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Managing Mongolia's Commons: Land Reforms, Social Contexts, and Institutional Change

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Managing Mongolia's Commons: Land Reforms, Social Contexts, and Institutional Change

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Since the collapse of the Soviet Union, postsocialist rural contexts have afforded commons scholars particularly fertile ground for examination of institutional change and evolution under new modes of governance. In Mongolia, as elsewhere, such transformations have been characterized by the erosion of state control and de facto or de jure devolution of land and resource rights. Particularly since 2000, policy and practice in Mongolia have reflected state and donor concerns with the formation of herders' groups and the implementation of group tenure solutions in pursuit of environmental sustainability. Drawing on data sets from the Gobi region, this article examines the nature, impact and limitations of recent state-, donor-, and community-led tenure reforms and social innovations with respect to land rights and practice, including with regard to mining-related land alienation. The article provides a critical analysis of recent, complex institutional innovations in Mongolia and their role in shaping contemporary commons management.

Keywords commons, groups, institutions, land reform, mining, Mongolia, pastoralism, social contexts

Since the demise of the Soviet Union, postsocialist rural contexts have afforded commons scholars particularly fertile ground for examination of institutional change, not least with reference to de facto or de jure land reforms and to emergent, devolved modes of natural resource governance. These transformations have affected not only the rules and norms of resource use, but also the social forms and groups through which resource access is enacted and contested (Lindner 2007).¹

However, the potential for research in post-Soviet contexts to contribute to contemporary debates over commons management has yet to be fully realized. Although restitution of agricultural land rights has been much studied, the governance of pastoral commons has attracted relatively little attention, even though mobile pastoralism remains a core livelihood strategy in countries such as Kyrgyzstan and Mongolia (Thornton et al. 2002). Future prospects for sustainable resource management necessitate improved understanding of the functioning of pastoral systems and institutions and of the impacts of state and donor interventions upon them, especially given the disappointing legacies of external interventions in pastoral societies elsewhere (Forstater 2002).

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In the 21st century, varied donor-initiated projects have been implemented on Mongolia's pastoral commons, with the formation of herders' groups and devolved resource management at their core. These afford an important opportunity for exploration of the social dimensions of commons management and institutional evolution among pastoralists. I draw on empirical data from Mongolia's Gobi region to explore the nature and limitations of donor-initiated herders' groups as a focus for commons management and for tenure reforms, in the context of pre-existing institutional landscapes. Three major projects, the German government-funded GTZ "Nature Conservation and Bufferzone Development"/"Conservation and Sustainable Management of Resources: Gobi Component" (NCBD) project (1995–2002/2002–2006), the World Bank "Sustainable Livelihoods" project (SLP) (Phase 1: 2002–2006), and the UNDP "Sustainable Grassland Management" project (SGMP) (2002–2007), form the basis for my analysis. In the final section of the article I discuss the contributions of this study to theoretical and policy debates.

Theoretical Context

The Social Dimensions of Commons Management

Commons scholarship has long been concerned with the institutional factors that facilitate cooperation and "success"² in the management of common pool resources (CPRs), most famously summarized in Ostrom's (1990, 2005) "design principles" and synthesized in Agrawal (2001). Such work, grounded in ideas of economic rationality as central to resource users' behavior, typically emphasizes the importance of clarity, not only in social and spatial boundaries of resources and user groups, but in rules governing resource use. Recent critiques suggest a more "socially embedded" understanding of CPR institutions, whereby practices and informal norms are emphasized over formal rules and management bodies. These latter perspectives highlight not only economic rationality but also social and historical contexts as key factors in shaping institutions and resource use (Colding and Folke 2001; Johnson 2004; Carter 2008; Sick 2008). They are also frequently concerned with the role of institutions in mediating or reinforcing inequities in resource access (Johnson 2004). Similarly, recent analyses of the successes and failures of community-based natural resource management (CBNRM) and co-management, with respect to issues of both equity and sustainability, emphasize sociocultural contexts and institutional dimensions as critical factors (Sandstrom 2009; Brunckhorst 2010). A number of important points arise: First, the often externally driven formalization of institutions and delineation of boundaries does not necessarily represent an optimum management solution, especially among pastoralists (Cousins 2000; Bennett et al. 2010). However, the ways in which formalized arrangements impact upon pre-existing institutions, and with what outcomes, merits greater critical attention. Second, as Sick (2008, 100) argues, "We [as commons scholars] must enhance our understanding of the institutional conditions that foster collective resource management by 'unpacking' the social contexts in which these institutions are created and by anticipating the broader social consequences that resource management institution building can provoke." Thus, social contexts are highlighted as both integral to and shaped by institutions, although significant gaps persist in understanding of these linkages, especially with respect to issues of equity and exclusion in resource access, and the impact of external interventions therein.

Land Tenure and Land Reform

Recent work by land reform scholars on the limitations of externally driven (state/ donor) and community-led reforms highlights not only the importance of context and social relations in understanding the reality of "what land reforms do in practice," but also the need for further, policy-relevant research on these issues (Sikor and Muller 2009, 7).³ These lacunae assume particular importance in the light of contemporary policy developments, whereby customary tenure and the role of "community" are increasingly emphasized by donors, despite the policy challenges posed by issues of equity, community capacity, and the inherent dynamism of many customary systems, not least among pastoralists (Peters 2009; World Bank 2003). Furthermore, in post-Soviet contexts in particular, the empirical focus for this article, the "ambiguity of property" has been widely remarked upon, with institutional and legal pluralism a commonplace aspect of "transition" (Sikor and Lund 2009, 2). Post-Soviet land restitution and land reforms, although exhibiting significant diversity in their aims and implementation across newly independent states, have typically reflected a move toward individualized and private land rights and development of markets in land (Lerman 2008). However, as Verdery (1999) observes, in practice "fuzzy property," characterized by diverse and overlapping claims, embedded in social networks and contested power relations, and markedly different from the clearly delineated private rights often envisaged by states and/or donors, may result. Thus, the social dimensions of property relations and institutions emerge as integral to understanding of actual contemporary practice vis-à-vis land, both within and without post-Soviet contexts.4

In the following article, I seek to integrate contemporary, overlapping concerns over commons management and land reform, to illuminate the social contexts and consequences of institutional change and the roles of state, donors, and local communities. I thus respond to recent calls for "detailed case studies...to contribute to more dynamic and socially informed models of common property institutions," with a particular focus on the especially complex and contested example of pastoralist communities in post-Soviet contexts (Sick 2008, 101).

Study Areas and Research Methods

Empirical data presented herein derive from fieldwork at three sites in comparable desert-steppe environments of Mongolia's Gobi region from 2000–2008 (Figure 1).⁵ Ongoing research, including post 2008 updates, will form the basis of future publications.

Site 1 was originally part of a 2000 study of pastoral institutions in diverse environmental contexts. Its inclusion herein enables longitudinal examination of institutional evolution and transformation, including the emergence of donorinitiated groups as a focus for CPR management and tenure reforms.⁶ Site 2 was one of few areas where the NCBD, SLP, and also SGMP were all active contemporaneously. Data from site 2 enable comparative evaluation of all key donor projects. Site 3 was selected to examine the limitations of herders' group tenure vis-à-vis mining. Thus, the subsequent analysis focuses on CPR management and institutional change in the context of different donor interventions and mining. The sites themselves do not differ significantly in terms of environmental or sociocultural factors.

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	SITE 1	SITE 2	SITE 3
Author's data sets	2000; 2001; 2004; 2006	2006; 2008	2008
Rationale for site selection	2000, 2001: One of four sites selected in different ecological zones to examine institutions in diverse contexts. 2004, 2006: Longitudinal analysis of donor-initiated herders' groups (NCBD, ^a SLP ^b projects), re CPR ^c management, social/historical contexts, and tenure reforms	2006: Analysis of donor-initiated herders' groups, re CPR management, social contexts/historical and tenure reforms. Presence of SGMP, ^d NCBD and SLP enabled comparison between projects. 2008: Presence of donor-initiated herders' groups and mining issues. Enabled exploration of groups' limitations re mining incursions.	2008: Presence of donor-initiated herders' groups (especially NCBD) and mining issues. Enabled exploration of groups' limitations re mining incursions.
Key donor projects present at site	GTZ NCBD (1995–2002/2002–2006) World Bank SLP (2002–2006)	GTZ NCBD, (1995–2002/ 2002–2006) World Bank SLP (2002–2006) UNDP SGMP (2002–2007)	GTZ/MNE NCBD, (1995–2002/ 2002– 2006) World Bank SLP (2002–2006)
Methods and informants	2000/2001: 111 household surveys (99% Site 1 herding families/KA) and 102 follow-up semistructured interviews (SSIs); 13 SSIs—NCBD, local administration (LA) staff. 2004: 105 SSIs with herding households/KA, 7 SSIs – NCBD, SLP, LA staff. 2006: 15 SSIs—leaders NCBD/SLP herders' groups, members and non-members. 2 SSIs—LA staff.	2006: 62 Household surveys and SSIs (70% Site 2 herding families/KA); 7 SSIs- SGMP, NCBD, SLP, LA staff. 2008: 2 SSIs—NCBD staff.	2008: 9 SSIs—herders' group leaders (NCBD, SLP); 11 SSIs—local NCBD, SLP, LA staff.
Data Analysis *NCBD *SLP: 5 *SComm *SGMP	Qualitative materials: coding (open and axial), theoretical memos, using Atlas.ti Public Household surveys: basic statistical analysis of socioeconomic information. *NCBD: Nature Conservation and Bufferzone Development project (GTZ). *LP: Sustainable Livelihoods project (World Bank). *Common pool resources. *SGMP: Sustainable Grassland Management project (UNDP)	al), theoretical memos, using Atlas.ti s of socioeconomic information. ject (GTZ).	

Figure 1. Site selection, methodology, and data analysis.

Data collection and analysis strategies were consistent across sites and research periods (Figure 1). In 2000/2001, household/*khot ail* (KA) surveys and semistructured interviews (SSIs) focused on social organization, land rights, and land use (site 1).⁷ Fieldwork in 2004 enabled further exploration of donor-initiated herders' groups. In 2006 household surveys at site 2 employed the 2000/2001 survey instrument, which was designed to elicit both qualitative and quantitative data. Further SSIs with site 1 and 2 herders included group leaders and randomly selected group members/nonmembers from diverse wealth categories, based on participatory wealth ranking. In 2008 (site 3) SSIs were conducted with leaders of herders' groups, NCBD/SLP, and local administration personnel, in addition to SSIs with NCBD staff for site 2. Participant observation was also undertaken at all sites.

Qualitative materials were subject to multiple coding events to facilitate analysis of emergent themes, in accordance with the precepts of grounded theory (Strauss and Corbin 1990).

The Mongolian Context: Institutions, Land Rights, and Institutional Evolution

In the 21st century, pastoralism remains the key livelihood strategy for over 30% of Mongolians. Despite radical changes in the economic and sociopolitical frames for pastoralism from pre-Soviet, to collectivized Soviet-era herding (late 1950s–early 1990s) and the post-Soviet "Age of the Market" (from 1991/1992), core elements of the herding system persist. It continues to be based on seasonal movements between pastures and herding of "five kinds of animals": sheep, goats, horses, cows/yaks, and camels, albeit with geographical variations in movement distances, patterns, and herd composition. At the time of writing, pastureland remains in state ownership, de facto managed as a common property regime, albeit with more exclusive rights of particular herding families to particular winter and spring camps.⁸

Prior to decollectivization of the Mongolian pastoral economy in the earlier 1990s following the collapse of the Soviet Union, herders' land use and land rights were, theoretically at least, conferred by state-run collectives (*negdel*) from the 1950s onward. However, customary, precollective pasture rights and institutions reportedly persisted and effectively coexisted to varying degrees with centralized state control (Mearns 1996). These earlier rights were grounded in regular, repeated usage, especially of particular key winter and spring grazing areas, by herding house-holds/*khot ail* (KA), although formal pasture allocation within larger predefined herding territories (banners or *hoshuu*) was officially at the discretion of religious or secular officials (Bawden 1968; Potkanski and Szynkiewicz 1993). The nature and importance of customary rights in terms of CPR institutions and pasture use are explored further for study areas in this article.

Images of a pastoral sector in crisis, characterized by conflict, sedenterization, and an overarching breakdown of pasture-use norms, became widespread in the 1990s (Mearns 1996; Fernández-Giménez 2002). These were often predicated on the notion of a postcollective institutional crisis wherein "formal regulatory institutions for allocating pastures [e.g., state-run collectives (*negdel*)] vanished, and weak-ened customary institutions were unable effectively to fill the void" (Fernández-Giménez and Batbuyan 2004, 141). In CPR terms, the situation thus arguably approached one of open access (Mearns 1996). In the early post decollectivization years, and in common with land reforms as enacted elsewhere in post-Soviet

states, certain donors' responses focused on private ownership of land, informed by notions of an incipient "tragedy," and driven by concepts of property and ownership largely alien to Mongolian pastoralists' custodial relationship with land (Sneath 2001). Especially over the last decade, however, enhanced, legible tenure security through formal devolution of rights to clearly delineated herders' groups has emerged as an important policy solution (Ykhanbai 2004; Upton 2009).

In the following section I analyze postcollective, pre-project social and institutional landscapes, primarily through empirical material from site 1, with reference to historical contexts and "design principles" and to provide the context wherein these recent reforms and donor interventions may be assessed.

Institutions, Social Contexts, and CPR Management (2000/2001)

Empirical evidence suggests that CPR institutions may continue to be influential, despite erosion of state influence and contrary to images of crisis.

In 2000/2001 membership of kinship-based bodies proved integral to herders' pasture use and access rights (site 1). Lone nuclear families and stem families (two co-resident households) predominated, albeit with some seasonal flexibility in social boundaries (Figure 2, overleaf). Despite variations in annual grazing patterns, particular winter camps and pastures, to which households claimed "customary rights," typically formed the stable part of each household/KA's seasonal cycle. More than 70% claimed their rights derived from historical, customary usage by family members, with collective-era usage often reinforced by allocation of winter shelters to particular families during decollectivization. Subsequent government licensing of winter camps under the 1994 Land Law further reinforced and formalized these allocations. Thus, both historical contexts and social organization were important determinants of postcollective institutions, rights and practices, while, as in the collective era, overlapping formal and informal dimensions characterized the institutional landscape.

As I explore in detail elsewhere (Upton 2005, 2009), the meaning of "customary pasture rights" was contested among herders. Herders variously cited rights of both collective and precollective origin, as summarized in Figure 2, as "customary" on the basis of usage of particular pastures and campsites by their immediate family or earlier ancestors. Even postcollective rights, gained for example through allocation of winter shelters under the Land Law, were also cited by a minority as "customary," thus reflecting a dynamic processes of strategic reinvention and deployment of custom as herders sought legitimacy for their practices and pasture rights through a process described by Cleaver (2002) as "institutional bricolage."⁹

In 2000–2001 the majority of households/KA enjoyed access to winter and also spring sites, with spring shelters often included on state-issued licences. Herders typically argued that campsite licences also implied more exclusive rights to surrounding grazing, in accordance with "customary rights" and norms of pasture use.¹⁰ Rights to summer and autumn grazing were less clearly delineated, albeit with herders typically returning to areas around a particular well each year, except when adverse climatic conditions necessitated longer distance (*otor*) movements.

In addition to the above social and natural constraints, factors such as wealth and labor power acted as material constraints on herders' on pasture use patterns, particularly their ability to undertake *otor*. However, neither showed statistically significant correlations with mobility overall. Despite marked heterogeneity in

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Household (hh)/khot ail	h)/khot ail (KA	() chara	(KA) characteristics ^a								
Mean size	Mean	Kinshi	Kinship characteristics ($n = 108$)	tics ($n = 108$		Seasor	Seasonal stability (n = 107)	<i>i</i> (<i>n</i> = 107)		Mean househ	Mean household wealth (total
(total number of members)	working power (adult members)					Remair year	Remain together all year		Separate during annual cycle	livestock numbers)	bers)
5	3.3	Lone r Stem 1	Lone nuclear families—75% Stem families/KA—16.7%	es—75% -16.7%		87.9%		12.1% <i>ail</i> in si	12.1% (primarily <i>khot</i> <i>ail</i> in summer)	232 (but heteroge	232 (but heterogeneous: 20%hh
		Joint/e Other-	Joint/extended joint families/KA—4.7% Other—3.6% ^b	t families/KA	-4.7%					<100 animals, i.e., below government poverty lines; 2% hh >600 animals)	, i.e., below overty lines; inimals)
Pasture use	Pasture use and pasture rights (by hh/KA)	ghts (by	hh/KA)								
Source of past	ture rights ^c		Annual mobility	ility				Winter	Main pasture problems	roblems	Incidence of
PC C DC/		Other	Mean	No of	Frequen	Frequency of annual	nual	shelter	(n = 100)		"trespassing" ^e
and C	Post		distance	main	moveme	movement categories	ories	ownership/			in winter
	Ы		(km)	seasonal	(n = 107)	(access			pastures (as
				camps	10km	1–20	20+				reported by
				р.а.	or less	km	km				hh/KA)
48.6% 21.6%	18%	11.8%	31.7 km	2–3	17.4 % 20.2%	20.2%	62.4%	95.5%	No problems-43%	43%	86.5%—no
									No observance of	of	trespassing
									"traditional rules" ^d —30%	s" ^d —30%	13.5%—
									Too many livestock—14%	tock—14%	trespassing
									Lack of wells/ water5%	vater5%	
									Climate change—5%	5%	
									Uther-3%		
Cooperation,	Cooperation, collective action and mutual assistance	on and	mutual assi	stance							
Participation in	Participation in informal collective action/ negotiation with other hh/KA	tive action	on/ negotiatic	in with other	hh/KA	Part	icipation in	n formal collec	Participation in formal collective action/negotiation with other hh/KA	iation with othe	er hh/KA
65% (e.g., sea	65% (e.g., seasonal deferral of pasture use; occasional, sporadic	of pastury	e use; occasi	ional, sporad	<u>.</u>	7.2%	% (typicall)	r marketing live	7.2% (typically marketing livestock products)		
cooperation over labor-inte	/er labor-intensi	ve tasks	ensive tasks e.g. shearing livestock)	g livestock)							
an = 111, unless c	$^{a}n = 111$, unless otherwise indicated.										

²n = 111, unless otherwise indicated.
⁵Stem families: usually lone nuclear family, plus parents of one of spouses in separate household. Joint/extended joint families: married siblings and nuclear families, plus dependent

parents in extended form (after Sneath 1999). PC and C: precollectives and collective; DC/Post DC: Decollectivisation/ postdecollectivization. Traditional rules:" norms of seasonal deferral, especially protection of wither pasture. However, interpretations varied—others' use of "Traspassing" refers to percoved unacceptable contravention of traditional rules. Uptically out-of-season grazing winter pastures. However, interpretations varied—others' use of their winter pasture in summer was identified as trespassing by some, not all herders. Such usage in autumn was identified as trespassing by all respondents.

Figure 2. Characteristics of Site 1 households/Khot Ail, 2000/2001.

wealth, even poorer households were able to access seasonal grazing and campsites (Figure 2).

Thus, in contrast to the negdel era, postcollective institutions were dominated by informal rules and norms, albeit reinforced by formal legislation, and grounded in herders' membership of particular households/KA (Figure 3). Neighborhood-level groups such as neg usniikhan/nutgiinhan/jalgynkhan ("people of one water"/ place/"one valley community") were widely dismissed by herders as absent or irrelevant, both for pasture regulation and mutual assistance, contrary to suggestions that these may emerge as key post-decollectivization institutions (e.g., Mearns 1996). Mutual assistance occurred primarily within households/KA, with interhousehold/KA cooperation confined to occasional assistance and general observance of informal rules around pasture use (Figure 2). Contra Ostrom, these "rules in use" are, however, contested and ambiguous; definitions of "trespassing" or contravention of rules varied between herders, although reported rates and observed incidences of trespassing were low. Notions of "trespassing" are also influenced by the central principal of reciprocity in Mongolian herding, by which herders are traditionally reluctant to deny others access to grazing in times of need, while also seeking to protect their customary winter pastures where possible, thus highlighting the importance of concerns beyond economic rationality.¹¹

Site 1 thus complies with few of the "design principles" for institutional success (Figure 4, overleaf).¹² However, when evaluated in terms of institutional sustainability, equity and compliance with (contested) "rules in use," some measure of success is evident. This is not to ignore local problems: Increasing human and livestock populations continue to present environmental challenges, while an influx of *otor* herders in summer 2001 placed principles of reciprocity under strain. Nonetheless, in 2000–2001 site 1 did not approximate an open-access situation, despite the absence of overt resource management bodies and clear rules and regulations for pasture use.

It is within this social and institutional context that recent donor interventions and land reform initiatives must be considered.

Land Reform, Herders' Groups, and New Social Contexts

Introduction to Donor-Initiated Herders' Groups as Institutional Innovations

Recent developments in Mongolia have seen the emergence of initiatives around enhanced tenure security, conservation, and sustainable livelihoods, in the context of natural disasters (*dzud*) and increasing impoverishment of the herding sector (GOM 2003). These initiatives have typically focused on formal devolution of pasture rights to herders' groups, albeit often expressed in terms of the revival or strengthening of customary rights and practice (Ykhanbai 2004). They have precipitated social and institutional innovations through formation of herders' groups as foci for devolution of rights and cooperation over commons management.

According to the United Nations Development Programme (UNDP 2007), since May 2006, donors have allocated US\$77.5 million to 14 projects centered on creation and formalization of some 2000 herders' groups. Despite project- and location-specific variations, herders' groups created by the NCBD, SGMP, and SLP share key features, as highlighted next.

By 2006, 83 NCBD "herders' communities" or *nukhurlul*, involving 1,175 herding households, or 20% of households in project areas, were active across 3 Gobi

	Collective (late 1950s-early 1990s)	Postcollective (1991 onward)
State institutions		
Bodies/groups/organizations	 Negdels (collectives)^e Brigades Heseg Suur 	 Sum/bag administration (under Laws, 1994 and 2002) (but limited state capacity, ambiguities in legislation—see section "State- and Community-Led Reforms")
Rules/laws/norms/practice	 Seasonal pasture areas allocated by <i>negdel</i> Control of timing of seasonal movements (seasonal deferral) by <i>negdel</i> Management of <i>otor</i>^c Herd placing (<i>negdel</i> allocation of specialized herds to particular suur) Cooperation over herding tasks 	 Land Laws 1994/2002 — (but limited state capacity, contested interpretations—see "State- and Community-Led Reforms") (RECENT STATE/ DONOR-LED REFORMS): Formal agreements over pasture use/possession rights with herders' groups/nukhurlul ("communities")/NGOs (but contested legal basis, see "State and Community-Led Reforms")
Non-state institutions		
Bodies/groups/organizations		 (Horshoo—mainly early 1990s)^d (Neg nutgiinkhan/ usniikhan/ jaigynkhan—dismissed by herders in study areas) Khot all/ households RECENT STATE/ DONOR-LED REFORMS): Nukhurlul, NGOs, herders' groups
Rules/ Laws/ Norms/ Practice	 Some recognition of "customary" pasture rights by <i>nedgel</i> (Mearns, 1996) Practice of seasonal deferral (formalised by <i>negdel</i>) Reciprocity (formalised by <i>negdel</i>) Otor (formalised by <i>negdel</i>) Cooperation for herding tasks (formalised within <i>suur</i> and <i>heseg</i>) 	 Continued recognition of "customary rights," (albeit with "trespassing") Practice of seasonal deferral (but reported "trespassing") Reciprocity Reciprocity Cooperation for herding tasks (primarily within households/KA prior to formation of <i>nukhurlul</i>, groups, etc.) Formalised cooperation within <i>nukhurlul</i>/groups/NGOs Rights of <i>nukhurlul</i>/groups/NGOs to particular pasture areas—affecting practice (supported by CMAs^e, formalised agreements) (See section "State and Community-Led Reforms")
^a For postcollective period, defunct	Vunimportant institutions, as defined by herders at st ain horizon routing montrolism Bringdog, horson a	^a For postcollective period, defunct/unimportant institutions, as defined by herders at study sites, are shown in parentheses. Data sources: empirical plus published material where indicated.

* Negdels (collectives) were the main bodies regulating pastoralism. Brigades, heseg and suur were formal, sub-units concerned with aspects of herding management. • Otoris lange-distance megration is nearch of pasture. * Horshoo were herders cooperatives (Mearms 1986), Most collapsed in early 1990s; some have emerged under donor projects. * Horshoo were harders cooperatives (Mearms 1986), Most collapsed in early 1990s; some have emerged under donor projects.

Figure 3. Summary of key institutions (Collective and Postcollective eras).^a

			Design principles (after Ostrom 1990)	strom 1990)			Other issues	
Resource and user group boundaries clearly defined ^e	Rules for resource appropriation and provision ^b	Individuals affected by OR able to participate in modifying OR [©]	Monitoring arrangements ^d	Existence and application of graduated sanctions [®]	Low cost, accessible conflict resolution mechanisms ^f	Government support for local rules/benign neglect	Rationality, historical and social contexts	Institutional "success"
Pre NCBD/SLP Project								
Resource: WC: Yes WP: No Four seasons' pastures: No Bag pastures: No Bag pastures: Yes (but boundaries boundaries boundaries boundaries boundaries boundaries hh/KA: Some seasonal seasonal ses for KA. MJ/WU: No Bag members: Yes	Yes: informal norms, but differing initerpretations of norms, e.g., "trespassing"	Yes: informally through changed practice. No "formal" except seasonal <i>bag</i> meetings.	Informal: observation by other herders. Noncomplance typically highly visible. (No reported involvement)	Social sanctions and criticism by Wo reported significant LA involvement)	Only through informal informal negotiation between herders, but general desire to avoid conflict. (No reported significant LA involvement).	Limited active support—e.g., through Land Law formalization of rights to winter camps.	Concerns with reciprocity and conflict avoidance, concerns beyond economic rationality. Predominantly informal institutions embedded in historically derived rights and kinship-based social organisation.	Low reported and observed rates of "trespassing" general compliance with (contested) rules. Access to key pastures across socio-economic categories—degree of equity. But—lack of data on environmental impacts; growing human/ livestock populations and resistance to <i>otor</i> herders.
Post NCBD/SLP changes								
Resource: WC, bag pastures—As above WP/4 seasons pasture: varied, depending on contracts etc User Group: As above, plus Nukhurlu/NGO —clear social boundaries	As above, plus new normstules articulated on basis of group membership, CMAs, contracts, etc. contracts, etc. understanding and legal bases.	As above, but non-members by be affected by new groups/rules and have little influence.	As above, plus provision for LA implementation of contracts, but limited capacity.	As above, plus LA involvement under contracts in "assisting members in protecting pasture protecting pasture ights," but limited capacity, no clear sanctions.	As above, plus concerns among herders over possible future conflicts, complaints by nonmembers/me mbers over exclusion/trespas sing	As above, plus LA involvement in supporting group under contracts, but limited capacity.	As above, but principles of reciprocity under stress; herders' concerns over exclusion/hardening of boundaries, but also desire for own stronger pasture rights; kinship pasture rights; kinship rights retain importance, but to varying degrees in particular groups.	More marked issues of exclutation. But potential to develop more sustainable pasture use, under provisions of contracts.
						<i>q</i>		.

Notes: Design principles for institutional success (Ostrom 1990, 360): "Clear definition of boundaries for resource and legitimate user group; "existence of rules for resource use/management, congruent with each other and local conditions; "individuals affected by operational rules (OR) should be able to participate in modifying rules; "monitors should belong to/be accountable to appropriators; "exact other and local conditions; "individuals affected by operational rules (OR) should be able to participate in modifying rules; "monitors should belong to/be accountable to appropriators; "exact other appropriators officials accountable to appropriators; "low-cost conflict resolution mechanisms should exist between appropriators and officials.

Key: WC = winter campsite (shelter plus 0.07 ha); WP = winter pasture; hh/KA = household/khot ail; NJ/NU = neg jalgynkhan/usnijkhan; LA = local administration.

Figure 4. Institutional characteristics and design principles: Site 1.

provinces. *Nukhurlul* at sites 1–3 typically comprised 10–15 households (40–60 people), with members sharing key seasonal grazing areas and/or water sources. *Nukhurlul* membership was optional. However, membership contributions were typically required, for example cashmere or up to 50,000 tg per household (US\$50 at 2004 exchange rates), as determined by *nukhurlul* themselves. *Nukhurlul* activities centred on shared labor, cooperation over seasonal movements, marketing and processing of livestock products and livelihood diversification (for example, vegetable growing). NCBD goals of "nature conservation" were not widely articulated among site 1 herders, although in published evaluations staff members argue that these "translated into the Gobi herders' objective of 'mobility,' which in itself was integral to achievement of more sustainable resource use" (e.g., Schmidt 2006, 20).

Social innovations associated with the SGMP are comparable. On conclusion of SGMP, 67 herder groups, typically of 10-15 households, had been established in 3 aimags (UNDP 2007). SGMP aimed "to increase the welfare of herding families through the sustainable management of Mongolian grasslands...[through]... strengthen[ing] and formaliz[ing] existing customary herder community institutions, and strengthen[ing] linkages between them and formal governance structures and the private sector" (UNDP 2002, 1). "Customary herder institutions" and groups are equated in project documents with neighbourhood groups, akin to neg usniikhan or neg nutgiinkhan, and existing norms of cooperation among such groups (UNDP 2002). Diverse and contested interpretations of custom, as highlighted in empirical material from study sites, are not acknowledged therein. One project key assumption was that "herders already cooperate in daily activities or can be easily convinced to cooperate" (UNDP 2002, 28). However, as with NCBD, this assumption proved questionable at site 2, with interhousehold/KA cooperation typically confined to occasional assistance with labor-intensive tasks. Furthermore, herders did not recognize neg usniikhan or neg nutgiinkhan as active, significant institutions.

World Bank SLP reports indicate the creation, formalization, and/or support of 544 herders' groups (313 NGOs, 42 cooperatives, and 189 "informal" groups), across 7 *aimags* (World Bank 2007a). SLP encouraged informal groups to "upgrade" to NGO or cooperative status to facilitate their access to credit (World Bank 2007b). In practice, at study sites, SLP NGOs were frequently based on pre-existing GTZ *nukhurlul*. SLP herder groups thus, unsurprisingly, share key characteristics with NCBD and SGMP groups, for example, geographical proximity of members and group activities centered on cooperation over pasture use, livestock husbandry, and marketing.¹³

For all three projects, herders' groups emerge as social and institutional innovations (Figure 3) and have been instrumental in shaping new social landscapes around resource use, as explored under "Community Influence" later in this article. As a focus of tenure reform they also serve to illuminate external (state/donor) and community capacity and limitations and the importance of local, social contexts in this respect.

State- and Community-Led Reforms: Contexts, Limitations, and Outcomes

State and Donor Influence. Sikor and Muller (2009) propose that limitations of state-led land reforms arise from their top-down nature and failure to enlist local support or respond to local contexts. In Mongolia, analysis of recent innovations

in group tenure tends to support these propositions, albeit with the identification of additional explanatory factors, especially issues of capacity and legislative clarity.

Specifically, early attempts by the postdecollectivization state to reclaim a role in pasture regulation were confounded by local administrations' lack of capacity to fulfill devolved legal rights and obligations, for example, under the 1994 Land Law (Fernández-Giménez and Batbuyan 2004).¹⁴ State capacity remains an issue in the implementation of recent legislation (e.g., 2002 Land Law), and in collaboration with donor initiatives (World Bank 2007a).

Ambiguities in legislation are equally important limitations. A key assumption underscoring SGMP is that "an adequate legal environment (already) exists...to provide for the allocation of meaningful tenure rights to herder organisations" (UNDP 2002, 29). This remains debatable. According to particular interpretations, the 2002 Land Law permits herders' groups to negotiate use or possession contracts for winter and spring pastures and campsites and even for all four season's "custom-ary" pastures (UNDP 2002, 29).¹⁵ However, Ykhanbai (2004, 7) argues that the "allocation of pasture to communities or groups of herders is not yet fully legal. The new Land Law [2002] allows herder's groups to contract with *sum* governors only for communal use of winter and spring pasture ... for summer and autumn pastures informal contracts only exist."¹⁶ Clarification and strengthening of legislative provision pertaining to land rights is a key recommendation from all three key projects considered herein.¹⁷

Lack of legislative clarity has been reflected in its translation to donor projects on the ground. SGMP reports indicate that of 67 herders' groups formed by 2007, 27 had 15-year contracts for pasture use rights, primarily for winter and spring grazing only (UNDP 2006; 2007). However, empirical evidence suggests that identification of the existence and meaning of contracts is far less clear-cut than suggested in the preceding discussion. For example, at site 2 (2006) SGMP staff identified only one use contract for all four seasons' pastures areas, while local administration (LA) staff argued that all six SGMP groups had such contracts. Within a single SGMP group, herders disagreed over whether they had a contract for all four seasons' pastures, or for haymaking areas only. They also disagreed over whether pasture contracts gave them rights to exclude other herders, or merely responsibilities for conservation. All highlighted their own lack of capacity, in conjunction with and reinforced by uncertainty over rights and resistance of nonmembers, as compromising their attempts to regulate pasture use.

Similarly for SLP, project documents suggest that contracts pertained to herders' groups "long term use of winter and spring pastures" (World Bank 2007a). Empirical work at sites 1 and 2 revealed at least three instances in which contracts existed for all four seasonal pastures. Furthermore, as one SLP representative argued, "In fact, herders can't understand the meaning of pastureland contracts," a claim borne out by local herders. One NGO leader, who had recently concluded such a contract, explained, "It's difficult to say if this contract means we can stop other herders' coming here...we've had very little information [about NGOs and what contracts mean]." Nonetheless, concerns were widely expressed, especially among nonmember herders, over their potential to limit movements. These concerns appear apposite: The contract secured by the above-mentioned NGO required the LA to support members in protecting pastures from lengthy use by nongroup members.

The geographical overlap between donor projects adds to complexity around group tenure provisions. In more than one instance *nukhurlul* had become SLP

NGOs and subsequently concluded land-use agreements. These and other *nukhurlul* also claimed to be stewards of "community managed areas" (CMAs) (NZNI 2006). At the time of writing, "CMA" was not a category of protected area recognized in national legislation. Furthermore, although resource management responsibility could legally be devolved to *nukhurlul* in forest environments, this was not the case in pastureland. However, this did not prevent some *nukhurlul* from concluding land management contracts for pastureland CMAs (NZNI 2006).

Other limitations lie in the extent to which external initiatives concur with local agendas. Others' reviews of SLP suggest that the push to develop formal herders' groups was "almost certainly...essentially donor-driven," with many herders expressing concerns over declining flexibility in boundaries associated with such innovations (Blench 2004). The contested and dynamic nature of custom, as highlighted for site 1 earlier, also presents challenges to external interventions, where these appear predicated on a clear, homogeneous notion of customary institutions. Finally, the low take-up of group membership by herders supports Sikor and Muller's (2009) concerns over the ability of externally led solutions to enroll local actors (NZNI 2006).

Community Influence. Although state- and donor-initiated, recent tenure reforms and social innovations enable subsequent community "ownership," through their local interpretation and enactment. As "domesticated" by herders, these reforms are limited in diverse ways, not least with respect to issues of equity.

By 2004, 52% (n = 100) of site 1 herders had joined one of six NCBD *nukhurlul*, primarily to access organized labor power, in conjunction with possible marketing and livelihood diversification opportunities. Patterns of nonmembership reflected a complex array of material, attitudinal, and geographical factors including poverty, lack of labor power, and lack of physical or familial proximity to *nukhurlul*.¹⁸ Labor and wealth characteristics were unable in isolation to explain membership patterns, although they were important in precluding membership for a number of households, through inability to pay membership fees and/or spare household members for shared activities (Figure 5).

Issues of trust were important in site 1's western area, where the failure of one emergent *nukhurlul* prompted herders' reversion to sole reliance on households/ KA. By 2004, "hardening" of established *nukhurluls*' social boundaries, where they had reached an optimum size for efficient cooperation, acted as additional barriers to inclusion. Site 2 fieldwork confirmed this complex array of factors as integral to nonmembership of herders' groups.

The impacts of group formation and tenure reforms were to some extent masked by their recent appearance. However, by 2004 concerns over declining mobility and pasture access for nonmember herders were apparent. As one nonmember observed: "Now the *nukhurlul* people...stay close to each other and it's difficult to move to these community areas." Others at site 1 noted the increasing association of summer pasture areas with particular *nukhurlul*, especially where these had repaired wells or created new water points, thus extending notions of exclusivity beyond winter pastures and tending to undermine previously fuzzy, multiple and contested notions of "customary" property rights (Upton 2008). Three *nukhurlul* had also formed SLP NGOs and concluded land use contracts, as highlighted earlier.¹⁹

Such contracts were intended to facilitate more sustainable use of pastureland and increase tenure security, while retaining some flexibility in land rights.

Household/ka attributes	Site 1 (to	Site 1 (total area)	Western area ^t	า area ^b	Eastern area ^t	า area ^b
	Nukhurlul members (<i>n</i> = 52)	Nonmembers $(n = 48)$	Nukhurlul members $(n = 8)$	Nonmembers (<i>n</i> = 32)	Nukhurlul members ($n = 44$)	Nonmembers (<i>n</i> = 13)
Labor power (mean, adults 18– 55/60 years) ¹	2.4	2.4	3.3 ^c	2.5	2.2°	2.3
Wealth (mean total private livestock per hh/ka)	204 ^a	225 ^a	211	209	203	217

Note. With 55 years (women) and 60 years (men) defined in LA records as upper limit of age range for working adults. After Upton (2008). ⁴Mean wealth differences not significant (t = 0.58, d.f. = 98, p = .56) ^bNo significant differences in wealth or labor power between members and nonmembers in either eastern or western areas, nor between members and nonmembers in east and west, except for differences in labor power of member households between east and west.

Figure 5. Attributes of Nukhurlul and non-Nukhurlul member households, site 1 (total area) and site 1 (eastern and western areas), 2004.

However, the position of co-resident nonmember herders was unclear, as was the potential for flexibility in times of *dzud*. At site 2, empirical data confirmed a situation of increasing institutional complexity and potential for exclusion. Non-group members complained of exclusion from pasture and/or haymaking areas, while group members frequently argued that nonmembers should not use "their" designated areas, confusion over their exact rights and limited ability to enforce them notwithstanding.

In terms of CPR theory, these developments bring the situation closer to the "design principles" (Figure 4). Clear delineation of social and spatial boundaries, while not yet realized, has been advanced by the development of donor-driven herders' groups with lists of members and with contracts/agreements (albeit with contested legal bases and interpretations), for defined areas of pasture. However, early indications suggest issues of exclusion for nonmembers. Where equity is taken as a measure of success these new institutional arrangements may thus be deemed less successful than their predecessors and, as observed by Cleaver (2002) in other geographical contexts, place unwelcome limitations on prospects for "institutional bricolage." Recent developments thus seem to mirror insights from pastoral societies elsewhere: namely, that an emphasis on formal institutions, clarity in boundaries, and exclusivity of rights may prove antithetical to "successful" CPR management (Cousins 2000). However, data also suggests that confusion over herders' rights under new arrangements may compromise efficacy, suggesting a need for greater clarity and capacity of herders' groups to enforce more exclusive rights. These implications are discussed further here, following brief consideration of one further limitation of current reforms: their ability to assure tenure security in the face of external pressures, in this case, mining activities.

Mining, Land Rights, and Limitations of Land Reforms

Both formal and informal ("ninja") mining sectors have expanded rapidly in Mongolia since the 1990s. However, debates over mining issues are almost wholly divorced from those concerned with herders' group formation and tenure reform, despite important questions over the efficacy of the latter in the context of mining.

At site 3 two well-established *nukhurlul*, both with CMA agreements for all seasonal pasture areas, had recently experienced the arrival of ninja miners. In both instances, although *nukhurlul* leaders reported CMA agreements as successful in deterring pasture use by nonmember herders, they had little efficacy in the face of mining incursions. *Nukhurlul* members tried, but failed, to expel ninjas, as a result of which a minority of local herders reportedly became involved in ninja mining themselves. As one *nukhurlul* leader argued, "This kind of ninja activity is very difficult... the *nukhurlul* has no advantage in this situation." Local NCBD staff confirmed the general weaknesses of CMA agreements in the face of mining activities: "CMAs being but "a kind of promotional activity for the communities... they don't really have full rights" (interview, 9 January 2008).

Commercial gold mining activities were not present in CMAs at site 3. However, at site 2, where a CMA had been adversely affected by commercial mining activities, the affected *nukhurlul* were unable to secure any redress from the company or from local officials (interview NCBD staff, 20 January 2008).

Summary reports by SLP and NCBD confirmed mining-related incursions as major issues facing herders' groups (World Bank 2007a, 2007b). NCBD reports

argue that "the current procedure and practice of issuing [mining] licences...to outsiders without the free, prior and informed consent of local communities...is endangering all successes of engaging communities in conservation, as they lose their stake in the natural resource base and thereby the incentive to invest in it and protect it" (NZNI 2006).

Conclusions

Analysis of institutional transformations and complex tenure reforms on Mongolia's pastoral commons highlights limitations in both external and locally reworked manifestations of land reform. It also serves to highlight the importance of social and historical contexts in shaping actual practices on the ground, and of social consequences in evaluating the "success" of recent initiatives (Sick 2008).

Following decollectivization, institutional analysis indicates the predominance of informal rules and norms, enacted and contested between herding households/ KA and "fuzzy" property rights, in the context of a weak state. However, recent donor-led initiatives have become increasingly influential in promoting institutional transformations and tenure reforms based on the formation and formalization of herders' groups.

These new social forms are affecting CPR management and livelihood outcomes in diverse ways. Specifically, flexibility in social and spatial boundaries, integral to pre-project institutional landscapes, appear compromised by formalization of pasture rights and by the delineation of clearly bounded herders' groups, while concerns over conflict and exclusion are exacerbated. Thus, despite failure of pre-project CPR institutions to comply with design principles they may be deemed more successful than latter more formalized innovations, a conclusion echoed in pastoral societies elsewhere in the world.

However, this is only a partial reading of the current situation in rural Mongolia. In a national context of growing pressure on pastoral resources it must be questioned whether the endogenous, pre-donor, and primarily informal institutional framework could continue in isolation to sustain broadly collaborative use of the CPR. Empirical evidence of growing challenges to principles of reciprocity and increasingly defensive attitudes to customary resources, even among herders concerned over prospects of their own exclusion from other areas, suggest that institutional developments that strengthen herders' rights should be welcomed. Problems arise, however, in that current manifestations of such developments typically focus on a small number of herders' groups, with self-selected members and who comprise a minority of local populations. The benefits of group membership for this minority may be considerable (Upton 2008), but may also be realized at the expense of nonmembers. An alternative, more inclusive option, that of compulsory group membership based on geographical location, has not proved effective in study areas where enacted through SLP. As noted earlier, such groups were little more than inactive "paper groups."²⁰

Problems also arise through weaknesses in state and herders' groups' capacity, and in legislative provision. Lack of clarity over key legislation has resulted in diverse interpretations and confusion over the status and legitimacy of implemented reforms, which have compounded difficulties not only for state actors, but also for group members in enforcing and enacting these provisions. In this sense, "fuzziness" comes closer to unwelcome confusion than to scope for institutional diversity. Recent expansion of minerals licensing across the countryside has also brought the weaknesses of current legislative provisions into sharp relief.

In policy terms, the development of a clearer legislative framework, as currently under discussion in the draft Pastureland Law, is welcome. However, where pasture rights are devolved to particular herders' groups, rights of nonmembers must be protected. In other words, flexibility in social and spatial boundaries must be maintained, within the context of clearer rights for particular groups, at least to winter and spring pastures. This suggests an emphasis on enhancing the capacity for LA, but particularly for herders' groups themselves, to negotiate and manage pasture access and respond flexibly to changing conditions, rather than undue concerns with formalized rules and boundaries. A situation in which herders' groups are allocated clearer responsibilities for pasture management, but without the resources to fulfill these responsibilities or to realize benefits from them, is unlikely to produce more "successful" CPR management. Compulsory group membership remains a problematic issue: Although this may apparently address concerns over exclusion, it does not address intragroup dynamics or power differentials and cannot of itself ensure equity in resource access, even should problems of "paper groups" be overcome. The resolution of issues of herders' land rights, tenure and associated livelihoods have acquired particular urgency in the aftermath of 2009–2010 dzud events, wherein the loss of some 20% of the national herd has prompted calls for "drastic policy reform in the livestock sector" (UN Mongolia Country Team 2010).

Notes

- 1. "Institutions" are defined herein following Leach et al. (1999, 226) as the whole complex of factors and structures "which influence who has access to and control over what resources, and arbitrate contested resource claims" and thus include not only rules and norms, but groups/organizations.
- 2. Institutional "success" is equated with long-enduring institutions, those that facilitate sustainable CPR use, through appropriate rules in use and resource users' compliance with rules, and with equity in access to resources/benefits (Ostrom 1990; Agrawal 2001).
- 3. Sikor and Muller (2009) define state-led reforms as "programs conceived by national governments in a top down fashion and implemented...through bureaucratic modalities." Community-led reform does not deny the role of the state, but focuses on "actual land tenure arrangements and authority relations as well as 'bottom up' political initiatives around land."
- 4. Space constraints preclude in-depth analysis of post-Soviet land reforms and debates over property rights. For further detail, see Hann (2003) and Verdery (1999).
- 5. Study sites are based on *bags*, Mongolia's smallest administrative units. They form part of *sums* (districts) and *aimags* (provinces).
- 6. Uniquely among the three sites, data from site 1 includes herders' pre- as well as postproject accounts of institutional landscapes. "Pre-project" does not mean that donor interventions were entirely absent in study areas, but rather that significant institutional transformations, through the emergence of donor-driven herders' groups, had yet to occur.
- 7. KA are herding camps, usually kinship-based, of three to six herding households. The term is applied here where herders in study areas self-identified as KA.
- 8. See Fernández-Giménez and Batbuyan (2004) and Upton (2009) for more detailed analysis of contemporary pastoral land rights.
- 9. According to Cleaver (2002), institutional bricolage is a process whereby stakeholders consciously or unconsciously draw on existing cultural and social arrangements, ways of thinking, and the legacy of historical institutional arrangements in shaping and justifying new institutions.

- 10. Legally, this interpretation is debatable. An emerging consensus suggests that individual household/KA licences pertain only to the shelter and its immediate area (0.07 ha) (Fernandez-Gimenez and Batbuyan 2004).
- 11. "Trespassing" was variously defined by herders, albeit typically in relation to out of season use of winter pastures. See Figure 2, note *e*; also Upton (2005).
- 12. Ostrom's 1990 "design principles" are still key to CPR debates, especially those reflecting economic rationality perspectives. Later work—e.g., Agrawal (2001)—elaborates on these principles.
- 13. SLP also produced maps that divided all herders into compulsory, geographically based groups. However, only where herders in study areas voluntarily formed smaller NGOs for pasture management were active groups evident. It is to these latter that "SLP herding groups" refers.
- Key provisions required local governors to "control use of common land" in addition to allocating campsites to herding households.
- 15. Use rights/contracts do not confer rights of disposal and are less exclusive than possession rights (Fernández-Giménez and Batbuyan 2004).
- 16. "Informal agreements" denotes pilot agreements between herders and local governors, without a clear legal basis; or informal agreements and practices among herders.
- 17. Reforms to pastureland legislation were under consideration by the Mongolian government at the time of writing. It is expected that a new Pastureland Law may permit allocation of pasture possession rights.
- Herders' groups at study sites exhibited wide variations in kinship links. Some were dominated by close family members, although the majority included more distant and/ or nonrelative households.
- 19. Contracts required *sum* governors to make provision for those on *otor* from other group territories, in addition to more "exclusive" provisions.
- 20. See Usukh et al. (2010) for analysis of the ongoing Swiss Agency for Development and Cooperation's Green Gold program and its attempts to develop such inclusive groups.

References

- Agrawal, A. 2001. Common property institutions and sustainable governance of resources. *World Dev.* 29:1649–1672.
- Bawden, C. 1968. The modern history of Mongolia. London: Weidenfield and Nicholson.
- Bennett, J., A. Ainslie, and J. Davis. 2010. Fenced in: Common property struggles in the management of communal rangelands in central Eastern Cape Province, South Africa. Land Use Policy 27:340–350.
- Blench, R. 2004. Report to ERM, for CPR, Mongolia. Unpublished consultancy report available from the author.
- Brunckhorst, D. 2010. Using context in novel community-based natural resource management: Landscapes of property, policy and place. *Environ. Conserv.* 37(1):16–22.
- Carter, S. 2008. Research and policy implementation for more equitable and sustainable use of common-pool resources. *Society Nat. Resources* 21:152–159.
- Cleaver, F. 2002. Reinventing institutions: Bricolage and the social embeddedness of natural resource management. *Eur. J. Dev. Res.* 14:11–30.
- Colding, J., and C. Folke. 2001. Social taboos: 'Invisible' systems of local resource management and biological conservation. *Ecol. Appl.* 11(2):584–600.
- Cousins, B. 2000. Tenure and common property resources in Africa. In *Evolving land rights, policy and tenure in Africa*, ed. C. Toulmin and J. F. Quan, 151–179. London: DFID, IIED, NRI.
- Fernández-Giménez, M., and B. Batbuyan. 2004. Law and disorder: Local implementation of Mongolia's Land Law. Dev. Change 35:141–161.
- Fernández-Giménez, M. 2002. Spatial and social boundaries and the paradox of pastoral land tenure: A case study from postsocialist Mongolia. *Hum. Ecol.* 30:49–78.

- Forstater, M. 2002. Bones for sale: 'Development,' environment and food security in East Africa. *Rev. Polit. Econ.* 14:47–67.
- Government of Mongolia. 2003. *Economic growth support and poverty reduction strategy*. Ulaanbaatar, Mongolia: Government of Mongolia.
- Hann, C. 2003. *The postsocialist agrarian question: Property relations and the rural condition*. London: Transaction Publishers.
- Johnson, C. 2004. Uncommon ground: The 'poverty of history' in common property discourse. Dev. Change 35(3):407–433.
- Leach, M., R. Mearns, and I. Scoones. 1999. Environmental entitlements: Dynamics and institutions in community-based natural resource management. World Dev. 27:225– 247.
- Lerman, Z. 2008. Agricultural recovery in the former Soviet Union: An overview of 15 years of land reform and farm restructuring. *Post-Communist Econ.* 20(4):391–412.
- Lindner, P. 2007. Localising privatisation, disconnecting locales—Mechanisms of disintegration in post-socialist rural Russia. *Geoforum* 38(3):494–504.
- Mearns, R. 1996. Community, collective action and common grazing: The case of post-socialist Mongolia. J. Dev. Stud. 32:297–339.
- New Zealand Nature Institute. 2006. Gobi regional component, project 'Conservation and sustainable management of natural resources': Summary of project strategies, and impacts on local livelihoods and natural resources. Ulaanbaatar, Mongolia: NZNI.
- Ostrom, E. 2005. Understanding institutional diversity. Princeton, NJ: Princeton University Press.
- Ostrom, E. 1990. Governing the commons: The evolution of institutions for collective action. Cambridge, UK: Cambridge University Press.
- Peters, P. 2009. Challenges in land tenure and land reform in Africa: Anthropological contributions. World Dev. 37(8):1317–1325.
- Potkanski, T., and S. Szynkiewicz. 1993. The social context of liberalisation of the Mongolian pastoral economy. PALD research report no. 4, Institute of Development Studies (IDS), Brighton, UK: University of Sussex.
- Sandstrom, C. 2009. Institutional dimensions of comanagement: Participation, power and process. *Society Nat. Resources* 22:230–244.
- Schmidt, S. 2006. Pastoral community organization, livelihoods and biodiversity conservation in Mongolia's southern Gobi region. In *Rangelands of Central Asia: Proceedings of the conference on transformations, issues and future challenges, 27 January 2004*, USDA Forest Service Proceedings RMRS-P-39, ed. D. Bedunah, D. McArthur, and M. Fernandez-Gimenez, 18–29. Fort Collins, CO: USDA Forest Service.
- Sick, D. 2008. Social contexts and consequences of institutional change in common pool resource management. *Society Nat. Resources* 21:94–105.
- Sikor, T., and C. Lund, C. 2009. Access and property: A question of power and authority. In *The politics of possession: Property, authority and access to natural resources*, ed. T. Sikor and C. Lund, 1–22. Chichester, UK: Wiley Blackwell.
- Sikor T., and D. Muller. 2009. The limits of state-led land reform: An introduction. *World Dev.* 37(8):1307–1316.
- Sneath, D. 2001. Notions of rights over land and the history of Mongolian pastoralism. *Inner Asia* 3:41–59.
- Sneath, D. 1999. Kinship, networks and residence. In *The end of nomadism? Society, state and the environment in Inner Asia*, ed. C. Humphrey and D. Sneath, 136–178. Cambridge, UK: White Horse Press.
- Strauss, A., and J. Corbin. 1990. *Basics of qualitative research: Grounded theory procedures and techniques*, 2nd ed. London: Sage.
- Thornton, P., R. Kruska, N. Henninger, P. Kristjansen, R. Reid, F. Atieno, A. Odero, and T. Ndegura. 2002. *Mapping poverty and livestock in the developing world*. Nairobi, Kenya: ILRI.

- United Nations Development Programme. 2002. Sustainable grassland management, Project document. Ulaanbaatar, Mongolia: UNDP.
- United Nations Development Programme. 2006. Annual progress report (January–December) (MON/02/301). Ulaanbaatar, Mongolia: UNDP.
- United Nations Development Programme. 2007. Sustainable grassland management project exit strategy. (MON/02/301). Ulaanbaatar, Mongolia: UNDP.
- UN Mongolia Country Team. 2010. Mongolia dzud appeal. UN Mongolia Country Team consolidated appeal, May. Available from: http://www.undp.org/cpr/documents/recovery/ mongolia_appeal.pdf (accessed 5 July 2010).
- Upton, C. 2005. Institutions in a pastoral society: Processes of formation and transformation in post-socialist Mongolia. *Comp. Stud. South Asia Africa Middle East* 25(3):584–599.
- Upton, C. 2008. Social capital, collective action and group formation: Developmental trajectories in post-socialist Mongolia. *Hum. Ecol.* 36:175–188.
- Upton, C. 2009. "Custom" and contestation: Land reform in post-socialist Mongolia. World Dev. 37(8):1400–1410.
- Usukh, B., H. Binswanger-Mkhize, R. Himmelsbach, and K. Schuler. 2010. Fostering the sustainable livelihoods of herders in Mongolia via collective action. Ulaanbaatar, Mongolia: Swiss Agency for Development and Cooperation (SDC) and Mongolian Society for Rangeland Management.
- Verdery, K. 1999. Fuzzy property: Rights, power and identity in Transylvania's decollectivisation. In Uncertain transition: Ethnographies of change in the postsocialist world, ed. M. Buroway and K. Verdery, 53–82. Lanham, UK: Rowman and Littlefield.
- World Bank. 2003. Land policies for growth and poverty reduction. Washington, DC: The World Bank.
- World Bank. 2007a. Community mobilisation in pastureland management: Final report. Ulaanbaatar, Mongolia: The World Bank.
- World Bank. 2007b. Mongolia, Sustainable Livelihoods Project II: Project appraisal document, East Asia and Pacific EASRE. Ulaanbaatar, Mongolia: The World Bank.
- Ykhanbai, H. 2004. Community based co-management of pastureland resources in Mongolia. Paper presented at IASCP 10th Biennial Conference, 9–13 August, Oaxaca, Mexico.