
Pastoral Nomadism in Mongolia: The Role of Herdsmen's Cooperatives in the National Economy

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THE PRE-REVOLUTIONARY SITUATION

For centuries the basic means of livelihood of the Mongolian people has been pastoral nomadism, the herding of five kinds of animals (horses, cattle, sheep, goats and camels) throughout the hilly steppes which lie between Siberia and the north Chinese plain. This paper is about the cooperative movement among Mongol herdsmen and the part it played in transforming the economy of the country. This theme issue is concerned with the future of native societies; it is impossible to predict the future from the past, but a discussion of the past can show the emergence of unexpected social developments as a result of decisions taken in the economy. It is this kind of development which I shall try to isolate in a description of the evolution of herdsmen's cooperatives; only in the last five years or so has it been possible to get an idea of the implications of full collectivization for the life of the Mongols, and even then Mongol society is changing so rapidly that yet other social forms are likely to emerge.

Before the Socialist Revolution in Mongolia in 1921, and in fact for some time afterwards, the Mongolians found themselves in a typically 'colonial' situation.

(i) They produced only raw materials (wool, meat, hides) for which there was an uncertain export market. As virtually all Mongolians engaged in production were herdsmen rather than artisans, cultivators or craftsmen, they had to import from China

or Russia any required manufactured goods. Some of these were, or became, necessities such as flour, sugar, salt, cloth and guns. By 1911 the Mongolian people as a whole owed a colossal debt to Chinese traders and merchants.

(ii) Executive positions in the administration of Mongolia were occupied at the highest levels by foreigners, in this case Manchus or Chinese, as Mongolia was a dependent territory of the Manchu Empire. Since Mongol officials operated only at lower levels there was no existing political framework through which the nation could be united.

(iii) The feudal state of the Manchus had the effect of dividing Mongols into classes which were potentially antagonistic because of the unequal division of resources and privileges. In 1918 the official divisions of the society were: aristocrats and officials (about 5.7% of the male population), subjects of the State (26.3%), serfs of aristocrats and lamas (16.5%), and Buddhist lamas (44.6%), others (7%).¹ The social positions of aristocrat and serf were inherited, as were most political offices.

The presence of such large numbers of unproductive lamas living in monasteries — about a third of the male workforce — and the existence of an aristocracy, some of whom were used to expensive luxuries from China, shows that the Mongol herding economy must have been relatively efficient. In 1918 there were, according to official sources,² 9,645,600 domestic animals in Mongolia, rising to 13,776,000 in 1924.³ (The total population in 1918 was 647,500 and in 1924 about 650,000.) We can gain some idea of how these animals were divided among social classes from the following figures: in 1858, in Darkhan Chin-van Khoshun of Tusheetkhan Aimak, a poor region, there was an average of 4.3 head of animals per head of population among the feudal lords, 1.1 among the state serfs and 0.9 among the personal serfs. A much more prosperous case, the Ilden-van Khoshun of Tsetsenkhan Aimak, in 1890 had an average of 26.0 head of animals per head of population; here, the difference between rich and poor households was extreme, with feudal lords owning an average of 230.8 herd of animals per person, while state serfs had 3.6 and personal serfs 3.3 head. During the early 20th century the total number of animals in Mongolia rose steadily, and we may take as a not particularly prosperous example the territory of the Narobachin Monastery about 1920; in this territory there was an average of 11.2 head of animals per head of population, with the monastery and high lamas

owning 34.8 head per person and the serfs owning 5.7 head per person. Out of 400 families (1,600-2,000 people) there were two particularly rich households with over 2,000 sheep each, and one or two families with no sheep at all. Over half the families owned a comfortable 200-300 sheep, which gave them independence: they worked for no one and no one worked for them.⁴

Table 1. Animals Herded by Eight Households, Ikh Tamir Sum, 1935

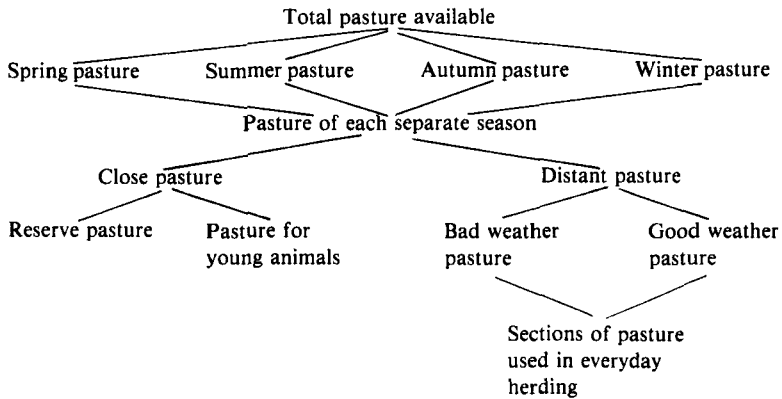
Kind of Animal	Households							
	1	2	3	4	5	6	7	8
Oxen	6	3	-	1	2	8	4	5
Horses	4	4	1	1	2	4	5	8
Mares	10	-	-	-	-	5	-	3
Milk cows	9	4	3	3	4	9	12	14
Calves and heifers	12	-	-	-	-	6	6	5
Sheep	90	107	-	8	32	100	80	160
of which ewes	18	16	-	-	-	20	25	26
Goats	25	6	-	20	10	6	12	3
of which milk goats	-	-	-	14	10	-	-	-

Source: D. Dash: *Ikh Tamir Sum, Gerelt Zam Negdel* (Tsetserleg Khot, 1970), p. 56.

The productiveness of Mongol nomadic pastoralism depended not only on the complex herding of different kinds of animals, illustrated in Table 1 which shows the animals belonging to eight households in Ikh Tamir Sum in 1935, but also on extensive use of pastures; that is, not only seasonal migrations from one type of grassland to another, but also a fairly rapid movement over each pasture area. Only by rapid and frequent moves could the Mongols be sure not to exhaust their pastures, and the closer they lived to the Gobi region the more important this was. There was a traditional system of rotation of different animals over pastures, so that each kind of herd could eat the kind of grass best suited to it and yet leave the pasture ready for another herd which would use another

grass. Pastures were divided into seasonal areas, into far and near pastures, and into various categories of use as set out in Diagram 1.⁵

Diagram 1.



Mares, cows and other milking animals were kept separate from their young during the summer, and there were established procedures for regulating the size and composition of herds so that animals kept primarily for meat, milk, wool etc. were present in the right proportions. Sheep and goats were herded together in winter, because the longer hair of the sheep kept the goats warm. All of these and other techniques were aimed at developing to the maximum potential of the herds to support a nomadic way of life, but they did not offer protection against the disasters which were likely to arise with this kind of herding. The need to keep moving, even over winter pastures if there was heavy snowfall, and also the great cultural value set on nomadism, meant that the Mongols rarely built permanent structures, not even winter shelters for their animals. This caused a regular loss of animals; if there was a long, deep frost or sudden storm, the absence of shelter could kill a herdsman's entire stock. Similarly, because of the desire to keep moving, the Mongols did not grow and reap hay for fodder, and animals died in the spring unless a man was fortunate enough to

find a sunny protected slope where the grass grew early. For the same reasons, agriculture was not widely developed as a possible source of food in bad years; it was only present in places where, for natural reasons, pastoral nomadism was less profitable.

Clearly, this pattern of herding could only be secure for rich people who were able to disperse their herds under different herdsman. For poor herdsman, who had all their animals under their own control in a single place, a bad winter, a spring drought, or a cattle epidemic could be disastrous.

It is important to consider the demographic structure here. The lack of modern medicine meant that the death rate was high; for children under 1 year it approached 50%. The death rate in childbirth was also very high (13%), and there was a general shortage of females, who in 1918 represented only 44.4% of the population.⁶ These factors, combined with the fact that there were a great number of supposedly celibate lamas, as far as we can tell without adequate statistics, resulted in a gradual decline of population in the 19th century. This was despite the great value Mongols put on having children. Although females were in the minority in the population, the many lamas resulted in there being a surplus of women of marriageable age; many of these had no alternative but to enter transitory relationships with Chinese merchants and caravan men, or even with lamas, and in these circumstances it was not socially approved or possible to have many children. Thus even though the nuclear family was the desired social form to which young Mongols aspired, it was not statistically as common as one might expect.

The decline or stasis in population was relevant to the pastoral economy because an increase in herds demanded a corresponding increase in the number of herdsman. A man could hand over a herd of optimum size to his son when he retired, but if the herd was increasing he would need to divide it so that it used two pastures and he would therefore need either two sons or a son and a 'hired' man. Since an increasing proportion of the young men were going into the lamaseries at the beginning of the 20th century this natural process of growth did not take place.

The tendency for herds to grow too large for the available labour was counteracted in two ways, neither of which was to the ultimate advantage of poor men. Firstly, rich men lent out animals temporarily to be looked after in exchange for the use of milk and wool. Secondly, the wealthy donated herds to the monasteries in

order to obtain religious merit; these monastery herds were then lent out to people (*shabi* serfs and others) to herd in return for the use of the meat, milk, and wool. The people who actually looked after the animals could not benefit from their multiplication. Both of these methods relied on there always being a certain number of destitute herdsmen and families with available labour; this was indeed the case because the Mongol system of nomadic pastoralism was without safeguards.

The two mechanisms mentioned above were typical of the feudal system in Mongolia, but did not constitute its essence. It was the confinement of pastoral nomads to particular territories, together with the exacting of obligatory dues, that constituted the enserfment of the Mongol population. Whole regions could be devastated by drought or winter frost, but rigidly guarded divisions of the feudal state were maintained, with the result that herdsmen could not move onto better land. Migrations and pastures were allotted by officials on the principle that a man with many herds should have more and better land; poor men were thus left with the most undesirable pastures. Mongolia as a whole was divided into four regions, called *aimag*, and these were subdivided into *khoshun*, sometimes translated as 'banner'. In theory land within a *khoshun* was commonly owned, but it was administered by a feudal official and his assistants who knew exactly how many households there should be and where they should move each year. Individual herdsmen were punished if they went outside the boundaries of the *khoshun* without permission. After the Revolution and before collectivization, control was apparently not lessened: the *khoshun* were divided into about 10 territorial sections called *sum*, each with about 150 households, and the *sum* was split into smaller units of about 50 families, called *bag*. The *bag* was not strictly a territorial unit but pastured its herds along allocated routes within the *sum*.

A poor man was someone with 50 head or less, of which many were sheep and goats. These people often were overwhelmed by debt even if natural disaster did not strike them, since they had not only to consume animals but also to sell some to buy necessities. Apart from entering into an ultimately fruitless relationship such as described above, there was virtually no escape except to enter a monastery. Towns hardly existed except for trading centres around monasteries. There was practically no secular education; official posts were mostly hereditary, and industry was almost non-existent. Mining, handicrafts, weaving, pottery, trading, vegetable

growing, pig and chicken keeping and even fishing — were all regarded as alien and even somewhat despicable occupations which only Chinese would undertake without shame. The only traditional supplementary occupations for Mongols without herds were hunting and caravan transport. Wool, skins, leather and other herding products were taken by oxen or camel caravan to trading centres on the borders with China and Russia. They returned laden with manufactured goods, tea, sugar, religious objects, cloth and other necessities and luxuries.

The single-minded homogeneity of their culture made the Mongols ill-equipped to face economic realities of the 20th century. By this time Mongolia was involved in the world market and Chinese, Russian and other foreign companies had set up enterprises there. As is always the case in such situations, the Mongols came off worst.

The homogeneity of Mongol culture also gave a distinctive character to the Mongolian Socialist Revolution. The pastoral economy was not merely a 'traditional' sector of a national economy; it *was* the national economy. To this extent the problems are dissimilar from those facing pastoral peoples who are integrated into larger economies; on the other hand, a discussion of the Mongol situation has the advantage of clearly outlining the critical points relevant to a pastoral economy.

In considering the 1921 Mongol Revolution and subsequent policy decisions, we must take into account the political position of Mongolia as a nation state. Neither China nor the Soviet Union were going to follow a Mongolian policy. The Mongols had to decide which of their two neighbours offered the best prospects as a protector, and they then had no option but to act as an ally, loyal not only in foreign affairs but also as a true follower of the ideology and social reconstruction. This fact has governed the outline of social evolution in the last 50 years, particularly of course in view of the fact that the economy is a planned one.

After the Revolution the status of 'serf' was abolished, together with the princely fiefs of land. The critical decision was faced in 1928, when, within the Revolutionary Party, the government, composed largely of members of the upper classes of the previous feudal period of Autonomy and inclined to prefer Chinese support, was opposed by a group referred to as the 'rural opposition', consisting mainly of poor herdsmen who had Soviet support and wanted to implement immediate socialist measures. This latter

group succeeded in gaining power at the Seventh Party Congress in 1928 and within a few months had put the first herding collectives into operation.

It is generally recognized that disastrous mistakes were made in the first collectivization. The population did not understand the reasons for communalization of property and bitterly resented the policy of physical enforcement, the crippling taxes on private livestock, the harassment of all lamas, both rich and poor, and the attack on small traders as though they were dangerous capitalists. The heavy taxes on private caravan transport brought the country to a state of chaos. Millions of cattle confiscated from the nobles died from being driven here and there in confusion, and further millions were slaughtered by owners who did not want their cattle communalized. Armed risings were put down in Western Mongolia. The Mongol government soon realized that collectivization was not going to work and abandoned the policy of compulsory enforcement.

Long-term plans still included a collectivization of herding, together with a massive education programme, the development of agriculture and the construction of industry, all of which were aimed at giving Mongolia relative economic independence, in the sense that she would be able to feed her own population and process her own raw materials as far as needed.

During the 1930s and 1940s the Mongolian Army cooperated with the Red Army. Mongolia received much aid from the Soviet Union in the form of construction of buildings, technical assistance, training programmes and machinery, and at the same time exported large quantities of meat, leather, felt, and transport animals to equip the Red Army. All of this produced a successful economy in which the number of head of animals rose well above the pre-collectivization figure (in fact to over 26 million head). But there were still rich people and poor people, many of whom lived in remote areas and were virtually untouched by Government measures. Pasture allocation was disorganized, people were slow in following government propaganda for haymaking or byre building; the small cooperatives which still remained had turned more or less into one-man shows, and made money by caravan transport and cart building; in short, without much fuller collectivization the government could not be sure of implementing its planned economic policy because it did not have sufficient control. During the 1950s the existing collectives were given

massive aid and people were strongly encouraged to join. Private herds were heavily taxed. At this time joining a collective implied giving up private animals over a certain minimum number (around 75 head officially) but this was sufficiently flexible to ensure that the majority of herders could keep virtually all their animals and at the same time benefit from the economic, medical, schooling and cultural facilities of the collective. The very richest people did not join until a compulsory measure was introduced in 1960, but then realized that resistance was useless; all the poorer people had joined collectives and there was no one to help them manage their large herds. At the present time, while 22.2% of the herds in Mongolia are still privately owned,⁷ virtually all herdsmen belong to collectives.

THE PRESENT SYSTEM

Mongolian herding collectives (*negdel*) have an organization which is designed to attain specific ends, and as institutions appear somewhere between a Soviet *kolkhoz* and a Chinese commune. Herding collectives occupy territories which are identical with the regions at the lowest level of the State structure (sum), the Chairman of the negdel being also President of the sum. The administration of the sum and negdel are parallel, with the former providing services for the collective: obtaining State aid, organizing non-economic matters such as education, medicine, culture, registration of the population, etc. and representing the negdel to the State and vice versa.

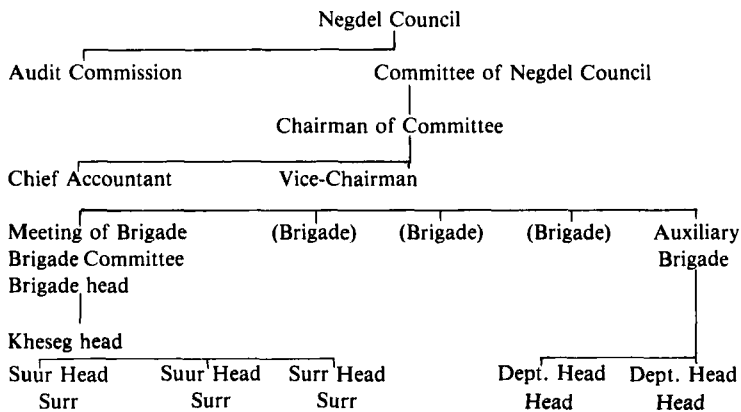
The Mongolian People's Republic is now divided into 18 aimag (counties or provinces) which are subdivided into 304 sum. The sum corresponds either to a negdel or to a State farm, the latter being similar to Soviet *sovkhos* and responsible for the majority of agricultural experiments, opening up of virgin lands, cross-breeding of animals, and preparation of fodder. The main orientation of the State farms is agriculture. In 1975 an average State farm sowed 9,500 hectares as compared to an average negdel's 400 hectares, and owned 31,800 head of herds to a negdel's 68,900. The relative numbers of negdels and State farms can be seen from the following table:

	1940	1960	1965	1974	1975
State farms	10	25	29	36	36
Negdels	91	354	289	259	259
Fodder production units	-	-	2	10	11

It seems that State farms on average may be smaller in population than negdels, since a typical State farm had 500 workers in 1975, while negdels frequently have up to 1,000 workers (i.e. about 4,000 total population).⁸

The negdels are purely economic institutions whose aim is to rationalize herding so that overall productivity should rise without bringing undue benefit or disadvantage to any individual. The structure of a typical herding collective is shown in Diagram 2.

Diagram 2.



5 Brigades (settled)
 24 *kheseg* (not settled and
 not specialized)
 132 *Surr* (not settled, specialized)

4 Dept. in Aux. Brigade
 e.g. sawmill, transport,
 agriculture &
 building, services

Each cooperative has a definite territory within which its members must live, and this is subdivided into the land belonging to each herding brigade. There is a cooperative 'centre' with buildings for meetings, a shop, medical centre, school, accounting office, machine-repair shop and public baths. Most cooperatives have moved their 'centres' over the years, but their sites are now more or less permanent. The herdsmen, since they have to move over the pastures, do not usually live in the centre, but the members

of the Auxiliary Brigade often live there in yurts or wooden houses. The Auxiliary Brigade was formerly an ad hoc group formed to accomplish some particular task, such as building or haymaking. Now, however, it is a permanent organization whose purpose is to fulfill some of the needs of the people which were formerly met by travelling merchants or Chinese artisans. The Auxiliary Brigade runs services such as transport, selling clothes and alcohol, the baths and hairdressing shop; it has taken over some tasks formerly performed by individual families such as feltmaking, making of noodles and bread, curing of leather, making hair ropes, producing grain and vegetables: finally, it handles construction and maintenance of the centre buildings. Often this brigade is composed of young people who have gained skills in the Army and old Chinese and Mongols who have formerly done some vegetable growing. Brigade members are paid by the month and the positions are popular because many people like being settled near the services of the centre.

Besides the Auxiliary Brigade each cooperative has three or four herding brigades which carry out the main work of the economy. The brigades are divided into units called *suur*, each of which consists of three or four households (sometimes more in milking *suurs*). As far as possible the brigades are specialized so that they take charge of certain kinds of herds only. Within the brigades the *suurs* are definitely specialized: each man or woman now has one of the following professional occupations:

Men: horse herdsman, camel herdsman, cattle and yak herdsman, calf herdsman, sheep herdsman, ewe (and birth) herdsman, female lamb/kid herdsman, male lamb/kid herdsman, ram herdsman.
Women: cow and yak milkmaid, sheep and goat milkmaid, horse milkmaid, lamb and kid deliverer.

In addition each *suur* has one of the following specializations: sheep and goats; castrated rams; one- and two-year-old lambs; rams and male goats; cross-bred sheep; cross-bred one-and two-year-old lambs; female goats together with kids in winter; goat kids separated in autumn; castrated male goats; one-year-old goats; male goats; cows (pasturing); cows (milking); oxen; calves; bulls; general horses of all kinds; mares with foals; mares (milking); camels of all kinds: male; female; female with young; barren; castrated and non-castrated male; young camels.⁹ At Brigade meetings it is decided which *suur* shall take charge of herds of particular animals of a given age and sex and also which migration

routes it shall follow during the year. Each suur elects its own head who is directly responsible to the Brigade for animals and machinery, but in day-to-day matters a suur has considerable autonomy. The people of the suur meet together frequently in the early morning to decide who shall do what work. This is often dictated by the specializations of the various members of the suur, but the existence of varied private herds as well as the specialized collective herd means that in practice most Mongols can still carry out nearly all of the traditional herding tasks.

The change in the demographic structure of Mongolia in the last 50 years has had a marked effect on the working of cooperatives and their relation to the rest of the economy. Due to improvements in medicine the population has increased from 647,500 in 1918 to 1,466,900 in 1976. Women now form 50.1% of the total, and the census shows a large proportion of young people who are just entering production or are still at school.¹⁰ This large increase has been almost entirely absorbed by the growth of towns, with their two drawing points of industry and education: although the population has almost doubled, the steppes are no more crowded than they were 50 years ago. In fact, until recently the number of people on the land in Mongolia had been gradually decreasing, partly because of the greater attraction of town life, and partly perhaps due to the mechanization of agriculture. Only in most recent times (1974-75) is there evidence that, while the number of workers in industry, building, transport and services remains constant, the number of workers in rural occupations (herding and agriculture) is beginning to rise. This probably reflects government policies counteracting the drift to the towns. In 1975, 53,700 workers were engaged in industry, 18,300 in building, 24,900 in herding/agriculture, 24,900 in transport, and 28,800 in services; in the same year the national income in percentages was: industry 24.7% building 5.4%, herding/agriculture 22.4%, transport 9.1% and services 36.2%.¹¹ Although it is not clear precisely what activities are listed under these headings, it is apparent that herding/agriculture is a relatively productive area of the national economy in relation to labour — particularly in comparison with industry. In 1969 herding produced 85.2% of the produce of the rural economy, while agriculture produced only 14.8%. By 1975 the figures were 76.1% and 23.9%.

Education has been a heavy investment for the Mongol government, since the greatly increased number of children from

the scattered, mobile herdsmen's families had to be boarded at State expense. A long education also keeps children from playing their former part in herding, although they are usually sent home at the busiest times of year, such as sheep-shearing and haymaking. From the government point of view, however, children who have been educated at boarding schools are more useful workers, since they are more likely to accept new ideas about herding, or even go into industry. Industry as a whole has been growing rapidly and until recently was very much aided by Soviet, Chinese and other Socialist countries; only now when young people born during the population boom are growing up has industry gained large numbers of Mongol workers. Among such young people jobs in industry are not regarded as boring or brutalizing; the machine is not hated. On the contrary, as Lattimore says, since there has never been a time in Mongol history when men have been displaced by machines, people have the attitude that without modern machines superior positions cannot be attained. The government encourages this attitude by attempting to create an elite of industrial workers, in which a man does not just put in hours of labour but enters a whole social complex. Each factory has its own medical-care arrangements, clubs, canteens, holiday arrangements, creches and training programmes.

The basic aim of Mongol industry has been to process the raw materials produced by the main sector of herding. Nevertheless, Mongolia still exports mainly raw materials of animal origin, and imports manufactured goods, fuels and metals. This emphasis on light and food industries may gradually change as more mineral deposits are discovered and heavy industrial plants created.

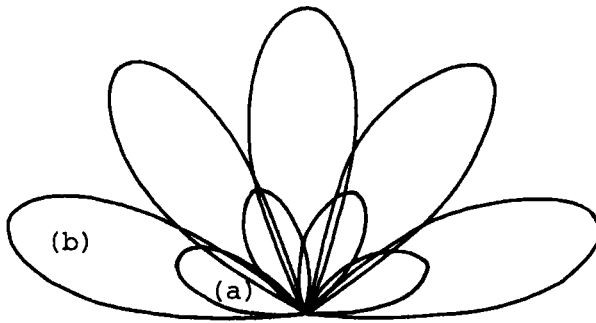
Herding cooperatives are still fundamental to the economy and it is vital to all Mongolians that they should function well. There are two main possibilities of failure. Firstly, the amalgamation implicit in making a cooperative might have led to the destruction of pastures; in other words, large specialized collective herds operating from a small number of centres, rather than myriads of tiny private herds emerging from all over the place, might tend to overuse the pastures and the benefits of the old five-animal rotation system might be missed. There is no evidence that this has occurred on a large scale in Mongolia, although some mistakes in herd management have been made (for example, the zealous separation of sheep and goats in the interests of specialization was found to be a mistake, since goats died in winter without sheep to keep them

warm). But tendencies towards overusing pastures are counteracted by the Brigade Councils, which send suurs out to the far pastures, despite a preference among herdsmen to be nearer the centres. Secondly, a policy of specialization of skills might mean that people lose the general ability to manage a full herding economy. Little is known about whether this is actually happening in the Mongol countryside, but the government has made efforts to prevent it by publishing in a large edition, for example, a book called *Advice to Herdsmen*, written by Sambuu, the former President of Mongolia. In fact, until recently, as this example shows, virtually everyone of the older generation, even long-standing town dwellers, was steeped in traditional knowledge of all aspects of herding.

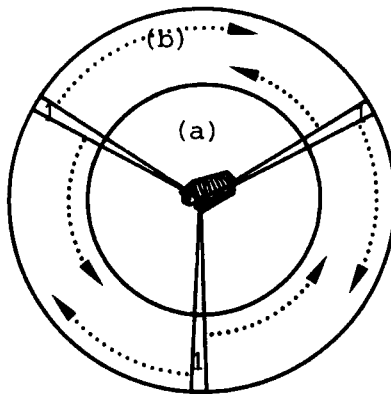
It is significant that modern methods of pasture use, which are explicitly designed to prevent degradation by overuse, are based on traditional methods employed before collectivization. It is important to realize that the present total of herds (24,351,500 head in 1975) has still not regained the 1940 figure of 26,204,800, and that one expert has estimated that the pasture available in Mongolia would be capable of carrying 1.5 to 2 times the number of animals now using it, if fodder production and water resources were more efficient.¹²

Maps have been known to the Mongol and Manchu authorities for several centuries and they are now essential in planning the distribution and movements of the suurs. These plans take into account the presence of water, natural soda and saltpetre, the types of grasses, their growth patterns and nutritious qualities. Scientific studies of these factors have been carried out by Mongolian technicians. (These factors, described in detail for each type of herd, are set out in a most valuable article by J. - P. Accolas and J. -P. Deffontaines.)¹³ Summer pasturing is carried out according to a different pattern from winter, since the grass is growing continuously during summer and there are no social constraints to preserve the cover.¹⁴

For political, cultural and educational reasons the Mongolian government aims to settle its population of herdsmen as far as possible, and this implies a more intensive use of pastures close to negdel centres. A more intensive pastoralism demands (a) the introduction of new and cross breeds of animals which are more productive than the traditional breeds, (b) the use of fodder concentrates to prevent losses during bad weather and to reduce the



Pattern of summer pasturing of one suur
(a) Close pasture used for young and riding animals
(b) Distant pasture



Pattern of winter pasturing of one suur
(a) Close pasture, not used in winter
(b) Distant pasture
(1) Paths by which herds are taken to pasture and back to byres and sheds

areas of pasture covered e.g. by milking herds, (c) provision of water (wells and irrigation) on the pastures used, and (d) construction of winter shelters and byres. It appears that, of these aims, the introduction of new breeds and the construction of byres are being successfully accomplished,¹⁵ but problems remain in production of enough fodder and in water management. The difficulties in hay and fodder production are lack of labour for fertilization, irrigation, harvesting and transporting, the distance of hayfields from migration routes and, perhaps most important, the problem of convincing herdsmen in fertile regions that it is worthwhile producing a surplus of hay to supply the barren Gobi areas. The low evaluation of work in producing fodder still survives from the traditional pastoral system. To some extent this has been overcome by setting up special centres where fodder concentrates are processed by trained workers, rather than relying on production and distribution by the herdsmen of the *negdels*. There are big differences in production of hay from year to year, due to weather conditions and bad organization (e.g. 1967, when production dropped by nearly half)¹⁶ and it appears that problems of distribution are such that even the hay produced is not always fully used. Water management is also a critical problem, since two-thirds of the available water is underground and the digging of wells has never been a Mongol tradition — indeed, Buddhist dogmas were against the digging of the soil at all. In the pre-collectivization period wells were occasionally dug by individuals but were not owned by them; the wells were shallow, often froze in winter, and rapidly became useless when people migrated away because no one was responsible for them. Now a total plan for construction of wells (both bore wells and drilled wells) has been worked out by the State for selected pastures. The work of construction and maintenance is carried out by the *negdels* or State farms but paid for by the State, and during the 1960s at least 70 percent of *negdels* had special sections of brigades allocated to look after the wells. In 1961 and subsequently there was a drive to build wells in the Gobi, and this was carried out by students from the capital. A water map was made in 1968 to help in planning of future wells, and USSR and Hungarian specialists have been invited to Mongolia to design dams and reservoirs. Faults remaining, however, are that wells are badly constructed, that the people on *negdels* do not know how to maintain them properly, and that herdsmen do not use them to the full extent.

All of this suggests that the planners have not yet completely succeeded in intensifying herding techniques. It is probable that the migration routes of the suurs are based on pre-collectivization routes which contained built-in features of traditional herding practices, such as adequate year-round pasture without hay or fodder, and natural shelter in winter rather than byres; for herdsmen to abandon these known and freely available (though not necessarily efficient) practices in favour of new ones — such as wells and byres which might be badly sited and impractical in various ways — is to some extent an act of faith. One serious objection to byres for sheep, for example, is that the wool is harmed and the sheep sometimes injure one another when crushed over a period of time into a small space. The relative success of the two systems, extensive and intensive, can be seen in the results of 'socialist competition' within and between negdels. It occasionally occurs that a herdsman still using primarily traditional extensive techniques nevertheless wins prizes for productivity (of wool, meat, etc). This gives rise to much discussion at suur meetings and even at brigade and negdel levels since the administration of a negdel is often under pressure to demonstrate that it functions according to new specialist-intensive techniques. These are not always incompatible with traditional practices, and the most successful negdels manage to combine the two.

As far as Mongol economic planners are concerned the point of specialization is that, quite apart from presumably ensuring that people do their specialized work better, it is a means by which a new work ethic can be introduced into the pastoral communities. Soviet and other experts frequently complained that the Mongols were non-systematic in their work, willing to put in a big effort at key points in the season, but the rest of the time preferring to be idle. They blamed the Buddhist morality and teaching of reflection and meditation. But with herdsmen as specialists, it was possible to work out plans to be fulfilled and to issue people with 'work books' to be completed, thus contributing to the idea of personal dedication to work. Free time could be used in training and education.

It was found after collectivization that economic incentives did not immediately work. Herdsmen did not want more money, partly because there were very few consumer goods to buy and what there were were all standardized, and partly because nomadic people had no place to accommodate goods and were not used to acquisition.

This is why, at the first stages of collectivization, rewards were given in prestige and honour rather than in money. Badges, certificates, speeches and honorific paragraphs in the newspaper were, and still are, used to celebrate people who have worked well in the collective interest. Similarly, observers may wonder why education for herdsmen concentrates more on moral and political matters than on professional and technical ones, and why certain agricultural experiments seem to have a pedagogic rather than an economic aim. All of this assumes that the herdsmen really know how to look after animals in harsh and difficult conditions; what is more doubtful, and needs to be carefully encouraged, is the motivation to work steadily to care for animals which are not their own property.

This is being achieved, it seems, since the number of animals in the cooperatives has been generally increasing and has also been advancing at the expense of privately owned herds. More precisely, we find that the number of head of animals per head of rural population is rising. The total absolute number of animals did in fact decrease in recent years, although 1974-75 saw an upswing. Cattle have continuously done best since collectivization; this is significant since just over half the cattle in Mongolia are privately owned, while only one-seventh of the goats, for example, are in private hands. It seems that the survival rate to one year of young animals is in general higher for private herds than for either *negdel* or State farm herds. This indicates that at present, as one might expect, greater care is given to privately owned than communally owned animals. On the other hand, the standard of care as measured by survival of young animals, is higher for *all* herds now than it was in pre-collectivization days for private herds. There have been improvements in animal breeding rates also, particularly among sheep and goats, as is shown in Table 2.

Table 2. Changes in Animal Birth Rates (births per 100 adult females per year)

	Camels	Horses	Cattle	Sheep	Goats
1940	34	43	57	56	52
1970	34	53	69	83	80

 Source: 50 Years, p.86

The slight decrease in the number of collective herds during the 1960s and early 1970s and the recent increase should not, however, be attributed simply to the motivation of herdsmen in caring for them. Many other factors are present: the recent parallel increase in rural population (i.e. more labour available in the *negdels*), the level of State procurements of animals for meat, the prices paid by the State, and the rise in productivity of meat, wool, etc. per animal. Unfortunately, it is impossible to assess the relative importance of these factors here. Certainly, a rise in the prices paid for goat hair and cashmere in the early 1970s seems to have halted a marked decrease in this type of herd.

In addition to feeding their own members, cooperatives are able to provide substantial amounts of raw materials for export and for the towns. This works as follows. The *negdel* has a five-year plan of products to be delivered to the State at set prices: the plan being in three sections, wool/hair, meat and fat/milk products. (The prices paid for milk products vary at different times of the year, being higher during the winter when production is less.) Much higher prices are paid, up to 50% more, for production over the plan, and the *negdel* is entitled to sell this surplus anywhere at any price it can get, not only to the State (with the exception of wool/hair). If the plan is not fulfilled, the *negdel* can borrow money from the State to purchase the required products, or it can try to have the plan altered. If non-fulfilment is due to a natural calamity, a State Insurance Fund supplies funds to the *negdel* which need not be repaid.

About 50% of the income of the *negdel* is paid out in wages to the members; the rest goes in building programmes, improvement of water resources, purchase of hay or seed, etc. Payment to workers is at a set rate for planned production and a higher rate for excess production. In 1974, for example, a milkmaid at Gerelt Zam *negdel* got 30 *möngö* per litre of milk up to 450 litres per cow. If she obtained 500 litres from one cow she would be paid 40 *möngö* per litre for the extra 50 litres. These rates may be changed from year to year, depending on the success of the *negdel*, and are determined each year by a commission of about 10 elected members.

Individual herdsmen can sell surplus products and animals to the State and also privately. However, it appears that most animals in private hands which are in excess of the permitted total are killed for meat in the autumn, and surplus meat, cheese, etc. tends to be circulated among kinsmen and friends rather than sold. A State

agency sends around buyers for other, less usable, products, such as bones, horn, tendons, and skin. People can either sell for money, or exchange such products for boots, hats, wooden saddles, etc. which the buyer takes round with him. This operation is interesting, since it shows that many traditional labour processes such as curing of leather, bootmaking, the production of bone and sinew implements, etc. have not been much reduced in the domestic setting.

But herdsmen do not execute the largest jobs in the non-traditional spheres of the cooperative. For tasks such as potato gathering, the digging of wells, the building of byres and stables, and the gathering of the grain harvest, the government encourages the non-productive townspeople to come out to the countryside. All students and teachers, for example, are under strong pressure to work one day a week through the winter at such tasks, and to spend a month or so in the summer gathering in the harvest. This has the purpose not only of creating a reciprocity and a gesture towards equality between town and countryside but also of demonstrating new methods, since town dwellers are more ready to carry out experiments than the herdsmen.

CHANGES IN MONGOL SOCIETY

In the last section of this paper I shall consider the great changes which have occurred in Mongol society as a result of collectivization.

First, relatively fluid kinship-based traditional production units have been replaced by more fixed institutions created to fulfil definite economic plans. Although the two forms are conceptually very different, they have been in practice sufficiently similar for roughly the same personnel to continue through from one to the other. Thus the old Mongol herding unit, called *xot-ail* (camp family), consisting of two or three related households which pastured animals communally, has been replaced by the *suur*, the group detailed by the Brigade to look after a particular specialized herd of the cooperative. In both cases a few families nomadize together, share many tasks, and give mutual help. And in both cases it could probably be said that economic factors were the determining ones, since the composition of the *xot-ail* depended very largely on what kind of labour was needed to look after the existing herds. The

difference lies in the fact that while the xot-ail based its cooperation on the needs of the particular group of people and animals, the suur has an aim beyond itself: the specialization of the work of each suur in fact constitutes a complex division of labour within the cooperative and creates relations of interdependence between the households involved. In Durkheim's classic terminology, mechanical solidarity has been replaced by organic solidarity.

It is this fact which counteracts the tendency for the suur to become an enclosed and isolated group of nuclear families. The xot-ail was never a closed group since it was always involved in wider patrilineal kinship links and, with the comparative fragility of the nuclear family in former times, there were always odd dependents and single people joining in for periods of time. The xot-ail varied in size from summer to winter. In cases where one member was much richer than another there was an element of inequality in many of the relations between them, since the wealthier owner needed the poor man's labour more than the other way around in order to maintain his standard of living. This master-servant element sometimes present in the xot-ail has completely disappeared from the suur, but is replaced by the difference in individuals' willingness to work to fulfil the plan. The fact that the suur is a more or less permanent group, however, from which people can usually only remove themselves for definite reasons such as marriage, higher education, or going to live with grown-up children, increases the element of isolation.

A milking suur might have about 160 cows and 360 head altogether including calves and yearlings. Such a group would contain about ten milkmaids, of all ages from 16 to 60, two calf herders, one specialist in looking after very young animals, and one headman, who would organize the milk collection, bookkeeping, and general management. Such a group, since the workers would mostly be women, would probably be combined with a sheep or horse suur with mainly male workers. In the case of Gerelt Zam mentioned above, the milking suur was joined and under common management with a sheep suur consisting of a herd of 600 with two shepherds. Altogether there were 58 people in the suur. Eleven children were in primary school, about 10 in secondary school, one in a railway technical college, one in an agricultural college, one in military service, and the rest were below school age. The adults consisted of 10 women workers, eight men, and four pensioners. The whole group made large moves four times a year, within a

radius of about 20 kilometres, and several smaller moves, within a general pasture area, about once every two months.

Other suurs, for horses and sheep, tend to be smaller, with only two or three families providing workers. The average sheep suur has 700 head and three families, a cattle suur (for meat production) has two families for 250-300 head, and a horse suur of 250-300 head also has two families. In such cases, if there is too much work at a particular time of year, for example lambing, the negdel sends out workers for a few days from the auxiliary brigade.

A large suur, such as the combined milking and sheep-herding suur described above, consists of two rows of neatly aligned felt tents, with smaller storage tents alongside. At winter and spring camps there are also newly built wooden byres and sheds, with the south wall open. Often there are fenced pens and dung shelters for young animals. A line is strung high between two posts and used for tying up the riding horses. Most suurs are approachable by motor vehicle, especially the winter camps, but cars or trucks are kept at the negdel centre and only occasionally cross the open steppes to visit a suur. A Brigade centre, on the other hand, tends to be situated on a road.

The neat alignment of the suur and many new items of material culture differentiate it from the old xot-ail. Metal utensils, manufactured clothing and footwear, radios, factory-made furniture, are all becoming common and may soon be universal. Food, however, remains based on the products of the privately owned herds: meat, milk products, homemade alcohol. Tea, in large pressed bricks, is imported from the Soviet Union and is an important item in the diet; mixed with cheese, grain, salt and butter, it is served with every meal. Noodles are eaten in small quantities, and so is bread of both traditional and Russian varieties. Flour, sugar, salt and sweets are bought at the negdel shop. Otherwise, the diet, including wild lily bulbs, garlic, nuts, berries and roots gathered by women and children, is produced by each family for itself. In some negdels it may be the case that a certain number of people prefer not to keep private herds and instead buy meat from the negdel for winter, but this is not yet a common practice. Generally, the private herds easily suffice to keep a family well fed during the year; one shepherd with a family of four at Gerelt Zam, for example, had the permitted number of 50 private animals (12 cattle, 5 horses, 33 sheep), and killed for the winter one adult cow, one yearling and 4-5 sheep; in summer he and

his family lived mainly on milk products rather than meat. As Owen Lattimore has remarked, Mongolians are among the best-fed peoples of Asia.¹⁷ (For purposes of comparison, see Table 1 on the size of pre-collectivization private herds.)

Since herdsmen in a *negdel* make use of a limited territory, it might be expected in relation to 'socialist competition' (i.e. the attempt by each *suur* to obtain more milk, meat, wool, etc. than comparable *suurs*) that conflicts would arise between neighbouring *suurs* over use of the best pastures. In practice this happens rarely, because the territories to be used by each *suur* are specified very clearly by the Brigade at the beginning of each year on the basis of scientific estimation of their carrying capacity. Furthermore, pasture is usually plentiful. Conflict is more likely to arise with respect to convenience and closeness of pastures, rather than their availability as such.

Two new developments in the cooperative economy have had the effect of possibly creating social forms which may mediate the isolation of the *suur*. Of course, the Brigade itself could have this function, and does to some extent where it has a settled centre. The Brigade centre and the Cooperative centre have the symbolic function of towns, although they consist of only a few buildings. People travel in to them for meetings and entertainment, but for the herdsmen of the *suurs* they do not constitute social groups where people meet one another on a regular basis. This function is provided rather by three new economic forms: (1) the *khesag* group of *suurs*; (2) a grouping of several *suurs* to perform seasonal or permanent work at a fixed place, and (3) the creation of winter fodder and forage stores for large numbers of animals.

In the first case, the *khesag*, a number of locally contiguous *suurs* have an appointed leader and council and meet together to discuss pasture allocations, cooperation in work, lending one another animals, etc. This is a permanent group. People told me that all the members of the *khesag* know one another well, while this is not the case in the brigade. In the second example, a group of *suurs* is set up periodically with its own head directly responsible to the cooperative and separate from the Brigade. The purpose of the group is usually to do some work with specialized machines which are installed at a permanent site, e.g. sheepshearing, feltmaking. Such groups may only operate at certain times of the year and are often disbanded and reorganized, but nevertheless they represent a new social formation based on a communal enterprise.

In the third case, the hay and fodder production of several sums is brought together to a permanent storage base which is also provided with byres and stabling. An example of this is Xerlen-Bayan where it is planned that 200,000 animals will be brought to winter, coming from several negdels, and where winter houses, a medical centre and a school are being set up. This is planned to be the first of many such storage bases, and it shows clearly the growing tendency, which is also present in the Brigade and Cooperative centres, for the population of herdsmen to group together during the winter months. The more hay and fodder is produced on the farms, the more it is possible to concentrate settlements during the winter. The Mongols see this as a very desirable plan, since it is possible to provide more shops, cinemas, bathhouses for settled people.¹⁸ In the long run, if permanent winter settlements for herdsmen do in fact develop, this will mean that the herdsmen live very different lives from season to season: the winter in populous, well-provided settlements, and the summer out on the distant and isolated pastures. Already, it seems that there are signs that Mongol herdsmen are beginning to prefer life on or near settlements; this is particularly the case when they can be near their children in school.

The question arises about the correspondence between the negdel (and other contemporary socio-economic groupings) and the previous pre-collectivization political and social groupings of Mongol society. This has been a problem in the organization of Chinese communes, where it was found that while very small communes were over-dominated by local kinship ties, very large ones could hardly maintain a centralized administration and effectively fell apart along the lines of the old localities. In Mongolia, it seems that negdels initially did not correspond exactly with either the old sum or the bag, but were in size somewhere between the old sum and the khoshun ('banner'). Because the old settled centres were based on monasteries and it was useful to be able to transform the monastery buildings into administrative offices of the negdels, many negdel centres were on the sites of disbanded lamaseries. There had been on an average one or two monasteries per khoshun and it is likely that the present negdels, many of which are the result of the amalgamation between 1965-75 of the original smaller negdels, correspond more or less to the old khoshun. It seems improbable that this has been a deliberate policy of the Mongolian government. Rather it has probably arisen from a

combination of geographical and economic reasons (availability of water, distance of pastures, presence of roads, and existing buildings).

The Mongols themselves agree that the goals of increased productivity in herding and the settlement of herdsmen are to some extent contradictory. Rationalization of pastures and of herding techniques has tended to make certain specialist suurs more, not less, nomadic than before. This is because in pre-collectivized times some pastures were not used and other were overused, and there were quarrels over pasture in some cases. Poor people often could not organize long and frequent journeys since they had to borrow transport animals. Although there was no general shortage of land, there was no overall authority to see that pastures were used efficiently in terms of production for the society as a whole rather than used simply to further the ends of individual herdsmen (usually in fact the rich herdsmen who had political power). This is an important point because the economic aims of herdsmen before collectivization were not the same as they are now. Then, they were simply concerned with accumulating as many head of animals as possible; if their herds provided them with adequate products for use and a little trade people were not concerned with squeezing the last drop of milk from all the sheep (by separating them from lambs) or to add a few pounds more weight to their animals. Now, the last few pounds are what make a herdsman successful and give him honour and bonus pay; in order to improve the weight and wool, etc. he has to take his animals on *otor* journeys to special pastures, in the case of sheep suurs, twice a year (suurs which do not go on *otor* are criticized at brigade meetings). This means that, at the suur level, some herdsmen may move more often and further than they previously did. Before, herdsmen with mixed herds moved approximately four times a year in accordance with the four seasons; now milking suurs move on an average of every two months, and horse and sheep suurs move even more often. The mapping of territory and centralized planning of moves means that herdsmen cannot 'forget' about distant pastures.

But if rationalization of pastures and herding tends to increase nomadism, other policies are being introduced deliberately to counteract this. The two most important I see as: (1) *hay (and other fodder) production*, which means that certain categories of animals, mainly milk cows, can stay almost unmoved during the winter. Two developments in the last fifteen years have achieved

this: one is the huge investment in fodder crops in the agricultural sector, and the other is the annual transportation of great quantities of hay from the northern and western parts of the country to the arid Gobi regions. And (2) the *irrigation of pastures* and *digging of wells* in the Gobi region generally reduces the distances to be covered in searching for pastures. In general, the Mongols are promoting settlement of their nomadic population by specialization of work. Herding tasks are separated from non-herding tasks (e.g. all political, cultural, educational and technical work) and the latter are given a settled base. Within the herding sector itself, jobs are divided in such a way that only those which absolutely must be mobile are so. Life on a milking *suur*, for example, usually involves moving within a limited radius only, and maintaining a more or less permanent winter site. Only very particular tasks, such as herding adult horses or sheep destined for meat, which really require high mobility, are kept fully nomadic, and here, as mentioned above, the trend may be towards more nomadism rather than less if this is functional.

The possibility of a settled life with a house is gradually bringing a change in the value system of young people. Manufactured goods are becoming more valued and are used more as an incentive by the cooperative leaders. While an old man would still undoubtedly desire a beautiful horse with a good saddle, a young herdsman might well prefer a motorbike or a radio. Formerly, wealth in money was transferred to animals, now the process is reversed. People's values are beginning to reflect the new idea of leisure, which can only emerge together with the idea of professionalism.

Conversely, the abrupt transition from a pastoral childhood to factory or office work in towns has come too quickly for many Mongols, and there is a noticeable longing to get away to the countryside; every summer a section of the population of Ulan-Bator pack up their yurts and disappear over the hills. People often keep a minimum number of private animals in the care of country relatives during the winter and travel out to use the mare's milk during the summer. In the winter, country people visit town, bringing presents of meat with them.

There is thus a continuing integration of the town and the countryside in Mongolian society brought about by the necessity for each of the products of the other. In general the Mongolian economy is undoubtedly moving in the direction of greater industrialization, i.e. in the long term it seems inevitable that more,

rather than less, capital and labour will move into the industrial sphere. Nevertheless, the collectivized herding and agricultural sector will retain its importance (a) in providing food products for the entire population which enable Mongolia to give its people one of the highest standards of living in Asia in this respect, and (b) in providing products for export. Recently, President Tsedenbal has emphasized that the development of industry by no means implies a reduction in the significance of animal husbandry, since its products accounted in 1976 for about 40% of the country's export funds, or nearly 80% if processed products were included. In this current year (1977), however, extra effort by co-operatives (and good luck with weather conditions) will be needed, since the winter of 1976-77 was severe and the total head of livestock may be down by 2-3 million from the 23.35 million of December 1975. Pastoralism in Mongolia has never been safe from such vicissitudes; the existence of co-operatives, the largely agricultural state farms, and the industrial sector, means, however, that individual herdsmen no longer have to suffer the effects in their own private domestic economies.

● NOTES

1. These are approximate figures. Different sources for this period give varying figures depending on how the social divisions of the population are estimated.

2. 50 Years of the MPR, Statistical Collection (Ulan-Bator, 1971), 71.

3. Ibidem, 71; another source, Y.T. Chang: *The Economic Prospects of Inner Mongolia* (Shanghai, 1933) gives 13,710,000 for 1928 (not including goats).

4. H.H. Vreeland: *Mongol Community and Kinship Structure* (HRAF Press, New Haven, 1954, 31-34).

5. G. Erdenejav: 'Traditsionnye metody kochevnikov po ispol' zovaniyu pastbishch', in Sh. Bira, A. Luvsandende (eds): *Role of the Nomadic Peoples in the Civilization of Central Asia* (Academy of Sciences, Ulan-Bator, 1974).

6. Sex ratios have changed as follows:

Mongolia: Sex ratios (males per 100 females)

	Total Population	Sex Ratio
1918	647,500	104
1922	649,900	106
1925	651,700	104
1970	1,230,200	99.5

Source: 50 Years, 45

7. 50 Years, 79.
8. BNMAU-yn Uls Ardyn Aj Axuy 1975 (Ulan-Bator, 1976), 81, 115.
9. Unem, 12 VIII (1963), quoted in S.K. Roshchin, *Sel'skoe Khozyaistvo MNR* (Moscow, 1971), 24-25.
10. BNMAU-yn Uls Ardyn Aj Axuy 1975, 42-47.
11. *Ibidem*, 61, 71.
12. S.K. Roshchin: *Sel'skoe Khozyaistvo MNR*, 209.
13. J.-P. Accolas, J.-P. Deffontaines: 'Les activités rurales en République Populaire de Mongolie', *Etudes Mongoles*, 8 (1975), 9-53.
14. Erdenejav: 'Traditsionnye metody', 336-337.
15. Accolas, Deffontaines: 'Les activités rurales', 36-52.
16. Roshchin: *Sel'skoe*, 210-212.
17. This was however not the case during the late 1930s and the early 1940s, when huge amounts of meat were exported to the USSR, resulting in food rationing in Mongolia which did not end until 1950. This affected the city population more than rural households. C.R. Bawden: *The Modern History of Mongolia* (London, 1968), 345-46.

18. A large negdel would have the following services provided at the different levels of the administrative hierarchy.

At the sum/negdel centre: administrative offices, meeting hall, medical centre with 2 qualified doctors, kindergarten, junior school, 8-year school with boarding house, club, cinema, library, trade centre for procurements and sales, general store, milk-products factory, mill, transport and garage, personal services (baths, hairdresser, etc.).

At the Brigade centre: administrative office, meeting hall, medical point with feldsher/midwife, junior school, communications (road, radio, sometimes telephone), red corner (political education), travelling cinema and library.

At the kheseq: this is not yet a settled point.

At the suur (i.e. travelling): evening school once a week, trade and procurement outlets, radio, artificial insemination team, veterinary service. This is quite instructive about Mongol priorities: vital production aid and political instruction are taken out to the suurs, for other things the herdsmen come into the brigade or the negdel centre. Education is perhaps one of the greatest inducements to settlement in this situation, since it is compulsory for all children over 7, and the children must live in dormitories unless their parents camp nearby. Children of parents who do not belong to the negdel are not allowed to use the dormitory and so their parents must camp near the school during the term.

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