

# Chapter 14

## Pastoral Mobility and Pastureland Possession in Mongolia

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### 14.1 Introduction

Pastoralists in Mongolia have adopted a number of models of European- or Western-style modernization or development since the middle of the last century: in the Socialist period, collectivization to establish herding collectives, which may be recognized as a Socialist version of development; in the early 1990s, during the transition to a market economy, a market-oriented model based on private property, with the dissolution of the herding collectives and privatization of livestock, although pastureland remains for common use; and currently, since the late 1990s, “Community-based natural resource management” (CBNRM), a development model for common-pool resources management.

The situation in the past two decades alleged to require new management institutions in the pastoral sector in Mongolia could be summarized as follows. Mongolia has been undergoing two processes impacting the pastoral economy and society: integration to the global economy or the transition to a market economy on a national scale since the early 1990s, and global warming on a global scale, the impact of which has been growing during the past decade. These processes have concentrated human and livestock population into areas less arid and closer to a large city or market such as Ulaanbaatar. The problem is that most of those movements are unidirectional: herders in favorable areas always accept those from outside their areas, but rarely share benefits of reciprocal ethics (even though adverse weather,

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heavy snowfall, or cold weather, happened, they could not escape to southern areas because there is little forage available), which reciprocation has long been a main aspect of institutions in managing pastureland use. This change appears to damage the resilience of pastoral society and makes it difficult for customary institutions to function effectively if not in the whole country.

CBNRM as an approach to common property management emerged from empirical critiques of Hardin's "tragedy of the commons," which predicts the degradation of communal pastures for reasons of the lack of institutions to control resource use and calls for privatization. Many large-scale development projects implemented by the international donor community in the pastoral sector in arid Africa in the 1970s and 1980s, and also the allotment of pastures to individual households carried out in the 1980s in Inner Mongolia, were inspired by Hardin's thesis, which had negative effects not only on pastureland ecology but also on the pastoral economy (Fratkin 1997). The economic advice that the Asian Development Bank (ADB) gave the Government of Mongolia in the early 1990s had the same logic. Since the publication of Hardin's article there have been reported from around the world many cases in which a common-pool resource was successfully managed, contrary to his prediction.

"Since 1999, Mongolia has become a de facto testing-ground for community-based rangeland management, with the establishment of over 2000 'herder groups' or 'pasture user groups,' facilitated by over 12 different donor and NGO-sponsored programs" (Fernandez-Gimenez et al. 2008: 3; Mau and Chantsalkham 2006). Donors funding those programs, for example, the United Nations Development Programme (UNDP) and the Swiss Agency for Development and Cooperation (SDC), also initiated legislation to allocate a pasture possession right to herder groups or pasture user groups (PUGs). A draft of a law on pastureland was prepared by a working group consisting of staff of those programs, some Parliament members, and officials of Mongolian ministries. The draft was presented to Parliament on 5 October 2010, although it was yet not passed at the time of this writing. In some project sites, *sum* governors contract with PUGs to allow for pastureland possession rights beyond the stipulation of the current Land Law, in anticipation of the future implementation of a Pastureland Law.

Despite the high expectations, "the practical implementation of community based natural resource management (CBNRM) initiatives, however, has frequently fallen short of expectations" (Leach et al. 1999: 226). In Mongolia, too, difficulties in implementation of CBNRM programs have been reported recently (for example, Upton 2005, 2008; Bedunah & Schmidt 2004). These difficulties or failures predict efficacy of the proposed Pastureland Law.

This chapter considers how the proposed legislation to provide for pasture possession rights to PUGs or herder groups could contribute to the sustainability<sup>1</sup> of

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<sup>1</sup> The definition of sustainability here is "maintaining the productive and adaptive capacity of ecosystems while providing for the well-being of human communities" (Fernandez-Gimenez and Swift 2003: 821).

pastoralism in Mongolia. First, I give a brief review on the background of the legislation for land tenure in Mongolia; second, I examine some articles of draft versions of pastureland law that would have impact on pastoral management; and then consider several issues critical to the subject, drawing on empirical data collected in a field survey in Mongolia.

## 14.2 Legislation Background

Since the beginning of the 1990s, attempts have been made to introduce a new pastureland tenure system or to formalize institutions to regulate pastureland use. Although the focus has shifted from privatization to ecological sustainability in the last decade, the logic and narrative of the rationalization seem to have remained unchanged.

When the transition to a market economy became a main national issue in the early 1990s, the private ownership of land was supposed to be an essential prerequisite for the market economy, although few Mongolian people shared such an assumption. In 1991, following the collapse of the Soviet Union and the dissolution of the Council for Mutual Economic Assistance (CMEA), the Mongolian government was urged to initiate a number of economic reforms designed to create a market economy. Those reforms were conducted actually in response to advice and recommendations of international development agencies such as the International Monetary Fund (IMF), the World Bank, the ADB, and other donor agencies. Legislation was soon enacted to privatize state assets. The new Constitution, which allows the privatization of state-owned land, but excepted pastureland, was promulgated in 1992. However, debate at Parliament over a new Land Law that would allow the private ownership of land led to nation-wide controversy.

Sneath (2003) suggests that although the Constitution excludes pastureland from privatization, some international agencies such as ADB required the Government to establish the private ownership of pastureland, citing a study report submitted to ADB: "Currently, there is no private ownership of land. As a consequence, land tenure insecurity causes disincentives to invest in land improvements. ... The Land Law ... aims to provide positive incentives to herders, farmers and others to maximize production and to protect land from damage or degradation" (p. 443).

ADB implemented the Agriculture Sector Program (ASP) designed to support the transition of Mongolian agriculture from a centrally planned system to a market-based economy in 1994–1998. As a policy reform measure to promote markets in land-use rights, ADB required passage of a Land Law. Parliament passed the law on 11 November 1994 after 3 years of debate. The Land Law allows long-term (up to 60 years and renewable for another 40 years) lease rights for possession of state

land for residential and commercial use, and for cropland, but not for pastureland. The ASP complete report criticized that the Land Law contained ambiguities and inconsistencies, and thus the law was amended three times: in 1997, 1999, and 2002. The 1997 amendment allowed for possession of lands under winter and spring campsites, and the 2002 amendment for transference of leases of cropland and use of the leases as collateral, but not ownership of land. Other legislation was also issued in 1997, including the Land Fee Payment Law, the Law on Registration of Immovable Property, and the Geodesy and Cartography Law (ADB 2002: 4–5).

It was only in 2002 that the legislation for ownership of land for residential and commercial purposes was enacted in Mongolia. A new Land Privatization Law (a law on allocation of land to Mongolian citizens for ownership) passed Parliament and became effective on March 1, 2003. Reflecting citizens' lack of interest, the law was amended twice in 2005 and 2008 to prolong the term of privatization, for 2 years until May 1, 2008, and for another 3 years until 2013, respectively.

The ADB report (2002) concludes as follows:

In the early 1990s, the complexity of land ownership issues in Mongolia was probably underestimated. Since Mongolia has no history of private land ownership, and herders have the constitutional right to move their animals freely, opposition to private ownership of land, especially pastureland, has been very strong. Because of the difficulties, the Land Law had been under debate for 3 years and was passed in 1994 only after removal of its most controversial clauses relating to private ownership and pasture-use rights. In retrospect, the ASP could have set a more moderate but realistic target and focused on cropland only (p. 5).

Since the mid-1990s, as negative effects of the reforms that had been carried out in the early 1990s clearly appeared, poverty, equity, and environment became more stressed than before. Swift (1995) argued that “unambiguous and secure tenure is an essential prerequisite for poor households to produce more and that an enactment of a new Land Law would set the framework for future land-allocation” (p. 113). On the other hand, he wrote: “Grazing-land title is not, under Mongolian conditions, needed as security for credit (herds can play this role), and title should not be used as a basis for creation of a market in grazing land, since this would encourage the privatisation and sale of the highest productivity pieces of land, without which the rest of the grazing system cannot be productive or sustainable” (p. 115), and he advocated group-leases of pastures.

During and after serial *zuds* in 1999–2001, the vulnerability of Mongolian pastoralism to natural disasters and the need of modernization or transition from extensive herding to intensive livestock farming were emphasized. In 2001, “Nambaryn Enkhbayar [ex-President and then a prime minister: A.K.] expressed unequivocally his vision of development and modernity for Mongolian pastoralists. ... the livestock management would shift to intensive, large farming units, involving only 10 per cent of the population” (Marin 2008: 78). Although his view provoked criticisms from both inside and outside the country (Rossabi 2005), this has given the impression to many Mongolian pastoralists and citizens that the transition to intensive livestock farming by business entities, and thus the private ownership of pastures in the future, is one of the established national policies.

The background of legislation for pastureland possession as just described should have been reflected in the opinions of drafters and advocates of a new pastureland law. As Fernandez-Gimenez et al. (2008) reviewed several articles written by some of them, I highlight here three main points in their views calling for pastureland possession: stress on the need for incentives to invest in pastures, to which responsibility to protect pastures is inversely parallel; orientation toward intensive livestock husbandry run by formal business entities; and preference for emancipation from the responsibility to protect pastureland and regulate its use from the government. The “Introduction of the Proposed Pastureland Law to Parliament”<sup>2</sup> also presents these points as rationale of the legislation.

### 14.3 Proposed Legislation

The proposed Pastureland Law was prepared not only to create consistency in pastureland tenure with other large pastoral nations (e.g., Australia, United States, Iceland, China, and Argentina) (Hannam 2008: 110), but also with reference to the Grassland Law of China.

Fernandez-Gimenez et al. (2008) reviewed pastureland possession provisions of the July 20, 2007 draft version. Although a number of amendments have been added to new versions, I would like to mention some of them related to this paper on the versions of March 27, 2008 (A version) and the newest one of May 13, 2010 (B version).

The Draft Law provides for a possession right of winter and spring pastures, and areas for managing intensified livestock husbandry purposes to PUGs or herder groups,<sup>3</sup> and to legal entities, respectively (Article 4.1.3 in A version; Article 4.1.3 and Article 9.3 in B version).<sup>4</sup> In the A version, the area for managing intensified livestock husbandry purposes is limited to pastureland near cities (Article 13.3); however, in the newer B version this article has been deleted. In the B version, Article 3.1.9 provides that the size of a PUG will be not less than ten households (five households in the Govi areas). A PUG or herder group will be a legal entity, an “unregistered union” or “partnership” formed in accordance with Article 481.1 of the Civil Code (Article 3.1.9), which “shall participate in the civil legal relationships through appointed representative or one of the members” (Civil Code, Article 481.2).

While Article 20 of the previous version of July 20, 2007 provided that a Pastureland Possession Certificate will be both transferred and put as mortgage to

<sup>2</sup>On the website of Parliament: <http://www.parliament.mn/new/law/project/index/page/5>.

<sup>3</sup>“Нөхөрөл” (“friendship” or “partnership”) in the Mongolian original. Unofficial English version on the Green Gold website translates this word as “community” and “herders’ friendship and groups” in A Articles 4.1.3 and 13.1 respectively. The newest B version (May 13, 2010) uses “малчдын бүлэг,” which is a translation of a “herder group” in English.

<sup>4</sup>The previous version of July 20, 2007 allowed for possession of pastures only by PUGs.

others, the revised article of A and B versions allows only for transfer. In the newest B version, mortgage, sale, and donation of a certificate are explicitly forbidden (Article 14.1.1); this should help to decrease the possibility of possession by entities other than herder communities.

The amendment to insert a new Article 18.2.4 in the A version that establishes an obligation to make an assessment of impact on the environment before fencing possessed pastures may prevent inducing “the dilemma of fences” in Inner Mongolia (Taylor 2006: 379). Fencing pastures leads to overuse and accelerated degradation of unfenced pastures. In the B version, there are no articles about fencing pastures, but Article 12.3.2 allows for the right of a pastureland possessor to demarcate, put signs on the boundary of, and take measures to keep others’ livestock from entering the possessed pasture.

The B version (May 13, 2010) provides for the demarcation of pastureland of *otor*<sup>5</sup> (Article 6.1) and passage (Article 6.2) for common use. Pastureland for *otor* should be more than 10% of the total pastureland (Article 9.5). Article 12.3.3 provides that a part of the pastureland possessed by a PUG will be used by others temporarily and by contract with a majority approval of all the PUG members.

Although these amendments, as well as Article 9.11, which provides for regulation in the case of natural disaster, may help to maintain the flexibility of pastoralism, the proposed law is composed within a frame of the exclusive property rights system so as to protect pastureland by clarifying the responsibility of pastoralists as possessors of pastureland, or, in other words, to ascribe the degradation of pastureland to local herders. The A version of July 20, 2007 provides that “if no rehabilitation work has been done on pastureland in possession, and/or pastureland condition was the same as before possession or deteriorated ... pastureland possession contract can be changed into another one prior to expiration” (Article 22.2). In the newest B version, even if these articles are deleted, Article 12.4.2 still stipulates that a possessor should keep the condition of possessed pastureland from getting worse, with Article 14.1.4 prohibiting from herding a number of animals exceeding the carrying capacity of the pastureland.

## 14.4 Household Surveys

We conducted household surveys<sup>6</sup> to identify factors that affect pastoral household mobility. Three *sums* were selected from different ecological zones (Table 14.1). We selected one *bag* from each *sum* that is not a *sum* center *bag* or one too much

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<sup>5</sup> *Otor* is an opportunistic move for a specific purpose (for example, to fatten livestock in autumn for the winter, or to escape from an adverse natural condition, drought, or *zud*), sometimes taking only a specific part of livestock, usually without a *ger* but with a tent, by a specific part of the household.

<sup>6</sup> The survey is based on the survey conducted in the summer of 2007 as part of a CALE, Nagoya University research project (see Fernandez-Gimenez et al. 2008).

**Table 14.1** Characteristics of the sites

Study site and time	O'goomor <i>bag</i> (Erdene sum) To'v <i>aimag</i> Sept. 2008	Tseel <i>bag</i> (Bayan- O'njuul <i>sum</i> ) To'v <i>aimag</i> Sept. 2009	Hondot <i>bag</i> (Hanhongor sum) O'mnogovi <i>aimag</i> Feb. 2009
Ecological zone	Forest steppe	Steppe	Desert steppe
Mean annual precipitation	<300 mm	<200 mm	<200 mm
Land area (1,000 ha)	212.0 (803.0)	164.6 (479.0)	n/a
Human population (at the end of the previous year)	522 (3,607)	965 (2,324)	524 (2,422)
Herding households (at the end of the previous year)	183 (1,105)	259 (618)	136 (721)
Head of livestock (at the end of the previous year)	28,330 (126,085)	69,551 (179,229)	31,210 (149,283)

influenced by other sectors such as mining. The households to survey were selected with systematic sampling from tax lists in order of the total number of owned livestock (Table 14.2). Because those lists include households permanently resident in the *sum* center and those artificially split off in an attempt to get more aid supply and avoid tax, we omitted such households.

The mobility of a herding household is significantly correlated only with total livestock number (see Table 14.3), however, in contrast to our assumption, with no other expected factors such as attitudes toward pastureland tenure (i.e., a herder who has the opinion that pastures for all seasons should be owned by individual households might actually move more than a herder who thinks that pastures should be used publicly), age of household head, or even labor power available within the household, in all three sites. There is also a tendency to increase the degree of correlation if using the total number of small livestock and/or that herded by a *hot ail* (pastoral residential group).<sup>7</sup> This finding agrees with herders' allegations that they move so as to satisfy the needs of livestock or forage. Even in less-arid areas, the more livestock a herder wants to keep, the more mobility is needed.

It is to be noted here that in more arid Hanhongor *sum* herders appear to move less and less according to the number of livestock than in the two other sites, mainly because of the smaller number of livestock owned or herded by a household as well as reflecting the "Gobi Type" movement system (Humphrey & Sneath 1999). They move around a well, usually allocated to the household, spending half a year on their winter campsite and the rest of year tracking fodder availability: they call all the moves out of their winter campsite "*otor*." The fact that herders in Hanhongor use

<sup>7</sup>The number of livestock herded by *hot ail* is as at the time of survey, but does not reflect the previous condition: whether the household had been part of a *hot ail*, and the number of livestock the *hot ail* or single household had herded.

**Table 14.2** Average household of the sites

Study site	O'goomor <i>bag</i> , Erdene <i>sum</i> , To'v <i>aimag</i>	Tseel <i>bag</i> , Bayan-O'njuul <i>sum</i> , To'v <i>aimag</i>	Hondot <i>bag</i> , Hanhongor <i>sum</i> , O'mnogovi <i>aimag</i>
	<i>N</i> =168, <i>n</i> =20	<i>N</i> =203, <i>n</i> =52	<i>N</i> =122, <i>n</i> =52
Number of <i>hot ail</i> member households	2.05	2.08	1.66
Head of livestock owned (SFU)	447.38	595.53	402.49
Sheep (head)	123.5	178.3	74.5
Goats (head)	67.7	148.2	191.7
Cattle (head)	23.3	15.5	1.2
Horses (head)	17.6	26.6	11.2
Camels (head)	0.0	1.0	13.9
Head of livestock herded by hot ail (SFU)	887.15	1,086.21	556.15
Avg. moves per year	3.32	3.55	3.05
Avg. distance per year (km)	48.54	58.05	50.32
	(of 32 months)	(of 47 months)	(of 44 months)
Frequent use of customary camps in the last 10 years (%)	30.43	20.31	12.85
Livestock income 2008 (2007 Erdene) (Tg)	2,380,976	3,707,662	2,761,296
Sheep	581,210	1,137,399	326,053
Goats	886,071	1,736,590	1,894,932
Cattle	724,267	456,846	6,604
Horses	189,429	322,212	65,443
Camels	0	54,615	468,264
Livestock expenditure 2008 (2007 Erdene) (Tg)	834,714.29	390,296.15	225,256.60

SFU: Sheep Forage Unit. Sheep are estimated as 1 SFU, goats as 0.9, cattle as 6, horses as 7, camels as 5. Tg: Tugrug

their own customary camp less frequently than in the other two sites (see Table 14.2) reflects the opportunistic characteristic of their movements whereas the movements in the other two sites are rather transhumant.

Surveys with formal or informal interviews (for example Table 14.4) were also conducted in O'ndorshireet *sum*, To'v *aimag*<sup>8</sup> in 2008 and 2009, and in Duut *sum*, Hovd *aimag* in 2008 and 2010, where the SDC Green Gold project has been implemented since 2008.

<sup>8</sup>Jamsranjav (2009) is a report on the GG project implemented in the *sum* in 2008.

**Table 14.3** Correlation between mobility and livestock income, and number of livestock

<i>r</i> =	Erdene N= 168, n=20			Bayan-O'njuul N=203, n=52			Hanhongor N= 122, n=52		
	Total moves	Total distance	Total livestock income	Total moves	Total distance	Total livestock income	Total moves	Total distance	Total livestock income
Total livestock owned (SFU)	0.58	0.54	0.68	0.46	0.44	0.70	0.31	0.31	0.69
Total livestock herded by <i>hot ail</i> (SFU)	0.64	0.70	0.43 <sup>a</sup>	0.48	0.48	0.44	0.34	0.25	0.41

<sup>a</sup>Not significant

**Table 14.4** Perception of pastureland degradation by pastoralists

	Erdene	Bayan-Unjuul	Hanhongor
Percent of respondents who perceive degradation of pasture	90.5%, <i>n</i> = 19	90.6%, <i>n</i> = 48	69.8%, <i>n</i> = 37
Percent of the above respondents who allege climate change as a main cause of degradation	78.9%, <i>n</i> = 15	70.8%, <i>n</i> = 34	91.9%, <i>n</i> = 34

## 14.5 Discussion

### 14.5.1 *Mobility: Paradigm of Equilibrium Versus Nonequilibrium Model*

In recent literature on the Mongolian rangeland ecosystem, the paradigm of equilibrium and non-equilibrium models has become one of the topics often discussed. This paradigm, however, may have implications for attitudes toward the legislation for pastureland tenure as well as grazing management (Mearns 1994), although it is considered as a continuum rather than a clear dichotomy. In an equilibrium ecosystem, grazing pressure explains the condition of the vegetation, and conventional range management techniques, such as maintaining appropriate average stocking rates, are deemed to be most suitable for sustainable grassland management, whereas in a non-equilibrium ecosystem abiotic factors such as rainfall explain the vegetation conditions with livestock populations and vegetation dynamics being only loosely related, and opportunistic means of "tracking" fodder availability, usually through mobility, are typical pastoral management adaptations to the spatial and temporal variability predicted under this ecosystem (Bruce and Mearns 2002: 39). Thus, if most pastureland in Mongolia would be deemed to conform to the equilibrium model, the legislation of more secure and formal rights to pastures with control of stocking rates might well be adopted (Table 14.5).

Although nonequilibrium dynamics are expected to occur where the coefficient of variation (CV) of annual precipitation is greater than 33% and mean annual precipitation is less than 250 mm in Mongolia (Ellis & Chuluun 1993; Ellis 1995), researchers differently estimate the area under nonequilibrium dynamics in Mongolia: Swift (1995) estimates this to be nearly half the country; a 2003 World Bank report concludes as "Mongolia's rangelands would be expected to conform to the characteristics of 'non-equilibrium' as opposed to 'equilibrium' grazing systems" (p. 3); Wesche and Retzer (2005), at least "the entire Gobi part of Mongolia, i.e., some 40% of the country" (p. 134); and Sneath (2003), "a third or more of Mongolia" (p. 444).

Fernandez-Gimenez and Allen-Diaz (1999), although they estimated the steppe to be under the equilibrium grazing system, suggest that "the steppe and mountain-steppe are also strongly influenced by inter-annual variation, a characteristic of non-equilibrium

**Table 14.5** Implications of paradigm of equilibrium versus nonequilibrium ecosystem for grazing management and legislation policy

Grazing system	Equilibrium	Nonequilibrium
Annual precipitation	CV < 33% Mean annual precipitation > 250 mm	CV > 33% Mean annual precipitation < 250 mm
Main factor to vegetation condition	Grazing pressure (human-induced degradation)	Rainfall (climate-induced degradation)
Herd management	Carrying capacity (control of stocking rates)—no or less mobility	Opportunistic means of “tracking” fodder availability—more mobility
Land tenure	Secure tenure Formal property (ownership) rights	Flexible access to large areas Communal usufruct—customary institutions
Spatial and social boundary	Clearly delineated	Ambiguous, multilayered

rangelands” and that “ecosystems usually possess characteristics of both non-equilibrium and equilibrium systems” (p. 882). Wesche and Retzer (2005) also argued that “Evidence for non-equilibrium conditions depends on the variables analyzed” (p. 143). This disparity shows that it is meaningless to demarcate areas corresponding to equilibrium or nonequilibrium grazing systems with two different herd management types.

Yet, arguments over the paradigm do not seem to be reflected in the design of CBNRM projects and the proposed pastureland law, which have adopted the control of stocking rate to balance with the carrying capacity of a pasture as a means to protect the condition of pastureland, whether under an equilibrium or nonequilibrium system. The limitation of general stocking rate is known to be hard to implement, and in Mongolia too I have known no project sites where it is actually in operation.<sup>9</sup> Instead, it translated into “mobility” or deferred rotation grazing by seasons, in particular, deferred utilization of winter and spring pastures in summer and autumn, not only in the Govi areas (Schmidt 2006: 20) but also in other areas. Carrying capacity as presented by governments or projects estimates grassland productivity too low to match the perception of herders because of flaws in its calculation: for example, compensatory regrowth of grazed and browsed plants is ignored (Behnke & Scoones 1993: 19). In most areas in Mongolia, and all the more in less-arid areas corresponding to equilibrium ecosystems, except in some regions such as Selenge aimag, mobility is the most effective way to spread grazing pressure and preserve the condition of pasturelands because the impact of herding on grassland becomes greater as a herd stay longer in one place.

<sup>9</sup> The Millennium Challenge Corporation (MCC) Peri-Urban Rangeland Project aims to form herder groups to run a semi-intensified form of livestock farming. Every herder group will consist of 2–6 households with up to 900 sheep units of livestock. No other projects define the limit of the size of livestock.

If we focus on herd management, we should also take into account risk management to escape from sudden severe natural conditions: droughts and *zud*, the latter of which may be caused by other environment factors than precipitation and grazing pressure, such as heavy snowfall and/or severe cold temperature. In reality, the herd management in Mongolia is based on the combination of transhumance to move regularly between seasonally suitable, usually customary camps, and opportunistic movements to escape from weather changes and to track fodder availability. "Fluctuating size and composition of herds, climatic variations and availability of drinking water all combine to influence a family's decision on when and where to move stock" (Mau & Chantsalkham 2006: 12). Mobility and flexibility, corresponding to nonequilibrium ecosystems, are still a main strategy in most areas, and it would be more intensified so as to manage uncertainty: not only interannual variation of precipitation and sudden adverse weather conditions but also the socioeconomic condition of the household and the society, even though the frequency and total distance of moves mainly depends on the size of herd: the number of the livestock that the household are herding, as our survey shows.

### ***14.5.2 "Community:" Size and Boundaries***

Leach et al. (1999) criticize that CBNRM approaches rest on not only an assumption of a distinct, relatively stable, local environment: in other words an equilibrium ecosystem, but also an equilibrium model of a distinct community (p. 228), which is rooted in much early social theory: "Early sociology and anthropology conceived of society as a bounded object or closed social system" (p. 229). The proposed pastureland law organizes a distinct "community" as a legal entity, and CBNRM projects implemented in Mongolia wish it to also work as a business enterprise, the interests and activities of which are, however, not necessarily compatible with those of a PUG.<sup>10</sup>

It is open to question to adopt some design principles in common-pool resource (CPR) literature into the pastoral sector in Mongolia with no reference to the nature of the resource system: this is a "blueprint" approach. Small size and clearly defined boundaries of group membership are commonly supposed to be critical conditions to sustainable management of CPRs (Agrawal 2002), and the first one of Ostrom's eight design principles, "clearly defined boundaries" (Ostrom 1990:90, 2009), is often referred to in donor documents (for example, Jamsranjav 2009). According to these principles, PUGs or herder groups have been organized, the size of which is usually two to three times smaller than a *bag*. Certainly, the smaller a natural resource user group and its target resource system are, the lower the transaction cost is. Moreover, when their boundaries are well defined, it will be easy to define to

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<sup>10</sup> NBNRM projects often linked environmental issues to livelihood improvement or poverty alleviation of herder households by optional incomes such as selling felt craft. There is an assumption that poverty is likely to cause overexploitation of natural resources.

whom the fruits of investment into or the responsibility of degradation of pastures belong. The proposed pastureland law is based on the same assumptions, with articles requiring herders to include the number of group members (albeit in the newest draft version only the name of group) and a map showing the area, location, and boundaries in a contract with the *sum* government, and to control the stocking rate.

However, in arid and semiarid rangeland ecology, including Mongolian pastureland, the resources “may be multiple, overlapping, and vary across space and time,” and “user groups may vary in size or composition with respect to different resources within an area, and with respect to a single resource over time” (Fernandez-Gimenez 2002: 51), which are characteristics of nonequilibrium ecosystems and communities. Thus, to whom the fruits or responsibility of investment into a pasture belong is not clear, as already noted. Our household survey also shows that a majority of herders perceive climate change as a main cause of pastureland degradation whether they live in arid or less-arid areas (see Table 14.4).

Some herders in Bayan-O’njuur answered “it is a *bag*” when asked what the expanse of “your community”<sup>11</sup> is. They said, “It might possibly be a *sum* in some cases, but it’s too big. In a *bag* everyone knows every household, if not everyone else. In our *sum* there are many I don’t know.” When asked “what right to be allocated to wells in a future pastureland law,” a number of herders in every site answered “they should be ‘managed’ (*‘ezemshih,’* which is usually translated as ‘to possess’) by one person and ‘used commonly’ (*‘niiteer ashiglah’* usually translated as ‘to use publicly’ or open access)”. They explained that “*niiteer ashiglah*” does not mean “open access” as usually understood and translated, but “common use,” and that outsiders who want to use resources have to negotiate with local herders or the *sum* government anyway. This description shows that we may take a *bag* as a community in most cases, although it was in the collective era that *bags* were established with seasonal nomadic moves nominally restricted within *bag* territories (Mearns 1993, 2004).

Fragmentation of a resource system into parts, in particular a pasture into smaller parts than a *bag*, is likely to impede the effective performance of resources management. In summer 2009 in O’ndorshireet *sum*, one of the SDC Green Gold project sites, the project coordinator told me that when they planned to conduct *otor* in less-used pastures allocated to a PUG in the *sum*, members of the PUG severely objected, claiming the land was their own. An old herder, one of the PUG leaders who came to a project meeting, complained that he was receiving persistent demands from members of another PUG to abandon his spring camp situated in the territory of the PUG even though he had used it for more than 20 years. In autumn 2010 a female PUG member in Bayan-O’njuul *sum* told us, “We are going to collect tolls from passengers over our possessed land,” without knowing that it is not allowed by law. These comments show that organizing PUGs have brought more exclusionary attitudes toward the territory.

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<sup>11</sup> We used “*tanai nutgiinhan*” (“members of your homeland” as literally translated) as “your community.”

### ***14.5.3 Inclusive Versus Exclusive Use of Pastureland and Roles of Local Governments***

CBNRM projects often confine their concerns within their project sites. In To'v *aimag* we met herders who came from Dundgovi *aimag* with their livestock escaping from droughts. They said, "If a new pastureland law, which provides for exclusionary pastureland possession, does not allow outsiders to use possessed pastures any more, it will cause civil war." They meant by "civil war" not only that it would increase disputes and conflicts between herders, but also that they would revolt to protest against the government. This is a problem of survival for them because, if they cannot move to the north, they will have no other means but to leave their livestock starving to die. A new legislation may end or limit their negotiation power or a potential right to use pastures in To'v *aimag* as a second user (see Niamir-Fuller 2000).

Historically, in the collective era the government assisted herders to move, and even in the Qing dynasty when movements beyond banners were prohibited by law, local governments often urged herders to accept those of other banners escaping from droughts or *zud*. The governments intended to promote pastoral productivity as a whole or to mitigate a loss of livestock in case of disaster, by enhancing mobility and flexibility (Humphrey & Sneath 1999; Fernandez-Gimenez 2002). Although there may have been some compulsion by the government, herders also recognized the benefit for themselves: providing social safety nets would spread risk based on reciprocity as well as improve their livelihood.

However, since the dissolution of herding collectives in the early 1990s, the administration has withdrawn or "abdicated" (Mearns 2004) authority and responsibility for the pastoral sector because of the chaos of transition, lack of budget, and later the introduction of "the notion that the economic sphere could and should be emancipated from the political structure so as to allow the economy to assume its latent 'natural' form" (Sneath 2002: 192). In summer 2002 the then governor of Duut *sum* in Hovd *aimag* told me, "I would not regulate pastureland use or disputes because the administration should not intervene in such private economic activities. If I do so, I must be accused later." He never did use nor know his authority endowed by the revised 2002 Land Law; this was not an isolated case but a common case (Fernandez-Gimenez & Batbuyan 2004).

Local herders and officials think that the proposed pastureland law will legally devolve the authority, responsibility and duties of the government to PUGs. In autumn 2010 the governor of Bayan-O'njuul *sum* told me, "If pastures are possessed by PUGs, present agreements between *sums* on pastureland use will be unnecessary because then movements beyond PUG territories will disappear." Only a few *sums* in To'v *aimag* have pastures enough for every season in their own territories. Some *sums* are short of winter pastures while others are short of spring pastures. Those agreements allow herders to use the seasonal pastures in other *sums* that their own *sum* lacks. If pastures are possessed by PUGs as their property, such agreements should be made between them in case of need. PUGs will also bear all costs of making, monitoring, and enforcing rules regarding rangeland management,

which at present local governments ought to bear. Nevertheless, it is very probable that the cost that the government should bear will rather rise as disputes and conflicts to be mediated decrease, and cases of punishment will be imposed by the government.

## 14.6 Conclusion

The privatization of pastureland in Mongolia was conceived as a part of the transition to a market economy in the early 1990s. The circumstances of the period appear to influence rationales for the legislation of pastureland law, such as stress on incentives to invest in pastures, orientation toward intensive livestock husbandry by formal business entities, preference for emancipation of the responsibility to protect pastureland and regulate the use from the government, and so on. This influence may be called “neoliberal bias.”

Later, as the focus of pastureland issues shifted to environmental concerns, CBNRM approaches were introduced as common property-based resource management with new legislation on pastureland that provides for pastureland possession. However, the logic calling for PUG possession of pastureland is still based on a conventional model of human–land relationship: the result of human activities or investment to land is predictable, without reference to new research on arid and semiarid ecosystems. CBNRM projects also have organized small PUGs based on a “blueprint” approach with a conventional image of “community” or a wish to establish business entities. These entities have reduced mobility and flexibility and increased exclusionary attitudes toward outsiders, with reciprocity decreasing.

Even in relatively less-arid areas, pastoral mobility is still the most effective strategy to increase the number of livestock with spreading grazing pressure so as to improve herders’ livelihoods as well as providing social safety nets in case of natural disasters. If the climate become more arid in Mongolia in the future, flexibility, mobility, and opportunistic management will be even more important to sustainable grassland management and herder livelihoods (Fernandez-Gimenez et al. 2008).

It is to be noted that local governments have played a significant role to enhance mobility and flexibility in herd management. Current problems regarding pastureland use, such as “open access” and abuse of winter and spring pastures in summer and autumn, are considerably attributable to the government’s abdication of the authority and responsibility to the pastoral sector since the early 1990s. The present 2002 Land Law already endows local governments with the authority to allow a herder group to use pasture exclusively (Article 52.2). Therefore, the central government should provide *sum* governments with necessary financial and human resources to enforce the present Land Law, instead of introducing a new pastureland law. Moreover, in contrast to expectations, it is possible that pastureland possession by small PUGs may increase the cost borne by local governments with increasing disputes and conflicts to be mediated.

The problem of the concentration of human and livestock population into peri-urban areas should be resolved by other approaches than property rights approaches, such as revenue transfer to rural areas. Pastureland possession based on the model of a distinct community with "clear defined boundaries" as a legal entity, which most NBNRM approaches and the proposed Pastureland Law have adopted, does not appear to conform to the characteristics of the resource system of pastoralism in Mongolia. It is needed to intensify present institutions: the role of local governments and reciprocal ethics in particular.

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