

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

Equity in a Pastoral Commons: Bayan Mountain, Mongolia

A thesis presented in partial fulfilment of the requirements for the
degree of

Master of Philosophy
in
Development Studies

at
Massey University, Palmerston North
New Zealand

Ri Weal

2004

Abstract

Common property regimes (CPRs) have been embraced as a means to achieve sustainable use of resources. However, it is also claimed that these and other forms of communal resource management can allow for equitable access to resources, which is of some importance given the heavier reliance of poorer households on common resources. This view however appears to be contradicted by the existence of wealth differentiation among resource users, suggesting that the reality is more complex.

This case study of a local pastoral commons used by Kazak herders in western Mongolia explores factors influencing both access to resources and wealth differentiation, which has been considerable since the end of socialism, and attempts to evaluate the extent to which resource access in the CPR can be considered equitable. There is differential resource access in the study community, both in terms of rights of access, with some inequities linked to non-wealth-related household characteristics, and in terms of the ability to realise nominal access rights, which is chiefly affected by relative wealth. Although allocation of access rights is not discriminatory, the interrelationship between wealth and resource access thus serves to reinforce wealth differentiation. Wealth differentiation itself however depends on multiple factors including but not limited to resource access, and does not reliably indicate inequitable access to resources.

The case study indicates that CPRs cannot be considered inherently equitable, but that instead equity in resource access is affected by social differentiation in the user group. In addition, where factors considered necessary to successful collective action are wanting, equitable outcomes seem less likely. Thus most inequities in access rights date back to privatisation in Mongolia and the resulting institutional breakdown and lack of user participation both in allocation of resources and in devising appropriate resource access rules. Despite this, evidence from both the case study and other pastoral commons suggests that CPRs may still offer more equitable access to resources than do other types of property regime.

Acknowledgements

I would like to thank my supervisors; Tony Banks for his input and assistance in getting to Mongolia, and Susan Maiava for her encouragement and support and for going the extra mile.

Fieldwork in Mongolia was made possible by scholarships from both Massey University and the New Zealand Federation of Graduate Women.

Various people at JCS International were tremendously helpful with logistics and advice both while I was preparing for fieldwork and once I was in Mongolia. Particular thanks are due to Daniel Parker and Lindsay King.

Most importantly, I am deeply grateful to the wonderful people of Bayan mountain and Sogoog township, who graciously opened their homes to an unknown foreigner. This thesis is the product of their generous gift of time and experience and their willingness to share some of their story. The further the thesis travels from fieldwork to the finished product, the more the theoretical seems to overtake the personal. Behind every line of general description however, there are faces, personal histories, shared laughs and countless bowls of salt tea.



Table of Contents

Abstract.....	iii
Acknowledgements.....	v
Table of Contents.....	vii
List of Figures	xi
Photographs.....	xi
List of Tables.....	xi
Note on Transcription.....	xii
Kazak and Mongolian alphabets	xii
Transcription and language	xiii
Glossary.....	xiv
Place Names.....	xv
Chapter 1: Introduction	1
1.1 Introduction.....	1
1.2 Does "common" mean equitable?	1
Existing studies	4
Mobile pastoralism	5
1.3 Focus of the study and research questions	6
1.4 Overview of the thesis	7
Chapter 2: Common Property and Equity	9
2.1 Common Property	9
Property regimes	9
Institutional arrangements	11
Advantages of common property in resource management	13
2.2 Equity and common property.....	14
A default setting for equity?.....	15
Defining equity	16
The "community"	17
Equity in heterogeneous groups.....	18
Social differentiation reflected in the CPR	19
Relative wealth and resource access	20
2.3 Mobile pastoralism.....	21
2.3.1 Equity in traditional pastoral commons	23
2.4 Changes to traditional mobile pastoralism.....	25
2.4.1 Africa.....	25
2.4.2 Central Asia	28
China.....	32

Former Soviet Union	35
Mongolia	38
2.5 Chapter Summary	39
Chapter 3: Mongolia.....	41
3.1 People, land and pastoralism	41
3.1.1 People	41
3.1.2 Land.....	42
3.1.3 Pastoralism.....	43
3.2 Overview of change in the pastoral sector	45
3.3 Feudalism.....	47
3.4 Revolution and early socialism.....	48
3.5 Collectivisation	49
3.5.1 Wealth differentiation under the collective	52
3.5.2 Access to resources under the collective.....	53
3.6 Privatisation and the post-socialist period	54
3.6.1 Decollectivisation	55
3.6.2 Wealth differentiation	56
3.6.3 Changes in the institutional setting	59
Informal institutions	59
Formal regulation: the Land Law.....	61
3.6.4 Changes in the herding community	63
Community change and collective action	65
3.6.5 Resource access and use.....	65
3.7 Chapter Summary	69
Chapter 4: Methodology.....	71
4.1 General approach.....	71
4.2 Selection of site	72
4.3 Methods and implementation issues	74
Visual methods.....	74
Wealth ranking	76
Interviews	77
Sensitive information	77
4.4 Chapter Summary	79
Chapter 5: Bayan Mountain	81
5.1 Study area and community.....	81
5.1.1 Bayan Mountain.....	84
5.1.2 Sogoog	86
5.2 Resource use and access.....	87
5.2.1 Seasonal movement	87
5.2.2 Changes in seasonal movement patterns.....	90

5.2.3 Summer pasture and water access.....	94
5.2.4 Mountain winter houses and winter pastures.....	97
Allocation of winter houses.....	98
5.2.5 Sogoog pastures: autumn, winter, spring.....	100
5.2.6 Hayfields.....	101
Irrigation.....	103
Allocation of hayfield land.....	104
Labour.....	105
Obtaining sufficient hay.....	106
Hay as an investment.....	107
User fees.....	108
5.2.7 Key resources and access.....	108
5.3 Participation in resource governance.....	111
5.4 Wealth differentiation.....	114
5.4.1 Differences in wealth.....	114
Definitions of wealth.....	115
Characteristics of different wealth groups.....	117
Spread of wealth groups.....	119
5.4.2 Changes in wealth.....	120
Differences in wealth in the last ten years.....	120
Reasons for changes in wealth.....	121
5.5 Resource access and relative wealth.....	125
5.6 Chapter Summary.....	127
Chapter 6: Discussion.....	129
6.1 Revisiting the research questions.....	129
6.2 Differential resource access.....	129
6.2.1 Differential rights of access.....	129
Seniority: new and ex-collective herders.....	131
Kinship.....	131
Connections.....	132
Personal standing and influence.....	133
Wealth.....	134
6.2.2 Differential ability to realise access rights.....	135
Contingent access rights.....	135
Wealth.....	136
6.2.3 Differential participation in the operation of the CPR.....	138
6.2.4 Differential resource access in the literature.....	140
Prioritising and differences in key endowments.....	140
Community heterogeneity.....	141
6.3 Resource access and wealth differentiation.....	143
6.4 Equity in the case study.....	145

Compliance and minimal conflict.....	145
Satisfaction with the rules	145
Inherent advantages in resource access.....	146
Perspectives on equity and the CPR's response	148
Assessing equity in the case study	149
The case study in the literature	151
6.5 Equity in common property.....	153
Defining and evaluating equity	153
How equitable are CPRs?	154
The importance of the community setting	156
Negatives and positives for equity in the case study.....	157
Equity in common property	159
6.6 Chapter Summary	160
Chapter 7: Conclusion	161
Bibliography	169

List of Figures

Figure 3.1: Mongolia with <i>aimag</i> boundaries.....	42
Figure 3.2: Changes in the number of full-time herding households	63
Figure 5.1: Study area, Bayan mountain and Sogoog, Ulaan-khus <i>sum</i>	82
Figure 5.2: Bayan mountain social map	85
Figure 5.3: Typical seasonal movement patterns.....	89
Figure 5.4: Winter house and livestock shelter, Bayan mountain.....	97
Figure 5.5: Sogoog river flats and hayfields.....	102
Figure 5.6: New and ex-collective herders on Bayan by wealth group.....	118
Figure 5.7: Relative wealth and resource access.....	126
Figure 6.1: Operation of factors in effective access to resources.....	137

Photographs

Photo Page 1: Bayan Mountain	93
Photo Page 2: Sogoog	109

List of Tables

Table 3.1: Households grouped by size of private herd	58
Table 5.1: Herding households and average herd size, Ulaan-khus <i>sum</i>	84
Table 5.2: Resource management decisions	112
Table 5.3: Bayan and Sogoog wealth groups compared	116
Table 5.4: Factors in changing wealth and their relative importance	123

Note on Transcription

Kazak and Mongolian alphabets

Both the Kazak and Mongolian alphabets are based on the Russian Cyrillic alphabet, with some differences in pronunciation and additional letters. Mongolian lacks letters 2, 6, 15, 19, 27, 31 and 38 of the Kazak alphabet. The Cyrillic letters have been transliterated into Latin script as shown below, and are generally pronounced similarly in both Kazak and Mongolian.

	<u>Cyrillic</u>	<u>Latin Script</u>		<u>Cyrillic</u>	<u>Latin Script</u>
1	А а	a (<i>ah</i>)	22	П п	p
2	Ә ә	a (<i>hat</i>)	23	Р р	r
3	Б б	b	24	С с	s
4	В в	v	25	Т т	t
5	Г г	g	26	У у	u
6	Ғ ғ	gh ¹	27	Ү ү	ou
7	Д д	d	28	Ү ү	ü / w
8	Е е	e (<i>ye</i>)	28	Ф ф	f
9	Ё ё	o (<i>yo</i>)	30	Х х	kh (<i>loch</i>)
10	Ж ж	j (<i>jump</i>)	31	Һ һ	h
11	З з	z	32	Ц ц	ts
12	И и	i (<i>kíwi</i>)	33	Ч ч	ch
13	Й й	i (<i>shorter</i>)	34	Ш ш	ch / sh ²
14	К к	k	35	Щ щ	shch
15	Қ қ	q	36	Ъ	(hard sign)
16	Л л	l	37	Ы	y (<i>brother</i>) ³
17	М м	m	38	І і	i (<i>hít</i>)
18	Н н	n	39	Ь	(soft sign)
19	Ң ң	ng	40	Э э	e (<i>eh</i>)
20	О о	o	41	Ю ю	yu
21	Ө ө	ö (<i>euh</i>)	42	Я я	ya

¹ Similar to French "r".

² In Kazak *w* seems to be pronounced "ch" in word-initial position, "sh" elsewhere. In Mongolian it seems always to be "sh".

³ Similar to the unstressed vowel here, but can be stressed in Kazak.

Transcription and language

It is difficult to transcribe languages which use 36 or 42 letters into an alphabet of 26, particularly when there is no international agreement on how this should be done (Sanders and Bat-Ireedui 1995:9). Nor is there even agreement on the original script - Kazak is written in a Cyrillic script in Kazakhstan and Mongolia and an Arabic script in Xinjiang, China, and has also been written in a modified Latin script (Benson and Svanberg 1988:94-7).

For this thesis the transcription system used by the Lonely Planet Mongolian Phrasebook (Sanders and Bat-Ireedui 1995) has been adopted for both Mongolian and Kazak, with some reference to the Kyrgyz section of Lonely Planet's Central Asia Phrasebook for the additional letters in Kazak; Kyrgyz and Kazak pronunciation are very similar (Rudelson 1998:76,104). Anything not covered by this is the author's own transcription system of sounds as heard in the field.

Although some Cyrillic letters have a slightly different pronunciation in Mongolian and Kazak, such as *з* (like English *z* in Kazak but closer to *dz* in Mongolian), the same letter has been used to transliterate them in both languages.

Two points deserve special note. Firstly, the use of the English "s" to indicate the plural has been avoided since the original languages follow a different pattern. Since in most cases the correct plural form was not known, the singular has been used as both singular and plural in both languages (*aimag*, *kigizwi*).

The second point relates to the spelling of the name Kazak. The common alternative spelling "Kazakh" is a transliteration of the Cyrillic spelling introduced by the Soviets, *Kazax* (Benson and Svanberg 1988:2). Kazaks' own name for themselves is written *Қазақ* in Mongolia, which should correctly be transliterated "Qazaq". As this is not only unrecognisable but somewhat disconcerting for English speakers, the spelling "Kazak" is used here instead.⁴

⁴ Kazak translators were also very reluctant to use "q" in transliterating *Қазақ*.

Glossary

Terms defined here are Mongolian unless indicated as Kazak (K).

<u>Latin Script</u>	<u>Cyrillic</u>	<u>Definition</u>
<i>aimag</i>	аймаг	province (21 in Mongolia)
<i>aral</i>	арал	"the land"; local name for the open area of the Sogoog hayfields
<i>auyl</i> (K)	ауыл	herding group (1-8 households, in study area); Mongolian <i>khot ail</i>
<i>bag</i>	баг	subdistrict (8 in Ulaan-khus; <i>bag</i> #4 contains 240 families)
<i>khoshuu</i>	хошуу	"banner"; pre-revolutionary administrative division
<i>khot ail</i>	хот айл	herding group (Kazak <i>auyl</i>)
<i>kigizwi</i> (K)	кигіз үй	felt tent; Mongolian <i>ger</i>
<i>neg nutgiinkhan</i>	нэг нутгийнхан	neighbourhood group of several <i>khot ail</i> ; literally "people of one place"
<i>negdel</i>	нэгдэл	collective
<i>sum</i>	сум	district (12 in Bayan-Ölgii, higher than average)
<i>suur</i>	суур	smallest herding unit within collective; 1-2 households
<i>zud</i>	зуд	very deep or frozen snow making it impossible for livestock to find forage

Place Names

Place names are Kazak unless indicated as Mongolian (M). Meanings were supplied by translators in Bayan-Ölgii, with some assistance from a Mongolian-English dictionary while still in Mongolia.

<u>Latin Script</u>	<u>Cyrillic</u>	<u>Meaning</u>
Aral	арал	land, area
Bakytjan Chappa	Бакытжан Шаппа	Bakytjan's hayfields
Bayan Zürkh (M)	Баян Зүрх	rich heart
Bayan tau (M: Bayan uul)	Баян тау (Баян уул)	rich mountain
Bor Burgas	Бор Бургас	willow thicket
Choqpar Tas	Шоқпар Тас	big rock
Iyq Jourt	Иық Жұрт	shoulder shape
Jumakhan Jailau	Жумахан Жайлау	Jumakhan's summer pastures
Khatuu (M)	Хатуу	hard
Kök Choqy	Көк Шоқы	blue hill / peak
Ölgii (M)	Өлгий	cradle
Orta Kharaghan	Орта Хараған	middle thornbush
Ospan Jailau	Оспан Жайлау	Ospan's summer pastures
Qara Jaryq	Қара Жарық	black gorge / cleft
Qara Saz	Қара Саз	black swamp
Qyzyl Bastau	Қызыл Бастау	red well
Qyzyl Kharaghan	Қызыл Хараған	red thornbush
Sogoog (M) / Soghaq (K)	Соогоо / Соғақ	(translator unaware of any meaning)
Terekti	Теректі	forested
Tor Kharaghan	Тор Хараған	thornbush fence
Ulaan-khus (M)	Улаан хус	red birch
Ülken Kharaghan	Үлкен Хараған	big thornbush
Üsh Bulaq	Үш Булақ	three streams

Chapter 1: Introduction

1.1 Introduction

Questions of equity belong in a view of development which has long linked the reduction of poverty with the reduction of inequality (Seers 1969:3). This view is not resigned to the existence of inequalities; rather it seeks to rectify them and focuses particularly on the least well off (Galaty 1999:48). Indeed some definitions extend their understanding of equity beyond reducing inequalities to include a specific focus on improving the choices and opportunities of those who are most marginalised (Chambers and Conway 1992:6). Equity in this view is seen to encompass both adequate livelihoods for all and access to whatever resources may be required to achieve them (Chambers and Conway 1992:7).

One avenue of governing resource access at the local level is through common property regimes, increasingly embraced as a means to achieve sustainable resource use, but which it is claimed can also allow for equitable access to resources (Berkes and Farvar 1989:11, Gibbs and Bromley 1989:26). However, this would appear to be called into question by the existence of wealth differentiation among the resource users of some common property regimes, suggesting a more complex picture.

This is a study of a local pastoral commons in western Mongolia, which seeks to explore the question of whether in fact common property regimes can afford equitable access to resources, and what the various factors are which may affect equity.

1.2 Does "common" mean equitable?

Common property has undergone something of a resurgence in popularity in resource management as the emphasis placed on people's participation in managing their own local resources has increased. There is a considerable body of literature demonstrating that common property regimes (CPRs) should not be confused with open access situations in which resource use is

unregulated and which result in overuse and degradation of resources. Common property, by contrast, does involve regulation of resource use by the group or community who use the resources in question, each of whom agree to limit their use of resources in the expectation that others will do likewise. Not only is this a longstanding and effective way of controlling the use of resources, in some circumstances it has been shown to be superior to either private or state property in terms of how well resources are managed (Baland and Platteau 1996:244-5, Lane 1998:13). On the one hand CPRs can provide flexible rules well tailored to the local environment and effective monitoring of resource use by the users themselves, with social pressure to conform to the rules, all of which are difficult for the state (Ostrom 1990:90, Baland and Platteau 1996:350). On the other, they can avoid capture of resources by individuals at the expense of those excluded, as under private property. Typically, CPRs have developed in environments where resources are complex or unpredictable, while the population using them is stable over the longer term, meaning that there is incentive for people to agree on resource management because they will reap ongoing benefits (Ostrom 1990:88). CPRs are found for example governing the use of fisheries, forests, irrigation systems and, as in this study, rangelands.

A major reason why CPRs and other forms of community-based natural resource management (CBNRM) are encouraged is that they are seen to promote sustainable use of resources; this follows from the agreement by resource users to limit their use of the resources in question, not only in the present but over the longer term (Gibbs and Bromley 1989:25-6), as implied by the supposed stability of the user group. However, it is also argued that there would be no incentive for users to agree to and abide by the rules unless they also perceived them to be fair, allowing for equitable distribution of resources (ibid.). By this reasoning, CPRs should promote not only sustainability, but equity. This seems to be supported by the fact that the resource user groups in a number of enduring CPRs are relatively homogeneous in many respects, including wealth (Ostrom 1990:89).

Although it is easy to focus on reducing inequalities and enhancing the well-being of the disadvantaged, it must however be acknowledged that equity is a highly nuanced concept that defies easy description. It might best be defined as "fairness", which clearly illustrates the problem: how is this to be decided, and how measured? It is likely that perspectives will differ, both among users of resources and between users and outsiders (Chambers and Conway 1992:4-5), as to what constitutes equity in a CPR. While recognising that the definition of equity in a given situation is subject to negotiation and should not be imposed from without, this study nevertheless adopts the perspective of Chambers and Conway, that equity and equitable access to resources may in themselves be considered good (*ibid.*).

Although local perceptions of equity and fairness may not include a bias towards the least well off, this is nevertheless the most obvious point of intersection between equity and common property, in that the least well off are often the most heavily dependent on common resources, having few or no other sources of income or livelihood (Bromley 1992:13, Beck and Nesmith 2001:129). The question of whether CPRs do in fact allow for equitable distribution of resources has greatest impact on those who depend most on those resources for their livelihood. This makes it important to understand what effect a growing emphasis on management of resources by local communities is likely to have in terms of resource access for the least well off.

The literature indicates that well-functioning CPRs can allow equitable access to resources, owing to the claim that rules must be fair before resource users will agree to them. This almost seems to imply that CPRs should, by definition, be equitable. However, it is apparently contradicted by the existence of differences in wealth, often longstanding and in some cases increasing, between resource users in the same CPR (Salzman 1999:41-3). Such wealth differentiation casts some doubt on the supposed equity of resource distribution, or at least suggests that there may be factors which influence this.

Existing studies

Questions of equity and wealth differentiation in CPRs are addressed to some extent in the common property literature, although it should be noted that the main focus of much of this literature is successful collective action in order to achieve successful (sustainable) resource management.⁵ While not overlooked, equity is therefore treated as something of a side issue. What these studies do stress is the complexity of the interaction between wealth differentiation (and other forms of social differentiation) and resource access.⁶ An important criticism is the tendency to take a rather romantic and simplistic view of local communities or resource user groups, rather than acknowledging various factors such as wealth, gender or ethnicity which may result in complicated dynamics within communities and thus in differential access to resources (Agrawal and Gibson 1999:637, Devereux 1996:4-6). The homogeneous communities which seem to characterise long-running successful CPRs may in fact be the exception rather than the rule. However, it does not follow that differentiation within a resource user community necessarily precludes equitable resource access, as elites who have an interest in the CPR continuing to function well may even ensure that other users benefit from it sufficiently to have an incentive to follow resource use rules (Baland and Platteau 1996:302, 311). The literature thus suggests a complex interrelationship between social differentiation, wealth differentiation included, and resource access, which is likely to be affected by power relationships within the resource user community (Leach et al. 1999:233, Agrawal and Gibson 1999:637). It cannot be assumed that differences in wealth necessarily lead to inequitable resource access, despite appearances. Nor can it be said with certainty that wealth differentiation derives from inequitable resource access, since even where resource access is equitable some households may have additional sources of income. What can be said is that, to the extent that resource access depends on wealth, differences in relative wealth are likely to result in differential resource access, with the least well off disadvantaged.

⁵ See Chapter 2, p.13.

⁶ Agrawal and Gibson 1999, Jain 2002, Baland and Platteau 1996:298-312. See also p.17ff.

Mobile pastoralism

Existing literature that specifically addresses equity in CPRs does so mostly in the context of either forests or irrigation. There is by contrast relatively little information on equitable resource access within rangeland CPRs.

The use of rangelands as common property, in conjunction with a mobile form of pastoralism, has developed in arid and semi-arid environments as a response to sparse and unpredictable rainfall, to maximise the use of available forage (Behnke and Scoones 1993:12-13). As with other types of CPR therefore, mobile pastoralism is linked with a complex and unpredictable environment. It differs from other types of CPR in that the rangeland resources in question are spread out and may be separated by considerable distances. Movement between pasture areas may be seasonal and predictable, or more contingent with the increasing unpredictability of the environment itself (Scoones 1995:16). As a result, a significant factor in rangeland as opposed to other types of CPRs is that the resource user group is mobile rather than settled, with mobility clearly a key factor in access to the various areas of pasture used throughout the year.

Traditional pastoral CPRs have been much affected both by the alienation of pasture for agriculture and by wider policy changes, often aimed at control of nomadic populations, which have undermined customary authority and resource management. These have included both nationalisation and privatisation of rangeland (Lane 1998:8-13). This move away from common property has impacted negatively on equitable access to rangeland resources. This is particularly true of privatisation, as wealthier individuals have been able to enclose and appropriate pasture as private reserves, increasing pressure on remaining common land, the only pasture to which the less well off have access. In these situations, repeated across Africa and also in parts of China, wealth differentiation is increasing (Lane 1998:13, Williams 1996:309). That this should happen as traditional pastoral CPRs decline suggests that some aspects of their operation may have either facilitated more equitable access to resources, or restrained individuals from exclusively appropriating resources at the expense of others.

Mongolia constitutes an interesting environment in which to explore questions of equitable resource access in pastoral CPRs. As elsewhere in Central Asia, despite several decades of socialism, which virtually enforced equality, patterns of wealth differentiation quickly re-emerged following decollectivisation. Mongolia differs from other Central Asian countries in several interesting particulars however. Pastoralism is a much more significant part of the economy; at least 30 percent of the population is directly involved in pastoral production (NSO 2001). In addition, despite privatisation of the livestock and assets of the former collectives, pastures remain state property and are effectively managed as common property by groups of herders who are, again in contrast to many of their neighbours, still largely nomadic. Land use legislation however is gradually moving in the direction of private ownership of pasture, which in other countries has proved to have negative consequences for equity and particularly for the least well off. If pastoral CPRs can allow more equitable access to resources than many other types of property regime, as experience elsewhere suggests, in view of likely changes in legislation it is important to know how this operates in the Mongolian context.

1.3 Focus of the study and research questions

This study takes as its starting point the apparent contradiction between the equitable resource access which CPRs are said to afford and the existence, even increase, of wealth differentiation among resource users. With mobile pastoralism as its setting, the study aims to further explore the question of whether common property regimes can in fact be considered equitable, and what the various factors are which may affect equity.

This may be expressed in the following research questions:

- What factors affect access to resources? Is there differential access, and is this equitable?
- What factors contribute to wealth differentiation? To what extent is wealth differentiation indicative of inequitable access to resources?
- How (if at all) does the CPR recognise or address issues of equity?

These questions are addressed through a qualitative case study of an ethnically Kazak pastoral community in Bayan-Ölgii *aimag* (province), western Mongolia. The study aims to discover within this context how resource access is governed, who in the community is able both to have access to resources and to participate in their governance, how wealth is understood in the local context and how wealth differentiation comes about. It then examines the relationship between wealth differentiation and resource access in the study community, before attempting to evaluate whether resource access is in fact equitable and to identify factors affecting equity. The complexity of the question to be studied guided the choice of both qualitative methods and a case study approach; this approach was considered most suitable for obtaining the detailed information required and the viewpoints of various people within the community.

Although this case study has not been selected as representative of the entire country, it is hoped that the findings may have some application in other parts of Mongolia, which are likely to share many background features with the community in question. However the case study may also have something to offer in terms of wider considerations of equity in common property and community-based natural resource management.

1.4 Overview of the thesis

This chapter has introduced the question of whether common property regimes can be held to be equitable in their provision of access to resources, given the existence of wealth differentiation among resource users. It briefly reviews this question in light of the common property literature, outlining its significance in terms of common property generally and more particularly in the context of pastoralism in Mongolia where the case study is located.

Following a short overview of common property, Chapter 2 reviews the literature on equity in common property regimes, discussing the complex interrelationship between social differentiation, wealth included, and resource access. The second part of this chapter describes mobile pastoralism, and moves from the general to consider equity issues within this specific type of CPR, focusing on Africa and more particularly on other post-socialist Central Asian countries.

Chapter 3 gives a historical overview of pastoralism in Mongolia, noting the considerable changes the country experienced in the course of the 20th century as it moved from feudalism to socialism and then embraced a market economy. The chapter focuses throughout on the effects of these changes on the organisation of the pastoral economy and the questions of relative wealth, resource access and equity.

In Chapter 4 the qualitative case study methodology employed for this research is described, together with the particular location selected and some of the implementation issues arising in the course of fieldwork.

Chapter 5 describes in detail how resource access is governed in the study community on Bayan mountain and in the Sogoog valley, Bayan-Ölgii *aimag*, highlighting how access is gained to different kinds of resources and by different kinds of people. It also presents local measures of wealth and perceptions of how relative wealth has changed over the last decade, and notes some interactions between these two processes.

Chapter 6 returns to the specific research questions stated in this introductory chapter, drawing on material presented in Chapter 5 for response and discussion. It examines factors affecting access to resources and the interaction with wealth differentiation, then makes an assessment of equity within the case study. The chapter concludes with some comments on equity considerations in CPRs.

Chapter 7 summarises these findings, concluding that CPRs, though not inherently equitable, may still offer better possibilities for equitable resource access in some situations than alternative property rights regimes. It notes some limitations in the suggestions drawn from the case study, and a possibility for further study on equity in resource access.

Chapter 2: Common Property and Equity

2.1 Common Property

Common property has been the subject of some confusion, as the same term has been used to refer to two very different situations with respect to management of natural resources. In the first case, the "property" or resource is described as common by virtue of the fact that it is public property in the broadest sense, open to use by anyone and controlled by none. Such "common" resources are those subject to so-called tragedies of the commons, the phrase coined by Garrett Hardin (1968) to refer to what he saw as inevitable resource degradation owing to a lack of controls or restrictions on the use of "common" resources. Hardin assumed that resource users would operate as individuals seeking to maximise personal gain, without reference to the future productivity of the resource or to each other, unable to cooperate for their joint interest (Berkes and Farvar 1989:8). The result of all resource users following this same line of action would be overuse of the resource and its eventual decline, to the detriment of all.

Hardin's view has been much criticised as a case of mistaken identity, since what he describes as common property is in fact an open access situation, where no one holds authority over the resources in question, manages them, or is excluded from using them. Since the concept of property necessarily implies that access is not open to all, but that some potential users are excluded (Berkes and Farvar 1989:8), what Hardin describes is not a property regime at all (The Ecologist 1995:231).

Property regimes

Property can be understood, not as a thing or resource owned, but as a social relation that defines people's rights or power over that resource (Gray 1995:223, Bromley 1992:4), and governs their behaviour in respect of it (Lane 1998:7). Property regimes can therefore be understood as the various ways in which the use of resources can be managed. Modern Western society is most familiar

with private property (where rights over a resource or thing are held by a particular individual) and state property, where authority is vested in the state to make decisions over the use of certain resources. Anything not covered by these two possibilities has sometimes been held to be "common" (Berkes and Farvar 1989:7) in the sense described by Hardin, as open to all and particular to none.

However, the term common property more accurately refers not to open access, but to a third type of property regime in which resources are communally owned and managed. Rather than being indiscriminately available to any potential user, resources are instead "common" only to members of a defined group or community, with those outside the group excluded from access (Grima and Berkes 1989:37). In this kind of property regime, regulation of access to and use of the resource is by the community or user group itself, rather than by an external authority. It has been argued that the term "common property" should be reserved for such situations of communal arrangements for allocation and management of resources (Grima and Berkes 1989:37). It should be noted however that resources are seldom governed by a single ideal type of property regime, but usually by some blend, such as local communally used resources over which the state maintains ultimate jurisdiction (Berkes and Farvar 1989:9).

In contrast to open access resources, where the incentive is for individuals to maximise their own benefits without regard to other resource users (or perhaps *because* of other resource users who might otherwise benefit at their expense), common property regimes involve agreed restrictions on individual behaviour in the interest of the entire group or community dependent on the resource (Gibbs and Bromley 1989:23). Rather than being an individualistic approach, this assumes interdependence among resource users, with the understanding that the actions of one person affect others (Berkes and Farvar 1989:7). Individual users thus agree to restrictions on their use of the resource in the expectation and assurance that others will do likewise (Gibbs and Bromley 1989:25). Many studies have shown that resource users do cooperate in this way, overcoming the so-called "assurance problem" (Runge 1992:21), and relying on each other to use the resource and contribute to its management according to the agreed

rules, rather than indulging in "free-riding", behaviour that neglects individual responsibilities and prioritises immediate personal gain over collective wellbeing, and is the basis of tragedies of the commons (Gibbs and Bromley 1989:25). Such cooperation takes the long-term view, in ensuring that the resource will continue to be available and productive, rather than being degraded. It also implies fairness in the rules for resource access and use, so that there is incentive for users to abide by them (Ostrom 1990:33).

Common property regimes (CPRs) can be found regulating the use of various kinds of resources, such as irrigation systems, forests, fisheries or rangelands, the focus of this research. While the nature of the resource does not prescribe the nature of the property regime governing it, the fact that private and common property regimes sometimes exist side by side, as in the Swiss Alps today or in mediaeval England, suggests that CPRs may have advantages over other property rights regimes in certain situations (Berkes and Farvar 1989:14-15). Long-lasting CPRs tend to have in common on the one hand environments which are complex or unpredictable (such as semi-arid environments with highly variable rainfall), and on the other a population which is relatively stable over the long term, so that resource users can see a benefit in maintaining the resource both for themselves and for the next generation (Ostrom 1990:88).

Institutional arrangements

As with other types of property regime, CPRs are governed by particular institutional arrangements, where institutions in this case should be understood to refer not only to the wider organisational setting in which the user group is situated, but more particularly to the local-level rules, agreements and conventions defining its members' rights to use of resources (Gibbs and Bromley 1989:22, Ostrom 1990:51). These rules, or rather the norms of behaviour that derive from them, constitute institutions at the local level (Leach et al. 1999:237). The existence of such institutions means that resource users can expect a certain consistency of behaviour from each other in their use of the resource and their relating to each other (Agrawal and Gibson 1999:637). Typically institutional arrangements govern who has access to the resource, what can be used and when, how use rights will be monitored, infractions

sanctioned and conflicts resolved, what contributions must be made to management of the resource, and who makes the rules and how (Gibbs and Bromley 1989:26-7).

There is general agreement that certain factors contribute to successful management of common resources. One list of such factors comes from Elinor Ostrom (1990), who distils from her extensive survey of CPRs, both successful and otherwise, the following "design principles" characteristic of the long-lived and robust CPRs in her study:

1. clearly defined boundaries to both the resource and the user group
2. rules appropriate to the local context
3. people affected by the rules can participate in modifying them (also helpful for tailoring rules to the local situation)
4. monitoring, by the users themselves or monitors accountable to them (ideally, well-designed use rules mean users monitor each other in the normal course of resource use)
5. graduated sanctions for non-compliance
6. low-cost conflict resolution
7. user group's right to devise its own institutions is recognised by local authorities rather than challenged
8. CPRs that are part of larger systems are "nested", such that rules at one level require supportive rules on the other levels for the CPR to work effectively

(Ostrom 1990:90-101).

When these principles (or similar ones)⁷ are in place, the cost of managing the resource can be greatly reduced because the rules eliminate the need to negotiate every transaction individually (Gibbs and Bromley 1989:26). Instead, the rules are common knowledge to the people working by them (Ostrom 1990:51). Provided the rules are perceived to be fair, and monitoring is effective, there is more incentive for people to keep to the rules than to attempt

⁷ See also Baland and Platteau 1996:286-9 for a comparison of several such lists of design principles.

to maximise their own benefits at the expense of others, and ultimately at the expense of the resource.

Advantages of common property in resource management

It follows that a well-functioning CPR has two major positive features. First, it can be an effective way of sustainably managing natural resources, conserving these resources for ongoing use and providing secure livelihoods for the people dependent on them (Berkes and Farvar 1989:11-13). Secondly, an effective CPR can also allow for equitable allocation of resources, since rules for managing the resource have been mutually agreed on by the users, rather than having to resort to negotiating every decision, in which case relative bargaining power would likely carry the day (Gibbs and Bromley 1989:26; Berkes and Farvar 1989:11). CPRs can therefore be equitable both across time, and across communities.

The potential advantages of CPRs in resource management have not gone unnoticed. There is a considerable body of literature in rebuttal of Hardin's "tragedy of the commons" argument, demonstrating that often it is external policies removing resources from customary communal management, rather than the common property regimes themselves, that have led to resource degradation and indeed set up the conditions for tragedies of the commons to occur (Lane and Moorehead 1995:122-3, Baland and Platteau 1996:247). Case studies of longstanding successful CPRs (such as Ostrom's 1990 survey) have fit well with the growing focus on sustainable development over the last two decades. This has been paralleled by increased emphasis on community participation in development, so that common property has neatly slotted into current trends and been reinvented as "community-based natural resource management" (CBNRM) in an attempt to devolve power and responsibility over resources to local communities (Leach et al. 1999:225, Li 2002:265). CBNRM initiatives are also being re-applied in some situations where common property regimes previously obtained, as in Nepal where forests were nationalised in 1957, then began to be returned to community management following a change of policy in 1978 (Baland and Platteau 1996:242,246). Similarly, there is a move towards "co-management" of resources which sees complementary roles for

local communities, who can devise locally appropriate institutional arrangements and have more effective monitoring capabilities, and the state which can offer legal status to community-based regimes and act as ultimate arbiter of conflict (Agrawal and Gibson 1999:638, Baland and Platteau 1996:347-350). The emphasis in these developments though seems to be more heavily on natural resource management than on the community, as evidenced by the focus of titles such as *Halting Degradation of Natural Resources: is there a role for rural communities?* (Baland and Platteau 1996).

2.2 Equity and common property

In view of the extensive literature on the potential contribution of CPRs to sustainable resource management, what is surprising is the comparative lack of writing focusing on their other supposed advantage, the equitable allocation of resources within communities. If CPRs are as successful at promoting equity as they are at sustainably managing natural resources, it could reasonably be expected that there would be an equivalent body of literature on both subjects, but this does not seem to be the case.

There are two possible reasons for this. First, questions of equity may have been overshadowed by sustainability and participation, so that the effectiveness of CPRs in this regard has simply not been the flavour of the moment. While this is difficult to substantiate or to measure, it is worth noting that the importance of equity highlighted in the 1987 Brundtland report on sustainable development, "concern for social equity between generations, a concern that must logically be extended to equity within each generation" (WCED 1987:43), has been somewhat eclipsed by the briefer and more famous definition which refers only to intergenerational equity: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (ibid.). This being the case, it is at least possible that equitable allocation of resources within CPRs has been overshadowed by a more long-term focus on sustainability.

Apart from development trends, the most logical reason why CPRs are not put forward in the literature as a means to promote equitable resource management

as much as sustainability, is that perhaps common property regimes are not always so equitable as has been suggested.

A default setting for equity?

Common property regimes are assumed to be equitable in their allocation of resources in part because some of the more successful examples seem to have user groups which are relatively homogeneous, in terms of features such as ethnicity or skills, but also in regards to ownership of assets (Ostrom 1990:89), which may be taken as one indicator of relative wealth. This homogeneity however may be a condition for the successful operation of the CPR, rather than its outcome. Some do see equitable access to resources as a product of a well-functioning CPR, on the assumption that for the rules to work, the users must agree to abide by them, and must therefore perceive the rules to be fair and equitable (Gibbs and Bromley 1989:26). In this view the existence of fair access rules is evidenced by a relative lack of conflict (Berkes and Farvar 1989:11).

Problems with allocation of resources in CPRs are thus seen as a distortion of what is almost a "default setting" for equity. Grima and Berkes refer to "allocative disorders", disruptions in what are otherwise assumed to be orderly and equitable systems, which arise because the rules of the CPR are either poorly defined or have broken down (Grima and Berkes 1989:39,41). Breakdown in the use-rules for CPRs can be due to undermining of their wider institutional setting, for example by external policies such as nationalisation of resources, as with the Nepali forests referred to above, or official standardising of rules previously fine-tuned for specific locations, as happened with Nova Scotia inshore fisheries (Ostrom 1990:175-7). The result is a loss of customary authority over the resource and in particular the authority to limit access and use (Grima and Berkes 1989:41). Similarly, if the rules for use of the resource are ill-defined or difficult to enforce, allocation problems arise within the CPR itself. In either case, the assumption with such "allocative disorders" is that, given the right circumstances, such as better-designed rules or a favourable policy environment, allocation of resources would in fact be equitable.

However, what is difficult to square with this impression that well-functioning CPRs promote equity is the undeniable existence of wealth differentiation among users of even long-standing CPRs (Baland and Platteau 1996:305-8). This is not always a new or recent development, and in some cases is even increasing (Salzman 1999:41-3), suggesting that CPRs, even when functioning well, are not necessarily equitable.

Defining equity

It is perhaps useful at this point to attempt to clarify what is meant by equity. Equity is often viewed as economic equality, measurable in terms of relative income distribution (Chambers and Conway 1992:6). This is an oversimplified picture for two reasons. First, inequality in income is often associated with other inequalities such as access to services, opportunities and especially power (Seers 1979:12,16); Chambers and Conway also argue for broadening the scope of equity beyond income to include "a less unequal distribution of assets, capabilities and opportunities, and especially enhancement of those of the most deprived" (1992:6). Secondly, understanding equity to mean equality may be imposing an outsider's (and perhaps a Western) viewpoint, in the form of egalitarianism (Wade 1992:222); it may also be imposing a bias in favour of marginalised groups, to which concerns for equity may have strong emotional ties (Jain 2002:3), as illustrated by the preceding quotation. This focus on the disadvantaged is consistent with a development emphasis on reducing both poverty and inequality (Seers 1969:3, Galaty 1999:48). This may be no bad thing, particularly in this context, since the least well off tend to rely more heavily on CPRs for their livelihoods, having few alternatives (Bromley 1992:13, Beck and Nesmith 2001:122,126,129). However, a focus on the poorest may not figure strongly in local perspectives on equity. Nevertheless the supposed equality of CPRs is stressed in the literature, with such systems even argued to promote greater equality (Jain 2002:3, Beck and Nesmith 2001:129). A better understanding of equity is fairness, in this case whether users have fair access to resources, or get a reasonable and fair return for their contribution to the CPR. This is more nuanced; unfortunately it is also much more difficult to measure, depending on what Oakerson has called "rough-and-ready indicators"

- whether most members of the user group are satisfied with the rules as they stand, and by implication agree that they are fair (Oakerson 1992:52).

As already noted, it is claimed that having fair use rules avoids the negative consequences for equity of relative bargaining power swaying individual decisions over resource use (p.13). However, the potential for differences in bargaining power to exist highlights the possibility that, even though the property regime continues to function, existing differentiation within the community may also be reflected in the CPR (Jain 2002:3).

The "community"

This raises the issue of the relative homogeneity of the user group, the "community" of community-based natural resource management. Ostrom notes that user groups in the enduring CPRs in her study did not vary greatly in terms of potentially divisive factors (Ostrom 1990:89). It is frequently assumed that such similarity among users contributes to the likely success of the CPRs they are involved in (Agrawal and Gibson 1999:634, Blair 1996:492), whereas differences may aggravate equity issues and consequently adversely affect the overall functioning of the CPR (Oakerson 1992:52).

Communities in general, however, are not usually homogeneous groups, and heterogeneous user groups cannot be avoided, particularly in larger CPRs where more than one local community is involved (Baland and Platteau 1996:301, note 4). While the user group of a CPR cannot always be equated exactly to a local community (Baland and Platteau 1996:299), it is useful to consider some of the criticisms of the oversimplification of "community" in CBNRM since they are also applicable to CPRs. The community, in this context, is assumed to be those people who live near a resource and depend on it for their livelihood, and is also often thought of as a homogeneous social unit whose members have a similar interest in sustainable management of local resources (Li 2002:265, Agrawal and Gibson 1999:633). This view is an idealised throwback to mid-20th century social theories of community as a homogeneous and rather static entity, in harmony both internally and with its

environment unless disrupted from outside, whose institutions virtually determine the actions of its members (Leach et al. 1999:229-30).

This has been challenged by newer perspectives seeing people as "social actors" who actively make decisions on the strategies they adopt, in this case with regards to resources, in response both to factors internal to the "community", and to the wider external context (Leach et al. 1999:230, Steins and Edwards 1999:543-4). This more dynamic view allows for the recognition that communities are differentiated along lines of wealth and power, with economic, religious and political elites and gender inequalities (divisions which may overlap), and that the various subgroups may have differing interests in resources and their allocation (Agrawal and Gibson 1999:637, Leach et al. 1999:226). Accordingly, the key processes of negotiating rules for resource use, implementing the rules, and resolving disputes arising in the implementation process, take place within a particular setting of power relationships and are influenced by it (Agrawal and Gibson 1999:637). The institutions that develop in such contexts may also involve overlapping rules that affect some groups or individuals differently from others (Agrawal and Gibson 1999:638), reflecting the structure of the communities in which they have developed (Jain 2002:2).

Equity in heterogeneous groups

This does not mean that social differentiation leads inevitably to inequitable access to resources (Baland and Platteau 1996:302). On the contrary, heterogeneity may even force resource users to develop equitable resource allocation systems in order to ensure the cooperation of all the various groups involved (Jain 2002:19). Thus even in communities where there is social stratification or considerable difference in private wealth, resource access rights or products of a CPR may be assigned fairly (Jain 2002:16) by systems such as lottery or rotation, with local elites sometimes even taking a leading role as patrons to poorer clients (Baland and Platteau 1996:311). While this may happen in response to pressure from donors or government bodies, it may also be due to the balance of power created when elites need the cooperation of other resource users in order to maintain a resource or enforce rules that are to their own benefit. This gives less powerful or less well off users bargaining

power to achieve an equitable allocation of resources (Baland and Platteau 1996: 310-11), since it is in the interest of more powerful members of the user group to keep the CPR functioning well (Wade 1987:104).

Social differentiation reflected in the CPR

Social differentiation in communities and user groups can however be less positive, with more powerful groups pursuing their own interests at the expense of other resource users. Considerations such as power or status may enable some members of the community to derive disproportionate benefits from the CPR, unchallenged by others whose values may even permit such inequitable distribution (Jain 2002:3). In such circumstances, the absence of conflict may not mean that all users are persuaded of the fairness of resource allocation, but only that they do not see any benefit in challenging it: there is a difference between the best deal, and the best deal you are likely to get.

The rules of the CPR may also be interpreted differently for different groups - in other words, there may be differences between theory and practice, or between customary law and customary norms (Devereux 1996:5). Devereux distinguishes two categories of rules governing property rights and access to resources in CPRs: eligibility rules which inflexibly exclude some and include others, and a second step of prioritising among those who are included, which he refers to as queuing and payment rules (Devereux 1996:4). Second-level rules of this sort may determine who will be allocated resource rights first, or be allocated more, or whose rights are more secure. So, for example, while all adults may be theoretically entitled to an allocation of land, reality may mean that older men take precedence over younger men and women, or that women only have access rights through their husbands, which may be lost if they are widowed (Devereux 1996:4). This is similar to the distinction made by Leach et al. between the resource endowments that people should have, over against their entitlements, or what they actually can have, which may be limited because they lack key endowments such as the labour needed to realise their nominal rights to resources (Li 1996: 510, Baland and Platteau 1996:305-6), or by institutionalised discrimination such as Devereux describes (Leach et al. 1999:232, Devereux 1996:25).

The fact of social differentiation can therefore work either for or against equity, although it is fair to say that, since CPRs are likely to reflect the structures of the communities in which they have developed, they are unlikely to provide equal benefits to all and will probably not redistribute wealth in favour of the less well off. However, even when there is considerable differentiation in the community, CPRs may still safeguard the interests of the poor, so long as these coincide with those of the more powerful (Jain 2002:2), or at least benefit the poor insofar as they also benefit the rich (Beck and Nesmith 2001:130).

Relative wealth and resource access

The above discussion shows that differences in wealth are not necessarily an indication of inequitable resource allocation within a CPR. Wealth differences may be related to factors other than access to the resources governed by the CPR, such as alternative sources of income. Conversely, access to resources may be restricted by factors that are not linked to relative wealth, such as gender, ethnicity or other social groupings. Thus, even when there is social differentiation within the user group, wealth differentiation included, resources may still be equitably distributed.

However, some factors that may contribute to relative wealth (such as the availability of labour) may also restrict access to resources. In this way the less well off in the user group or the community may be disadvantaged in their ability to access resources, even where nominal rights of access exist. Wealthier members of user groups may in some instances also use their wealth to control resource access. Since inability to access resources is likely to impact negatively on wealth status, this means that where there are inequities in resource access under CPRs, whether because of formal or informal rules or for other reasons, the poor are likely to be disadvantaged and may become less well off.

Whether wealth differentiation in communities and user groups (as other forms of social differentiation) has a positive or negative impact on equitable access to resources, is therefore likely to depend on the setting in which institutional arrangements are developed, the differing interests and priorities of the various

people involved (Agrawal and Gibson 1999:637), and how these groups and individuals gain access to and control of resources (Leach et al. 1999:232).

These are questions which will be examined in the case study, but are also considered further in the context of pastoralism, the specific example of common property which is the subject of the second part of this chapter.

2.3 Mobile pastoralism

Conventional rangeland management has been based on the concept of a balance or equilibrium between numbers of livestock and the regenerative capacity of pasture, such that there exists an optimum carrying capacity or stocking density for the land. Increasing stock numbers beyond this would lead to overgrazing and eventually to degradation of the pasture (Behnke and Scoones 1993:3). However, arid and semi-arid grassland ecosystems experience such dramatic and unpredictable variability of rainfall, both between seasons and interannually, that a balance between stock numbers and pasture growth is never achieved - the system is too changeable (Ellis 1995:38). Such systems are referred to as non-equilibrium environments. It is now recognised that a conventional approach to pastoralism, suited to wetter temperate grasslands, is not appropriate in non-equilibrium situations (Behnke and Scoones 1993:1,12).

Pastoralists faced with such environments have instead traditionally adopted strategies of herd mobility and communal land tenure over the pastures they use (Lane 1998:1). In non-equilibrium areas, the productivity of rangelands, and therefore of livestock, is chiefly dependent on rainfall rather than stock numbers (Ellis 1995:40). Variable rainfall leads to corresponding variations in pasture quality at different times of the year and in different areas. Rather than adjust herd size in response to variations in pasture, herders have developed a system of mobility that allows them to maximise herd numbers by following the best available pastures at different times of the year (Behnke and Scoones 1993:13). This is more complex than simply moving on when pasture in one area has been well grazed. Instead, pastoralists follow patterns of regular seasonal migration between specific pastures. Typically this involves having access to

key pastures during the dry season (in Africa) or the winter (in Asia) that allow use of other more remote or more marginal pastures at other times of the year (Lane and Moorehead 1995:129, Humphrey and Sneath 1999:221-3).

In areas where there is less variation in rainfall, and more diverse kinds of pastures occur within a smaller area, migration tends to be regular and seasonal. In more extreme environments movement does not follow a regular route, but is contingent, responding to unpredictable rainfall. In this case migration tends to cover a much wider geographical area because herders must travel further afield to obtain sufficient grazing (Scoones 1995:16), and also depend on having some access rights beyond their normal area as a fallback in times of crisis (Behnke and Scoones 1993:14). Whether migration is regular or contingent, the scale of movement involved and the variability of pastures mean that coordination is more effective at the group rather than the individual household level.

Under such traditional communal tenure regimes, rangeland resources belonged to a group of herders, often linked by kinship, while the herds themselves were privately owned. A single group or community of herders would have access to specific pastures, using various different pasture types and locations throughout the year, as well as access to water sources, salt licks or campsites, though tenure of these resources might be more contested and more exclusive (Scoones 1995:26). Regulations might also require periodic closure of pastures for regeneration, or controls on the kinds or number of livestock, in order to maintain the rangeland (Gibbs and Bromley 1989:28). Coordination over a wider area was achieved by traditional authorities who controlled seasonal movement by determining when pastures would be opened and closed, depending on range and weather conditions (Lane 1998:17, Humphrey and Sneath 1999:69). Pastoral groups might also share reciprocal arrangements with neighbouring groups to use each other's grazing lands in case of extreme climatic conditions such as drought or severe winter (Lane and Moorehead 1995:129, Humphrey and Sneath 1999:276).

2.3.1 Equity in traditional pastoral commons

Pastoral societies, like other communities, are neither typically homogeneous nor truly equitable (Perrier 1995:53, Sylla 1995:147). Instead they have historically been subject to social differentiation along lines of both wealth and, not necessarily by derivation, social standing. Wealth, as measured in herd size, has always been variable to a greater or lesser degree depending on the society, with instances of very large herdowners (Salzman 1999:41-2), of others herding for these large herdowners, and simply of poorer households herding for richer (Humphrey and Sneath 1999:220). Salzman draws a distinction between economic differences (disparities in wealth) and economic differentiation (wealth-based status), arguing that for at least some pastoral societies, wealth did not confer status or power, chiefly because differences were not stable over time, owing to the vulnerability of livestock wealth to disease and disaster (Salzman 1999:42-3). At the very least, expansion in individual herd size does seem in some societies to have been limited by these factors, as well as by the significant labour requirements of grazing and watering large herds, and by customary patterns of social assistance (loans, gifts, exchange) and of livestock redistribution for political reasons or on marriage (Sutter 1987:212, Salzman 1999:43-4). Social and economic reciprocity of this kind could act as a counter-balance to emergent economic stratification (Sutter 1987:212-3); also, the clan as ultimate owner might even redistribute livestock from richer households to poorer (Swift 1995a:169). Nevertheless there were certainly societies in which wealth did confer status and prestige and could bolster an individual's authority (Szykiewicz 1998:215-7).

Communities were also stratified along lines other than wealth, including distinct groups such as nobles, independent herders, castes or slaves, who did not have equal voice and power (Sylla 1995:147). Similarly, social status could be based on kinship, such as belonging to a clan lineage with a long history in a given area (Moorehead 1998:56). A further distinction in some African pastoral societies was the age group to which men belonged, although social inequalities based on age group status were temporary, since individuals in the group gained status and power with time as their age group in turn became

dominant (Salzman 1999:34). Customary leaders and formal office holders also had prestige by virtue of their position (Baland and Platteau 1996:339, Szyrkiewicz 1998:213-4), while other individuals earned standing and reputation, and thus a degree of influence, because of their abilities and character (Salzman 1999:32, Szyrkiewicz 1998:215).

Social differentiation had a definite impact on access to pastoral resources. Access to pasture in some situations was controlled by the head of the chief or founding clan in an area, so that for individual households access depended on kinship ties, in other words their relationship to that clan, with outsiders having to pay the clan fees for use of pasture it controlled (Moorehead 1998:51,56). Even among local residents preferential access might go to those who belonged to the longest established clan ahead of more recent arrivals (Lane and Moorehead 1995:129-30), or to immediate local residents, then neighbours with reciprocal access rights, then outsiders or strangers to the area last of all (Moorehead 1998:52). In many pastoral areas of Africa at least, women also lacked access rights to land on account of their low status (Sylla 1995:147-8).

Relative wealth also affected resource access. It can be argued that this should not happen in a pastoral commons: livestock are only one of the elements of pastoral production (and cannot be entirely controlled by the wealthy, since all pastoral households have livestock), and most other productive resources are common property, open to all in the community. By this reasoning therefore, differences in livestock wealth are likely to be temporary because the wealthy cannot control the means of pastoral production (Salzman 1999:41). However this does not appear to have been uniformly the case, particularly the assumption that pastoral resources are open to all. Ownership of a well, for example, could give the owners some degree of control of the surrounding pasture, with priority going to the local community and outsiders having to pay for access to the well and by extension to the pasture itself (Baland and Platteau 1996:340 and note). On a broader scale, often it was the large herdowners who controlled the allocation of pasture and seasonal movement within it (Humphrey and Sneath 1999:222, Potkanski 1993:124), and could appropriate the best pastures for their own use (Sneath 2001:45) and thus

increase their wealth. This seems a clear contrast to the societies Salzman describes, in which wealth did not equate to power. However it is worth noting that these same herdowners were also local nobility or clergy, indicating that there were other status factors allowing them control over resources, even if wealth seems to have been highly significant. The ability to control resource access because of their status was undoubtedly what had allowed their herds and thus their wealth to increase to such a degree, illustrating the difficulty of separating wealth inequalities from other social inequalities (Seers 1979:12).

While therefore wealth in traditional mobile pastoralism did not automatically either lead to, or derive from, differential access to resources, neither can it be said that resource access was entirely equitable. The fact of pastoral resources being held in common, while it guaranteed access to all members of the community, and even to those outside it at the discretion of local leaders, did not necessarily guarantee equal access, or access to equally productive resources. Instead priority in resource access was affected by social differences, including relative wealth, such that although the common property regime continued to function, it also allowed wealth differentiation to continue and perhaps to increase.

2.4 Changes to traditional mobile pastoralism

The world of mobile pastoralists has changed dramatically as wider political realities have impacted on traditional practice. While the particular circumstances are different in different countries, many of the processes have been similar and share similar results in undermining the customary institutions of communal land tenure. These changes, and their effects on resource access and wealth differentiation, are described first for Africa, then in greater detail for Central Asia where the case study is located.

2.4.1 Africa

In Africa the erosion of traditional pastoralism goes back to colonial times. Land that was conveniently supposed to be unoccupied or underutilised, because of the seasonal mobility patterns of pastoralists, was declared "ownerless" and appropriated by colonial states for settlement and agriculture, especially cash

crops, or for the creation of game reserves (Lane 1998:16). Herders were thus denied access to vast areas that had previously been part of the pastoral commons and restricted to smaller and smaller areas for their livelihoods, resulting in increased grazing pressure on remaining common lands. Colonial governments also took it upon themselves to coordinate access to natural resources, overriding complex and flexible customary arrangements and traditional authorities, and causing damage to pastures (Lane 1998:17).

Policies of this nature, in addition to being geared towards the profit of the colonising powers, were fuelled in no small part by ignorance of pastoralists' way of life and of managing commonly-held rangelands. This ignorance continued after independence as the elites who now held power were often not from pastoral backgrounds, and were unsympathetic or even hostile to the interests of herders (Grainger 1995:247). In a stroke of singularly bad timing, Hardin's "tragedy of the commons" argument appeared about this time, and in the face of observable degradation of rangelands, had enormous influence on the newly independent governments in their policies concerning pastoralists. In this, it should be noted, they had the support of development agencies, which had also taken Hardin to heart and saw communal land tenure by pastoralists as a direct impediment to combating rangeland degradation (Fratkin 1997:251). They encouraged private tenure following a ranching model, as part of a modernisation package (ibid.), failing to take into account that much of the degradation was in fact traceable to the colonial administrations' undermining of communal tenure through their previous attempts to "modernise" traditional systems.

The resulting mix of policies was based on a series of misconceptions: that pastoralists did not know how to manage rangeland or control the size of their herds, leading to overgrazing and degradation; that they lacked the secure land tenure that would encourage them to invest in good range management; and that their mobility was a sign of their lack of organisation (Lane 1998:9-10).

To combat these supposed failings of pastoralists, as well as perhaps to increase their control over nomadic people (Grainger 1995:246), governments

applied policies that in some cases had first been implemented by the colonial administrations, which were designed to cut directly across communal land tenure and herd mobility, and which, due to the faulty "tragedy" model underpinning them, have almost uniformly backfired.

Nationalisation of rangelands, ostensibly for their better management, often removed what remained of customary local authority over them, without providing an effective alternative capable of upholding either order or restrictions over rights of access. In some cases it can be argued that the state itself has thus created the open access situation it sought to avoid, and has set up the conditions for a tragedy of the commons to occur (Lane 1998:9,17). Sedentarisation of nomads in villages, and the allocation of land under title to those villages, have both had a major impact on customary land use patterns, removing the scope for management beyond the village boundary. This has led to overgrazing, disruption of seasonal land use except for small movements, and loss of reciprocal access rights to land beyond village boundaries, which previously functioned as a kind of drought insurance (Lane 1998:10-11). Further, pastoral land continues to be alienated for agricultural production, with key pastures taken over, placing further pressure on more marginal land and on herder mobility (Lane and Moorehead 1995:129).

All these have had negative effects on pastoralists' wellbeing in general, but privatisation of rangeland, intended to reduce overgrazing and increase productivity, has had perhaps the most dire consequences for equity. Resource access under these policies has been heavily affected by social and especially wealth differentiation. Typically it has been those who could afford to fence, could afford to sink boreholes to have their own access to water, or could use their influence to stake a claim to some of the best land, who have profited most from privatisation, the more so in that often they maintain their private land as reserve pasture and "dual graze" their stock on remaining communal land. The net result is increasing wealth differentiation, as less well off herders are confined to overgrazed common land and the quality of their animals falls (Lane 1998:13).

These processes have continued what was begun under colonial administrations, the undermining or outright destruction of customary institutions for common resource management. This has clearly had negative consequences for land management, evident in increased rangeland degradation. However, because communal land tenure is a social institution and so cannot be separated from its cultural setting, its erosion has also had an effect on that cultural setting, seen in the decline of the community-oriented thinking necessary to common property regimes, in favour of individualistic strategies such as those followed under privatisation. Ironically, these are the same strategies of "rational beings" that were predicted by Hardin if there were not "mutual coercion" to avoid them (Hardin 1968:1244,1247) - coercion which in fact existed under traditional systems. Even though wealth differentiation among pastoralists predated colonial influence in Africa, the fact that it is increasing with the breakdown in common property would seem to indicate that it was to some extent held in check by communal tenure systems which regulated access to rangeland resources, suggesting that these systems may have been more equitable than the alternatives (Quiggin 1993:1125,1135).

2.4.2 Central Asia

The disruption of common tenure and management of rangelands has been of shorter duration in Central Asia than in Africa. From the late 19th century foreign attitudes to land use and ownership were introduced to pastoral Central Asia through Russian immigration into regions incorporated into the Russian Empire and Han immigration into Chinese-controlled areas such as Xinjiang and Inner Mongolia (Miller 2001:1, Humphrey and Sneath 1996:2, Hurelbaatar 1996:161-2). This intrusion of notions of private property, together with government policies declaring large areas of the uncultivated Central Asian steppe state property and the subsequent alienation of pasture land for agriculture, as in Africa, led to the beginnings of a breakdown in the traditional lifestyle and movement patterns of nomadic pastoralists (Miller 2001:1, Khazanov 1998:10). However, the most significant changes in the Central Asian region resulted from the introduction of socialism from the 1920s onwards (Humphrey and Sneath 1996:2).

Rather than customary authority and communal tenure continuing though marginalised or undermined, as in Africa, the thoroughness of socialism and collectivisation meant that the entire pastoral system was overhauled. Communist governments, like African ones, sought to modernise pastoralists and bring them under state control, in this case not through privatisation but through collectivisation, following socialist ideology, usually coupled with sedentarisation (Khazanov 1998:15). Pre-revolutionary institutions were abolished in the 1920s and 1930s in Russia and Mongolia, in China by the 1950s, and were replaced with centralised and top-down decision-making structures directed from distant centres (Humphrey and Sneath 1999:70). Organisation of the flexible and mobile pastoral lifestyle into centrally-directed collective and state farms was an attempt to incorporate pastoralists into the wider state by imposing Russian and Chinese institutional models, with varying degrees of adaptation to the local setting (Humphrey and Sneath 1996:3,5). Thus pastoral collectives were formed, sometimes forcibly, with many pastoralists also forcibly settled, to a greater or lesser degree, and organised into specialised brigades herding single species under the direction of the collective (Khazanov 1998:16, Humphrey and Sneath 1999:70).

This did represent some continuity with pre-collective institutions. The collective in effect took over the coordination of herding at a district level, organising movement and allocating pasture, a role characteristic of Central Asian pastoralism which had previously been the preserve of district nobility, monasteries, or clan leaders or councils (Humphrey and Sneath 1999:230, Miller 2001:1, Hudson 1938:27,34). Large herd-owners had also organised single-species herding of some of their livestock, which under the collective system became the norm. Some features of former communal tenure also persisted in adapted form, as collectives were often formed around existing social structures such as kinship networks, which continued to be important both as part of the underlying structure of the collectives, and for accessing resources based on connections (Banks 1999:298, Humphrey and Sneath 1999:137,142). Herding in small groups of households, often kinship-based, also continued in parts of the region and some local pastoral communities

continued to use the same pastures that they had before being subsumed into collectives (Banks 1999:298,302-3; Humphrey and Sneath 1999:15).

Nevertheless, there were significant differences between traditional systems and the collectives that replaced them. In the centralised command economy, decisions were made far from the realities of pastoral life, by policymakers who often had little understanding of those realities. The more rigid collective organisational structure also lacked the flexibility and high degree of mobility of the traditional system and, being geared towards centrally-stated objectives, was less effective in responding to local weather and pasture conditions and maintaining pastoral resources. Although the collectives continued seasonal movement of herds, there was an almost universal reduction in mobility. This was due in part to the introduction of less hardy "improved" breeds of livestock, which could not make long migrations and required heated sheds and fodder in winter, and conversion of often the most productive pasture to fodder production (Humphrey and Sneath 1999:46). Elsewhere however, the extent of movement was dramatically increased through motorised transportation of both households and herds, cutting across customary practice or boundaries (Miller 2001:1). Herders themselves had little incentive to care for pasture, since they were no longer making their own decisions about where and when to move, or the numbers of livestock they herded, most of which were no longer their own (Humphrey and Sneath 1999:40-41, Banks 1999:298). Instead they worked for salaries, based on production targets and the survival rate of collective herds for which they were responsible (Humphrey and Sneath 1999:40, Cooper 1993:154).

In pre-revolutionary times there had been significant differences in wealth throughout Central Asian pastoral regions, with some extremely large herdowners such as princes and monasteries, while some of the poorest families herded for richer relatives in patron-client relationships, or even worked for non-relatives for wages (Humphrey and Sneath 1999:69-70, 174-5; Hudson 1938:27). With the advent of socialism, wealthier herders' animals were at first redistributed to poorer herders (Potkanski 1993:124, Humphrey and Sneath 1999:40-41), then with collectivisation all livestock became the collective's

property, individual households retaining only a few private animals. The collective or state farm effectively owned pastures, determining which would be used by which herding brigades. These changes largely eliminated significant differences in wealth among the newly collectivised pastoralists, as well as the "persuasive power of the rich" (Hudson 1938:27) over access to the best pastoral resources.

Since the 1980s pastoralism in the region has again seen significant changes, with collective and state farms dismantled and both livestock and land privatised to varying degrees. As with collectivisation earlier, these reforms were originally designed in response to issues in China and Russia proper, rather than locally developed for the Central Asian situation and conditions (Humphrey and Sneath 1996:5). As a result some consequences of the reforms have been less than positive for pastoralists, such as a marked increase in wealth differentiation, particularly in areas previously dominated by the Soviet Union, Mongolia included. This has been associated with a drop in living standards to pre-collective levels and, with the end of guaranteed state wages, a reversion to subsistence herding production for many (Miller 2001:3, Ludi 2003:120, Humphrey and Sneath 1999:4,6).

Central Asia forms an interesting contrast to Africa in that, while wealth differentiation existed under traditional common property systems, these countries are now emerging from a period under socialism of relative (although imposed) equality, which had come to be an expectation (Humphrey and Sneath 1999:177). Yet wealth differentiation since decollectivisation is increasing and in some areas has been rapid. Given that common property regimes can theoretically allow equitable distribution of resources, and given that such equitable distribution was more or less enforced under socialism, one of the aims of this study is to understand the swift re-emergence of differences in wealth, focusing particularly on the extent to which access to resources in the post-socialist setting has been a contributing factor.

Another outcome of the reforms has been the reappearance in some regions of elements of traditional communal tenure, though in adapted form compared to

pre-collective times, with varying degrees of private ownership of land, coordination between herders, and coordination of herding by local authorities. It should not be assumed however that there is a kind of "default setting" to which Central Asian pastoral societies are now returning. Instead, in the different environment that each country represents, new institutional forms are developing (Humphrey and Sneath 1999:68). Thus the experience of decollectivisation and privatisation has not been uniform across Central Asia, in part because of differences under the collective system, but also because of differences in policies and their implementation in China, in the former Soviet Union, and in Mongolia.

China

Rural decollectivisation in Central Asia began first in China, with reforms developed for cropland areas implemented in pastoral regions in the early 1980s without significant changes (Banks 1999:299). Under the reforms communes were dismantled and their assets (livestock, equipment and land) distributed to individual households under the "household responsibility" system, with the aim of promoting a market orientation at household level while still retaining state control. There was also a devolution of power to provincial and local governments (Humphrey and Sneath 1999:74, 90-91,96).

While the reforms have created an economic environment in which pastoralists could prosper, there has also been rapid and increasing wealth differentiation, with the greatest differences in household herd size in the Central Asian region (Humphrey and Sneath 1999:61). The richest households are involved in business, or have the technology (through control of farm machinery) to support large herds, and can benefit from market opportunities because of transportation and proximity to centres (Humphrey and Sneath 1996:6, 1999:58, 106-7). Poorer households by contrast have been forced back into subsistence and into unsustainable strategies such as slaughtering their livestock for cash income (Humphrey and Sneath 1999:58,106).

This situation is traceable in part to inequities in the decollectivisation process and to unforeseen consequences of the policies implemented. Livestock were

distributed to herding households based on household size and available labour, with few problems. This was followed by allocation of pasture according to herd size, again (theoretically) to individual households, and the sale of equipment and machinery (Humphrey and Sneath 1999:96). This last caused some difficulties, since haymaking machinery and tractors often went to those with contacts in the commune administration. Mechanisation meant the ability to produce sufficient hay for winter and sell a surplus, while other herders generally had to buy hay. Households with an initial advantage in equipment could often increase their wealth by purchasing even more (Humphrey and Sneath 1999:106-7).

Allocation of pastures however caused the greatest problems. These remained state property, but were allocated to individual households on 15-20 year leases, later extended to 50 years to give leaseholders the incentive to care for their pastures (Humphrey and Sneath 1999:96,107). This was following Hardin's "tragedy of the commons" thesis; it was believed that allocation of individuated pastures with assigned carrying capacities, plus incentives and sanctions to prevent overuse, would counteract rangeland degradation (in fact due to inappropriate use during the commune era) and encourage sustainable land use (Williams 1996:308, Humphrey and Sneath 1999:91-2). However, Central Asian pastoralism had never been organised around the individual household as the main economic unit, and allocation of exclusive use rights over pasture to single households was without precedent (Humphrey and Sneath 1996:6, 1999:54). It is perhaps not surprising therefore that it has generally not worked as intended.

In some areas wealthy or well-connected households were able to obtain the most productive land. As in Africa, those who could afford fencing enclosed pasture (often more than their allocation) as private reserves while continuing to graze their livestock on the unfenced "common" pasture on which poorer households relied (Williams 1999:309, Humphrey and Sneath 1999:107). This reinforced wealth differentiation, as wealthier households could increase their herds at the expense of the less well off, who struggled for adequate pasture with the increased grazing pressure on common land (Williams 1996:309).

Official policy thus inadvertently created situations where social pressure on wealthier households was insufficient to prevent overuse of common land, rather than ensuring resources were preserved for use by all, including the disadvantaged, and was in danger of bringing about the tragedy of the commons it was designed to prevent (Humphrey and Sneath 1999:92). The sense of responsibility for pasture also remains low (Hurelbaatar 1996:170). A further problem with individuated tenure was that households' herd size and pasture requirements changed over time relative to their original allocation, while new households also required pasture. Some more crowded areas thus resorted to reallocating pastures every few years, creating tremendous friction and conflict over boundaries (Humphrey and Sneath 1999:107).

By contrast, in parts of western China, some more traditional forms of pastoral land use have persisted, permitting somewhat more equitable access to resources. Official policy has been adapted, particularly where pastoral minorities have had more influence in local governments, to allow allocation of pastures to groups of herders or even entire villages (Banks 1999, 2001; Banks et al. 2003). Mismatches between current herd size and individual land allocation (based on herd size at decollectivisation) may be evened out by group tenure, as some require more than their allocated area and others less. Collective arrangements may not determine how many animals a household can graze on shared land, so that those with large herds may still use more than their fair share of pasture; however, collective tenure does guarantee access to pasture for all members of the group. Sometimes households with smaller herds may even earn income by charging rents on the unused portion of "their" share of communally held land (Banks et al. 2003:135-8). District administrations in these areas continue the district-level management of pastoralism previously undertaken by communes and historically by large herdowners and clan authorities, in setting dates for movement between seasonal pastures. These are generally followed for fear of social sanctions, since non-compliance is highly visible to neighbours; there is also general respect for others' use rights to pasture, and for avoiding grazing reserve pastures out of season (Banks 2000:7-9, 1999:304-6).

The sharp increase in wealth differentiation after decollectivisation seems clearly linked to a household's ability to appropriate a larger share of commune resources, particularly equipment and pasture, chiefly through exploiting social connections. However, differences in policy implementation may have affected the degree to which wealthier households have subsequently been able to build on their initial appropriation and to which poorer households have been excluded from equitable access to resources. It seems that where land tenure has been most individualised, there has been least control over the behaviour of the wealthy and well-connected, to the great detriment of the poorest, whereas forms of communal tenure have guaranteed them access to pasture while applying some social pressure on more powerful members of the community. The situation for pastoralists in post-commune China therefore cannot be described as uniform because of differences in how decollectivisation was carried out.

Former Soviet Union⁸

In contrast to China, reforms affecting the pastoral sector were preceded by political change, as the Soviet Union held elections in 1989 and its constituent republics gained independence after the failed 1991 coup. The transition to a market economy which followed, and the economic upheaval and uncertainty it produced, formed the backdrop against which decollectivisation of pastoral collectives took place (Miller 2001:2, Humphrey and Sneath 1999:6).

In Kyrgyzstan collective and state farms were privatised, or reorganised into a variety of agricultural enterprises including cooperatives, individual peasant enterprises and associations. Loss of subsidies meant a reversion to subsistence agriculture for many, often with little agricultural experience. Livestock were redistributed but many households had herds too small to be viable and few managed to increase them in their first years as independent herders (Ludi 2003:120, Mearns 1996a:9,12). Local administrations allocated

⁸ The relative scarcity of English-language material relating to this region unfortunately confines the discussion in this section chiefly to parts of the former Soviet Union which are contiguous to Mongolia and still remain in the Russian Federation (Tuva, Buryatia, Chita province), with some comparisons from Kyrgyzstan and Tajikistan.

pastures to the various agricultural enterprises which in turn allocated them to individual herders based on the number of animals in their care (often belonging to multiple owners paying the herder). Pasture was leased⁹ to individual herders or herding groups, giving priority to existing herders, and user fees charged (Mearns 1996a:11-13, Miller 2001:2, Ludi 2003:121). In the difficult economic situation following independence, costs associated with leasing summer pasture, especially transportation, became prohibitive for many, especially those with small herds, who are thus restricted to using increasingly degraded pastures close to villages, while higher quality alpine pastures remain underused (Ludi 2003:121, Miller 2001:3). In Tajikistan, where state farm assets were not distributed until after 1999, there is no formal leasing of pasture, which remains state-owned. However, here also poorer households who cannot afford transportation keep their livestock near villages year round, while richer herders with larger herds can move further to better quality pasture (Ludi 2003:121). In both countries it thus appears that the high costs of transportation prevent less well off households from having access to the best quality pastures, which must affect the quality of their herds and ultimately household wealth.

Within the Russian Federation, privatisation of collectives was encouraged from the early 1990s onward, but was resisted. In the newly democratic environment people could choose what to do with their collective and its assets and were reluctant to abandon it for what they regarded as an uncertain environment for private farming (Humphrey and Sneath 1999:41, 54-5). Some form of collective production has thus continued in many districts, with large collective-type farms still dominating, although no longer under state control (Humphrey and Sneath 1999:54-5, 72, 81). This happened in part because the mechanisation and infrastructure designed for economies of scale was difficult to reproduce for private farming (Humphrey and Sneath 1999:83). In addition, the few who did attempt private farming often faced disincentives, since their departure was seen as an individual gain but a loss to the collective farm. In some cases therefore they were allocated the worst pastures or inappropriate equipment, or

⁹ From 1999 private ownership of land was introduced, amid considerable resistance due to fears of land concentration among other issues (Hanstad and Duncan 2001:13). It has not been possible to establish the effects of this change on resource access for pastoralists.

faced bureaucratic difficulties. Unsurprisingly, many were not very successful and the numbers of prospective private farmers soon fell away (Humphrey and Sneath 1999:55, 83-84). In some cases privatisation was even reversed as it was felt that the private enterprises created were not working, and new collectives were re-formed (Gomboev 1996:23, Humphrey and Sneath 1999:85-6).

However, while some of the rationale behind retaining collective farming was provision of services to the community as a whole, the former state subsidies that made this possible had collapsed. Collective members, either because they were newly unemployed, or because the collective was unable to pay wages, were thus forced to give priority to subsistence production from small private plots within the farm territory, leading to declining collective production (Humphrey and Sneath 1999:58,81,88). In the mid-1990s some farms responded with massive restructuring towards more labour-intensive production methods and an internally-oriented moneyless economy. With few market opportunities, households also had to depend on urban-rural networks, and by the late 1990s most continued to derive the bulk of their income from subsistence production, plus whatever the collective allocated to them and whatever state pensions they continued to receive (Humphrey and Sneath 1999:86-8).

Redistributive mechanisms operating under socialism had also ended, leading to increasing income differentials, with the least well off also suffering the most reduced access to services formerly provided through collectives, such as health and education (Humphrey and Sneath 1996:9). While large numbers of livestock were still owned communally by the collective farms, dependence on subsistence production meant that an increasing number were privately owned, with some differentiation in wealth measured in livestock, although less than in other areas of Central Asia where privatisation was further advanced. Some more entrepreneurial individuals also became very wealthy through investment in transportation or specialised herds (horses, a traditional favourite), or through trading (Humphrey and Sneath 1999:59,61). A further factor in wealth differentiation was that in some instances of privatisation and subsequent

recollectivisation, people had been left out of the new collectives, not having desired skills or simply being surplus to requirements. This move away from the universal inclusion practised under socialist ideology led to an increase in subsistence living and sometimes severe poverty, as had been the case in the pre-revolutionary era (Humphrey and Sneath 1999:85-6).

Because most people continued to belong to collective-type farms, the farms likewise continued to occupy most of the usable land. The few small private herding enterprises were allocated land by the collective farms, which placed strict boundaries on land available for use by private herders, to avoid conflict with collective herders. However, collective herders did question farms' right to allocate "their" customary pastures for private use, which may in part be the reason behind the allocation of poor land to private herders (Humphrey and Sneath 1999:116). At the same time, the small private plots of land held by collective members became increasingly important for their own subsistence production, particularly for those excluded in the reorganisation of collectives, who thus had limited access to resources and had to rely on their private plots for their support (Humphrey and Sneath 1999:58,90).

Therefore, while wealth differentiation increased following economic transition and privatisation, since most herders remained in collectives, differences in wealth were not chiefly due to differing ability to access sufficient resources. The significant exceptions to this were the two groups who no longer had access to collective-controlled resources: first, those who had gone into private herding and in some cases had been allocated the least productive pastures; and second, those who now found themselves unwillingly excluded from collectives with access only to limited privately held land. The ability or inability of these groups to prosper was clearly linked to their ability to access adequate pasture.

Mongolia

Decollectivisation in Mongolia, where pastoralism is a much more significant part of the national economy, has been different from that in either China or the former Soviet Union. Economic transition was preceded by political change, as

in other Soviet-dominated areas, but the process of privatisation was more complete in Mongolia, with collectives dissolved in 1991 and virtually all livestock in private ownership by the end of 1994. Herding has reverted to being largely the province of small and flexible family-based groups, although as in China, the state has continued some involvement at a local level, with varying degrees of pasture use coordination by district authorities. Where Mongolia differs sharply from China is in the exclusion of pasture from formal allocation to individual households; although remaining state property, in practice it is managed in common by groups of herders at a local level. The next chapter discusses more fully these characteristics and their effects on the interaction between wealth differentiation and resource use and access.

Decollectivisation has thus evolved into quite different situations in Central Asia, with wealth differentiation much more clearly linked to resource access in the pastoral regions of China, and perhaps of the former Soviet Central Asian republics, than in those of the Russian Federation. This seems chiefly due to the differing degrees of decollectivisation and individualisation of land tenure in different regions. The situation in Mongolia, which is different again, is discussed in detail in the following chapter on the Mongolian pastoral economy.

2.5 Chapter Summary

Common property depends for its success on resource users agreeing to rules governing and limiting the use of resources. This is seen to have advantages for sustainable resource use, but the potential for equitable access to resources has not been taken up despite the apparent corollary that access rules must be fair before users will agree to them. This assumption that CPRs are inherently equitable is called into question by the existence of wealth differentiation within user groups and overlooks the fact of social differentiation and power dynamics within communities, which also affect resource access. Despite this, wealth differentiation cannot consistently be said either to lead to, or derive from, differential or inequitable resource access. Instead these outcomes depend on the individual social setting in which the CPR operates.

Pastoralists in rangeland CPRs employ a strategy of mobility in response to highly variable environmental conditions, accessing a variety of pastures on a seasonal or contingent basis. Inequities in resource access existed in traditional pastoral commons but appear to have worsened as customary authority has been undermined without effective replacement. In Africa land has been alienated from pastoral production and remaining pastures nationalised or privatised, with negative consequences for equity. In Central Asia socialism imposed relative equality in pastoral collectives, but with decollectivisation wealth differentiation has reappeared, linked to varying degrees across the region to differences in resource access and especially individualised tenure of pasture.

Chapter 3: Mongolia

3.1 People, land and pastoralism

With its vast expanse of grasslands still used by groups of mobile pastoralists, Mongolia has been described as the largest remaining area of common grazing land in the world (Mearns 1996b:308), what one writer has called "the last best place" (Economist 2002).

3.1.1 People

Mongolia with its huge landmass is among the most sparsely populated countries in the world in terms of people per square kilometre, although of its current 2.7 million population (CIA 2003) at least one million are concentrated in the capital Ulaanbaatar and the two other large cities of Erdenet and Darkhan (NSO 2001). There are up to 20 ethnic groups in Mongolia, with Khalkha Mongols by far the largest at 85 percent of the total population (CIA 2003). The largest minority group are the Kazaks, who came to western Mongolia between the 1860s and the 1940s from Xinjiang province in neighbouring China and are still concentrated in the western *aimag* (provinces) of Uvs, Khovd and particularly Bayan-Ölgii, the only *aimag* in which an ethnic minority forms a regional majority (Finke 2000:4). In 1989 the then 130,000 Kazaks constituted six percent of Mongolia's population; this figure is somewhat diminished today due to outmigration to Kazakhstan, with an estimated 40 percent of Kazaks having left Mongolia, chiefly farmers or town-dwellers rather than pastoralists; some have since returned (Finke 1995:197). Relations between the Turkic-speaking, Muslim Kazaks and the dominant Mongolian population, which like many of the other Mongolian-speaking minorities is largely Buddhist, are good (Finke 2000:4). The only potential for inter-ethnic friction occurs in some areas where the recent return of Kazak herders to Mongolia has created uncertainty about access to pasture (Tumenbayar 2000:26).

3.1.2 Land

Mongolia's 1.56 million square kilometres include six ecological zones (MNE 1996:4-5), ranging from the mountainous west and centre of the country to Siberian taiga in the north, the Gobi desert in the south and extensive open steppes in the east. Grasslands cover about 70 percent of the land, in the mountain steppe, steppe and desert steppe zones, although there is also some grazing in forested areas, high mountain pastures and even in the desert itself (Fernández-Giménez 1999a:317). In all, some 80 percent of Mongolia is classified as pasture, which is specifically excluded from private ownership under the 1992 Constitution of Mongolia (Mearns 1996b:308, Hanstad and Duncan 2001:4).

Figure 3.1: Mongolia with *aimag* boundaries



Source: CIA, from Perry-Castañeda Library Map Collection, University of Texas.
Bayan-Ölgii, where the study community is located, is the westernmost aimag.

The climate is continental, with cold dry winters, while summers are short and (for Mongolia) comparatively wet. Temperatures average -20° to -35°C in winter but in summer may climb to 40°C, particularly in desert areas. Rainfall is relatively scant across the entire country, ranging from 600mm annually in some mountain areas to 95mm in the desert steppe, while some parts of the Gobi may receive no rain at all for several consecutive years (MNE 1996:4, Fernández-Giménez 1999a:318). The study area in westernmost Bayan-Ölgii *aimag* (see Figure 3.1), although in the Altai mountain range, receives 150-200mm annually (BOAA 1990:10). There is considerable variation in rainfall over both time and space, particularly in the desert and desert-steppe zones in the south of the country. These can be considered non-equilibrium environments (p.21) because of the extreme interannual variability of rainfall, whereas in most central and northern areas variation is less (Fernández-Giménez 1999a:318, Humphrey and Sneath 1999:270-2). In addition to the risk of drought from low and unpredictable rainfall, herders face the possibility of *zud*, a term covering various forms of severe winter conditions that make forage inaccessible to animals, such as deep snow or an ice crust they are unable to break through (Fernández-Giménez 1999a:318). Bayan-Ölgii is considered a high risk area for *zud* (Templer et al. 1993:109).

3.1.3 Pastoralism

In these often difficult environments, Mongolia's people have a long history of mobile pastoralism, which it can be argued is the type of production best suited to Mongolian conditions (Tumenbayar 2000:10). Mongols have been associated with this part of the world at least since the 13th century when Chinggis Khan unified various Mongol tribes and granted his allies control over the pasture areas within their territories (Fernández-Giménez 1999a:319, Mearns 1993:90). Kazaks also have been pastoralists for many centuries, though further to the west, from the Altai mountains towards the Caspian Sea across what is now Kazakhstan (Hudson 1938:7). Both groups have historically herded in groups based on kinship and especially clan; while clan and lineage has largely lost significance among Mongolians, it remains important among Kazaks (Humphrey and Sneath 1999:29, Finke 1995:208-9). Thus the Mongolian herding group or encampment, the *khot ail*, has moved from a strictly kinship-based entity to a

more neighbourhood-based one, in which constituent households may no longer even be related (Mearns 1996b:313). The Kazak *auyl* by contrast is generally still made up of close patrilineal relatives as it historically has been, with unrelated families rarely herding together (Finke 1995:209-10, Hudson 1938:24). The same five types of animals are herded all over Mongolia: sheep, goats, cattle (including yak), camels and horses. Animals are privately owned by individual households but herded together within the *khot ail* or *auyl* (Finke 1995:209).

Pastoralists in Mongolia have adapted to variable rainfall and pasture conditions through patterns of seasonal migration. Since most of Mongolia, while subject to low and variable rainfall, still has fairly predictable pasture growth in most years, regular migration patterns are not as opportunistic as might be expected in non-equilibrium grazing environments. Even in such environments, opportunistic movement has been used in Mongolia chiefly as a contingency measure for adverse climatic conditions such as drought or *zud* (Humphrey and Sneath 1999:276). Regular seasonal movements have typically been between a set of four seasonal pastures, sometimes including moves within a seasonal area, with greater degrees of mobility in less productive areas (Mearns 1993:81-8). Historically, the general pattern has been to spend summers near natural water sources, relying in winter on snow as a water source and thus using pastures further from water. Winter pastures were often in sheltered mountain valleys, whereas summer pastures might be either in open valleys at low elevations, or in high mountain areas, although with considerable variation between and within regions (Fernández-Giménez 1999a:319, Humphrey and Sneath 1999:221-2). Even so, two basic norms of pasture use hold across most different types of regions. First, winter (and sometimes spring) pastures are set aside as reserves for the non-growing seasons of the year, with out of season grazing by the habitual users or others prohibited. Second, access to local pastures is granted to herders from outside the area in the event of climatic disaster in their own area, with the expectation of reciprocity should the situation be reversed (Fernández-Giménez 2001:51).

Pastures have never been viewed as being privately owned; indeed theoretically any Mongolian has the right to use pasture anywhere in Mongolia (Fernández-Giménez 2002:65, Mearns 1996b:314). In practice herding groups within the same area cooperate in some degree of regulation and coordination of natural resource use (Mearns 1996b:314). Although state-owned, pastures are thus effectively controlled by local herding groups in what amount to *de facto* common property regimes (Mearns 1996b:308, Hanstad and Duncan 2001:18).

Unlike in many other countries where there is a history of mobile pastoralism, the pastoral sector remains central to Mongolia's economy, accounting for roughly one third of GDP (CIA 2003). Nor is pastoralism under pressure from agriculture, due to the paucity of arable land and the unsuitability of the climate for cultivation (Tumenbayar 2000:10). Currently the national herd stands at around 26 million, down from a 1999 high of 33.6 million, and approximately one third of all households are considered full-time herding households (NSO 2001).¹⁰

3.2 Overview of change in the pastoral sector

Mongolia underwent considerable political change during the course of the 20th century, and these political and ideological shifts have in their turn impacted on pastoralism. The Mongolian experience with socialism has in some ways been less disruptive than in the Soviet Union and China, since collectivisation was done on a voluntary basis except for a brief and unsuccessful attempt in the early 1930s, and pastoralists have never been forcibly settled (Finke 2000:4, Potkanski 1993:124). Some degree of continuity also persisted from the feudal to the collective systems in terms of land tenure arrangements and the use of pastoral resources (Mearns 1993). Nevertheless, as in other areas of socialist Central Asia the governance of the pastoral commons was completely overhauled and traditional institutions were replaced with socialist versions

¹⁰ These numbers have probably fallen since 2001, as further severe winters have led to increased rural-urban migration in the last two years. The population of Ulaanbaatar, which was 645,000 in 1995, is now said to be close to 1.2 million, with most of the increase impoverished families who have had to give up herding.

directed top-down from central government. This has had a lasting effect in that with the end of socialism and ensuing decollectivisation, pastoralists could not revert to a traditional institutional framework for local management of resources. In addition, herding knowledge and skills had been lost at the household and local level as decisions had been taken out of the hands of herders and made by the collective, resulting in a lack of initiative and experience (Fernández-Giménez 1999a:330-333, Humphrey and Sneath 1999:39-40).

Some overall patterns can be traced as a result of the political changes throughout the century, such as increased control of the movement of animals and the allocation of pasture, and an increase in individuated tenure of certain resources (Fernández-Giménez 1999a:316); some of this control has been removed with the dismantling of the collective system. One important pattern which has continued however is the reduction in the extent and frequency of movement in the seasonal migration cycle (Humphrey and Sneath 1999:265), leading in the present situation to the concentration of pastoralists nearer to roads and settled areas, while more remote pastures are under-used (Fernández-Giménez 2001:61).

These trends have an obvious impact on access to resources, which has also been affected to varying degrees throughout Mongolia's history by differences in wealth among herding households (Fernández-Giménez 1999a:337). While wealth and poverty are nuanced concepts for herders, the most significant factor in defining relative wealth in this context has generally been the size, and to some degree composition, of a household's herd; such differences in wealth have always been part of the Mongolian pastoral economy (Potkanski 1993:123, Cooper 1995:12,19).

The remainder of this chapter describes in greater detail the changes in the pastoral sector from the beginning of the 20th century until the present, with a particular focus on the questions of wealth differentiation and resource access which are the subject of this study.

3.3 Feudalism

The beginning of the 20th century saw Mongolia under the control of the Manchu Chinese Qing dynasty, and divided into over 100 administrative regions (*khoshuu* or "banners") ruled by secular princes or nobles, with some territories also controlled by powerful Buddhist lamas (Mearns 1993:90, Fernández-Giménez 2002:56-7).

There was considerable wealth differentiation (measured in herd size) with some very large herds belonging to the banner prince or the monastery. These were herded by individual herding households, some of whom were specialist herders who tended single-species large-animal herds for the *khoshuu* rulers, although most households owned a variety of different types of livestock. The poorest households sometimes worked for richer families in patron-client relationships (Humphrey and Sneath 1999:220, Potkanski 1993:123).

Khoshuu were the unit of pastoral land management, intermediate in size between the current *aimag* (province) and *sum* (district). Within this area *khoshuu* rulers had the right to allocate pastures for themselves, for monasteries and for local herding communities (Potkanski 1993:124). Each *khoshuu* contained different areas of pasture for seasonal use and was subdivided into *sum* and then *bag*, among which the various seasonal pastures were divided. Herding households were assigned to *sum* and *bag* and had customary use rights to the pastures within them, with use rights to winter pasture the most strongly enforced (Sneath 2001:44); by the late 19th century rights to winter campsites had begun to resemble private property in some areas (Fernández-Giménez 1999a:323). *Khoshuu* rulers often appropriated for their own use the most productive pastures (Sneath 2001:45), while other parts of the *khoshuu* were used by common herders in informal groupings of herding camps or *khot ail* (Mearns 1996b:310-12, Humphrey and Sneath 1999:174-5). Decisions over coordinating pasture use were made at this informal level and referred upward only in case of dispute (Mearns 1993:90).

Herders had to remain within the pastures allocated to their *bag*, but had some flexibility within that area (Humphrey and Sneath 1999:220). However,

movement across borders was permitted in case of drought or *zud*, provided that herders returned home once the crisis was over (Fernández-Giménez 1999a:321). Access to seasonal pastures was informally regulated through the timing of seasonal movement, with moving dates signalled by the movement of the *khoshuu* ruler's herds and followed by herders in the same *bag* (Fernández-Giménez 1999a:323). Access to transportation (meaning large pack animals) allowed wealthier herders the opportunity to use the best pastures and in particular to avoid climatic disasters. The poorest by contrast lacked the ability to move, even under pressure from drought, unless assisted by other households to do so; it seems however that poor households, due to the small size of their herds, were not sanctioned for failing to make seasonal moves (Fernández-Giménez 1999a:324). Despite this concession, the less well off who lacked transportation consequently also lacked access to the better or varied pastures which would allow them to fatten their animals and increase their herds and wealth (Fernández-Giménez 1999a:337).

3.4 Revolution and early socialism

In 1911 Outer Mongolia¹¹ gained independence from China and was ruled by the highest-ranking lama, the Bogd Khan. Ten years later in 1921 it became the second country in the world to undergo a communist revolution, and following the Bogd Khan's death in 1924 the Mongolian People's Republic was formed. A year later the secular and religious feudal systems were abolished, and all land was declared the property of the state (Mearns 1993:91). Between 1929 and 1932 the herds of monasteries and nobles were also confiscated and were redistributed to poorer herders. Wealth differences were reduced by this move but remained, as the great majority of households still had only small herds (Potkanski 1993:124, Fernández-Giménez 1999a:327), and some continued to herd for richer "patron" families. Among poorer herders therefore there was support for collectives early on since they had more to gain, but an attempt to impose collectivisation in the early 1930s was abandoned following fierce resistance as herders even slaughtered their animals rather than give them up

¹¹ The division between "Outer" Mongolia, which today is Mongolia proper, and "Inner" Mongolia, now the province of China which borders it to the southeast, was introduced by the Manchu.

to collectives (Mearns 1996b:318-9, Fernández-Giménez 1999a:327). Thus while collectives continued to be encouraged, large-scale collectivisation did not take place until the late 1950s, and the individual household remained the unit of production (Potkanski 1993:124).

The new *khoshuu* administration replaced the *khoshuu* and monastery rulers in controlling the use of pasture (Humphrey and Sneath 1999:220), although customary land tenure rules based on local herding communities remained in place, and seasonal migrations continued much as before (Potkanski 1993:124, Fernández-Giménez 1999a:327). There was however some restriction on freedom of movement within territorial boundaries, and a prohibition on movement outside them (Mearns 1993:91). Wealthier herders were still able in some cases to control the best pastures, sometimes with official complicity, and also tended to make more extensive migrations than less well off herders could manage (Fernández-Giménez 1999a:329, Mearns 1999a:319).

3.5 Collectivisation

The communist government increasingly encouraged voluntary collectivisation through a variety of tax measures and social incentives, and by 1959 virtually all households were members of collectives, which now owned about 75 percent of all herds. Herders were however permitted to retain a small and strictly limited private herd (Fernández-Giménez 1999a:329, Potkanski 1993:124).

In the 1930s the 100 *khoshuu* had been abolished and replaced by 300 *sum*, subdivided into *bag* (Fernández-Giménez 1999a:327). These *sum* boundaries were now redrawn such that one *sum* equated to the territory of one collective or *negdel*. However, this was an administrative measure and the boundaries of *sum* did not always fit well with the seasonal pasture requirements of the herders within them (Bold 1997:15-17, Batbuyan 1997:99).

Like the *khoshuu* the collective was subdivided. At the lowest level the traditional *khot ail* of several households was replaced by the *suur* of one to two, camping together and herding just one kind of livestock (Fernández-Giménez 1999a:330). *Suur* however were not independent units as *khot ail* had

been, but were organised into mid-level groupings of up to 100 households called brigades, or *bag* (Mearns 1996b:317), often based on pre-existing social groupings (Batbuyan 1997:97). Herders' movements were restricted to the territory of the *sum* and often to the brigade area, even though the *sum* encompassed less territory and often much less variation in pasture than the earlier *khoshuu*, and there were real differences between *sum* in the quality of pasture available (Mearns 1993:91). Reciprocal access arrangements in case of climatic disaster were however negotiated with neighbouring brigades and *sum* (Fernández-Giménez 1999a:332-3), and there continued to be informal and unofficial movement across boundaries, especially where adequate seasonal pasturage was not available within the *sum*. In general however the extent of movement declined noticeably during the collective period (Mearns 1993:91, Fernández-Giménez 1999a:330).

Livestock were owned by the collective and allocated by it to herding households or *suur*, to be herded in single-species herds, thus continuing the practice of the large herd-owners in pre-communist times (Mearns 1996b:317, Humphrey and Sneath 1999:230). Private herds continued to be mixed, but were often split, so that, for example, yak herders for the collective might also herd their own and relatives' private yak, but send their sheep and goats to relatives herding those animals (Goldstein and Beall 1994:83). The collective also allocated these specific herding tasks to families, often assigning larger animals to the most skilled and often the wealthiest herders (Cooper 1995:12-13). Since the herders no longer owned most of the animals they were herding, instead of depending on their herds for their livelihood they were paid a salary for herding by the collective. Salaries depended on the number and type of the animals herded, with the highest salaries paid to those with the largest herds and those who met or exceeded production quotas (Cooper 1993:154).

Land was owned by the state and granted to the collective, which in turn allocated pastures to herding households at the discretion of its leaders (Fernández-Giménez 1999a:332). This often followed and incorporated customary arrangements for pasture use at the local level, with the difference that some families were relocated to different areas of the *sum* because of the

requirements of single-species herding (Mearns 1993:92, Potkanski 1993:125). Collective and brigade leaders also decided on migration routes and set the dates for seasonal movement. Herders' freedom in deciding where and when to move varied, since in general decisionmaking had become the province of the collective rather than the individual household, a shift which undermined traditional cooperation between households at the level of the *khot ail* (Mearns 1996b:317, Fernández-Giménez 1999a:333). Since however the collective had final (and official) authority over pasture and migration, and herding generally, customary authority and institutions for regulating pasture use and resolving disputes were necessarily weakened (Mearns 1996b:318).

The collective, as the largest herdowner in the district for which other households herded, thus took on the role played by the feudal nobility and the monasteries, in organising seasonal movement and allocating single-species herds and pasture (Humphrey and Sneath 1999:230, Sneath 2001:47). It went beyond this role however in the provision of services such as healthcare, free education, child support, veterinary services and importantly, vehicle transportation for nomadic moves (Goldstein and Beall 1994:90).

In addition, to reduce winter losses the collective embarked on a campaign of building animal shelters at winter campsites. Customary use rights to given winter pastures and campsites had previously been the most strictly enforced, and the collective formalised this by allocating the winter shelters; it allocated them however on the basis of the animals herded for the collective, rather than necessarily according to customary tenure. Having the use of permanent shelters, herders tended to return to the same campsites every year, so that campsites became increasingly like private property, a trend which had begun in the 19th century in some areas (Fernández-Giménez 1999a:331, Mearns 1993:92). Unlike Mongols, Kazak herders in Bayan-Ölgii *aimag*, where the case study is situated, have winter houses as well as animal shelters at their winter campsites; these too were allocated by the collective to specific herding households (Finke 1995:204).

Other new developments which were possible at the collective-wide scale included the sinking of new mechanical wells, which opened new pastures to grazing and allowed better distribution of livestock across the *sum* (Potkanski 1993:125, Fernández-Giménez 1999a:332), the cultivation and harvesting of hay (Humphrey and Sneath 1999:39) and especially the provision of supplementary feed. This was intended for winter emergency use but came to be relied on for annual shortfalls, discouraging local fodder production, with some regions effectively subsidising others in what may have been local overstocking (Templer et al. 1993:111, Fernández-Giménez 1999a:334, Mearns 1993:93). The state also insured livestock against death not related to negligence, although this cover for the most part included collective rather than privately owned animals (Fernández-Giménez 1999a:334).

3.5.1 Wealth differentiation under the collective

With collectivisation there had been a deliberate effort to even out differences in wealth, as part of the socialist ideology that had been embraced. The strict limit on the size of personal herds was imposed expressly to prevent the reappearance of the large differences in wealth that had existed prior to collectivisation (Goldstein and Beall 1994:83). That private herds were too small (at about 50 head) to provide subsistence for a family¹² also served to underscore dependence on the herding salary and thus the collective as the main source of income. Beginning in the mid-1980s the private herd limit was gradually raised to 75 and then 100, and in 1990 was removed entirely, allowing personal herds to increase according to the skills of individual herders, with some corresponding increase in wealth differentiation (Potkanski 1993:126, Goldstein and Beall 1994:83). For most of this period however, relative wealth was tied mainly to the salary received, plus the rewards that could be earned through meeting and exceeding state production quotas (Cooper 1993:154). There were some problems with this however, in that the base salary remained the same regardless of productivity, and disincentives for failing to meet quotas were not so significant as to impact on the household's actual subsistence. The result was low productivity, and an insulation of herders from the reality of its

¹² An official estimate of the minimum herd size for subsistence is around 150 head; see p.58.

effects, since the collective protected herders from extreme poverty through the guaranteed salary and the allocation of collective animals for herding. Thus while this system achieved the aim of eliminating a poor underclass, it created a different problem because it also protected the lazy or incompetent (Cooper 1995:13, Goldstein and Beall 1994:97-9).

3.5.2 Access to resources under the collective

Two different trends can be seen during the collective period in terms of access to resources. The first is an increase in disputes over natural resources such as water and pasture, perhaps due to the breakdown or weakening of customary authority for allocating such resources and settling disputes, as a result of the overriding authority of the collective administration (Mearns 1993:94). The suggestion that increased stocking rates may also have led to disputes over resources seems to be contradicted by the low productivity of the collectives and the relatively small 6.5 percent increase in the national herd between 1965 and 1990 (Goldstein and Beall 1994:99). There was also the possibility for herders to play off official against customary authority, particularly if they had friends or relatives in administration, by influencing dispute resolution in their favour or going unpunished for free-riding behaviour (Mearns 1993:94). It seems therefore that there may have been differences in resource access during this time, along lines not so much of wealth but of social influence.

The second trend is due to the nature of collective production. Under the collective system, the main unit of production could be seen as the collective in its entirety, just as much as the individual household or the *suur*. This was in contrast to the situation early in the socialist period, or even under feudalism, when the monastery or the *khoshuu* prince, though dominant, was still one herdowner among many. Even though small private herds still existed, the collective was now effectively *the* herdowner in the district.

Since the collective's operation was geared to the entity as a whole attaining the required production levels, it was chiefly important that the collective herd prospered. The collective therefore undertook the provision of veterinary services, the building of winter shelters and provision of supplementary winter

feed; it organised specialised herding which both increased the productivity of the herd (Humphrey and Sneath 1999:230) and reduced the labour requirements for individual households (Potkanski 1993:124); and it provided free vehicle transportation for nomadic moves so that herders could accompany the collective's animals on their seasonal migrations, a critical point for those who would otherwise have been unable to obtain adequate pasture (Fernández-Giménez 1999a:332). While it is true that these services were provided universally as part of socialist ideology, they were also necessary to the management of the collective herd. The net effect, both as a by-product of such management and by intent, was that lack of labour or transportation did not bar individual households from access to pasture. This applied both to the animals they herded for the collective, and to privately-owned animals herded with them.

While therefore there was the possibility, even during the collective period, of differential resource access due to personal influence, it can also be seen that the collective setup overcame some problems in accessing resources that had previously been affected by issues of relative wealth. Just as the herding salary perhaps falsely insulated herders from the immediate effects of low productivity, the fact of belonging to a larger entity and the services it provided cushioned those who would previously have been poor against poverty and its effects.

3.6 Privatisation and the post-socialist period

Mongolia began its transition to a market economy in 1990 following its first multi-party elections, and in the midst of considerable change in the Soviet Union, on which its economy had become heavily dependent. Between 1989 and 1991 the Mongolian economy was hit by a triple shock in the wake of the Soviet Union's collapse: subsidies which had underwritten many of the services provided by the collectives had been much reduced in 1989 and in 1991 were discontinued; the Soviet trading bloc which accounted for over 90 percent of Mongolia's export and import market collapsed; and the Soviet technical advisors on whom the country had become reliant were withdrawn, leaving the government with much reduced capacity for managing the major economic change it had embarked on (Cooper 1995:11, Griffin 1995:1-4). In addition, there were flaws in the design of the transition strategy, with poorly sequenced

reforms that focused on privatisation despite the unstable economic environment (Griffin 1995:21-2). The result was severe inflation, unemployment and a dramatic increase in poverty, which had been virtually unknown under the socialist system but affected 17 percent of the population by 1992 (Cooper 1995:11-12). Since 1995 one third of the population has been officially in poverty (Mearns and Dulamday 2000:2).

3.6.1 Decollectivisation

Privatisation of herding collectives began in September 1991. While the general rules for this were set by the government, in practice there was room for each *sum* to adapt them to the local situation and the interests of collective members (Potkanski 1993:127). The government had issued coupons to all citizens with which they could purchase state assets that were being privatised. In the collectives, distribution of livestock was done largely on a per person basis, and was thus considerably dependent on family size. In addition however there was usually a loading aimed at rewarding households considered to have contributed most to the collective, based variously on whether they had been founding members of the collective, how many animals they had contributed at collectivisation, how long they had been members of the collective, or their individual contributions to it (Cooper 1995:13, Potkanski 1993:125). Often however, these households had been assigned large animals by the collective, or had herded the largest numbers of animals for it, and had thus previously been paid the highest salaries (p.50). Differences in herd sizes immediately after privatisation were thus to some extent a reflection of household size rather than herders' effort and skill (Potkanski 1993:129), but the loading process also allowed the persistence of some inequalities from the collective system (Cooper 1995:13).

In the first stage of decollectivisation in 1991 30 percent of livestock were privatised; this had risen to 90 percent by the end of 1994. A significant shift was the return from single-species herding to mixed herds, as the different types of livestock owned by the collective were shared out to each household (Mearns 1996b:322, Potkanski 1993:128). As well as livestock, other collective assets were also privatised, including equipment, vehicles and winter shelters.

These were also purchased with the government-issued privatisation coupons as livestock had been, but again with other factors operating in some cases, such as winter shelters being allocated to their habitual users for purchase (Potkanski 1993:128), or the concentration of vehicle ownership in few, often official, hands (Cooper 1995:14).

With the collective went the considerable range of services it had provided, which could no longer be supported because the Soviet subsidies that had financed them had been withdrawn. These included healthcare, child support and free education, but also veterinary services, livestock insurance, and especially provision of transportation for seasonal moves (Potkanski 1993:129). In addition, the collective (and through it, the state) had protected herders by carrying the risks inherent in herding, such as drought, *zud* or animal disease, which now became the responsibility of individual herders (Cooper 1995:13-14, Templer et al. 1993:120). Households also faced the increased labour requirements of herding several species of livestock instead of the one they were previously assigned. This affected female-headed households in particular, some of whose herds had difficulty surviving winter through lack of adequate care (Skapa 1995:95). In the new environment therefore, households had to be reliant on their own resources, which necessarily resulted in an increasing individualisation of Mongolian pastoralism, and a shift towards subsistence production (Humphrey and Sneath 1999:4).

The effects of these changes in terms of wealth differentiation, the changing institutional setting and changes in the herding community itself are outlined below in more detail, before exploring the interaction of all three of these areas as regards resource use and access.

3.6.2 Wealth differentiation

Differences in wealth, kept largely under control during the socialist period by the imposition of private herd limits and the social assistance provided by the collective, reappeared rapidly after privatisation, on a scale not seen in Mongolia since the 1930s (Swift 1995b:104). Rural poverty may even have been understated due to the official poverty line being set lower for rural people,

on the assumption that herding households could live off their animals; this did not however take into account households with insufficient labour for their needs, such as elderly or female-headed households, or those with herds too small for their subsistence requirements (Cooper 1995:6, Swift 1995b:105). Household herd size is viewed by Mongolian herders as the main factor in relative wealth, although other contributing factors include assets owned, available labour, herding experience and household income, with the poorest households relying on pensions due to low sales of animal products. As some of these factors are related to the life cycle of the household, the wealthiest households are also perceived to be those of middle age with older children (Cooper 1995:30, 39-40). With the collective's support for weaker households gone, certain types of households quickly became marginalised in herding: as noted, those with herds too small for independent subsistence, but also those with insufficient labour, including female-headed households, those with limited herding skills, and those who relied heavily on state benefits, such as the sick and the old, who could not engage directly in herding for their own support (Cooper 1993:155-6).

The sharp increase in both relative and absolute poverty among herders could be traced in part to the management of the economic transition which formed the backdrop to privatisation, but also to several other main factors. The first of these was the privatisation process itself, which as noted often served to favour those already among the wealthier members of the collective (Cooper 1995:54-5). Second, the loss of services and subsidies provided by the collective meant a new environment of self-reliance, which suited a minority of more entrepreneurial herders who saw new opportunities in privatisation, but left most others feeling the lack of both assistance and supervision in herding (Potkanski 1993:129). Cooper however considers the most significant factor in increasing poverty and wealth differentiation to be the shifting of risk from the collective to the individual household (1995:55). Poorer households are less able to cope with winter disaster or *zud*, the most serious risk faced by herders, because of inability to purchase supplementary feed and lack of labour to cope with the extra work required. These households therefore tend to suffer proportionately higher stock losses (Cooper 1995:43-4, Templer et al. 1993:119), which

deepens their poverty given the importance of livestock in relative wealth. By early 1994 therefore, little more than two years after the start of privatisation, livestock was already concentrated among the richest households, who in some areas owned up to 50 percent of livestock, while the least well off owned ten percent or less (Cooper 1995:54). By 1998 many households had far in excess of the 150 head of stock estimated necessary to sustain a family (GOM and UNS 1998:11)¹³ and far beyond what a single family's labour could maintain (Tumenbayar 2000:8), as shown in Table 3.1.

Table 3.1: Households grouped by size of private herd

Number of livestock	1990	1995	1998
51-100	42,548	61,082	62,941
101-200	10,714	53,564	67,466
201-500	492	31,393	36,275
501-999		3,095	5,112
1,000-1,499		280	860
1,500-2,000		17	62
Over 2,000		8	33
Over 3,000			8

Source: NSO 1998, based on Tumenbayar 2000:8.¹⁴ Note that 1990 figures are for private herds prior to decollectivisation.

The situation was compounded by climatic factors, with *zud* in 1993 and 1997 followed by a series of severe winters interspersed with summer droughts between 1999 and 2002, in which millions of animals were lost and the national herd dropped from a 1999 high of 33.6 million to 25.1 million, less than it had been in 1990. Over 9,000 households lost their entire herds between 2000 and 2001, with the western mountains, where the case study is located, among the worst affected regions (Siurua and Swift 2002:90).

¹³ No indication is given however of what size family a herd of 150 could sustain; Tumenbayar suggests this may be a sufficient minimum herd for a family of five (2000:8).

¹⁴ Tumenbayar gives selected figures for 1994 and 1998; however 1995 is used here as 1994 figures for all categories of herd size were unavailable.

3.6.3 Changes in the institutional setting

The demise of the collective represented the loss of the regional coordinating institution that allocated pasture, governed resource access and regulated seasonal movement (Fernández-Giménez 2001:52). In this respect, despite the political shift involved, there was less severe institutional discontinuity between the feudal and socialist systems than in the move to a market environment (Humphrey and Sneath 1999:230). District-wide coordination of herding and resource use has been a historic feature of Mongolian pastoralism, first through the *khoshuu* and latterly through the collective, and may even be necessary for governing pasture use effectively. While some oversight of herders by *sum* and *bag* authorities remained after decollectivisation, the formal governing role of the collective was not really replaced (Humphrey and Sneath 1999:69-70, 111, 333-4; Fernández-Giménez and Batbuyan 2000:2).

Nor was it possible simply to revert to the pre-collective institutional setting, as customary institutions had been weakened by "the omnipresence of the *negdel* [collective]" (Finke 2000:14). Its sudden absence therefore left a situation of institutional scarcity in which decisions over pasture use devolved to individual herding households. In this way the heavy involvement of government during the collective period can be considered to have undermined the actual governance of the pastoral commons (Mearns 1996b, 1996c), resulting in the disintegration of coordinated pasture use once the collective was gone (Fernández-Giménez and Batbuyan 2000:2).

Informal institutions

Nevertheless some informal customary institutions did reappear, at the local rather than the regional level. Arguably the most important of these was the traditional herding group or *khot ail*, often but not exclusively kinship-based. The *khot ail* re-emerged as a social and also an economic unit, allowing economies of scale by pooling labour across several households to cope with the increased labour requirements of mixed-species herds. It also provided an environment of mutual assistance and a social safety net, of particular benefit to less well off households (Cooper 1993:158), as well as a means of pooling risks in herding, which had now devolved from the collective to the household. This was a

traditional mechanism for coping with risk in Mongolian pastoralism, although it too had been weakened by the dominance of the collective and its provision of social assistance (Templer et al. 1993:106-7).

There was also some incidence of poorer households herding for richer, a traditional coping mechanism allowing the less well off household a share of animal products in exchange for labour (Siurua and Swift 2002:94, Humphrey and Sneath 1999:161, 175, 223). Some *khot ail* even formed for this express purpose following *zud*, with households that had suffered heavy stock losses joining up with richer but labour-deficit households; this practice may however have diminished more recently as some have lost so many stock as to need no extra labour (Siurua and Swift 2002:94).

In some areas cooperation also took place on a wider scale, among groups of *khot ail* in "neighbourhoods" or *neg nutgiinkhan*, "people of one place". This differed from region to region but variously might include some pooling of labour for tasks such as haymaking, some mutual assistance, or agreement over movement dates (Mearns 1993:77-8, 1996b:323-4). However these neighbourhood groups did not assume such importance in all parts of Mongolia, and in some areas do not exist, notably in at least one Kazak-dominated *sum*, which may in part be a reflection of cultural differences (Finke 2000:14, Humphrey and Sneath 1999:15).

Rural-urban networks also became more significant in the institutional and economic chaos following decollectivisation, as a means of compensating for the loss of the services and infrastructure provided by the collective (Humphrey and Sneath 1999:137, Fernández-Giménez 1999b:4, Szykiewicz 1993:171). These networks of friends and especially kin predate the communist era, but became increasingly important once it ended (Humphrey and Sneath 1999:137,142). One way in which such networks operate is by herders caring for the livestock of urban kin and friends along with their own herds. Rather than this being a form of exploitation of poor herders by richer urban dwellers as in some countries, in Mongolia such "absentee herding" has a subsistence orientation and is of mutual benefit to both parties. Thus herders are able to

provide animal products to their friends or kin, and receive in exchange gifts of food items, help with labour at key times of the year such as haymaking and shearing, or help with transportation for moving; their school-age children may also be boarded in town. All these functions of absentee herding arrangements are either coping mechanisms for economic instability, or replace former functions of the collective (Fernández-Giménez 1999b:1-2,8; Humphrey and Sneath 1999:144). Humphrey and Sneath see such networks as more significant than neighbourhood groups of *khot ail*, which in their study sites were not strong (1999:15).

Formal regulation: the Land Law

Alongside the resurgence of local-level informal institutions has been the attempt to formally regulate land use through the 1994 Land Law. While pasture land remains state owned, the Land Law allows for the leasing of winter and spring campsites by *sum* governments (ADB 1995:4), through the issuing of exclusive possession contracts, which was carried out in 1998 and 1999 (Fernández-Giménez and Batbuyan 2000:6,8; Sneath 2003:444-5). Since the law stresses that autumn and summer pastures should remain in "common use", by implication it also appears to allow the leasing of winter and spring pasture; this however has not taken place (Fernández-Giménez and Batbuyan 2000:8, Hanstad and Duncan 2001:26,1.5-6).¹⁵ In general the issuing of possession contracts over pasture land is resisted by herders, and by some government members, who see it as a form of privatisation, counter to very longstanding traditions and a potential source of conflict, since they fear exclusion of the poor from access to key resources and the dominance of wealthier herders (Fernández-Giménez and Batbuyan 2000:15-16; Sneath 2001:42-3, 2003:445, Hanstad and Duncan 2001:1.0). To some extent this has happened already, with considerable favouritism in campsite allocation in some areas,¹⁶ illustrating the persistence of social connections (p.53) and the continued power of local governors in resource allocation (Szyrkiewicz 1998:214). Many households were left out in the issuing of possession

¹⁵ This is as of 1999. Fieldwork in Bayan-Ölgii in 2003 uncovered no instances of pasture leasing either, and the *aimag* Land Office had no immediate plans to proceed in this direction.

¹⁶ Sabine Schmidt, personal communication, 13 May 2003.

certificates where there were fewer campsites than households; typically these were less well off, owned few livestock, or were newly married couples just starting out (Fernández-Giménez and Batbuyan 2000:8-9). In addition possession was granted in some cases to *khot ail* in the name of the leading household, which creates difficulties given the fluidity of these groups from year to year and leaves the other households with less secure tenure (Fernández-Giménez 2002:61-2). The Land Law also gave authority to *bag* and *sum* officials to tell herders where and when to move, to reserve pastures, to allocate possession contracts over pastures, and to regulate the numbers of livestock within their boundaries. In spite of this, local officials did not perceive that they had such authority, continuing to see all pasture as common and unable to be leased, and themselves unable to tell herders where they should move, such as to less frequently used pastures (Fernández-Giménez and Batbuyan 2000:18-19).

Despite the provisions of the Land Law therefore, formal institutions for governing and regulating pasture use have not yet taken hold.¹⁷ Also, notwithstanding other institutional developments at the local level, customary institutions for pasture use have not reasserted themselves, nor have new informal institutions for this purpose evolved (Fernández-Giménez and Batbuyan 2000:2). In part this may be due to the changing nature of the herding community itself, described below, which makes effective collective action difficult (Mearns 1996b). Regardless of cause however, the lack of such coordinating institutions is having a detrimental effect on pasture use and leading to undesirable resource use patterns such as out of season grazing of reserve pastures, trespass on the reserve pastures of other herders, an overall reduction in the extent of seasonal movement, and concentration of livestock in regions closer to roads and towns, in part for easier access to services (Fernández-Giménez 2001:61-3). In some areas norms of pasture use have broken down to such a degree as to resemble an open access situation (Finke

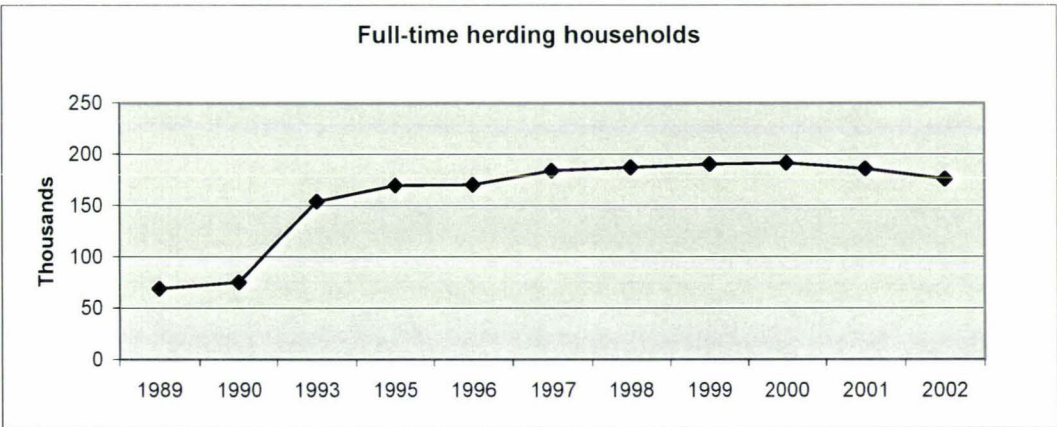
¹⁷ Further changes to the Land Law came into effect in May 2003, but thus far pasture land remains unaffected except for the issuing of possession certificates for winter sites and a small area of surrounding pasture (Sabine Schmidt, personal communication, 13 May 2003).

2000). These problems are discussed in more detail below in the context of changes in resource access and use.

3.6.4 Changes in the herding community

At privatisation, eligibility for a share in the collective's animals was extended beyond former collective herders to include non-herding collective employees such as administrative personnel and even former employees. In the face of rising unemployment in urban areas, some urban residents returned to their home *sum* to claim their share of the collective's livestock. Some who were ineligible for collective livestock managed to purchase animals instead and also went herding, seeing this as a more secure livelihood. The result was a net urban-rural migration in the years immediately following privatisation, and an influx of new herding households into rural areas, particularly in *sum* around *aimag* centres and cities (Potkanski 1993:129, Fernández-Giménez 2001:52). As Figure 3.2 shows, between 1990 and 1993 the number of herding households more than doubled, rising from under 75,000 to 154,000 (NSO 1998, 2001). This figure continued to rise, though less sharply, to a peak of nearly 192,000 in 2000. More recently however the post-privatisation trend of urban-rural migration has reversed, particularly following the series of drought and *zud* in recent years, and by the end of 2002 the number of herding households had declined again to 176,000 (Zuuny Medee 2003).

Figure 3.2: Changes in the number of full-time herding households



Source: NSO 1998, 2001; Zuuny Medee 2003.

The Mongolian ethic of access to pasture for all comers, based on the belief that a herding lifestyle is the birthright of all Mongols, made it morally difficult to exclude the "new" herders from pasture, water, and other resources (Fernández-Giménez 2002:65, Mearns 1993:79). Nevertheless, initially at least there was some discontent over their being eligible to receive collective livestock and over a perceived increase in grazing pressure in some areas (Mearns 1993:96). In some locations potential new herders had to demonstrate family ties in order to share in the privatisation of collective livestock; even where this was not a requirement, many joined *khot ail* with relatives, suggesting that despite "universal" access, some implicit rules of entry into herding communities may operate (Mearns 1993:96-7).

While many of the "new" herders were children of herders, most lacked herding experience themselves, and consequently had less skill in pasture and herd management. They were also outsiders to established local groups of herders, who had followed some degree of customary pasture use coordination even under the collective system and, being outsiders, had less incentive to follow such norms of pasture use as existed. This was chiefly because, being much less integrated into the local community, they stood to lose less if they forfeited social approval by free-riding (Mearns 1993:95-6).

A different kind of people-movement occurred among Kazaks in the west of the country. Here one response to the economic crisis was outmigration to newly independent Kazakhstan. Between 1990 and 1994 about 40 percent of Kazaks left Mongolia, although the figure among herders was less. However, not least because the economic situation in Kazakhstan was then no better than in Mongolia, a number of Kazaks have since returned. This situation was complicated by the corresponding migration of new Mongol herders into areas previously used by the departing Kazaks, leading to the possibility of inter-ethnic conflict over pasture use as the latter returned (Finke 1995:197-8; 2000:6, 12-13).

Community change and collective action

These changes in the makeup of local herding communities can be viewed as constituting a loss of some of the key attributes of community considered necessary for effective collective action, in this case the evolution of coordinated norms of pasture use in the institutional vacuum created when the collective was abolished. Among the most important of these attributes were relative stability in the community, and the consequent expectation of continuing to interact with the same community members in the future; together these allow herders to form stable mutual expectations of each other's behaviour and overcome the "assurance problem" (Mearns 1996b:320; see p.10). It can readily be seen that the stability of the herding community in any given local setting was undermined, at first because of the large-scale influx of new herding households, as well as the departure of many in some areas, and later because of the partial reversal of both trends. The likelihood of continued long-term interaction with the same people decreased dramatically in the face of such fluctuation in the community (Finke 2000:3). The degree to which various groups of herders were integrated into the local community and thus responsive to social pressure also differed, as did their consequent bargaining power and their interests; this combination of factors contributed to a decline in stable mutual expectations and an increased assurance problem (Finke 2000:14-15, Mearns 1996b:320,328). Changes in the herding community thus further reduced the likelihood of informal institutions developing to take over from formal institutions in governing resource access and use.

3.6.5 Resource access and use

Clearly the greatest effect on access to and use of pastoral resources in the post-socialist period has come from the changed institutional setting, or rather the lack of coordinating institutions, but this has been compounded by changes in the herding community itself, as well as by the increase in wealth differentiation that followed from the economic transition begun in 1990. After privatisation there were multiple kinds of access rights operating (Szynkiewicz 1993:168-9), as is illustrated by considering shelters, campsites and pasture.

Winter and spring shelters, and winter houses in Kazak areas, became private property at decollectivisation, continuing the trend which had begun in the 19th century towards increasing "privatisation" of winter campsites. Shelters and houses were generally allocated to the herders who were using them at the time (most such structures had been used by the same families for decades or even generations). New herders, as latecomers, often had more difficulty in acquiring shelters than ex-collective herders (Mearns 1993:96, Finke 1995:207).

In contrast to the situation with structures, rights of access to campsites after privatisation were varied, being based on inheritance from parents, customary use, use during socialism, or even just on occupancy of an unused site. Ownership of a shelter at a given campsite strengthened the owner's hand in securing access to the underlying campsite and the surrounding pasture. When possession certificates for campsites were issued starting in 1998, herders who could demonstrate past use of their campsite seemed more likely to be awarded possession, making ownership of a shelter a distinct advantage (Fernández-Giménez 2002:61). The allocation of campsite possession certificates was also flawed, as noted, both by favouritism and by the practice in some areas of issuing a certificate to an entire *khot ail* in one name only, leaving other households with less secure access rights, since *khot ail* membership is fluid from year to year. Poorer and newer herders often camp with kin or acquaintances on a non-permanent basis, making them more vulnerable in this regard (Fernández-Giménez 2002:61-2). In other instances, allocation of campsite possession certificates also seemed to favour wealthier herders, meaning further disadvantage for less well off households (Fernández-Giménez and Batbuyan 2000:26).

In terms of pasture, technically an entire *bag*, up to about 200 households, may have the right to find grazing and a suitable campsite within a specified area, but smaller groups hold more exclusive access rights. Rights of access to winter and spring pasture have long been the most exclusive, with customary use generally respected (Fernández-Giménez 2002:63, Mearns 1993:92). Nevertheless, after privatisation multiple sources of access rights existed, such as continuous use going back to the collective period, inheritance from parents

(probably the strongest claim since this has traditional validity as well), or for wealthier herders often the assertion of a "birthright" to use pasture by virtue of being born in the *sum*. Poorer and newer herders often had secondary access rights, or rights by association, through camping with relatives or friends, but rights of this nature were less secure, and might need to be renegotiated annually, making it more difficult for such herders to exclude others from their reserved winter pastures (Fernández-Giménez 2002:62). Newer herders also tended to have less developed social and kinship networks for gaining such secondary access to pastures (Tumenbayar 2000:8). Pasture in summer and autumn however is generally considered to be open for use by all herders in a given *sum* (Fernández-Giménez 2002:62).

Access rights to one kind of resource may be contingent on access to others. Ownership of a winter shelter, for instance, helps secure the rights to the campsite where it is located, and rights to the campsite (whether through occupation or a formal possession certificate) ensure access to surrounding winter pasture, although legally such pasture remains open to all. Herders lacking winter shelters or campsites (typically the less well off, or new herders) thus have more difficulty in gaining access to winter pasture. A further example is that of water resources, for which property rights are also varied. Rivers and lakes are open access resources by law, some hand-dug wells are virtual private property, while small streams, springs and some hand-dug or mechanical wells may be managed in common by groups of herders. As many mechanical wells sunk during the collective era have fallen into disrepair, while the number of herders and livestock has risen, herders who cannot negotiate access to a well or spring used by a group may also find their ability to use nearby pastures constrained, unless an alternative open access water source is available (Fernández-Giménez 2002:63).

These examples of dependent or contingent access rights highlight the possibility that although a household has nominal rights to use pasture or water sources, it may still lack the ability to realise those rights. This may be because of contingency issues, as above, but may also be due to characteristics of the household itself. This may be seen as a distinction between resource

endowments and entitlements (p.19). In this context resource endowments are the "rights" that people have to use certain resources, through ownership or a possession certificate, or through belonging to a particular social group such as the inhabitants of a *sum*, while resource entitlements also encompass the ability to actually use these resources (Mearns 1996c:111, Leach et al. 1999:232). This may be constrained because of a lack of certain endowments, such as a shortage of household labour, lack of kinship ties to join a *khot ail*, or inability to access transportation for nomadic moves, whether through lack of a vehicle or pack animals, or lack of cash income to pay for transportation. Clearly therefore, factors contributing to relative wealth (income, assets, labour) also affect a household's ability to access and use resources (Mearns 1996c:111-2).

An important instance of a problem in entitlements is the interaction between relative wealth, mobility, and resource access. Access to transportation, and thus the ability to make seasonal migrations, depended on relative wealth in feudal times, with the less well off often left behind. This was recognised by the collectives, which provided free household transportation to all herders. With the end of socialism this provision disappeared and households were again dependent on their own resources for moving. Households with access to transportation could ensure access to varied seasonal pastures and thus improved and increased herds, meaning increased wealth. Poorer households by contrast, with smaller herds, were less likely to own pack animals or have income or livestock to pay for transportation; lack of mobility meant lack of good pasture and diminished possibilities for herd growth, resulting in deepening poverty and increased wealth differentiation (Fernández-Giménez 1999a:337-8).

In the post-socialist herding economy therefore, access to resources seems clearly affected by social differentiation. This differentiation is not exclusively along lines of wealth however, but as indicated in the examples given above, is also determined by social connection, and whether the household is "new" or had been herding for the collective. New herders may have difficulty in gaining secure access (or any access) to certain key resources which in turn may affect their ability to use other resources; this may also be the case for poorer herding

families, who are also less likely to be able to make nomadic moves. In both cases, a reduced ability to access sufficient resources to improve their herds, compared with wealthier and ex-collective herding households, is likely to mean a decline in household wealth and wellbeing. While all new herding households are not necessarily poor, nor the reverse, this still suggests that in any given setting access to resources is likely to be connected to household wealth, newness at herding, and perhaps social connection, in a complex interrelationship. The case study aims to explore this relationship in a specific local setting, before attempting to evaluate whether resource access in that setting can be considered equitable.

3.7 Chapter Summary

This overview of Mongolian pastoralism in the 20th century has shown how social differentiation has been a historic feature of the herding economy, even to some extent under the levelling influence of the collective period. Since the end of socialism more extreme wealth differentiation has reappeared, in what amounts to a reversion towards the situation during the feudal system early last century. As well as relative wealth, however, social differentiation in post-socialist Mongolia also encompasses whether a household herded for the collective or was new to herding at privatisation, as well as its social connections.

Where the current situation differs markedly from the collective period and from feudalism before it is in the lack of a strong institutional framework to govern access to resources and regulate pasture use, despite the perseverance of some customary institutions at a local level and the partial implementation of the Land Law. The historic interconnection of wealth differentiation and resource access in Mongolia is rendered more complex by this fluid environment in which multiple sources of rights to access and use resources are able to coexist, affected to a greater or lesser degree by social differentiation in the form of relative wealth, social connections and recent beginnings in herding.

Chapter 4: Methodology

4.1 General approach

Common property regimes (CPRs) are claimed to be equitable in their allocation of resources, yet there is wealth differentiation within resource user groups: this is the apparent contradiction which led to this research. Key questions in exploring this therefore were who may have access to resources and how this is governed, how wealth differentiation comes about and how relative wealth and resource access interact. In the course of research, it became apparent that the initial focus on wealth differentiation, as a possible indication of inequitable resource access, needed to be broadened to take into account other forms of social differentiation which also affect resource access, as discussed in Chapter 2.

The literature indicates that resource access in CPRs is affected by their social setting (see 2.2). This kind of connection means CPRs cannot be divorced from their setting, so that the equity considerations at issue are best studied in their particular context (Babbie 1998:283). A case study approach lent itself to this, and also offered the possibility of exploring in depth what was expected to be a complex interrelationship (Yin 2003:13) between social differentiation and resource access.

Because of this complexity, the research needed to build a nuanced picture (Babbie 1998:283) of the interactions over resources among members of the CPR user group. This required methods that would avoid overlooking unanticipated factors having a bearing on resource access and would ensure that the perspectives of various kinds of people were included. Expectations of the situation in the location selected were also somewhat uncertain, given that none of the limited information available on Kazaks in Mongolia pertains to Bayan-Ölgii *aimag* where they are a majority. Flexibility to adjust methods and questions as the situation required was therefore of considerable importance. For all these reasons, a qualitative approach was preferred.

4.2 Selection of site

Despite several decades of socialism, which emphasised equality, wealth differentiation reappeared rapidly in Mongolia after decollectivisation. This made the choice of a case study in this country particularly interesting in terms of equity. There is a related caveat, however, in that the significant effects of socialism followed by the privatisation process may also mean that Mongolian CPRs can be considered less than typical (if such a thing as a typical CPR exists). It is a potential drawback of this case study therefore that, while interesting because of its immediate background, it may have limited possibility for generalisation to other situations (Robson 1993:73).

As detailed secondary information on inequity and resource management within pastoral communities in Mongolia was unavailable, Bayan-Ölgii *aimag* was instead selected on the basis of the availability of contacts in this region, and because of the researcher's interest in the Islamic peoples of Central Asia. In addition, as noted, there is very little existing information on the Mongolian Kazaks who form the majority population of this *aimag*, making a study in this area interesting in and of itself. Ulaan-khus *sum* was selected on the basis of the translator's contacts, which it was hoped would facilitate entry into the community. In the event however the translator had no prior knowledge of any of the households in the community selected.

Fieldwork was carried out over a period of six weeks in July and August, when most herders were in summer pasture. Since knowing the relative wealth of all community members was important to the research, a group of 100 households or less was preferred so that informants would know all the households well enough for wealth ranking (Mearns n.d.:6). A number of the summer pasture areas in the *sum* were used by groups of up to 200 households; the smaller group of around 60 near the Khatuu and Qara Jaryq rivers on Bayan mountain (Figure 5.1, p.82) was selected with the assistance of *sum* officials. Given the high cost of travel in Mongolia and the requirement for border permits in locations within 30km of the Chinese and Russian borders (which affected most of the *sum*), the relative proximity of this area to the *sum* centre was an advantage.

Since relationships and differences within the user community of the CPR are of key importance to this topic, the definition of "community" is also important, in order to define what constitutes the CPR under discussion. This was complicated by studying mobile pastoralism, since the herders' physical location changes throughout the year and the same group does not necessarily move together in all seasons. Thus prior to fieldwork it was not known how the resource users themselves would define what they considered to be their community: the group who are together in summer pasture, or in winter pasture, all those who use the same autumn pasture (the largest group), or perhaps some other grouping. Since the fieldwork was done in summer, the decision was made to begin with a summer pasture group and adjust if necessary. This worked well as the herders indicated during social mapping that the larger group using the Sogoog river flats for haymaking and autumn grazing was too large and complex for them to map; they preferred to regard the summer pasture group on Bayan as their community, although acknowledging that they also belonged to a larger Sogoog-based group of households. The larger group was not studied as such; however in recognition of this wider connection further fieldwork was carried out in Sogoog township, with particular emphasis on including those who were related to households on Bayan and considered themselves connected to that group. A little over half the total fieldwork time was spent on the mountain, the rest in Sogoog. In all locations the researcher, translator and driver stayed with community members in their homes.

A further reason for doing research in Sogoog was to take advantage of being present during the haymaking season in mid-August. During the first part of the research, hayfield resources had been pointed out as a problem area. As it had been difficult to obtain good information about the allocation of haymaking land while still on the mountain, the objective was to do follow-up interviews in the hayfields with households already interviewed. However, this proved difficult both because the hayfield allocations of Bayan families were scattered across a wide area, and because poor hay growth forced many to cut in an extensive area of wet land inaccessible to vehicles. While interviews were still obtained, they were thus fewer than had been hoped and mostly lacked the follow-up element intended.

4.3 Methods and implementation issues

Sum officials were approached before research was undertaken among the herders themselves. Apart from courtesy, the purpose of this visit was to obtain population and livestock statistics for the *sum* and advice on a study location, and to interview relevant officials regarding local government involvement in and views on the allocation of pastoral resources.

The main part of the research however was done with the herders on Bayan and later the year-round residents of Sogoog. For this a combination of participatory visual methods and semi-structured interviews were used, along with participant-observation. The visual methods were intended to provide overview information which could later be followed up on and cross-checked in interviews. This was partly successful, but not all the visual methods worked as well as hoped; interviews generally produced more, and more detailed, information. Cross-checking was also done by conducting interviews on the same topic with people from different wealth groups, with different levels of herding experience and of both genders.

Visual methods

Research on Bayan began with the *bag* governor's *auyl* (herding group) and two neighbouring *auyl* in K  k Choqy (Figure 5.2, p.85), to make use of his knowledge of the area as a community leader. The initial social map and wealth ranking done by members of this group served as a basis for selecting most subsequent informants on the mountain. With all visual exercises a deliberate attempt was made to involve participants of both genders and, once known, varying wealth status.

Social mapping of the entire group on Bayan was done first, both to locate the different families on the mountain,¹⁸ and to identify households with particular characteristics, such as new herders at privatisation, female-headed households or those regarded as having particular experience in herding in the

¹⁸ The social map was accurate enough to double as a very effective road map on the mountain.

area (Chambers 1997:117). This social map also generated the list of households subsequently used in wealth ranking.

Smaller social maps were also done in each locality to obtain information about relationships between the households in each *auyl*, numbers and ages of children (for assessing available labour), which households herded together in each season, which had winter houses and the location of their pastures on Bayan. This information was too complicated for inclusion on the main map, if indeed informants could provide such detail beyond their immediate locality. Initially these local social maps were done by the people themselves; the latter ones were elicited in the interests of speed. Local maps confirmed the general accuracy of the main social map; very few adjustments were made to it.

Social mapping in Sogoog was less successful, perhaps because of the scattered nature of the "permanent" township and the presence of winter houses belonging to herders currently in summer pasture. Four additional households were discovered which were not on the social map and consequently were not included in wealth ranking, while two others were found to be in summer pasture rather than in Sogoog as mapped. Identification of local experts however paid particular dividends in Sogoog, allowing a guided tour of the hayfields with one of the hay watchmen before the haymaking began, which greatly helped in focusing subsequent interviews.

Resource mapping was also done in Kök Choqy, but the attempt to cover all resources used by herders in the course of the year (rather than just on the mountain) proved too complex and yielded little information. Instead information about resource use and access came mostly from interviews as well as from the local social maps, which included such things as winter house possession and the direction taken for pasture on the mountain. By contrast, the resource map of the hayfields done in Sogoog provided considerable useful information which served as a basis for further interviews.

Least successful among the visual methods used was a causality diagram intended to explore local perceptions of factors in changing wealth. Participants

generated an impressive list of such factors with relative ease but had much more difficulty with linking cause and effect. This may have been a fault in the way the exercise was explained and set up. However, the caution that this method is not best suited to use early in a PRA exercise (Kumar 2002:192) was also partly overlooked: for the individual participants in each of the two cases, it was their first experience of such visual exercises. Thus although the multiple causes of wealth differentiation were very well defined, too much intervention was required from the researcher for the results to be viewed as a reliable indication of local people's perceptions.

Wealth ranking

Wealth ranking had several objectives. The first was to enable selection of households for interview on the basis of varying wealth status as well as other characteristics, for which reason it was done early in the research. In addition the aim was to discover local measures of wealth and well-being, as well as to begin exploring how wealth status had changed and why. To avoid narrowing the concept of wealth to income and asset measures the wider concept of well-being was discussed with the translator to arrive at a good equivalent in Kazak. It was this broader concept which was subsequently discussed with informants; the eventual list of factors in wealth status went well beyond income and assets, as hoped. The term "wealth" is however used throughout in reference to the case study situation, both for simplicity and for continuity with earlier discussion.

Wealth ranking was done separately for Bayan and Sogoog, each time using a card sorting method (Mearns n.d.) with three informants and combining their individual rankings to arrive at a composite score. In both locations the first two informants were a husband and wife, although ranking and subsequent discussion was done without the spouse present. In each case the third informant was deliberately selected from what the first pair's scores indicated was a different wealth group from their own. Households were assigned to wealth groups on the basis of the composite scores (Mearns n.d.:6), although this was difficult because the scores fell in a continuum with few natural breaks. Ranking was of individual households, even on Bayan where these were

grouped into *auyl*. Informants insisted that it was not possible to compare wealth at the level of *auyl* (p.114).

Interviews

Over 40 semi-structured interviews were done with herders on Bayan, residents of Sogoog and haycutters. Informants were selected on the basis of information obtained from social mapping and wealth ranking. Sometimes it was not possible to interview the selected informants however because they had gone to the *sum* or *aimag* centre or were taking their turn as herder on the last day of research in a particular locality. On occasion this meant finding whoever was available for interview; despite this all but one of the wealth groups on Bayan were covered and all in Sogoog.

Initial interviews focused mainly on how the CPR functioned in terms of resource access and governance, later ones on the causes and effects of wealth differentiation, particularly exploring the role of resource access in this. In Sogoog interviews also focused on reasons why people were in the township and had not moved to summer pasture. As with the participatory exercises, informants covered varying wealth status, both genders, female-headed households, new and established herders and those considered to have particular experience. Interviews were sometimes tailored to make the most of an individual's expertise. Some information was later cross-checked with the *bag* governor, although without identifying the informants, for a quasi-"official" perspective.

Most interviews were done with individual herders or in individual households; in some cases a group of herders was interviewed when visitors arrived as things were getting started.

Sensitive information

In general it proved difficult to conduct interviews without something of an audience, in part because people are normally in and out of each other's homes, but largely owing to the high novelty value of having an overseas visitor. This was a particular issue on Bayan where several households lived close

together in *auyl*, and one to which no good solution was found, other than on occasion leaving the driver to explain photographs of New Zealand while the researcher and translator escaped for an interview. This audience factor necessarily made discussion of sensitive information more difficult, with some questions having to be avoided.

Wealth is obviously a sensitive issue, and questions about personal wealth were not asked with others present. However, a degree of cultural interference led to overcompensation, initially preventing the researcher from asking the size of informants' herds. Given the importance of herd size in relative wealth this seemed analogous to asking their bank balance, which would be impossible in New Zealand with others present (and probably even without). The realisation that herd size by contrast is very visible and not very secret, and that herders were happy to answer this question, came too late to obtain an accurate picture of variation in herd size across the community. Instead more general inferences had to be made on the basis of wealth ranking information (Table 5.3, p.116). Fortunately, herd size is not the only factor in relative wealth.

Resource access however is also potentially a sensitive issue, particularly since this research required establishing whether nominal access rules matched reality, whether there was conflict and who would have priority access. Informants were most reluctant to acknowledge that conflict existed. Initially, injudicious phrasing of questions repeatedly led to them "closing ranks" and presenting a harmonious front. It took some rewording (and different informants) to gain admissions that there were differences of opinion over how resources were managed. Thus questions such as "Is there any conflict over the allocation of winter houses?" moved through "Have there been cases of conflict?" and finally became "Have you ever heard of conflict over winter houses?". At this point conflict was acknowledged in the abstract, but particular instances and their outcome could not be uncovered.

All informants, whether for interviews or visual exercises, were told that participation was entirely voluntary and that they were not obliged to answer all questions put to them. Some questions were declined; in only one case was a

request for interview refused, but as soon as the informant was told that this was fine, he changed his mind and consented. Participants were also assured that all information they provided was confidential; the few personal names used in Chapters 5 and 6 have been changed.

Some further comments on issues relating to the use of particular methods are also found in the following chapter, in the context of the information they provided.

4.4 Chapter Summary

Qualitative methods and a case study approach were selected as the most appropriate for examining a complex issue within a somewhat uncertain context. Six weeks' fieldwork was carried out among a summer pasture group on Bayan mountain which identified itself as a community, and at its autumn base in Sogoog.

Sensitive information relating to wealth and potential conflict over resource issues, necessary to the research, was sometimes difficult to obtain, particularly when others were present. Methods included participatory visual exercises, wealth ranking and semi-structured interviews. The variety of methods and the range of informants were selected to facilitate cross-checking of information.

Chapter 5: Bayan Mountain

5.1 Study area and community

Ulaan-khus *sum* or district, one of twelve in Bayan-Ölgii *aimag*, runs south from the Russian border in an arc that takes in the catchment area of the Sogoog river, continuing past its confluence with the Khovd to meet the Chinese border to the south, and enclosing Tsengel *sum*, the westernmost of the *aimag* and the country. Bayan-Ölgii *aimag* is among the most mountainous in Mongolia; the *aimag* centre Ölgii, Ulaan-khus *sum* centre and the Sogoog valley all lie at around 1800m, with surrounding ranges often rising to over 3000m. It is also dry - the study area receives less than 200mm annual rainfall, with dry cool summers and cold winter temperatures dropping from -20° to -40°C (BOAA 1990:10). Ulaan-khus *sum* centre is located about 50km west of Ölgii, up to two hours away by vehicle. The *sum*'s population is 8,700 (2002), of whom 2,000 live in the *sum* centre, while 99 percent of the remaining 6,700 (1,400 households) live in the countryside and are considered full-time herders (UKSG).¹⁹

Bayan-Ölgii is the only *aimag* in Mongolia with a Kazak majority, currently estimated at around 80 percent of the *aimag* population and about 90 percent for Ulaan-khus *sum*.²⁰ This may previously have been higher; about 40 percent of Kazaks left Mongolia for Kazakhstan following privatisation, although some have since returned (Finke 1995:197-8). The population of Ulaan-khus *sum* fell by 21 percent between 1991 and 1993;²¹ the fact that the herding population continued to climb at the same time may reflect the parallel numbers of those who took up herding at privatisation, and the comments of some that they had acquired animals and winter houses from families leaving for Kazakhstan.

¹⁹ Statistics supplied by Ulaan-khus *sum* government office (UKSG).

²⁰ Estimated by various herders, that is. *Sum* population statistics were not broken down by ethnicity.

²¹ Statistics supplied by National Statistical Office of Mongolia (NSO).

Research was carried out first among a subgroup of 60 of the 240 *bag* #4 households, who were in summer pasture on Bayan mountain, about two hours by road from the *sum* centre, as shown in Figure 5.1. These 60 families were not the only herders on the mountain, but effectively formed a closed unit because of the terrain: the others could only be reached by descending the mountain and taking more distant roads, even though some of their homes were visible from high points around the study community. The second part of the research was in the Sogoog valley hayfields which are used by *bag* #3, #4 and #5 and among the 20 or so families who are permanent residents of the *bag* centre at Sogoog, where many Bayan families have their winter houses. All households in both study areas were ethnically Kazak. Some 20 families (about eight percent) from *bag* #4 had emigrated to Kazakhstan, of whom only 4-5 had returned, but none of these were on Bayan. Of the 60 households on the mountain 22 had not been herders before privatisation (although many came from herding backgrounds), nor had at least three households in Sogoog.

At the time research was undertaken, only two or three households in the *sum* (and none in *bag* #4) had herds of 500 head, though a number had 400. A herder's estimate of the average herd size was closer to 40 or 50, but year-round residents of Sogoog had less, while those who moved to the mountains generally had more. All "five types" of Mongolian livestock - sheep, goats, cattle (including yak), horses and camels - are herded in the *sum*, although camels are few in number, while sheep and goats account for 52 percent and 35 percent respectively of the total herd. The total number of livestock in Ulaan-khus *sum* peaked in 1997 and has since dropped back to its 1991 level, while the number of herding households has continued to increase (Table 5.1). The average herd size per herding household has therefore declined by 35 percent since 1991 (UKSG, NSO), due in part to heavy winter losses,²² and perhaps to splitting herds as new households are created by marriage. Available *sum* statistics do not however offer any information on the concentration of the *sum*

²² Herd sizes in other parts of Mongolia are sometimes understated as a means of tax avoidance, and winter losses correspondingly overreported to clear the slate (David Dyer, personal communication, July 2003). It is possible that these statistics are also skewed by the same practice.

livestock among herding households.

Table 5.1: Herding households and average herd size, Ulaan-khus sum

Year	Total households	Herding households	Total livestock	Avg livestock per herding household
1991	1,688	899	124,768	139
1992	1,610	885	105,818	120
1993	1,393	948	96,884	102
1994	1,435	1,067	112,732	106
1995	1,487	1,088	132,058	121
1996	1,562	1,021	145,882	143
1997	1,617	1,144	162,671	142
1998	1,713	1,223	151,154	124
1999	1,755	1,292	153,692	119
2000	1,819	1,268	138,393	109
2001	1,891	1,404	131,646	94
2002	1,880	1,407	124,688	89

Source: National Statistical Office of Mongolia. Ulaan-khus sum Government.

5.1.1 Bayan Mountain

The 60 households in the group on Bayan were divided into 15 *auyl* or herding groups of one to eight households, with a household viewed as the people living in a single *kigizwi* or felt tent.²³ This was usually a nuclear family but sometimes included a paternal grandparent, most often the grandmother. *Auyl*, as identified on the mountain, generally equated to summer herding groups in which the men took turns to herd all the *auyl*'s livestock together. In most *auyl* the household heads were related - brothers, sons, cousins, or some combination. Widows had remained in the *auyl* they married into. Some *auyl* contained two or more unrelated subgroups which were together for summer herding but would separate in winter. Two *auyl* consisted of completely unrelated families, again together for the convenience of sharing summer herding, but who each herded alone in winter. In one case both blood ties and shared herding cut across *auyl* boundaries within a cluster of three *auyl*.

²³ In only one case was a single household living in more than one *kigizwi*, and this was a simple case of their 11 children overflowing into the second. See photo p.93.

Figure 5.2: Bayan mountain social map

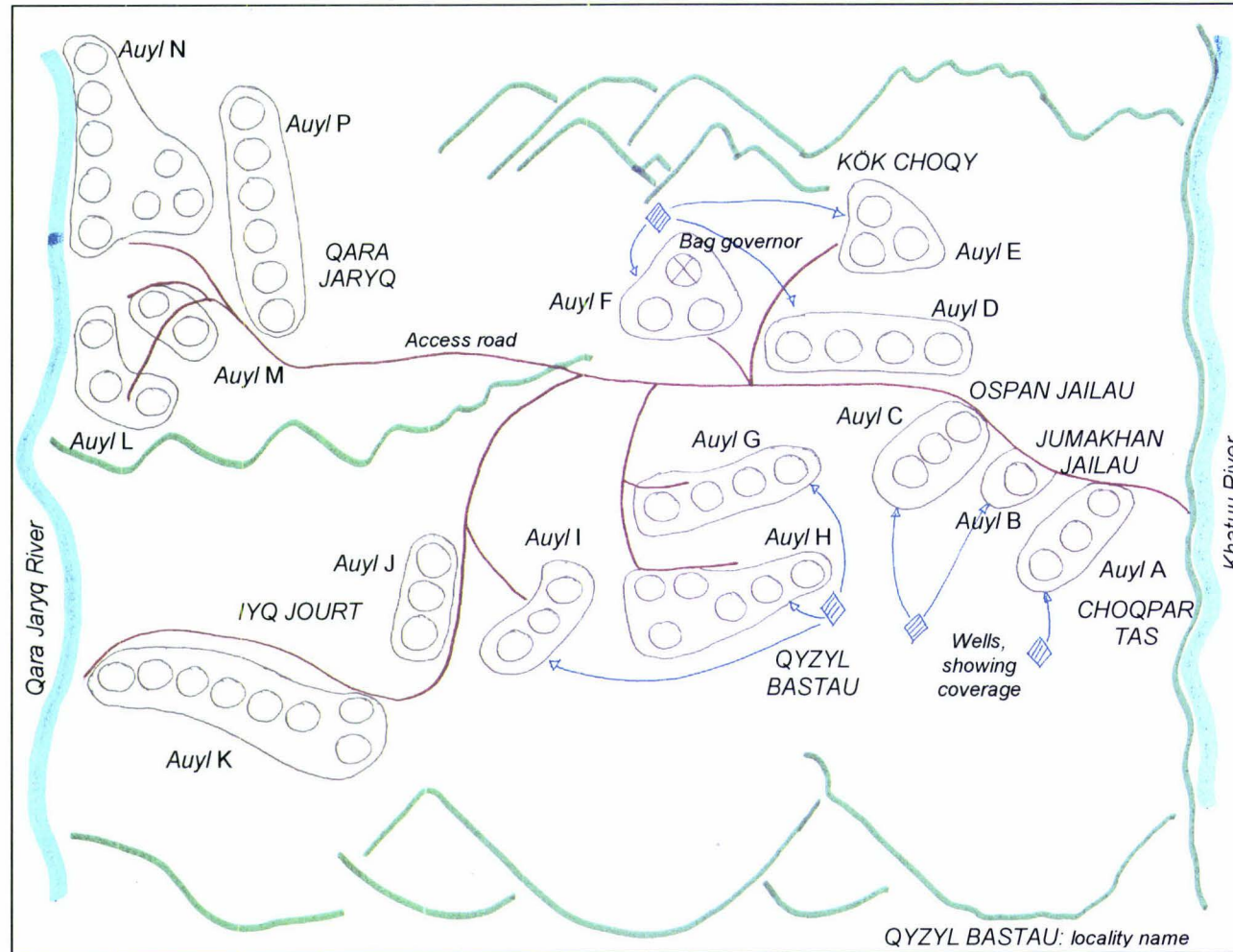


Figure 5.2: Bayan mountain social map

Map includes minor adjustments based on Qara Jaryq locality map. Khatuu River has also been added for clarity.

Within the study area, covering the 4-5km between the Khatuu and Qara Jaryq rivers, the herders were clustered in groups of 3-4 *auyl* in five locations (Figure 5.2), each referred to by some geographic feature (blue hill, red well). Unlike the "neighbourhood groups" identified by Mearns (1993:79) among Mongol herders, these clusters of *auyl* had no name or cooperative function that herders were aware of. They were simply used as a point of reference and identification: "the people who live at Qyzyl Bastau (red well)".

Informants involved in social mapping identified their community as comprising all those who use the Sogoog hayfields and winter pastures, but preferred to map the subset of this group who were using their part of Bayan mountain, shown in Figure 5.2. This mapping group included the *bag* governor, whose summer pastures were in the area selected, and perhaps for this reason the social map of the whole Bayan group was reasonably accurate; an attempt to duplicate this map using informants in another *auyl* failed because they felt unable to correctly locate all the families. This second group would only map their own locality and even so did not know neighbouring *auyl* well enough to give accurate information about relationships between households, or the numbers and ages of children. This pattern was repeated in the other localities within what is geographically quite a small area, and where there is considerable visiting (although chiefly among the men)²⁴ between localities.

5.1.2 Sogoog

The Sogoog river runs through an open and windy valley that is over 5km across for much of its length. Hayfields extend roughly 10km both up and downstream from the *bag* centre, which is located about 20km from Ulaan-khus. This is dominated by the only building of any size, a school and 140-bed dormitory for herders' children. Mudbrick winter houses belonging to the herders are scattered around the school for 2-3km in all directions and near the base of Bayan mountain on the southwest side of the valley (Figure 5.1). From *bag* #4 alone, 240 families use the hayfields, as do others from *bag* #3 and #5. During

²⁴ One female wealth ranking informant expressed the opinion that it is harder for women to know who is rich and who is poor, because they travel about much less than men.

the summer however only about 20 households were present, most immediately identifiable by the *kigizwi* they had erected for cooler summer living.

Most of the families in Sogoog during the summer were related to others in *bag* #4 currently in summer pasture, either on Bayan or in Üsh Bulaq north of the *bag* centre. Some few would usually have been in summer pasture themselves, but the majority live in Sogoog year round. Of these ten stayed because they were employed, most at the school and two as watchmen for the hayfields. Most families based year-round in Sogoog did not have large numbers of animals and one expressed doubt that any full-time herding households stayed there right through the year.

As on Bayan, informants stated that it was impossible to draw a social map for Sogoog in winter because of its complexity, and opted to map the families present in summer. However they seemed to have difficulty identifying who was in fact present; subsequent interviews added four households to the 23 originally mapped, and deleted two who were found to be in summer pasture.

5.2 Resource use and access

Herding in this area takes in various kinds of resources throughout the year, some of which were identified by the herders as more critical than others. These are described in turn below and issues relating to resource access are discussed in each case. It is useful however to introduce resource use through an overview of the seasonal movement patterns followed by herders in the study area.

5.2.1 Seasonal movement

Use of particular seasonal pastures has technically been allocated to each *bag* by the *sum* government, but in fact herders are free to move all over the *sum* and the government would rather they exercised this right more, as pastures further from the *sum* centre are underused. Many pastures are now used by herders from more than one *bag*; Üsh Bulaq and the upper Khatuu valley are both used by a mixture of *bag* #3 and *bag* #4 families in this way, so that former *bag* boundaries are now somewhat irrelevant. However, movement across *sum*

boundaries without permission from the neighbouring *sum* is not well received by either the *sum* government or the herders.

Herders in the study area make up to four moves in a year, to four seasonal pastures rather than within one seasonal area. *Auyl* which are together in summer pasture tend to separate after summer into individual households, which do not all follow the same migration patterns. Seasonal movement dates are set by the *sum* government at a spring meeting of the *bag* and agreed on by a majority of herders, or alternative suggestions made, though this is unusual in *bag* #4. The *bag* governor is responsible for communicating movement dates to those who did not attend the meeting, and reminding all herders to move.

Moving often is considered advantageous because in addition to allowing pastures to recover between seasons, it means fresh and varied pastures for livestock, producing healthier and fatter animals better able to withstand the harsh winters. As the Sogoog valley is very cold and windy in winter, moving livestock into the mountains where it is more sheltered also reduces the risk of stock loss from severe winter conditions, or *zud*.

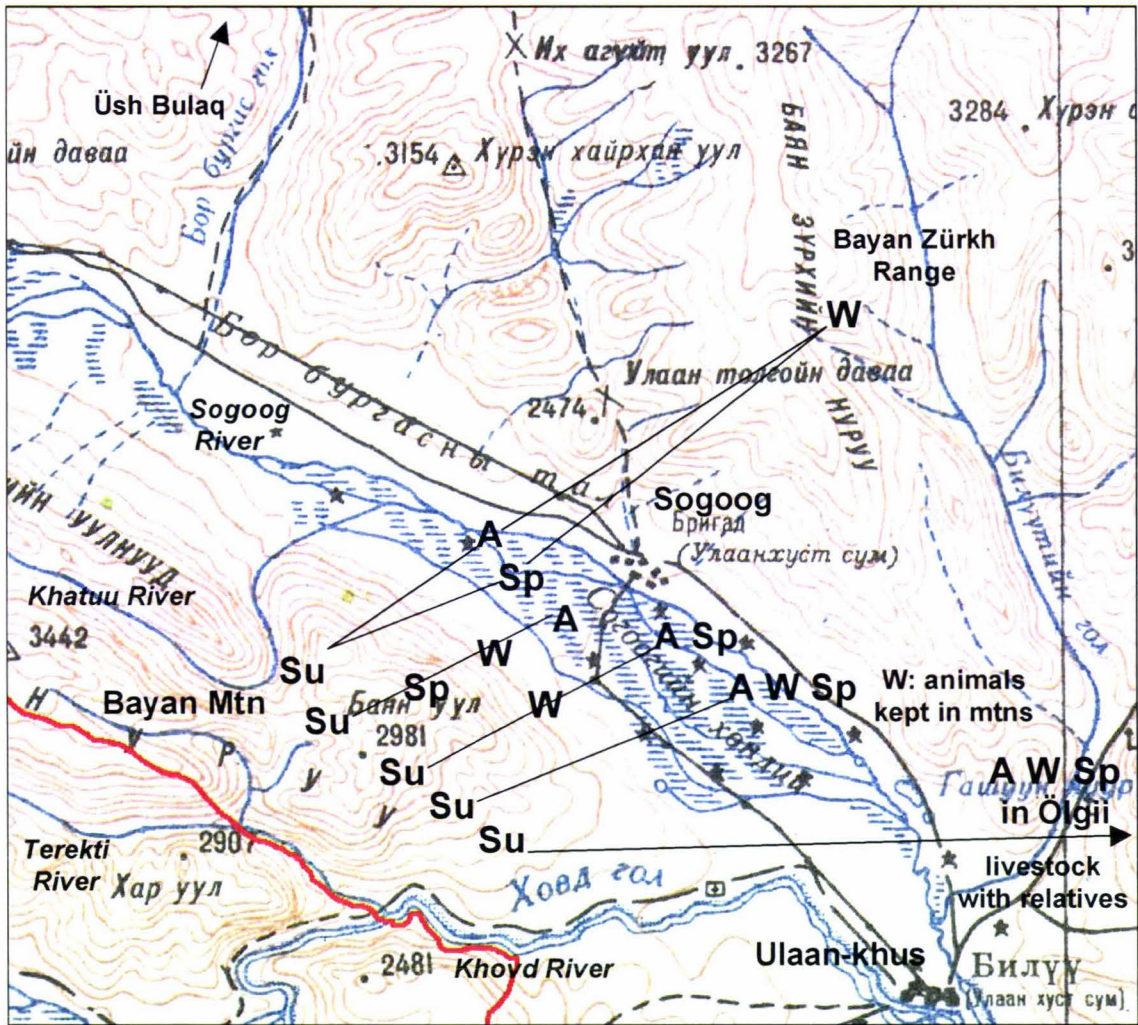
Many of the herders on Bayan said they continued to move between Bayan and Sogoog, not venturing elsewhere within the *bag* or *sum*, because they or their family had a history of using these locations (sometimes for generations). They were familiar with the land and weather patterns and their livestock were used to the kinds of pasture available; they felt no inclination to move elsewhere. Others who had become herders following privatisation had also come to this area because their family had traditionally used it.

In a typical four moves (see Figure 5.3) a herding household is in summer pasture on Bayan from early June; the men go down to Sogoog for haymaking on 10 August, and must bring the family down from summer pasture by 25 August. Autumn is spent in Sogoog grazing the hay stubble until 10 October,²⁵ when the household moves to winter pasture in low sheltered valleys on the

²⁵ Movement dates for 2003.

Sogoog side of Bayan mountain; in mid-March they move with newborn animals either to spring pastures higher up the mountain or down to Sogoog, and return to summer pastures again in June.

Figure 5.3: Typical seasonal movement patterns



Source: Background map enlarged from 1:500,000 Mongolian Government map. Distance from Ulaan-khus sum centre to Sogoog approximately 20km. Boundary with Tsengel sum shown in red.

There are some exceptions - in a couple of *ayul* the men remain living in tents up to 60 days longer in summer pastures, provided it is not too cold, to make the fullest use of summer pasture and preserve winter pasture as long as possible, and the *sum* government makes no objection.²⁶ Also, some families

²⁶ Although some of the herders may; this practice was flatly denied by one *ayul* leader whose cousin in the same *ayul* had indicated that they both followed it.

have summer pastures on Bayan but winter pastures in another mountain range and so follow the same general pattern but a different route (see Figure 5.3).

5.2.2 Changes in seasonal movement patterns

Most differences in movement patterns however are between those who move to all four kinds of seasonal pasture, and those who make less moves in a year.

Some families use Sogoog for both autumn and spring pasture. This can be because they have no spring house or pastures in the mountains, or because they work on irrigation canals in the hayfields during spring. More commonly however, increasing numbers of herders are staying in Sogoog for three seasons of the year and omitting the move to winter pastures in the mountains. One informant said his family would spend the winter in Sogoog only if their winter pastures on Bayan were not good, but most have simply adopted a pattern of spending summer on Bayan and the rest of the year in Sogoog. In many cases the stated reason for this is children's schooling needs, although several including one widowed father continue to take their livestock up to winter pastures, leaving school-age children in the school dormitory.

Even though the herders may stay in Sogoog, this is not necessarily true of their livestock. A number of those who remain for children's schooling, and one school employee whose job requires him to be in Sogoog, had arranged to have animals kept in winter pasture by relatives or friends. (A number of summer residents of Sogoog had also sent livestock to summer pasture in this way). This option was also taken by some whose herds were too small for them to afford a winter house in the mountains, or who had insufficient labour to take their own livestock up. Sometimes this was a paid arrangement, sometimes reciprocal, in which the family staying in Sogoog allowed another family use of their winter house and pastures in exchange for looking after their livestock.

A major constraint to moving however is the cost of transportation. While some herders still use camels to move,²⁷ most now use vehicle transport; households

²⁷As noted by one herder, a camel has the advantage of not needing to stop halfway up the mountain to cool its engine.

with their own transportation clearly have an advantage here. Three of the four households on Bayan observed to have trucks fall in the top wealth group said to have positions of influence and importance (p.116); the fourth is the brother of the former collective head. Whether their influential positions predated privatisation, allowing them to obtain vehicles when the collective's assets were privatised, was not established.²⁸ Other households must pay for vehicle transportation in cash or livestock; a shortage of either means the household is unable to move. One experienced herder stated that in his view the key constraint to resource access is money. Those with smaller herds are therefore less likely to be able to move in either summer or winter, or to use a winter house if they have one. They are also (because less well off) less likely to be able to afford to have their livestock kept in winter pasture.

Informants in Sogoog also noted the increased numbers of households remaining there year round. Ten years previously²⁹ only two or three families, or even just the hay watchman's family, stayed in the *bag* centre all year, whereas over 20 do now. Those staying in Sogoog other than for employment were identified as the old, the sick, those with no income, those who have lost most or all of their livestock to *zud*, who cannot afford a *kigizwi* or transportation, or who may even be trying to save money by not moving. An informant on Bayan, asked whether very poor families who were unable to move were connected to *auyl* on the mountain, declined to answer. Mobility was also said to be more difficult for female-headed households because of limited labour among other reasons; most do not move unless assisted by relatives. Nevertheless four of the seven female-headed households in the study area were in summer pasture on Bayan.

In a different development, there is some movement of herders to the *aimag* centre Ölgii. Some older parents are moving there to live with married children (although some still return to summer pasture in the mountains), and one *auyl*

²⁸ It is of course also possible that these households did well following privatisation and were subsequently able to purchase their own trucks. Nevertheless the coincidence of position and assets is striking.

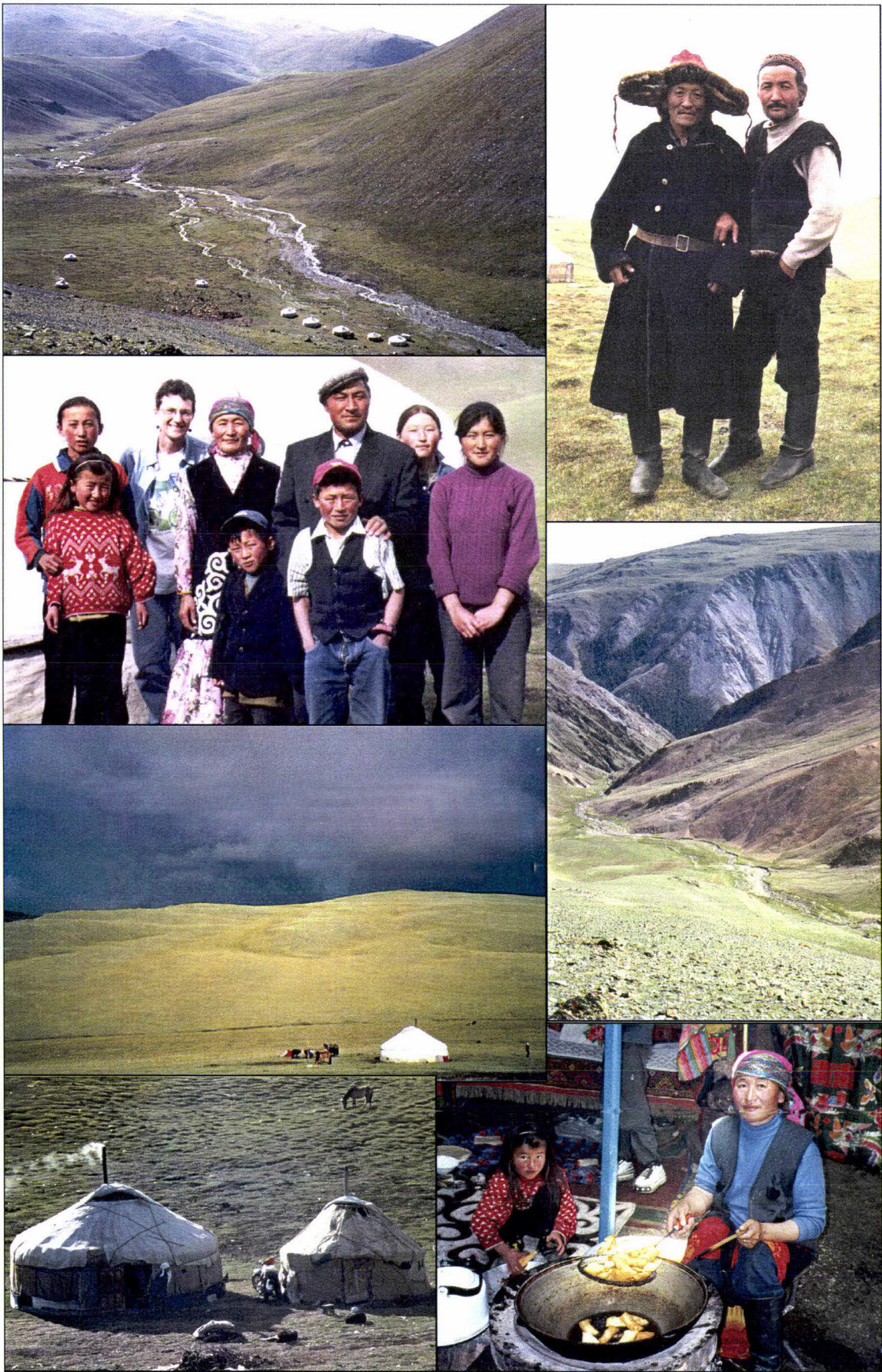
²⁹ Or perhaps during socialism; this distinction was often unclear.

on Bayan consisted almost entirely of families based in Ölgii who were effectively on summer holiday, while the one serious herding family in the *auyl* took care of the livestock. The lack of animal mess around this *auyl* was very noticeable. Some of these families had businesses in the *aimag* or *sum* centre. Another herder planned to move to Ölgii, leaving his herd with his brother except in summer, expressing a desire to educate his daughters so that they could have a different life from herding.

Some informants considered that absolute numbers of households moving to the mountains for winter were unchanged, but that different people were moving now, using pastures and winter houses formerly used by others. The increased number of families staying in Sogoog for three seasons or year-round seems to contradict at least part of this observation. There is general agreement however that there are clear differences between those who are moving more and moving less. Those who have larger herds and can afford transportation move more often in the year, whereas those with smaller herds or who cannot afford transportation now move less often or not at all. Wherever possible, herders who now stay in Sogoog for three or four seasons in the year still send their livestock to summer and winter pasture in the mountains, but generally those who cannot afford to move cannot afford to send livestock to the mountains either, or have too few to make it worthwhile.

Many of the changes in movement patterns among the herders are thus due to inability (rather than unwillingness) to move, for various reasons many of which are related to wealth; those who move least or not at all are among the poorest. This reduced mobility among the least well off, a historic problem in Mongolia (p.68), constitutes a disadvantage in terms of access to many of the resources, such as varied pasture and sheltered winter environments, that are necessary for their animals to thrive. Other issues regarding resource access are discussed below in relation to each type of resource in turn.

Photo Page 1: Bayan Mountain



Clockwise from bottom left: 11-child family in 2 *kigizwi*; storm over K k Choq; [redacted] and interloper; *auyl* N in Qara Jaryq valley; brothers - the great hat brought out specially for the photo; lower Qara Jaryq area used as spring pasture - grazing on all these slopes; making *bauyrdaq* (fried bread).

5.2.3 Summer pasture and water access

Summer pastures in the study area are at high altitudes of 2500m to 3000m and above. The community of 60 households studied were using pastures on the western side of Bayan mountain, mostly between the Khatuu and Qara Jaryq rivers and running up to the ridgetop boundary with Tsengel *sum* (Figure 5.1, Figure 5.3).

Herders do not move around but stay in one campsite for the entire summer. These are not formally allocated, nor is it formally agreed between the herders who uses which site. Rather, most herders said they or their families had traditionally used their current campsite, and they preferred to stay there. Some said that while this was their traditional site, it was also useful for water access or for guarding their winter pastures, while others simply said they liked the location.

In theory there is free movement all over the mountain, and families can take up residence wherever they like; in practice, while the herders said they could change campsite from year to year, or even join another *auyl* if they chose, only one could name anyone who had. New herders at privatisation generally joined an *auyl* with their relatives and camped with them. Few new herders have come to the mountain since privatisation, and while some again chose sites used by parents or family, others have had difficulty finding an available campsite. In some cases newer herders (both at and since privatisation) have taken up sites vacated by families migrating to Kazakhstan.

Pastures throughout this area are considered equally good. Again, although technically there is freedom to range all over the area, in practice herders tend to stay in pastures near their own locality, because other pastures are used by other families. The most important question in choosing where to take animals for pasture is the availability of water. Livestock must be taken to the rivers for watering, so although the herdsmen have their choice of pasture, they tend to stay within reach of the rivers, or on the tops above Qara Jaryq where there are streams.

Water is an issue on the mountain. *Auyl* further from the rivers have access to wells, but these are rainfall-dependent, and rainfall is low and has been decreasing. Herders with some years' experience on Bayan repeatedly said that while pasture quality was the same from place to place, overall it had deteriorated because of reduced rainfall. One stream which ten years earlier could sometimes not be crossed, had now disappeared entirely; one *auyl* had moved down the hillside into a valley floor previously too muddy to camp in, and many said that increased wind was also drying out and destroying pasture. This year summer rainfall was good but in some recent years there has been none except in June.

Herders were reluctant to distinguish some locations as better than others for either pasture or campsites, but agreed that water access for both household and livestock use is much easier in the Qara Jaryq valley. There is open space beside the river and those living closest can draw water a few steps from their *kigizwi* (see photo p.93). The Khatuu by contrast is in a steep-sided cleft, requiring a good horseman to take livestock down to the river, and *auyl* on this side of the study area must rely on wells for household water requirements or carry water 2-3km from the Qara Jaryq.

In bad years, if wells go dry, households furthest from Qara Jaryq are technically allowed to move down to the river. However, one Kök Choqy informant, 4km distant from Qara Jaryq, said that despite there being almost no rain last summer, he did not move because there was not enough room and he did not want to cause trouble for families already there. This suggests some differences between theoretical access to the river, and what is actually possible - or rather, who feels it is possible to have access to the river at need.

Theoretically any family could camp at Qara Jaryq, but this area is already considered crowded with 21 households in four *auyl*, and more moving there would place too much pressure on surrounding pasture. Herders said the households camped in the Qara Jaryq valley were those with less labour - the elderly, those with only young children, or no sons, who thus had greater need

to benefit from easy water access.³⁰ There is no formal agreement to this effect; it is simply done.

Despite the clear advantages of a site at Qara Jaryq, herders claimed that everyone on the mountain was satisfied with the distribution of campsites and pastures. While this may be because they felt most families near the river were there deservedly because they lacked labour, the herders may also have been unwilling to discuss conflict.³¹

Labour may genuinely be a factor in obtaining campsites at Qara Jaryq; although informants there as elsewhere said their sites had been used by their family for several decades, one also mentioned the convenience of water access. Interviews discovered only one instance of a household moving to Qara Jaryq for better water access, but no information about labour in that household. While most households in the *auyl* nearest the river did have mainly young children, the former head of the collective and ex-vice-governor of the *sum*, Jardimbek, was also camped there, which raises questions at least of preferential access, although he too said this was his family's traditional site.³² Similarly, at Qyzyl Bastau the well serving three *auyl* was located directly behind the *kigizwi* of Nourbek, a businessman in the "holiday" *auyl* H, but over the ridge from the genuine herding *auyl* G which also had large numbers of small children and low labour ratios. Both households have influential positions typical of the top wealth group on Bayan (p.116), suggesting that power or influence can command a better location, and too that any link between ease of water access and labour availability is confined to Qara Jaryq, with those households lacking labour but still far from the river at some disadvantage.

³⁰ On average these *auyl* were also the least well off on the mountain; see p.114.

³¹ This is not complete speculation; conflict over resources was a sensitive issue about which information was difficult to obtain (p.77).

³² This however only takes the question back a step: how does a location supposedly "reserved" for those with little labour become someone's customary site, particularly given that individual's history in leadership? Interestingly, Hanstad and Duncan also note "traditional" claims by wealthy herders to the most desirable land (2001:1.3).

5.2.4 Mountain winter houses and winter pastures

Winter pastures and winter houses on Bayan are located in low sheltered valleys on the Sogoog side of the mountain (Figure 5.3). Without a winter house and livestock shelter (Figure 5.4) winter pastures in the mountains are effectively inaccessible, as *kigizwi* are not used in winter; access to winter pasture is thus contingent on access to a winter house (p.67). The advantages of a winter house therefore are that it enables a household to make use of these pastures (with all the benefits to livestock that moving entails), and for some also provides a source of income or extra fodder if they are keeping animals for relatives or friends.

Winter pastures are not grazed in summer but kept in reserve for winter.³³ According to the herders these are the only pastures that need protecting, although most are not at risk from out of season grazing as there is no water available in summer; in winter the herders rely on snow or even truck in ice for their water supply. Some herders said the proximity of their summer camp to their winter and spring pastures was sufficient to deter encroachment, but that there could be problems if they were further away. However most said there was no issue with out of season grazing because all herders complied with seasonal movement dates.

Figure 5.4: Winter house and livestock shelter, Bayan mountain.



³³ On descending the mountain however we saw about 20 yak in winter pasture, where they may have wandered; there was no herder in sight.

A few herders use both winter and spring pastures in the mountains. Spring pastures and in some cases houses are on the Sogoog side of Bayan, but higher up and less sheltered than the winter pastures. Some use spring pastures in the mountains every year as part of their regular migratory cycle. Another *auyl* however said that in a bad winter with insufficient hay, they would move their *kigizwi* to the lower Qara Jaryq valley floor in spring only as a last resort (they had no spring houses and the inaccessibility of the valley could be dangerous in case of illness; see photo p.93). They did not reserve these pastures in summer, not knowing in advance whether they would be required, and considered that there was enough time between summer and spring for the pastures to recover. More herders however indicated they spent the spring in Sogoog, in part to work on irrigation canals in the hayfields.

Allocation of winter houses

Under the terms of Mongolia's Land Law, pastures remain state-owned but winter houses like other structures were allocated to herders at privatisation for purchase as private property (pp.55,65). With the winter house come possession rights to the underlying pasture, allowing its protection within a 500m radius. Any pastures beyond this are legally free for anyone to use. However, people are overstepping their legal rights and laying claim to private use of pasture outside their 500m limit, agreeing with neighbours where their "boundaries" lie and marking them. Whether this is because they don't understand the law (the *bag* governor's view), because the law is difficult to enforce or poorly designed, or whether it simply represents the formalising of existing practice, is hard to say. Others said they would not want to travel far from their houses in winter because of the cold, so there may be few instances where one herder would want to cross an assumed "boundary" into winter pasture used by another. This research did not answer what is probably a more important question, how the extent of pasture effectively enclosed by each herder's "boundaries" was decided upon and whether this is considered fair.

A second important question with regard to winter pasture is who has access to it at all, in other words, who has a winter house. Winter houses were allocated by the *sum* government chiefly on the basis of existing usage, as well as

according to the size of the *ayul*, as an indication of herd size. Therefore, most families with winter houses were herders for the collective, have larger herds, have continued to use the house they or their parents had been using, and feel the leasing process has worked well.

By contrast, informants said obtaining a winter house was more difficult for newer herders especially, those who lived in the *sum* or *aimag* centre and took up herding at or after privatisation. Some were able to buy winter houses from people migrating to Kazakhstan or moving to the *sum* or *aimag* centre. Others have made renting or sharing arrangements with friends and relatives, as with one herder who had the use of three winter houses under socialism³⁴ and made over one each to his son and cousin when they began herding after privatisation. However, about a third of new herders on Bayan (7 out of 22) were known to have winter houses, compared to about half the ex-collective herders.³⁵ While this is a small number, it shows that new herders did find ways to obtain access to winter houses. For example, of the seven known to have houses, four have established herding relatives, suggesting that kinship figured in influencing house allocation.

Currently however, all existing winter houses have been allocated, particularly to those with larger herds, and the *sum* government considers that allocating any further land in winter pasture will lead to overcrowding. Anyone who wants a winter house now must either buy an existing house (which is beyond the means of those with smaller herds), or come to some kind of renting or sharing arrangement. This is another reason for having livestock kept in winter pasture by others. Very few new houses are being built, partly because of the cost, but also because this must be negotiated and agreed with the potential neighbours before the *sum* government will issue a permit to build. Most refuse; the exceptions are deals among family members, as with one man who began herding only five years ago but whose winter neighbour is his brother, and who consequently had no trouble obtaining agreement and permission to build. This

³⁴ These houses were perhaps used by the *ayul* rather than the one herder; he is the head of the *ayul*.

³⁵ Details of winter house possession were not obtained for every *ayul*.

was the only instance among households interviewed of someone building rather than inheriting or buying rights to a winter house. Where proposed neighbours are not family, building of a new house must be discussed and agreed upon by herders in the area³⁶ at a meeting convened by the *bag* governor.

Even where a household has nominal access to a winter house, the ability to realise it is still dependent on both mobility and on having sufficient labour to tend livestock in winter pasture. Some households are thus unable to move to winter pasture and remain in Sogoog, although some have livestock wintered in the mountains in exchange for use of their winter house (p.90).

5.2.5 Sogoog pastures: autumn, winter, spring

Unlike winter and spring pastures on Bayan mountain, pasture in Sogoog is neither allocated to nor claimed by individual herders, but is open to all. Theoretically "all" means anyone from within the *sum*, or from outside the *sum* with the government's permission; in practice it means herders from *bag* #3, #4 and #5 who have houses in the valley and come there for haymaking.

During the summer year-round residents of Sogoog must keep their animals out of the hayfields, sending them into the hills either side of the river; mosquitoes and hay watchmen act as a disincentive to encroachment. After the haymaking however, herding families come down from summer pasture in late August and graze their livestock on the stubble for the autumn. In mid-October all who are able either move, or send their livestock, back up to the mountains; many return in spring with newborn animals. As described above however, increasing numbers of herders are spending three seasons in Sogoog.

Herding families returning to Sogoog in autumn move into their mudbrick "winter" houses.³⁷ As on Bayan, these seem to have been mostly allocated to

³⁶ It was unclear whether this was a meeting of the entire *bag*, or just of other herders using the mountain.

³⁷ Unlike Mongols, Kazaks (in Bayan-Ölgii at least) tend to use their felt tents only in summer. The Kazak *kigizwi* is larger and has a higher roof than the Mongolian *ger* and is consequently more difficult to keep warm.

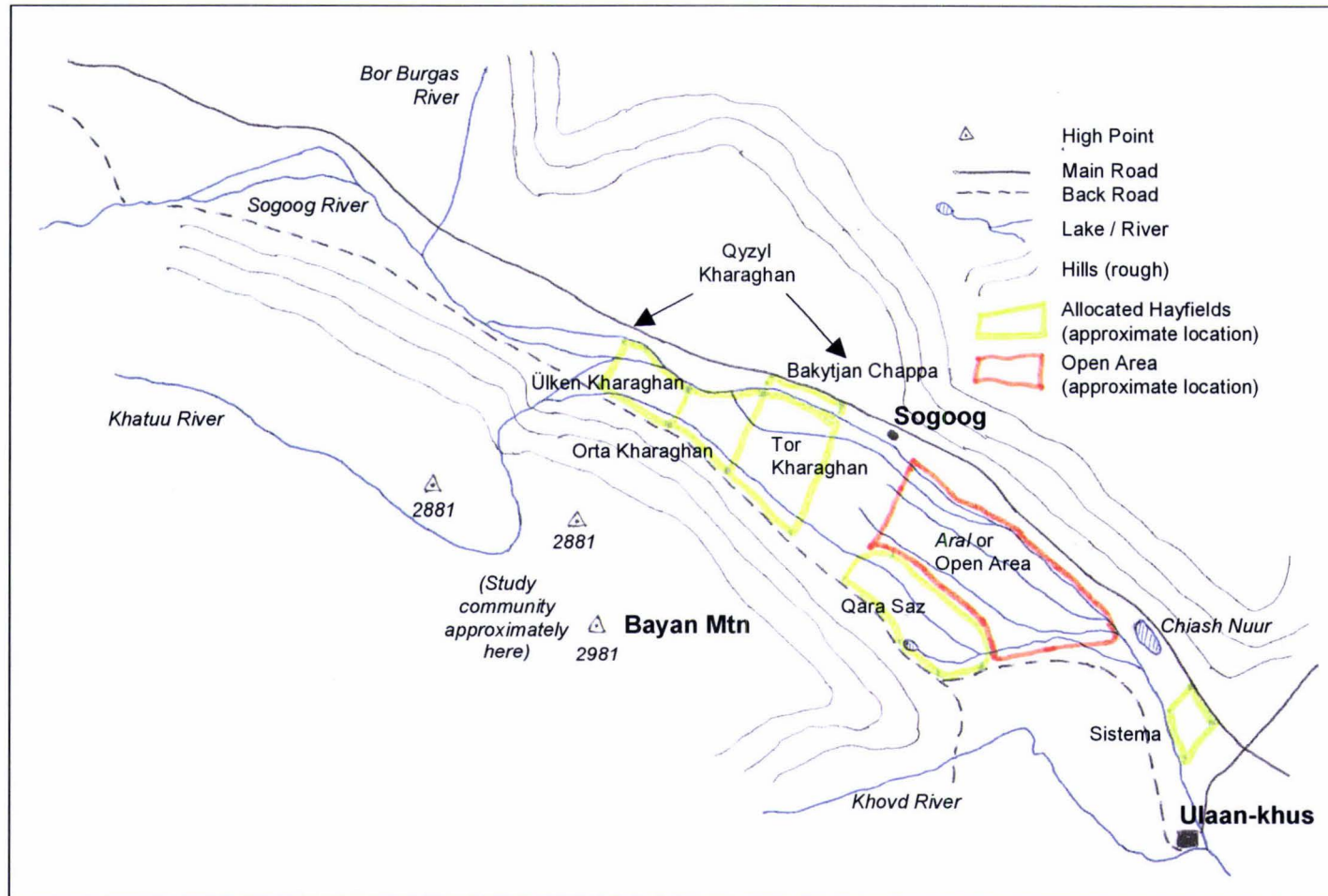
the households using them at the time of privatisation, although some new houses have also been built. Even in Sogoog however, having a good winter house and shelter can be difficult as bringing down stones from the mountains for building is costly.

Land is allocated to individual households for haymaking, but once the hay is cut livestock can graze anywhere in the valley. As in summer pasture however, herders generally take their animals to a particular location, because other areas are used by other families. Pressure on the land is heaviest in autumn when all the herders are present with their livestock; both they and the *sum* government feel Sogoog is becoming crowded at this time. Some herders said they were glad to return to winter pasture in the mountains where there was more space and more pasture. Large numbers of livestock are also present in spring. Nevertheless, herders interviewed considered there was enough pasture at Sogoog for everyone.

5.2.6 Hayfields

The open flats of the Sogoog river serve as hayfields for *bag* #3, #4 and #5. Hayfields (see Figure 5.5) extend about 10km upstream of the *bag* centre into Qyzyl Kharaghan, a mostly dry area studded with thornbushes (*kharaghan*) and patches of stony ground and dependent on canal irrigation. This area is divided into three large sections true right of the river, in which herding households have been allocated one of 250 0.5ha blocks of land. Boundaries are indicated by stones or wooden markers. Haymaking blocks are not privately owned but remain state property. True left of the river is Bakytjan Chappa, a 15ha block which by contrast is irrigated and harvested entirely by one household; this is discussed further below. Hay in Qyzyl Kharaghan grows to knee height at best, often less. Downstream of the *bag* centre the river flats are wet and the hay correspondingly taller. Near the base of Bayan mountain where there are a number of winter houses is Qara Saz, ankle to knee deep in water and also partially allocated in 0.5ha blocks (see photo p.109). The remainder of Qara Saz and the wet land in the centre and to river left of the flats, known simply as the *aral*, or the open area, can be used by anyone in Ulaan-khus *sum*.

Figure 5.5: Sogoog river flats and hayfields



Source: hand-copied from 1:100,000 map, Ulaan-khus sum government office. Distance from Ulaan-khus to Sogoog approximately 20km.

Figure 5.5: Sogoog river flats and hayfields

Each of the three large sections in Qyzyl Kharaghan has a watchman, two of whom are resident in Sogoog while the third travels down from Qara Jaryq. The hay watchman's task is to keep livestock out of the hayfields, and ensure that no one starts cutting before the official start of the haymaking. Hay watchmen are paid by the families for whose land they are responsible, rather than by the *sum* government. Payment is for the summer months only; once the haymaking begins the watchman's job is over as herders can keep watch on their own allocated fields.³⁸ In Qara Saz, which falls outside the watchmen's jurisdiction, some families with allocated blocks have an arrangement whereby each family in turn remains in Sogoog for summer to watch the hayfields for the whole group, while their animals are kept in summer pasture. In general however there are few problems of encroachment in the hayfields, and those are related to straying animals rather than people.

Nevertheless, there are issues surrounding hay. The *bag* governor and another experienced herder both expressed the opinion that while there is sufficient pasture, the real problem in this area is hay. Hay is important for getting stock through the worst days of winter, especially if there has been little rain in summer and pasture growth is poor, but more particularly in early spring just before and after young animals are born and when adult animals are at their weakest. This is the highest risk time for stock loss. Without sufficient hay the risk of stock loss to *zud* is also much greater. Therefore, issues that impact on herders' ability to make enough hay for the winter have significant repercussions.

Irrigation

The chief reason why hay is a problem in the Sogoog valley is irrigation. In the *sum* vice-governor's opinion all areas are equally well-watered, an opinion contradicted by every herder interviewed. Qyzyl Kharaghan upstream of the *bag* centre is very unevenly irrigated, with the best land closest to the river and the middle section Orta Kharaghan the best watered of the three. Canals are hand-dug and maintained by the people whose land they serve, but not all succeed in

³⁸ This is obviously more difficult with larger holdings; on the second morning of the haymaking there were 20 horses in a freshly mown field in the 15ha Bakytjan Chappa.

bringing water where it is wanted (see photos p.109). Canals upstream tend to take off water from those downstream, and as the river level is well below the banks it requires considerable work to get the depth and slope of the canal right, plus diversionary weirs in the river itself. A number of attempted irrigation canals have failed to carry water, and even well designed ones may be left dry if low rainfall drops the river level.

Under socialism the hayfields were well irrigated because this was organised and paid for by the collective; this responsibility now falls to individual households, who cannot afford the same quality of irrigation. This is recognised by the *sum* government which last year devised an irrigation scheme for the whole community, but this collapsed because poorer households could not afford the small contribution required.³⁹ For the moment therefore, each household is still dependent on its own resources for irrigating its land.

This year, despite good rainfall in the hills compared to recent summers, the river level is low and the hayfields' quality mixed, and quite erratically so: land on two sides of one canal was better on one side than usual, worse on the other. In general however, herders who said their land was good this year also commented that they were glad to be near the river or a good canal. A key factor in obtaining sufficient hay therefore is the location, relative to irrigation, of the household's allocated land.

Allocation of hayfield land

Irrespective of household or herd size, each herding household has been allocated 0.5ha for hay production. Under socialism also, the hayfields were split up among families, but the 0.5ha limit per family was imposed after privatisation, when numbers of herding families rose dramatically. Some families' holdings were thus reduced, leaving other blocks of land free for allocation. Land was allocated to each household by the *sum* government and the *bag* governors. Despite the 1994 Land Law stipulating annual allocation of hayfields (Hanstad and Duncan 2001:2.19), in Sogoog this seems to have been

³⁹ 6,000 *tögrög* - under US \$6.

done on a once-off basis. Herders themselves had varying influence over hayfield allocation. Generally, those who had been herding a long time at privatisation either retained the block they had been using, or could request land where they wanted it. Younger families had to take what was allocated to them, and those who became herders at privatisation were mostly allocated poor land requiring considerable irrigation work to be productive.

There have been some exceptions. In one case two brothers, one new to herding at privatisation, one since, requested adjacent blocks of land near the river in Ülken Kharaghan, which were granted them by the *sum* and *bag* governors; it was not established whether this happened before or after their brother became *bag* governor three years ago. One informant also claimed that in spite of the 0.5ha limit per household, it was an open secret that some had larger blocks of productive land. They had managed to obtain good land near their own that was freed up at privatisation when holdings were reduced to 0.5ha. While this was felt to be unfair, there was no point in complaining to the *bag* and *sum* governors since they were in the know and were taking no action. According to this informant, some good land still remains unallocated, but because too many people want to claim it, the *sum* government is avoiding conflict by not assigning it to anyone.⁴⁰ On a different note however, Ainagul, a widow with four young daughters and no sons, requested land in a wetter area downstream from the *bag* centre since she is unable to dig a canal, and this was agreed to. In addition, some herders in Qyzyl Kharaghan said they had blocks larger than 0.5ha because their area contained extensive stony ground and thornbushes (which was visibly true). While therefore it seems likely that favouritism or leverage plays a part in the allocation of land, there does also seem to be recognition of genuine need.

Labour

Another constraint in addition to the productive capacity of the land itself is labour, implicit in the widow Ainagul's request for land which did not require irrigation. Herders work on irrigation canals in the spring when many are in

⁴⁰ This does however rest on the testimony of a single informant. All others interviewed said the good land had all been allocated.

Sogoog already with newborn animals. However, households short on labour have less to spare for canal construction and maintenance after the normal work of herding, and are likely to have less productive land in consequence. The haymaking itself is also affected by lack of labour - several informants noted that this is a difficult time for the elderly, or those who have no grown sons. In addition, herders must still take their turn at herding for the *auyl* unless another family member is capable of doing so. This means either stopping in the middle of haymaking, or the men in the *auyl* taking turns to cut as fast as possible and return to the mountain. Relatives from the *sum* or *aimag* centre are often called upon to help with haymaking, sometimes in exchange for their own small animals being looked after by the herding brother or cousin.⁴¹ In another instance, two brothers and a cousin, all from different *auyl*, were working adjacent blocks of land, camping and eating together in what may have been a labour-saving arrangement.

Obtaining sufficient hay

A household whose 0.5ha block produces insufficient hay has several options. First, they may be allocated an additional piece of land, but as there is only land of dubious quality left in Qyzyl Kharaghan, this will require irrigation. Thus while the *sum* government, and some herders, consider that plenty of land is still available for hay production, it is this poorer land they are referring to. However, a herder who can irrigate land and make it productive is allowed the use of it. Some herders have been able to extend their 0.5ha in this way.

Secondly, and perhaps more commonly, those whose land is unproductive in a given year, or whose herd is larger than 0.5ha will support, can go to the *aral* or open area. Many of the families encountered on Bayan had gone to the open area because the poor growth in their allocated hayfields was not worth cutting.⁴² About 30 of the 240 families in *bag* #4 do this every year rather than just in bad years. Making hay in the *aral* has its own difficulties because the

⁴¹ Of several herders whose relatives were helping with haymaking, only one mentioned this exchange, although it does figure in the literature (e.g. Humphrey and Sneath 1999:143-144, Fernández-Giménez 1999b:8).

⁴² This was unfortunate in that the inaccessibility of the *aral* made it impossible to interview many from the Bayan community.

water, up to mid-thigh in places, makes bringing in trucks impossible. Hay must be carried out by camel for drying, rather than being left where it is cut. For some this means borrowing a camel, or the cost of hiring one, which may be added to the existing cost of transporting the dried hay (wherever it is cut) to the winter house where it will be needed.

A third option is to buy extra hay from those whose land produces more than they need. Making extra hay is therefore a potential source of income for those with small herds but good land, since even some herders who use the *aral* still buy hay for their herds. Extra hay can be used for cash income, or as payment for wintering animals in the mountains. Even the widow Ainagul planned to cut more hay than her five goats needed, and sell the rest.

Hay as an investment

This is the purpose of Bakytjan Chappa, the 15ha claimed by Bakytjan true left of the river. As a member of *bag* #4 he has the right to a 0.5ha allocation, but is also permitted to use whatever land he can irrigate - which has been increased to 15ha in the six years since he and his family first began the irrigation works. Bakytjan is not a herder but a teacher at the local school; his hay income goes towards his large family's schooling and university tuition. Thus despite the sizeable block of land he has claimed, Bakytjan is not considered a wealthy man. The use rights to an even larger 70ha block have been bought by the businessman Nourbek whose *kigizwi* on Bayan is located beside the Qyzyl Bastau well (p.96). Like Bakytjan he is not a herder, but is making hay purely for sale. The 70ha block is half of the land known as the Sistema, an area near the *sum* centre previously set aside by the collective for hay production⁴³ and fenced against animals. While he had to apply to the *aimag* governor to buy the use rights because of the size of the block, Nourbek said this was agreed to in part because he had worked on this land for 12 years under socialism. The Sistema was pump-irrigated by the collective but now relies on the Sogoog river and rainfall; Nourbek hopes for some assistance from a government projects office that sponsors the sinking of new wells. Both Nourbek and Bakytjan also

⁴³ And an abortive attempt at vegetable growing.

have standard 0.5ha blocks allocated to them in Qyzyl Kharaghan, which they are still using.

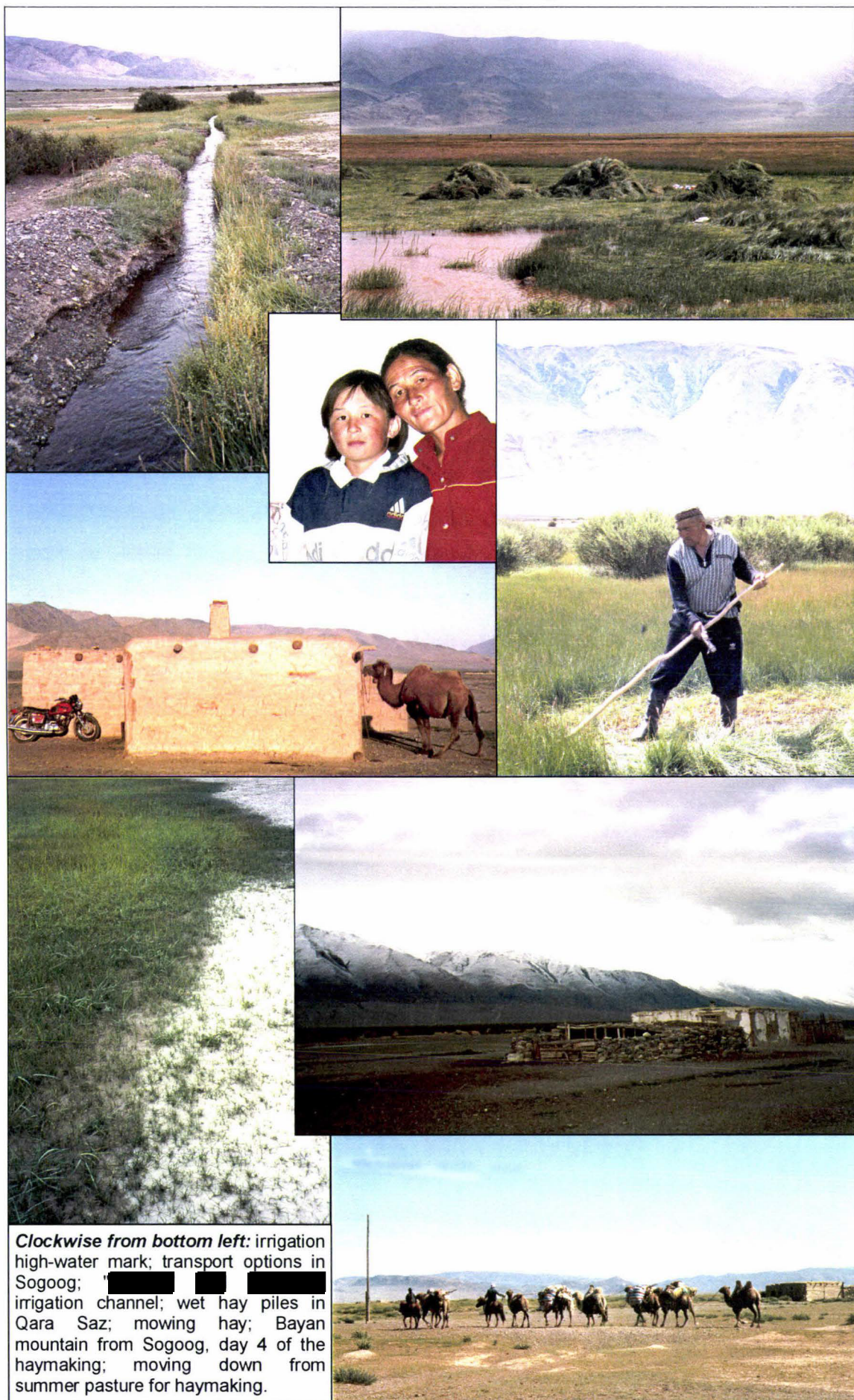
User fees

Recent changes to the Land Law in Mongolia are intended to promote formal tenure, which would affect hayfields though not pastures (p.61, note 15); the *aimag* Land Office however indicated that so long as informal arrangements are working, they are unlikely to attempt to formalise tenure. At present hayfields attract no land use fees, but herders have been told that in future the *sum* government will issue certificates for allocated land and then fees will be charged. This would chiefly affect those with larger holdings, whose fees would be correspondingly higher, but may also mean some less well off families will be obliged to cut hay in the *aral* if they cannot afford user fees on a 0.5ha block. However, no indication has yet been given as to the likely level of user fees or the date of implementation.

5.2.7 Key resources and access

Herders asked to specify which resources are most important for herding gave good pasture a clear first place, closely followed by hay, then water availability. It was often difficult to distinguish whether this last referred to distance from water, or to good rainfall and climate, obviously a factor outside herders' control and equally contended with by all. It is worth noting however that most who mentioned pasture and all who mentioned water were on Bayan, where decreased rainfall and proximity to water were noted as issues. Several stressed the dependence of good pasture on rainfall. By contrast, most who mentioned hay as a critical resource were interviewed in Sogoog when the haymaking was either imminent or underway, so that immediacy may have had some influence on their responses. Having a warm winter house, either in the mountains or in Sogoog, was also cited a few times but other resources such as herding skills or available labour figured only once each.

Photo Page 2: Sogoog



When the question was broadened to enquire which factors had the greatest effect on a household becoming better or worse off, this changed. The only resource now mentioned more than once was having a winter house, particularly in the mountains. Availability of hay did not figure at all, pasture only once. Winter houses may figure more prominently here in part because some may have interpreted the first question as relating to natural resources only. Other factors considered important to household well-being are discussed below in the context of wealth differentiation.⁴⁴

Combining the responses to these two questions, the most critical resources from the herders' perspective are seen to be pasture, water availability, hay, and winter houses. Of these, only pasture in Sogoog may be considered equally available to all. Mobility constraints, largely related to wealth, may preclude access to mountain pastures. Access to mountain pastures in winter is also contingent on access to a winter house, which is not possible for every household; ex-collective herders seem to have had some advantage here, though perhaps less than is suggested, with kinship also having some effect (p.98). Water may refer here to rainfall rather than location, but access to easily available water in summer pasture at least is an issue, with some good locations "reserved" for labour-deficit households but some perhaps captured by the influential or powerful. Similarly, the location of allocated hayfields makes a considerable difference in producing adequate hay for winter use; while there has been some preferential allocation in favour of ex-collective herders, there is some indication that influence or kinship has also secured access to productive land.

Access to a winter house, a good location relative to water in summer pasture and well-irrigated hayfields is thus affected by various factors including, but not limited to, relative wealth. A household which can command access to such key resources clearly has an advantage over one which struggles in all of these areas, so that good access to resources in turn affects the household's relative wealth.

⁴⁴ See in particular Table 5.4, p.123.

5.3 Participation in resource governance

The various resources necessary to the herding life, as already indicated, are managed by different bodies in different ways.

The *sum* government allocates pastures to a *bag* as a whole and sets the dates for seasonal movement (with the agreement of herders at a *bag* meeting) but does not tell the herders where they should go. The *sum* government is also responsible for allocating winter houses (again with the possibility of involving a *bag* meeting if difficulties arise), and for allocating hayfields (with varying degrees of input and influence from herders).

Herders are formally involved in resource management through *bag* meetings, open to representatives of all families in the *bag*. In *bag* #4 the quorum and usual attendance is around 70 of the 240 families in the *bag*. The meeting works by majority decision, but if a sizeable group do not agree with proposed movement dates, the *sum* government tries to accommodate them to avoid later problems with non-compliance. Generally there is no disagreement about movement dates in *bag* #4 although this does happen in other *bag*. Meetings of the *bag*, or perhaps of a subgroup of herders using an area, may also be called to decide whether new winter houses may be built if the proposed neighbours are not family, but this is rare.

Less formally, herders make their own choice of which summer pasture area to go to (such as Bayan or Üsh Bulaq), and where to camp within that area. This is not a free-for-all, but depends to some degree on tradition and unspoken agreement. Thus despite there being no formal agreement, the herders know that generally it is families with little labour who camp near the Qara Jaryq river. There is also an understanding both on Bayan in summer and in the Sogoog pastures that, although in theory herders can go anywhere they like, each *auyl* or household tends to use certain pastures because others are habitually used by other people. In both these locations the pasture quality is fairly even (in spite of the water access issue on Bayan), there is considered to be sufficient for everybody, and consequently there seem to be few problems.

Table 5.2: Resource management decisions

Decision-making body	Decisions over resources			
	BROAD	LOOSELY CONTROLLED	SPECIFIC TIGHTLY CONTROLLED (more limited resources)	
SUM GOVT	Pastures for Bag		Winter House Allocation	Hayfield Allocation
			↓	
BAG MEETING	Dates for Seasonal Movement		Conflicts over Winter Houses	
↑ HERDERS		Choice of Summer Pasture Area		
		Choice of Summer Pastures		
		Choice of Campsite in Summer Pasture		
		Choice of Pasture at Sogoog		
	LITTLE / NO CONFLICT	LITTLE / NO CONFLICT	SOME CONFLICT; RECOURSE POSSIBLE?	SOME CONFLICT; NO RECOURSE

Issues arise chiefly with more limited resources, those which are insufficient to supply everyone's needs well and are consequently more tightly controlled (Table 5.2). The two areas most referred to as sources of difficulty are winter houses in the mountains, and hayfields. Both are identified by the herders as critical to doing well in herding; both have seen some preferential allocation in favour of ex-collective herders, with newer herders at some disadvantage. With these more formally controlled resources, there are also formal processes for dealing with grievances.

For winter pasture access through obtaining or building a winter house, if the parties are unable to resolve the problem it must go to a meeting of herders using the Bayan winter pastures.⁴⁵ This works on the understanding that local people know the area well, the extent of pastures being used and the parties involved, and are thus well placed to decide on the appropriate outcome (whether or not pasture should be shared with a newcomer). The minutes of such a meeting must be sent to the *sum* government which confirms the decision. If one of the parties is unhappy with the outcome they can then appeal to a magistrate. However, while herders would concede that there are conflicts and jealousies over winter houses, none could or would give specific examples, or could say what the outcome would be in such cases.

With hayfields, the issues concern the quality of the land allocated to each household, the loss by some of portions of good land they had been using before privatisation, and the alleged withholding by the *sum* government of blocks of good land, while some households have more than the 0.5ha of productive land they are entitled to. Anyone unhappy about the land allocated to them would have recourse first to the *bag* governor, then, if the matter could not be resolved, to the *sum* government. Again, no specific instances were given, nor the likely outcome. However, herders interviewed seemed to feel there was little point in pursuing official channels because of official complicity in the perceived problems: all the hayfield allocation had been done by the *bag* and *sum* governors. There is also the fact that, apart from some remaining blocks which may or may not exist, all the good land has already been carved up into 0.5ha blocks and allocated; it is not possible to squeeze further people on to the land as it may be with winter pastures. One herder commented that the best course for those with unproductive haymaking land was simply to pray for rain.

This is summarised visually in Table 5.2, which illustrates how the more limited the resource, the more tightly controlled it is, the less control herders have, the greater the likelihood of conflict and the less the likelihood of being able to resolve it.

⁴⁵ Or perhaps, of herders in the *bag*.

Thus while herders, as resource users, can participate in some aspects of resource management, this is largely restricted to resources which are less limited and regarding which there is little or no conflict. Significantly, the great majority of herders had no say in the allocation of more limited resources (winter houses and hayfields) at privatisation and feel that, despite official provision for it, they have no real means to resolve conflicts or perceived injustices.

5.4 Wealth differentiation

In each of the two parts of the study area there were noticeable differences in wealth. The herders were open about the existence of such differences and quite willing to talk about them in general terms, less so at the specific and personal level. They were also clear that differences in wealth had increased in their area since the end of socialism, with some households better off and some worse off than they had been.

5.4.1 Differences in wealth

Wealth ranking was done separately for Bayan and Sogoog. Although scores for the two groups thus cannot be integrated to give a single ranking of the entire sample, characteristics associated with different wealth groups may still be compared, as in Table 5.3.

Informants who took part in wealth ranking, as well as those interviewed later, insisted that it was not possible to compare wealth between *auyl*, only between their constituent households. A single *auyl* might contain both wealthy and less wealthy households, and despite kinship ties better-off households could not or would not necessarily help the less well off in the same *auyl*. In Sogoog the ranking was necessarily done between households as the families were not living in *auyl*.

However, comparing the average wealth rank of households in each *auyl* suggests that some *auyl* are noticeably better off overall than others. The three *auyl* with the lowest average wealth rank (L, N and P; see Figure 5.2) were all at

Qara Jaryq, already suggested as a locality with labour-deficit households and many young children (p.95).

Definitions of wealth

The *sum* government officially defines wealth (or more correctly poverty) according to a monthly per person income measure. This includes a conversion factor for various kinds of livestock based on the assumed “profit” or income from animal products; cattle (cows or yak) have more than three times the value of any other animal. Placing an income value on livestock in this way means that those with small herds can be considered among the official “poor”.

In talking with the herders however, the objective in wealth ranking and subsequent interviews was to leave the possible definition of wealth as wide as they chose to make it, without focusing solely on income and assets. This worked well in both locations with a number of other factors being identified.

The same criteria for determining relative wealth were mentioned repeatedly in wealth ranking:

- herd size (a large herd being 100 head or more)
- other sources of income (pensions, employment)
- household composition (large numbers of children, single-parent households, young families and elderly all scoring low)
- availability of labour (related to the previous point)
- access to transportation (noted particularly on Bayan)

Other criteria given besides these were high expenses relative to income (specifically, the cost of children’s schooling and university tuition), sickness in the family, involvement in business (a few in the top group only), and having a winter house in the mountains. One informant included laziness (as opposed to self-discipline) when listing factors in defining wealth; he did not however distinguish this as characteristic of any of the groups into which he divided households.

Table 5.3: Bayan and Sogoog wealth groups compared

Bayan	Sogoog
<p>Group 1 (3 households) (only ones scored top by all 3 informants)</p> <ul style="list-style-type: none"> • very large herds (over 100 head) • have transportation • other income (pensions) • small family size • winter houses • some business involvement, private land, positions of influence 	
<p>Group 2 (11 households) (similar to top group)</p> <ul style="list-style-type: none"> • large herds • some transportation • other income (less than top group) • lot of labour (older children) • winter houses 	<p>Group 1 (7 households)</p> <ul style="list-style-type: none"> • large herd (100 head) • job / source of income • labour • some transportation • some business involvement
<p>Group 3 (15 households)</p> <ul style="list-style-type: none"> • mid-sized herds • less income • some govt-employed (teachers etc) • labour • some winter houses (not teachers) 	
<p>Group 4 (20 households)</p> <ul style="list-style-type: none"> • small herds • less or no income • lot of children • less labour • paying for schooling / tuition • single-parent families, young families, elderly 	<p>Group 2 (2 households)</p> <ul style="list-style-type: none"> • mid-sized herd, no income • few animals, some income • lot of children
<p>Group 5 (11 households)</p> <ul style="list-style-type: none"> • very few animals (e.g. 20-30) • no income (except from sale of animals) • lot of small children 	<p>Group 3 (7 households) (not moving, unlike Bayan equivalent)</p> <ul style="list-style-type: none"> • few animals (about 30) • no income • lot of children • some sick
	<p>Group 4 (5 households)</p> <ul style="list-style-type: none"> • no animals • no income • lot of small children • single-parent families

Sogoog wealth groups are positioned approximately as they compare to Bayan groups; see p.117.

Characteristics of different wealth groups

On Bayan the 60 households were divided into five groups (Table 5.3). Households in the two wealthiest groups were perceived to be those with very large herds of 100 head or more, with income from pensions, their own transportation, small family size, plenty of available labour, and winter houses. The top group was distinguished by some business involvement, private use of land, or positions of importance.

Households classed in the middle had mid-sized herds, some income including through employment by the *sum* (as teachers, etc), enough labour in the family, and some winter houses.

Those considered less well off tended to have small herds, less or no income, large numbers of children, schooling and tuition expenses to meet, and less available labour. In this group were young families, single-parent households (both female- and male-headed), and the elderly.

The poorest group had very few animals (20-30), no income except from the sale of animals, and many small children unable to contribute to the household's labour requirements.

In Sogoog, while essentially the same criteria were used to determine wealth, the four groups did not correspond exactly to the groups on Bayan, although they did display similar trends from richer to poorer. The wealthiest group in Sogoog was identified as having a large herd of about 100 head, income (particularly from employment, with the school the major employer), perhaps transportation or a small business venture, and sufficient labour.

Households in the second group had either a mid-sized herd with no income, or a smaller herd with some income, and a large family. This seems to fall somewhere between the third and fourth groups on Bayan (see Table 5.3).

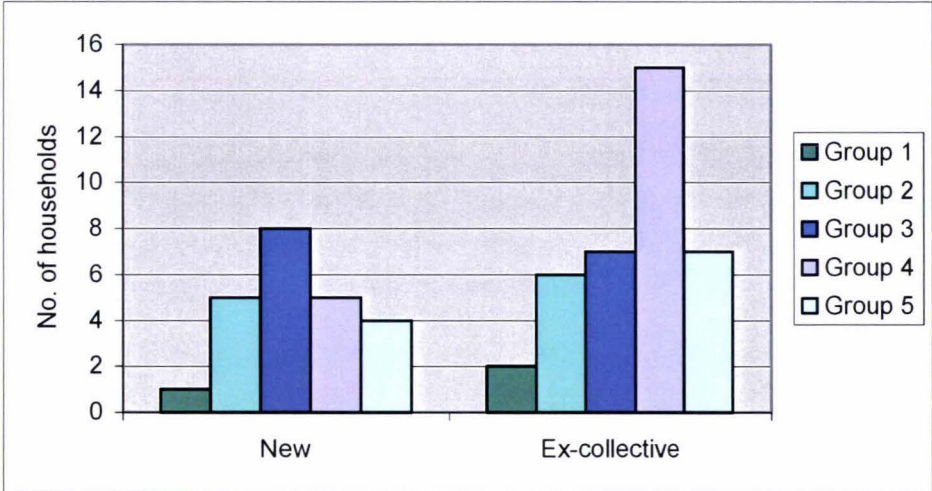
Those in the third wealth group had small herds (about 30), no income in most cases and large numbers of children; some were sick. This seems to equate to

the poorest group on Bayan, except that this group does not move. Nor is it the poorest group in Sogoog: this includes those with no livestock at all, no income, many (small) children, and single-parent households (all female-headed).

Other informants not involved in wealth ranking used similar criteria, identifying the best off in the community as those with large herds, transportation, labour, good food, winter houses and land in Sogoog; the least well off were aged 20-50, had few or no animals, no income and many children; they were not yet eligible for a pension,⁴⁶ or were former government employees who had acquired no livestock. Some of these factors clearly relate to the life cycle of the household and most are typical factors affecting wealth in Mongolia (p.56).

Being a new herder was not mentioned as a criterion in wealth ranking by any informant, and is therefore clearly not among the most important of the many factors influencing relative wealth, except by inference, such as the relative likelihood of having a winter house, or perhaps herd size or access to transportation. Thus despite the widespread perception that new herders have had some difficulties in resource access, rather than being clustered towards the poorer end of the spectrum, they are in fact spread across all wealth groups, as Figure 5.6 shows.

Figure 5.6: New and ex-collective herders on Bayan by wealth group



⁴⁶ Women are eligible for pensions from age 55, men from 60.

Spread of wealth groups

On Bayan, perceptions of differences in wealth across the community as a whole depended on the perspective of the person interviewed. Two wealth ranking informants from the second lowest wealth group distinguished 4-5 households as comprising the wealthiest group on Bayan, which one said stood out as better off, with differences between the remaining groups much less marked. He identified households in this group as spending the winters in the *aimag* centre, Ölgii, having private land which some had received during privatisation, and having positions of importance such as the directorship of the youth federation for the *aimag*. Included in this group were Jardimbek, the former head of the collective and ex-vice-governor of the *sum*, the businessman Nourbek who has the use rights to 70ha of hayfields in the Sistema, and another of the herders from the “holiday” *auyl* H who spends most of the year in Ölgii.

Conversely, the third wealth ranking informant on Bayan was Jardimbek, who had a much larger top group and correspondingly smaller second group (in which he ranked his own household), and made no mention of any unusual features in regards to the wealthiest group. His ranking of both upper groups was related to income, herd size, access to transportation, and labour, in addition to which he said his top group had no need of assistance from others.

Generally, informants from middle to upper wealth groups said that some households were better off in small ways, but that there were really no great differences. This could be contradicted by simple observation of household living conditions, with the better off particularly noticeable. Informants from lower wealth groups however were more aware of some families being very poor, while they said most others were about the same. One however said that it was very clear which households were the wealthiest.

In Sogoog each wealth ranking informant divided the 23 households⁴⁷ relatively

⁴⁷ Two were subsequently removed from the composite wealth ranking as they were discovered to be in summer pasture rather than present in Sogoog. The numbers of households in Table 5.3 thus add to 21.

evenly into groups. However comparison of the characteristics of different wealth groups in the two communities (Table 5.3) shows that, unsurprisingly, the wealthiest group on Bayan is not represented in Sogoog at all. Since informants on Bayan had indicated that it was chiefly the poorest families who did not move even to summer pasture, it had been expected that most of those in Sogoog would not be well off when compared with households on Bayan. This might have been so if it were not for the school, which provides regular employment for at least six households, although this was not the only factor behind some households being better off. Even so, the majority of households in Sogoog were grouped toward the lower end of the Bayan spectrum or even below it. Comparison of the Sogoog groups with those on Bayan also shows a definite gap between the wealthiest group and the rest, confirming Bayan herders' information that households not moving are among the least well off.

5.4.2 Changes in wealth

While differences in wealth existed under socialism (see p.52), they were much less pronounced, and poverty was virtually unknown. Since privatisation began in 1991 however, differences in wealth have become more marked.

Differences in wealth in the last ten years

Informants involved in wealth ranking said there would be considerable differences if the same households were ranked as they stood ten years earlier.⁴⁸ Because people were now herding for themselves rather than the government (through the collective) they had more choices available to them; they were also learning how to handle private herds and in some cases private land, for themselves. In this view, expressed by several herders, opportunities had opened up for those who were able to profit from them.

Where the herders perceived that all had been equal under socialism, this had now changed, although not predictably, according to some: richer households had become poorer and poorer households richer, and this could still happen. In one herder's view positions had even reversed from what they were under

⁴⁸ The figure of ten years was chosen arbitrarily to avoid automatic comparisons of life before and after privatisation (11-12 years ago), but most informants still made this connection.

socialism - poorer families had done better by dint of hard work, while better off families had had to face new costs such as children's schooling and had had to split herds on their children's marriage.

A more pragmatic view however was that the reasons for differences in wealth were the same as during socialism: having money and livestock and working hard made the difference as to how well off a household was.

Reasons for changes in wealth

Some informants maintained that it was difficult to say for whom the situation had improved, since all had been affected by the same difficulties: rising cost of living, falling prices of animal products (especially cashmere), low rainfall with consequent deterioration of pasture and decreased hay production leading to stock losses, and *zud*.

However, while all herders have had to contend with these issues, not all have been affected to the same extent. To take the example of livestock losses in *zud*, informants said those who suffered most severely had smaller herds to begin with, so that while they had proportionally similar losses to those with large herds, their remaining livestock were not sufficient for their needs. They had also typically been short on labour, had had insufficient hay (in part because of a labour deficit), lacked warm winter houses, and some had been guilty of mismanagement or even laziness, although this last group was small compared to all those affected. This example illustrates the interconnectedness of factors such as labour and hay, or of poor herding skill coupled with lack of a winter house, both of which could be more likely among new herders.

In more general terms, households which have become better off in the last ten years (Table 5.4) were said to be those who worked hard, had more labour and less children; who had considerable herding skills and experience and did not need much advice or help; who had winter houses in the mountains, plenty of hay, livestock shelters and good water access in summer pasture;⁴⁹ who had

⁴⁹ Cited by one informant only, a Sogoog resident who is usually in Üsh Bulaq (not Bayan) for summer.

sources of income besides herding, including business; and who had large herds at privatisation and consequently both greater income from animal products and the option of selling livestock to avoid winter losses if they were short on hay.

The list of reasons given for becoming less well off was more comprehensive (Table 5.4). Those who have become worse off in the last decade were often new herders at privatisation, who were allocated livestock but no winter house (thus facing the additional cost of having livestock kept in the mountains in winter); those who may have a winter house but are short of labour, or of hay due to laziness or lack of labour; those with small herds (including herds split on a son's marriage), who have insufficient herding experience or poor management skills, or have been heavily affected by *zud*; those with large numbers of children for whom government support is no longer forthcoming; the elderly, sick, or single-parent households; those affected by alcohol, those unemployed after privatisation but not yet eligible for pensions, and those with no other sources of income besides herding.

Several informants also identified potential triggers leading to poverty: loss of livestock to wolves or thieves; loss of most or all animals in *zud*; sickness, accident or death, especially affecting a parent. Thus, loss of livestock would lead to reduced income and sometimes to food insecurity with some meals missed. These informants commented that once a household began to be badly off, it was very hard for it to recover. This was confirmed in interviews with herders who had seen their own circumstances deteriorate, most of whom foresaw a continued downward trend for their families. Some informants however did believe households could become better off, chiefly through hard work to increase cash income, together with improved management and herding skills.

Most of these factors, listed in Table 5.4, were supplied in response to the question of which households had become better off and which worse off. Some informants were also asked to rank the various factors they had listed.

Table 5.4: Factors in changing wealth and their relative importance

Factors leading to changes in wealth (listed by total times cited)	Times cited as factor in becoming:		Total times cited	Times cited among most important factors
	worse off	better off		
hard work / laziness	4	13	17	4
labour	7	6	13	
income (herding / other)*	4	7	11	2
herd size at privatisation	3	7	10	2
winter house in mountains	5	5	10	4
adequate hay	7	1	8	
herding experience	3	4	7	3
many (small) children	5	1	6	1
management skills	3	3	6	
<i>zud</i> (climate)	4		4	2
sickness	4		4	
ineligible for pension	4		4	
loss of livestock	3		3	
new herder	2		2	
single-parent household	2		2	
old age (and sickness)	2		2	
alcohol issues	2		2	
no livestock	2		2	
death / accident in family	2		2	
winter house but short of labour	1		1	
splitting herds	1		1	

* Includes income from business, employment and pensions.

Easily the most frequently mentioned was hard work, or its opposite, laziness. Interestingly, laziness was much less cited as a reason for becoming worse off, than hard work was for improvement, suggesting that the significance of laziness as a factor in poverty may be more a commonly-held perception than a reality. This seems to be supported by neither laziness nor hard work being cited as characteristic of any wealth group in either community (p.115). Labour, income (from animal products or other sources) and herd size, particularly at privatisation, also figured prominently, as did having a winter house, sufficient hay, good herding and management skills and experience, and the number of younger children in the household.

Herders asked to rank the factors they cited as causes of changes in wealth also named hard work as opposed to laziness the most important, followed by a winter house in the mountains and herding experience and skills. Income, herd

size at privatisation, and numbers of children were also mentioned, but hay and labour were not (although numbers of younger children impact on available labour). Some also cited climate (including *zud*) among the factors they considered most important.

Though labour was not cited among the most important factors in wealth differentiation, it does have some bearing on others, such as the ability to make enough hay for winter, or even to tend livestock in winter pasture in the mountains (it was noted as a constraining factor by one herder); one widowed mother commented that no matter how hardworking a household is, without the necessary labour, it cannot improve its circumstances.

The size of the household herd at privatisation depended on two factors: the size of the private herd at the time, and the size of the household itself, since collective livestock were distributed on the basis of 20 sheep per person. Many who began herding at privatisation would have had only their share of the collective's livestock, unless they had previously kept animals with herding relatives. Herd size is significant also in that there was some preferential allocation of winter houses in favour of those with larger herds (p.98).

Some factors listed as important in changing wealth may also be associated with being an experienced rather than a new herder at privatisation, although this was not stated directly by any informant. Most obviously these include having good herding skills, but perhaps also an increased likelihood of having productive haymaking land or a winter house in the mountains. However, as noted (p.99), the rate of winter house possession is not too dissimilar between new and ex-collective herders. Conversely, members of all except the bottom wealth group on Bayan do in fact have winter houses.

The many factors cited by informants as affecting households' circumstances illustrate the complexity of changes in household wealth, which cannot be linked to any single major factor. As Table 5.4 shows, while access to resources, principally winter houses and hay, does affect relative wealth, it is certainly not the only or even the most important factor.

5.5 Resource access and relative wealth

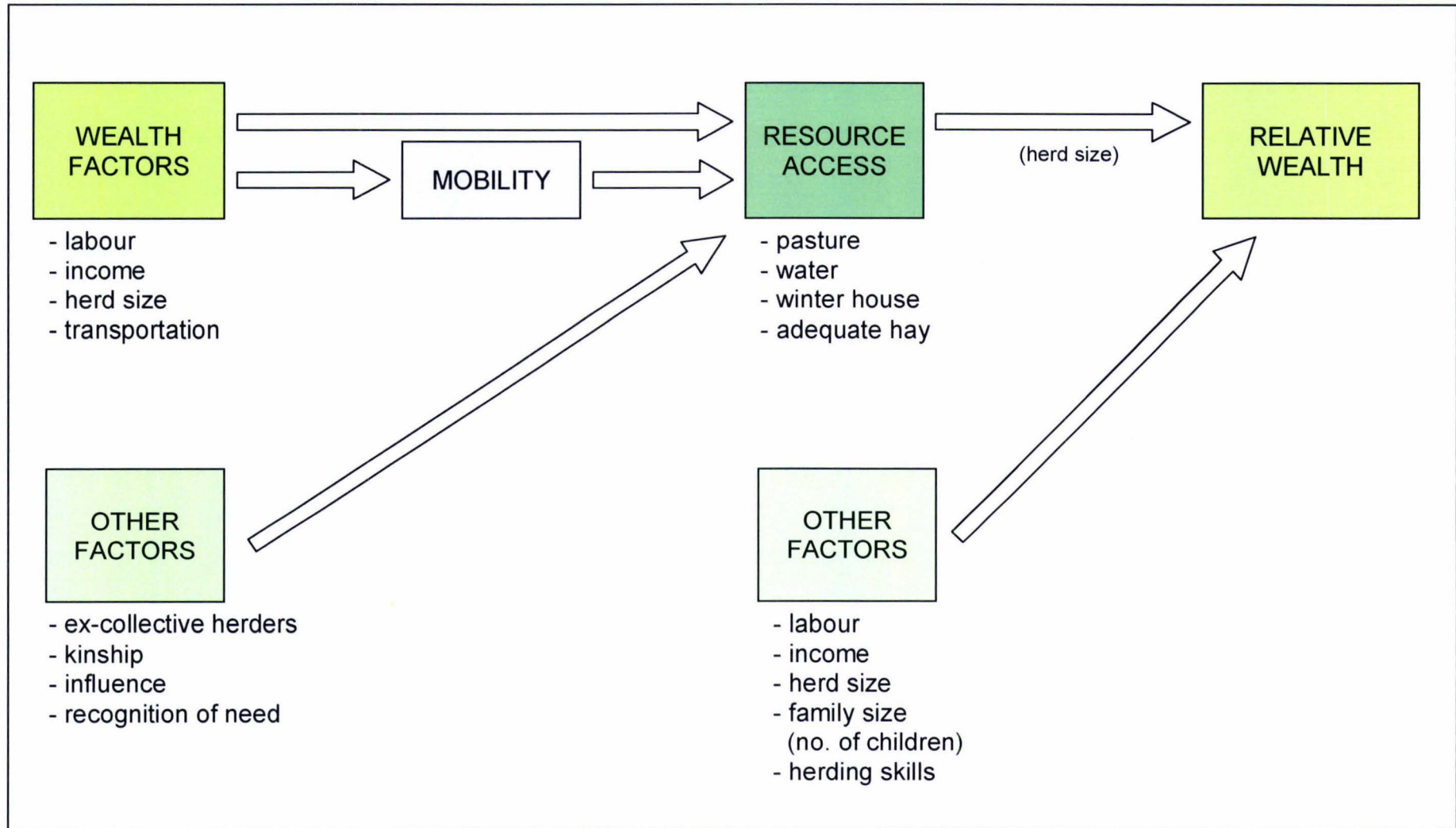
This description of wealth and resource use in Bayan and Sogoog has shown how both are affected by multiple factors. The first part of the chapter illustrated how resource access is dependent on a number of characteristics of households, including but not limited to wealth-related characteristics. Wealth affects households' access to resources notably through the ability to make seasonal moves, as well as directly. This is shown in Figure 5.7. Differences in resource access, while they exist, are thus much more than a matter of relative wealth.

Conversely, as the second part of the chapter showed, wealth status and changing wealth are also traceable to numerous factors. While these include resource access, it is not the most important issue in wealth differentiation, which is complex and not linked to a single major cause. Again, this means that while wealth differentiation exists in the study community, it cannot necessarily be concluded that it implies inequitable access to resources.

As Figure 5.7 shows, the relationship between wealth differentiation and resource access is complex because of the many other factors involved, with some degree of circularity between the two, since factors in wealth affect resource access, and access, particularly to key resources, impacts on herd size and thus in turn influences relative wealth.

For example, households with small herds are less likely to have been allocated a winter house, and less likely to be able to afford to move to it if transportation costs must be paid in livestock. However, livestock which are moved often will be in better condition to survive winter, which is especially severe in Sogoog. Inability to move to winter pasture thus means a greater likelihood of winter stock loss, resulting in decreased herd size and decreased wealth. The reverse cycle holds for households with larger herds, winter houses and their own transportation, suggesting that, while resource management is not overtly set up to favour the wealthy, it may nevertheless serve to reinforce a pattern of wealth differentiation.

Figure 5.7: Relative wealth and resource access



This relationship between wealth differentiation and resource access, as well as other factors affecting access to resources, is explored in greater detail in the following chapter, which then attempts to evaluate whether access to resources in the study community can be considered equitable.

5.6 Chapter Summary

Access to resources in the case study area of the Sogoog valley and Bayan mountain in Ulaan-khus *sum* is governed by the herders themselves in summer pasture and in Sogoog. Winter houses and hayfields, identified by herders as among the most important resources, are more limited and access rights are allocated by the *sum* government. There is some evidence that ex-collective herders were favoured in the allocation of access rights. Kinship, personal influence and some recognition of genuine need also seem to influence resource access, as does relative wealth, particularly as regards the ability to make seasonal migrations.

There are considerable differences in wealth in the area, most of which date to privatisation and have increased markedly since. Wealth status and changes in wealth are complex, depending on many interrelated factors of which resource access is one, although not the most important. Access to resources thus both affects, and is affected by, differences in wealth. Given the complexity of the relationship between the two and the many factors involved, it is not possible to conclude that the existence of wealth differentiation implies inequitable resource access in the study community. Resource management does however appear to reinforce wealth differentiation.

Chapter 6: Discussion

6.1 Revisiting the research questions

The previous chapter described in detail how resource use and access is governed in the study community, the factors that affect wealth and wealth differentiation, and the interaction between these. In the case study, having access to resources was shown to be only one of several factors contributing to relative wealth and changes in wealth. Conversely, other aspects of social differentiation besides relative wealth also affect herders' ability to access resources.

In the introduction to this thesis the following research questions were outlined:

- What factors affect access to resources? Is there differential resource access within the CPR, and is this equitable?
- What factors contribute to wealth differentiation? To what extent is wealth differentiation indicative of inequitable access to resources?
- How (if at all) does the CPR recognise or address issues of equity?

This chapter returns more explicitly to these questions, drawing on the material presented in Chapter 5, and considers the case study in the light of the literature on common property and equity discussed in Chapter 2.

6.2 Differential resource access

Having access to resources is a matter of both the rights to use them, and the ability to make use of those rights (Li 1996:510, Baland and Platteau 1996:305-6). This distinction can be seen in the case study, with different factors affecting access rights on the one hand and the ability to realise them on the other.

6.2.1 Differential rights of access

The current distribution of resource access rights derives in large part from the allocation of such rights at privatisation. Prior to this all resources were owned by the collective even if habitually used by particular households. What was

allocated in this case was not a quota for extraction (as with forests or fisheries), but right of access. For summer pastures and the Sogoog pastures no formal allocation was considered necessary; for hayfields and winter pasture (or rather winter houses) this allocation was done once, at privatisation, and is not renegotiated on an annual basis by lottery or rotation as in some CPRs (Baland and Platteau 1996:311).⁵⁰ In a sense the CPR was "restarted" at privatisation, with the distribution of livestock and equipment and formal allocation of winter houses and hayfields to individual households, and a corresponding shift back to herding on a household basis.

Owing to the economic instability created by the transition to a market economy, there was an influx of new herders in Ulaan-khus *sum*, as elsewhere. While the decollectivisation process allowed for the distribution of livestock to non-herders and former collective employees, it was not designed to cope with a large increase in the number of herding families, since the transition strategy was obviously not intended to fail as it did and leave herding the only livelihood option for many urban dwellers.

Traditionally in Mongolia there is an ethic of universal right of access to pasture, which made it difficult to exclude new herders, especially as many were relatives of ex-collective herding households. Where less tightly controlled resources were concerned, such as summer pasture or the Sogoog pastures, this worked because there was sufficient grazing for everyone and boundaries were flexible. Problems arose however where resources were more limited.⁵¹ If former collective herders only had continued in herding, there might have been sufficient winter houses and productive haymaking land for all herding households. Instead the rapid rise in herder numbers placed unanticipated pressure on these more limited resources, which the new herders also needed if they were to succeed, and which had to be resolved somehow within the CPR⁵² (Bromley 1992:13).

⁵⁰ Or indeed as the Mongolian Land Law stipulates for hayfields (p.61).

⁵¹ Obviously, all resources are limited in some degree. The distinction made here, and recurring throughout this chapter, is between hayfields and winter houses, which are particularly limited and were treated differently, and other pastoral resources.

⁵² See p.138 and note 53 on the use of "CPR" in this chapter.

Some allocation of resources was intended to be strictly equal, such as the redivision of hayfields into 0.5ha blocks regardless of family or herd size, and regardless of there having been larger holdings prior to privatisation (p.104). With winter houses however, there were not enough for every household and there had to be some kind of prioritising.

Seniority: new and ex-collective herders

According to many herders, the chief basis on which distribution of resources was prioritised was whether households had herded for the collective or had begun herding at privatisation. Even within this distinction some seniority operated, with those who had been herding longest sometimes able to request land where they wanted it while younger families had to take what they were given (p.104). In general however, the pattern was that ex-collective herders were allocated the resources they had used under the collective, while new herders had to make do with what was left. Informants repeatedly stated that new herders had had greater difficulty in obtaining winter houses, and thus access to winter pasture, and had been left with the least productive hayfields requiring considerable irrigation work (pp.99,104). However, this does not mean there was a clear-cut allocation of resources between new and established herding households, since some new herding families did obtain, and still have, winter houses (p.99) and productive blocks of haymaking land (p.104). This suggests that being a new herder was not quite such an automatic disadvantage as some claimed, and that other factors could also affect households' ability to obtain access rights to resources.

Kinship

One means of overcoming the potential disadvantage of being a new herder was to gain access to resources through kinship ties. Many of the new herders on Bayan joined *auyl* with relatives who were ex-collective herders. This was partly a matter of culture, since the Kazak *auyl* is traditionally made up of patrilineal relatives, and partly a way to pool labour by herding livestock jointly. It could also be seen as a means of gaining access to a summer campsite and thus summer pasture, although the presence of new herders with no relatives on Bayan suggests that this was not a critical entry criterion to the mountain.

Kinship also played a role in access to winter houses. One aspect of this is the practice of sharing arrangements whereby the animals of several relatives are herded by one of them at a single winter site (p.99). More significantly, since four of the seven new herding households known to have winter houses also have relatives who are ex-collective herders (p.99), kinship links seem to have affected a household's ability to obtain a winter house, and to an extent still do. Thus one influential *ayul* leader was able to make over winter houses to his son and cousin, and in the only instance found where a herder had built a new winter house, he obtained agreement to do so only because his immediate neighbour was his brother (p.99).

Connections

Similarly, it is possible that two of the *bag* governor's brothers may have used their family connections to obtain productive haymaking land (p.104). This is consistent with the longstanding practice in Mongolia of using social connections with influential persons or officials in order to influence or circumvent the normal operation of resource allocation rules or to avoid sanctions for free-riding behaviour (pp.53,61).

Connections probably also played a part in Nourbek, or perhaps his predecessor, being able to obtain possession rights to the Sistema, the large 70ha block of haymaking land closest to Ulaan-khus (p.107). Nourbek obtained the rights to the Sistema a year ago with permission from the *sum* and *aimag* governors, in part owing to having worked on this land during socialism. However, this does not explain why the Sistema was not also split into 0.5ha blocks at privatisation for use by new herders, suggesting that the person who originally obtained the rights to it must have been able to exert some leverage to retain such a large piece of land as a private holding. This implies some favouritism in the privatisation process, a suspicion strengthened by the allegation of one informant that some herders obtained more than their 0.5ha share of productive hayland at privatisation, with the complicity of the *bag* and *sum* governors (p.104).

It should not be assumed however that all large hay holdings were obtained through connections. The 15ha worked by Bakytjan forms an interesting contrast. Since Bakytjan and his family have worked hard at irrigation over the space of six years to "earn" the use of the land and make it productive, in the same way that anyone else in Qyzyl Kharaghan could extend their 0.5ha block (and as some have), his holding 15ha is perhaps regarded as fair. While his engineering ability may be envied, he is not considered wealthy since he needs his hay sales to supplement his teaching salary in paying for his family's education (p.107). The Sistema however needed no canal irrigation, and Nourbek now hopes for *aimag* government support for sinking new wells in it (p.108); how this will be justified, when there are other herders whose land needs irrigation simply to produce hay for their own animals, is difficult to say.

Reliance on connections perhaps also figured where transportation was concerned. Given the importance of transportation for accessing different kinds of pasture throughout the year, the ability to secure a private vehicle would be a considerable advantage. As noted, the four households on Bayan observed to have trucks were those of Jardimbek, the former collective head and ex-vice governor of the *sum*, his brother, the businessman Nourbek and another "summer" herder in the "holiday" *auyl* H; three of the four were noted by a wealth ranking informant as having influential or important positions typical of the top wealth group. It was not established however whether these trucks were obtained at privatisation or more recently (p.91).

Personal standing and influence

Two examples suggest that position or standing may mean some households can command access to the best sites in summer pasture. While summer campsites are not formally allocated to individual households, the advantage of good water access on Bayan is recognised in the informal practice of families with little labour using the campsites beside the Qara Jaryq. The presence of the (relatively wealthy) former collective head Jardimbek is something of an anomaly here. However, despite the relative poverty and shortage of labour in most Qara Jaryq households, all those interviewed, Jardimbek included, said they were using their family's traditional site (p.96).

Similarly the well at Qyzyl Bastau is closest to *auyl* H, the "holiday" *auyl* consisting almost entirely of summer-only herders or families literally on summer holiday, and is located directly behind the *kigizwi* belonging to Nourbek (see Figure 5.2, p.85). The fulltime herding *auyl* G by contrast, which has large numbers of small children and very little labour, must cross a small rise to reach the well (p.96). There may be another factor in this besides influence; since most households in *auyl* H are only on Bayan in summer and several spend the remainder of the year in Ölgii rather than Sogoog, there may be less social integration with the more permanent herding community and perhaps less susceptibility to social expectations.

Both these cases have at least the appearance of some personal influence at work; both Jardimbek and Nourbek figure in the top wealth group said to hold influential positions. Nevertheless, despite the recognised advantages of campsites near water, none of the herders interviewed said there was any ill feeling over campsite locations in summer pasture. Given this apparent lack of conflict, and the ambiguity in the source of rights to campsites at Qara Jaryq, individual influence and standing cannot definitely be considered significant in gaining preferential access to good campsite locations. Certainly standing does not automatically infer possibilities for increased personal wealth or preferential resource access: the current *bag* governor, now in his third year in this position, is in a middle wealth group, has an average summer location on Bayan and no winter house on the mountain.

Wealth

There is also some overlap between wealth status and the (possible) effects of connections and influence on resource access rights, particularly since influential position is characteristic of the top wealth group. However, although there were differences in wealth towards the end of the collective era especially, this does not seem to have translated to preferential allocation of rights to resource access. The possible exception to this is that those who had larger private herds under the collective were likely to end up with larger herds overall after the privatisation process, and there is some indication of a bias towards

those with large herds in the allocation of winter houses (p.99); however, this could also be seen simply as allocation in favour of ex-collective herders.

Within the study community then, there is some indication of differential allocation of resource access rights. The only prioritising factor which herders indicated was deliberate and to some extent systematic was seniority. While it seems likely that other factors such as kinship, connections, personal influence and perhaps wealth have also played some role in gaining access rights to resources, in a sense these are ways of subverting the CPR rather than a part of its normal operation. They are also a matter of inference rather than stated practice, and often other interpretations are possible. Certainly there is no systematic pattern either of particular groups using particular means to obtain access, or of individuals possessing any of these advantages consistently having priority access to resources. Each of these factors therefore constitutes a potential, but not a certain, advantage in obtaining access rights.

6.2.2 Differential ability to realise access rights

Regardless of what a household's theoretical rights to access and use resources may be, some have greater difficulties than others in making use of resources to which they have nominal access.

Contingent access rights

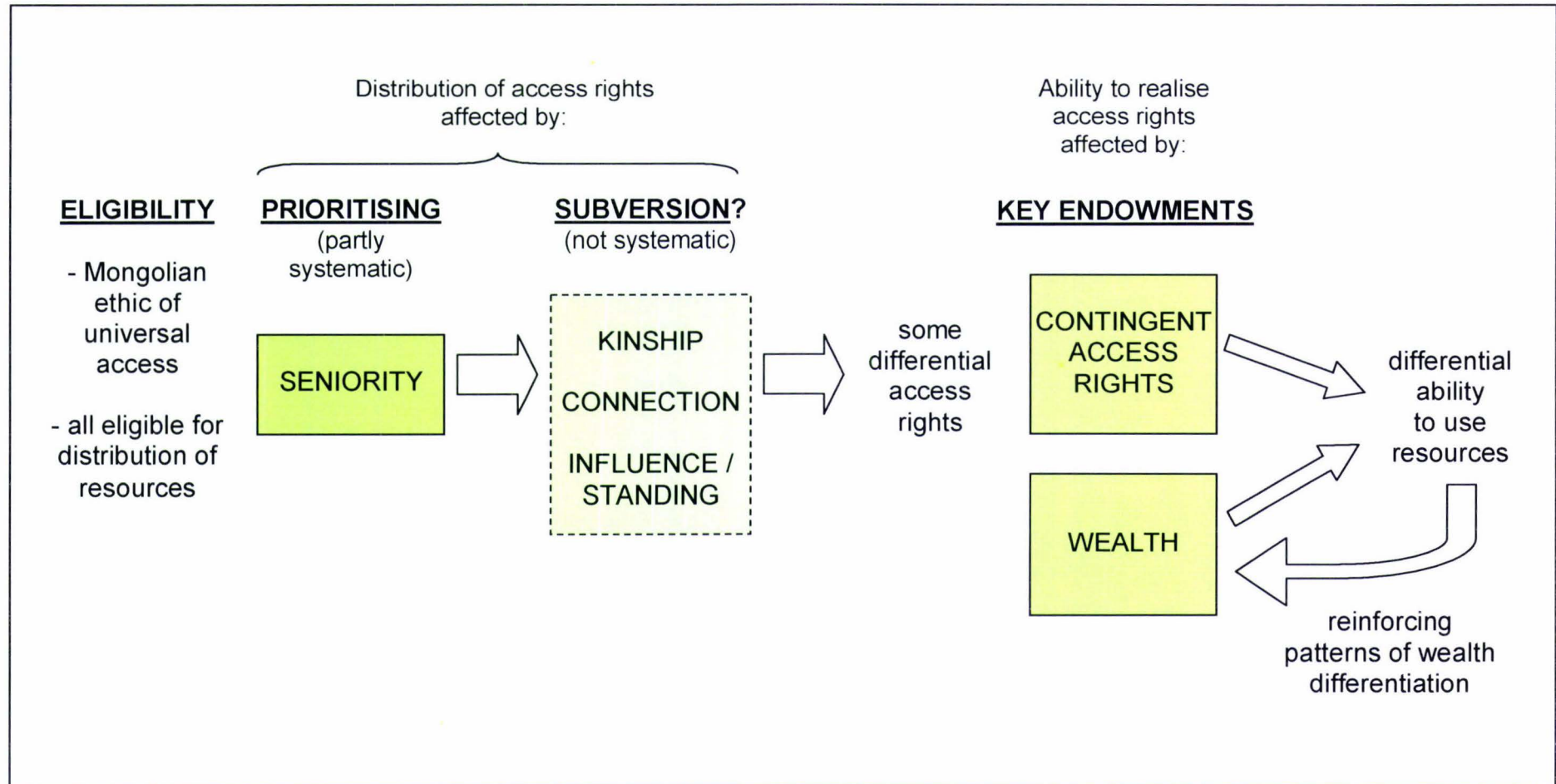
One cause of such difficulties is that the ability to use certain resources may be contingent on having access to others (Fernández-Giménez 2002:63). In the case study the prime example of this is winter pasture, which by law is open to all herders except in the immediate vicinity of winter houses. However, winter pasture is effectively inaccessible to households lacking winter houses (p.100). One consequence is that those who do have winter houses are agreeing on boundaries with neighbours and laying claim to all winter pasture including what is legally free for others' use. This suggests that it will become even more difficult for others to build new winter houses and obtain access to winter pasture.

Wealth

The greatest constraint to realising nominal rights of access to resources is, however, wealth. Factors affecting relative wealth, most importantly labour, access to transportation, cash income and herd size, have been shown to also have considerable impact on a household's ability to access resources (5.5). As Figure 5.7 shows (p.126), wealth constraints are of particular importance as regards mobility and thus the ability to access summer and winter pasture, since those who cannot afford to move are unable to obtain the best pasture for their livestock, which are less healthy in consequence and also face more severe winter conditions on the flats of Sogoog (p.88). The better off among new herders were also better placed for obtaining both livestock and access rights to winter houses and summer campsites from herders migrating to Kazakhstan (p.99), although members of all except the bottom wealth group on Bayan do in fact have winter houses (p.124). Labour constraints may also make it impossible for a household to move to a winter house in the mountains even if they have one (pp.90,100). A shortage of labour or cash income may also affect a household's ability to cut or purchase sufficient hay for the winter, as well as to pay for transporting it to where it will be needed (p.105).

In addition to there being some differences in access rights among the study community, there are thus also differences in ability to realise access rights, or in what might be termed effective access to resources. Such differences can have an ongoing effect on household wealth. Relative wealth is significant in enabling households to realise access to resources, particularly as regards mobility and the obtaining of sufficient hay for winter use, which are important for livestock health and thus ultimately for herd size. Herd size however is a major factor in relative wealth, which in turn affects the ability to realise access to resources. There is thus a circular relationship between differences in wealth and in effective access rights, which feed and reinforce each other. This is represented visually in Figure 6.1.

Figure 6.1: Operation of factors in effective access to resources.



6.2.3 Differential participation in the operation of the CPR

With decollectivisation and the return to household-based rather than collective herding, responsibility for coordinating resource use, which had been the province of the collective, also devolved in large part to herders themselves, for want of a coordinating body to replace the collective.

However, in this instance many of the operational rules for the CPR were not devised or agreed on by the resource users. As elsewhere in Mongolia, there was a vacant institutional space left by the dissolution of the collective, and no real "customary" authority to fall back on in the governance of resources (Mearns 1996c, Finke 2000:14). Instead, herders inherited a mishmash of rules and authority over the resources they use, in most of which they had had no say. These included central government policy, with some reference to socialism, such as the allocation of key resources on the basis of use during the collective period (p.99); some limited coordination by local government, in the setting of movement dates and the broad allocation of pastures to each *bag* (p.110); there was also some continued observance of traditional use rights, as in the choice of summer pasture campsites, which for some herders on Bayan goes back generations rather than decades (p.93). However, there is some agreement among herders over resource use at a very local level, within the *bag*, or even at sub-*bag* level such as among the group of 60 households on Bayan. This includes the practice of avoiding the use of certain areas of summer pasture or the Sogoog pastures, because they are habitually used by others (pp.93,101). This is however informal, and more a customary way of doing things than an actual agreement.⁵³

Resource users themselves thus had no part in setting most of the various rules over resource use, and do not always recognise them; in some matters they do not recognise any authority but follow their own course. For example, the *sum* government has authority under the Land Law to direct herders to specific

⁵³ The use of the term "common property regime" (CPR) throughout this chapter to refer to governance of resources in the case study recognises and includes this combination of formal and informal rules and customs, rather than suggesting the existence of a tidy set of clearly defined or recorded rules.

pastures, but in practice does not and probably cannot enforce the use of pastures far from the *sum* and *bag* centres, even though it recognises that there is too much pressure on closer pastures. Herders instead make their own choice of summer pasture location, regardless of which pastures are allocated to their *bag* (p.87). This is similar to the situation described by Fernández-Giménez and Batbuyan in Bayankhongor *aimag* (2000:18-19), supporting their finding that the various sources of rights over pasture and rules governing its use have thus far not been synthesised into a coherent institutional framework for governing the use of common resources (2000:2).

At present herders are able to participate in resource management and governance, informally by making their own choice of campsite and pasture at a very local level, and formally by participating in *bag* meetings (for instance in setting seasonal movement dates), as indicated in Table 5.2 (p.112). *Bag* meetings are open to all herders in the *bag* and operate on majority decision; herders interviewed did not indicate any problems with this.

However, this was not the case with the allocation of resource access rights at privatisation. Allocation of winter houses and hayfields was done by the *bag* and *sum* governors, with herders having limited input: except for those who had been herding longest, most had no say in these decisions (pp.99,104). Thus the actual users of the resources in question could not participate equally (or at all) in the all-important initial allocation of resource access rights at privatisation, which necessarily set the stage for the CPR in its current form.

The lack of a clear institutional framework to continue from the collective perhaps contributed to the space in which certain individuals seem to have been able to angle for preferential access to resources, using various means open to them as discussed above. Rather than this being institutionalised discrimination, it could be seen instead as a lack of institutions, allowing some to manipulate the CPR to their own benefit. Herders have thus inherited a situation in which they are able to participate in the current management of resources, but had virtually no say over those resources that have been formally allocated. Unsurprisingly, while conflict over management and

coordination of resources today appears minimal, what conflict there is surrounds resource allocation. The lack of space for participation by most herders in this process no doubt contributes to feelings that it was unfairly done, and that there is no means to resolve perceived problems since the allocation is done and is no longer negotiable (p.114).

The only people to have a possible advantage in decisionmaking over resources at privatisation were those ex-collective herders who had been herding longest, and those who may have been able to manipulate the fluidity of the situation at privatisation to their advantage. In the current situation no group appears to have any advantage in terms of control of the operating rules of the CPR which would translate to preferential resource access.

6.2.4 Differential resource access in the literature

Prioritising and differences in key endowments

The distinction between differential access rights and differential ability to realise them is also found in the literature. Devereux outlines two levels of resource access rules (1996:4), first eligibility (inclusion and exclusion) and secondly prioritising among the included (such as who is allocated resources first, or allocated more, or who can afford to pay). In the case study, eligibility is problematic: because of the Mongolian ethic of universal access to pasture, theoretically everybody is "in" and no one can be excluded, hence the influx of new herders at privatisation. The lack of eligibility rules in this CPR has been handled through some degree of prioritising (according to seniority and sometimes kinship, connections or influence; see Figure 6.1), but not by systematically privileging any groups either formally or informally. In terms of ability to pay, what is envisaged here is payment for access rights which formerly were free of charge (Devereux 1996:5); to date user fees are not required for access to pasture or hayland in the study area, although there are hints that this may change, with potential negative impact on access by the least well off (p.108).

Differential access to resources can also be described as a distinction between the resource endowments that people should have (including access rights), as compared to their entitlements, which encompass the ability to realise rights to resources (Leach et al. 1996:232). This ability may be limited because of a lack of key endowments such as labour (Li 1996: 510, Baland and Platteau 1996:305-6) or because of discriminatory prioritising rules (Devereux 1996:25). Wealth differentiation as a factor in resource access in the case study fits this categorisation well, since it is the ability to actually use resources, rather than formal or informal access rights, that is affected by wealth-related factors. Households lacking in labour, cash income or access to transportation may be seen as lacking endowments that would enable them to utilise resources to which they have rights of access. Contingent access rights, in this case the necessity of access to a winter house in order to use mountain winter pastures, also function in this way: those lacking winter houses have reduced entitlements because they lack key resource endowments (Figure 6.1). Except perhaps where winter houses may have been preferentially distributed, differences in key endowments are mostly not the result of discrimination: most are related to relative wealth, which itself is a complex mix of many factors and not tied to membership in any definable group (pp.116,124).

Community heterogeneity

While the literature suggests that differential resource access may result from different groups in the community having differing interests in resources and power to gain access (Agrawal and Gibson 1999:637, Leach et al. 1999:226), this does not seem to be the case here. It is in fact difficult to isolate specific groups within the study community. There are no ethnic divisions as only one ethnic group is represented. Certain attributes such as seniority in herding, connections, or wealth may confer an advantage in resource access, as discussed above, but the community is not really divided along these lines. Even the distinction between ex-collective and new herders is not really a division, as the two are well intermingled because new herders have joined *auyl* with established herding relatives and now herd with them. Nor do there seem to be power divisions that affect resource access. Control over allocation of limited resources was and is in the hands of *bag* and *sum* governors rather than

resource users,⁵⁴ and indications are that the current governance of resource use through *bag* meetings is democratic and not captured by any one group.

Nor are there conflicting interests in the same resources. This is partly the nature of rangeland; unlike some other kinds of resources governed by CPRs, such as forests, it can only be used for one purpose, pastoralism, unless it ceases to be rangeland and is turned over to agriculture. In the study area there is no pressure on either pasture or hayfields from agriculture because the severity of the climate makes cultivation impossible (p.107 note 43, cf. p.81). Consequently, there is no contention over differing potential uses of the same land since it is all used for either grazing or hay production. The one possible exception is hay production on large holdings for sale rather than for the household's own winter use; as noted above, the Sistema in particular could have been divided at privatisation for use by herding families, but was not. This is however a matter of one household,⁵⁵ rather than an elite group, having a different interest in and benefiting disproportionately from the CPR.

Although there are certainly differences in the study community, the similarity of interest in the resource and the lack of identifiable elites or division into definite groups means that it is perhaps more homogeneous than some. It is not surprising therefore that no examples were found in the case study of elites controlling the allocation of resources either solely for their own benefit (Jain 2002:3, Oakerson 1992:52), or in such a way as to ensure the cooperation of other users by ensuring that they also benefit (Baland and Platteau 1996:310-311, Wade 1987:104). The only possible instance where this may be said to be happening is in campsites with good water access at Qara Jaryq being used mainly by labour-deficit households (p.95), although this is not so much action on the part of elites as an unspoken agreement across the community. Also, as noted above, herders do not control the allocation of limited resources (winter houses and hayfields), and exercise only loose control over access to

⁵⁴ In this instance the *bag* governor is a member of the resource user group; had a different subgroup of *bag* #4 been selected this would not have been the case.

⁵⁵ See p.133 above for the reasons why Bakytjan's 15ha is considered to be in a different category from the Sistema.

other resources (p.138).

While heterogeneity in a resource user community can have either positive or negative consequences in terms of equitable allocation of resources and access rights (Baland and Platteau 1996:302, 310-11; Jain 2002:19), it seems that the literature envisages more distinct subgroupings within a resource user community than is the case here. The only group to stand out as having some advantages where resources are concerned are ex-collective herders, but there is some inconsistency in this as they still fall in all wealth groups and have only a slightly higher rate of winter house possession than new herders. Nor can they be considered to constitute an elite group, since they do not control resource use or allocation. Heterogeneity in the study community, in contrast to the literature, is less a matter of clear divisions and more of a continuum, which is chiefly visible in relative wealth, a compound of various factors which include resource access. In this way, differences in resource access do reflect social differentiation in the user community (Jain 2002:2), since like it they are not clear-cut or systematic. Therefore, in this case the limited heterogeneity of the user group cannot be said to have a major effect on the equitable or inequitable distribution of resource access rights.

6.3 Resource access and wealth differentiation

In the study community, as described above, relative wealth is one of several factors contributing to differences in resource access, particularly to differences in realising rights of access to resources. Conversely, as demonstrated in Figure 6.1 and in Figure 5.7 (p.126), resource access is also a contributing factor in wealth differentiation. Because of the circularity in the relationship between wealth differentiation and differential resource access, wealthier households are able to make use of all resources to which they have nominal access and to maintain or improve the health and size of their herds, and thus their wealth (5.5, p.125).

Resource access is not however the only factor in relative wealth or changing wealth, or necessarily the most important. Both wealth status and wealth differentiation were shown to be complex in nature with no one factor

consistently determining either in which wealth group a household would fall, or whether its circumstances were likely to improve or deteriorate (Table 5.3, p.116; Table 5.4, p.123).

The importance of non-resource-related factors (such as labour, income, herding skills and herd size) in both wealth status and changing wealth implies that wealth differentiation in the case study cannot be seen as originating chiefly in differential resource access. At first glance relative wealth may instead appear to bear some relationship to being an established rather than a new herder at privatisation, since better herding skills and perhaps larger herds at privatisation (p.124) are more likely among ex-collective herders, as also are possession of a winter house and productive hayfields. However, this connection is not borne out either, since both new and ex-collective herding households appear in all wealth groups (Figure 5.6, p.118), underscoring the point that no single factor, whether resource access or seniority in herding, can be taken as a reliable indicator of household wealth.

Since resource access cannot be considered the most significant factor in relative wealth, the existence of wealth differentiation in the study community, even following a period of relative equality under socialism (p.114), cannot be said to reliably indicate that there is inequitable access to resources. This seems consistent with claims in the literature that even when there are differences in private wealth (or other forms of social differentiation), access rights to the resources governed by CPRs may still be equitably distributed (Jain 2002:16, Baland and Platteau 1996:311). In this case the distribution of access rights may not be totally equitable, as resources are not allocated on a basis (such as rotation) that is beyond susceptibility to prioritising and subversion (see Figure 6.1), nor is equitable access ensured here by an elite group serving its own interests (Wade 1987:104). However, while the CPR may not exactly safeguard their interests (Jain 2002:2), at the very least it is not set up to automatically disadvantage the poor in terms of access rights, although the ability to realise access is certainly linked to wealth. Whether this can be considered inequitable is discussed in the next section.

6.4 Equity in the case study

Compliance and minimal conflict

In Chapter 2 it was argued (p.16) that equity is more nuanced a concept than simply equality, and is better understood as "fairness", or whether resource users in the CPR have fair access to resources. It was acknowledged that this is a difficult concept to measure, since for the most part this is done by inference, for example by assuming that compliance with the rules of the CPR (Ostrom 1990:33, Gibbs and Bromley 1989:26), or a relative lack of conflict (Berkes and Farvar 1989:11), imply that users perceive the allocation of resources or access rights to be fair.

In the study community compliance with access rules is high. Herders reported very few problems with trespassing on reserved winter pastures, or with encroachment on one another's hayfields, and observance of seasonal movement dates appears to be universal. Similarly, although herders admitted that some jealousies and disputes do exist (p.113), there seems to be very little open conflict over resources. There is however tacit acknowledgement that conflict does arise, in the provision of procedures for resolving it, such as through a meeting of herders from the immediate area or the *bag*, or through application to the *bag* and *sum* governors (p.113). However, the fact that none of the herders would give specific examples of this happening or could relate the likely outcome (p.113) casts some doubt on whether conflicts are in fact taken through the channels provided, particularly as informants also indicated there was little to be gained from this in regards to allocation of winter houses and hayfields, the principal source of conflict (p.113). This suggests that it can be misleading to assume that a lack of visible conflict implies fairness in the allocation of resources.

Satisfaction with the rules

Perhaps more helpful is the suggestion that if most users of the resource are satisfied with the existing rules, this implies that they are fair (Oakerson 1992:52); this requires going to resource users themselves to find out their thoughts on the matter, rather than making inferences from their behaviour. It

also allows for the possibility, as here, that there may be dissatisfaction with the rules that does not manifest itself in conflict, if no benefit is seen to be possible from challenging the rules (Jain 2002:3).

There does not seem to be ill feeling over the current management of resources, such as setting seasonal movement dates, which has its proper forum in the *bag* meeting, in which all herders can participate. Instead, dissatisfaction with the rules of the CPR was expressed concerning the allocation of more limited resources. This is a historic issue that goes back to the privatisation process; it is also the area in which herders themselves had least participation in devising the rules by which they now live (p.139), and for which there is seen to be no effective means of addressing and resolving perceived unfairness (p.114).

Informants thus indicated that it had been more difficult for new herders to obtain winter houses, but noted particular discontent over the allocation of haymaking land, both among those who had been unable to obtain productive land at privatisation (generally also new herders), and among the few who had lost portions of good land used during socialism (p.113). This also highlights the point that, while grievances over resource access do not rest entirely with one section of the community, the perception yet again is that it is new herders who were unhappy and by implication were not fairly dealt with.

Inherent advantages in resource access

This last point suggests a further consideration in evaluating equity in resource access, in that some differences in the rights and ability to have access to resources are not based on characteristics households can acquire or change. Instead, most of the factors identified as affecting resource access rights (see Figure 6.1) are in fact inherent characteristics or advantages, which households either have or do not (Devereux 1996:4), such as being an established herder, or having established herding relatives. Useful social connections or personal influence may to some extent be developed, but may also be included here since these are not possibilities for every household. Such preferential rights of access as exist have been granted on these bases. Even though this has not

been done systematically, the implication nevertheless is that in this case differential rights of access to resources are in fact inequitable.

This can perhaps be queried as regards preferential allocation of resources on the basis of seniority (the distinction between new and ex-collective herders). It is difficult to judge whether this should be considered inequitable, as it is how the CPR seems to have adapted to cope with the unexpected increase in herder numbers over against limited resources (p.130). Seniority in an area also figures in other pastoral CPRs, with more established groups having power to obtain preferential access (Lane and Moorehead 1995:129-30). The Mongolian situation is unusual however in that, as noted, new and ex-collective herders are related and live together rather than forming discrete groups with differing power. It is also possible here that the need to support increased numbers of herders on the same land was seen as only a temporary measure until the economy should recover. In the event, many of the new herders have remained in herding because there are still so few alternative livelihood options, but this may have been unforeseen at privatisation. Resources were thus made available as possible, with hayfields split into small (and equally-sized) blocks, but as the number of winter houses was limited, it is perhaps justifiable that more of these were allocated, along with the more productive hayland, to ex-collective herders who were more likely to remain in herding in the longer term. This could be regarded as their having acquired access rights simply through historical use; this is the basis of many herders' claims to both summer campsites and winter houses (pp.93,104), as elsewhere in Mongolia (Fernández-Giménez 2002:61). It is therefore partly a matter of perspective whether seniority-based advantages in access rights can be considered inequitable.

While wealth also confers advantages in resource access, it differs in two ways from other factors shown in Figure 6.1. First, for the most part it does not affect *rights* to access resources; in other words the CPR is not set up to favour the wealthy over the poor in the distribution of access rights. However, as discussed above, relative wealth affects a household's ability to realise nominal access rights to resources. Second, household wealth is itself a combination of

changeable characteristics such as income, herding skills and herd size, all of which a household stands some chance of improving, and inherent factors such as available labour, which cannot be changed except (in some cases) by waiting for children to grow up. It is thus not possible to categorise wealth-based advantages in resource access as entirely acquired (or acquirable). This may mean that to some degree wealth-based differences in effective resource access can be considered inequitable.

Perspectives on equity and the CPR's response

Herders interviewed recognised the difficulties faced by poorer households particularly in moving and thus accessing different seasonal pastures, but did not give any indication that they regarded these as unfair; their concerns were rather with differential access rights. It could be argued therefore that from the herders' perspective, wealth-based differences in the ability to realise access to resources do not constitute inequitable access.

However, if equity in resource access includes having particular regard to the situation of the least well off (Chambers and Conway 1992:6), then it must include not only nominal access rights but the ability to realise them. In the case study it is the poorest households (rather than any other social group) who face the greatest barriers to effective resource access, principally through the prohibitive costs of mobility but also the labour requirements of hay production and winter herding in the mountains (pp.90,105). This is a historic problem in Mongolia, with the poorest households consistently restricted in their ability to move (p.68), but one to which the current CPR does not offer a solution or response as the collective did before it (through provision of transportation).

There is some minor recognition in the CPR of differential ability (rather than rights) to access resources, in favour of the less well off. One example is the agreed use of Qara Jaryq campsites by labour-deficit families, another Ainagul being granted her request for well-watered haymaking land (p.104), although this latter is due not to agreement among the resource users but to a favourable decision by *bag* and *sum* governors. However, these are isolated examples: there are other families short of labour on Bayan who do not have good

locations relative to water access, and other poorer households struggling with unproductive hayfields, who have not benefited in this way. Just as there does not appear to be systematic favouring of one group in the allocation of resource rights, there does not appear to be any systematic preferential treatment of the less well off. Instead, as Figure 6.1 illustrates, the interrelationship between relative wealth and resource access means that poor households are likely to become poorer.

Assessing equity in the case study

This discussion of equity in the study community confirms how difficult it is to define a concept of fairness, since this may look different from different points of view. For ex-collective herders their having preferential access to winter houses and productive haymaking land may be justifiable on the basis of long use; for new herders who were allocated less productive land or missed out on winter houses the situation may appear different. An outside observer such as the researcher may see the cost barrier that prevents poorer households from moving as evidence of inequitable resource access; herders appear to see this as much less important than the allocation of (nominal) access rights. The widespread perception that hard work or laziness are significant factors in relative wealth (pp.115,123) may also colour the herders' point of view in this respect.

To summarise some of the points made above, there are certainly differences in effective resource access in the CPR. Despite this, compliance with access rules is high and there is little open conflict over resources, not least because this is perceived to be somewhat pointless. Differential access rights are largely based on attributes that households are unable to change; this is the point of greatest dissatisfaction among herders and such differences, while not systematic, can probably be said to be inequitable. More difficult to assess is differential ability to realise rights of access to resources, chiefly due to differences in wealth, itself a characteristic over which households have varying degrees of control. This seems to be of less concern to herders than issues over access rights, and the CPR as a whole makes little attempt to ensure that the least well off are able to have access to resources; only relatives are likely

to help in this regard (p.91). There are thus some inequities in access rights, as perceived by herders, and probably also in the ability to realise access rights, as perceived by outsiders though perhaps not by the herders themselves.

Inequitable access to resources (on the basis of inherent characteristics at least) does reflect social differentiation, reaffirming that a CPR does not operate independently of relationships within its user community (Agrawal and Gibson 1999:637). However, it does not appear to be a structural issue within the CPR, since it is not based on long-term social differences and particular groups are not consistently favoured.

Further, what issues there are with inequitable resource access are in large part traceable to privatisation rather than the current operation of the CPR. It was not the aim of this research to study the effects of decollectivisation and privatisation, but these have been difficult to ignore because of the consequences for equity: the current allocation of hayfields and winter houses dates back to privatisation and is now regarded as largely unchangeable, so that anyone who was able to gain an advantage in the privatisation process still maintains it. The lack of a solid institutional framework to take over as the collective ended likely also allowed some degree of manoeuvring in this process through the use of influence and connections. The abrupt return to individual household-based herding and reliance on the household's own wealth and resources, combined with the loss of collective-provided transportation, has also had a negative impact on equitable resource access.

It could be considered that the institutional vagueness surrounding decollectivisation and privatisation (and continuing today) has undermined the CPR and led to these inequities in resource allocation and access. However, this is effectively a return to Grima and Berkes' concept of "allocative disorders" in the CPR (Grima and Berkes 1989:39, 41), with its underlying assumption that inequitable resource access is somehow abnormal, that the CPR *should* promote equitable access to resources and that if it does not, something has gone wrong. In Mongolia however, arguably what is abnormal is not the current situation, but the socialist environment that preceded it. It was collectivisation,

rather than privatisation, that undermined customary authority and customary access to resources (p.53), which was highly inequitable (p.47). The present situation in Mongolia is an oddity historically, lacking the very large (and very rich) herdowners of the past (p.47). With such a history, it would be strange to expect to find today's CPR fostering access to resources by all including the poorest. It is perhaps not surprising therefore that, although herders in the study community recognise the disadvantages faced by less well off households in resource access, the rules of the CPR make little if any response.

The case study in the literature

The situation in respect of equity in this CPR is to some extent what the literature suggests it will be. The degree of heterogeneity in the user community and the kinds of differences found in it have an impact on resource access, with various sources of differential access rights (Agrawal and Gibson 1999:638) and varying ability to actualise them (Devereux 1996:4-5, Li 1996:510). Like differences in this community however, differences in resource access are not systematic; neither are they clearly linked to specific groups with differing interests in the resource and power over it. While the lack of differing interests may be partly explained by the limited possibilities for use of rangeland and for other livelihood options in this area, this appears to be a point of difference with the many examples in the literature where elite groups exercise disproportionate power over resources (Baland and Platteau 1996:310-11, Jain 2002:2-3, Agrawal and Gibson 1999:637). This community does not appear to have clearly identifiable subgroups, and in any case decisionmaking over resources, especially limited ones, is largely done by the *bag* and *sum* governors and is thus out of the hands of resource users.

Contrary to some suggestions, compliance with use rules or lack of conflict over resources is not a reliable indicator of equitable access rules (Ostrom 1990:33, Gibbs and Bromley 1989:26). Instead, perceived unfairness dates back chiefly to a once-off allocation of access rights at privatisation, but is seen to be largely unresolvable both because it is historic and because despite the existence of official channels herders do not have the power to challenge it (Jain 2002:3). Unlike in some CPRs therefore, differential control over resources is not

between different groups of resource users as might be expected (Agrawal and Gibson 1999:637, Leach et al. 1999:226). Instead there is differential user control over different aspects of resource management. Thus, herders informally agree on the use of summer and autumn pastures, and participate in decisions over movement dates, while allocation of access rights to more limited resources, the area causing most difficulty, is effectively outside resource users' direct control and must be negotiated through workaround solutions such as sharing or renting (p.99).

As in other CPRs, relative wealth and resource access are interconnected in a complex fashion, such that wealth differentiation does not clearly indicate that resource access is inequitable (Jain 2002:2-3, Baland and Platteau 1996:302). The nature of this interrelationship however is such that, instead of the CPR safeguarding access to resources by the poor (Jain 2002:2), they are likely to become further disadvantaged and less well off. If wealth-based differences in the ability to access resources are considered inequitable, then inequities in resource access are increasing.

This case study seems typical of the current situation in Mongolia generally, as discussed in Chapter 3. The loss of customary authority and lack of a clear institutional framework experienced in Ulaan-khus *sum* is a familiar backdrop to resource access issues all over Mongolia (p.59), as is *sum* government control in issuing formal possession rights, to winter campsites elsewhere as opposed to winter houses (Fernández-Giménez and Batbuyan 2000:6-9). The same factors of seniority, kinship, influence or connections and wealth also figure in similar fashion in differential resource access elsewhere in the country (see 3.6.5, p.65). Thus, allocation of winter shelters at privatisation and of possession certificates for winter campsites has generally favoured those who could demonstrate habitual use (Mearns 1993:96, Fernández-Giménez 2002:61); new and poor households often camp with kin as a means of gaining access to pasture; and connections played a role in gaining control of collective assets (especially vehicles) at privatisation (Cooper 1995:14).

The difference between nominal access rights and the ability to realise them is also found in other parts of Mongolia. As in the case study this is due in part to issues with contingent access (p.67, Fernández-Giménez 2002:63), but more particularly to the interaction between relative wealth, its effect on mobility and consequently on the ability to access different types of pasture, which in turn affects herd health and size and so household wealth (Fernández-Giménez 1999a:337-8). The circular relationship between resource access and wealth differentiation found in the case study, indicated in Figure 6.1, is thus both a historic issue in Mongolia, going back to feudal times (p.68), and a widespread one now.

These common features between the case study and examples in other parts of the country all suggest that the kinds of inequities found in resource access in the case study are likely to occur in other pastoral CPRs throughout Mongolia.

6.5 Equity in common property

Defining and evaluating equity

The case study illustrates the difficulty of defining what equity means in a given situation and evaluating the extent to which it exists. The high degree of compliance with use rules and lack of overt conflict in this case do not signal fairness in the rules of the CPR, but resource users' resignation to the current situation being unresolvable. This suggests that asking resource users themselves to evaluate the rules is, unsurprisingly, a better way to discover whether they perceive there to be inequities in the CPR.

This does however raise the question of perspective. There are likely to be differences in the perception of what is fair and equitable both within the CPR, among its users, and between the users and outsiders. It was noted above that although the clearest operation of preferential access rights was according to seniority in herding, it is a matter of interpretation as to whether this can be considered inequitable; this interpretation may well differ for new and ex-collective herders. Ostrom makes the (very obvious) point that if the rules treat two groups differently, they are likely to evaluate the rules differently (Ostrom

1990:210). Further, herders do not appear to see the existence of wealth constraints to resource access as unfair, although they do recognise that poorer households face difficulties. However, "outside" perspectives on equity often include a focus on improving the lot of the least well off (Jain 2002:3, Chambers and Conway 1992:6), and have long linked the reduction of inequality with the elimination of poverty (Seers 1969:3).

While this may be no bad thing, there is a potential clash here in understandings of equity between resource users and those outsiders seeking to support or establish communal management of resources. This does not mean it is not possible, or desirable, to extend resource users' perception of fair access to include those who are most disadvantaged (as the poorest are in this case); what is perhaps more important is how this is done. Rather than simply imposing outsider egalitarian preferences on a CPR (Wade 1992:222), there is a need to acknowledge that equity considerations as expressed in the literature are outsider concepts. Differences between these concepts and those of resource users are not necessarily insuperable, but require dialogue and a readiness on the part of outsiders to question their own views and understand what is suited to local conditions and priorities (Chambers and Conway 1992:4), as well as the recognition that equity can be defined differently in different situations (Jain 2002:2-3).

How equitable are CPRs?

This case study certainly confirms that CPRs do not have a default setting for equity (p.16). Despite several decades of socialism, the CPR that has followed the collective here is neither egalitarian nor entirely equitable in its distribution of resource access rights. Although there has been considerable breakdown in the institutional setting of the CPR, inequities are not necessarily due to "allocative disorders" or a breakdown in the internal rules of the CPR but have more to do with the difficulties of absorbing large numbers of newcomers (Bromley 1992:13) at decollectivisation and the withdrawal of collective-provided services such as transportation which smoothed over wealth differences under socialism.

It has been argued that the allocation of rights under CPRs is no more equitable than under any other kind of property regime or institutional framework, and is if anything even more susceptible to discrimination and influence because relationships are more personal (Devereux 1996:8). To some extent the case study confirms this, in that there does seem to have been some influence and favouritism in the allocation of access rights (see Figure 6.1). However, since preferential allocation in favour of the well-connected or influential, or even of ex-collective herders, was not consistent or systematic in this case, perhaps it should not be taken as a given that community-level property regimes are likely to be captured by influential groups; this will depend on the dynamics of the individual community.

What may be said is that, in certain settings, CPRs may be more equitable than other kinds of property regimes, particularly private property (Quiggin 1993:1125). "Common" property at least implies that there cannot be individual accumulation through excluding others, whereas private or individualised tenure of pasture in Africa and parts of Inner Mongolia has resulted in increased inequity in resource access (pp.27,35). In the case study pasture has thus far not been privatised, despite a drift in legislation in this direction (p.61; note 15). So long as households can still afford to move, their access to pasture is assured. However, as winter pasture increasingly comes to resemble *de facto* private property, those who possess winter houses are agreeing on boundaries, which will make winter pasture access impossible for other households even if they can afford to build houses; this can certainly not be regarded as equitable. While therefore CPRs may not guarantee equal access to resources, or access to equally good resources, they can ensure that all who are part of the user group do in fact have resource access rights (leaving aside for the moment the issue of realising these). This is particularly important for the poorest, who are likely to rely heavily on common land (Bromley 1992:13, Beck and Nesmith 2001:129), as do less well off herders in the case study, having no other sources of income besides herding; or when there are no other livelihood options available (Banks et al. 2003:136). The question of whether CPRs can be considered equitable should therefore be considered against the backdrop of

the setting (and the particular resources at issue) and of how equitable alternative types of property regime may be in the same context.

The importance of the community setting

As the literature repeatedly indicates, equity in the allocation of resources and access rights in a CPR is linked to differentiation and dynamics in the resource user community (Agrawal and Gibson 1999:637, Jain 2002:2). Although all communities are differentiated to some extent (Agrawal and Gibson 1999:635, Baland and Platteau 1996:301), heterogeneity in the study community is more limited and much less clear-cut than in many examples in the literature, without the presence of obvious elites. Consequently, while there is some preferential and inequitable allocation of access rights according to various overlapping rules (Agrawal and Gibson 1999:638), the lack of easily definable groups with differing interests and power over resource allocation means that in the case study this is not systematic.

As discussed above, local perceptions of how equitable the CPR is are also likely to differ according to how well different groups feel it treats them. Community values as to what constitutes equity may also be important; as noted here, although the interaction between wealth differentiation and resource access means that the poor seem to be getting poorer, herders do not appear to find this unfair, perhaps since the less well off are not accorded lesser *rights* of access but struggle only to realise them.

While in this case neither social differentiation nor differential resource access are extreme, their interconnection is still clear, suggesting that there needs to be a healthy degree of realism about a resource user community as regards how equitable the CPR it operates can be expected to be. Despite a certain degree of idealism regarding the inherent equality of CPRs (Quiggin 1993:1135, Jain 2002:3), if the community is riven with social and power inequalities, there is little potential for a CPR (or any other form of communal management) to be equitable in the distribution of resources and access rights unless there are incentives for the powerful to ensure this (Wade 1992:223).

Negatives and positives for equity in the case study

Aside from differentiation in the resource user community, which can work either for or against equity, certain other factors seem to have had a definite negative effect on equitable allocation of resources in the case study. Recognising these, and the possibility of overcoming them, may perhaps have application beyond this particular situation.

One issue which this study indicates is significant for equity is the degree of participation resource users have in setting and changing the rules of the CPR. User participation in the allocation of limited resources was not so much differential, as almost nonexistent, since the allocation of winter houses and hayfields was done by *bag* and *sum* governors with very limited herder input (pp.98,104). This is the area in which there is the greatest sense of unfairness, and the least sense of being able to resolve problems since there is no workable forum in which to do so.

Having resource users agree, not only on how resources are managed in terms of setting dates for seasonal movement and haymaking, but on how limited resources especially would be allocated, might have increased the likelihood of this being done equitably. Perhaps also at issue is the fact of resources having been allocated on a once-off basis so that there is no possibility of resolving perceived unfairnesses; this is also leading to winter pasture becoming quasi-private property, with others excluded. A related process may be happening with hayfields which have been extended by irrigation works, since there is very little likelihood that boundaries could now be renegotiated. Had the herders had to agree on how access rights to winter houses and hayfields would be allocated, perhaps other more equitable systems might have been devised. However, this does not discount the possibility that such agreements may also be skewed by personal influence and power; it may be that in this instance it was judged that the *bag* and *sum* governors would do the job more fairly.

Nevertheless, the fact that the herders themselves did not agree on the allocation of resources has meant that they are also unable to resolve issues surrounding this allocation. Having to agree on how to distribute access rights

might also have created a forum in which this could be renegotiated or disputes settled. As it is, the *bag* meeting does not in the main appear to deal with this, and approaching the governors is not seen as worthwhile, meaning that there is little or no possibility for making resource allocation more equitable than it currently is.

Both these situations point to the importance of people who will be affected by the rules of a CPR also participating in their devising. Although this qualifies as something of a basic point in regards to successful collective action (Ostrom 1990:90, Baland and Platteau 1996:289), the case study seems to indicate that it may also be important for improving equitable allocation of resources.

A further issue which impacts negatively on equitable allocation of access rights in the case study is the institutional vagueness surrounding privatisation and still continuing. It seems likely that some individuals were able to take advantage of the lack of strong institutions to obtain preferential access rights, such as to the 70ha Sistema in the hayfields, or perhaps to use kinship or connections to influence the allocation of winter houses. The want of a forum in which users could negotiate the allocation of access rights, and the fact that the users themselves did not devise many of the operational rules of the CPR, may also be considered institutional failings.

While the state of transition and economic collapse in Mongolia at the time of privatisation may make this institutional situation understandable, not every CPR will be under such peculiar stress. The experience of the case study community suggests that if there is not a strong institutional framework in place, developed for the situation by the users, the CPR is more open to manipulation by influential or well-connected individuals. This implies that one means of enhancing or encouraging equitable distribution of resource access rights is to encourage the development by resource users of strong institutional forms which allow for enforcement of user-made rules and decisions.

Lastly, and more positively, there are some few instances in this CPR of recognising the needs of the less well off, in according preferential water access to labour-deficit households beside the Qara Jaryq stream and in the allocation

of well-watered hayland to Ainagul at her request. Although these can hardly be described as rules and apply only to a few households, nonetheless they indicate at least some willingness among CPR users to assist the less well off. It is suggested that as a means of enhancing equity in general in the CPR, it is well worth finding even such isolated examples of preferential treatment and encouraging their wider application and inclusion in the CPR's agreed operational rules. This may also be a way of fostering greater equity not only in the distribution of access rights, but in their realisation.

It will be obvious that the factors considered detrimental to equitable resource access here are also generally considered to have an adverse effect on successful collective action in general (Ostrom 1990:90, Baland and Platteau 1996:289, 344; see p.12). While this does not imply that well-functioning CPRs are necessarily equitable, it does suggest that equitable resource access is that much less likely when the CPR as a whole is under stress, and in particular when the community has limited control over the resources it uses. Possibilities for improving equity are therefore likely to be increased by shoring up the institutions for local resource management.

Equity in common property

While some of the literature makes claims that common property regimes can allow for equitable distribution of resources, it seems from this case study that such claims need to be put into perspective. There is, first of all, the question of whose understanding of equity is to be used. Second, while CPRs may not be entirely equitable, they may in some circumstances be less inequitable than other types of property regimes. Third, such claims need to take into account the different groups within the user community and whether they are able to influence the allocation of resources in their favour. Lastly, the strength or otherwise of the CPR's institutions is also likely to have considerable bearing on how equitable it may be. All this notwithstanding, it is still possible that in some situations CPRs could allow for equitable resource access, but expecting them to promote equity without taking into account the above factors is simply unrealistic.

6.6 Chapter Summary

Within the case study there are both differential rights of access to resources, and differential ability to realise them. Preferential access rights, though not systematic, are based mainly on inherent characteristics of households and as such may be considered inequitable. Ability to realise access rights is chiefly constrained by wealth, but there is no indication that herders themselves regard this as unfair. The interrelationship between wealth and resource access is however reinforcing wealth differentiation. Problems with inequitable resource access rights are largely historic, but resource allocation was not controlled by elite groups or even the users themselves but by local governors. Because these problems are considered largely unresolvable, the lack of surface conflict and high compliance with current rules cannot be considered evidence of equitable resource access.

Claims made that CPRs can afford equitable access to resources are unrealistic unless they take into account differing views on what constitutes equity, the social and power dynamics in the user community, and the robustness of the institutions in the CPR. The potential for resource access in common property to be equitable is also relative and should be compared with the likely situation under other forms of property regime.

Chapter 7: Conclusion

This research began from the starting point of claims that common property regimes (CPRs) can afford equitable access to resources, which appear to be contradicted by the existence of wealth differentiation among resource users. It asked the question of whether, given this contradiction, CPRs can in fact be considered equitable, and what factors may affect this. The case study of Bayan mountain and Sogoog explored how resource access is governed, how wealth differentiation comes about, and how these two are connected, before attempting to evaluate whether resource access in this CPR can be considered equitable and to identify factors affecting equity. The interrelationship between social differentiation (wealth included) and resource access in the case study, as expected, proved to be complex.

Wealth differentiation among herders was shown to depend on multiple factors. Access to resources, particularly winter houses and productive hayfields, figures among these but is not the only factor in wealth differentiation, or even the most important. Wealth differentiation in the case study thus cannot be taken as a reliable indicator that resource access is inequitable.

There is however differential access to resources in the case study, both in terms of access rights and of the ability to realise them. Resource access is affected by various aspects of social differentiation, of which wealth is only one. Access rights to most resources are not problematic; difficulties arise in respect of winter houses and hayfields, which are more limited than other pastoral resources in this area and are allocated to individual households. Characteristics such as being an ex-collective herder or having useful kinship or social connections or personal influence can all confer some advantage in gaining rights of access to these resources, as throughout Mongolia, although systematic discrimination on this basis is not practised. Wealth however has little effect in the case study in terms of preferential access rights.

Households which have rights of access to resources may still have trouble realising these, however. While this is due in part to issues of contingent resource access (with access to winter pasture dependent on having a winter house), it is here that wealth plays a more important role. Factors associated with relative wealth, such as labour availability, cash income and access to transportation are all key constraints on a household's ability to access resources, particularly insofar as they affect mobility for seasonal access to varied pastures. Lack of access to adequate pasture through inability to move in turn affects herd health and size and thus household wealth, given the importance of herd size in defining this. While the CPR does not disadvantage the poor through discriminatory allocation of access rights, this circularity in the relationship between resource access and wealth differentiation means that its current operation nonetheless serves to reinforce patterns of wealth differentiation.

Assessing whether the kind of differential access to resources found on Bayan and in Sogoog can be considered inequitable is not straightforward. Although compliance with the use-rules of the CPR is high and there is little overt conflict, this cannot be taken as an indication that herders consider the rules and the allocation of resources to be fair, as the literature suggests. Instead herders indicate some dissatisfaction with the allocation of winter houses and hayfields, principally due to how this was done by *bag* and *sum* governors at privatisation. However perceived inequities in this allocation are felt to be largely unresolvable despite official conflict resolution channels, both because it was a once-off allocation and because of official complicity in resulting inequities.

Preferential allocation of access rights, though not consistently practised, was on the basis of largely inherent characteristics of households, chiefly being an ex-collective herder or perhaps having herding kin, or characteristics that not every household can acquire, such as useful social connections or personal influence. To the extent that such inherent advantages allowed some households preferential access rights to resources, the CPR can perhaps be considered inequitable, although this is partly a matter of perspective. Ex-collective herders for instance could equally be considered to have gained

access rights to winter houses and productive haymaking land through continuous use, as has happened throughout Mongolia. It is also a matter of perspective whether wealth-based differences in resource access, principally in the ability to realise access rights, can be considered inequitable. While herders recognise the difficulties faced by poorer households in this respect, particularly as regards mobility, they do not seem to consider this unfair and there is little allowance in the rules and customs of the CPR for the needs of the less well off. An "outsider" perspective of equity which encompasses improving the lot of the poorest would have to include not only access rights but also the ability to realise them, in which case differential resource access due to wealth constraints restricting mobility may also be considered inequitable. Thus in the case study CPR there are some inequities in the allocation of access rights and perhaps also in the ability to realise access to resources.

These are due in large measure less to the current operation of the CPR than to the ongoing effects of decollectivisation and privatisation. In part this means the persistence of historic inequities, due to the once-off allocation of winter houses and hayfields with minimal input from resource users, against a backdrop of institutional change allowing some to manipulate the CPR to their advantage. However the ability to realise access rights was also affected, as households must now rely on their own resources in place of collective-provided services, notably transportation for seasonal moves, making differences in household wealth more significant in terms of resource access.

While the interaction between social and wealth differentiation and resource access would have been complex in any location, the particular circumstances of the case study CPR as described here are likely to find reflections elsewhere in Mongolia owing to a similar historic and institutional setting. However, this case also provides some insights in terms of factors affecting equitable resource access which may have wider application beyond Mongolia and perhaps beyond pastoral CPRs.

The case study illustrates the difficulty of evaluating equity in resource access, since in this instance the absence of non-compliant behaviour and overt conflict

did not reliably indicate equitable access. Asking resource users themselves to evaluate the rules of the CPR provided a better understanding of how equitable it is. A further issue here is how equity is defined and by whom, since perspectives of equity may differ both within the CPR user group (such as between ex-collective and new herders over the allocation of winter houses) and between resource users and outsiders (in how wealth constraints to realising resource access are viewed). The definition of equity needs to be negotiated and adapted to the local situation.

Regardless of some claims in the literature, it can safely be said that CPRs are not inherently equitable. Instead resource access is affected by both the social and institutional setting of the CPR. In this case study social differentiation is much less pronounced than in many examples in the literature, but nevertheless impacts on resource access in that, while also less pronounced, inequities still exist. Although there is no systematic discrimination in the allocation of access rights, neither is there any elite group that might ensure access for all users to serve its own interests. Thus while the interests of the disadvantaged, chiefly the poorest, are not threatened in the CPR, neither are they safeguarded.

Where the institutions for collective action in the CPR are under stress or do not function well, equitable outcomes seem to be less likely. The case study demonstrates the effects on equity of the lack of a coherent institutional framework to take over at decollectivisation. Institutional vagueness from privatisation to the present day has resulted variously in some manipulation of the privatisation process; in the lack of resource user participation in allocating more limited resources and in devising appropriate and effective rules for resource access and use; and in an inability to resolve conflict and inequities in resource allocation. It is significant that the source of greatest dissatisfaction over resources, the allocation of winter houses and hayfields at privatisation, is the area in which resource users had least participation. This suggests that strengthening the institutions for management of resources by local users may help to foster more equitable resource access.

While CPRs may not be inherently equitable, compared to the alternatives they may still offer better possibilities for equity in some situations, with pastoralism seeming a good case in point. In both Africa and Central Asia, particularly parts of China, inequity in resource access has increased with individualised tenure of pasture. This is paralleled in Mongolia with some poorer households left out in the allocation of campsite possession certificates, and in the case study by herders informally setting boundaries in winter pasture, effectively excluding other users. By contrast, forms of communal tenure may serve to guarantee access to the poorest and place some social pressure on the wealthy and powerful in the community. This is especially important for the less well off who generally depend more heavily on access to common resources for their livelihood.

In Mongolia this has particular implications since the general trend of land use legislation seems to be increasingly towards privatisation of pasture. Evidence from other pastoral commons where individualised tenure has been introduced suggests that herders' fears of exclusion from resources by the wealthy, and their consequent resistance to issuing possession contracts for pasture, are probably justified. Taking into account the need for strong institutions devolving decisionmaking power to resource users, the likely effects on equity of differentiation in the user community, and how equity is understood, common tenure may still allow for more equitable access to resources than will privatising of pasture.

These suggestions however suffer from at least two specific limitations. First, they chiefly affect equitable rights of access to resources, rather than problems in realising access rights. In the case study such problems derive in part from contingency issues, here possession of a winter house, exacerbated by boundary agreements in winter pasture which effectively exclude some resource users from pasture despite their having legal access rights. This is partly due to institutional weakness and could perhaps be overcome. The main issue with realising access rights however is wealth constraints to mobility, a historic problem in Mongolia which was addressed under the collectives but which herders do not currently appear to recognise as a question of equity in

resource access. It is a significant issue however for the least well off, who depend more heavily on access to common resources and whose lack of mobility leads to a continued decline in wealth. If equity includes enhanced possibilities for the most disadvantaged, then the current CPR must also find some way to address such constraints to mobility, which must depend heavily on the goodwill of resource users and their first perceiving a need to address this issue.

Secondly, the suggestions made here for enhancing equity are much more easily applicable when establishing new communal tenure regimes. Making changes to an existing situation is more difficult, particularly when, as here, some resources have already been fully allocated on a once-off basis. This leaves limited options for making resource access more equitable and taking into account the increased number of resource users since privatisation. Either winter houses and hayfields must be reallocated (although attempts by officials to reallocate pasture in neighbouring Inner Mongolia have caused significant conflict), or completely new ways of governing their use must be devised. In either case this would mean yet another new start in resource management in a setting which has already seen considerable change. Any alteration to existing arrangements for resource management would probably first involve persuading herders, as the resource users, that a more equitable system is worth the effort of change; this is likely to be resisted since many would not benefit directly and those who are well served by the present system would likely lose their privileged position. Similarly, while lack of user participation in devising institutions has contributed to current inequities, now to devolve this power to herders without some agreement over how equitably resource access should be apportioned, might have the counterproductive result of reinforcing existing inequities by effectively handing decision-making power to the strongest.

It would be informative therefore to investigate examples, particularly in post-socialist settings, of CPRs in which the resource users themselves have agreed on institutional forms that do allow relatively equitable access to resources. Insights gained into how this has been possible may well have some application in the pastoral commons of Mongolia and Central Asia.

This thesis has shown that claims that CPRs or other forms of communal resource management can afford equitable access to resources are overly simplistic. The case study of Bayan mountain suggests that these claims should not be dismissed out of hand however, but qualified and put into perspective. Attempts to promote equitable resource access in community-based resource management need to consider how equity is defined in a given situation, the social divisions and power dynamics in the resource user community and the robustness of resource management institutions, as well as evaluating how equitable resource access is likely to be under other types of property regime. Taking all this into account, while no property regime is entirely equitable, in the pastoral setting common tenure may still offer the best possibilities for equity.

Bibliography

- ADB (1995) *Developing Mongolia's Legal Framework: A Needs Analysis - Property Rights*. http://www.adb.org/Documents/Papers/Mongolia_Legal_Framework/property_rights.asp, retrieved 13 May 2003.
- Agrawal, Arun and Clark C Gibson (1999) Enchantment and disenchantment: the role of community in natural resource conservation. *World Development* 27(4):629-649.
- Babbie, Earl (1998) *The Practice of Social Research (8th edition)*. New York: Wadsworth.
- Baland, Jean-Marie and Jean-Philippe Platteau (1996) *Halting Degradation of Natural Resources: Is there a Role for Rural Communities?* Oxford: Clarendon Press / FAO.
- Banks, Tony (1999) State, community and common property in Xinjiang: synergy or strife? *Development Policy Review* 17:293-313.
- Banks, Tony (2000) *Economic Reform and the Chinese Commons: A Tale of Three Villages*. Department of Applied and International Economics Discussion Paper No. 2000.11. Palmerston North: Massey University.
- Banks, Tony (2001) Property rights and the environment in pastoral China: evidence from the field. *Development and Change* 32(4):717-740.
- Banks, Tony, Camille Richard, Li Ping and Yan Zhaoli (2003) Community-based grassland management in western China: rationale, pilot project experience and policy implications. *Mountain Research and Development* 23(2):132-140.
- Batbuyan, Batjav (1997) Territorial organisation of Mongolian pastoral livestock husbandry in the transition to a market economy. Proceedings of Rural Development International Workshop, Gödöllő, Hungary. Rome: FAO.
- Beck, Tony and Cathy Nesmith (2001) Building on poor people's capacities: the case of common property resources in India and West Africa. *World Development* 29(1):119-133.
- Behnke, Roy and Ian Scoones (1993) Rethinking range ecology: implications for rangeland management in Africa. In Roy Behnke, Ian Scoones and Carol Kerven (eds) *Range Ecology at Disequilibrium: New Models of Natural Variability and Pastoral Adaptation in African Savannas*. London: Overseas Development Institute / International Institute for Environment and Development / Commonwealth Secretariat.
- Benson, Linda and Ingvar Svanberg (1988) The Kazaks in Xinjiang. In Linda Benson and Ingvar Svanberg (eds) *The Kazaks of China: Essays on an Ethnic Minority*. Uppsala: Centre for Multiethnic Research, Uppsala University; Almqvist & Wiksell International, distributor.

- Berkes, Fikret and M Taghi Farvar (1989) Introduction and overview. In Fikret Berkes (ed.) *Common Property Resources: Ecology and Community-Based Sustainable Development*. London: Belhaven Press.
- Blair, Harry W (1996) Democracy, equity and common property resource management in the Indian subcontinent. *Development and Change* 27(3):475-499.
- BOAA (1990) *Bayan-Ölgii Aimag Atlas (Bayan-Ölgii aimgiin atlas)*. Ulaanbaatar: Mongolian Geodesic and Cartographic Laboratory.
- Bold, Bat-Ochir (1997) The coordination of territorial-administrative divisions with pastoral areas: an important prerequisite for the effective use of pasture land. *Mongolian Studies* 20:1-22.
- Bromley, Daniel W (1992) The commons, property, and common-property regimes. In D W Bromley (ed.) *Making the Commons Work: Theory, Practice and Policy*. San Francisco: Institute for Contemporary Studies Press.
- Chambers, Robert (1997) *Whose Reality Counts? Putting the First Last*. London: Intermediate Technology.
- Chambers, Robert and Gordon R Conway (1992) *Sustainable Rural Livelihoods: Practical Concepts for the 21st Century*. IDS Working Paper No. 72. Brighton: Institute of Development Studies.
- CIA (2003) *CIA - The World Factbook - Mongolia*. www.cia.gov/cia/publications/factbook/print/mg.html, last accessed 4 Nov 2003.
- Cooper, Louise (1993) Patterns of mutual assistance in the Mongolian pastoral economy. *Nomadic Peoples* 33:153-162.
- Cooper, Louise (1995) *Wealth and Poverty in the Mongolian Pastoral Economy*. Policy Alternatives for Livestock Development (PALD) Research Report No. 11. Brighton: Institute of Development Studies.
- Devereux, Stephen (1996) *Fuzzy Entitlements and Common Property Resources: Struggles over Rights to Communal Land in Namibia*. IDS Working Paper No. 44. Brighton: Institute of Development Studies.
- Ecologist (1995) The commons: where the community has authority. In John Kirkby, Phil O'Keefe and Lloyd Timberlake (eds.) *The Earthscan Reader in Sustainable Development*. London: Earthscan.
- Economist (2002) The last best place. *Economist* 21 Dec 2002, 365(8304):58-60.
- Ellis, Jim (1995) Climate variability and complex ecosystem dynamics: implications for pastoral development. In Scoones, Ian (ed.) *Living with Uncertainty: New Directions in Pastoral Development in Africa*. London: Intermediate Technology.
- Fernández-Giménez, Maria (1999a) Sustaining the Steppes: A Geographical History of Pastoral Land Use in Mongolia. *The Geographical Review* 89(3):315-342.

- Fernández-Giménez, Maria (1999b) Reconsidering the role of absentee herd owners: a view from Mongolia. *Human Ecology* 27(1):1-27.
- Fernández-Giménez, Maria (2001) The effects of livestock privatisation on pastoral land use and land tenure in post-socialist Mongolia. *Nomadic Peoples* 5(2):49-66.
- Fernández-Giménez, Maria (2002) Spatial and social boundaries and the paradox of pastoral land tenure: a case study from postsocialist Mongolia. *Human Ecology* 30(1):49-78.
- Fernández-Giménez, Maria and B Batbuyan (2000) Law and disorder in Mongolia: local implementation of Mongolia's Land Law. Paper presented at the Eighth Conference of the International Association for the Study of Common Property. <http://dlc.dlib.indiana.edu/documents/dir0/00/00/02/54/index.html>, retrieved 6 May 2003.
- Finke, Peter (1995) Kazak pastoralists in western Mongolia: economic and social change in the course of privatization. *Nomadic Peoples* 36/37:195-216.
- Finke, Peter (2000) From "common property" to "open access": changing pastoral land tenure in post-socialist Mongolia. Paper presented at the Eighth Conference of the International Association for the Study of Common Property, Bloomington, Indiana, USA. <http://dlc.dlib.indiana.edu/documents/dir0/00/00/02/56/index.html>, retrieved 6 May 2003.
- Fratkin, Elliot (1997) Pastoralism: governance and development issues. *Annual Review of Anthropology* 26:235-261.
- Galaty, John G (1999) Response to Philip Salzman, Is inequality universal? *Current Anthropology* 40(1):47-48.
- Gibbs, Christopher and Daniel Bromley (1989) Institutional arrangements for management of rural resources: common property regimes. In Fikret Berkes (ed.) *Common Property Resources: Ecology and Community-Based Sustainable Development*. London: Belhaven Press.
- Goldstein, Melvyn C and Cynthia M Beall (1994) *The Changing World of Mongolia's Nomads*. Hong Kong: Odyssey.
- GOM and UNS (Government of Mongolia and United Nations System) (1998) *Memorandum of Understanding: Food Security and Nutrition*. http://www.un-mongolia.mn/reports/files/mou_food.pdf, retrieved 10 Feb 2004.
- Gomboev, B O (1996) The structure and process of land use in Inner Asia. In Caroline Humphrey and David Sneath (eds) *Culture and Environment in Inner Asia, vol. 1: The Pastoral Economy and the Environment*. Cambridge: White Horse Press.
- Grainger, Alan (1995) Improving livestock raising. In John Kirkby, Phil O'Keefe and Lloyd Timberlake (eds) *The Earthscan Reader in Sustainable Development*. London: Earthscan.

- Gray, Kevin (1995) The ambivalence of property. In John Kirkby, Phil O'Keefe and Lloyd Timberlake (eds) *The Earthscan Reader in Sustainable Development*. London: Earthscan.
- Griffin, Keith (1995) Economic strategy during the transition. In Keith Griffin (ed.) *Poverty and the Transition to a Market Economy in Mongolia*. Basingstoke: Macmillan.
- Grima, A P Lino and Fikret Berkes (1989) Natural resources: access, rights-to-use and management. In Fikret Berkes (ed.) *Common Property Resources: Ecology and Community-Based Sustainable Development*. London: Belhaven Press.
- Hanstad, Tim and Jennifer Duncan (2001) *Land Reform in Mongolia: Observations and Recommendations*. RDI Reports on Foreign Aid and Development No. 109. Seattle: Rural Development Institute.
- Hardin, Garrett (1968) The tragedy of the commons. *Science* 162:1243-48.
- Hudson, Alfred E (1938) *Kazak Social Structure*. New Haven: Yale University Press.
- Humphrey, Caroline and David Sneath (1996) Introduction. In Caroline Humphrey and David Sneath (eds) *Culture and Environment in Inner Asia, vol. 1: The Pastoral Economy and the Environment*. Cambridge: White Horse Press.
- Humphrey, Caroline and David Sneath (1999) *The End of Nomadism? Society, State and the Environment in Inner Asia*. London: Earthscan.
- Hurelbaatar, A (1996) The transformation of the Inner Mongolian pastoral economy: the case of Hulun Buir League. In Caroline Humphrey and David Sneath (eds) *Culture and Environment in Inner Asia, vol. 2: Society and Culture*. Cambridge: White Horse Press.
- Jain, Nihal C (2002) Heterogeneity and equity: some contradictions and compromises in collective action. Paper presented at the Ninth Biennial Conference of the International Association for the Study of Common Property, Victoria Falls, Zimbabwe. <http://dlc.dlib.indiana.edu/documents/dir0/00/00/08/35/index.html>, retrieved 6 May 2003.
- Khazanov, Anatoly M (1998) Pastoralists in the contemporary world: the problem of survival. In Joseph Ginat and Anatoly M Khazanov (eds) *Changing Nomads in a Changing World*. Brighton / Portland: Sussex Academic Press.
- Kumar, Somesh (2002) *Methods for Community Participation: A Complete Guide for Practitioners*. London: ITDG.
- Lane, Charles R (1998) Overview of the pastoral problematic. In Charles R Lane (ed.) *Custodians of the Commons: Pastoral Land Tenure in East and West Africa*. London: Earthscan.
- Lane, Charles R and Richard Moorehead (1995) New directions in rangeland resource tenure and policy. In Ian Scoones (ed.) *Living with Uncertainty: New Directions in Pastoral Development in Africa*. London: Intermediate Technology.

- Leach, Melissa, Robin Mearns and Ian Scoones (1999) Environmental entitlements: dynamics and institutions in community-based natural resource management. *World Development* 27(2):225-247.
- Li, Tania Murray (1996) Images of community: discourse and strategy in property relations. *Development and Change* 27(3):501-527.
- Li, Tania Murray (2002) Engaging simplifications: community-based resource management, market processes and state agendas in upland Southeast Asia. *World Development* 30(2):265-283.
- Ludi, Eva (2003) Sustainable pasture management in Kyrgyzstan and Tajikistan: development needs and recommendations. *Mountain Research and Development* 23(2):119-123.
- Mearns, Robin (1993) Territoriality and land tenure among Mongolian pastoralists: variation, continuity and change. *Nomadic Peoples* 33:73-103.
- Mearns, Robin (1996a) *Commons and Collectives: The Lack of Social Capital in Central Asia's Land Reforms*. IDS Working Paper No. 40. Brighton: Institute of Development Studies.
- Mearns, Robin (1996b) Community, collective action and common grazing: the case of post-socialist Mongolia. *Journal of Development Studies* 32(3):297-339.
- Mearns, Robin (1996c) Environmental entitlements: pastoral natural resource management in Mongolia. *Cahiers des sciences humaines* 32(1):105-131.
- Mearns, Robin (n.d.) *A Training Course in RRA Field Research Methods for Analysis of the Mongolian Herding Economy*. Policy Alternatives for Livestock Development (PALD) Working Paper No. 1. Brighton: Institute of Development Studies.
- Mearns, Robin and E Dulamdary (2000) Sustaining livelihoods on Mongolia's pastoral commons. Paper presented at the Eighth Conference of the International Association for the Study of Common Property. <http://dlc.dlib.indiana.edu/documents/dir0/00/00/05/74/index.html>, retrieved 6 May 2003.
- Miller, Daniel (2001) *Sustainable Development of Mountain Rangelands in Central Asia: An Update from Kyrgyzstan*. The Mountain Forum: www.mtnforum.org/resources/library/milld01a.htm; retrieved 1 Apr 2003.
- MNE (Mongolia Ministry for Nature and the Environment) (1996) *Mongolia's Wild Heritage: Biological Diversity, Protected Areas and Conservation in the Land of Chingis Khan*. Boulder, Co: Mongolia Ministry for Nature and the Environment / UNDP Global Environment Facility / WorldWide Fund for Nature.
- Moorehead, Richard (1998) Mali. In Charles R Lane (ed.) *Custodians of the Commons: Pastoral Land Tenure in East and West Africa*. London: Earthscan.

- NSO (National Statistical Office of Mongolia) (1998) *Mongolian Statistical Yearbook 1998*. Ulaanbaatar: National Statistical Office of Mongolia.
- NSO (National Statistical Office of Mongolia) (2001) *Mongolian Statistical Yearbook 2001*. Ulaanbaatar: National Statistical Office of Mongolia.
- Oakerson, Ronald J (1992) Analyzing the commons: a framework. In D W Bromley (ed.) *Making the Commons Work: Theory, Practice and Policy*. San Francisco: Institute for Contemporary Studies Press.
- Ostrom, Elinor (1990) *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: University of Cambridge Press.
- Perrier, Gregory (1995) New directions in range management planning in Africa. In Ian Scoones (ed.) *Living with Uncertainty: New Directions in Pastoral Development in Africa*. London: Intermediate Technology.
- Potkanski, Tomasz (1993) Decollectivisation of the Mongolian pastoral economy (1991-92): some economic and social consequences. *Nomadic Peoples* 33:123-135.
- Quiggin, John (1993) Common property, equality and development. *World Development* 21(7):1123-1138.
- Robson, Colin (1993) *Real World Research: A Resource for Social Scientists and Practitioner-Researchers*. Oxford: Blackwell.
- Rudelson, Justin Jon (1998) *Central Asia Phrasebook*. Footscray, Australia: Lonely Planet.
- Runge, C Ford (1992) Common property and collective action in economic development. In D W Bromley (ed.) *Making the Commons Work: Theory, Practice and Policy*. San Francisco: Institute for Contemporary Studies Press.
- Salzman, Philip Carl (1999) Is inequality universal? *Current Anthropology* 40(1):31-61.
- Sanders, Alan J K and J Bat-Ireedui (1995) *Mongolian Phrasebook*. Footscray, Australia: Lonely Planet.
- Scoones, Ian (1995) New directions in pastoral development in Africa. In Ian Scoones (ed.) *Living with Uncertainty: New Directions in Pastoral Development in Africa*. London: Intermediate Technology.
- Seers, Dudley (1969) The meaning of development. *International Development Review* 11(4):2-6.
- Seers, Dudley (1979) The meaning of development. In David Lehman (ed.), *Development Theory: Four Critical Studies*. London: Cass.
- Siurua, Hanna and Jeremy Swift (2002) Drought and *zud* but no famine (yet) in the Mongolian herding economy. *IDS Bulletin* 33(4):88-97.
- Skapa, Barbara (1995) Mongolian women and poverty during the transition. In Keith Griffin (ed.) *Poverty and the Transition to a Market Economy in Mongolia*. Basingstoke: Macmillan.

- Sneath, David (2001) Notions of rights over land and the history of Mongolian pastoralism. *Inner Asia* 3(1):41-59.
- Sneath, David (2003) Land use, the environment and development in post-socialist Mongolia. *Oxford Development Studies* 31(4):441-459.
- Steins, Nathalie A and Victoria M Edwards (1999) Collective action in common-pool resource management: the contribution of a social constructivist perspective to existing theory. *Society and Natural Resources* 12:539-557.
- Sutter, John W (1987) Cattle and inequality: herd size differences and pastoral production among the Fulani of Northeastern Senegal. *Africa* 57(2):196-218.
- Swift, Jeremy (1995a) Dynamic ecological systems and the administration of pastoral development. In Ian Scoones (ed.) *Living with Uncertainty: New Directions in Pastoral Development in Africa*. London: Intermediate Technology.
- Swift, Jeremy (1995b) Rural development: the livestock sector. In Keith Griffin (ed.) *Poverty and the Transition to a Market Economy in Mongolia*. Basingstoke: Macmillan.
- Sylla, Djéidi (1995) Pastoral organisations for uncertain environments. In Ian Scoones (ed.) *Living with Uncertainty: New Directions in Pastoral Development in Africa*. London: Intermediate Technology.
- Szykiewicz, Slawoj (1993) Mongolia's nomads build a new society again: social structures and obligations on the eve of the private economy. *Nomadic Peoples* 33:163-172.
- Szykiewicz, Slawoj (1998) Contemporary Mongol concepts on being a pastoralist: institutional continuity, change and substitutes. In Joseph Ginat and Anatoly M Khazanov (eds) *Changing Nomads in a Changing World*. Brighton / Portland: Sussex Academic Press.
- Templer, Guy, Jeremy Swift and Polly Payne (1993) The changing significance of risk in the Mongolian pastoral economy. *Nomadic Peoples* 33:105-122.
- Tumenbayar, Nyamaa (2000) Land privatization option for Mongolia. Paper presented at the Eighth Conference of the International Association for the Study of Common Property, Bloomington, Indiana, USA. <http://dlc.dlib.indiana.edu/documents/dir0/00/00/03/70/index.html>, retrieved 6 May 2003.
- Wade, Robert (1987) The management of common property resources: collective action as an alternative to privatisation or state regulation. *Cambridge Journal of Economics* 11:95-106.
- Wade, Robert (1992) Common-property resource management in South Indian villages. In D W Bromley (ed.) *Making the Commons Work: Theory, Practice and Policy*. San Francisco: Institute for Contemporary Studies Press.
- WCED (1987) *Our Common Future*. London: Oxford University Press.

- Williams, Dee Mack (1996) Grassland enclosures: catalyst of land degradation in Inner Mongolia. *Human Organization* 55(3):307-313.
- Yin, Robert K (2003) *Case Study Research: Design and Methods* (3rd edition). Thousand Oaks / London: Sage.
- Zuuny Medee (2003) Herding statistics for 2002. Newspaper article, *Zuuny Medee* (Century News) July 2003.