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Laws and Regulations Impacting the Enclosure Movement on the Tibetan Plateau of China

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LAWS AND REGULATIONS IMPACTING THE ENCLOSURE MOVEMENT ON THE TIBETAN PLATEAU OF CHINA

Few comprehensive surveys address the evolution of China's grassland policies, particularly with respect to fencing. As a necessary prologue to such an inquiry, this paper presents the national-level laws and regulations that have structured contemporary property regimes and influenced the rate and extent of the enclosure movement in pastoral western China, with a focus on Tibetan areas. Based on this review of the legal and political framework of enclosure on the Tibetan Plateau, we argue that the intent and sequencing of development policies in pastoral areas has been based on the overriding logic of modernization, privatization, and intensification. This logic promotes and rationalizes policies that reflect the state's political goals in Tibetan areas, which may have unintended consequences including increased grazing pressure on, and degradation of, the very rangeland resources that are putatively being protected by enclosures. Rather than addressing critical socio-economic constraints in pastoral areas such as population pressures and market distortions, policy makers have focused instead on technical interventions without recognizing the integrated nature of the challenges confronting Tibetan pastoralists amidst ongoing and rapid shifts in their socio-economic situation.

INTRODUCTION

There are few comprehensive surveys addressing the evolution of China's grassland policies, particularly with respect to fencing. This paper presents the national-level laws and regulations that structure China's contemporary property regimes and directly affect the ongoing enclosure movement in pastoral areas, with a focus on Tibetan populations. Having reviewed the legal and political framework for enclosure on the Tibetan Plateau, we will argue that the intent and sequencing of development policies in pastoral areas is based on an overriding logic of modernization, privatization, and intensification (Yeh 2005). This logic, in turn, has been used to promote enclosure and rationalize heavy investments in technologies of control — policies that reflect the state's political goals in Tibetan areas and which may have unintended consequences, including increased grazing and degradation of the very rangeland resources that are putatively being protected by enclosures.¹ Rather than addressing critical socio-economic constraints in pastoral areas such as population pressures, migration, labor access, and market distortions (Shen 2004), policymakers have instead focused on technical interventions (e.g., reseeded, livestock breeding)

without recognizing the integrated nature of the challenges confronting Tibetan nomads as they undergo rapid shifts in their socio-economic situation.

It is germane to reiterate the importance of these grasslands, which can hardly be exaggerated: rangeland resources include 400 million hectares—more than 40 percent of China's land (Schwarzwalder et al. 2002). Of that, Tibetan Plateau rangelands encompass about 1.65 million km² or one-quarter of China's total area (Miller 2001). The PRC has 266 pastoral and semi-pastoral counties accounting for 161.5 million people, who herd the world's largest population of sheep and goats along with other livestock (Liu 2010; Williams 1996).² In addition to supporting millions of pastoralists, Tibetan rangelands provide critical ecosystem services. China's water supply is dependent on Tibet's grasslands, which are the source of its major rivers. Many of these river systems are crucial to countries other than China, so the management of these watersheds is of global import. While little studied, the carbon storage capacity of the world's largest expanse of grasslands—and its concomitant effects on the global climate—must also be given emphasis. Tibet's grasslands also support many rare and endemic species of fauna and flora.

Economically, China's western pastoral regions are

1. c.f. Yeh 2009; Williams 1996b; Jahiel 1997; Muldavin 2000; Ho 2001a; Harris 2010

2. There are 120 "pure pastoral" counties in China comprising almost 63 million people.

characterized by heterogeneous and geographically dispersed resources and rudimentary markets (Brown et al. 2008). The economic development of these areas poses a formidable challenge to the Chinese government. Poverty incidence among livestock-dependent people is among the highest in China, with large numbers of nomads living below the poverty line (Mearns 2004).³ Reportedly, more than a third of pastoral households in Qinghai Province live below the poverty line (Wageningen and Wenjun 2001). Given their importance as a source of livelihoods and provisioner of environmental services—not to mention their ethnic makeup, demography, and current state of development—it behooves us to scrutinize the national-level regulations and policies affecting the enclosure movement on China's grasslands.

Pastoralism is long-lived in Tibet — e.g., archaeological evidence dates the domestication of yaks to 4,000 years ago. Therefore, we must recognize that cultural institutions, livelihood practices, wildlife and plant communities have co-evolved on the Plateau (Miller 2000). As such, there are continuities in patterns of resource use, animal husbandry strategies, and property regimes among Tibetan pastoralists, which China's recent political and economic reforms have not wholly transformed.

Authors should explain their methods in compiling a review like this. Between 2007 and 2010, the first author was a member of a multi-national and multi-disciplinary team funded by the European Commission to examine the effects of fencing on livestock productivity, wildlife, vegetation, and the socio-economic situation of pastoralists on the Tibetan Plateau.⁴ This research consisted of a literature review; interviews with provincial and county-level grassland officials in western China; participant observation as well as partial results from a survey administered in three pastoral counties in Gansu, Sichuan, and Qinghai Provinces; and personal observations based on years of working and traveling in pastoral Tibet. Translations of relevant Chinese language sources on grassland legislation and regulations were completed by Yonten Nyima. In what follows, we will cross-reference our observations and assertions about enclosure with the relevant laws and regulations, which will be noted according to the row in which they are located, for example, the notation "T-1, 5" refers the reader to rows 1 and 5 in Table 1.

This paper reviews China's rangeland policies, particularly those relevant to enclosure, since the implementation of the Household Responsibility System in the 1980s. Throughout

3. Standard income measures are not well conceived to capture subsistence or asset-based wealth, particularly in the case of Tibetan nomads. Fischer (2008) notes that their relative asset wealth (i.e., number of livestock/household) trumps their relative income poverty when it comes to the factors influencing economic behavior. That is, the animal assets and, therefore, subsistence capacity which Tibetan nomads and farmers retain are better indicators than income measures of household wealth and the factors underlying Tibetans' economic decisions.

4. Rangeland Enclosure on the Tibetan Plateau (RETPEC), funded by the European Commission under FP6 Specific Targeted Research Project, Contract number INCO-CT-2006-032350.

this paper, the term "enclosure" is meant in the literal sense, i.e., the enclosure of land by barbed wire fencing or other means. Please note that "enclosure" is often a misnomer because fencing is used just as frequently for exclosure, i.e., to keep animals out of grazing areas. Regardless, "enclosure" has other dimensions. Specifically, China's contemporary enclosure movement must be considered within a broader set of historical arguments, as exemplified by the economic substantialists who adopted Polanyi's assertions that markets are embedded in society. Polanyi (1944) argued that the enclosure of common lands in England was a political and social process that led to the commoditization of land, which was a necessary precursor to industrialization.⁵

Applying this notion to the enclosure movement on the Tibetan Plateau is complicated. On the one hand, the process of fencing and long-term title to land may be a precursor to the wholesale commoditization of rangelands in Tibet. We anticipate that, within a generation, there will be a broad-scale consolidation of land holdings and the growth of large, privately held ranches.

On the other hand, the enclosure process in contemporary China differs in important ways from historical England in that: (1) the state still owns rangelands in China [T-1, 14, 15, 22, 23]; (2) fencing on the Tibetan Plateau subdivides pastures at the household level creating a rather inefficient basis for commoditization and consolidation of these lands; (3) in areas where caterpillar fungus is available for harvest and a viable economic option [see Sulek this volume], we do not anticipate that Tibetans would willingly sell or relinquish their land parcels; (4) leasing is a viable economic option for many Tibetans, particularly livestock poor households, and there is little incentive for them to sell their land if they can continue to rent it. These aforementioned factors counteract any preordained movement toward the commercialization of Tibetan rangelands. While it is not possible to resolve this argument here, raising these issues helps to contextualize the enclosure movement reviewed here and underscores the importance — economic, political, and social — of this ongoing process for Tibetan pastoralists and the Chinese nation as a whole.

THE INTRODUCTION OF FENCING ON THE TIBETAN PLATEAU

Barbed wire fencing, which physically, socially, and symbolically demarcates territory, has seen expanding use since it was first installed in the early 1960s as an experiment at Inner Mongolia's Wushenzhao (Uxin Ju) Commune; this commune was later trumpeted as a national model for intensifying pastoral production (Williams 1996). Its use then expanded to other pastoral areas such as Ningxia (Ho 2000). Fencing began on a small scale in Tibetan areas of Qinghai, Gansu, Yunnan, and Sichuan Provinces during the commune period

5. Enclosure is more advanced in agricultural China. Anthropologist Li Zhang calls land expropriation the "new enclosure movement," and describes it as 'accumulation by dispossession' (Zhang 2010).

(1967-1980), when pastoral communities began to set aside and enclose their most fertile meadows as communal reserves for winter grazing and hay harvesting. The first fencing in the Tibet Autonomous Region (TAR) was installed in the late 1960s in the Damshung Valley (north of Lhasa), a “model” demonstration area due to its proximity to the capital.

During the commune period, the government pushed for enclosures in Tibet’s nomadic communities, obliging pastoral collectives to build sod walls to conserve winter pastures as well as develop hay-harvesting areas. The harvesting of sod to construct these walls led to significant soil damage; in particular, surface mining of the grassland turf caused the breakdown of root systems, making soil more erodible. Regardless, commune members were compelled to build these enclosures in order to earn work points for food rations and other necessities. Building these walls—much less maintaining them—was exhausting and time-consuming; they are invariably crumbling, often in parallel to today’s barbed wire fencing.

The construction of permanent houses and animal shelters began in earnest during the 1980s, when nomads were encouraged to build houses near their traditional wintering grounds with government subsidies. Currently, that process is oriented towards the creation of “new socialist villages” for Tibetan nomads and the construction of concentrated housing along transportation nodes.⁶

THE ENCLOSURE MOVEMENT IN THE REFORM ERA

Since the 1980s, the central government has attempted to convert extensive range systems throughout pastoral China into producing more intensively for the market using enclosed pastures, irrigated forage production, and improved breeding techniques (Williams 1996a, 2002; Clarke 1987). In the Tibetan context, enclosure by fencing has been the commonest means of trying to achieve these ends.

Pastoral production in Tibet depends on controlling access to and maintaining the productivity of winter pastures. The government focused first on these seasonal resources and heavily subsidized fencing in winter leaseholds, lambing pastures and fodder plantations. These reserve pastures and forage production areas help reduce the risk of livestock losses by reserving grass for lean seasons and providing fodder during critical bottlenecks in the production cycle. Still, summer and autumn pastures remained largely unfenced, as the government expected that livestock numbers would reach a “natural maximum” based on the limits of each household’s winter fodder.

One of the main goals of the Household Responsibility System (HRS) was to provide incentives by giving families long-term leases to grasslands (Levine 1998, 1999). The pasture contracts issued through the HRS identified the areas over which a household had private rights and specified that land’s capacity for supporting livestock. In theory, the imple-

mentation of this contract system took place in three phases: 1) surveying of rangeland boundaries at the village and township level; 2) issuance of pasture use contracts by the county government; 3) distribution of pasture contracts to households by the administrative village (Ho 2000). HRS contracts defined the grazing areas for households on winter pastures and in household pens but summer grasslands were still typically grazed communally by herds of combined households. This facilitated group grazing and ensured access to water points and stock routes shared by collective units.

According to Miller (1998), Chinese government policy for privatization of grassland is based on the mistaken belief that traditional systems did not give nomads any responsibility for rangelands and, thus, households tried to maximize herd sizes without concern for the grassland ecosystem. In fact, traditional Tibetan systems were often well managed and had elaborate regulations to periodically reallocate grazing, depending on the number of seasonal pastures (Bauer 2008; Goldstein and Beall 1991; Goldstein et al. 2003). While the HRS granted households full rights to livestock, the rights to land were still collectively held (Goldstein and Beall 1989, 2002; Manderscheid 2001). This created a basic paradox at the heart of the reforms in pastoral areas: because the rights to grazing lands are held jointly by the household, it has become increasingly difficult to divide pastures among one’s children and to support herd division among subsequent generations. Moreover, the HRS allotments have generally not been updated, with pressures burgeoning (Bauer 2005). Critical to the enclosure process has been a series of laws and regulations, detailed in Table 1 below, that funded the institutions and provided the bureaucratic rationale for enclosure and the shift toward privatization.

The first Grassland Law of the PRC was enacted in 1985 [T-2]. There is no explicit mention of enclosure or fencing in this nationwide law. Of course, fencing had been installed in various parts of the Tibetan Plateau long before this, which lends some credence to the notion that the enclosure movement has its roots, to some extent, in social and economic movements at the grassroots level rather than being a function of government initiative. The 1985 Grassland Law provided a general framework for the allocation of grasslands and the division of land which fences instantiate. This law establishes the basis for household land use rights: it allows contracts between the collective and individual households, and grants exclusive usufruct rights to winter grazing sites. Initially, families were given 30-year leases over their pasture allotments, which were subsequently extended to 50 years (Ho 1996, 2001b). Though some have argued for recognition of group title (Ho 1988; Yan et al 2005; Banks 2002; Banks et al. 2003), there is no provision in the 1985 Grassland Law to account for group activities. The subsequent Land Administration Laws [T-3,5,6] as well as the 1988 PRC Constitution [T-4] and other regulations [T-21,27] provide for the titling of rangelands to collective units. Even as it prescribed the division of grasslands to households, this first grassland law

6. For in-depth discussions of the impacts of collectivization in Tibetan pastoral areas, see Goldstein and Beall (1998) and Bauer (2008).

did not address pasture management. It envisioned that, after land allocation, a system of incentives and sanctions would enforce compliance with the government-assessed stocking rates (Mearns 2004). Notably, in the 1985 Grassland Law, the state gave itself the mandate and authority to set stocking rates for different types of grasslands.

Since the 1990s, “Grassland Responsibility and Management Certificates” have been issued to herders, typically households with larger herds. Responsibilities under these contracts include improving the condition of grasslands. The establishment of this system has, however, been problematic according to pastoralists and government officials alike. These grassland use certificates do not clearly delineate household boundaries; there are no maps or cadastral surveys to confirm grazing areas. Even where long-term (50-years) leases have been allocated, and fencing has created exclusive grazing, it is not clear that privatized rights to grasslands will lead to efficient and sustainable practices. Rather, fifty-year leases constrain the free movement of assets, which can be a major impediment to efficient production. The assumption is that private property rights are required to optimize resource use. However, the current system results in widespread leasing between households in the absence of a more complete land market (Ho and Lin 2003) [T-9, 23, 24, 26].

Leasing can create perverse incentives and lead to unintended outcomes: lessees have little incentive to invest in grasslands or use them sustainably, a problem compounded by the usually short-term (1 year) nature of the leases. Such imperfections in the land rental market mean that lessees will have incentives to overstock and run down rented land relative to their own contracted pastures. A more widespread, robust, and legally enforced system for leasing land is needed to overcome these problems. In the meantime, significant numbers of poor pastoral households currently lease out their land, often without access to alternative forms of income (Manderscheid and Naukarinen 2004). This raises issues of policy sequencing where, for example, vocational training would precede out-migration for labor or leases would be coordinated with appropriate management policies.

In the 1990s, rates of enclosure accelerated: a tipping point in favor of fencing was reached. A government *White Paper on the Development-oriented Poverty Reduction Program for Rural China* boasted that between 1994 and 1999, 6.72 million *mu* of grassland in autonomous areas (including “TAR” and the Tibetan prefectures) had been fenced (Information Office 2001). Total fenced grassland in China increased from just 52 million *mu* (~3.5 million ha) in 1985 to 450 million *mu* (30 million ha) in 2004. The Tenth Five Year Plan (2001-2005) set the goal of fencing an additional 150 million *mu* (10 million ha) of China’s pastures (Miller 2001). By 2008, China had fenced off a total of 62 million hectares, which is the latest figure (Ministry of Agriculture 2009a). On the Tibetan Plateau alone, almost a million hectares of grassland had been fenced by 2005.

A recent Ministry of Forestry (2009b) document states

that, by 2010, China wants to fence 100 million ha more of its grassland, including a total of 28 million hectares on the Tibetan Plateau. In 2020, the government plans to have fenced off 150 million hectares of grasslands nationwide, with a total 900 million planned by 2020.⁷ Still, even as millions of hectares were being fenced, there was no central directive that mentioned enclosure.

Since the 1990s, Chinese government policy with respect to grasslands has assumed that these resources are being squandered (Williams 1997, 2000; Sneath 1998, 2000). Presuming that rangeland degradation is widespread and accelerating, economic arguments in favor of privatization have been prominently employed to rationalize China’s grassland administration and resource use policies (Banks 2002, 2003; Ho 2000b; Sneath 2002). The Chinese government emphasized the idea that degradation of grasslands could only be avoided by strengthening the pasture contract system (Ho 2000a, 2001b; Thwaites et al. 1998). Xu and Qiu (1995) write, “The core of reform in the grasslands must be to introduce a kind of contract responsibility system which would increase the worth of the land in the eyes of those who live on it, and persuade them to protect the grasslands by convincing them that the grass is their living, as well as their fodder” (quoted in Williams 2002: 31).

Government policymakers proposed that privatization would increase users’ incentives to invest in better management because common property systems lacked such incentives (Miller 1998). Privatization is not only touted by government planners as more efficient, but also fits within the larger modernization framework of free enterprise and entrepreneurship strongly advocated by the World Bank (Ho 2001b). International development organizations thus directly and indirectly influenced the discourse of privatization (Williams 2002).

The strategy of privatizing communal pastures has been tried worldwide under the pretext of preventing degradation (c.f. de Queiroz 1993). Neoliberal economists and planners assert that rural productivity and the environment are threatened in the absence of property rights. However, privatization does not guarantee conservative rangeland management or wise stewardship (Little and Brokensha 1987). Regardless, the premise of widespread grassland degradation and the posited need for privatization have led Chinese policymakers to the conclusion that stocking rates must be lowered in pastoral areas (Ho 2000b).

Privatization policies were designed to turn Tibet’s communal, extensive rangeland grazing system into industrialized ranch-based production that relies on enclosed pastures, grows fodder, feeds animals in stalls, and delivers meat to ready markets. Should intensification succeed, it must take labor off Tibet’s rangelands. But can more nomads be absorbed

7. “General plans for grassland protection, development (*jianshe*) and use” (*quanguo caoyuan baohu jianshe liyong zongti guihua*) <http://www.forestry.gov.cn/uploadfile/main/2010-11/file/2010-11-26-e1c16284c5aa4f-a396c2756a4d3a9971.pdf>

into China's labor markets? Alongside Chinese migrants and increasing numbers of rural Tibetans who are being pushed (e.g., resettlement) or pulled (e.g., migration for labor or education) into settlements and urban areas, can nomads compete? Government planners have failed to tackle the real dilemma of how to provide incentives for proper management of land resources in ways that ensure long-term rangeland productivity amidst rapid socio-economic and demographic change (Ho 2001b).

The 2002 Grassland Law emphasizes stocking rates [T-7] and related measures [T-8], creating various challenges. These include having up-to-date and accurate measures of grassland productivity; accounting for seasonal and inter-year variations; policing stocking rates and associated fines. Stocking rates often fail to account for area specific and climatic variations and are, therefore, an inappropriate basis on which to regulate household grazing. In their nationwide survey of China's rangeland areas, Brown et al. (2008) report that there is little enforcement at the local level of the stocking limits, nor are fines frequently given to those who exceed their assigned quota of animals.

The first national document to mention fencing in relation to grassland protection and development was the "Suggestions regarding strengthening grassland protection and construction," published in 2002 [T-8]. It suggests that grassland enclosures be undertaken both for pastoral development and for grassland protection. At the start of this decade, the implementation of individual parcels and the enclosure of these grazing lands had reportedly been achieved in only a minority of China's grazing regions (Ho 2000a). The authors' field observations in Tibetan areas of Yunnan, Sichuan, and Qinghai Provinces as well as the Tibet Autonomous Region indicate that this has changed greatly in the past decade. Indeed, the contracting of grasslands to households is well advanced in Tibetan pastoral areas; for example, 90 percent of grasslands in Qinghai are reportedly contracted out (Schwarzwalder et al. 2002). Nationally, by mid 2009, a total of 220 million hectares had been contracted out (Ministry of Agriculture 2009b). In sum, more than half of China's usable grassland (55 percent) has been contracted out, with even higher proportions in Inner Mongolia, Xinjiang and some Tibetan areas.

THE ROLES OF FENCING OVER TIME

In the last 50 years, the management and social functions of grassland enclosure have undergone several stages. Beginning in the 1960s, grassland enclosure was initiated in Inner Mongolia. Until the introduction of the household responsibility system in the early 1980s, grassland enclosures were used to reserve grass and fatten animals at herders' own initiative. Since then, enclosure has seen increasing use by herders to establish the physical boundaries of their leasehold pastures: fencing is a *de facto* part of the household contract system in pastoral areas.

Fences are seen as indicators of livestock production technology and socio-economic development (Yan et al. 2005).

Fences are highly visible and tangible assets that are quick to deliver: the progress of fencing projects is easy to quantify against specified targets (Bauer 2005). As such, fencing is attractive both to domestic policy makers and external agencies. Fencing projects enable Beijing and provincial decision-makers as well as external agencies to tie funding to labor, which gives them a level of control not normally available through other measures. For instance, fencing projects can be structured to provide funding conditional on local input, in this case, herders who provide most of the work to install barbed wire fencing.

THE CURRENT ENCLOSURE MOMENT

Through the mid-1990s, fencing served largely as a tool to reinforce and expand traditional enclosures for the purpose of reserving winter/spring feed and harvesting hay in autumn. Since then, fencing has been used to enforce a wholly new kind of territoriality that is driven by central government directives to exclude pastoralists from grasslands on the pretext of environmental conservation, particularly in (1) regions that have been heavily deforested by industrial concerns (e.g., Sichuan, Yunnan); (2) watersheds that are a source China's major rivers (e.g., Qinghai); and (3) areas with significant potential for hydropower development. Enclosure policies and funding streams act in political consort with sedentarization programs, mineral extraction pushes, and the imperative to privatize rangelands.

This current period started with the *sipeitao jianshe*, the "Comprehensive Set of Four Constructions" which promoted:

- fixed settlements (*jianshe dingju dian*) on winter pastures
- fenced areas (*jianshe weilan*)
- schools and health stations (*jianshe xuexiao weisheng zhan*)
- contracting of pastures to families (*cheng bao caoyuan dao hu*)

The "four ways" program and other national-level programs encourage and subsidize the building of houses for herders, rodent control, and shelters for livestock as well as additional fences and fodder plantations [T-16, 18, 19, 25]. This policy significantly altered the livelihoods of the pastoralists in affected areas, especially since it was accompanied by a number of "Poverty Alleviation through Migration" (*yimin fupin*) schemes, which resettled nomads into county towns. After 2000, enclosure was spearheaded by the government as integral to broader initiatives, especially the *Xibu Dakaiifa* ("China's Western Development") (c.f. Hongyi 2002).

Aspects of the current enclosure movement can be seen as a continuation of previous fencing programs. From herders' perspective, *xiumu* enclosures (grazing ban for several months annually) are similar to previous fencing initiatives in terms of their function, to reserve grass and fatten animals (Dong et al. 2007) [T-10]. However, in its push for the destocking of livestock, the "returning grazing to grassland" (*tuimu huan-*

cao), and the government's sweeping resettlement projects [T-11,12,13,17,20] are, not surprisingly, seen as qualitatively and quantitatively different than previous enclosure policies.

In sum, the enclosure movement in Tibetan areas has undergone discrete but overlapping stages:

1. Traditional practices, in which certain pastures were seasonally reserved and defended through boundary demarcation, seasonal mobility, and socially reinforced sanctions (pre-1950s).
2. Enclosures used to reserve grass at herders' initiative. Such enclosures were supported by the Animal Husbandry Bureau, including experimental stations and technical extension agents.
3. Enclosures created during the Household Responsibility System that were used to establish physical boundaries of private pastures, especially in winter areas.
4. Enclosures that serve as tools for broader, orchestrated national development projects (e.g., airports, railroads, roads, other eminent domain projects) and for political control (i.e., sedentarization and resettlement, direct control of resource priority areas like headwaters and minerals), rationalized as necessary steps for environmental protection.

The grassland enclosure policies reviewed here overlap naturally. Nevertheless, the current enclosure program—the grazing removal project (*tuimu huancao*)—aims to remove pastoralists' from grassland resources to reverse purported grassland degradation; the previous phases of enclosure focused on reserving grass and providing physical boundaries, without restricting nomads' use of rangelands.

Various local governments in Tibetan areas have implemented policies quite differently (Yangzong 2006; Bauer 2005; Yan et al. 2005; Yeh 2003; Wu and Richard 1999). This paper is based in part on snapshots of these local differences in governance and policy implementation. There are significant disjunctures between policy setting and effective implementation. At the grassroots level, contradictions between the stated intent of the programs and the way they are implemented are common, reflecting the divergent incentives and maneuvering room local officials have.

CONCLUSIONS

In both theory and practice, fencing plays an important role in livestock and grassland management. Fences are part of the rationalizing discourse of modern livestock manage-

ment and an organizing tool used in pastoral environments the world over (Sullivan and Homewood 2003). Neo-liberal economists and government planners alike argue that fencing provides individual herders with security of property rights and, therefore, incentives to more sustainably manage and invest in their pastures. This argument, although based on shaky evidence, is frequently used to support expanding enclosure (Harris 2010). Fencing in China's Tibetan regions is today ultimately more about redistribution of resources and resettlement of pastoralists rather than about productivity or sustainable management of resources.

The current land market in pastures is neither complete nor characterized by perfect information—conditions that, according to neoliberal economic logic, must exist in order for privatization to succeed. A (more) complete market in land—in which private rights to land are secure and guaranteed by the legal system—would make land transactions more efficient and consequently provide, hypothetically, the conditions for intensification of pastoral production. However, there has been weak development of livestock markets in Tibetan areas. Still, central policy—which is reflected in the table of grassland laws and regulations presented here—continues to favor state and collective land ownership, which has resulted in a complex leasing system that makes consolidation difficult.

So far, policy makers have focused on the physical constraints (i.e., technical improvements) and neglected socioeconomic constraints such as population pressures, migration, labor access, and market distortions. Reflecting these priorities, the government's key areas of activity in livestock development have been the establishment of demonstration centers focused on technology extension; the restoration of severely degraded grasslands (Xue et al. 2002); the protection of selected grasslands with strategic, economic, ecological, or other values; and subsidies for fencing and sown pastures. Even though today's rangeland policies can appear on the surface to be uncoordinated in intent and sequencing, the overriding logic of modernization, privatization, and intensification drives China's governance goals in developing Tibetan pastoral areas.

There is no unitary explanation of how and why the laws and regulations reviewed here were created and carried out. Rather, complex phenomena like governance and the exercise of power, especially in multi-cultural societies such as China, require approaches that are both diachronic and synchronic. Hopefully, this review provides a foundation for enhanced understanding of these processes and a framework within which further empirical work can be completed.

Table 1: Laws and Regulations Affecting the Enclosure of Rangelands in Tibetan Areas of China

	Law/Regulation	Date	Key Provisions
1	PRC Constitution ¹	1982	<ul style="list-style-type: none"> Rural land is either owned by collectives or by the State (Article 10).
2	Grassland Law ²	1985	<ul style="list-style-type: none"> The Department of Agriculture and Animal Husbandry shall be in charge of grassland administration nationwide (Article 3). All grasslands in the PRC are state owned; grasslands may be contracted by collectives or individuals for pastoral production (Article 4). Department of Agriculture and Animal Husbandry shall be in charge of nationwide grassland administration. Grassland users are allowed to use others' grasslands based upon mutual understandings and for the purpose of public benefit under special circumstances such as in the event of natural disasters (Article 5). Disputes between groups (collectives) over ownership and use rights of grasslands should be handled by county level governments and those between groups and individuals and between individuals should be handled by township or county governments (Article 6). Grassland reclamation must be approved by county level (or above) governments (Article 10). The harvest of medicinal plants and exploitation of natural resources found on grasslands must be agreed upon by grassland users and approved by township or county level government. (Article 11). Allows leasing of rangeland use rights to individual households.
3	Land Administration Law ³	1986	<ul style="list-style-type: none"> Both collectively owned and state owned land can be contracted to collectives or individuals for pastoral production (Article 12). If land is taken by the state, compensation for use rights and settlement allowance should be paid to land users (Article 28).
4	Amendment to the Constitution ⁴	1988	<ul style="list-style-type: none"> Explicitly states that land use rights may be transferred by law.
5	Land Administration Law ⁵	1988	<ul style="list-style-type: none"> Use rights of both state and collectively owned land may be transferred by law.
6	Land Administration Law ⁶	1998	<ul style="list-style-type: none"> Divided land into three categories: agricultural land, land for construction, and unused land, which aimed to limit the transfer of agricultural land to land for construction and thereby preserve farming land.
7	Grassland Law ⁷	2002	<ul style="list-style-type: none"> Key regulations derived from the Grassland Law include: Basic Grasslands Protection Regulations; Grazing Bans and Restrictions Administrative Regulations; Autumn and Spring Grassland Vegetation Fee Collection, Use and Management Measures; Grassland Survey and Statistics Administrative Regulations. Provides for the establishment of a nationwide system of monitoring and inspection agencies along with stiffer penalties to curb reclamation, encroachment, overgrazing were included. Placed greater emphasis on environmental protection and conservation of biodiversity than its predecessor. Grassland administration was extended to township governments who were assigned responsibility for the supervision, inspection, protection, and development of grasslands (Article 8).

1. *Xian fa* (1982), http://www.npc.gov.cn/englishnpc/Law/2008-01/24/content_1381976.htm

2. *Caoyuan fa* (1985), <http://www.tgenviron.org/policylaw/law/grassland.htm>; http://www.china.org.cn/environment/2007-08/20/content_1034338.htm

3. *Tudi guanli fa* (1986), <http://www.nmql.com/ShowArticle.shtml?ID=20078281463867013.htm>

4. *Xian fa xiuzheng an* (1988), http://www.npc.gov.cn/englishnpc/Constitution/node_2829.htm; http://www.law-lib.com/law/law_view.asp?id=204

5. *Tudi guanli fa* (1988), http://www.law-lib.com/law/law_view.asp?id=95544

6. *Tudi guanli fa* (1998), http://www.law-lib.com/law/law_view.asp?id=419

7. *Caoyuan fa* (2002), <http://law.chinalawinfo.com/newlaw2002/slc/slc.asp?db=chl&gid=44354>; http://www.gov.cn/english/laws/2005-10/09/content_75387.htm

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	Law/Regulation	Date	Key Provisions
7	Grassland Law ⁸ [continued]	2002	<ul style="list-style-type: none"> • Grasslands (state owned or collectively owned) may be contracted to households individually or jointly within the collectives. No adjustment may be made to the contracted grasslands within the term of contract unless approved by township governments and grassland administrative departments at the county level (Article 13). • Grassland use rights may be transferred and subcontracted for pastoral production within the original term of contracts (Article 15). • County level (or above) governments should encourage herders to build up grassland fences, livestock shelters, settlements, and reserve grass and fodder as initiatives to develop production and living facilities (Article 28). • Grassland users should not exceed livestock carrying capacity determined by grassland administrative departments. The standard for livestock carrying capacity and the balance between grass yields and livestock numbers shall be determined by grassland administrative department under the State Council (Article 33). • Rotation grazing and raising livestock in pens are encouraged (Articles 34, 35). Raising livestock in pens (especially in farming and semi-pastoral areas) was encouraged (Article 35). • Grassland use for mineral resource exploitation and construction is subject to the approval of provincial level (and above) governments (Article 38). • Compensation for collectively owned grasslands (use rights) taken for construction should be made according to the land administrative law; compensation for state owned grasslands (use rights) taken for construction should be made according to relevant regulations of the State Council (Article 39). • Where grasslands are taken for construction, restoration fees should be collected by grassland administrative departments and used to restore vegetation (Article 39). • The concept of carrying capacity was first at the national level in this law. Users should not exceed livestock carrying capacity determined by county level government agencies (Article 45). • Where grassland has been degraded severely and is fragile, grazing bans should be implemented (both short and long term) (<i>jinmu/xiumu</i>) (Article 47). • Specific policies on the restoration of farmland to grassland and grazing bans would be made by the State Council and provincial (level) governments; compensation and subsidies for grass seeds will be paid in the form of grain or cash (Article 48). • The term “grasslands” was extended to artificial grasslands including improved grasslands and restored grasslands from farming but excluded urban lands covered by grass (Article 74).
8	Suggestions regarding strengthening grassland protection and construction (Document 19, State Council) ⁹	2002	<ul style="list-style-type: none"> • States that 90 percent of China’s utilizable grassland has been degraded to various extents and that overgrazing has not been controlled. • Advocated measures such as the “Grain for Green” program as well as grazing ban and rest systems. • Provisions for the establishment of a nationwide monitoring system and inspection agencies along with stiffer penalties to curb reclamation, encroachment, and overgrazing. Places greater emphasis on environmental protection and conservation of biodiversity than its predecessor (Grassland Law 1985). For example, the penalty for grassland violations changed from simply “stopping illegal behavior, compensating for the losses, restoring vegetation or imposing a fine” to imprisonment for various offences. • States that rotational grazing, short-term grazing bans (<i>xiumu</i>) in spring and fall, and long-term grazing bans in fragile and degraded areas should be implemented. Local governments should devise feasible plans for rotational and grazing bans according to local conditions. Restoration of farmland to grassland and the restoration of degraded grassland should be focused on river source areas and sandstorm source areas. This central government document became the guideline for the grazing removal project (<i>tuimu huancao</i>).

8. *Caoyuan fa* (2002), <http://law.chinalawinfo.com/newlaw2002/slc/slc.asp?db=chl&gid=44354>; http://www.gov.cn/english/laws/2005-10/09/content_75387.htm

	Law/Regulation	Date	Key Provisions
8	Suggestions regarding strengthening grassland protection and construction (Document 19, State Council) ¹⁰ [continued]	2002	<ul style="list-style-type: none"> Requires governments at various levels to control grassland deterioration, increase grassland production, and promote sustainable utilization of grasslands through: <ol style="list-style-type: none"> Protection of so-called basic grassland (<i>jiben caodi</i>), which includes artificial pastures, improved pastures, pastures where grass is harvested, and grasslands in natural reserves. Maintenance of the balance between grass and livestock. Promotion of rotational grazing and grazing bans (both short- and long-term) Intensification of fencing installation and irrigation works. Restoration of farmland (in particular, river source areas and sandstorm source areas) to grassland and the restoration of degraded grasslands.
9	Rural land Contract Law ¹¹	2002	<ul style="list-style-type: none"> If during the term of contract, contractors settle into a small town, land use rights of the contractor should be reserved, or the contractor should be allowed to circulate (<i>liuzhuan</i>) the land contracts and management rights (use rights); if during the term of contract, contractors move into an urban area and their rural residency is changed from non-rural to urban residency, the contract should be returned to the collective (Article 26). Land use rights (<i>tudi chengbao jingyingquan</i>) may be circulated by subcontracts, leases, exchanges, transfers or other means (Article 32). The transfer of grassland to uses other pastoral production is prohibited (Article 32). The ownership and purpose of the land (agricultural production) should not be altered and the terms of the circulation may not exceed the remaining period of the term of the contract (Article 33). Charges for subcontracts, rent, and transfer should be determined by the two parties through consultation (Article 36). Article 57 stipulates that grasslands have to be utilized ‘appropriately.’ Article 61 states that local government has to protect and monitor grasslands and to guide households in their utilization including feeding and cultivation, grazing, the number of livestock, rotation of grassland within the area, and extensive and intensive grazing. Article 62 stipulates that land reclamation is forbidden.
10	Technical codes of grazing bans ¹²	2003	<ul style="list-style-type: none"> Grazing bans less than one year are defined as <i>xiumu</i> while those lasting more than one year (usually several years) are defined as <i>jinmu</i>. Both <i>xiumu</i> and <i>jinmu</i> areas should be fenced according to the following guidelines: <ul style="list-style-type: none"> <i>xiumu</i> should be applied to ban grazing during growing seasons (usually in spring and fall for 2-4 months) in order to remove the harmful effects of grazing on vegetation. <i>jinmu</i> should be applied to pastures unsuitable for grazing derived from overgrazing in order to remove grazing pressure on vegetation and facilitate vegetation restoration and growth.
11	Notice regarding assigning tasks of implementing the <i>tuimu huancao</i> program for 2003 ¹³	2003	<ul style="list-style-type: none"> First central government document on grazing removal project in which the term “<i>tuimu huancao</i>” was used. States that 90 percent of the total usable grassland in China has been degraded due to both natural factors and overgrazing. States that the trend of overgrazing has not been fundamentally reversed, which has led to environmental problems (desertification, sandstorms, drying-up of rivers and lakes) and stagnating income among herders. Rangeland degradation hinders pastoral development and affects the sustainability of China’s socioeconomic development and threatens the country’s ecological security. Calls for the restoration of 1 billion mu of pastures, which accounts for 40 percent of the total degraded pastures in western China, in five years (2003-2008). Targets pastures in eastern Tibetan Plateau, particularly where important rivers originate. The TAR was not a target area in 2003.

9. Guowuyuan guanyu jiaqiang caoyuan baohu yu jianshe de ruogan yijian, <http://www.xining.gov.cn/html/169/9861.html>

10. Guowuyuan guanyu jiaqiang caoyuan baohu yu jianshe de ruogan yijian, <http://www.xining.gov.cn/html/169/9861.html>

11. Nongcun tudi chengbao fa, http://news.xinhuanet.com/zhengfu/2002-08/30/content_543847.htm, http://www.gov.cn/english/2005-10/09/content_179389.htm

	Law/Regulation	Date	Key Provisions
11	Notice regarding assigning tasks of implementing the tuimu huancao program for 2003 ¹³ [continued]	2003	<ul style="list-style-type: none"> States that the grazing removal project should be implemented according to different local conditions. Outlines the tuimu huancao program as: <ol style="list-style-type: none"> fencing of existing pastures to ban grazing completely and permanently (<i>fengyu</i>), to cease grazing for several years (<i>jinmu</i>), to cease grazing for several months (<i>xiumu</i>) rotational grazing (<i>lunmu</i>) reseeding of pastures promotion of pen-feeding (<i>quanyang</i>) adjustment of the number of livestock to the carrying capacity and maintenance of the balance between grass yields and livestock numbers.
12	Notice regarding finishing tasks of implementing the tuimu huancao program for 2004 ¹⁴	2004	States that the grazing removal project (tuimu huancao) was going well but the installation of fences lagged behind partly due to the outbreak of Severe Acute Respiratory Syndrome (SARS). It reiterates the guideline for implementing the project (i.e., implementing the grassland household contract system, maintaining the balance between grass and livestock, controlling carrying capacities, etc.).
13	Notice on issuing detailed codes of evaluating the tuimu huancao program in the western region ¹⁵	2004	<ul style="list-style-type: none"> Details the standards and codes for evaluating grazing removal projects. The following elements should be examined including vegetation coverage, the availability and use of funding (especially matching funds by the local governments), budget management, pasture availability and quality of grain (feed allowance) as well as proposed project management (e.g., the bidding process). Government inspection team should consist of professionals from grassland departments, planning committees and financial departments as well as grain departments.
14	PRC Constitution ¹⁶	2004	<ul style="list-style-type: none"> Land can legally be taken by the state with compensation.
15	Land Administration Law ¹⁷	2004	<ul style="list-style-type: none"> Collectively owned land can be taken with state compensation for the sake of public interests (Article 2).
16	Regulation on management of rural land contracts and use rights circulation ¹⁸	2005	<ul style="list-style-type: none"> Herders are encouraged to take the following actions (Article 13): <ol style="list-style-type: none"> Develop artificial fodder production centers. Purchase fodder to increase supplies. Raise livestock in pens with fodder in order to lessen grazing pressure on pastures. Increase off-take rates and improve livestock herd structure. Increase areas of pastures through transfer of grassland use rights. Adopt any other means that help achieve the balance between grass and livestock. Stipulates that existing rural land uses (agricultural production) should not be altered and that the term of the circulation may not exceed the remaining period of the term of the contract (Article 3). No organizations or individuals should force or prevent land users (farmers) from circulating their land use rights (Article 6) or from claiming compensation, which should be paid to the land users (Article 7). Herders are encouraged to seed pastures, reserve grass and fodder, improve breeds, raise livestock in pens, and increase off-take rates in order to lessen grazing pressure on natural grasslands (Article 7). Grassland administrative departments of county governments are responsible for determining specific carrying capacities according to the production of natural pastures, artificial pastures and fodder production centers in the previous 5 years, which will be updated every 5 years (Article 10).

12. *Xiumu he jinmu jishu guicheng*, <http://www.ordosagri.gov.cn/tm/ShowArticle.asp?ArticleID=1833>

13. *Guanyu xiada 2003 nian tuimu huancao renwu de tongzhi*, http://www.gov.cn/gongbao/content/2003/content_62103.htm

14. *Quanguo guanyu zuohao 2004 nian tuimu huancao gongzuo de tongzhi*, <http://www.scxm.gov.cn/news/Wenjlz/2008/117/08117135937AJ8FGCIF9296EA1B01A3.html>

15. *Guanyu yinfa xibu diqu tianran caoyuan tuimu huancao gongcheng xiangmu yanshou xize de tongzhi*, <http://www.xjxmt.gov.cn/article.asp?id=2267>

16. *Xianfa* (2004), http://www.law-lib.com/law/law_view.asp?id=82529; http://www.npc.gov.cn/englishnpc/Constitution/node_2825.htm

	Law/Regulation	Date	Key Provisions
17	Suggestions regarding another step toward strengthening the implementation and management of tuimu huancao program ¹⁹	2005	<ul style="list-style-type: none"> States that ecological outcomes are the focus of the project while economic and social impacts should also be considered. Where feed allowance is not paid or only partly paid, an investigation of the government officials responsible should be conducted.
18	Animal Husbandry Law ²⁰	2005	<ul style="list-style-type: none"> Encourages efforts to intensify livestock systems in pastoral areas specifically through fencing propagation.
19	Regulations on maintenance of forage and livestock balance ²¹	2005	<ul style="list-style-type: none"> Herders are encouraged to seed pastures, reserve grass and fodder, improve breeds, raise livestock in pens, and increase off-take rates in order to lessen grazing pressure on natural grasslands (Article 7). The Ministry of Agriculture is responsible for determining the standards for livestock carrying capacity (Article 8). Grassland administrative departments of provincial or prefectural (municipal) governments are responsible for determining the specific standards for carrying capacity according to local conditions (Article 9). Grassland administrative departments of county governments are responsible for determining specific carrying capacities according to the production of natural pastures, artificial pastures and fodder production centers in the previous 5 years, which will be updated every 5 years (Article 10). States that ecological outcomes are the focus of the project while economic and social impacts should also be considered. Where feed allowance is not paid or only partly paid, an investigation of the government officials responsible should be conducted.
20	Suggestions regarding another step toward strengthening the implementation and management of the grazing removal project[continued] ²²	2005	<ul style="list-style-type: none"> Gives a clear definition of the <i>tuimu huancao</i> project as a grassland development project that aims to restore grassland vegetation, improve grassland ecologies, enhance grassland productivity, and promote harmony between grassland ecologies and pastoral production through fencing, seeding, grazing bans and rotational grazing Suggests that livestock breeds and herd structure should be improved. In addition, off-take rates should be increased along with the commercialization of livestock production in order to help herders change their production mode and to stabilize and enhance their incomes. Given these changes, the grazing bans and vegetation restoration can be sustained and the goal of improving grassland ecologies can be achieved. Suggests that <i>jinmu</i> (long-term grazing ban) should be implemented in severely degraded areas, <i>xiumu</i> (seasonal grazing bans) in moderately and slightly degraded areas, and rotational grazing in areas with good vegetation. Areas for grazing bans (<i>xiumu/jinmu</i>) should be within a county and the administrative village should be the unit for grazing bans. Responsibility for implementing the project should be devolved to the township government while the provincial governments should take overall responsibility and the county government should take responsibility for implementing the project on the ground.
21	Cooperative Law ²³	2006	<ul style="list-style-type: none"> Provides the legal basis for the development of local groups. Groups can register as cooperatives rather than as companies as required in the past, notionally allowing the groups to more readily enter into contracts for inputs and marketing and to take out loans.

17. *Tudi guanli fa* (2004), http://www.gov.cn/flfg/2005-06/22/content_8505.htm

18. *Nongcun tudi chengbao jingying quan liuzhuan guanli banfa*, http://www.chinacourt.org/flwk/show1.php?file_id=99323

19. *Guanyu jinyibu jiaqiang tuimu huancao gongcheng shishi guanli de yijian*, <http://www.myagri.gov.cn/new/view.asp?id=6035&typeid=55>

20. http://www.legaldaily.com.cn/misc/2006-06/28/content_342315.htm

21. *Caoxu pingheng guanli banfa*, http://www.xzq.gov.cn/nm/news_view.asp?newsid=120

22. *Guanyu jinyibu jiaqiang tuimu huancao gongcheng shishi guanli de yijian*, <http://www.myagri.gov.cn/new/view.asp?id=6035&typeid=55>

23. *Nongmin zhuanyue hezuoshe fa*, http://www.gov.cn/jrzq/2006-10/31/content_429182.htm

	Law/Regulation	Date	Key Provisions
22	Regulation on management and approval of grassland taking ²⁴ [continued]	2006	<ul style="list-style-type: none"> Grassland administrative departments of county level (and above) governments are responsible for approving grassland-taking proposals (Article 3). Grassland administrative departments of county level (and above) governments are responsible for approving grassland-taking proposals (Article 3). Grassland-taking of over 70 hectares for mineral resource exploitation and construction is subject to the approval of Ministry of Agriculture; less than 70 hectares is subject to the approval of grassland administrative departments of provincial governments (Article 6). Temporary land-taking for construction projects, exploration, and tourism is subject to the approval of grassland administrative departments of county level (and above) governments. Temporary land-taking cannot exceed a period of two years and permanent buildings should not be established and the grassland should be returned in time and vegetation should be restored (Article 7).
23	Property Law ²⁵	2007	<ul style="list-style-type: none"> Land ownership (Article 42, 48, 59, 60) along with land contracts and management rights remain the same as in the land administrative law (2004) as well as the “Regulation on Management of Rural Land Use Rights Circulation” (2005).
24	Notice regarding speeding up implementing grassland household contract system ²⁶	2007	<ul style="list-style-type: none"> Reiterates that the household contract system for grasslands aims to further (1) create incentives for herders to protect and invest in grasslands; (2) change patterns of pastoral production (from extensive grazing on natural grassland to a system combining the raising of livestock in pens with fodder, rotational grazing, and seasonal grazing bans (3) control grassland desertification (inhibit overgrazing and maintain a balance of grass yields and livestock numbers). States that grassland vegetation should be restored and that the productivity of natural pastures should be enhanced through grazing bans and rotational grazing, which will create conditions for changing current patterns of pastoral production system. The transfer of grassland use rights is allowed so long as the subcontracted grasslands are still used for pastoral production.
25	General plans for grassland protection, development (<i>jianshe</i>) and use ²⁷	2007	<ul style="list-style-type: none"> Suggests that specific programs on the ground should include grassland enclosure, grassland improvement, artificial pasture establishment, the raising of livestock scientifically, livestock breed improvement, grazing bans and rotational grazing For the Tibetan Plateau, the general goal is to restore grassland ecosystems and grassland vegetation, protect river sources and biodiversity, and improve herders’ production and living conditions (housing conditions, livestock shelters and pens, fodder bases, sheds, drinking water for people and livestock). The specific goals and methods are: <ul style="list-style-type: none"> grassland enclosure (by 2010, 28 million hectares of fenced pastures), seeding, grazing bans and rotational grazing; rodent control; protection of unique grassland resources on the plateau; housing improvement.

24. *Caoyuan zhengzhanyong shenhe shenpi guanli banfa*, http://www.chinacourt.org/llwk/show1.php?file_id=108167

25. *Wuquan fa*, http://www.gov.cn/jllfg/2007-03/19/content_554452.htm

26. *Nongyebu guanyu jiakuai tuijin caoyuan jiating chengbaozhi de tongzhi*, http://www.moa.gov.cn/sjzz/xumusi/fagui/201006/t20100606_1534926.htm

27. *Quanguo cao yuan baohu jianshe liyong zongti guihua*, <http://www.forestry.gov.cn/uploadfile/main/2010-11/file/2010-11-26-e1c16284c5aa4fa396c2756a4d3a9971.pdf>

	Law/Regulation	Date	Key Provisions
26	Resolution on certain important questions concerning the implementation of rural reform and development ²⁸	2008	<ul style="list-style-type: none"> The household contract system and the current land tenure system should remain unchanged for the long term and the scale of land-taking should be reduced even as the mechanisms of compensation for land-taking are improved. Farmers are allowed to circulate (<i>liuzhuan</i>) land contracts and management rights with compensation through various means (subcontract, lease, exchange, transfer, and joining collective cooperation) on a voluntary basis but the ownership and the use of the land (agricultural production) must not be altered when the contracts and management rights of the land are circulated.
27	Notice regarding strengthening the management of and services related to the circulation (<i>liuzhuan</i>) of rural land contracts and management rights ²⁹	2008	<ul style="list-style-type: none"> Emphasizes that collective ownership (common property) of rural land and existing uses of land for agricultural production should not be altered. It stipulates that the farmer should have the final say about whether their contracts and management rights should be transferred and through which means.

28. Zhonggong zhongyang guanyu tuijin nongcun gaige fazhan ruogan zhongda wenti de jue ding, <http://cpc.people.com.cn/GB/64093/64094/8194418.html>
 29. Nongyebu guanyu zuohao dangqian nongcun tudi chengbao jingyingquan liuzhuan guanli he fuwu de tongzhi, http://www.gov.cn/gzdt/2008-12/11/content_1174954.htm

REFERENCES

- Banks, T. 2001. "Property rights and the environment in pastoral China: Evidence from the field." *Development and Change* 32(4): 717-740.
- _____. 2002. "State, Community and Common Property in Xinjiang: Synergy or Strife?" *Development Policy Review* 17(3): 293-313.
- _____. 2003. "Property Rights Reform in Rangeland China: Dilemmas on the Road to the Household Ranch." *World Development* 31(12): 2129-2142.
- Banks, T., C. Richard, L. Ping, Z. Yan. 2003. "Community-based Grassland Management in Western China: Rationale, Pilot Project Experience and Policy Implications." *Mountain Research and Development* 23: 132-140.
- Bauer, K. 2005. "Development and the enclosure movement in pastoral Tibet since the 1980s." *Nomadic Peoples* 9(1): 53-83.
- _____. 2008. "Land Use, Common Property, and Development among Pastoralists in Central Tibet (1884-2004)." *DPhil thesis*, Development Studies, University of Oxford.
- Brown, C., J. Longworth, and S. Waldron. 2008. *Sustainable Development in Western China: Managing People, Livestock and Grasslands in Pastoral Areas*. Cheltenham, UK: Edward Elgar Publishing.
- Clarke, G. 1987. *China's Reforms of Tibet and their Effect on Pastoralism*. Brighton, UK: IDS Discussion Paper No. 237.
- Croll, E. 1994. *From Heaven to Earth: Images and Experiences of Development in China*. London: Routledge.
- Dong, S., H. Gao, G. Xu, X. Hou, J. Long, M. Kang, J. Lassoie. 2007. "Farmer and professional attitudes to the large-scale ban on livestock grazing of grasslands in China." *Environmental Conservation* 34: 246-254.
- Fischer, A. 2008. "Subsistence and Rural Livelihood Strategies in Tibet under Rapid Economic and Social Transition." *Journal of the International Association of Tibetan Studies* 4: 1-39.
- "General plans for grassland protection, development (*jianshe*) and use" (*quanguo cao yuan baohu jianshe liyong zongti guihua*). <http://www.forestry.gov.cn/uploadfile/main/2010-11/file/2010-11-26-e1c-16284c5aa4fa396c2756a4d3a9971.pdf>
- Goldstein, M.C., and C. Beall. 1989. "The Impact of China's Reform Policy on the Nomads of Western Tibet." *Asian Survey* 29(6): 619-641.
- _____. 1991. "Change and Continuity in Nomadic Pastoralism on the Western Tibetan Plateau." *Nomadic Peoples* 28:105-122.
- _____. 2002. "Changing Patterns of Tibetan Nomadic Pastoralism." In W. Leonard and M. Crawford, eds. *Human Biology of Pastoral Populations*. Cambridge: Cambridge University Press.
- Goldstein, M.C., B. Jiao, C. Beall and P. Tsering. 2003. "Development and Change in Rural Tibet: Problems and Adaptation." *Asian Survey* 43(5): 758-779.
- Harris, R. 2010. "Rangeland degradation on the Qinghai-Tibetan plateau: A review of the evidence of its magnitude and causes." *Journal of Arid Environments* 74: 1-12.
- Ho, S. and G. Lin. 2003. "Emerging land markets in rural and urban China: Policies and practices." *The China Quarterly* 175: 681-707.
- Ho, P. 1996. *Ownership and Control in Chinese Rangeland Management since Mao: The Case of Free-Riding in Ningxia*. London:

Overseas Development Institute.

_____. 2000a. "The Clash over State and Collective Property: The Making of the Rangeland Law." *The China Quarterly* 161: 227-250.

_____. 2000b. "The Myth of Desertification of China's North-western Frontier: The Case of Ningxia Province (1929-1958)." *Modern China* 26: 348-395.

_____. 2001a. "Rangeland degradation in north China revisited? A preliminary statistical analysis to validate non-equilibrium range ecology." *The Journal of Development Studies* 38(3): 99-133.

_____. 2001b. "Who Owns China's Land? Policies, Property Rights and Deliberate Institutional Ambiguity." *The China Quarterly* 166: 394-421

Hongyi, H. 2002. "China's Western Development Program: Its Rationale, Implementation, and Prospects." *Modern China* 28: 432-466.

Information Office of the State Council, People's Republic of China (Information Office). 2001. *The Development-oriented Poverty Reduction Program for Rural China*. <http://english.people.com.cn/features/PRpaper/pr.html>.

Jahiel, A. 1997. "The contradictory impact of reform on environmental protection in China." *The China Quarterly* 149: 81-103.

Levine, N. 1998. "From Nomads to Ranchers: Managing Pasture among Ethnic Tibetans in Sichuan." Paper presented at a Panel of the 7th International Association of Tibetan Studies, Graz, 1995. In G. Clarke, ed. *Development, Society, and Environment in Tibet*. Wien: Verlag der Osterreichischen Akademie der Wissenschaften.

_____. 1999. "Cattle and the Cash Economy: Responses to Change among Tibetan Pastoralists in Sichuan, China." *Human Organization* 58(2): 161-172.

Little, P. and D. Brokensha. 1987. "Local Institutions, Tenure and Resource Management in East Africa." In D. Anderson and R. Grove, eds. *Conservation in Africa: People, Policies, and Practice*. New York: Cambridge University Press.

Liu, J. 2010. "Paying attention to pastoral issues, accelerating pastoral development." (*zhongshi sanmu wenti, jiakuai muqu fazhan*), July 2010, Grassland Monitoring and Supervision Center, Ministry of Agriculture. <http://www.grassland.gov.cn/Grassland-new/Item/2361.aspx>

Longworth, J. and G. Williamson. 1993. *China's Pastoral Region: Sheep and Wool, Minority Nationalities, Rangeland Degradation and Sustainable Development*. Canberra, Australia: CAB International.

Manderscheid, A. 2001. "Decline and Re-emergence of Nomadism: Tibetan Pastoralists Revive a Nomadic Way of Life and Production." *GeoJournal* 53: 173-82.

Manderscheid, A. and A. Naukkarinen. 2004. "From subsistence to market economy: Responses of Tibetan pastoralists to new economic realities." *Rangifer* (Special Issue (15): 29-37.

Mearns, R. 2004. "Sustaining Livelihoods on Mongolia's Pastoral Commons: Insights from a Participatory Poverty Assessment." *Development and Change* 35(1): 107-139.

Miller, D. 1998. "Tibetan pastoralism: Hard times on the plateau." *Chinabrief* 1(2): 17-22.

_____. 2000. "Tough times for nomads in western China: Snowstorms, settling down, fences and the demise of traditional nomadic pastoralism." *Nomadic Peoples* 4(1): 83-109.

_____. 2001. "Poverty among Tibetan nomads in western China: Profiles of poverty and strategies for poverty reduction." Paper prepared for the Tibet Development Symposium. May 4-6, 2001. Brandeis University. <http://www.cwru.edu/affil/tibet/papers/miller2.htm>

Ministry of Agriculture [PRC]. 2009a. "Grassland Monitoring Report for 2009." http://www.farmer.com.cn/news/nyxw/201003/t20100320_531965.htm [Accession date?]

Ministry of Agriculture [PRC]. 2009b. "Grassland of nearly 3.3 billion mu contracted out, accounting for about 55 percent of the total grassland." http://www.gov.cn/gzdt/2009-08/25/content_1400936.htm

Muldavin, J. 2000. "The paradoxes of environmental policy and resource management in reform-era China." *Economic Geography* 76(3):244-271.

Polanyi, K. 2001[1944]. *The Great Transformation*. Boston: Beacon Press.

de Queiroz, J. 1993. *Range Degradation in Botswana: Myth or reality?* Pastoral Development Network Paper No. 35b. London: Overseas Development Institute.

Schwarzwalder, B., R. Prosterman, J. Ye, J. Riedinger, P. Li. 2002. "An update on China's rural land tenure reforms: analysis and recommendations based on a seventeen-province survey." *Columbia Journal Asian Law* 16(1): 142-225.

Shen, J. 2004. "Population growth, ecological degradation and construction in the western region of China." *Journal of Contemporary China* 13(41): 637-661.

Sneath, D. 1998. "State policy and pasture degradation in Inner Asia." *Science* 281(5380): 1147.

_____. 2000. *Changing Inner Mongolia: Pastoral Mongolian Society and the Chinese State*. Oxford: Oxford University Press.

_____. 2002. "Mongolia in the 'Age of the Market': Pastoral Land-use and the

Development Discourse." IN Mandel, R., C. Humphrey, eds. *Markets and Moralities: Ethnographies of Postsocialism*. Oxford: Berg, 191-210.

Sullivan, S. and K. Homewood. 2003. "On Non-Equilibrium and Nomadism: Knowledge, Diversity and Global Modernity in Drylands (and Beyond ...)." London: CSGR Working Paper No.

- 122/03. <http://www2.warwick.ac.uk/fac/soc/csgr/research/working-papers/2003/wp12203.pdf> [Accession date?]
- Thwaites, R., T. de Lacy, L. Hong and L. Hua. 1998. "Property Rights, Social Change, and Grassland Degradation in Xilingol Biosphere Reserve, Inner Mongolia, China." *Society and Natural Resources* 11: 319-338.
- Wageningen, N., S. Wenjun. 2001. *The Living Plateau: Changing Lives of Herders in Qinghai - Concluding Seminar of the Qinghai Livestock Development Project*. Kathmandu: ICIMOD
- Williams, D. 1996a. "The barbed walls of China: A contemporary grassland drama." *The Journal of Asian Studies* 55(3): 665-691.
- _____. 1996b. "Grassland enclosures: Catalyst of land degradation in Inner Mongolia." *Human Organization* 55(3): 307-313.
- _____. 1997. "The desert discourse of modern China." *Modern China* 23(3): 328-355.
- _____. 2000. "Representations of Nature on the Mongolian Steppe: An Investigation of Scientific Knowledge Construction." *American Anthropologist* 102(3): 503-519.
- _____. 2002. *Beyond Great Walls: Environment, Identity and Development on the Chinese Grasslands of Inner Mongolia*. Stanford, CA: Stanford University Press.
- Wu, N. and C. Richard. 1999. "The privatization process of rangeland and its impacts on the pastoral dynamics in the Hindu-Kush Himalaya: the case of western Sichuan." In D. Eldridge, D. and D. Freudenberger, eds. *People and Rangelands: Building the Future, Proceedings of the VIth International Rangeland Congress*. Aitkenvale, Australia: VI International Rangeland Congress, Inc.
- Wu, N. and Y. Zhaoli. 2002. "Climate variability and social vulnerability on the Tibetan Plateau: Dilemma on the road of pastoral reform." *Erdkunde*, 2002: 56: 2-14.
- Xue, Y., S. Li, C. Zhang, G. Dong, Y. Dong, P. Yan. 2002. "Desertification and control plan in the Tibet Autonomous Region of China." *Journal of Arid Environments* 51(2): 183-198.
- Yan, Zhaoli, Ning Wu, Yeshe Dorji, Jia Ru. 2005. "A Review of Rangeland Privatization and its Implications in the Tibetan Plateau, China." *Nomadic Peoples* 9(1-2): 31-52.
- Yangzong, C. 2006. "The household responsibility contract system and the question of grassland protection: a case study from the Chang Tang, northwest Tibet Autonomous Region." *Masters thesis*, University of Tromsø, Norway.
- Yeh, E. 2003. "Tibetan range wars: Spatial politics and authority on the grasslands of Amdo." *Development and Change* 34(3): 499-523.
- _____. 2005. "Green governmentality and pastoralism in western China: Converting pastures to Grasslands." *Nomadic Peoples* 9(1): 9-30.
- Yeh, E. 2009. "Greening western China: A critical view." *Geoforum* 40:884-894.
- _____. and Gaerrang. 2010. "Tibetan pastoralism in neoliberalizing China: Continuity and change in Gouli." *Area*. Published online 19 Oct. doi: 10.1111/j/1475-4762.2010.00976.x
- Yonten, N. 2008. "Grassland Use Rights Leasing Policy and its Potential Impact on the Life of Tibetan Nomads in the Tibet Autonomous Region: A Critical Analysis." In *Multifunctional Grasslands in a Changing World. Proceedings of the XXI International Grassland Congress and VIII International Rangeland Congress*. Hohhot, China, June 29-July 5, 2008. Guangzhou: Guangzhou People's Publishing House.
- Zhang, Li. 2010. *In Search of Paradise: Middle-Class Living in a Chinese Metropolis*. Ithaca, NY: Cornell University Press.