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Do pasture user groups lead to improved rangeland condition in the Mongolian Gobi Desert?

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ABSTRACT

Pasture user groups have become an important tool by which development agencies have sought to improve rangeland condition and resolve inter-herder conflict. However the ability of these groups to improve rangeland condition in the Gobi Desert is rarely examined. In this paper, three and twelve year old pasture user group areas were compared with non-group areas. Herders and local officials in both group and non-group areas were interviewed to compare activities and institutions that may contribute to degradation through overgrazing. Soil and vegetation based indicators of rangeland condition were also assessed. There were some differences in indicators of rangeland condition between pasture user group and non-group areas, but little evidence of institutions or activities specific to the group that could explain this difference. Herders did not seek to manage grazing pressures for natural resource management aims, nor did they enforce or sanction the external spatial boundaries of pasture user groups. These results suggest that the ability of pasture user group to improve rangeland condition in the Mongolian Gobi Desert may have been overstated.

1. Introduction

1.1. Managing common property resources in the rangelands

It is increasingly recognised that the ability of the State to manage natural resources at the local level is extremely limited (e.g. Agrawal and Gibson, 1999; Swallow and Bromley, 1995). Institutions are rules or norms developed by the shared perceptions of a group of people about proper and improper behaviour (Crawford and Ostrom, 1995; Ostrom, 2005). The creation or recognition of more localised institutions for governing resource use is considered to be more effective at improving natural resource management than State-based institutions (Brosius et al., 1998; Ostrom, 1990). There is some evidence that clearly defined boundaries, self-determination, locally adapted rules governing resource usage and collective-choice arrangements in decision making may contribute to better management of common property resources than control by the State (Ostrom, 1990; Scoones and Graham, 1994). Community based management, joint management, co-management and collaborative management are just a few of the different manifestations of a return to more localised forms of common property management.

International development agencies, in particular, have sought to recreate or strengthen socially embedded institutions for natural resource management (Brosius et al., 1998; Hogg, 1992). Governments have also been supportive to varying degrees. At times, the support for these institutions has involved a co-management agreement between the State and resource users that recognises the ability of local resource users, like herders, to manage the local resource effectively. At other times, resource users have attempted to re-establish weakened socially embedded institutions with the facilitation and support of an external agent such as a development agency. In some countries, these institutional settings are formally recognised by the State, with Swallow and Bromley (1995) noting that they govern the rangelands of countries including Ethiopia (Helland, 1982), Tanzania (Lane, 1991) and Morocco (Gilles et al., 1992).

Despite the renewed emphasis on socially embedded institutions and collective-choice, the purported benefits of these institutional models have been challenged. Defining a local 'group' or 'community' can be difficult, with definitions of the terms often missing entirely in the documentation of those using these concepts to progress natural resource management aims (Cleaver, 2000; Hogg, 1992). The belief that natural resources were historically sustainably managed by a homogeneous group of local

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resource users may be naive (Li, 1996). Institutions may be crafted from pre-existing ones that are no longer relevant to the new social–ecological context, and consequently may no longer be the best institutions for natural resource management (Cleaver, 2000).

Assumptions that community control automatically translates into environmental benefits has been labelled as '*green romanticism*' (Davis and Ruddle, 2010; Vayda and Walters, 1999). Local groups may seek to maximise income, becoming involved in natural resource projects only for economic gain, and prioritising this gain over sustainability (Vayda and Walters, 1999). Local groups may deliberately attempt to become a co-operative community for the purposes of accessing donor resources (Cleaver, 2000), deliberately wielding the power of the dominant culture's environmental rhetoric for their own purposes (Davis and Ruddle, 2010).

Some suggest that common property theory is overly optimistic, an artefact of a particular ideology or an overstatement of success (Hogg, 1992). Hogg (1992) suggested that the development agencies operating in pastoral Africa who emphasised community-based development had '*ridden on a crest of a public and academic reaction against older, top-down, development approaches*', but that '*the record of NGO projects is rarely examined*'. Collective action can fail to prevent degradation in the face of other social, political and economic pressures (Agrawal and Gibson, 1999; Hogg, 1992; Sneath, 2003). It can contribute to inequality or marginalisation of the most poor (Cleaver, 2005; Upton, 2009). Boesen (2007) found that top–down approaches for reducing corruption were more effective than bottom–up, collective action.

These issues suggest that theoretical panacea can be risky to both rangeland condition and herder livelihoods. Newly introduced or evolved institutional settings will have different effects on rangeland condition and livelihoods in different biophysical, political, economic and cultural contexts (Cleaver, 2000; Ostrom, 2007). For these reasons, the social-ecological context of the area in which institutional interventions are being introduced and/or examined needs to be understood.

1.2. Institutional change in Mongolia

Institutions that are socially embedded at the local level, as well as those established or facilitated by external agents, have changed the ways in which Mongolian herders and their livestock access the forage resource. From the 1950s, most herders worked for rural collectives. The movements of livestock between pastures were influenced by the rules applied by collectives that had been established by the socialist central government and by pre-existing customary institutions (Sneath, 2003). Collectives also supported pastoralism through the provision of fodder, livestock transport and veterinary care (Sneath, 2003). In the early 1990s, the collectives dissolved; livestock were privatised, and the State retreated from the provision of pastoral services (Murphy, 2011).

Despite little empirical evidence of grazing-mediated degradation (Wesche and Retzer, 2005; Wesche et al., 2010), these institutional changes have been assumed to contribute to declining rangeland condition in Mongolia (Asian Development Bank, 1995; Millennium Challenge Account Mongolia, 2008; The World Bank, 2011; United Nations Development Programme, 2011). A strengthening of institutions controlling access to the forage resource has been proposed as a potential solution for this problem. However changes in national-level institutions have been contentious (Sneath, 2001, 2003; Upton, 2009; Upton, 2010). Although some early advice from international agencies promoted the privatisation of rangelands (e.g. Asian Development Bank, 1995), private ownership of land is constitutionally illegal (Fernandez-Gimenez and Batbuyan, 2004). Further, while the national Law on Land gave herders exclusive use rights to winter/spring shelters, conflict between herders over who has rights of access to pastures has continued (Fernandez-Gimenez and Batbuyan, 2004; Murphy, 2011). Decentralisation of rangeland management to local government might have helped to resolve conflicts and improve rangeland management had it been accompanied by increased funding and capacity amongst officials (Mearns, 2005). Instead, it has consolidated power inequities (Murphy, 2011) and there is little evidence to suggest that it has improved natural resource management.

Development agencies in Mongolia have responded to these issues by encouraging the formation of herder groups (Sarantuya and Nyamdorj, 2003; Schmidt, 2006; Hess et al., 2010; The International Development Research Centre, 2007; Usukh et al., 2010). Over 2000 herder groups of varying types, through more than 12 different programmes, have been established by development agencies (Mau and Chantsalkham, 2006, cited in; Fernandez-Gimenez and Kamimura, 2008). The Swiss Development Corporation's Green Gold Programme uses the term 'pasture user groups' (PUGs) to describe multiple herders in a defined geographical area that it has encouraged to engage with collective action to meet pasture management and livelihood goals. We use the same term in this paper to distinguish these types of groups from groups of herders that cooperate in livelihood strategies without the involvement of an external agent (such as *khot ail*), or those that cooperate for the exclusive purpose of marketing commodities such as cashmere, with or without the involvement of an external agent.

Development agencies typically provide funding and other support for PUG activities, including fencing of winter/spring pastures, operation of community centres, business loans and information sharing workshops (Usukh et al., 2010). They also assist with PUG design, including facilitating the strengthening of antecedent socially-embedded institutions that might regulate access of livestock to the forage resource. PUGs vary in their aims, membership size, and legal recognition depending on the region they are located in and the approach of the development agency that has facilitated their establishment. In general, however, members agree to provide mutual assistance to each other, such as providing labour for maintaining winter shelters, and to work towards sustainably managing pasture resources. In some cases, there is an expectation that members will regulate grazing pressures within a spatially defined area designated for the PUG. However in other cases there is no such expectation and PUG areas are only spatially defined for the purpose of determining herders' eligibility for membership. This eligibility is generally based on a herding household having pre-existing rights, arising from either formal or socially-embedded institutions, to a permanent winter/spring camp within the PUG area.

There has been some empirical assessment of the ability of PUGs to benefit livelihoods in the Mongolian Gobi Desert. Hess et al. (2010) described the benefits of PUGs as perceived by members, including empowerment of women and better communication between herders. Upton (2009) supported the claims of development agencies that PUG membership brought social benefits to members. However, she also suggested that the creation of PUGs may have contributed to feelings of exclusion amongst herders who could not be members of a PUG due to their relative poverty and/or lack of labour to contribute to collective activities. Upton (2009) also suggested that the devolution of power from the State to PUGs may have exacerbated inequality, a finding supported by Murphy (2011) in a different PUG. There has been less independent assessment of the ability of PUGs to benefit rangeland condition. Assessments of PUG efficacy are generally conducted by development agencies immediately upon project completion, a time frame that is poorly matched to the high level of climatic variability exhibited by the Gobi Desert (Von Wehrden et al., 2010).