

LAW AND DISORDER IN MONGOLIA: LOCAL IMPLEMENTATION OF MONGOLIA'S LAND LAW

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Abstract

With the dismantling of herding collectives in Mongolia in 1992, formal regulatory institutions for allocating pasture vanished, and weakened customary institutions were unable effectively to fill the void. Increasing poverty and wealth differentiation in the herding sector combined with the lack of formal or strong informal regulation led to declining nomadic mobility and increasing trespassing and out of season grazing—a downward spiral of unsustainable grazing practices. In 1994, Mongolia's parliament passed the Land Law, which provides for the issuance of land possession contracts (leases) over pastoral resources such as campsites and pastures. Implementation of leasing provisions began in 1998-1999. This paper examines the implications of land lease implementation at the local level, including differing interpretations of the law by various stakeholders, the potential impacts of leases on poor herders' access to resources, and the potential role of pastureland leases in rangeland co-management institutions. Changes in herders' patterns of resource use since 1995 are explored based on a 1999 resurvey of herding households studied in 1994-1995.

Introduction

Land titling and registration are considered prerequisites to a functional and fluid market in land. Land registration is promoted because it enables governments to collect property and real estate transfer taxes, it allows landowners to obtain credit using land as collateral, it stimulates investment in land improvements that lead to increased productivity and land stewardship, and, presumably, it promotes economic efficiency by facilitating transfer of land to those who make the best (i.e. most productive) use of it (Demsetz 1967; Dale 1997). The creation of private property is usually the objective of land registration and titling. However, titling may also be used to secure the rights of a group of individuals to a defined territory, thus improving the opportunity for successful self-regulation of common property, at least in theory (Bruce 1996). Recently, land titling schemes in developing countries have come under increasing scrutiny, as have assumptions about the outcomes of land registration (Atwood 1990; Place and Hazell 1993; Jansen and Roquas 1998; Firmin-Sellers and Sellers 1999). This paper examines the first phases of implementation of Mongolia's land law, which provides for the allocation of land "use" and "possession" contracts. The land law is justified, in part, by the argument that secure tenure to pastoral resources should lead to improved resource management and decreasing conflict among resource users.

In Mongolia, private property in pastureland has never existed, and privatization of pasture remains unconstitutional. Rather, there existed a complex of distinct but often overlapping or nested tenures to a variety of resources vested in groups of different sizes and social functions and governed by an array of formal and informal institutions. These pastoral resources included seasonal pastures (winter, spring, summer and autumn), natural and man-made water sources, campsites, animal shelters and corrals, hay-cutting grounds, salt licks, and stock driveways. Prior to Mongolia's communist revolution in 1921, pasture allocation and use were governed in many areas by a combination of formal regulation imposed by ruling nobles (either secular princes or high-ranking lamas in the Tibetan Buddhist church), and informal norms and customs described by herders as "unwritten law" (Fernandez-Gimenez 1999). During the last thirty years of socialist government (1960-1990), pasture use was regulated by the state, through the mechanism of the *negdel* or collective, although customary patterns of use and tenure informed

negdel decisions to varying degrees. Since the demise of socialism in Mongolia (1990), and the difficult emergence of a market economy and democratic political system, pasture use has not been formally controlled. The collectives that once allocated pastures and campsites and directed seasonal movement patterns were dismantled in 1992 and state-owned livestock were privatized. Although some customary forms of social organization quickly re-emerged, notably the traditional residential unit of the herding camp or *khot ail*, institutions to govern pasture use have not re-evolved in most places. As a result, by 1995, once coordinated pasture use patterns had disintegrated, and grazing patterns were characterized by out-of-season grazing of reserve pastures, concentrations of herds and herding camps near roads, settlements and water points, and decreasing mobility (Fernandez-Gimenez In Press).

In 1994 the Mongolian Ikh Khural (national legislature) passed the Land Law, which contained provisions for the regulation and management of pastureland, as well as leasing of campsites and pasture. Leasing of campsites began in 1998. This essay reports on the implementation of Mongolia's land law at the local level, stressing the continuing challenges to providing both security and flexibility to herders in a nomadic pastoral society. After first introducing the study communities and methods, we summarize the sections of the land law that apply to pasture and other pastoral resources, highlighting key provisions as well as ambiguities that threaten to undermine the law's utility. Next we report on current land-use patterns in Jinst and Bayan-Ovoo and on how the law is being implemented in each sum. The fourth section describes how herders, local authorities, and other stakeholders interpret the law and its provisions. In the final section we summarize our findings and discuss their implications for the sustainability of the steppes and the livelihoods that depend on them.

Study Sites and Methods

Jinst and Bayan-Ovoo Sum (districts) are located in eastern Bayankhongor Aimag, Mongolia. Bayankhongor, one of 18 *aimags* or provinces in Mongolia, lies in west central Mongolia and extends from the crest of the Khangai Mountains in the north, to the border with China in the south. The province spans four ecological zones, from alpine tundra at the high mountain elevations, to mountain-steppe pastures in the

Khangai, through the expanse of the steppe and the desert-steppe or Gobi, to the true desert at its southern extremes. In 1999, Jinst, covering 5,002 km² in the desert-steppe, contained 605 households, of which 584 owned livestock and 503 were listed as “full-time herders” in government records. Bayan-Ovoo, which spans 3,213 km² in the steppe and mountain-steppe environments, was home to 870 households, of which 773 owned livestock and 650 were full-time herders.

In pre-revolutionary times, most herding households in the area now encompassed by Jinst and Bayan-Ovoo (and several other sum) migrated over large areas, spending the winters sheltered in protected valleys or outcrops in the low Narin Khar Ridge, or the foothills of Ikh Bogd Mountain in the Gobi Altai mountain range; migrating north along the Tuin River in spring to graze the lush summer pastures of the Khangai in the mid-summer months. In the fall, they returned to the Gobi, camping on the sweeping steppes and near desert salt marshes, where livestock used naturally occurring mineral licks and fattened on salt-shrubs, wild onions and cured desert grasses. Many households herded livestock owned by the ruling monastery, and their migrations were governed by the Lamiin Gegen, the powerful religious leader of the territory, who dictated seasonal movements through appointed local leaders.

Under the *negdel* system, scope of migration was severely curtailed, and most herders were confined to the boundaries of their sum or even to their sub-district or *bag*. However, the *negdel* enforced seasonal movements and in some sum regularly sent groups of herders on long-distance *otor*ⁱ trips to other districts, and occasionally to other aimags. A key feature of pastoral land use in the pre-revolutionary era, the *negdel* period and today, is the practice of setting aside certain areas for use only during the winter and spring seasons. These areas were left ungrazed in summer and fall, so that the standing dried forage will be available for animals to eat during the harsh non-growing seasons. In the pre-revolutionary era, the large distances between traditional winter and summer pastures precluded out-of-season grazing. In the *negdel* era, out-of-season use of winter and spring pastures was punishable by fines (Negdel 1990). Today, there is neither sufficient spatial segregation between seasonal pastures, nor effective sanctions by government or community to prevent out-of-season grazing of reserves.

We first studied Jinst and Bayan-Ovoo in 1994-1995, conducting intensive case studies in each sum, including a survey of a stratified random sample of 102 herding households, over 200 interviews with herders and local officials, and 11 months of participant observation living in herding camps. In April 1999, we re-surveyed 42 households of the original 102 herding and interviewed herders and local officials at length to determine how livelihoods, land-use patterns and property relations had changed since the first survey in 1995ⁱⁱ. In particular, we focused on herders' and officials' knowledge about and attitudes towards the recently-implemented Land Law, and their responses to several proposed alternatives to conflicts over resources and declining pasture conditions.

The Letter of the Law

Types of Rights in Land

The land law in Chapter One distinguishes among three types of rights in land: “land ownership,” “land possession,” and “land use.” Land ownership, unlike use or possession, includes the right to dispose of the land. Land possession is defined as “the management of land within the framework allowed by law and in accordance with contract with no right to dispose thereof.” Land use is the right to make use of a particular land *feature* with no right of disposal. In practice, there is considerable confusion over the distinction between “possession” and “use.” The former seems to imply an exclusive right, while the latter a non-exclusive right, particularly with respect to grazing. The term “common use land” is used throughout the law but is never defined. The implication is that any land owned by the state and not owned or possessed by individuals or economic entities, and not reserved for special uses by the government, is “common use” land, available for joint use by residents of the jurisdiction in which it is located. It is unclear whether the grant of “use rights” confers any greater exclusivity over the right to use common use land than is implicit in its designation for common use.

Rights and Responsibilities of Local Governments

Chapter Four sets out the rights of sum governments to control implementation of land legislation, to approve land management planning within their territory and to take

state land not in use by citizens or economic entities for special needs. Sum governments are empowered to “conduct control over whether land possessors and users are using and protecting land and its resource efficiently, rationally and in accordance with law and contract in their territory,” to make decisions on land possession and use by citizens, and to impose land fees on land possessors and users. Chapter Five requires that sum governors submit an annual report (“Unified Land Territory Report”) to the aimag each year, reporting the size, characteristics, assessment, payment and protection activities of land in their territories.

Bag governors and citizen *khurals* (councils) are charged with regulating common use land not allocated for possession or use by others; making a seasonal schedule for pastures not allocated to others and allocating haymaking areas; ensuring sanitary conditions on common use land within the bag; and, at the request of the sum governor, allocating winter and spring campsites not already possessed by others. In general, the bag leaders are responsible for implementing decisions made at the sum level and are fundamentally responsible for the protection and use of common use lands. As will be shown in later sections, local government officials have very different views on their power to regulate pasture use.

Conditions for Land Use and Possession

Chapter Six specifies how land may be possessed and the conditions for requesting and receiving land possession. Significantly, nowhere does the land law provide for land ownership, as defined in Chapter One. Only land possession and use are discussed. The chapter on land possession first describes the allocation of land to citizens for residential purposes. It provides that land on which a citizen’s ger (traditional dwelling) or house stands shall not exceed .05 ha, with an additional .1 ha allowed for cultivation of vegetables, fruit or fodder for citizens living in towns, villages or settled areas. The government shall establish the size of land that may be possessed by economic entities and organizations for production and service (commercial) activities.

Possession contracts may be established for terms up to 60 years and rights of possession may be transferred by inheritance. The law specifies a routine procedure for applying for land possession rights. The decision to grant a land possession contract over

state-owned land is made by sum governments. No criteria are specified, except that in the event of a refusal to grant a requested possession contract, a justification must be provided. If two people apply for the same piece of land, the decision is to be made considering the administrative and territorial jurisdictions in which the applicants reside (implying that local residents have priority), the applicant's ability to pay, the intended land use, and the environmental impact. The rights and obligations associated with land possession are also spelled out.

Common Use Lands and Rights of Way

Article 38 discusses land use, specifying that “the following land shall be commonly used if not otherwise indicated by law regardless of whether it is allocated for possession and use by others: 1) water sources in pastures and salt lick areas, 2) Common Use land in Cities, Villages or Other Settled Areas, 3) Transportation and Network Land, 4) Forest Resources land, 5) Water Resources Land.” Article 42 provides that land possessed or used by others may be crossed unless fenced or specially posted with warning signs. Land possessors and users have the right to require a person using land with limited rights, such as for crossing, to terminate their use if it renders the land unsuitable for its original purposes (e.g. grazing).

These provisions protect the rights of all herders to access these essential resources, an issue that is clearly of major concern to herders. However, by mandating that salt licks and natural water sources remain available for the use of all herders, the law potentially undermines initiatives to grant exclusive tenure over large areas to herding associations or groups to manage for their collective use.

Pasture Use, Possession and Regulation

Chapter Seven, Article 51 deals specifically with pasture. Sum governors are charged with managing land, protecting pasture and “regulating its carrying capacity.” Paragraph 3 provides: “Pasture use shall be governed by the general schedule for winter, spring, autumn and summer settlements pursuant to the traditional system. Summer, autumn, and reserve pastures shall be allocated to Bag and Khot Ail and be commonly used.” Aimag and sum governments may establish pasture [extensive, nomadic] and

settled [intensive, sedentary] livestock herding zones within their jurisdictions, and may negotiate among themselves reciprocal pasture use agreements in the event of climatic disasters. In a key provision Article 51 also states that aimag and sum governors “may take measures for pasture protection such as release of pasture which has been overgrazed and whose carrying capacity has been exceeded, or limit the number of livestock.”

Here again, the law is murky on the meaning of common use and seems to imply that only winter and spring pastures may be allocated under possession or use contracts, while summer, autumn and reserve pastures must remain open to all. The sum governors are empowered to regulate livestock numbers (“carrying capacity”) and to protect pastures.

Monitoring

Article 55 mandates that a state certificate of land characteristics and quality be issued every five years and upon the termination of land possession or use rights. Specific land characteristics to be monitored are specified, including soil fertility, pollution, vegetation cover and species composition.

Dispute Resolution

The final chapter of the law, Chapter Eight, specifies processes for settling land disputes, provides for compensation for damage to land and fines for violations of the legislation. In general, disputes that cannot be resolved by the parties themselves are referred to the next highest level of government; disputes among bags to the sum governor, disputes among sums to the aimag governor, and so on.

In sum, the law provides broad authority to sum and bag governors to regulate pastoral land use and allocate land. As will be shown in the next sections, local interpretations of the law vary notably from the apparent letter of the law. The law also contains serious ambiguities in its failure to define “common use” and to distinguish sufficiently between “possession” and “use.” It appears that possession allows for exclusive rights vested in an individual or economic entity, whereas use confers a right to

use, but not a right to exclude other potential users. Further, the provisions relating to common use lands (including water fund land and salt licks), which state that these lands must be used in common, could easily undermine secure tenure to pasture on which water sources are located. Finally, the law appears to prohibit allocation of summer and fall pastures under use or possession contracts (allowing for common use only of these pastures), which may limit the options for future co-management, by precluding allocation of territories including all four seasonal pastures to grazing associations for their management.

Local Implementation of the Land Law and Current Land-use Patterns

Planning and Management

Apart from submitting the required annual Land Use Report, the local governments of Jinst and Bayan-Ovoo engaged in no land-use planning or management activities, nor did they attempt to regulate seasonal movement, pasture use or livestock numbers in any way, despite the common perception by officials that local carrying capacities had been exceeded. As the section on stakeholder perceptions will show, interpretations of the law by local officials and herders largely explain the lack of implementation of planning and management provisions at the local level.

Land Leasing

Land leasing, that is, the granting of possession and use contracts over land, has been implemented to a limited extent. Campsites have been allocated, but pasture has not. By spring 1999, allocation of possession contracts for residential and commercial plots in sum and aimag centers had been completed. The allocation of possession contracts over winter and spring campsites was in progress. There were no plans to allocate possession contracts over pastureland to individuals or groups of herders. According to Bayankhongor Aimag officials, possession contracts for campsites were issued to individual households in Gobi sums and to khot ail in most Khangai Mountain sums. In the latter case, each group was to choose one individual as the primary leaseholder, but the names of other joint owners were to be listed on the contract. In Bayan-

Ovoo Sum, where at least one of the bags is in the Khangai, contracts were issued to individual households rather than khot ail.

The criteria used in allocating possession contracts varied slightly from sum to sum. In Bayan-Ovoo Sum, contracts were issued over .05 ha plots containing campsites and animal bedding grounds based on: 1) length and continuity of past use of the campsite, 2) customary hereditary rights to the campsite (i.e. parents camped there in the past), 3) use of the campsite during the negdel (collective) period, and 4) development of a new campsite or bedding ground on unoccupied ground or on a site abandoned for several years. In Jinst Sum 60-year contracts over .07 ha plots were granted using these criteria: 1) the herder was “born” at the campsite, 2) inheritance from parents, and 3) use during the negdel period. If more than one household used the campsite, the household with the longest residence received the certificate. In both Jinst and Bayan-Ovoo, where contracts were issued to one household per campsite, there were many more households than campsites. In Jinst, only 300 of 503 herding households were issued possession contracts, leaving 200 households without secure tenure. The situation was similar in Bayan-Ovoo. In both sums, households that were not allocated campsites were advised to claim an abandoned campsite, develop a new campsite on a previously unused site, or to “stay with relatives” or negotiate with other contract-holders for campsite access. According to Jinst Sum officials, most of the 200 households without a contract are poor, owning few livestock, or are recently married couples (new households).

Livelihoods and Land-use Patterns

In this section, we report some of our survey results on herders’ pasture use behavior and socio-economic conditions. The survey largely confirmed the national trend of increasing wealth differentiation among herding households. Average herd size among wealthy households increased from 58 *bod* in 1995 to 80 *bod* in 1999, with extreme variation among households (20-472 *bod*, SE 19.5). The *bod* is the traditional Mongolian livestock unit, equivalent to one bovine or horse, 7 sheep, 10 goats or 0.75 camels. Livestock holdings among households in the “poor” group barely changed at all since 1995 (from 29.2 *bod* in 1995 to 29.6 *bod* in 1999) and varied little among households (SE 3.9). While the poor remain poor, failing to keep pace with inflation, and

middle-income herders struggle to maintain their livelihoods, a few herders are becoming extremely rich.

Several differences in herding practices and patterns of pasture use have emerged in the past several years in Jinst and Bayan-Ovoo. First, mobility, measured in the average number of moves made over the past 2 years, the average distances moved, and the number of different campsites used, has changed little since 1995, although the total distance moved over two years increased. However, mobility among the poorer households has increased, while the wealthier households have become less mobile (Table 1). The means of transportation remain unchanged over time, with the wealthier group relying on camels about half of the time, and trucks or tractors a third of the time, while poorer households use vehicles 40% of the time and camels 36% of the time. The remaining moves are made using pack yaks—which the poor use more often. The frequency with which households make otor moves has increased slightly among the wealthier households, and remained constant among the poorer households.

We suspect that the explanation for these unexpected changes in mobility patterns lies in changing institutions of access to pastoral resources. We hypothesize that as campsites are formally allocated through possession contracts, often to wealthier households, poorer households must move more often and farther to access winter and spring campsites and shelters. Conversely, as wealthier households obtain secure rights over campsites, they are less likely to use alternate sites and more likely to remain close by to protect the surrounding pasture from trespassing. This hypothesis is supported by our finding that more than half of the poorer households reported camping at another household's campsite in the past 5 years, while only 8% (2 of 24 households) of wealthier households did (Table 2).

Herders in both groups reported a sharp decline in the frequency of trespass on their own campsites (7% in 1999 vs. 31% in 1995), a pattern that also may be related to the formal allocation of campsites. The frequency of trespass on reserve pastures has also declined overall (34% 1999 vs. 58% in 1995), as has the rate of out-of-season grazing of by customary users (26% in 1999 vs. 41% in 1995). Wealthier herders report far higher rates of pasture trespass than poorer herders. This may reflect the fact that wealthy herders perceive that they have rights over pasture. In contrast the poor, lacking

possession contracts over campsites, also feel that they lack informal rights to pasture and hence to not perceive that their rights are violated when others graze the pasture they use. More than half of the poorer households reported that they did not reserve winter, spring or emergency pasture, while only a quarter of wealthier households did not set aside any reserves. Again, this seems to indicate that poorer households, with no secure rights, do not have sufficient influence over the pasture they use to reserve it for winter. In fact, because they lack secure rights to campsites, they may not know in advance where they will be able to spend the winter, making it impossible to set aside pasture for winter and spring useⁱⁱⁱ.

Overall, these patterns tell a somewhat contradictory story about the changes occurring in Jinst and Bayan-Ovoo. Trespassing has apparently declined and mobility among the poor has increased, both positive changes in the abstract. However, the allocation of campsite leases primarily to wealthy households, and the resulting decline in tenure security to both campsites and pastures for poor households, may threaten sustainable livelihoods for the poor as well as the potential for coordinated self-regulation of pasture use within local herding communities.

Stakeholder Perceptions of the Law and Local Conditions

Ecological Conditions & Pasture Management Problems

Herders

Increasingly, herders in Jinst and Bayan-Ovoo Sums acknowledge negative changes in the environment, and the role that human activities play in causing these changes. These attitudes are markedly different from those documented by the authors in 1994-1995, when most herders perceived grazing-induced changes either as temporary, reversible, and no cause for concern, or as an inevitable process of earthly aging, which they were powerless to influence (Fernandez-Gimenez In Press c). Although the latter perception is still apparent, especially among elder herders, many herders now perceive the main causes of declining pasture conditions to be increasing numbers of animals and the decline in mobility—particularly the trend for households to camp in one place for all four seasons and graze the surrounding pasture year-round without an opportunity for the

area to rest. The following quotes and excerpts from interviews with herders in Jinst and Bayan-Ovoo are representative of the comments made by herders in April 1999.

“The number of animals has increased a lot, the pasture has been used repeatedly, so the yield has been diminishing, the carrying capacity has declined and is seriously insufficient. It was all right when the sum had about 70,000 animals, but now it has over 100,000, therefore the pasture has been used repeatedly. This happens because some herdsman do not have the means of transportation and their animals are fed from the same place where they stay in all four seasons, thus the pasture is degraded. No pasture is reserved out. This is the situation. In the past, when there was the collective, herdsman moved a lot, even far away to Arkhangai aimag by truck. After the 1990s land started to deteriorate, pasture has been used a lot and pasture condition has worsened.” (Lhagvasuren, Bayan-Ovoo Sum)

“It is not correct for people to stay in one place for four seasons. The pasture is getting worse because of overgrazing, staying for all four seasons. Also in some places there is some desertification—sand. I think it is because of staying in one place. This problem of staying in one place for all four seasons is something the administration must regulate or organize.”

Q: Who should organize this?

A: The sum governor (zasag darga). I don't know. The bag khural or bag darga? Last year the bag darga called one meeting and nothing else. He collects the taxes and nothing else.” (Chuluun, Jinst Sum)

“My husband and I have been telling other ails to move in order to save the pasture. This year we will move to another summer pasture to preserve this area. We are trying to get all the households to move. Not holding any meeting, just talking to each other and saying “why not move?” Also, there has been some talk about telling the zasag darga to organize to move other households to another place this summer.” (Naravbadam, Jinst Sum)

“Nowadays, some people have transportation and can move, and others who can't afford to, stay. Nowadays, nobody thinks of moving and giving the pasture a rest.”

Q: What if the sum darga told people they had to move?

A: It is possible that the administration could organize this if the land has no grass. But also it's difficult because the livestock would prefer the places they are used to. Even in places with fresh grass it's hard. Also, it depends on the household and whether it can pay to move. For example, if you have eight small children, it is very hard to move.” (Tsambaa, Jinst Sum)

Many older herders continue to believe that declining productivity is a natural process of earthly aging (see also (Fernandez-Gimenez In Press c). For example in the words of one old woman,

“When I was young there was lots of grass. But now maybe the earth is dying. The sand is covering the grass and the grass doesn't come out.” (Jambaa, Jinst Sum).

An elder herder in Jinst Sum summed up the changes in social relations and the environment in this dialogue. Like the woman who uttered the preceding quote, he also views pasture degradation, in part, as an inevitable process of aging.

Q: In the monastery days, were there conflicts over pasture?

A: At that time, people didn't argue with each other. They were friendly with each other. In the old days people had great knowledge of the land. They knew each other well. At that time pasture was very good, the grass grew very high and thick, but nowadays the land is degraded.

Q: Why does the grass grow badly now?

A: In ancient times, the land was young, now it is dying. Old men say that this is the time the earth will collapse.

Q: Really. When will this happen?

A: I don't know, but it will. All things become old. Now our land has a drought and we haven't any rain. Now sand covers all of the land. All these things are signs of collapse.

Q: If we have rain, will the land be restored?

A: Yes, if it would rain the land would be restored again. But nowadays rain is so rare.

Q: Earlier you said that nature was collapsing. What about people staying in one place for a long time and damaging the pasture. How can we restore the pasture? How can we organize?

A: People only need to move.

Q: Where?

A: We need to migrate to new pasture. I told my children, we need to move!

Q: If you moved, where would you go?

A: I would move to the south. But it is difficult. A few days ago, I went to the aimag center because of my child's health. I left my money in this box, but when I came back it had disappeared. Someone stole my money. Young people have very bad behavior. We need to teach them. I ask help from the government for the young people.

..... Now we haven't any regulation. I don't understand this government's activity. I want to tell the president about the disorder of public life, but I can't go to the city (Ulaanbaatar). It's too far to the city. Nowadays we haven't intelligent people who can lead people well. I don't know why people always want to be rich, why government doesn't regulate prices." (Namjil, Jinst Sum)

As these quotes indicate, herders increasingly perceive that localized overstocking and especially lack of mobility are major causes of the declines in pasture condition and yield. Another prevalent theme is the need for some regulation, and the lack of government support and intervention in pasture management.

Local Officials

Local officials vary in their perceptions of current ecological conditions and their causes. Pasture management problems cited by local officials included 1) overstocking, 2) border conflicts with neighboring sums, including poorly demarcated sum boundaries, 3) lack of adequate water resources, especially in summer, 4) lack of access to transportation for herders, 5) a shortage of winter and spring campsites, 6) people from outside the sum grazing in sum territory, 7) infestations of steppe mice, and 8) increases in poisonous plants. Some local officials insist that carrying capacity has not been exceeded, rather the shortage of water points or campsites is forcing herders to concentrate in certain areas, overusing them.

One official, who had earlier noted that the pasture in Bayan-Ovoo Sum was “turning to sand,” also asserted that these changes were “natural,” and not the result of human activity (“not degradation”). “If the rainfall is enough we have enough pasture in our sum.”

Another Bayan-Ovoo official first said that he hadn’t observed any overgrazing, then qualified this to say that there were places that were being grazed year-round (and overused), and concluded the interview later by saying,

“In my opinion the space in Bayan-Ovoo is not enough for the current herds of over 100,000 animals and also the uncounted animals from other sums that graze here. Herdsmen want to be near the center of the Aimag and the market. According to the land law, herdsmen can go anywhere. If there were a khoshuun, it would be easier to regulate. In one year 1200 households came from other sums and the Aimag center and all have their own livestock. This is the main reason for overgrazing.” (Baasanbat, Bayan-Ovoo)

A bag darga in Bayan-Ovoo Sum made similar comments,

“There is not enough pasture for the animals in the bag. On paper there are 25,000 animals, but in actuality there are probably 35,000. Fifteen thousand would be suitable for the amount of pasture available.” (Boldsai Khan, Bayan-Ovoo)

Aimag Officials

According to the head livestock official in Bayankhongor Aimag, the carrying capacity of the aimag’s pastures has been exceeded.

“In my opinion, there is enough pasture in Bayankhongor Aimag for 1.3 million goats. No more than 1.3 million. Officially, the carrying capacity is 1.6 million, but now there is a total of 2.5 million head. If they continue to increase, there will be a bad impact.” (Janzan, Bayankhongor Aimag Center)

This official also perceived a decline in mobility among herders, primarily due to lack of access to transportation, as well as difficulties for old people in moving. He attributed the disorganization of current pasture use patterns in part to a loss of traditional customs based on mutual respect, as well as the lack of strong regulatory authority (such as existed in the negdel), and an increasing lack of respect for authority and unwillingness to take direction from others on the part of herders.

Aimag officials with the Land Management Agency (the agency under the Ministry for Nature and Environment responsible for local implementation of the Land

Law) say there is no research on the carrying capacity of Bayankhongor Aimag that is based on forage production. However, it is clear to them that some sums have insufficient pasture or campsites and herders are crossing borders with neighboring sums to access these resources. Officially, herders are required to pay for the use of pasture in sums where they are not residents, but we heard of no instances where fees were collected.

Ministry Officials

Ministry officials have little knowledge of specific conditions in different areas, but acknowledge that there is little research on the carrying capacity of pastures based on actual forage measurements. Some officials of the Ministry for Nature and Environment (MNE) blame mining for loss of pastureland while officials from the Ministry of Agriculture and Industry (MAI) cited the creation and expansion of protected areas as a reason for diminishing pasture resources.

The Land Law

Herders

Herders' knowledge of the land law and the status of implementation in their communities varies. Those who have possession contracts are aware of the campsite leasing provisions, but those who do not are often unaware of their existence. Some herders had no interest in obtaining a formal lease. Others felt it was a good thing, as it would provide an incentive for people to take better care of their campsites.

Herders continue universally to oppose privatization of pasture in any form, and perceive possession contracts over pasture as a form of privatization. The following interview excerpt with a well-off herder who has a possession contract over his campsite illustrates the typical attitude.

Q: Say for example, I have 1000 sheep. I bring my sheep to your campsite. If we had a law, wouldn't it be easier to protect your pasture?

A: No, it is impossible. The Mongolians have been herding our animals for hundreds of years with common use and living peacefully as neighbors according to the old saying "Khayaa bagtakhar booj, khazar bagtakhar iddeg" (Occupy the land to the edges of your home and eat as much as the bridle allows). What you are talking about is a huge task, a task that will be ineffective. We don't need it. There has already been one person murdered in a fight over a campsite.

Q: Here?

A: No, not here. I just heard about it last year.

Q: Where?

A. Ah, two families had a quarrel, and it became a situation of revenge. This land ownership is the worst possible thing for livestock husbandry. Cropland can be privatized and protected, OK. Livestock husbandry certainly must not be settled. The climatic conditions are extremely difficult and changeable here. Therefore, pasture must be shared among herders and used in common, for sure—it must be left as it is and has been for hundreds of years. (Bor, Bayan-Ovoo Sum)

In Bor's view, privatization and the creation of private property in land, and not the lack of property rights, cause conflicts. Other herders had similar views on the consequences of pasture privatization, as the following quotes illustrate.

“If they do it [lease pasture], there will be a lot of conflicts between households. I don't agree with this. If pasture is individually owned, people will just graze in one place and afterwards the pasture will not be useable.” (Chuluun, Jinst Sum)

“I am against any kind of ownership [of pasture], by individuals or groups of households. It's difficult if I [need to] move ... in dry years to fresh grass. Somebody will kick me out.” (Danzan, Jinst Sum)

When pushed to decide which pastures would be most suitable for formal tenure, another herder commented:

“The most harsh is the winter and spring. Autumn and summer are OK everywhere. People can stay anywhere in autumn and summer. The winter and spring are hardest. If there is no alternative to privatization, the best seasons are winter and spring. However, it is wrong. This will cause disputes over land and real problems.” (Lhagvasuren, Bayan-Ovoo)

The old and well-respected herder in the following interview excerpt was not displeased with the allocation of campsites, but remained highly skeptical about pasture allocation through possession contracts. Like many herders, he perceived that possession contracts over pasture would limit his access to key resources such as salt licks. His words illustrate once again the perception that constraints on transportation and lack of government regulation and support are responsible for unsustainable grazing practices.

“People said that areas would be divided and allocated according to where people already were. People will own their shelters but pasture will not be allocated. If the pasture is allocated to people it wouldn't be a good thing. For example, I need to pasture cattle on a salt marsh place. If someone owned it, I couldn't go there. So how can I give salt to my cattle? People want to migrate to the nice places like the cool Khangai, places with water, and salt marshes, so that the cattle will fatten. If you prohibited it, how would you increase your herds? Also last year people were saying that we would get our campsite. For example,

this is Baramsai's campsite and no one could settle here but me. Also people were saying that if the government allocated campsites, they would take money from us. I don't have money for this.

I will tell you a little story about my campsite. Twenty years ago or so one family lived here with many livestock. They moved and this camp lay fallow for twenty years. When I first came here I found that this camp was so warm because it is surrounded by mountains. In the summer time I settled down here with my livestock. When I was a member of the negdel, I didn't use this campsite. When I came here I didn't have any negdel animals. And now I settled on this campsite. And I heard that the government would give the camp where someone had settled to that person. And others couldn't get that camp if someone was settled on it."

Q: Is this right?

A: In my opinion, it's right. I only worried that people would be stingy about their pasture and I was also afraid that they would destroy the campsite. Except for those things I agree with this idea. Since nowadays some people don't have prepared their own campsite, when they panicked, they just moved to another person's campsite. So when the number of livestock increased at one campsite, it would be worse for the cattle. And I think if people had their own campsite, they would take care of it. If someone wanted to settle down on their campsite they would arrange it with each other. This way it would prevent things from becoming worse for the cattle. And now I think it's right.

Nowadays the most difficult problem is transport. If you provide the people with transportation, they will follow you. People lack transport, that's why when they moved to the good pasture they didn't take a lot of luggage. They just took a little ger, without furniture. For example, this ger in which we are sitting required almost ten camels, or one truck, for the load. A little ger requires only one camel or one or two yaks for the load. When I migrate to the new pasture, I'll lead an animal drawing a cart and drive the livestock. After privatization we are moving like this. Also, we check the pasture ourselves. The chairman (bag leader) never comes and gives instructions about the pasture. They only get a salary, they don't do anything for the people. Before, during socialism, the chairman of the bag always paid attention to us. He asked "Where are you moving?" "What are you lacking?" also he would ask "Why do you stay only in one place?" "Would you like to change pastures?" "What do you need?" Nowadays, all of this attention has disappeared. [In the old days] this sum's administration paid attention to us and supported us in many ways. The whole country has changed to a market economy. We got some livestock. Besides this, all social care has disappeared. (Baramsai, Bayan-Ovoo)

An interview with another Bayan-Ovoo herder, who moved to the countryside after privatization following a career as an agent for the negdel, again emphasized the problems with possession contracts over pasture and herders' fear of being excluded from resources or further limited in their range of movements. This herder had no interest in a campsite possession contract, and described negotiations among herders for campsite access.

"The pasture growth is irregular from year to year due to the climate, so fixed places for seasons [are difficult]. This place was OK last year, [but if use areas are fixed] there is no alternative to returning to the same place this year. Therefore, land privatization and pasture scheduling are totally wrong. For this particular land of our sum with sparse grass, this is not possible. It is OK with me here in the Khangai on our campsite. But in the steppe to the south it is impossible. Down in the Gobi, there is nothing. They have to come here, no alternative. We have to move from the Khangai. In some years this happens. Thus, privatization and scheduling are impossible taking into consideration that the grass grows differently every year.

[break]

Well, they [possession contracts over campsites] are not so important. In each campsite a household was given a certificate to indicate that the campsite is theirs. This was decided at a citizen's meeting. It was something in the legislation. If there were a heavy snowfall in my area, or if another

family wants to move to my place when it is better here, I cannot deny it. But we need to negotiate well. Land possession will bring disputes, and problems for the administration. The contracts have been issued. We did not get one. They did not give it to us and we did not ask for it.

Q: [Asked for clarification on negotiating over campsites.]

A: I stay here in winter, because this area does not keep heavy snows and gets less snow. Then people come and say they would like to stay next to me. I would not say no. They come and stay here. Some families from the Khangai came and stayed here. In return, if summer is not good around my place, I move to them. They receive me. It is better for both this way.

Generally, a one person, one piece of land system of tenure is wrong. In places like ours, in an [extensive] pasture livestock production system, this will not lead to a good result. Maybe it is possible for the land in the east with lots of cultivated fields. For our steppe here with frequent droughts, it is not possible. In the early 1990s two years after I moved to the countryside, there was a drought and I moved south for the winter. That turned out all right. If I had stayed here, then all my animals would have died.” (Lhagvasuren, Bayan-Ovoo)

This strong ethic of reciprocal access—a moral economy of the steppes—combined with the perceived necessity for freedom of movement, were stressed by many herders. On the one hand, as Bor explains

“It’s difficult to say no to other people, because we have known each other.”

By the same token, it is difficult to be refused by others, as he anticipates would occur under pasture possession.

“In spring the land tells me where to go. Where there is good grass and fresh water, I move there. ...I don’t know [about pasture possession contracts]. It doesn’t sound so easy. If my place is not good for all four seasons, but yours is nice now, and I move to your place, you will not give it to me. If in my place there is drought...”

Local Officials

Herders’ perceptions of passivity and ignorance on the part of local officials were echoed by local officials’ own descriptions of their management authority. In contrast to what the law appears to authorize, local officials believed that they did NOT have the authority to: 1) instruct herders generally or specifically when and where to move, 2) designate reserve areas or temporarily rest overused areas within their territories, 3) allocate pasture to individuals or groups for possession or use, or 4) regulate the number of livestock.

When asked how he would solve current problems of overuse and concentration around water sources a Bayan-Ovoo bag darga responded,

“I have no means. There is no law, pasture and land have not been privatized, so anyone can go on any pasture. Herders from the first bag and second bag come to the third bag in summer to this pasture and they eat all the grass. It is very difficult to organize. I have told the herders from other bags not to come here because it is difficult to preserve our winter and spring camps. In one case there was high competition for pasture near the border of the sum where herders [from two sums] lived next to each other and each claimed it was in their territory. Sometimes herders take a neighbor’s animals to another area—send them away. According to the map the winter camp belongs to both sums. I don’t know what to do. Livestock are the main source of income, so I can’t order people to reduce the number of livestock. I have no right [legally] to exclude people.” (Boldsaikhan, Bayan-Ovoo)

The sum governor in Bayan-Ovoo held similar beliefs,

“There is no law that we can tell someone else to move here or there. The bag governor can control seasonal pasture, but not the sum governor. The bag governor can tell herders to move out of a winter area, but he can’t tell them where to move.” (Yondonlodoi, Bayan-Ovoo)

The governor distinguished between ownership and possession or use rights, and articulated the logic for providing possession contract,

“It isn’t privatization, just possession—use rights. The aim of this possession is just to make herders think that this place is theirs so they will take care of it. ... Because it’s common pasture, herders don’t save or protect it.”

In Jinst Sum, the darga of the Sum Khural likewise said that the government had no authority to force people to move.

“The local government must work within the law and if there is no law we can’t do any regulation.” (Bataa, Jinst Sum)

When asked about plans to lease pasture, local officials invariably believed this to be practically impossible or illegal.

“Pasture is common use land. Everyone can have livestock everywhere. Everyone has the right.” (Tegshbayar, Jinst)

“I am against the ownership of pasture. People talk about there is not enough pasture, but it is connected with the water supply. If there were enough water, there would be enough pasture. In the past, there was a lot of water research done here.

Nowadays, there a lot of sums and they each have their own little area. That’s why herders’ movements are limited within the sum border. Traditionally, we moved far up north in the summer and south in the fall. But now movement is within the sum. Now there are discussions about combining three sums: Bayanlig, Bogd and Jinst. ...[This area] was one Khushuun. In my opinion, this is the only way to

expand the territory for the herders. The local sum administrations have already made the decision to join and have submitted their paperwork to the aimag center.

Q: In a khoshuun, would the government organize movement or the herders themselves?

A: The herders themselves.

Q: What if there were problems with people staying in one place all year?

A: It is compulsory to move, but we can't say to someone, move out of here. Now many households have moved North, near the aimag center." (Nyamkhuu, Jinst Sum Darga)

Thus, although some local officials distinguish between ownership and possession or use more clearly than herders, they (like herders) perceive significant problems with implementation of possession contracts over pasture. Like herders, they also value access to a variety of resources and some are actively seeking to expand the territory available to their sum's herding population by advocating the formation of khoshuun-like territories. Local governments, in contrast to the letter of the law, and the apparent wishes of some herders, do not perceive that they have regulatory authority to direct seasonal movements, limit livestock numbers, or designate areas for rest.

Aimag Officials

Aimag officials of the Land Management Agency have no plans to proceed with allocating possession contracts over pasture. They perceive that dividing pasture and allocating it to groups of herders would be "nearly impossible," due to current pasture shortages and the infeasibility of fencing or otherwise excluding outsiders from leased pastures. Although they acknowledge a problem with out of season grazing of winter and spring pastures, they perceive "no way to solve this problem because by law these pastures are common use lands." According to LMA officials, the main problems are conflicts over campsites. There are no big problems with herders sharing pasture.

Ministry Officials

Some MNE officials believe in promoting a more settled style of livestock husbandry in Mongolia, characterized by increased investment in small-scale cultivation of vegetables, fodder crops and hay production. As the lead agency in implementing the land law, and proposed cadastral survey and land registration program, MNE officials tend to espouse an ideology that individual responsibility for pastureland tenure through the vehicle of possession and use contracts is necessary to encourage herders to better care for their pastures. MNE officials perceive the main purpose of a cadastral survey

and land registration with respect to pastureland, is to “defend herders’ rights to use the land,” and encourage them to, “use the land properly.” They generally believe that pastureland is the most complex and difficult to address in a cadastral survey and land registration program, and that land use monitoring and planning are not well developed in Mongolia.

According to MNE officials, under both the current land law and the proposed revisions, local sum and bag governments have the authority to make decisions about pasture use and allocation in their territories, including limiting livestock numbers, setting aside reserve areas, and resting overused pastures. Most believe that the current law does not allow for possession contracts over pasture. The proposed revisions to the land law under consideration in spring 1999, however, would clearly allow for possession contracts over winter and spring pasture land, according to MNE officials. Some say that summer and fall lands would remain available for common use, while others stated that there would be no distinction among seasonal pastures and all would be available for possession. According to one official, the amendments would also allow for sub-leasing of pasture by holders of a possession contract. The MAI tends to advocate for the interests of herders and livestock production and appears more conservative with respect to opening land markets than the MNE.

Foreign Experts

Most foreign experts have interpreted the current law to allow for the leasing of pastureland. Economists and policy analysts view the primary goal of land titling as the creation of a functioning land market and a mechanism for the government to collect land fee payments (and increase its tax base). In the context of pastureland, a secondary objective is to grant individuals or groups secure title to facilitate improved management and investment, and potentially the use of land as collateral for loans. Although aware that the constitution prohibits the privatization of pastureland, some consultants nonetheless assume that privatization of all land in Mongolia will ultimately occur in some form. For example, a 1997 report on “Strengthening Land Use Policies in Mongolia” by consultants contracted by the Asian Development Bank stated, “It is stressed at the outset that the land in Mongolia should be considered as a totality. It is not

easy to appreciate this at the moment with the emphasis being on “possession” of crop farm land by economic entities, and without the institutions to carry out cadastral survey and register the possessory and usufruct rights of the new private farmers. However, in the longer term Mongolia must accept that the land market crosses all land types.” (GISL 1997) p. 21)

Environmentalists and conservation biologists are primarily concerned with the protection of biological diversity and prevention of desertification and other forms of land degradation. The focus of these groups has tended to be the assessment of current ecological conditions, calculation of pasture carrying capacity as the basis for regulating herd size, establishment of environmental monitoring programs, and expansion and improved management of protected areas (Danida 1996; Environment 1996; Flamm 1998).

Consultants concerned with the welfare of herders and the health of the pastoral economy, generally perceive close links between poverty and environmental degradation (or conversely, ecological health and socio-economic sustainability). They tend to be focused on the development of land policy that will facilitate rational and ecologically appropriate land use by herders, attending to traditional forms of organization and patterns of movement. While some livestock production experts initially advocate some form of pasture privatization, they are usually quickly enlightened after discussions with herders. As one recent arrival working on veterinary services and genetic improvement in cashmere goats put it, “When we brought up land tenure, they laughed in our faces.” A number of projects in this category as well as some in the environmental category have recommended the establishment of pilot co-management projects to “test” the pasture leasing provisions of the land law and assess the capacity of herding communities for self-governance and self-regulation to overcome current unsustainable trends in grazing patterns (Danida 1996; Agriteam 1997; Buzzard 1998).

Solutions to Current Land Use Problems

Two major approaches to current land use problems have been advanced. The first is the expansion of territories to approximate the size of pre-revolutionary *khoshuun*. The second is the formation, on a trial basis, of pasture co-management regimes within

the parameters of existing law. At all levels within the aimag, from herders to aimag officials, the idea of reuniting sums into larger khoshuun-like administrative territories is popular, but it is especially popular among herders and sum authorities. There is some support for this idea among Mongolian researchers as well. Scholars at the Institute of Geography have been advancing the concept of ecologically suitable territories (Bazargur, Shiirevadja et al. 1993; Batbuyan 1996) for a number of years, arguing that administrative-territorial areas must take into account the resources required by herders during the entire annual production cycle, and should be based on, among other things, herders traditional use patterns.

The following interview excerpt with the herder from Bayan-Ovoo Sum is representative of herders' views on reunification.

Q: You're saying that pasture is degraded. Can you think of any way to regulate pasture use?

A: First and most important, if it were possible, I don't know, if the administrative unit of organization could change to resemble the organization of the past. This is because Bayankhongor Aimag had a few khushuun in the past. It could be divided into four khoshuun and on one hand economize, and on the other increase the size of pasture territories for moving around. From the point of view of easing the pasture overload, it is better to expand the pasture are and keep away part of the animals for a while. Our sum has too many animals for the pasture, therefore the administrative territory had better be expanded. ...For our sum, it was Bangiin Khoshuun in the past. Bangiin Khoshuun covered Edrenetsogt, Bayan-Ovoo and all the territory to the Tsagaan River in the south of Baatsagan. In this territory there are three sums now. So, better to unite the sums. I think the past organization was right. This is good for population's genes, good for pasture availability in the Khangai and the Gobi, and good for animals to be strengthened. This was good organization as far as I can see. (Lhagvasuren, Bayan-Ovoo)

Local officials echoed this view as reflected in this comment by the Khural Darga of Jinst Sum.

"The main thing is to join into a khushuun and give herders the freedom to move over a large area." (Bataa, Jinst)

The Khural Darga of Bayan-Ovoo Sum also was in favor of khushuun. In addition, he felt that the only solution to the current situation would be the revival of customary institutions.

"In my opinion the current change means regulation of pastures according to the old unwritten pasture law. The tendency is to go back to the traditional pasture livestock breeding ways. ... If we try to revive the old traditions, we should also revive old pasture use, and begin to revive the custom of respecting each others' pasture." (Dashbazar, Bayan-Ovoo)

The main flaw in the approach of re-creating khoshuun, as we see it, is that the expansion of territory still will not ensure that herders will rotate among seasonal pastures in a coordinated fashion, nor does it address the possibility that all the constituent sums are currently overstocked. If they are all overstocked, expanding the boundaries won't provide any additional pasture and may add to chaos and conflicts. The expansion of territories combined with regulation and some form of in-kind support for transportation, may begin to address the problem.

The second approach, advocated primarily by foreign experts, is the creation of co-management regimes for pasture use (Danida 1996; Agriteam 1997; Buzzard 1998). This approach relies on the assumption that the land law allows exclusive allocation of pasture to an organized group of herders, which would jointly lease the pasture and manage its use within the group. Co-management could take a variety of forms, including group tenure over a large area that encompasses all four seasonal pastures, water, salt licks and other essential resources. Nested tenure regimes could co-exist within a larger co-management regime. For example it would not preclude more exclusive tenure over campsites, as currently exists. In this case, the members of the group might include all the households in a bag or sum.

Another option is to grant joint tenure to smaller groups of herders over smaller areas, for example a shared winter pasture area. As we have seen earlier, however, herders and local officials are highly skeptical, if not outright opposed, to such approaches. The most palatable approach to formal tenure was allocation of a large area to a large group, provided that co-management institutions allow for flexibility between years and seasons. Most herders felt that such an arrangement might be feasible, particularly if a governing co-management committee had strong representation by herders as well as local government.

If co-management is attempted on a pilot basis, significant challenges remain in developing rules to determine group membership in a culture where a powerful moral economy operates, based on reciprocal relationships with outsiders. Even if social and spatial boundaries can be established, the crafting of written or unwritten rules for pasture use presents major hurdles. Control over the timing and spatial distribution of livestock is the first avenue for regulation, and this approach most closely parallels customary

institutions. Once spatial boundaries are fixed, however, mechanisms to control livestock numbers (stocking rates) ultimately will have to be developed. As our interviews reveal, there is a strong antipathy towards regulation of herd numbers, by officials as well as herders, even though the existing law allows for it. We suggest that regulation of seasonal movements by herders alone, by local government alone, or by a co-management committee consisting of both herders and local government, is the solution of first resort to current unsustainable grazing patterns. Regulation of movement could occur within a formal tenure framework or without it. This is an approach that herders find more acceptable than allocation of small-scale pasture resources. It does not, however, address material constraints to mobility.

Conclusions and Implications

Our paper has traced the continuing development of property relations and pastoral land-use patterns in two Mongolian communities by examining the implementation of Mongolia's land law at the local level. By using a survey together with interviews, we gleaned data on herders' behavior as well as their beliefs. Perceptions and behavior did not always coincide, nor did the letter of the law and local interpretations, revealing the complexity of choices facing lawmakers, those who implement the law, and those who must abide by it.

We found that in Jinst and Bayan-Ovoo, the poor are staying poor and that there is increasing variation among herding households, due largely to the accumulation of great wealth by a few. Many herders perceive that transportation constraints seriously limit mobility thereby causing increasing degradation. However, our survey showed that poor households were more mobile in 1999 than they had been in 1995. We hypothesize that this increase in the mobility of poorer households is related to lack of access and secure tenure to campsites (and hence to surrounding pasture), due to allocation of possession contracts over campsites predominantly to wealthier households. By the same token, we speculate that increasing sedentary behavior of the wealthy is related to the fact that they now possess official rights to campsites, creating incentives to use the same camp repeatedly and to protect improvements and pastures by staying in the area.

Our survey suggests that formal tenure over campsites has decreased the incidence of trespass, and presumably of conflicts over campsites. Despite this apparent trend, herders believe that possession contracts over pasture would increase conflicts rather than reducing them. Overall, herders and local government officials remain strongly committed to a mobile form of pastoralism, and to the moral economy of reciprocal relations that underlies the nomadic way of life. In virtually all interviews, herders valued access to a broad range of resources over security of tenure to specific resources. Yet many herders also yearned for greater coordination of pasture use and some direction and assistance from local government. Both herders and local officials believed that territorial expansion and the dissolution of boundaries between sums was the best solution to existing pasture use problems. These views fall in stark contrast to the prevailing wisdom on the rationale for land registration and titling, and call into question the viability of a land registration program for pastureland in Mongolia.

We conclude by highlighting two aspects of the land law and its implementation of particular concern to the sustainability of pastoral livelihoods on the Mongolian commons. The first is the pattern of allocating formal tenure to campsites to only a subset of households in each sum, and of favoring wealthier households in those allocations. Poorer households may own only a few livestock, and therefore seem to be of little consequence to pasture use. However, excluding these households from allocation processes will only accelerate the downward trajectory of many herders into poverty, and will almost certainly undermine future efforts to bring order and coordination to pasture use.

The second is the lack of clarity in the law as to the meaning of “common use,” and its relation to “land use” and “land possession.” We are concerned about the consequences of making all mineral licks and natural water sources “common use” lands even if they occur on lands that have been granted for possession or use to specific groups or individuals. We worry that such provisions may make it difficult to implement rangeland co-management schemes that aim to provide secure tenure over large areas of land to groups of herders constituted as grazing associations so that they can manage use among their membership. As written, the law would seem to make it impossible for a group to have exclusive rights to any area that includes mineral licks or natural water

sources. These resources are open access by law, making it difficult or impossible to control the use of pasture around them. Somehow, provisions must be made to ensure access for all to these key resources, while protecting the interests of herders who have exclusive use rights to surrounding pastures. The law is also unclear as to whether summer and autumn pastures may be allocated under exclusive possession or use contracts—even to groups for their joint use. Inability to manage in a coordinated fashion the entire suite of seasonal pastures used by a given group of herders would undermine prospects for co-management.

The fierce attachment to a mobile way of life and to the ethics of access and reciprocity it implies are great strengths of the Mongolian pastoral economy. This commitment to nomadism is reflected in the current land law and the Mongolian constitution. The existing legal framework and local attitudes stand in clear opposition to the implied goal of land registration and titling—an all-embracing market in land and the supremacy of private property rights. However, the current legislation and local attempts at implementation may also hinder efforts to solve current pasture use problems through development of co-management institutions that could, if carefully crafted, bring order to the steppes while ensuring sustainability of land and livelihoods.

Notes

ⁱ Otor is the rapid, often long-distance movement of a portion of a household's herd to distant pastures. Otor is undertaken to escape deep snows or drought, to fatten animals in the fall, or to bring them to fresh pasture in early spring.

ⁱⁱ The original survey was administered to a random sample of herding households in each sum, stratified by wealth group. Four wealth groups were identified based on subjective rankings made by 3-4 independent herders in each sum using established wealth-ranking methods (Grandin 1988; Mearns, Shombodon et al. 1992). An average rank was calculated for each household, and the population of each sample bag was subjectively divided into 4 quartiles by rank. Ranks were correlated with the size of livestock holdings in the household ($R^2=.53$ in Jinst, $R^2=.37$ in Bayan-Ovoo), but herders also used other criteria in grouping households, including sources of outside income, social status, ownership of mechanized transport, ownership of high-status possessions, age of the household head and the number and age of children in the household. Due to the small size of the 1999 sample, households were divided into two wealth groups rather than four for analysis. Analyses indicate that few if any households shifted from the “wealthier” group to the “poorer” group or vice versa, based on livestock ownership and herding behavior. However, we had difficulty relocating many of the households that had been in the poorest group in the original sample. Based on the best information we were able to obtain on these households, we interpreted their disappearance from the study bags as an indication that many of the poorest households in 1995 were no longer viable herding households in 1999. In several cases, elderly herders had died or moved to towns. Other households had also given up herding and moved to the aimag center, while still others had moved to distant sums or aimags in search of a better situation in the company of kin from another district. These findings are similar to those documented in pre-revolutionary Mongolia, where the poorest of the poor were not herding households, but were individuals who could not sustain a herd and had

no alternative but to perform menial wage labor, hawk trinkets, beg or prostitute themselves on the fringes of settlements.

iii Another notable change in herding practices is a sharp decline in the reported prevalence of absentee herding or herd placement. In 1995 48% of all sampled households herded livestock belonging to someone outside of their khot ail, while in 1999, only 14% of households reported herding absentee-owned stock. The proportion of wealthy and poor households with absentee animals remained constant.

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Table 1. Changes in mobility between 1995-1999 in Jinst and Bayan-Ovoo Sums.

	Poorer (n=17)		Wealthier (n=24)	
	1995	1999	1995	1999
Ave. number of moves per year	3.2 (0.4)*	4.3 (0.3)	3.7 (0.3)	3.5 (0.3)
Ave. distance moved per year (km)	8.4 (2.2)	10.3 (2.0)	13.1 (1.8)	12.0 (1.6)
Total distance moved in previous 24 months (km)	52.6 (14.0)	95.6 (17.9)	94.5 (10.7)	90.2 (13.7)
Number of different camps used in previous 24 months	3.5 (0.5)	4.8 (0.4)	4.6 (0.4)	3.7 (0.3)

* Least squares mean (LS Standard Error)

Table 2. Changes in pasture use patterns 1995-1999 in Jinst and Bayan-Ovoo Sums

	Poorer (n=17)		Wealthier (n=24)	
	1995	1999	1995	1999
Reserve winter or spring pasture	71%	47%	96%	75%
Grazed own reserve pastures out of season	35%	24%	54%	29%
Others grazed reserve pasture out of season	53%	18%	63%	46%
Own campsite used by others	18%	12%	42%	4%
Used another person's campsite	40%	53%	38%	8%

ⁱ Otor is the rapid, often long-distance movement of a portion of a household's herd to distant pastures. Otor is undertaken to escape deep snows or drought, to fatten animals in the fall, or to bring them to fresh pasture in early spring.

ⁱⁱ The original survey was administered to a random sample of herding households in each sum, stratified by wealth group. Four wealth groups were identified based on subjective rankings made by 3-4 independent herders in each sum using established wealth-ranking methods (Grandin 1988; Mearns, Shombodon et al. 1992). An average rank was calculated for each household, and the population of each sample bag was subjectively divided into 4 quartiles by rank. Ranks were correlated with the size of livestock holdings in the household ($R^2=.53$ in Jinst, $R^2=.37$ in Bayan-Ovoo), but herders also used other criteria in grouping households, including sources of outside income, social status, ownership of mechanized transport, ownership of high-status possessions, age of the household head and the number and age of children in the household. Due to the small size of the 1999 sample, households were divided into two wealth groups rather than four for analysis. Analyses indicate that few if any households shifted from the "wealthier" group to the "poorer" group or vice versa, based on livestock ownership and herding behavior. However, we had difficulty relocating many of the households that had been in the poorest group in the original sample. Based on the best information we were able to obtain on these households, we interpreted their disappearance from the study bags as an indication that many of the poorest households in 1995 were no longer viable herding households in 1999. In several cases, elderly herders had died or moved to towns. Other households had also given up herding and moved to the aimag center, while still others had moved to distant sums or aimags in search of a better situation in the company of kin from another district. These findings are similar to those documented in pre-revolutionary Mongolia, where the poorest of the poor were not herding households, but were individuals who could not sustain a herd and had no alternative but to perform menial wage labor, hawk trinkets, beg or prostitute themselves on the fringes of settlements.



ⁱⁱⁱ Another notable change in herding practices is a sharp decline in the reported prevalence of absentee herding or herd placement. In 1995 48% of all sampled households herded livestock belonging to someone outside of their khot ail, while in 1999, only 14% of households reported herding absentee-owned stock. The proportion of wealthy and poor households with absentee animals remained constant.