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# **PASTORALISM AND INSTITUTIONAL CHANGE IN INNER ASIA: COMPARATIVE PERSPECTIVES FROM THE MECCIA RESEARCH PROJECT**

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## **INTRODUCTION**

In this paper we outline some of the findings which have emerged from the Cambridge MacArthur 'Environmental and Cultural Conservation in Inner Asia' (ECCIA) project. The project was carried out in collaboration with a number of Inner Asian research institutions with the aim of comparing environmental, cultural and administrative conditions throughout Inner Asia,<sup>1</sup> in an attempt to learn lessons for sustainable pastoral development in the region. The people of Inner Asia are currently reforming their pastoral economic systems in line with their governments' policies. A comparative investigation of their different experiences is important for evaluating the variety of reform options currently being undertaken, and for projecting their likely future effects on society and the environment. For this research the ECCIA project brought together young researchers from a variety of environmental and social sciences, including specialists from the areas covered. The aim was to ensure that the project incorporated a maximum number of regional perspectives and discussions. To obtain both in-depth knowledge and a wide understanding of major processes we used a series of detailed case studies (see Figure 1) carried out by individual researchers, in conjunction with comparative overviews of topics including land use, institutional change, mobility, social organisation and settlement patterns.

## **PASTORAL INSTITUTIONS IN INNER ASIA**

A major aim of the ECCIA project was to compare the different institutions which organise the pastoral economy in Russia, Mongolia and China. The local institutions of high socialism – People's Communes in China, and State/collective farms in Russia and Mongolia – have, to varying degrees, been dismantled in recent years. We make a comparative analysis of this rapidly changing situation.

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<sup>1</sup> Mongolia, Inner Mongolia, Buryatia, Tuva and Xinjiang.

Rather than assuming that there is some ‘default position’ or generic Inner Asian society to which people have recently returned, we analyse the range of new institutions that are taking shape. While the forms of these new institutions reflect the current economic situation, they also bear some legacy from previous eras. We discuss the role of these new rural institutions in the pastoral economies of Inner Asia.

Let us begin with some very general observations. If one were to go to Inner Asia today, one would find that in the **Russian** areas covered by the project (Tuva, Buryatia and Chita Oblast) herders are still for the most part attached to collective institutions. However, the State has largely retreated from the running of these farms. Since the early 1990s their legal basis has changed from that of socialist times, as they are no longer either part of the State structure (the old *sovkhos* farms) or the financial responsibility of the government (*kolkhoz*, collective farms). The relation of the herders to these institutions has also changed, and is now based on individual contracts. In **Mongolia** de-collectivisation has, in many ways, been pursued more radically than in Russia – although State organs still retain some management functions in pastoralism. The early 1990s saw the break-up of most of the socialist institutions (*negdel*, collective farms and *sangiin aj ahui*, State farms). Mostly they were divided into a number of companies (*kompan*) and at the same time a range of firms and cooperatives were set up. Contractual relations with workers are more varied than in Russia, and there are large numbers of private herders too. In **China** (Inner Mongolia, Xinjiang) the State-managed People’s Communes began to be replaced in the early 1980s. The district government and other State organisations still have important managerial and service functions with respect to the pastoral economy, but the overwhelming majority of ‘economic units’ are more or less independent households – usually with their own allocated pastures. These have contractual relations with the district administrations.

The ‘traditional’ practice in the pre-revolutionary period in the open steppes of Inner Asia was based on general access to the bounded pasture territories coordinated by leaders and officials. In Mongol inhabited areas, along with small herder groups of a few families, there were large institutions, notably Buddhist monasteries and the economies of banners<sup>2</sup> managed by the ruling princes. These institutions held their own property or funds (*jas*) consisting of livestock, land and

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<sup>2</sup> Banners were the main administrative units of the Manchu government in Inner Mongolia and Mongolia. They approximated in area to the present counties (banners) in Inner Mongolia. In Mongolia territories of banner size no longer exist; they were amalgamated into *aimags*, which are divided into *sum* (more numerous and mostly smaller units than the previous banners).

money. In Mongolia and Inner Mongolia the animals were herded by monastery serfs (*shabinar*) or banner princes' serfs (*hamjilaga*), while a further class of State subjects (*albat*) paid taxes and performed labour services. The large monastic foundations, with their own territories and people, functioned as districts equivalent to banners, but there were also numerous smaller monasteries located inside the princely banners.

In the forest steppe regions of the north, Buryats and others practised a different type of pastoralism which involved the use of fertilised hay fields (*utug*) along rivers to provide winter fodder. Mobile dwellings were not used – rather, wooden winter houses were dispersed along the rivers so as to make maximum use of land suitable for hay. The hay fields were communally managed by local kin groups which allotted inheritable shares in them to their members. The monasteries in this region were attached to parishes consisting of 'administrative clans.'<sup>3</sup> The economic role of monasteries was limited by regulations of the Tsarist government and they held much less land and smaller herds than in Mongolia. The large numbers of animals donated to them by the faithful were rapidly converted into other forms of wealth. However, in the easterly Aga steppe, which was open grassland, a more mobile type of pastoralism was practised. Here certain aristocrats and lamas had enormous flocks, herded for them by clan members and clients together with their own private animals.<sup>4</sup>

In both areas the herds of individuals, large and small, coexisted with corporate and lasting economic institutions, for which work was done by those of a certain social status. The property of institutions was in principle separate from that of the high lamas and aristocrats who led them. The leader's role was highly important in these institutions and, like other ideas of social status, was acceptable to the ordinary people as ordained in the nature of things (by divine incarnation, by inheritance *etc.*). The pre-revolutionary institutions were abolished during the 1920s and 1930s in Mongolia and Russia and by the 1950s in China. They were replaced by socialist institutions. It is not possible here to develop any detailed comparison between the two. It is worth pointing out, however, that the socialist productive institutions also operated as corporations and that members worked for

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<sup>3</sup> The 'administrative clan' (*rodovaya uprava*) in Buryat areas of Russia was in some ways similar to the banner in Mongolia. Monasteries were founded by clans, which placed their sons in them as lamas. The *jas* of the monastery was divided into two parts, one for the institution as a whole and one to be divided among the lamas according to their religious status. Lamas also had their own personal property gifted to them by the faithful.

<sup>4</sup> Sagja Lama (1858–1909) of the Aga Monastery is said to have owned 7 000 cows, 4 000 horses, 3 000 sheep and over 1 000 camels (Galdanova *et al.* 1983: 72).

them at the same time as keeping their own private animals. Of course socialist institutions were vastly different from their predecessors, notably in their inclusiveness and in the fact that they did not accept externally given social status. Instead, by their operation, they conferred status on their members, classing them in a variety of ranks and specialist occupations (cadres, technicians, herders *etc.*), which gave them both rights and duties.

Very generally one might postulate that there has been a move from status to contract as the basis of economic relations in Inner Asia. This phrase calls up certain images: An historical shift to modernity; a move to legal as opposed to governmental sanctions; a change in the basis of property rights; or the separation of sovereignty from ownership. However, our studies show that these points are debatable as far as actual relations in rural Inner Asia are concerned. People certainly talk about and use ‘contracts’ (*kontrakt* in Russian, *he tong* in Chinese, *darchilig* in Inner Mongolian, *geree* in Mongolia, *keree charar* in Tuvan), but what these terms mean has to be understood within the discourse of the political economy of the various countries (including echoes of earlier concepts such as those described above). Therefore, rather than searching for manifestations of some abstract notion of ‘contract’, it is more profitable to examine the organisational bases of the existing rural institutions in Inner Asia. This is not an easy task even for one country, let alone on a comparative basis.

In order to have some basis for comparison, it is useful initially to divide rural institutions into two types – State (governmental) and non-State – and then to subdivide non-State institutions into three categories – those based on communal or corporatist principles, those based on associations, and those based on the household. Perhaps these categories require some further definition. **State institutions** can be very various, but their common feature is that they are part of wider hierarchically organised structures managed and financed by the government. By **corporate institutions** we mean non-State types of organisation which are conceived as a whole unity, and in which sub-groups or individuals are replaceable members. An **associative institution**, on the other hand, is one in which the organisational form is arrived at by agreement between those who come together to set it up, and the institution’s existence is dependent on continued collaboration between the participants. Finally, a **household institution** is one in which the household, sometimes together with helpers or hired workers, is legally constituted as an economic actor (*i.e.* as a unit of decision making and economic responsibility).

On this basis, if we look generally at the main institutions existing in rural Inner Asia today, we can see distinct and different distributions in the three countries (Table 1). Table 1 provides merely a starting point for discussion. It refers to the predominant institutional forms in each country, and only in the areas studied by the project. Thus it should not be used to deduce, for example, that

there are no remaining State- run economic organisations in Russia. The most important point to note is that the present situation is not immutable. Some rural economic institutions in Russia are changing from the corporate to the associative type, and the number of household farms, having made a brief spurt in 1991–92, has now stopped increasing – at least for the time being. In China the development of associative types of institution has been much weaker.

**Table 1.** The distribution of institutional types in Inner Asia

	State	Non-State Corporate	Associative	Household
Russia		✓	✓	
Mongolia	✓	✓	✓	✓
China	✓			✓

### Kinship networks and recent change

Throughout the region it appears that de-collectivisation has lead to an increase in the importance of kinship and kin networks. In Buryatia, for example, ‘as the family becomes responsible for economic activities, it has had to flexibly adjust its residence so as to facilitate production and gain allocated resources. The self help network of kin and friends are now very important. The ‘mafia’ of the large cities are in some ways only an outgrowth of these networks.’<sup>5</sup> It would be misleading to talk of the kinship *system* being increasingly important in the rural economy. While kinship is one of the principles upon which local social organisation is based, it is not generally elaborated into a large formal system.

While in formerly Soviet regions the increasing importance of kinship and networks can be seen as a response to shortages and economic change, in Chinese areas the importance of kinship is rooted in slightly different factors. In parts of Inner Mongolia, for example, the local government has strengthened and entrenched the economic importance of kinship relations by allocating pasture land to small groups of one, two or three families. As these families were generally close kin the government’s allocation of resources created economic

<sup>5</sup> B. Gomboev (1994) personal communication.

units that were almost always kin-based. This tendency is also emerging in the formerly Soviet regions where in some cases property has been allocated to private family farms. Interviewees often commented that when it came to important matters, such as property, the only people they trusted were their close kin.<sup>6</sup>

In Mongolia, as collective and State institutions have relinquished ownership of livestock and other rural resources, the role of families in productive activity has become more important. Rural families are property owning corporations, and apart from the (as yet very small) property holdings of the Lamaist Church, the only other such corporations are generally remnants of the formerly State structures (that often have a new status as Joint Stock Companies or other 'private' enterprises). Wherever there have been attempts to set up new private pastoral enterprises which are not based upon sections of previously State structures, they have usually been based upon the family.

It is important to recognise that rural Inner Asian families are not clearly bounded units. They are part of a network of relations of social obligation that links settlement with steppe. This socio-economic web<sup>7</sup> predated collectivisation, but adapted remarkably well to the non-commercialised economy of the Soviet period. It is hardly surprising, therefore, that the networks continued to operate after collective assets had been privatised. Throughout the former Soviet areas of the region, for instance, pastoral households keep a large number of animals belonging to friends and relatives (see Sneath 1995a).

The most commercialised of the pastoral economies studied appears to be that of Inner Mongolia, which reflects the relative proximity of large urban markets, the expansion of the Chinese economy, and the relatively good communications infrastructure of the area. In part this might also reflect the importance of Chinese culture, with its long tradition of trade. However, it is important to note that the Chinese economy has not suffered the dislocation that has so affected other parts of the region. There is confidence in the currency and consumer goods are widely available, making cash important enough for it to have a much more influential role in both Inner Mongolia and Xinjiang than in the

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<sup>6</sup> It should be noted, however, that the situation is very different in large Siberian cities, in which families tend to be smaller. In some cases entrepreneurs would like to avoid employing kin in their new businesses, and prefer impersonal relationships with business partners. However, there are often strong family and social pressures not to do this.

<sup>7</sup> This web, albeit with different colours and characteristics, appears to have long been a fundamental aspect of social organisation throughout Inner Asia, but it is understood much less clearly than the formal economic and political structures created by the different governments of the region.

former Soviet economic zone. In the Inner Mongolian study sites, arrangements to keep livestock for relatives or friends – that would generally be non-financial arrangements elsewhere – tended to be paid for with cash. In both Haragant and in Chinggelbulag a third of the interviewed pastoral families hired labour regularly,<sup>8</sup> while little or no regular hiring of labour was recorded in the other case study sites. Although networks of social relations of obligation remain important in Inner Mongolia, it appears that cash is playing an increasingly important role – particularly in the relations between the rich and poor.

The other important general tendency throughout Inner Asia has been the flexibility of social organisation and residence in the face of property ownership. The social and residential groupings seem to be frequently based upon two principles – property ownership and kinship. In Inner Mongolia areas like Chinggelbulag, this can be seen in the clusters of kin around allocated land and housing. In Mongolia it is apparent in the grouping of kin working in the Bayan Tsagaan *horshoolal* (cooperative) in Dornod aimag, and the extended families of Buryatia that maintain both town and pastoral ‘allotments.’

## SUSTAINABLE PASTORALISM IN INNER ASIA

It seems that pasture degradation in certain regions of Inner Asia is severe and that current livestock production practices are unsustainable in a few places, such as in the Barguzin valley (Buryatia). This raises the general question of ‘sustainability’ and how we use the term. As Arrow *et al.* (1995) observed, sustainability, like ‘carrying capacity’, is not a fixed or simple relation – for either animal or human populations.<sup>9</sup> It is contingent on technology, preferences and the structure of production and consumption. It also depends on the ever-changing interactions between the physical and biotic environment. Environmental sustainability is related to ecosystem resilience: Economic activities are sustainable only if the ecological resource base on which they rely are resilient. In any one region there may be multiple locally stable equilibria, and resilience is a measure of the size of disturbances that a system can absorb before it flips over from one equilibrium to another (Arrow *et al.* 1995: 4).

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<sup>8</sup> Three of the nine interviewed pastoral families in each case study site. All those hiring labour in this way were relatively wealthy, being classified locally as either ‘rich’ or of ‘middle income.’ They all paid about 150 yuan a month to their hired herders.

<sup>9</sup> The complexity of the concept of carrying capacity in relation to Inner Asian pastoralism is discussed in more detail in our 1992 Interim Report.

Ecological resilience is difficult to measure and varies from system to system, but there are signals that provide early warnings of essential ecological changes. We thought it was useful to refer in our work both to local (herdsmens') perceptions of environmental degradation and to the assessments of regional specialists. Among the former, with reference specifically to pasture conditions, we list: Marked reduction in the diversity of grass species; observed diminution in the growth of grasses over the annual cycle; increase in unpalatable grass species associated with overused pastures; decrease in density of vegetation distribution; reduction in water levels in rivers; and expansion in sandy areas and dunes. Herders and local specialists also make assessments about the number of years required to reconstitute a flourishing pasture after it has been turned over to agricultural use, and after specific types of degradation. With regard to the assessments of regional specialists, we have taken account of professionally produced models of carrying capacity for pastures of given types (see Gomboev *et al.* 1996).

These methods of assessing sustainability have their own advantages and disadvantages. Herdsmens' judgements are specific and reliable, but they do not enable us to judge adequately the sustainability of a given pastoral system. The professional specialists' models are based on plant productivity, mathematically abstracted over a whole region and are subject to a variety of problems.<sup>10</sup> However, they do enable analysts to make judgements about sustainability at given sites.

The MECCIA project mapped livestock density in Inner Asia, based on local government statistics for each of the regions, using districts of approximately the same geographical size.<sup>11</sup> These maps show relatively high concentrations of domestic animals in much of Inner Mongolia, notably the south eastern areas (where there are also substantial amounts of agricultural land), such as Jirim aimag and Chifeng prefecture. There appears to be noticeable impact upon vegetation cover in these two districts, probably linked to both agricultural and pastoral land

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<sup>10</sup> These include the variability of vegetation yields from year to year, the problems of not taking into account local pastoral practices (*e.g.* grazing behaviour of different species, succession of flocks on a given pasture), the vegetation re-growth factor, the problem of mathematical extrapolation in a highly varied landscape, the ecological characteristics of long cycles, and possible assumptions of a livestock-vegetation equilibria where no such equilibria may exist.

<sup>11</sup> In Mongolia the data were collected at the level of the *sum*; in Inner Mongolia the banner (*hoshuu*), and in Buryatia, Chita and Tuva the *raion* statistics were used.



use.<sup>12</sup> These regions also have some of the highest levels of reported pasture degradation (Figure 2).

**Figure 2.** Percentage of pasture considered degraded in leagues and prefectures of Inner Mongolia

Much of the pasture land in Buryatia and Chita also has high stocking levels, and in general these regions have both static pastoralism and the most significant problems of pasture degradation. Mongolia generally seems to have lower livestock densities than other parts of the region. Interestingly, however, the relatively well watered regions of central Mongolia have stocking levels that are comparable with those of Inner Mongolia and the Russian districts. These Mongolian areas also receive relatively large amounts of annual precipitation

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<sup>12</sup> NOAA AVHRR scenes for 1986–88 show a noticeably lower amount of vegetation in the Jirim region of Inner Mongolia than one might expect from precipitation levels. This may well reflect the intensive use of the land in these localities. The percentage of land used for agriculture is largest in the city districts of Huhhot and Baotou, where they reach 26 % and 22 % respectively (see Longworth & Williamson (1993: 81) for details about other leagues and prefectures).

(300–500 mm) – although this is not much higher than corresponding values in eastern Inner Mongolia. It appears, however, that these parts of Mongolia experience few, if any, of the problems of pasture degradation and desertification that are reported in Inner Mongolia. It is significant that the most densely stocked regions of Mongolia are mountainous, particularly parts of the Hangai range. These areas are not noted for high pastoral mobility – indeed they tend to have shorter annual movements than much of the rest of Mongolia (see Sneath 1995b). However, high stocking rates also occur in the mountainous west of the country, which contain some of the longest annual movements. It seems likely that the range of climatic and pasture conditions that can be found in more mountainous regions tends to allow for high numbers of livestock.

Taken together with the findings from the case study sites, the comparison with Mongolia suggests that the severe problems of pasture degradation reported in parts of Inner Mongolia, may have more to do with the practice of agriculture and low pastoral mobility in these regions than with absolute numbers of livestock.

In Russia (Buryatia, Chita and Tuva) the distribution of high density livestock regions is more patchy. Interestingly, the Buryat and Chita case study sites appear to be suffering from extremely serious problems of pasture degradation, while the Tuvan site is not.<sup>13</sup> Tuvan stocking levels are lower, but not markedly so – and this suggests that the Tuvan pastoralism, being more mobile and more closely resembling that of Mongolia, is also more sustainable. Unfortunately, many of the data we have are at the aggregated level of *raions* – although even at this level they suggest that Tuva has achieved similar livestock densities as Buryatia and Chita, at a fraction of the environmental cost.

### **Pasture degradation and mobility**

Examining the findings of the case studies themselves, it appears that stocking rates alone are a poor guide to the levels of perceived pasture degradation, except where extremely high concentrations are found in the Buryatia and Chita sites, as shown in Figure 3. While in Argada and Gigant there are both high stocking rates and very severe problems of perceived pasture degradation, Ovyur (Tuva) has a higher stocking rate than most sites, and yet has almost no reported pasture degradation. The State farm at Solchur in Ovyur does, however, have a relatively mobile pastoral system. By contrast, the increasingly sedentary Haragant site in

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<sup>13</sup> Kurbatskaya's (1993) report for the MacArthur ECCIA project provides data on pasture degradation in Tuva as a whole, indicating that our case study site at Solchur was typical of rural regions without arable agriculture.

Inner Mongolia combines a comparatively low stocking rate with high levels of perceived degradation.

It appears that in the steppe case study sites, livestock mobility is a better guide to the amount of reported pasture degradation than stocking rate. Comparisons between pastoral systems in each case study seem to support the widespread perception among herders that restrictions on livestock movement are a major cause of pasture degradation. One of the most significant changes in the pastoral systems of Inner Asia has been a reduction in the amount of mobility in certain sectors. The Mongolian and Tuvan systems seem to have retained a greater degree of mobility than those in other parts of Inner Asia (see Sneath 1995b).

**Figure 3.** Comparison of stocking rates and perceived pasture degradation in the case study sites

The re-allocation of pasture land to individual households being carried out in Inner Mongolia is historically unprecedented in Inner Asia. It raises questions as to what extent such allocation will continue to reduce the annual movement of livestock in the region, as this policy does seem to have reduced mobility in the case study sites.

### **The fodder and the winter ‘bottle neck’**

Throughout Inner Asia, the luxuriant grass produced in the wet summer season can support larger numbers of livestock than the dry and sometimes snow covered vegetation of winter. Pastoralists have developed two main techniques to deal with this problem. In the steppe regions, which includes most of the area covered by the project, frequent movements to flexibly chosen pastures enables herders to make best use of the grasses available in a given year. This is no longer possible in many regions where pastoral mobility has been reduced, but in some areas the winter *otor* (short pasturing trips away from the settlement) continues to be particularly important for more rapidly moving species such as sheep, goats and horses. Over the last fifty years the use of natural hay (mown in summer to feed the animals during winter) has increased, but a much older strategy for the intensification of production is essentially to make more frequent and longer seasonal migratory movements. In the hilly northern parts of the region, where the forests and steppe meet, alternative strategies had to be used. In these regions valleys are more frequently snow covered in winter and the large areas of forest cover reduce the amount of open steppe pasture. Intensification was traditionally achieved by cultivating (manuring and irrigating) hay fields (*utug*) in the valleys. Animals were also moved to summer pastures, but the main strategy was to increase herd size above the number sustainable on natural pasture during winter by the regular production of hay.

Clearly a single approach to pastoralism is not appropriate for the whole Inner Asian region and local geographical conditions should be taken into account in decisions about land use and herd composition.

### **PASTORAL INTENSIFICATION, LABOUR AND MECHANISATION**

The importance of large herd owning institutions in the past is an interesting element in the development of a model for the current rural economies of the region. If a system of wide pastoral movement is seen as a long standing method of pastoral intensification, often supported by a large scale institution, it bears comparison with the other principal strategy for economic intensification in the region – agro-industrial sedentarisation – which has been applied through collectives and State farms. In a highly mobile pastoral system an adequate supply of (natural) primary produce is maintained by frequently moving the herd. In the sedentary model conditions are created so as to maximise the amount of fodder grown, which is then harvested and fed to relatively static animals. Both strategies require an intensification of labour, which can be addressed through the

application of mechanisation. This might suggest the simplified and notional model illustrated in Figure 4.

In the sketch, the term 'labour' refers to the effort and difficulty of a particular system rather than the number of workers. Point C represents a highly mobile extensive system of pastoral land use with frequent movement. It requires a relatively high level of labour (but not necessarily in terms of a large labour force) to move animals, families and belongings frequently and sometimes over long distances. Some of this work can be eased by utilising animal power, but the greatest reductions are achieved through mechanised transport. Point A represents the relatively high amount of labour needed to support an entirely static herding system on steppe land. Land must be ploughed, and hay and fodder cultivated, harvested and supplied to the herds. Irrigation and manuring of fields is often necessary in Inner Asian conditions. Again, animal power has been applied to this task, but mechanisation allows for a great reduction in the necessary labour.

**Figure 4.** Simplified model for the effect of mechanisation on production effort in different pastoral systems.

The point here is that small producers, at point B on the diagram, are unable, without new investments, to provide the labour and/or mechanisation necessary

to successfully achieve either form of intensification. (They also lack the organisational resources of a larger institution to facilitate access to large areas of land.) Without institutional support there is a tendency to 'fall back' to an achievable system that does not require much labour and is also relatively immobile. It is important to note that State and collective farms have been able to support both forms of intensification through mechanisation. Thus in Mongun-Taiga (Tuva) in the late 1980s, all herders' migrations were carried out by trucks supplied by the farm, and herders often used motorcycles to get to pastures and even for certain types of herding. It is not that we would recommend this type of practice, but the point is that mechanisation (water carrying trucks, mobile shops, livestock transport, hay cutters *etc.*) can be used to support the distinctive Inner Asian 'tradition' of pastoral intensification through mobility. In present economic circumstances this would require a definite policy decision from local authorities to provide petrol, vehicles and repair shops strategically and in the public interest. Today's herders in Inner Mongolia are no strangers to the fact that mechanisation reduces labour, and around one third of herders in our studies used mini-tractors for personal transport or minor haulage. However the high price and uncertain supply of fuel and repair facilities, and the uneven distribution of tractors, means that they are not used effectively to sustain a mobile system of pastoralism in the districts as a whole. In Hargant (Inner Mongolia), for example, certain distant pastures are under-used. The message is that district wide management, possibly underpinned by specific herding institutions, could reconstitute intensified and market-oriented production on a mobile model.

## IMPLICATIONS FOR ECONOMIC POLICIES

Our studies show that rural networks, particularly kinship relations, are of key importance to the pastoral societies of Inner Asia. These networks link herding and urban families, and provide channels along which many goods and services flow. One implication of the importance of this Mongolian 'indigenous service economy' for market reforms is that a fully commoditised rural economy is unlikely to develop in the near future (see Sneath 1995a). Subsistence production, together with production for minor exchange along these networks, will probably remain the first priority for much of the pastoral population for some time. It seems likely that as long as real incomes remain low relative to food prices, a good deal of pastoral produce will continue to flow through network relationships, alongside whatever markets continue to emerge.

A comparable situation exists in Russia, even though various forms of collective farm still dominate. An earlier study for the project in Tuva showed that even within collectives subsistence production on small 'private plots' had become

the priority for the members. Collective production continues to decline dramatically, and a cycle has developed in many places whereby a combination of low prices, late payments, and the increasing difficulty of obtaining credits has resulted in the collectives being unable to make regular wage payments. Without wages the farm members are forced to turn to subsistence production as a priority.

Mongolia also faces grave economic problems. Real wages halved between 1990 and 1992, and then declined by a third in 1993. More than a quarter of the population are now living below the poverty line, which itself is very low. Unemployment has also increased rapidly, and is set to continue to rise steadily in the foreseeable future.<sup>14</sup> Infrastructure, local government buildings, schools and health facilities are in dire need of investment.

The reduction in buying power of most of the population has added to the difficulties of economic disruption. The shift towards subsistence, found in the Russian and Mongolian case studies, suggests that some of the economic measures designed to promote the circulation of goods on the market have actually subverted it. As Shombodon (1995) points out, privatisation led to most rural families owning livestock, and as a result the market for these products has declined. Conditions for herders have worsened, and most rural households are short of consumer goods and non-locally produced foods (rice, flour products, fruit, sugar *etc.*).

In Mongolia the nature of the emerging rural economy will be largely dependent upon the social organisational forms of pastoralists. Wasow (1995) has asked the crucial question, will pastoral families react to higher prices for their products by selling more or selling less? Mongolian pastoralism can be perceived as containing a spectrum of economic orientation ranging from large scale 'maximising' and 'specialist' herding on the one hand, to small scale 'subsistence' or 'domestic' production on the other (see Sneath 1995b). In the socialist period the large scale pastoral operations of the collectives and State farms were linked to the small domestic economies of pastoral families by the network of social relations mentioned above.

It seems that in Mongolia the privatisation process, which distributed livestock to herding households, is leading to an increase in the domestic-subsistence orientation, and (in the short term at least) a decline in the economies of scale of collectives and other specialist-maximising agencies. This would suggest that the reaction of pastoralists to changing prices will depend on the balance between two modes of economic activity. The maximising specialist mode is likely to result in production aimed directly at the market, while those

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<sup>14</sup> An estimated 60 000 workers were unemployed in Mongolia in early 1995, from a population of 2.2 million (World Bank 1994: iii)

pastoralists with a primarily domestic subsistence orientation are likely to have rather limited market responsiveness. As these productive modes appear to be linked to herd size as well as the individual and personal characters of individuals, we suggest that larger owners and large herd owning institutions are most prone to market orientation. An example of an optimistically market-oriented association, the Bayan-Tsagaan Horshuulal in Dornod Aimag (Mongolia), consisting of around 30 members, is described in Sneath (1995a) and Humphrey (1995). At present the proportion of herders belonging to such groups is, however, small.

All the pastoral households in the case studies were asked what they would do in response to increases in the prices of livestock and livestock products. More than half the respondents in both the Chinese and Mongolian surveys said they would make no appreciable changes. Around 20 % of the respondents in both countries thought they might increase wool production if prices rose dramatically, but only 10–15 % said they would sell more livestock. The aim of most pastoral households in all sites appeared to be to increase the number of their animals by consuming or selling as few as possible.<sup>15</sup>

Even in Inner Mongolia, where economic reforms (including the private ownership of livestock) were introduced in the mid 1980s, the ability of many pastoralists to change their herding practice in response to market fluctuations appears to be limited, and subsistence production continues to be important. Mongolia does not have Inner Mongolia's economic advantages of inclusion in the growing Chinese economy, financial confidence or easy access to huge markets with a wealth of consumer goods. It seems unlikely, therefore, that Mongolia will be as successful at promoting widespread rural market orientation in the short term. In Inner Mongolia and Xinjiang, herders are becoming increasingly polarised into those with the technology to support relatively large herds and able to benefit from market conditions, and those forced to use short term (often environmentally harmful) strategies to maintain subsistence. Although the herders in the Chinese regions of the project are generally more market-oriented than those in Mongolia, the Chinese pastoral economy as a whole suffers from its peripheral position in the vast national economy and from the fact that individuals within the

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<sup>15</sup> In the three Mongolian sites 57 % reported that they would make no change in the face of price increases; 20 % said they would increase the amount of wool they sold, usually by increasing the number of sheep in their herds; 10 % said they would try to increase their sales of livestock if prices increased; and 6 % said they would sell fewer livestock as prices rose, so as to enlarge their herds faster. (7 % gave no response.) In the Chinese studies 63 % said they would make no changes; 18 % said they would increase wool sales; 15 % said they would increase livestock sales; and 5 % made no reply at all.



myriad of small producers are not in a strategic position to influence market conditions.

## CONCLUSION

The principal mechanisms of both cultural and pastoral economic change in the steppe areas of Inner Asia are the institutional forms introduced to the region over the last seventy years. State run organisations created entirely new patterns of land use, power structures, lifestyles, educational environments and aspirations. The livestock economy was organised by means of large collectivist farms that divided herders into specialist brigades. These institutional forms were perforce adapted to meet local conditions, but were originally products of Chinese and Russian political cultures. It was in Mongolia and Tuva (Russia) that these institutions were allowed to organise practical herding in ways that most closely resembled earlier pre-socialist pastoral organisation. The collectives in these regions made fewest changes to earlier patterns of land use (the relation between use of land for pasture, hay, fodder crops, crops for human consumption *etc.*), and they kept, or even enhanced, pastoral mobility for certain types of herds. Mongolia and Tuva are regions where good environmental conditions have been maintained.

The districts in China which have retained large State farms with a similar specialised organisation also contain pastures which are in relatively good condition. The issues here are complex but, overall, our findings challenge the widespread Western assumption that collective type farms are, by definition, culturally and environmentally destructive. Our research suggests that they should continue to be part of policies for management of the livestock economy in combination with other forms of organisation.

In Mongolia, during the pre-revolutionary and socialist periods, long migrations were used as a strategy for intensifying production. This approach was used by large herd owners and institutions to produce for non-subsistence exchange (see Sneath 1995b). This argument challenges the stereotypical view that seasonal migration is something of a 'primitive survival technique', and that the only way to intensify pastoral production is to reduce mobility.

The case studies also suggest that pasture degradation is associated with the loss of mobility in pastoral systems. In both pre-revolutionary and collective periods, pastoral movement was often facilitated by large herd owning institutions. One of the effects of privatising livestock has been to reduce the amount of movement undertaken by many pastoral households. The more mobile of the case study sites were those in mountainous regions, and those (in Tuva and Mongolia) where a State or collective farm continued to organise and support pastoral movement. Very low mobility and the cultivation of fodder crops with the use of

heavy machinery in Buryatian regions is associated with severe pasture degradation. Privatisation in China, also accompanied by reduction of movement, again seems to be correlated with a decline in pasture quality in many areas. These findings challenge the idea that sustainable pastoralism in Inner Asian steppe regions can be achieved without retaining mobility.

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**Figure 1.** MacArthur ECCIA project case study sites.

