for example, khot ails often consist of a single household whereas in Arhangai, as many as five households may group together. A household comprises the occupants of a single ger, usually a husband and wife and their junior and unmarried children.

At the wider neighbourhood and community levels other customary institutions are re-emerging. At the neighbourhood level are neg nutgiinhan (meaning 'people of the same place') which have evolved as a

4 ibid. :8

5 See Swift, J., 1992, PALD Summary Report of Work Undertaken in 1992

6 Szynkiewicz, S., 1977, Kinship Groups in Modern Mongolia, Ethnologia Polona, Vol 3:43

means of regulating access to pasture. Formed along kinship lines, these groups are often defined in relation to the ecological environment and include neg jalqynhan ('people of one valley') or neg usniihan ('people using the same water source') as in the Gobi.<sup>7</sup>

These institutions exist within the wider organisation of the bag, a customary institution again responsible for pasture allocation and dispute settlement in the pre-collective period. The boundaries of the bag have generally been formed from the territory of the old brigades and it is expected that these units will now assume important pasture and other resource management functions alongside the growing number of horshoo. Horshoo are voluntary marketing cooperatives with economic rather than resource management functions and which are replacing companies in many areas.

The exact role each of these institutions will play in the newly emerging market economy is still unclear. Currently something of an institutional vacuum exists as a range of different organisations attempt to fulfill the functions of livestock marketing, service provision and input supply previously carried out by the negdel. The implications of this for the individual household and the different members within it will form part of the following discussion.

#### 4. OBJECTIVES AND METHODS OF RESEARCH

The research was carried out under the direction of Robin Mearns using participatory or rapid rural appraisal techniques. Both the objectives and methods of research were designed to consolidate and develop work carried out in 1991.<sup>8</sup>

The research reported in this paper relates to the theme of household and intra-household livelihood strategies, risk management and vulnerability, and focused on: changing patterns of livestock ownership, livestock processing and marketing; household income and expenditure, labour use, consumption patterns, decision-making, and changing access to and use of services.<sup>9</sup>

Research was carried out in two contrasting ecological areas; Erdene sum in Dornogobi province (a desert-steppe zone in south-east Mongolia), and Tariat sum, in Arhangai province (a forest-mountain-steppe zone in the central-west of the country).

##### **Erdene sum, Dornogobi**

Erdene sum is situated in south-east Dornogobi, close to the border with China. Research was carried out among 106 households in Tsagaan Hutul bag, the administrative unit formed from one of the two brigades of Amdralin Zam negdel.

Like the whole Gobi zone, the climate in this area is dry and unpredictable, there is little hay or fodder production and only a small

7 See Mearns 1993.

8 See Mearns, R., 1991, Transformation of a Pastoral Economy: a local view from Arhangai and Dornogobi Provinces PALD Working Paper No. 2.

9 For details of work on other themes see Swift, J., 1992 PALD Summary Report of Work undertaken in 1992, Mearns, R., 1993.

amount of total land area is under arable crops. Population densities are very low, and khot ail size is small, composed usually of only one or two households. Khot ail are situated between 5-10 km apart but group around local wells. Households make frequent movements from one pasture area to the next in the summer months.

The former negdel was formed into a company in January 1992. During the research period the company was still functional but plans were underway for its liquidation in January 1993. Groups of herders were already planning to set up marketing cooperatives (horshoo) to organise contracts with brokering institutions for the supply livestock products in the year ahead.

#### **Tariat sum, Arhangai**

Tariat sum lies in the north of Arhangai aimag which is situated to the north of the Hangai mountain range. Tariat falls into the mountain-steppe zone of the aimag, an area of wide valleys and relatively large areas of open pasture. Research was carried out among 236 households of Booroljuut bag, who at the time of our visit were situated on autumn pastures in the three valleys of Upper Booroljuut, Lower Booroljuut and Ikh Jargalant.

Population densities are higher than in the Gobi. Khot ail are situated much closer together and consist of between 4 and 10 households. There is significantly greater fodder and hay production than in Erdene and the quality of open pasture is good. The climate is wetter and generally less risky although the winter and spring seasons are particularly harsh. Yak and sheep are the dominant species, and the production and consumption of milk and milk products is of greater significance than in the Gobi region.

The process of privatisation began in Tariat in October 1991 when over 70% of negdel animals were privatised. In March 1992 the former negdel was divided into the Gerelt Zam company and Yalalt horshoo (or cooperative). Following the second stage of privatisation in June 1992, when all remaining animals were privatised, the total assets of Gerelt Zam company fell below the required minimum level and it also became a horshoo.

Following the first privatisation in October 1991 the herders of Booroljuut bag became shareholders in either Gerelt Zam company or Yalalt horshoo, and were responsible for both their own private animals and those they leased from the company or horshoo. In June 1992 after the second stage of privatisation, 123 households in Booroljuut bag chose to become fully private herders responsible for making their own arrangements for the sale of livestock products. The other 112 remained as horshoo members.

#### **Methods**

The organisation of research was the same in both areas. Initial interviews were carried out with sum officials in Erdene and Tariat to secure sum level statistics, local maps and information on the pattern of privatisation. From this information a single bag was selected on which to concentrate field research: 106 households in Tsagan Hutul bag, Erdene and 236 households in Booroljuut bag, Tariat.

An initial stratification of each sample was carried out using the Wealth Ranking method. This was used to gain a general understanding of 'wealth by local reckoning' and to stratify the households into different wealth



categories.<sup>10</sup> This was done using the card sorting method.<sup>11</sup> Three informants from each sample sorted cards into piles marked with the names of all the households in the bag. The piles were grouped according to the informants own view of different wealth groups within the bag. Tables 1 and 2 in Appendix 4 show the list of informant rankings listed in ascending order of average ranking score from richest to poorest. The ranking was then used to carry out semi-structured interviews with households from a range of different circumstances.

#### **Gender and intra-household issues in the pastoral economy**

The aims of this particular theme in the research were (1) to consider the organisation of pastoral production from a gender perspective with particular focus on household labour organisation, time use and decision making and (2) to examine the impact of economic liberalisation on household income, expenditure and consumption patterns, and identify the potential impact of these changes on different categories of people within the household. Analysis of the first question is required to illuminate discussion of the second, since research elsewhere has shown that certain categories of people, namely women, children and older people are especially vulnerable to changes arising from economic liberalisation and are less able to respond to market opportunities brought about by the commercialisation of livestock production in particular.

Liberalisation of rural markets and services can result in increased vulnerability for certain households and particular individuals within them. Income differentials between households can quickly increase, which in the absence of safety nets can have a negative affect on household welfare and food security particularly during periods of seasonal stress. The groups most affected are also those least able to respond to market opportunity.

In the case of women this is largely explained by the socially determined gender division of labour which ascribes to women primary responsibility for domestic labour in the household. This labour is performed alongside directly productive activity and as a result women's total labour input often exceeds that of men's. Under conditions of increased market opportunity, women are less able to switch between these two areas of activity firstly because their primary responsibility for domestic labour places considerable demands on their time and labour, and secondly because response to market opportunity is most easily made by men who are considered the 'primary' actors in the sphere of production.<sup>12</sup>

In the context of pastoral economies, evidence from a number of countries has shown that the commercialisation of livestock production has had a clearly negative impact on women's labour, income, rights and entitlements

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10 Mearns, R., 1991, Transformation of a Pastoral Economy: a local view from Arhangai and Dorngobi Provinces PALD Working Paper No.2: 3.

11 For more details of this method see Mearns, R., 1991, A Training Course in Rapid Rural Appraisal Field Research Methods for the Analysis of the Mongolian Herding Economy, PALD Working Paper No.1

12 The designation of men as the 'primary' actors in productive activity has been shown in a number of studies to be empirically false but powerful cultural and ideological factors play a significant role in presenting them as such. Women's contribution to productive activity (and notions of what constitute it) are severely underestimated as a result.

as animals are increasingly defined as commodities (to be placed in the hands of men) rather than as the bearers of social relations. These changes in the organisation of production coupled with a reduction in state provision of services has meant that women are required to spend an even greater proportion of their time performing reproductive tasks thus undermining their contribution to productive activity as well as their position in the household.

While the process of liberalisation in Mongolia is taking place differently from other countries it is important to assess how far these changes are likely to occur in the Mongolian context and with what implications.

The findings presented are drawn from semi-structured interviews carried out with thirty-seven households in the two sample areas (see table 3 in Appendix 4). Because of time and logistic constraints the majority of the interviews were carried out with women. While a focus on women was necessarily important, the lack of substantial comparative data on men means that the findings should be seen as preliminary.

A range of participatory and rapid rural appraisal methods were used and these are described in detail throughout the text. Rapid methods were used for two reasons. First they enabled the team to gain a rapid understanding of patterns of organisation within the household, and second were particularly useful in revealing the perceptions and judgements of particular informants in a way that other methods might not.

##### 5. THE ORGANISATION OF PRODUCTION AT HOUSEHOLD LEVEL

Each household comprises the occupants of a single ger, most usually a husband and wife and their junior or unmarried children. A single or widowed woman may also live with her unmarried sons, or a man with his unmarried daughters. In other cases, elderly and retired men and women who are unable to live independently will occupy their own ger alongside close relatives. They may contribute little to productive activity but comprise a separate household.

Cooperation between households varies across the seasons and between ecological areas. In winter and spring individual households operate as independent production units living close to their own shelters and cooperating with other households for moves only. During summer and autumn a number of households will join together to form a khot ail primarily to share herding tasks. Gers are situated close together in small groups of between two and five households which are often but not always made up of kin relations. In Erdene, khot ail seldom comprise more than one or two households but in Tariat groups of five or more households are not uncommon.

The members of the khot ail group their animals according to age and species and each household takes responsibility for a particular species according to a daily rota. For example on a given day in a khot ail comprising five households: one household will be responsible for sheep, another lambs, another cattle, another calves and one will have a free day. Despite differences in the numbers of animals owned by individual households, the division of labour is equal between them. There is also cooperation in shearing, clipping and hay making. Individual households milk their own animals, however, and all domestic and reproductive work is carried out within the household unit.

## 5.1 Household labour organisation

### Gender division of labour

Within the household there exists a clear division of labour between men and women. Men are largely responsible for the herding of large animals (cattle, camels), building and repairing winter and spring shelters, and the sale and marketing of livestock. Women are responsible for the herding of small stock (sheep and goats), milking, and shearing and clipping all animals. In addition, women perform all domestic tasks, including product processing, cooking, cleaning, washing, sewing, and collecting argal (dung or wood for fuel) and water.

This gender division of labour is commonly observed and can be seen as an 'ideal type' to which households will conform given the right gender composition of the household and sufficient labour. However, labour shortages, seasonal demands and variations in the life cycle of individual households necessitate considerable flexibility in the allocation of tasks. Women will frequently herd large animals in the absence of men or male children, and are often involved in labour intensive seasonal activities such as building and mending winter shelters. In some cases, women and female children will perform a greater proportion of herding tasks even when an active male is present.

Although men or women may hold responsibility for certain tasks these are frequently assigned to children under their control. This labour is critical to all households and children are active in herding tasks from the age of five. The range of tasks allocated to children varies according to seasonal demands and constraints and it is not uncommon for boys as young as five and eight to perform long distance herding during summer and autumn while their father is engaged in haymaking and hunting. Tasks are usually divided along gender lines with boys learning herding and girls domestic tasks, but in households with no male children, girls will often take on herding tasks. In one household three daughters aged twenty, nineteen and fourteen, perform all herding and domestic tasks, the fourteen year old having been taken out of school by her father to train as a herder. Absenteeism is very common among school age children, and one of the most usual ways in which households cope with labour shortage. Although school holidays coincide with periods of peak labour demand during February and March, many households rely on the contribution from their children throughout the year. Households with a severe labour shortage frequently 'adopt' children from friends or relatives living in sum and district centres. Care for animals or a regular supply of livestock products are usually provided in return.

### Explaining the gender division of labour

The nature of pastoral production requires that there is some division of tasks and there are a number of practical reasons why men and women have different responsibilities. For example, the association of men with long distance herding is based partly on the fact that pregnant women and women with small children will not usually take on tasks that require them to cover long distances or spend a large proportion of their time away from the camp.<sup>13</sup> However, as we have seen there is considerable flexibility in

13 Dahl, G., 1987, Women in Pastoral Production: Some Theoretical Notes on Roles and Resources, *Ethnos* Vol.52 1-2:250.

the way in which labour resources are allocated and women will often perform long distance herding tasks in the absence of such constraints. In addition, such flexibility does not apply to domestic tasks which are always the responsibility of women.

In common with other pastoral economies then, the division of labour in Mongolia operates on an ideological as well as practical level, according to socially constructed ideas about men and women which ascribe them different gender roles. These gender roles, although social and cultural in origin are presented as (and subsequently perceived as) 'natural' creating clearly defined areas of power and responsibility for men and women within the productive and reproductive domains.

In the pastoral economy labour is invested both in the creation of livestock products for consumption or sale, and in the continual generation of the herd. Despite women's responsibilities for milking and the care of small, sick, pregnant and weak animals, it is men (as those responsible for open range herding) who are associated with the overall reproduction of the herd and women (through the processing of livestock products) with the production of goods. This association is made for a number of reasons. Firstly, the pastoral labour process is such that the labour of one person presupposes the effort of the other and thus the objective contribution of men and women is difficult to assess. Secondly, the relationship between labour effort and any subsequent gain is easily obscured since benefits are often only seen over a number of years. Thus, the contribution of men and women to this area of productive activity is open to a wide variety of cultural interpretations including those which undermine women's contribution and associate their work primarily with the domestic sphere and the reproduction of labour. This association is more easily made. There is a clear link in domestic work between initial effort and subsequent gain, and the work is so closely related to the sphere of physical reproduction that it is easily treated as the work of women.<sup>14</sup>

The role of cultural and ideological factors in shaping patterns of labour organisation in the Mongolian context was observed through analysis of men and women's perceptions of the task based gender division of labour, patterns of time use and overall work load.

#### **Analysis of labour tasks**

Analysis of labour tasks was done with three women and one man using ranking and scoring methods. In a brief discussion, each informant described the range of different tasks she or he performed for the household. They were then asked to compare tasks (two at a time) by saying what they liked or disliked about each one to highlight differences between them. This was done to generate the informant's own criteria for describing the work that they do. As a result different tasks were described as 'hard', 'easy', 'time consuming' and so on. The criteria were then used to form a matrix showing the range of different tasks and the criteria used to describe them. Informants were asked score each task between 1 and 5 against each of the criteria (eg. 1 would denote very easy and 5 not very easy). The matrices of the three women informants are shown in Appendix 3.<sup>15</sup>

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14 *ibid*: 249-255.

15 Due to time constraints it was not possible to do a matrix scoring exercise with the male informant.

Table 1 summarises the data from the three matrices. The table shows that there is a difference between the criteria used to describe productive and reproductive tasks that women perform.<sup>16</sup> Productive tasks such as milking, product processing, watering animals, clipping hair, and cleaning and repairing winter shelters, were seen as the most time consuming, and requiring the most effort and help from others.

Table 1

Summary Table: Analysis of Women's Labour Tasks

Tasks	Most Able To Do	Takes Most Time	Hard Work	Needs Help From Others	Least Able To Do	Takes Least Time	Easy Work	Done at Same Time As Other Tasks
<b>PRODUCTIVE</b>								
Processing	x	x	x					x
Milking	x	x	x					
Watering Animals	x		x					
Clipping Small Animals	x	x	x	x				
Clipping Large Animals		x	x	x	x			
Repairing Shelters			x		x			
<b>REPRODUCTIVE</b>								
Collecting Argal	x					x	x	
Cooking	x					x	x	x
Cleaning						x	x	x
Washing						x	x	
Sewing		x					x	
Childcare	x					x	x	x

16 'Productive' tasks here are those which contribute to the reproduction of the herd. 'Reproductive' tasks are those which contribute to the reproduction of labour. The exception is processing which is included as productive.)

Reproductive tasks such as collecting argal, cooking, cleaning, washing, sewing, and caring for children were all seen as the easiest tasks often done in conjunction with others. While the informants themselves did not suggest that tasks were organised and performed alongside others this criteria was introduced in two cases and proved to be important. The fact that the women did not identify this criteria may be explained by the fact that the ability to combine tasks is a learned and automatic one and not easily identified by them. Similarly, reproductive tasks (with the exception of sewing) were also seen as the least time consuming. While they may take up a large proportion of women's total available time, they are usually carried out in short periods throughout the day between or alongside other work. As a result they are not perceived as taking up a single block of time and thus 'time consuming'.

The three women felt able to perform both productive and reproductive tasks equally well. However, tasks such as milking, processing, clipping small animals they felt 'able to do' because they had sufficient skills, strength and knowledge to perform them. Other tasks, such as mending shelters, or clipping wool from larger animals they were only able to do properly when they had sufficient time or were given sufficient assistance.

The criteria used by the women to describe their work reflected their concern with their ability to perform certain tasks according to time, labour and physical constraints. The single male informant identified a largely different and more diverse range of activities and judged them according to different criteria. His preferred task was building and maintaining winter shelters, followed by watering, training and selling animals. He enjoyed these tasks either because they were seasonal and manual (moving, winter shelters), restful (watering animals), skilful (training animals) or social (selling animals).

Because the informant stated that he occasionally helped with milking, processing and cooking tasks he was able to compare productive and reproductive tasks making clear distinctions between 'man's and 'woman's work' in this respect. Similar distinctions were made by both male and female informants between 'inside' and 'outside' work, linking inside to reproductive and outside to productive tasks. Women as we have seen clearly view their 'inside' work differently from their 'outside', and both genders view work done inside the ger to be the natural and primary domain of women.

#### **Seasonal labour allocation, time use and mobility**

The task based allocation of labour resources results in different patterns of time use and mobility for men and women. These operate according to seasonal and daily patterns.<sup>17</sup>

There is a high level of labour intensity for both men and women during the lambing and calving periods from February through to May. Women are busiest during the milking season which runs from May until September. As a general rule men are less busy during the summer and autumn months while women are less busy during the winter. However there are different periods of intensity in the two areas at different times. For example, men in Erdene are busier in winter preparing shelters which are often made of stone rather than wood. In summer men in Erdene are responsible for

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<sup>17</sup> Detailed analysis of seasonal labour patterns of men and women is given in Working Paper 2 and only brief findings are presented here.

watering animals twice a day, while in Tariat men are busy hay making during this period.

### Daily time use

Daily labour profiles done with two households revealed very different patterns of time use for men and women. Given time and other constraints it was not possible to gain daily profiles for the different seasons. Instead a woman in each sample area described a typical day for her and her husband during the busy Spring period.<sup>18</sup> (See Figures 1 and 2).

The profiles showed the women working on a wide range of tasks in and around the ger, with men spending most of the day away from the camp performing long distance herding. There was a high level of cooperation between them in the care of young animals during the morning and evening. Both women got up one or two hours before other family members to perform domestic tasks for the household. Both women initially omitted to mention some domestic tasks they performed suggesting that women's tasks are woven into a seamless routine of activity, and are seldom considered separately or even as 'work' at all.

While further work is required to assess the time use patterns of men and women at different points in the year, it is probable that these profiles reflect a typical pattern of time use within the household. They show men and women cooperating on specific production tasks but otherwise working separately. Women are seen dividing their time between domestic and productive tasks and working longer hours than men, thus shifting the overall burden of household labour in their direction.

As a general rule then women work longer hours than men although this varies according to individual households and seasonal constraints. Under certain circumstances the daily work load of women is particularly heavy. This is usually the case for women headed households with insufficient labour and among wealthy male headed households with more than 200 animals where women are responsible for a large proportion of herding tasks.

### Mobility

Men and women experience very different patterns of mobility reflecting the gender division of labour and different time use patterns of men and women. Figures 3 and 4 show the mobility maps of two men and two women in each sample area.

The majority of men's movements reflect their responsibility for decisions regarding herding movements and pasture use. As well as their daily herding responsibilities they make regular trips to sum centres and other khot ail for meetings, general information, and the sale and marketing of products. They also attend more social occasions, in particular marriage ceremonies (nairs). Women will only attend the nairs of relatives while men frequently attend those of friends and relatives.

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18 It was not possible to do labour profiles with the men themselves since they were absent at the time of the visit.

Figure 1.

Daily Labour Profile - Monkhtogoo and Tserennadmid  
Household Reference Number: 110 Erdene Sum Domogobi

## Spring Daily Labour Profile

Tserennadmid (wife)	Monkhtogoo # (husband)
5am Gets up * (Makes Tea and Dresses Children)*	6am Gets up, Drinks Tea Saddles horse, prepares for day.
7.30am Gives Fodder to Animals Supervises Suckling of Young Animals Separates Young from Mothers After Feeding Gives Fodder and Hay to Lambs	7.30am Takes Camels to Pasture Waters Camels Repeats with Cattle and Horses
10am Gives fodder and hay to young Camels	
12am Cooks and Eats Lunch Does Washing and Sewing Cares for Children	
4pm Supervises Suckling of Lambs	
7pm Cooks and Eats Dinner Checks on Animals for the night	7pm Returns from pasture Eats/Checks on animals
9pm Sleeps	9pm Sleeps

\* These Tasks only added after questioning

# Information supplied by Tserennadmid

Figure 2.

Daily Labour Profile - Altantssetseg and Dangasuren Household Reference  
No: 58 - Tarfat Sum Arkhangai

## Spring Daily Labour Profile

Altantssetseg (wife)	Dangasuren @ (husband)
6am Gets up Makes Tea Gets Daughters up Other Domestic Tasks	7am Gets up Collects cattle from pasture Brings cattle for milking Checks animals at shelter
8am Milks Cattle Cleans Shelters Takes female Cattle to Pasture	10am Takes sheep to pasture Takes animals to river Cares for horses Reads books
11am Brings Milk to Gher Chops logs for fire Collects ice from river Puts animals in shelter	
5pm Prepares food, cooks and eats	7pm Returns from pasture, eats
8-9pm Checks animals at shelter	8-9pm Suckling animals at shelter
12pm Sleeps	12pm Sleeps

@ Information supplied by Altantssetseg



FIGURE 4. MOBILITY MAPS TAGUAT SUM, ARKHAND  
HOUSEHOLD REFERENCE NO.

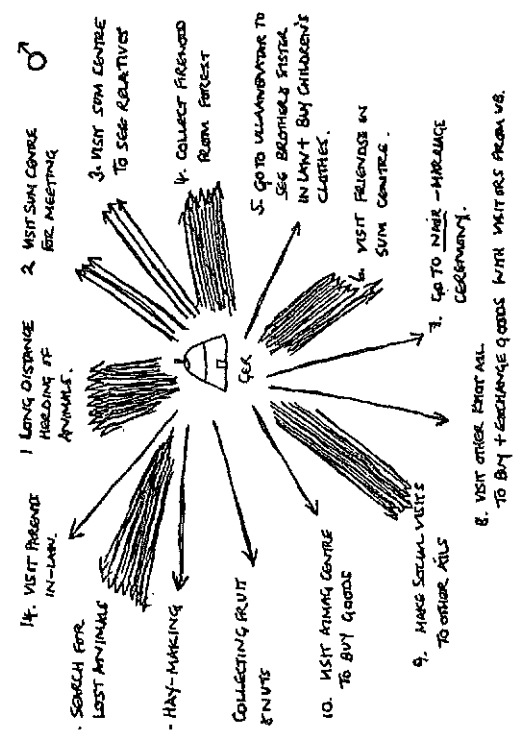
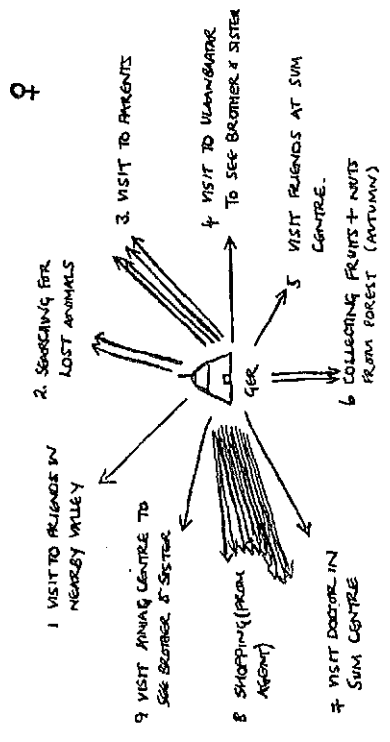
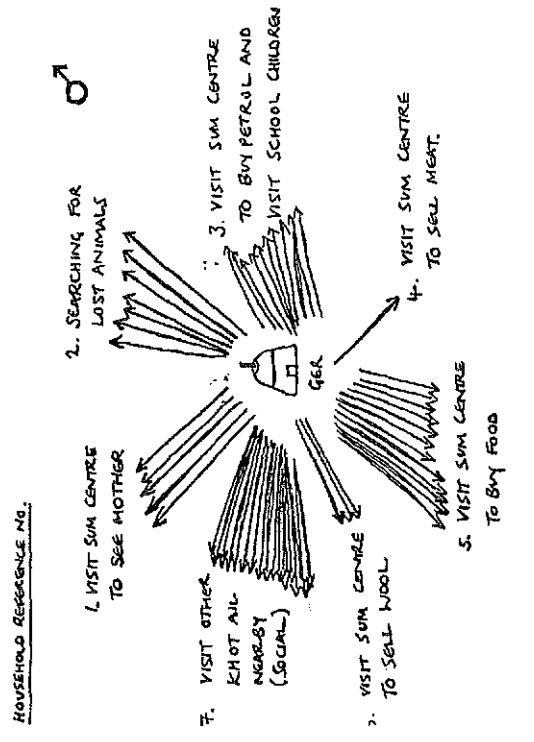
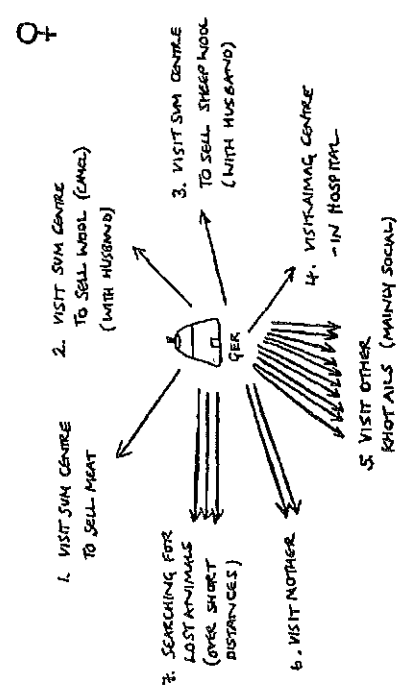


FIGURE 3. MOBILITY MAPS ERDENIE SUM, DORNOGABI  
HOUSEHOLD REFERENCE NO.



Because the majority of women's labour takes place in close proximity to the ger, women make fewer trips than men, usually for shopping and visiting friends and relatives. Even then, women usually only make trips during the quieter months of December, January and February when there is no milking and demands on their labour are less intense.

### Household decision-making

In pastoral economies women's influence within the household is often centred in their ability to control the sale, distribution and consumption of livestock products. Although a systematic investigation was not carried out into areas of influence and decision making within the household, a number of observations were made in this area. It is however notoriously difficult to gain accurate information on these kind of issues using the methods and time frame available to us so any conclusions are necessarily tentative. Information gained from brief discussions with a number of households are summarised in table 2.

Table 2

Summary of Household Decision-Making Erdene and Tariat

Responsibility For:	No. of H-holds Questioned	Female Headed H-holds		Male Headed H-holds	
		Women	Women & Sons	Men	Women Both
Sale of Small Animals	4	1	1	1	1
Sale of Large Animals	4	1	1	2	
Slaughter of Small Animals	3	1			1 1
Slaughter of Large Animals	3	1			1 1
Expenditure					
- H-hold	4		1	1	1 1
- Other	4				
Milk Offtake	6	1			5
Milk Sales	1				1
Food Consumption	3	1			2

Decisions relating to household income and expenditure are generally taken by both men and women. Although male and female household heads may often state that they have control over particular decisions, in reality decisions are seldom made individually. This is particularly true in the case of households headed by women, where there is greater consultation with other family members although the household heads themselves generally maintain that they have overall responsibility.

In discussion with one poorer household it emerged that both partners have responsibility for different incomes derived from a wide range of sources. While income from the sale of animals is pooled, the woman's income gained from milking and clipping for other households and selling ropes and harnesses to other herders, remains her own. This income constitutes only a small proportion of total household income however and is used to buy winter shoes, clothes and some food stuffs. While decisions regarding expenditure are discussed jointly, her husband has responsibility for purchases relating to the herd while she is responsible for those relating to the household and children.

Men are usually responsible for the sale of animals although women can influence this and will often decide which animals to sell or slaughter for home consumption since this is frequently related to milk offtake. In some households women control the sale of small animals and men the sale of large. Women, as those responsible for milking always control decisions regarding milk offtake, household food consumption and the distribution of food to family members elsewhere.

It is not at all clear how decisions are made regarding the consumption of food within households, since women maintain that all family members have equal need and so equal portions. Women did state that under conditions of food shortage they are more likely to give better or more food to children within the household.

#### **Female headed-households**

Female headed households represent an important focus for research for a number of reasons. Research elsewhere has suggested that households headed by women constitute a potentially vulnerable group among rural households since their income and labour resources are often less secure than those of male headed households. Because of this, their position might usefully illustrate the way in which women in the Mongolian context cooperate with relatives and other households in the management of labour and other resources.

In the Gobi, there have traditionally been a large number of female headed households. Although Mongolian society is for the most part patrilineal, during the nineteenth and early twentieth centuries a large number of monastic herdsman fathered children in non-marital relationships. This resulted in a number of families where the chief line of descent was through the mother. These 'matrilineal islands' are still significant today; it is reported that as many as 24% of households in the Gobi are female headed.<sup>19</sup>

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<sup>19</sup> Szyrkiewicz, S., 1977 Kinship Groups in Modern Mongolia, *Ethnologia Polona*, Vol 3:42. UNESCO, 1991, *Non-formal Education to Meet Basic Learning Needs of Nomadic Women in the Gobi Desert - Mongolia*, Annex 3.

At the time of research there were more female headed households in Tariat than in Erdene, although the unexpected high number in Tariat was at least partly due to the unusually large number of male deaths in the last two years. The reason for this was not clearly established. In Tariat, 42 out of the 237 households (18%) and in Erdene 11 out of 106 (10%) were female headed.

Female headed households can be divided broadly into two groups. The majority are widowed or retired women aged between 60 and 75. Most live in the same khot ail as their children or other family members and perform few domestic or herding tasks. They mostly assist female relatives with childcare and other domestic tasks such as cooking, processing and sewing. Some also perform milking and other more active tasks such as water and fuel collection. Their level of independence varies however; some cook and eat independently despite the fact that consumption of animal products is shared, others eat with other family members. Decisions regarding sale of animals and other products are usually made in conjunction with male relatives and often these and other responsibilities are surrendered completely.

A second, smaller group of women, are younger and often widowed, divorced or unmarried. While they rely on sons to perform herding of larger animals, they themselves care for smaller animals, and perform all domestic tasks including product processing. While these women can be considered independent heads of household, they too rely on sons and other male relatives for assistance in livestock management and other decision-making responsibilities.

Women headed households with insufficient labour resources will often 'adopt' both male and female children of friends and relatives to assist with herding tasks and so ensure the survival of the household as a viable unit. This is the most common example of co-operative links operating between women to ensure the effective management of labour resources and the care of children. Adopted children are treated as the woman's own and in most cases she will provide childcare for her 'grandchildren' in later years. This is often the most significant contribution that elderly female headed households make to the labour of the household or khot ail. One elderly woman illustrated the value of her contribution by describing it as her 'man work'.

In some cases single women have lived as independent herders for the greater part of their lives without assistance. In one such case, a seventy four year old woman has only requested help from her family in the last three years. She lives independently and used to herd her private animals alone but is now assisted by her teenage granddaughter and grandson who divide herding tasks between them. In another case, a young woman adopted as a child, functioned as an independent herder with no assistance after the deaths of her adopted parents. She returned to her natural parents household after one year. She now receives assistance with herding tasks from her natural brothers but remains an independent household head. Both these cases show that under exceptional circumstances women do live as independent herders for some part of their lives and receive little support. These cases should be viewed as exceptions but it is households such as these which are not able to exploit networks of support who are emerging as the most vulnerable.

A further indication of the potential vulnerability of female headed households is seen in analysis of their overall wealth status. The wealth

ranking data shows households headed by women to be poorer in general (See tables 1 and 2 in Appendix 4). In Tariat, sixteen female headed households scored 75 or more in the wealth ranking, placing over a third in the poorest group. In Erdene, eight households had this score, placing over two thirds in the poorest group.

Evidence from both the 1991 and 1992 research shows that wealth ranking scores are strongly linked to the number of animals a household owns, and this is true of the thirteen female headed households considered in this sample of thirty-seven households.<sup>20</sup> Most of the elderly women have few animals. They are unable to herd many themselves and most have been given to children or other relatives as marriage gifts. Others are poor and have never owned many animals. These women are placed at the bottom of the Wealth Ranking. However, some richer households are placed within the middle of the Wealth Ranking despite owning more animals than male headed households placed in a higher position. There are a number of possible reasons for this. One is that some households gained considerably in the privatisation process and this is not reflected in the wealth ranking. Another is that while these women are known as 'good herders' within the community the male informants who did the wealth ranking did not perceive these particular women heads of household as rich.

## 6. ECONOMIC LIBERALISATION AND ITS IMPACT ON HERDING HOUSEHOLDS

So far this paper has considered a broad range of gender issues relating to the pastoral economy in Mongolia. A knowledge of intra-household issues is particularly relevant to the second part of the work which was to gain an overview of the impact of liberalisation on herding families. The process of liberalisation has had a significant impact on herding households particularly in relation to income and expenditure patterns, household food consumption, social security safety nets and the availability of rural services. By looking at each of these areas it was possible to gain a preliminary view of how these changes are already impacting on different groups within households and how potentially vulnerable groups such as women, children, older people and female headed households are currently being and will continue to be affected in the future.

### Household incomes and livestock marketing

A small amount of income and expenditure data was gathered from both samples and is summarised in tables 3 and 4.

In general, incomes in Dornogobi are higher than those in Arhangai largely because negdel members in the Gobi aimags received higher salaries than those in other areas to compensate for the harsh working environment. Table 3 shows income data from three households in Erdene sum. While these do not claim to be representative they illustrate the range of income levels within the sum. Table 4 shows income and expenditure data from one poorer household and two middle income households in Tariat and so the difference in income levels between the three households is not as great.

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<sup>20</sup> See Mearns, R., 1992 and 1993.

Table 3

**Erdene Sum Annual Income Data 1992  
(Tugriks)**

Household Ref. No.	'80 *	66	65
Wealth Ranking Position	'91/106	'30/106	'19/106
Number of Animals	26	116	171
<b>Income</b>			
Company Sales	3400	12000	29796
Private Sales		5500	12090
State Benefits	5268	6000	6360
Salary		12000	24000
Other	200	600	
<b>Total</b>	<b>8868</b>	<b>36100</b>	<b>72246</b>

\* Denotes Female Headed Household

Table 4

**Tariat Sum Annual Income and Expenditure Data 1992  
(Tugriks)**

Household Ref. No.	14 *	46	151
Wealth Ranking Position	226/237	'198/237	'149/237
No. of Animals	65		123
<b>Income</b>			
Horseshoe Sales	6000	13750	6300
Private Sales	800	13500	2000
State Benefits	6552		14964
Salary		1200	
Income in Kind	12000	13000	15000
<b>Total</b>	<b>25352</b>	<b>41450</b>	<b>38264</b>
<b>Expenditure</b>			
Food (Own Production)	12000	13000	15000
Food (Purchased)	2000	4526	4800
Clothing	1920	10000	9000
Medicine		300	
<b>Total</b>	<b>15920</b>	<b>27826</b>	<b>28800</b>

\* Denotes Female Headed Household

The impact of privatisation on herding incomes has been significant, although of the two areas, Tariat has been most acutely affected. While the overall incomes may not appear to be significantly reduced, the **range** of income sources which households can exploit has been severely undermined in the majority of cases. This is partly due to the overall economic climate which has resulted in a partial breakdown in banking and social security systems, and partly due to the inadequate development of markets for the sale of livestock products in the wake of decollectivisation.

In both areas the payment of pensions (which form a substantial source of income for many households) has become increasingly irregular. Although some households have been unaffected and continue to receive monthly payments, many of those affected are older people and female headed households who are least able to generate income from other sources. For example, at the time of fieldwork in September in Tariat some households last received their pensions in May while in Erdene payments began to be held up in August. Discussions with pension officials in Erdene and Tsetserleg revealed that households in sum and aimag centres are given priority over herding households when decisions about payments are made. It is assumed that households without animals or any other source of support are in greater need. In Erdene 80% of those entitled to pensions are currently receiving them on time.

Herders have also had difficulty gaining access to money held in bank accounts and in some cases have had payments for livestock products made as 'savings' deposits or with other goods. For example, in Tariat, one household sold wool and meat to the horshoo for 12,000 tugriks and payment was made not in cash but as savings. They are unclear about when they might be able to gain access to this money. In another case two thirds of a 5,000 tugrik payment was made in goods (material, cigarettes, matches and soap), while the rest was paid into the bank as savings. Since August this problem has become more acute since herders are no longer receiving their monthly horshoo salary.

In other cases herders are having to wait a long time for payment for products supplied to company or horshoo. In Erdene households will only receive income from sales of products to the company after its liquidation in January 1993. In Tariat payments for wool and cashmere sold to the horshoo cannot be paid until these goods are sold in Ulaanbaatar. The herders concerned have not been guaranteed a minimum price.

Households in Erdene have received a more regular income than those in Tariat because the more or less smooth transition from negdel to company has allowed the supply of livestock products and subsequent remuneration to continue relatively unhindered. In addition the sum administration has played an important role in maintaining the regular supply of products to state order.

Tables 5 and 6 show that the majority of households in Erdene have sold a range of products to both company and sum while some households in Tariat have sold very few. In Tariat a stark difference between horshoo and private herders can be observed. Horshoo herders have sold meat, wool and milk while private herders have mostly sold only milk. As a result there is a greater incidence of exchange or sale of goods through private transactions with visitors or friends. Tariat has a greater potential in this respect firstly, because of its position in relation to Ulaanbaatar and secondly because the area produces a greater range of quality milk

products which have high market potential among the urban population. In Erdene comparably few milk products are made and there is less evidence of milk sales.

Table 5

## Sale of Livestock Products 1992 - Erdene Sum Dornogbi

Name of Household Head	Household Reference No.	Product Sold	Received By/ Sold To
Dolgor *	4	Cattle (Co.) Goats (Co.) Wool (Co.)	Company Company Company
Zundui	82	Meat (Co.) Wool (Co.) Meat (Pr.)	Company Company Sum Admin.
Orgontsagan	66	Meat (Pr.) Wool (Pr.) Camel (Pr.)	Sum Admin. Sum Admin. Pr. Herder
Tsagaanmaam	65	Meat (Co.) Wool (Co.) Meat (Pr.) Wool (Pr.)	Company Company Sum Admin. Sum Admin.
Borkhuu	123	Meat (Pr.) Wool (Pr.) Gts/Sheep (Pr.)	Sum Admin. Sum Admin. Friends
Tudevbar	122	Meat (Co.) Wool (Co.) Wool (Pr.)	Company Company Sum Admin.
Batdelger	77	Meat (Co.) Wool (Co.)	Company Company
Uizil *	109	Meat (Pr.) Wool (Pr.)	Sum Admin. Sum Admin.

\* Denotes Female Headed Household



Table 6  
Sale of Livestock Products - Tariat 1992

Name of Household Head	Household Reference No.	Household Type	Product Sold	Received By/ Sold To
Ochirhuyag	151	Private	Meat (Pr.) Wool (Pr.) Aral (Pr.) Unum (Pr.)	Horshoo Horshoo Visitors Visitors
Sengee *	36	Private	Wool (Pr.) Buuz Marmots Shimiin Arkai	Horshoo Sold At Nadam Herders Herders
Lhamaa *	14	Horshoo (To 8.92)	Milk (Ho.) Milk (Pr.) Cattle (Ho.) Sheep Wool (Ho.)	Horshoo Horshoo Horshoo Horshoo
Bazaragchaa	46	Horshoo (To 8.92)	Meat (Ho.) Wool (Ho.) Milk (Ho.) Milk (Pr.) Milk Prod. Meat/Fruits Cattle	Horshoo Horshoo Horshoo Horshoo Exchange With Visitors For Consumer Goo Exchange
Lhamsuren *	29	Horshoo	Milk (Ho.) Sheep Wool (Ho.) Cashmere (Ho.)	Horshoo Horshoo Horshoo
Monkhsalkhan	70	Horshoo	Milk (Ho.) Sheep Wool (Ho.) Cashmere (Ho.)	Horshoo Horshoo Horshoo
Tsend-Ayush *	209	Private	Cashmere (Pr.)	Sum Admin.
Dorj A	118	Private	Milk (Pr.)	Private Milk Tasag
Ulzitt	171	Private	Milk (Pr.)	Private Milk Tasag
Avidsuren	216	Private	Milk (Pr.)	Private Milk Tasag
Janjahuu	213	Private	Milk (Pr.)	Private Milk Tasag

The very small sample of income and expenditure data gathered did not indicate a big difference between the overall incomes of horshoo or private herders and decisions on whether to become a horshoo or private herder were not taken according to wealth status but according to locality. While we have seen that horshoo herders currently have more outlets for the sale of their products than private herders and have sold significantly more over the year, this has not resulted in substantial benefits over private herders. The prices paid to horshoo herders are reasonably low and unacceptable to some. In addition, while the horshoo has made available certain goods to its herders, stocks have quickly run out and not all herders have been able to purchase them. Further, while many herders joined the horshoo in the belief that it would allow them access to fodder and transport services, the costs are high, and even the richest horshoo herders cannot afford to use them although the promise of their availability seems to have been upheld.

However, private herders would potentially be in a better position, if greater organisation of marketing initiatives were to develop. The one initiative in either sample area to have taken off so far involved the creation of a butter making tasag with milk supplied from fifty private herders. The butter sold in Ulaanbaatar produced a return of approximately 11 tugriks per litre of milk supplied. In addition each herder received about 1 kilo of flour per 20 litres of milk supplied. Considering horshoo herders received 2.5 tugriks per litre from horshoo animals and 5 tugriks per litre from private animals for milk supplied to the horshoo this can be seen as a reasonably successful enterprise. It is expected that this initiative will continue in 1993 when the tasag will receive milk for four months rather than just two.

In general, herders have been slow to seek out markets because they are not used to doing so. However, herders in both areas are constrained in their ability to market products by the economic circumstances created by the liberalisation process. In many cases, they are unable to purchase items required for initial product processing or gain access to transport facilities to deliver products. For example, in Erdene, one elderly female household head was unable to purchase salt to process skins for sale to the company, which refused to accept the skins as they were. Salt, although not expensive is in short supply. In Tariat, another female household head said that she was unable to deliver milk to the private milking tasag because the delivery point was a long way from her ger and she did not have access to transport.

The ability and willingness of herders to market products and accept the prices offered differs according to the wealth status of the household. The increasing costs of staples such as flour and rice, means that poorer herders are using surplus products for household consumption rather than for sale; they are not in a position to market products. Richer herders meanwhile, are unwilling to sell products at what they consider to be unacceptably low rates. In Tariat, both horshoo and private herders are unhappy with the prices offered by the horshoo; they were offered 20 tugriks a kilo for cattle meat but felt 40 was a satisfactory price. One wealthy private herder, felt it was unlikely that private herders would join together to market products in the future because the poorer households had little to sell and the richer ones would prefer not to, since they are keen to maximise the growth potential of their herd over the next couple of years. While this particular herder may sell a small amount of meat when he requires cash, he will not otherwise sell animals at a price which he does not see as giving him 'income'. He was however, pleased to be in a position to make these kinds of decisions about his herd and as a private herder now felt 'like the owner of his animals' a feeling not commonly expressed among herders.

With limited opportunities for marketing products non-monetised exchanges are increasing. This is due in part to the lack of available cash, transport and consumer goods. The practice is more common in Tariat and these kind of exchanges are taking place among both private and horshoo herders and is a new development in the post-negdel period. One household exchanged milk products, (mostly cream - urum), meat and fruits for children's shoes and trousers with visitors from Ulaanbaatar. They had also made arrangements to sell two cattle to other friends in exchange for flour, materials, sugar, shoes and clothes worth ten thousand tugriks.

These kinds of sales and exchanges are also taking place on a wider scale because the normal exchanges of goods and products between family members in town and country are becoming less common. While women in Erdene and Tariat have maintained the practice of 'idish' as far as possible, and are continuing to send livestock products to children and other family members elsewhere, it nonetheless place considerable pressure on resources. They seldom receive consumer goods in return.

### **Expenditure patterns**

Changing patterns of income and rising prices have had a considerable impact on the expenditure patterns of herding households. Households use the majority of their income to purchase rationed food items with coupons, often relying on their pension money to cover this. Where pensions are being received regularly, households are continuing to purchase a range of items but where they have been delayed there has been a significant increase in the level of self-provisioning. This point is illustrated by the cases of two elderly female headed households who came 89th and 83rd (out of 106) in the Erdene wealth ranking. Both women receive a similar income and have similar expenditures. While one woman is receiving her pension regularly and managing satisfactorily, the second has not received her pension for two months and is relying heavily on milk products since she is unable to afford many rationed items. She has a small number of animals but is unlikely to be able to increase consumption of meat since they are her only other source of income. She receives no assistance from relatives or any other sources.

The monthly allowance for rationed items vary across the two areas. For example, in Tariat each person is allowed 2 kilos of flour per month while in Erdene where the shortage of flour is less acute, the allowance is between 3 and 4 kilos per month. This is considerably less than households would normally consume, and the problem is even more acute for households which have to divide an allowance designed for a single person. One female headed household in Tariat divides her single persons allowance between herself and her four grandchildren who assist her with herding tasks. She has not recieved her pension since May, and relies on her daughter in Tsetserleg, the district centre, to send flour, candles, tea matches and cigarettes. Otherwise the household is relying heavily on its own supplies of milk products.

The price of flour on the open market has risen considerably, from 100 tugriks for a 50 kilo bag to anything between four and six thousand tugriks, and thus it is very difficult for households to purchase anything beyond their ration allowance. Richer households are clearly in a better position to do so. One household, which emerged as the seventh richest household in the Tariat wealth ranking, exchanged one sheep for 35 kilos of flour with friends from Selenge aimag. The fact that they own a large number of animals means that they can choose to make this kind of transaction when other households cannot.

The majority of households rely on purchasing high cost items such as flour, rice, materials and other household goods from traders and other 'speculators' at prices they can ill afford. Few have bought many items this year and where possible they will purchase clothes and shoes for children.

### Consumption patterns

The changing income and expenditure patterns of households are reflected in changing consumption patterns. Seasonal consumption data gathered from households in both samples illustrated significant differences in present consumption patterns compared with those of five years ago. Table 7 shows seasonal consumption matrices of two households, a richer household from Tariat sum and a poorer one from Erdene. There are two matrices for each household, the first shows the seasonal pattern of household consumption during the negdel period and the second the seasonal pattern for 1992.

Table 7

## Seasonal Consumption Matrices

Household Reference no: 213		Wealth Ranking Position: 10/238											
D Janjshuu Tariat Sum Arkhangai													
5 Yrs Ago	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Meat	3	3	3	3	3	3	3	3	3	3	4	3	
Flour	4	4	4	4	4	3	4	4	4	4	4	4	
Milk	1	1	1	1	1	2	2	2	1	1	1	1	
Milk Products	2	2	2	2	2	2	1	1	2	2	2	2	
1992	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Meat	4	4	4	4	4	3	3	3	3	4	5	5	
Flour	2	2	2	2	2	2	2	2	1	1	-	-	
Milk	1	1	1	2	2	3	3	3	3	3	2	2	
Milk prod.	3	3	3	2	2	2	2	2	3	2	3	3	
Household Reference No:122		Wealth Ranking Position: 85/108											
G Tudevbarar Erdene Sum Dornogobi													
5 yrs ago	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Meat	3	3	3	2	2	2	2	2	2	3	4	5	
Flour	3	4	4	5	5	4	3	2	3	4	4	3	
Milk	2	2	2	2	2	4	2	2	2	2	1	1	
Milk Products	2	1	1	1	1	1	3	4	3	1	1	1	
1992	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Meat	6	6	7	4	4	3	2	2	2	5	5	5	
Flour	1	1	1	1	1	1	1	1	1	1	1	1	
Milk	2	2	1	4	4	5	5	4	4	3	3	3	
Milk Prod.	1	1	1	1	1	1	2	3	3	1	1	1	

These were done by asking each informant to name the different foods consumed by the household and then to give each food item a score against each month of the year. The total available score for each month was 10. This fixed method of scoring was used to encourage informants to make precise choices about the relative importance of each food item in a given month. A high score (eg 4 or 5) meant the item was the primary food source during that month, a low score (eg 1 or 2) meant little was consumed during the month of that particular item.

The matrices show how consumption patterns have changed since privatisation. Flour was previously the constant element in the diet throughout the year in both areas along with additional consumption of meat in winter and milk and milk products in summer. With current shortages and high costs, flour consumption has been severely reduced in Erdene and in some cases almost eliminated from the diet in Tariat, to be replaced by increased consumption of meat and milk products in greater amounts and over periods beyond the seasonal norm.

The extent of this change is seen in table 8. Meat is now the main product consumed between November and June, with the months between July and October divided equally between milk, milk products and meat. As a result, many households are slaughtering more animals this winter for household consumption and have sold fewer milk products during the summer.

Table 8		Seasonal Consumption Patterns											
		Product Eaten Most in Each Month											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Tariat													
1987		Fl.	Fl.	Fl.	Fl.	Fl.	Fl.	Fl.	Fl.	Fl.	Fl.	Mt.	Mt.
							Mt					Mt	Fl.
1992		Mt	Mt	Mt	Mt	Mt	Mt	Mi	Mi	Mi	Mt	Mt	Mt
							Mi	Mp		Mp	MP		
Erdene													
1987		Fl	Fl	Fl	Fl	Fl	Mi	Mi	Mi	Mi	Mi	Fl	Mt
		Mt	Mt	Mt	Mi	Mi		Mp	Mp	Mp	Fl	Mt	
									Fl	Fl			
1992		Mt	Mt	Mt	Mt	Mt	Mi	Mi	Mi	Mi	Mt	Mt	Mt
						Mi		Mp			Mt		
Product Mostly Eaten in Each Month in 1992													
Name		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
A Dorj		Mt.	Mt.	Mt.	Mt.	Fl.	Fl.	Mt.	Mi.	Fl.	Mt.	Mt.	Mt.
										Mi.	Fl.		
Ch Ulzitt		Mt.	Mt.	Mt.	Mt.	Mt.	Mt.	MP.	MP.	Mt.	Mt.	Mt.	Mt.
								Fl.	Fl.	Fl.	Fl.		
Avidsuren		Mt.	Mt.	Mt.	Mi.	Mi.	Mi.	MP.	Mi.	Mt.	Mt.	Mt.	Mt.
								Mi.		Mi.	Mi.		
										MP.	MP.		
Janjahuu		Mt.	Mt.	Mt.	Mt.	Mt.	Mt.	Mt.	Mt.	Mt.	Mt.	Mt.	Mt.
						Mi.	Mi.	Mi.		Mi.			
										MP.			
Lhamsuren		MP.	MP.	Mt.	Mt.	Mt.	Mt.	Mt.	Mi.	Mt.	Mt.	Mt.	Mt.
										Mi.			MP.
										MP.			
Monkhsaikha		Mt.	Mt.	Mt.	Mt.	Mt.	Mt.	Mi.	Mi.	Mi.	Mi.	Mt.	Mt.
										MP.	MP.		

Fl.: Flour

Mt.: Meat

Mi.: Milk

Mp.: Milk Products

The matrices in table 7 show that in 1992 the richer household consumed half as much flour as during previous years but more than the poorer household. This is despite the fact that the shortage of flour is more acute in Tariat than in Erdene and illustrates the fact that richer households are not having to adjust their patterns of consumption to the same extent as poorer ones. The poorer household compensated for the lack of flour with significantly increased consumption of meat. This is largely because Erdene households have fewer milk products available to carry them through the winter months. In Tariat, the level of milk production is high and so households can more easily fall back on the consumption of milk products where necessary.

### **Changing use and availability of services**

The ability of herders to gain access to transport, fodder, health and other services has been reduced. Where horshoo or sum administrations have taken responsibility for negdel vehicles they are not easily made available to herders and then only at high cost. It appears that even the richest herders cannot afford to pay transport costs and are either making their own arrangements or reverting to traditional forms of transport. In some cases khot ail arrangements are defined by the fact that one household has access to a particular vehicle which others can use. In Erdene fodder and hay costs have increased considerably while in Tariat households are making their own hay.

Issues relating to health service provision were only addressed in Erdene sum where there has been a significant reduction in visits to herders by health workers as a result of fuel and medicine shortages. Previously doctors would visit each khot ail about once a month, but now priority is given to visiting pregnant women or those with children under one year. While visiting these households, health workers will take in as many other khot ail as possible. Households were not overly concerned about the cuts in services, and it is obvious that women will automatically assume greater responsibility for family health care. They already treat minor illnesses such as winter colds with milk products which doctors acknowledge have good healing properties. However doctors are concerned that poor nutrition has resulted in weight loss in some children although vitamin supplements are available free. While increasing women's responsibility for family health does have important implications for the labour and health of women themselves, of more critical importance currently is the general position of the health sector. From discussion with Erdene's main doctor it emerged that the hospital's budget will be severely reduced in 1993 and they are going to be increasingly responsible for generating their own funds.

## **7. SUMMARY AND CONCLUSIONS**

This paper has focused on issues relating to labour organisation and time use within the Mongolian pastoral economy and the impact of liberalisation on household income, expenditure and consumption patterns. This final section summarises the main findings.

### **7.1 Gender and intra-household production strategies**

#### **Labour organisation, time use and decision-making**

The division of labour within herding households operates according to age and gender. Men perform long distance herding tasks, women herd smaller

animals and perform all domestic labour for the household. This gender division of labour results in different patterns of time use and mobility for men and women, thus determining their respective areas of power and influence within the household. Women carry out the majority of their labour in and around the ger, and control resource allocation and food distribution within the household. Men spend a greater proportion of their time herding away from the camp and are responsible for information gathering, the majority of livestock marketing and decisions regarding herd movement and herd growth.

Women generally work longer hours than men, particularly during periods of seasonal labour intensity when the labour of children becomes critical and labour constraints for richer households especially, are very real. It is among these households that the burden of women's labour appears to be greatest. Some are able to spread this burden among other women in the same khot ail; female relatives will often share childcare, cooking and other domestic tasks.

#### **Gender implications of economic liberalisation**

The implications of liberalisation for women's labour, rights and influence within the household are as yet unclear. Clearly women's labour is more readily switched between directly productive and reproductive or domestic tasks and as a result it is women and not men who will take on the burden of welfare and service provision previously provided by the state. This greater responsibility for reproductive activity however, is unlikely to lead to a reduction in their contribution to directly productive work and their overall labour burden will probably increase. This may prevent women from exploiting market opportunity in their own right, but women's labour is unlikely to be 'confined to the domestic sphere'.

The organisation of production through the khot ail plays an important role in the management of scarce labour resources and may prove important in spreading women's burden of labour and strengthening cooperative links between them. It will be important to see how far these extend beyond immediate relatives to other women in the same khot ail, or even whether the level of cooperation between women has increased.

Non-monetised exchanges between households are an important example of cooperative links operating between women and women remain instrumental in maintaining the flow of resources between urban and rural households in the form of livestock products, cash and goods. The extent to which the practice of idish has been maintained varies between households and across the two areas. In certain cases it has proved critical to otherwise vulnerable households. With a discernible increase in self-provisioning evident among rural households, women are retaining a critical influence over household resources in the wake of privatisation.

While women's contribution to productive labour is likely to increase rather than decrease, this may not result in a corresponding increase in their responsibility for livestock marketing. While it has been shown that women have a level of influence in household decision making, the culturally based formal authority of men as household heads, leaders and decision makers suggests that, as in other pastoral economies, they will remain the significant actors in livestock marketing. However, the move from collective to fully private ownership of livestock may signal changes in ownership and disposal rights to livestock which may or may not benefit

women. Further analysis of pre-collective, collective and post-collective rights to livestock of men and women is required.

## **7.2 Poverty, vulnerability and risk**

### **Household income, expenditure and consumption**

The context of economic dislocation in which the privatisation of livestock production has taken place has had a significant impact on the income, expenditure, and consumption patterns of herding households. In both areas the breakdown in banking and social security systems has resulted in delayed payments for livestock products and irregular payments of pensions. In Erdene more regular incomes have been maintained through the regular sale of livestock products to company and sum administrations, but in Tariat the inadequate development of marketing opportunities for private herders and the poor organisation and fixed prices offered by horshoo and sum administrations, has meant a sharp reduction in the sale of livestock products over the year by both poor and wealthy households.

The inadequate development of channels for livestock marketing as well as shortages of staple foods such as flour and rice, has had a considerable impact on the expenditure and consumption patterns of herding households. The majority of household income is used for the purchase of rationed food items, but prices are high and supplies inadequate and there has been an increase in non-monetary exchanges and a return to self-provisioning as a result. The level of self-provisioning is higher among poorer households and seen in increased consumption of meat and milk products beyond seasonal norms.

These developments may in the future have important implications for food security of certain households.

### **Wealth differences**

The impact of economic liberalisation differs according to the wealth status and lifecycle stage of herding households. PALD data from 1991 showed that clear wealth differences exist between herding households, while data from 1992 shows that these are likely to have increased as households are more or less able to respond to market opportunity and generate satisfactory incomes. The 1992 data suggests that certain categories of households are becoming increasingly vulnerable as income differentials increase.

Wealth differences between herders in different ecological zones are also significant. Overall income levels are higher in Erdene sum than in Tariat largely because the riskier environment of the Gobi commanded high salaries and benefits during the negdel period. Overall sale of livestock products has been lower in Tariat than in Erdene, and own food production comprises a higher proportion of total income as a result. In Tariat sum, fully private herders have experienced less opportunities for livestock marketing than company or horshoo herders, and while some are wealthy herders who are in a strong position to weather this transitional period, poorer herders with a small number of animals are less able to do so.

The absence of regular salaries and social security safety nets are contributing to increased poverty and vulnerability of these and other categories of households. Those identified as most vulnerable currently include older female household heads, low-income private herders (Tariat



sum), and younger, poorer households in both areas. These households generally have fewer animals, with greater labour constraints and are less able to respond to market opportunity than wealthier households.

The extent to which these households will become increasingly vulnerable depends on the level of support drawn from customary institutions and practices currently operating at local level. The khot ail is proving particularly important in this respect, easing labour constraints for younger households and older single household heads, as well as providing support in other herding tasks. The maintenance of kin based, non-monetised exchanges between households has also proved a critical form of support to some households in the absence of regular social security payments and necessity goods. Older female household heads are particular beneficiaries of this practice.

### **Risk**

Privatisation of herding production has transferred the burden of risk away from the negdel onto individual households. In the absence of state subsidised inputs to herding production, herders are increasingly vulnerable to natural calamity and seasonal stresses. While livestock losses were previously covered by the negdel, few households now have their animals insured and so are especially vulnerable to animal losses brought about as a result of severe drought or snowfall. As privatisation increases income differentials between households, wealthy households are more able to respond to such stresses, purchase necessary inputs such as extra fodder supplies and survive high animal losses. Herders are responding to privatisation by adopting more risk averse production strategies characterised by diversified herds and high labour requirements. At present these are being effectively managed through cooperative institutions at local level. However, it is likely that a sustained level of risk will have negative implications for households already identified as being particularly vulnerable.

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## Appendix 1.

## Interview Participants - Erdene Sum Dornogobi

August 22-29 1992

Household Head	Household Reference No.	Wealth Ranking Score	Wealth Ranking Position	Interview Participants
B Dolgor *	80	84	91/106	Dolgor
D Zundul	82	95	100/106	Zundul/Monkhthetheg (wife)
Sh Enebish	54	43	33/106	Naranzol (Wife)
D Rentsemaa *	42	56	60/106	Rentsemaa and Khookhuuz
D Khookhuuz *	41	71	78/106	Khookhuu and Rentsemaa
Yo Organtsagaan	66	43	30/106	Maam (Wife)
D Monkhtogoo	110	59	62/106	Tserennadmid (Wife)

October 6-13 1992

D Namjilmaa *	46	85	93/106	Nansalma (Sister)
Ts Tsagaanmaam	65	38	19/106	Rentheemaa (Wife)
Ts Erdenezul	61	46	38/106	Ardaya (Wife)
G Borkhuu	123	59	61/106	Borkhuu & Monkhtogoo (wife)
G Tudevbarar	122	79	85/106	Tudevbarar & Bazookh (wife)
L Sharkhuu	118	69	76/106	Utziibayar (wife)
S Batjargal	71	59	65/106	Batjargal & Sumya (wife)
N Dugersuren *	75	84	89/106	Dugersuren
Ch Batdelger	77	43	32/106	Batdelger & Maam (wife)
U Ulzil *	109	78	83/106	Ulzil

## Officials

Dashbadgar	Company Director
Ookhnaa	Accountant/insurance officer
Amgalan	Pensions officer
Sarantuya	Head Doctor

NB \* Denotes Female Headed Household

## Appendix 2.

## Interview Participants Tariat Sum Arkhangal

September 1-9 1992

Household Head	Household Reference No.	Wealth Ranking Score	Wealth Ranking Position	Interview Participants
U Davaasambu *	185	85	200/237	Davaasambu
O Ochirhuyag	151	70	149/237	Ochirhuyag Adoyasuren (his wife)
S Chuluunbaatar (Sengee) *	217	60	99/237	Sengee
L Lhamaa *	14	100	226/237	Lhamaa
B Dangasuren	56	38	32/237	Altantsetseg (Dangasuren's wife)
H Bazarragcha	46	85	198/237	Bazarragcha Buginham his wife
September 18-25 1992				
J Jaavzandulum *	28	58	94/237	Javzandulam
O Buyanbillig *	32	80	185/237	Buyanbillig
G Tsend-Ayush *	209	40	36/237	Tsend-Ayush
A Dorj	118	45	46/237	Bambasuren wife of Dorj
Ch Ulzitt	171	85	197/237	Ulzitt Batjargal his wife  Tserendish (wife)
N Avidsuren	216	55	79/237	Tseremaa wife of Avidsuren
D Janjahuu	213	23	10/237	Janjahuu
R Lhamsuren *	29	55	85/237	Lhamsuren
I Monkhsalkhan	70	23	7/237	Tuya (wife of Monkhsalkhan)

NB \* Denotes Female-Headed Household

## Appendix 3

Matrix Ranking of Labour Tasks  
Naranzol, Erdene sum, Dornogbi

Tasks	Most Able To Do	Takes Most Time	Done At Same Time As Other Tasks	Hard Work	Needs Help From Others	Hot Work	Done Every Day
Milking	5	3	3	2	1	5	5
Processing	5	3	5	3	1	5	5
Cooking	5	2	5	1	1	5	5
Collecting Argal	5	1	5	1	1	1	5
Sewing	4	3	3	1	1	2	3
Washing	4	1	4	1	1	2	5
Fodder To Animals	3	1	1	2	1	1	1
Making Zoodoi	3	2	2	5	1	5	1
Making Harness	5	1	1	1	1	1	1
Shearing Sheep	5	4	3	2	1	5	1
Shearing Camel	3	5	2	5	5	5	1
Childcare	5	2	5	1	1	3	5

Appendix 3                      Sengee Matrix Scoring of Labour Tasks

Criteria	Tasks					
	Milking Sheep	Milking Cattle	Process- ing	Cook- ing	Collect Argal	Sewing
Able to Do	5	5	5	5	5	5
Time Consuming	3	4	5	1	1	5
Requires Help From Others	4	4	0	0	0	0
Done at Same Time as Other Things	0	2	5	5	0	5
Hard Work	3	5	4	3	2	3

## Appendix 3

## Monkhthetgeg - Matrix Ranking of Labour Tasks - Erdene Sum Dornogobi August 1992

Criteria	Tasks					
	Milking	Processing	Cooking	Collecting Argal	Sewing	Washing
Able To Do	3	5	3	5	2	3
Hard Work	3	4	1	1	4	1
Long Distance	3	1	1	4	1	1
Time Consuming	4	3	1	2	4	2
Same Time As Other Tasks	1	3	5	3	3	4

## Appendix 4 - TABLES

Table 1

Wealth Ranking Tsagaan Hutul bag, Erdene sum, Dornogobi

Position	Hhold ref.no	Name of hhold head	Informant Ranking Scores				Average ranking score	Notes
			INF 1 U.Ukhnaa	INF 2 Bawoo	INF 3 Oyun	INF 4 Monkhtogo		
1	135	Natsagdorj	20	20	25	20	21	ex-Y
2	129	Ya.Damdinjav	20	20	25	20	21	ex-Y
3	84	B.Dorjhorloo	20	20	25	20	21	
4	134	Ts.Luvsanbal	20	20	25	20	21	ex-Y
5	151	Shuurgan	20	20	25	20	21	S
6	121	D.Gombsuren	20	20	25	20	21	
7	57	Ts.Damdinjav	20	20	25	20	21	
8	150	M.Bolooj	40	20		20	27	S
9	140	D.Jargalan	20	20	50	20	28	ex-Y
10	131	B.Choijamts	20	60	25	20	31	ex-Y
11	132	D.Gombo	20	20	25	60	31	ex-Y
12	137	B.Dorjsuren	20	20	25	60	31	ex-Y
13	74	P.Tuvdendorj	20	20	25	60	31	
14	83	D.Bandi	20	20	25	60	31	
15	145	N.Gonchigsur	60	20		20	33	S
16	175	Sukhee	60	20		20	33	A
17	136	Ts.Badarch	20	40	25	60	36	ex-Y
18	130	Ts.Chinzorig	20	20	50	60	38	ex-Y
19	65	Ts.Tsagaanm	20	20	50	60	38	
20	156	B.Dorjpalam	40	40		40	40	S
21	169	D.Sergelen	40	40		40	40	S
22	165	D.Chuluunba	40	40		40	40	S
23	158	G.Chuluunba	60	20		40	40	S
24	141	Odsuren				40	40	S
25	144	D.Dashzeveg	40	40		40	40	S
26	97	B.Jigmid	20	40		60	40	
27	161	P.Gombojav	40			40	40	S
28	149	U.Buyantsogt	40	40		40	40	S
29	128	N.Tsedevsure	60	60	25	20	41	ex-Y
30	66	Yo.Orgontsag	20	40	50	60	43	
31	112	U.Ukhnaa	20	40	50	60	43	
32	77	Ch.Batdelger	20	40	50	60	43	
33	54	Sh.Enebish	20	40	50	60	43	
34	139	B.Bolooj	20	40	50	60	43	ex-Y
35	72	Ts.Bawoo	20	40	50	60	43	
36	60	L.Nergui	20	40	50	60	43	
37	119	Ch.Choisuren	20	40	50	60	43	
38	61	Ts.Erdenezul	60	40	25	60	46	
39	98	T.Chimidregz	20	40	25	60	46	



## Wealth Ranking Tsagaan Hutul bag, Erdene sum, Dornogobi

Position	Hhold ref. no.	Name of hhold head	Informant Ranking Scores				Average ranking score	Notes
			INF 1 U.Ukhnaa	INF 2 Bawoo	INF 3 Oyun	INF 4 Monkhtogo		
40	163	D.Sanzai	60	40		40	47	S
41	166	S.Senge	60	20		60	47	S*
42	146	I.Bayantsagaa	60	40		40	47	S
43	143	H.Bandi	60	40		40	47	S
44	157	N.Purevsuren	60	40		40	47	S
45	78	O.Chimiddorj	20	40	75	60	49	
46	162	B.Gankhuyag		40		60	50	S
47	164	B.Ganbat		40		60	50	S
48	67	O.Dashbat	60	80	25	40	51	
49	96	G.Tuvd	20	60	25	100	51	
50	126	B.Altansukh	60	40	50	60	53	ex-Y
51	62	D.Manal	60	40	50	60	53	
52	76	S.Lutjargal	60	40	50	60	53	
53	107	B.Erdenebaya	60	40	50	60	53	
54	70	D.Batsaikhan	60	40	50	60	53	
55	154	G.Sandagsur	60	40		60	53	S
56	160	N.Nyamdavaa	60	40		60	53	S
57	148	N.Gantulya	60	40		60	53	S
58	79	M.Bayandorj	20	60	75	60	54	
59	106	M.Nyamdorj	20	60	75	60	54	
60	42	D.Rentsenma	20	80	25	100	56	*
61	123	G.Borkhuu	60	40	75	60	59	
62	110	D.Monkhtogo	60	40	75	60	59	
63	127	B.Tumurikhag	60	40	75	60	59	ex-Y
64	152	G.Monkhat	60	40	75	60	59	S
65	71	S.Batjargal	60	40	75	60	59	
66	113	D.Bazarbat	60	40	75	60	59	
67	73	D.Khishig-Ulzi	60	40	75	60	59	
68	173	Dashravdan				60	60	A
69	171	Legdengombo				60	60	A
70	69	J.Byamba	80	60	50	60	63	
71	59	U.Buyandelge	100	40	50	60	63	
72	95	Ts.Tsogbadra	60	60	75	60	64	
73	102	Ts.Batdelger	60	60	75	60	64	
74	138	D.Ganbold	80	100	25	60	66	ex-Y
75	142	Navaansamda	80	100	25	60	66	
76	118	L.Sharkhuu	60	40	75	100	69	
77	147	S.Ulzilbat	60		50	100	70	S
78	41	D.Khookhuuz	60	100	25	100	71	*

## Wealth Ranking Tsagaan Hutul bag, Erdene sum, Dornogobi

Position	Hhold ref. no.	Name of hhold head	Informant Ranking Scores				Average ranking score	Notes
			INF 1 U.Ukhnaa	INF 2 Bawoo	INF 3 Oyun	INF 4 Monkhtogo		
79	40	H.Talkhaa	60	100	50	80	73	
80	120	R.Demberel	60	80	50	100	73	
81	125	Dashdondov	60	80	50	100	73	ex-Y
82	116	O.Tseren	80	40		100	73	
83	109	U.Ulzii	60	100	50	100	78	*
84	167	Ts.Hurel	60		75	100	76	S
85	122	G.Tudevbarar	100	60	75	80	79	
86	117	B.Damdinjav	60	80		100	80	*
87	153	R.Bud	80	80		80	80	S
88	58	N.Acya	80				80	S
89	75	N.Dugersuren	60	100	75	100	84	*
90	108	G.Ulzii	60	100	75	100	84	*
91	80	B.Dolgor	60	100	75	100	84	*
92	53	N.Urtnasan	100		75	80	85	
93	46	D.Namjilmaa	100	60	100	80	85	*
94	115	G.Batbayar	100	60	100	80	85	
95	155	Shashmaa	80	80		100	87	S*
96	133	J.Bayarsaikha	100	80		80	87	ex-Y
97	168	D.Nanaalmaa	100		100	60	87	S*
98	81	L.Chuluu	100	100	75	80	89	
99	124	U.Davaazul	100			80	90	ex-Y
100	82	D.Zundui	100	100	100	80	95	
101	114	G.Hurelukhna	100	100	100	80	95	
102	174	Mandal						A
103	172	Batkham						A
104	170	D.Enkhbat						S
105	176	Bayankhoshuu						A
106	159	Ts.Ganbat						S

## Key to Notes

- \* Female Headed Household
- S Resident in sum centre
- A Resident in Sainshand or elsewhere in aimag
- ex-Y Joined Tsagaan Hutul bag in May 1992 from former brigade of Yunshuu

Table 2

## WEALTH RANKING: BOOROLJUUT BAG, TARIAT SUM, ARKHANGAI AIMAG

Rank no.	Hhold ref. no.	Name of hhold head	Informant Ranking Scores			Average ranking score	Notes
			INF 1 D.Sosor	INF 2 J.Tuvaan (No.227)	INF 3 B.Ravdandorj (No.74)		
1	43	S.Gotov	20			20	
2	98	D.Enkhtor	20			20	
3	69	O.Lhagvaa	20	25	25	23	
4	155	Ch.Dawaakhuu	20	25	25	23	P
5	96	D.Tumurkhuyag	20	25	25	23	
6	93	B.Damdinjav	20	25	25	23	
7	70	I.Monkhsaikhan	20	25	25	23	
8	153	B.Badamsambuu	20	25	25	23	P
9	204	G.Sumyaragchaa	20	25	25	23	P
10	213	D.Janjaahuu	20	25	25	23	P
11	182	Sh.Choiyondorj	20	25	25	23	P
12	189	D.Choijamts	20	25	25	23	P
13	191	S.Algaa (Algsanda)	20	25	25	23	P
14	59	J.Adayahori	20	25	25	23	
15	8	J.Baljirjantsan	20	25	25	23	
16	40	B.Dugerjav	20	25	25	23	
17	6	G.Namsraihorol	20	25	25	30	
18	231	Ts.Tumur-Ochir	40	25	25	30	
19	170	T.Choijoo	40	25	25	30	P
20	208	N.Tuvdendavga	40	25	25	30	P
21	172	B.Lhamgombo	40	25	25	30	P
22	100	(Choibolyn) Burent	20	25	50	32	
23	158	D.Batsaikhan	20	50	25	32	P
24	178	G.Oidov	20	25	50	32	P
25	106	S.Lhavagajav	20	25	50	32	P
26	92	Yo.Baasanjav	20	25	50	32	
27	66	Yo.Purevjav	20	25	50	32	
28	49	N.Choindon	20	25	50	32	
29	65	T.Dovchin	20	25	50	32	
30	105	D.Mavganbavuu	40	25		33	P
31	173	G.Galbadrakh	40		25	33	P
32	56	B.Dangaasuren	40	25	50	38	
33	168	D.Purevragchaa	40	50	25	38	P
34	234	O.Jadambaa	40	25	50	38	
35	203	L.Galbadrakh	20	25	75	40	P
36	209	G.Tsend-Ayush	20	25	75	40	*P
37	63	D.Chimiddorj	20	50	50	40	
38	57	M.Lhavaga	20	25	75	40	

## WEALTH RANKING: BOOROLJUUT BAG, TARIAT SUM, ARKHANGAI AIMAG

Rank no.	Hhold ref. no.	Name of hhold head	Informant Ranking Scores			Average ranking score	Notes
			INF 1 D.Sosor	INF 2 J.Tuvaan (No.227)	INF 3 B.Ravdandorj (No.74)		
39	81	I.Zambal	20	50	50	40	*
40	68	R.Batsaikhan	20	50	50	40	
41	47	(Chojiljavyn) Bure	20	25	75	40	
42	30	M.Jamtsaa	20	50	50	40	*
43	138	D.Dorj	40		50	45	P
44	181	(Tuvaangyn) Togto	60	25	50	45	P
45	72	G.Battsingel	60	25	50	45	
46	118	A.Dorj	60	25	50	45	P
47	104	(Dechenkhuugyn)	60	50	25	45	P
48	219	Ch.Gombosuren	40		50	45	
49	230	T.Manjiljav	40	50	50	47	
50	114	N.Damdinbazar	40	50	50	47	P
51	122	Ts.Dambijantsan	40	50	50	47	P
52	94	R.Batsuur	40	50	50	47	
53	177	P.Dorjdavga	40	25	75	47	P
54	97	O.Davaasuren	40	25	75	47	
55	27	Sh.Ichinhorloo	40	50	50	47	*
56	220	S.Gombosuren	40	50	50	47	
57	225	J.Angidaabaatar	40	50	50	47	
58	4	Ch.Lhamragchaa	40	50	50	47	
59	36	S.Chuluunbat	40	50	50	47	*
60	186	S.Tserendash	40	50	50	47	*P
61	210	Ch.Hasbaatar	40	50	50	47	
62	202	J.Tuvaanjav	40	50	50	47	P
63	99	G.Budragchaa	20		75	48	
64	91	T.Batbayar	20		75	48	
65	74	B.Ravdandorj	20	50	75	48	
66	79	P.Gavaachimbuu	20	25	100	48	
67	73	B.Erdenebayar	20	100	25	48	
68	222	M.Baasankhuu	20	25	100	48	P
69	33	R.Odnemekh	20	50	75	48	
70	113	Yo.Batbaatar	20	75	50	48	P
71	131	M.Baatarjav			50	50	P
72	37	G.Gankhuyag			50	50	
73	139	(Lhamragchaagyn) Batorshikh			50	50	
74	195	O.Dulamsuren	80		75	52	*P
75	212	N.Tserenpuntsag	80	50	25	52	P
76	7	D.Chantsal	60	50	50	53	*

## WEALTH RANKING: BOOROLJUUT BAG, TARIAT SUM, ARKHANGAI AIMAG

Rank no.	Hhold ref. no.	Name of hhold head	Informant Ranking Scores			Average ranking score	Notes
			INF 1 D.Sosor	INF 2 J.Tuvaan (No.227)	INF 3 B.Ravdandorj (No.74)		
77	142	L.Onorsaikhan	60	50	50	53	P
78	48	T.Lhamsuren	60	50	50	53	*
79	216	N.Avidsuren	60	50	50	53	P
80	102	D.Boldbaatar	60		50	55	P
81	42	G.Gomboo	40	50	75	55	
82	90	Sh.Badamhand	40	50	75	55	*
83	87	J.Adyabat	40	50	75	55	*
84	50	J.Bayarsaikhan	40	50	75	55	
85	29	R.Lhamsuren	40	75	50	55	*
86	115	D.Sandallhundev	60	50		55	P
87	58	G.Dugerhorol	40	50	75	55	
88	101	G.Banzragch	40	50	75	55	*
89	143	D.Jamseranjav	40	75	50	55	P
90	228	J.Dalantai	40	75	50	55	
91	188	T.Lhagvasuren	40		75	58	P
92	95	A.Nadmids	40		75	58	
93	75	J.Onorbayan	40		75	58	
94	28	J.Javzandulam	40		75	58	*
95	161	B.Choijil	80	25	75	60	P
96	19	Ch.Enkhbayar	80	50	50	60	
97	169	B.Baasanmonkh	80	50	50	60	P
98	16	L.Chogsomjav	80	50	50	60	
99	217	S.Chuluunbaatar	80	50	50	60	*P
100	67	G.Magsarjamts	20		100	60	*
101	86	Ts.Batdelger	60			60	
102	85	I.Ulziisaikhan	60			62	
103	141	Sh.Purevsuren	60	75	50	62	*P
104	21	O.Davaadorj	60	50	75	62	
105	145	D.Batorshikh	60	75	50	62	P
106	126	G.Enebish	60	50	75	62	P
107	229	D.Budbazar	60	50	75	62	P
108	150	Sh.Baasannyam	60	50	75	62	P
109	120	D.Lombon	60	75	50	62	P
110	232	G.Adya	60	50	75	62	P
111	214	N.Dorjgotov	60	50	75	62	P
112	54	O.Narbaatar	60	50	75	62	
113	135	D.Doljinjav	60	75	50	62	*P
114	121	J.Erdene	60	75	50	62	P

## WEALTH RANKING: BOOROLJUUT BAG, TARIAT SUM, ARKHANGAI AIMAG

Rank no.	Hhold ref. no.	Name of hhold head	Informant Ranking Scores			Average ranking score	Notes
			INF 1 D.Sosor	INF 2 J.Tuvaan (No.227)	INF 3 B.Ravdandorj (No.74)		
115	128	D.Perenliimaa			50	75	63
116	51	Ts.Gongorsuren			50	75	63
117	35	Ts.Dolgosuren		40	75	75	63
118	226	(Toryn)Togtokhbaatar		40	50	100	63
119	154	D.Damdinsuren		40	75	75	63
120	24	N.Damdinsuren		40	75	75	63
121	201	N.Badamhand		80		50	63
122	233	S.Bayarsalkhan		80		50	65
123	89	G.Batbayar		80		50	65
124	211	(Choyondorjyn) Gankhuyaag		80		50	65
125	193	G.Altangerel		80		50	65
126	157	N.Lhavgadondiv		100	50	50	65
127	77	B.Purevrinchen		100	50	50	67
128	44	A.Badamdorj		60		75	67
129	166	D.Sainbayar		60		75	68
130	144	Ch.Batbold		60		75	68
131	223	G.Ganzorig		60		75	68
132	215	M.Zagdaragchaa		60		75	68
133	148	M.Erdene-Ochir		60	75		68
134	25	Ch.Ichinhorloo		80	75	50	68
135	39	G.Batmonkh		80	50	75	68
136	125	S.Sumyakhuu		80	50	75	68
137	227	J.Tuvaan		80	50	75	68
138	133	D.Sandag		80	75	50	68
139	156	T.Dugersuren		80	50	75	68
140	140	Ch.Damdinbazar		80	50	75	68
141	207	D.Baatar		80	100	25	68
142	199	J.Gonchig		80	75	50	68
143	13	(Chijmiddorjyn) Gankhuyag		80	75	50	68
144	5	O.Mavganbaatar		80	50	75	68
145	11	Z.Jargalsalkhan		80	75	50	68
146	17	L.Magsarjalam		80	50	75	68
147	112	H.Batdorj		60	50	100	70
148	205	R.Dolgorjav		60	75	75	70
149	151	O.Ochirkhuyag		60	75	75	70
150	134	L.Altangerel		60	75	75	70
151	124	S.Dashdavaa		60	50	100	70
152	55	B.Handjav		40	100	75	72

## WEALTH RANKING: BOOROLJUUT BAG, TARIAT SUM, ARKHANGAI AIMAG

Rank no.	Hhold ref. no.	Name of hhold head	Informant Ranking Scores			Average ranking score	Notes
			INF 1 D.Sosor	INF 2 J.Tuvaan (No.227)	INF 3 B.Ravdandorj (No.74)		
153	34	G.Onorsaikhan		100		50	75
154	117	N.Enebishdavaajav		100	50	75	75
155	60	Alagsandar		100	100	25	75
156	129	R.Zagd		100	75	50	75
157	31	Ch.Hurelbaatar				75	75
158	127	M.Batjargal				75	75
159	82	M.Mayar			100	50	75
160	9	D.Tserendorj				75	75
161	206	(Legdenjavyn)Batorshikh				75	75
162	136	D.Ganbold				75	75
163	184	D.Gomboo	100		50	75	75
164	22	N.Norvoo	80		75	75	77
165	235	D.Dashdavaa	80		75	75	77
166	224	T.Odonkhuu	80		75	75	77
167	18	Ch.Ariunbold	80		75	75	77
168	15	N.Dodkhuu	80		75	75	77
169	179	B.Dolgorjav	80		50	100	77
170	146	Ts.Erdenebillig	80		75	75	77
171	103	J.Dashbaljir	80		75	75	77
172	116	T.Otgonbayar	80		75	75	77
173	119	V.Tuvaan	80		75	75	77
174	71	G.Baljinyam	80		50	100	77
175	218	B.Batmonkh	80		75	75	77
176	23	G.Magsarsuren	80			75	78
177	163	Ch.Ganbold	80			75	78
178	20	G.Batchuluun	60		75	100	78
179	190	G.Baatarchuluun	60		75	100	78
180	52	S.Batjargal	60		100	75	78
181	41	O.Sainbayar	60		100	75	78
182	167	(Sereeterlundaagyn) Adyasuren	60		100		80
183	197	V.Suglegmaa	60		100		80
184	175	(Regzengyn)Bayasgalan	80				80
185	32	O.Buyanbillig	60			100	80
186	111	R.Tsendjav	100		100	50	83
187	149	J.Sandag	100		75	75	83
188	183	E.Nambarsaikhan	100		50	100	83
189	110	Ch.Lhaasuren	100		75	75	83
190	164	T.Erdenebadrakh	100		50	100	83

## WEALTH RANKING: BOOROLJUUT BAG, TARIAT SUM, ARKHANGAI AIMAG

Rank no.	Hhold ref. no.	Name of hhold head	Informant Ranking Scores			Average ranking score	Notes
			INF 1 D.Sosor	INF 2 J.Tuvaan (No.227)	INF 3 B.Ravdandorj (No.74)		
191	165	E.Namnansuren	100	75	75	83	P
192	12	J.Batjantsan	100	75	75	83	
193	160	J.Jigjee	100	75	75	83	P
194	10	U.Badmaadorj	100	75	75	83	
195	130	Z.Horolgarav	80	75	100	85	P
196	159	(Sumyagyn)Adyas	80	75	100	85	P
197	171	Ch.Ulzitt	80	75	100	85	P
198	46	H.Bazarragchaa	80	100	75	85	
199	187	R.Davaa	80	100	75	85	P
200	185	U.Davaasambuu	80	75	100	85	*P
201	109	G.Dolgorsuren	80	75	100	85	P
202	192	G.Ichinhorloo	80	100	75	85	*P
203	38	G.Byambasuren	80	100	75	85	*
204	84	J.Baasankhuu	60	100	100	87	
205	174	A.Chimidregzen	60	100	100	87	*P
206	180	N.Batdorj	100		75	88	P
207	196	J.Enkhjargal	100		75	88	P
208	194	R.Otgonbayar	100		75	88	P
209	107	D.Lhavagsuren	100		75	88	P
210	108	(Regmaagyn)Baya	100		75	88	P
211	2	T.Chimid-Ochir	80		100	90	*
212	83	D.Amarsalkhan	80		100	90	
213	147	E.Naidansuren	100	75	100	92	P
214	123	R.Tsend-Ayush	100	100	75	92	*P
215	45	N.Laichanjav	100	100	75	92	
216	88	D.Lhamjav	80	100	100	93	
217	61	A.Zorigtbaatar	80	100	100	93	
218	137	D.Pejee	80	100	100	93	*P
219	198	Sh.Purevdulam	100	100	100	100	P
220	221	T.Galsandorj	100	100	100	100	P
221	53	Ch.Tsogt	100	100	100	100	
222	62	L.Monkhat	100	100	100	100	
223	64	Z.Danaa	100	100	100	100	
224	26	N.Galsandorj	100	100	100	100	
225	1	D.Maamaakhuu	100		100	100	
226	14	L.Lhamaa	100		100	100	*
227	3	B.Hurlee	100	100	100	100	
228	76	R.Baasankhuu	100	100	100	100	*

## WEALTH RANKING: BOOROLJUUT BAG, TARIAT SUM, ARKHANGAI AIMAG

Rank no.	Hhold ref. no.	Name of hhold head	Informant Ranking Scores			Average ranking score	Notes
			INF 1 D.Sosor	INF 2 J.Tuvaan (No.227)	INF 3 B.Ravdandorj (No.74)		
229	132	R.Badral	100	100	100	100	P
230	176	Z.Jugder	100	100	100	100	*P
231	200	D.Dovchinhorl	100	100	100	100	P
232	162	T.Davaa	100		100	100	P
233	78	B.Boldsaikhan	100	100	100	100	
234	80	G.Badamragchaa	100	100	100	100	*
235	152	L.Byambaa	100	100	100	100	P
236	236	G.Magsarjalam					

## Key to notes

\* Female Headed Household

P Private Herder (All others are Horshoo Members)



Table 3

## Informant Summary

	Erdene	Tariat	Total
Female Headed Households	6	7	13
Male Headed Households	11	9	20
Total Households	17	16	33
Officials	4	-	4
Total Informants	21	16	37