

16 **Natural Resource Institutions in Transformation: The Tragedy and Glory of the Private**

Christine Bichsel¹, Gilbert Fokou², Asel Ibraimova³, Ulan Kasymov⁴, Bernd Steimann⁵, and Susan Thieme⁶

Abstract

The present article focuses on continuity and change in natural resource institutions in post-Soviet Kyrgyzstan. Two main trends have characterised the management of water, agricultural land and pastures since the country became independent in 1991. First, while natural resources were collective and state-owned during the Soviet period, they are now being gradually privatised and passed into individual or group ownership. Second, by contrast with central administration under the Soviet regime, after independence natural resource management has been and is increasingly being decentralised to the community level. We suggest that these processes have created a new concept of the 'private', defined as clearly assigned property rights as opposed to 'commons', and individual or group ownership as opposed to 'public' ownership. We attempt here to analyse how privatisation and decentralisation have created new property relations and new forms of natural resource governance. We conclude that these processes have yielded both favourable and unfavourable outcomes.

Keywords: Post-socialist transformation; natural resource institutions; privatisation; decentralisation; water; agricultural land; pastures; Kyrgyzstan.

16.1 Introduction

Privatisation and decentralisation in Kyrgyzstan have altered natural resource use and management. This article traces the emergence of the 'private' and discusses its 'glories' and 'tragedies' in terms of favourable and unfavourable outcomes. The term 'private' entails two dimensions. First, 'private' relates to the 'tragedy of the commons' proclaimed by Garrett Hardin (1968), who, in brief, posits a Malthusian relationship between unregulated access to natural resources and over-exploitation and degradation of these resources. He bases this relationship on the idea of self-interested individuals who strive for maximisation of benefits rather than protecting the common good. In this view, the 'private' as opposed to the 'commons' denotes clearly defined property rights that restrict access and regulate demand, thus avoiding Hardin's tragedy. The 'tragedy of the commons' remains an implicit assumption that shapes critique of excessive use and degradation of natural resources in the former Soviet Union (Mirovitskaya and Soroos 1995). Analysts, mainly of Western origin, understand Soviet public ownership as a 'property vacuum' that represents a form of Hardin's commons and in practice leads to an open access situation – hence the prescription of clearly assigned property rights.

Second, 'private' refers to a form of ownership not by the state, but by individuals or groups. Yet in this sense private property is more than a form of ownership. It is a concept that has ideological effects. In particular, individualised private exclusive ownership is posited as the basis of democratic politics and stable market economies (Hann 1998; Verdery 2004b). Moreover, the controversy regarding public and private property regimes had political symbolism and characterised the central ideological opposition of the state socialist and capitalist systems during the Cold War period. Therefore, transformation of property regimes – i.e. privatisation – throughout the post-socialist space needs to be understood in the context of this ideological opposition.

We argue that exploration of the two aspects of the 'private' outlined above constitutes an important contribution to understanding post-socialist transformation.⁷ Post-socialist transformation is defined first of all as the sum of social, economic and political changes that have occurred and continue to occur in Kyrgyzstan (and in varying forms in other countries) since the demise of state socialism. Second, it is defined as a process that links the past to the future (Burawoy and Verdery 1999). While we aim at a descriptive

rather than a prescriptive use of the term, we acknowledge that evaluation of processes attributed to it is hardly ever value-free. We mark the beginning of post-socialist transformation with the independence of Kyrgyzstan. However, we also take into account that the final years of the Soviet Union were constitutive in this process. Not only was this period formative in terms of present-day post-Soviet realities, but it also serves as a point of reference for people's subjective interpretations of transformation.

The present article draws on empirical research on land, water and pasture management conducted in Kyrgyzstan between 2002 and 2007 within the framework of the Swiss National Centre of Competence in Research (NCCR) North-South programme. The next section presents a descriptive account of privatisation and decentralisation of natural resources in independent Kyrgyzstan. This is followed by an exploration of how privatisation and decentralisation have altered social relations with respect to natural resources, and an examination of the new forms of natural resource governance. Finally, conclusions are drawn from our analysis of the 'private'.

16.2 Privatisation and decentralisation in independent Kyrgyzstan

Privatisation entails the transfer of property from state or collective entities to private actors. Privatisation programmes were introduced in Kyrgyzstan as early as December 1991. In the course of the following years, a vast array of state enterprises and state-owned utilities were transferred to private entities by means of vouchers and cash auctions.⁸ For this endeavour, the newly independent state received strong political backing and monetary support from international financial institutions (i.e. the International Monetary Fund and the World Bank) which assigned a high priority to privatisation (Pomfret 2004). In the case of natural resources, Kyrgyzstan largely privatised excludable goods such as agricultural land and cattle, but has so far retained state ownership of some common-pool and key natural resources such as forests, pastures and water.

Agricultural land has been successively transferred from state and collective farms to private ownership by peasant farms.⁹ In a first step, the government allocated land-use rights to peasant farms for 99 years in 1995. These rights, inscribed in land-use certificates, were converted to ownership documents in 1998. The Land Code¹⁰ adopted in 1999 initially foresaw a five-

year moratorium on agricultural land sales, which, however, was gradually eased and eventually lifted by 2002 (Bloch and Rasmussen 1998; Giovarelli 1998; Bloch 2002). While livestock was privatised by distribution to entitled individuals, pastures have remained state property as regulated in the Land Code. Individuals or economic entities may, however, conclude leasing agreements for grazing rights over a period of five to ten years (Farrington 2005). The Water Code¹¹ adopted in 2005 defines water as state property, but grants every person within the boundaries of Kyrgyzstan the right to use water for a finite list of purposes, including irrigation. An irrigation service fee was introduced in 1995 and finally implemented in 1999. While inter-farm irrigation infrastructure also remains state-owned, the ownership of on-farm (tertiary) infrastructure is transferred to formalised irrigation communities (Ul Hassan et al 2004; Herrfahrdt et al 2006; Sehring 2007).

Decentralisation transfers centralised state authority to lower political levels and delegates authority to governmental and non-governmental bodies. In Kyrgyzstan, the process of decentralising the political and economic system inherited from the Soviet period began soon after independence.¹² It centres on the concept of 'local self-governance'. The most relevant body in this respect is the village administration (*aiyl ökmötü*), which was introduced in 1996. It subsumes clusters of villages – most of which were part of the same state or collective farm – under the same executive and representative body. The law defines the village administration as independent from central government. The decentralisation process has received strong support from the United Nations Development Programme and other international aid organisations.¹³ It was implemented by the central government as a top-down process rather than being driven by the population (Ibraimova 2009).

In the case of agricultural land, the village administration was entitled to hold property in 2002 and is thus in charge of managing municipal infrastructure and the land in the Redistribution Fund. With regard to pastures, the village administration holds the right to conclude lease agreements and collect taxes for grazing areas in the vicinity of villages. With regard to irrigation water, Kyrgyzstan has transferred and is still transferring authority for irrigation management to Water User Associations (WUAs). WUAs are non-commercial voluntary associations of water users that finance themselves through members' payments for water service delivery. Usually established along the boundaries of the former state and collective farms, they are intended to operate, maintain and rehabilitate the irrigation system, deliver water to the end users, purchase water from the state, and collect water fees from users

(Ul Hassan et al 2004; Herrfahrdt et al 2006; Sehring 2007). The country received strong financial and logistic support from the Asian Development Bank and the World Bank for country-wide development of WUAs.¹⁴

16.3 New property relations concerning natural resources

Property relations are a specific form of social and cultural relations among humans with respect to natural resources (Hann 1998; Humphrey and Verdery 2004). Privatisation and decentralisation alter property relations in two ways: first, they transform the nature of people who engage in social relations with respect to natural resources, and second, they redefine the way the natural resources at stake are constituted (Table 1). In the case of Kyrgyzstan, these processes have created an unprecedented form of personhood: the ‘peasant farmer’. Far from being a naturally existing category, the peasant farmer emerges as both a means and an end of privatisation and decentralisation. The peasant farmer becomes the holder of property rights, but it is the very social concept translated into spatial boundaries that allows property to be reassigned in the first place. Equally, the peasant farmer becomes the basic social unit of rural livelihood production, engagement in the market economy, preservation of natural resources and the environment, and realisation of local self-governance. But transfer of political power and delegation of authority are only possible on the grounds of the peasant farmer’s conceptual existence.

In practice, a vast number of farmers clearly support and approve of private land ownership. They either produce for subsistence or participate in the evolving rural and urban agricultural and livestock markets in Kyrgyzstan. A smaller number of farmers engage in emerging profitable agricultural businesses beyond the national border.¹⁵ At the same time, farmers often perceive themselves as ‘unemployed’ or ‘without a job’ (Lindberg 2007, p 69; Rohner 2007). This may be the result of previous Soviet practices, whereby agricultural workers were provided with salaried jobs. Alternatively, it could be a strategy for dealing with the Ministry of Labour and Social Protection, which monitors income and submits those categorised as ‘poor’ to the Employment Centre for unemployment allowances (Ibraimova 2009). But in this context we suggest that a lack of ‘professionalisation’ also hints at a hitherto absent social identity and societal valuation. Becoming a peasant farmer is – at least initially – not an entrepreneurial option as neo-liberal

Table 1

Impacts of privatisation and decentralisation on property relations related to natural resources in Kyrgyzstan.	Changes in property relations	Processes
	Emergence of the 'peasant farmer'	<ul style="list-style-type: none"> - The concept of the 'peasant farmer' emerges as both the means and end of privatisation and decentralisation - Actual practice lacks social identity and valuation
	Monetarisisation and new values of natural resources	<ul style="list-style-type: none"> - Renders people 'responsible' and 'self-governing' in a neo-liberal framework - Attributes higher value to some natural resources and makes others lose value
	Natural resources become an asset and obligation	<ul style="list-style-type: none"> - Empowerment and freedom of choice through ownership - Private ownership leads to new risks, liabilities and burden
	Reconfiguration of wealth and social status	<ul style="list-style-type: none"> - Privatisation processes lead to unequal benefits - Private ownership results in new social stratification

reasoning constructs it, but is often the last resort in comparison with other socially and economically more beneficial opportunities, such as migrating for low-skilled but better-paid work to the capital of Bishkek or to Kazakhstan or Russia (Thieme 2007).

The constitution of natural resources has been altered by monetarisisation, through the process of assigning prices to the potential benefits derived from resources (e.g. irrigation service fee). This is not to say that natural resources were completely outside the realm of economic relations during the Soviet period.¹⁶ But with the form of capitalism that followed independence, monetarisisation – and the market in particular – became imperative (Wood 1994). Assigning a price to property and services was guided by ideas of economic efficiency, but also by the attempt to render people responsible and self-governing within a neo-liberal framework. By this reasoning, the monetarised natural resource was to appear as a scarce good of (monetary) value with which people could engage in a specific form: environmental stewardship, political agency, and efficient economic transactions.¹⁷

With ownership, it is expected that people will bestow new values on natural resources and therefore help protect them from degradation. At the same

time, ownership implies new obligations. When privatised land carries liabilities (Verdery 2004a), repair and maintenance of transferred irrigation infrastructure turn into a financial burden (Bichsel 2009), and livestock ownership devolved to individual herders becomes a risk (Farrington 2005). Moreover, newly owned objects have gone from being valuable to being valueless or vice-versa, simply because the surrounding conditions changed.¹⁸ This is illustrated by the greater value attributed to pastures near villages and the diminished importance of more distant high-altitude villages after the collapse of the Soviet supply and transportation network (Ludi 2003; Shigaeva et al 2007; Liechti, submitted). Similarly, users at present greatly prefer gravity-operated to pump-fed systems for irrigation. The latter were designed for the Soviet socio-economic system, with heavily subsidised electricity and state infrastructure maintenance. When this network fell apart, pumps transferred to communities became a burden to users and a liability with respect to ensuring water supply (Bichsel 2009).

Changed values brought about winners and losers, most succinctly summarised in a colloquial expression: *prikhvatisatsiia*. The collated words *privatisatsiia* (Russian for ‘privatisation’) and *khvatat’* (‘to grab’) denote the illicit appropriation of former or present state property for private use.¹⁹ The expression entails both ridicule of the actual process of privatisation and a social critique of its sometimes grossly unequal and unjust outcomes. Not only did privatisation processes allow for inequalities; private ownership itself resulted in new social stratification. Shigaeva et al (2007) argue that the social dynamics in two northern Kyrgyz villages reflect reassignment of agricultural production assets to wealthier households. While post-socialist distribution of wealth appears to reflect former disparities – and thus to counter the ideological picture of a ‘levelled’ Soviet society – the influx of new financial resources such as remittances reconfigures and possibly also amplifies these disparities (Rohner 2007). Unequal accumulation and consumption of wealth alter moral perceptions and remake familial and social networks (Wanner 2005), as indicated by the low prestige of agricultural work on fields now done by the poor for the wealthier (Lindberg 2007).²⁰

16.4 Altered governance of natural resources

Natural resource governance is understood as the arrangements of power and forms of authority that regularise the appropriation, distribution and value of natural resources in society (Hann 1998; Humphrey and Verdery 2004).

Altered governance thus raises the question of the legislative framework, as well as of other norms and relationships that shape current social practices related to natural resources (Table 2). Formal state law in independent Kyrgyzstan draws on a number of sources. The present legislative system succeeds Soviet law, but is also inspired by post-socialist Russia's legal science and law-making (Ibraimova 2009). At the same time, Western legal concepts entered legislation in Kyrgyzstan following independence and continue to shape the law. As discussed above, the country welcomed standards and practices recommended by international organisations for governance of natural resources. Finally, invoking its historical heritage, Kyrgyzstan has introduced institutions referred to as 'traditional' which presumably or actually existed prior to the Soviet period. This 're-traditionalisation' of law is reflected in the formalisation of elders' courts with the authority to adjudicate minor disputes over water and land at village level (Beyer 2006).

Evidence shows that social practices related to natural resources do not fully mirror the legislative framework (see, for example, Steimann 2008). Depending on their normative position, observers speak of a 'lack of rule of law' (Kangas 2004) or 'hybrid institutions' (Koehler and Zürcher 2004). Discrepancies between the legal and the empirical appear to have existed as a key element in Soviet institutional patterns and thus suggest a certain continuity. We propose that current social practices are governed by four main frameworks: first, the legal framework and respective policies already discussed; second, pre-independence structures and imaginaries, such as

Table 2

Governance of natural resources in Kyrgyzstan.	Frameworks	Informed by...
	1. Formal law and policies	<ul style="list-style-type: none"> – Soviet law – Russian legal thought – Western legal concepts – Introduction of 'traditional' law
	2. Pre-independence structures and imaginaries	<ul style="list-style-type: none"> – Soviet administrative divisions – Existing infrastructure – Past experiences and value systems
	3. Local moralities and norms	<ul style="list-style-type: none"> – Boundaries of collectivities – Rules of reciprocity and trust – Customary law (<i>adat</i>)
	4. On-site power relations	<ul style="list-style-type: none"> – Social and political configurations – Wealth, status and connections

ethno-territorial administrative divisions (Haugen 2003), infrastructural politics (Obertreis 2007), and previous experiences and value systems (Liechti, submitted); third, local moralities and norms that regulate the formation of collectivities, reciprocity and trust (Rohner 2007; Ibraimova 2009); and fourth, on-site power relations such as upstream–downstream constellations in irrigation systems (Bichsel 2009) or the advantageous position that ‘status’ bestows for access to irrigation water (Lindberg 2007).

The discrepancy between the legal framework and social practices entails inherent tension. Law is a normative prescription for behaviour, and the gap between the ‘ought’ and the ‘is’ raises questions about forms of authority and power that regulate actual social practices, and about their basis for legitimacy. The extended room for manoeuvre to bend formal rules is attributed to wealth, ‘status’ and social connections (Lindberg 2007; Rohner 2007; Shigaeva et al 2007). While the importance of connections may constitute a continuation of Soviet practices (Kuehnast and Dudwick 2002), it appears that status and wealth are now becoming more closely interlinked and morally reconfigured. Monetary means create a form of influence that incites both respect and fear among people for its potential to promote one’s own interests and ‘achieve things’. Possession or promise of money bestows authority on semi-criminal actors and buys popular support for political candidates to ascend to power, but also accounts for the wide room for manoeuvre of development projects to pursue their objectives. Conversely, this also explains the lack of trust and the low status that state institutions with limited funds enjoy among the population when pitted against financially potent international organisations.

Yet legal reform and development policy assign importance to a different form of power: associational power that emerges from joint integrative action for a common purpose, usually expressed as ‘collective action’. Decentralisation is driven by the idea that collective action needs to replace the centrally assumed responsibilities of previous state socialism. For example, the transition to farmer-managed systems now requires new forms of collective action for sustained operation and maintenance (Gallati 2008). Moreover, through forms of public sociality and mobilisation, collective action should fill the presumed ‘public void’ (Fairbanks 1997) of the Soviet Union and mould a democratic society.²¹ The main responsibility for people’s ability to recognise and exert their agency, Ibraimova (2009) argues, lies in the legislative and institutional framework the government provides. This framework has been significantly altered to enable collective action at

the community level. At the same time, Ibraimova contends that Kyrgyzstan has so far failed to successfully empower people for collective action due to its excessive focus on executive power and lack of the conditions required to secure public interests (ibid.).

Aid projects engage in institutional engineering for collective action through ‘community mobilisation’ and ‘initiative groups’. Here, their aims of political and societal reform account for specific ‘design principles’ to build collective action and related institutions. Such institutions are either built from scratch following the idealised image of Western democracy, or, alternatively, aid projects build on so-called ‘local traditions’ but include only selective aspects of these traditions that are of interest,²² while at the same time attempting to transform their underlying societal model (Bichsel 2009). Since independence, aid projects have set up or supported a vast number of community-based organisations for collective action. Numerous persons have participated in such organisations, and have been able to voice their needs and join forces to address the challenges they face. At the same time, many of these organisations are highly dependent on financial and technical aid that often determines their terms and their very existence. Moreover, the resulting contradictory and parallel structures often create confusion and thus threaten rather than enable collective action (Ibraimova 2009). In summary, the public space no longer appears in its retrospective void, but appears overcrowded in the sense of a Hardinian tragedy.

16.5 Conclusion

Privatisation and decentralisation rely heavily on the administrative and conceptual boundaries of the socialist property regime. For example, Kyrgyzstan adopted the principle of re-distribution rather than restitution, as it did not aim to restore pre-Soviet individual or group rights to natural resources which had to be relinquished in the socialist collectivisation process. Rather, it took residential and professional affiliation during the last Soviet period as a baseline. Similarly, the concept and term of ‘local self-governance’ has its origins in Soviet law. After the rapid social development and deeply conservative politics of the Brezhnev period, Gorbachev separated spheres of authority for the different levels of government, if only administratively (Ibraimova 2009). Therefore, despite the ideological politics which surround privatisation and decentralisation in post-Soviet Kyrgyzstan, the ‘private’ is inevitably conditioned by its preceding property

regime. We therefore suggest that accounts of post-socialist transformation must acknowledge this past outside its ideological framework.

Legal and social engineering has achieved de facto private property and decentralised governance in Kyrgyzstan. Yet it appears that social imaginaries that attribute meaning to the facts do not necessarily correspond. The peasant farmer as the newly emerging basic social unit of privatisation and decentralisation is a discursive reality and a social fact. However, on closer examination, the integrity of this image breaks down. Similarly, devolution of power and decentralisation of authority to the newly created political level of 'local self-governance' has to a considerable extent been successful. Yet many people perceive local self-governance authorities and even the re-invented elders' courts – per definition not part of the state – as an element of the central state. We suggest that this may be both a stage of ongoing transformation as well as a particular manifestation of the 'private' in Kyrgyzstan's post-Soviet context.

At present, our research suggests that the 'private' has both its glories and its tragedies in terms of outcomes. In terms of the 'private' as opposed to Hardin's tragedy of the commons, evidence suggests that clearly assigned property rights have indeed altered people's relationships to natural resources in terms of responsibility for protecting their condition. On the other hand, concomitant processes such as reconfiguration of value, slowly emerging markets and growing inequalities have led to greater exploitation and degradation of natural resources. With regard to private property, people's appreciation of individual or group ownership, their empowerment through such ownership, and their freedom of choice clearly rank as a glory. Yet private property has so far not delivered the 'bright future' promised by market capitalism and liberal theory in terms of democratic politics and stable market economies.

Endnotes

Full citation for this article:

Bichsel C, Fokou G, Ibraimova A, Kasymov U, Steimann B, Thieme S. 2010. Natural resource institutions in transformation: The tragedy and glory of the private. *In*: Hurni H, Wiesmann U, editors; with an international group of co-editors. *Global Change and Sustainable Development: A Synthesis of Regional Experiences from Research Partnerships*. Perspectives of the Swiss National Centre of Competence in Research (NCCR) North-South, University of Bern, Vol. 5. Bern, Switzerland: Geographica Bernensia, pp 255–269.

Acknowledgements:

The authors acknowledge support from the Swiss National Centre of Competence in Research (NCCR) North-South: Research Partnerships for Mitigating Syndromes of Global Change, co-funded by the Swiss National Science Foundation (SNSF), the Swiss Agency for Development and Cooperation (SDC), and the participating institutions.

¹ Christine Bichsel is a post-doctoral fellow at the University Priority Research Programme “Asia and Europe: Exchanges and Encounters” of the University of Zurich, Switzerland. Her research interests include development studies, peace and conflict research, and post-socialist transformation in Central Asia.

E-mail: christine.bichsel@access.uzh.ch

² Gilbert Fokou is a post-doctoral researcher at the Institut du Sahel in Bamako, Mali. His research focuses mainly on institutions for management of common property resources, on environmental conflicts, and on institutions and mechanisms for access of pastoral communities to natural resources and basic social services.

E-mail: gilbertfokou@yahoo.fr

³ Asel Ibraimova is a member of the Commission on Environmental Law of the World Conservation Union (IUCN) and a member of the legal team at Cerner Ltd. Her research interests are governance, decentralisation and sustainable management of natural resources, with a focus on local institutions.

E-mail: asel_i@yahoo.com

⁴ Ulan Kasymov is Director of the NGO CAMP Alatoo in Bishkek, Kyrgyzstan. His main research interest is in institutions for natural resource management and rural development.

E-mail: ulan@camp.elcat.kg

⁵ Bernd Steimann is a PhD researcher at the Department of Geography, University of Zurich, Switzerland. His research focuses on processes of post-socialist transformation, rural livelihoods and natural resource management in mountain areas in Central and South Asia.

E-mail: bernd.steimann@geo.uzh.ch

⁶ Susan Thieme is a research fellow at the Department of Geography, University of Zurich, Switzerland. Her research interests are migration and development studies, particularly the multilocality of livelihoods, gender and generation, and social finance.

E-mail: susan.thieme@geo.uzh.ch

⁷ In this article, we use the term ‘transformation’ rather than ‘transition’, which is more common in English literature. By doing so, we emphasise the all-encompassing changes of the political, social and economic system with the advent of the post-socialist period rather than the transition from an authoritarian to a democratic system only (Herbers 2006, pp 3–9).

⁸ For a detailed account of progress and problems relating to privatisation in the 1990s, see Abazov (1999).

- ⁹ According to the 1999 Land Code, 25% of agricultural land remains in the Agricultural Land Redistribution Fund for lease to rural and urban citizens.
- ¹⁰ *Land Code of the Kyrgyz Republic*, 30 April 1999, with several amendments, most importantly the 2001 *Law on Agricultural Land Regulation*.
- ¹¹ *Water Code of the Kyrgyz Republic*, 12 January 2005.
- ¹² For a detailed overview of the different stages of decentralisation see Ibraimova (2009).
- ¹³ Compare Ackermann (2007) for an overview of the involvement of foreign donor organisations in decentralisation in Kyrgyzstan.
- ¹⁴ The establishment of a WUA has been a condition for international aid projects in the irrigation sector (Sehring 2007).
- ¹⁵ Examples include farmers in southern Kyrgyzstan catering to the demand for cherries in Russia, or livestock herders from Naryn province profitably selling white wool to traders from Kazakhstan and China.
- ¹⁶ For example, land and water played a pivotal role in the political economy of cotton production in Central Asia during the Tsarist and Soviet periods (Kandiyoti 2007). Moreover, historical studies show that economic transactions for natural resources were also frequent at the micro-economic level (see, for example, Thurman 1999).
- ¹⁷ At present, poplar trees are increasingly planted on private land plots as they fetch a good price on the timber market, and at the same time have a positive effect on the environment.
- ¹⁸ Values are a quality not of single objects or conditions of property, but of networks of things and institutions (Alexander 2004).
- ¹⁹ It is, however, rarely used for the case of natural resources and refers more to assets such as machinery or whole enterprises.
- ²⁰ Such low prestige is, however, not observed in animal husbandry. In Naryn province, more and more households offer their herding skills as professional herders to livestock owners in order to generate income. The higher esteem attributed to such work may be related to the fact that herding, livestock and life on the pasture enjoy prestige among large segments of Kyrgyz society.
- ²¹ Whether or not Soviet public space was actually void is disputed. See, for example, Sievers (2002).
- ²² For example, aid projects are often interested in the capacity of elders to mobilise villagers for a collective task, or their presumed accountability to the public.

References

Publications elaborated within the framework of NCCR North-South research are indicated by an asterisk (*).

- Abazov R. 1999. Policy of economic transition in Kyrgyzstan. *Central Asian Survey* 18(2):197–223.
- Ackermann M. 2007. *Die lokale Selbstverwaltung in Kirgisistan* [MSc thesis]. Tübingen, Germany: Institute of Geography, University of Tübingen.
- Alexander C. 2004. Value, relations, and changing bodies: Privatisation and property rights in Kazakhstan. In: Verdery K, Humphrey C, editors. *Property in Question: Value Transformation in the Global Economy*. Oxford, UK: Berg, pp 251–273.
- Beyer J. 2006. Revitalization, invention and continued existence of the Kyrgyz *aksakal* courts: Listening to pluralistic accounts of history. *Journal of Legal Pluralism and Unofficial Law* 53/54:141–176.
- * Bichsel C. 2009. *Conflict Transformation in Central Asia: Irrigation Disputes in the Fergana Valley*. Central Asian Studies Series. London, UK: Routledge.
- Bloch PC. 2002. Land reform and farm restructuring in Kyrgyzstan: Almost done, what next? *Problems of Post-Communism* 49(1):53–62.
- Bloch PC, Rasmussen K. 1998. Land reform in Kyrgyzstan. In: Stephen WK, editor. *Land Reform in the Former Soviet Union and Eastern Europe*. London, UK: Routledge, pp 111–125.
- Burawoy M, Verdery K, editors. 1999. *Uncertain Transition: Ethnographies of Change in the Postsocialist World*. Lanham, MD: Rowman and Littlefield.
- Fairbanks CH. 1997. The public void: Antipolitics in the former Soviet Union. In: Schedler A, editor. *End of Politics? Explorations into Modern Antipolitics*. London, UK: Macmillan Press, pp 91–114.
- Farrington JD. 2005. De-development in Eastern Kyrgyzstan and persistence of semi-nomadic livestock herding. *Nomadic Peoples* 9(1/2):171–197.
- * Gallati J. 2008. *Towards an Improved Understanding of Collective Irrigation Management: A System Dynamics Approach* [PhD dissertation]. Bern, Switzerland: University of Bern.
- Giovarelli R. 1998. *Land Reform and Farm Reorganization in the Kyrgyz Republic*. RDI Reports on Foreign Aid and Development No. 96. Seattle, WA: Rural Development Institute (RDI).
- Hann CM. 1998. Introduction: The embeddedness of property. In: Hann CM, editor. *Property Relations: Renewing the Anthropological Tradition*. Cambridge, UK: Cambridge University Press, pp 1–47.
- Hardin G. 1968. The tragedy of the commons. *Science* 162(3859):1243–1248.
- Haugen A. 2003. *The Establishment of National Republics in Soviet Central Asia*. Basingstoke, UK: Palgrave Macmillan.
- Herbers H. 2006. *Landreform und Existenzsicherung in Tadschikistan. Die Handlungsmacht der Akteure im Kontext der postsowjetischen Transformation*. Sonderband Nr. 33. Erlangen, Germany: Erlanger Geographische Arbeiten.
- Herrfahrdt E, Kipping M, Pickardt T, Polak M, Rohrer C, Wolff CF. 2006. *Water Governance in the Kyrgyz Agricultural Sector: On Its Way to Integrated Water Resource Management?* DIE Studies No. 14. Bonn, Germany: German Development Institute (DIE).
- Humphrey C, Verdery K. 2004. Introduction: Raising questions about property. In: Verdery K, Humphrey C, editors. *Property in Question: Value Transformation in the Global Economy*. Oxford, UK: Berg, pp 1–25.
- * Ibraimova A. 2009. *Legal and Institutional Framework for Empowerment of Rural Communities in the Kyrgyz Republic*. Etudes et colloques 53. Fribourg, Switzerland: Publications of the Institute of Federalism.
- Kandiyoti D, editor. 2007. *The Cotton Sector in Central Asia: Economic Policy and Development Challenges*. London, UK: School of Oriental and African Studies (SOAS).

- Kangas RD. 2004. Legal reform in Central Asia: Battling the influence of history. In: Burghart DL, Sabonis-Helf T, editors. *In the Tracks of Tamerlane: Central Asia's Path to the 21st Century*. Washington, D.C.: Center for Technology and National Security Policy, pp 65–91.
- Koehler J, Zürcher C. 2004. Conflict and the state in the Caucasus and Central Asia: An empirical research challenge. *Berliner Osteuropa Info* 21:57–67.
- Kuehnast K, Dudwick N. 2002. Better a hundred friends than a hundred rubles? Social networks in transition—The Kyrgyz Republic. *World Bank Economists' Forum* 2:51–88.
- * Liechti K. Submitted. The meanings of pasture and their relevance to negotiations regarding resource degradation: Evidence from post-Soviet rural Kyrgyzstan. Available from Karina Liechti (see Endnote 1 in Chapter 35 by Liechti and Müller on p 559 of the present volume).
- * Lindberg EE. 2007. *Access to Water for Irrigation in Post-Soviet Agriculture* [MSc thesis]. Zurich, Switzerland: Department of Geography, University of Zurich.
- * Ludi E. 2003. Sustainable pasture management in Kyrgyzstan and Tajikistan: Development needs and recommendations. *Mountain Research and Development* 23(2):119–123.
- Mirovitskaya N, Soroos MS. 1995. Socialism and the tragedy of the commons: Reflections on environmental practice in the Soviet Union and Russia. *Journal of Environment and Development* 4(1):77–110.
- Obertreis J. 2007. Infrastrukturen im Sozialismus. Das Beispiel der Bewässerungssysteme im sowjetischen Zentralasien. *Saeculum. Jahrbuch für Universalgeschichte* 58:151–182.
- Pomfret R. 2004. Aid and ideas: The impact of western economic support on the Muslim successor states. In: Ro'i Y, editor. *Democracy and Pluralism in Muslim Eurasia*. London, UK: Frank Cass, pp 77–99.
- * Rohner I. 2007. *National and International Labour Migration: A Case Study in the Province of Batken, Kyrgyzstan*. IP6 Working Paper No. 8. NCCR North-South Dialogue Series. Bern, Switzerland: Swiss National Centre of Competence in Research (NCCR) North-South. Also available at: http://www.nccr-north-south.unibe.ch//publications/Infosystem/On-line%20Dokumente/Upload/WP_finale_Irene1.pdf; accessed on 6 January 2010.
- Sehring J. 2007. Irrigation reform in Kyrgyzstan and Tajikistan. *Irrigation and Drainage Systems* 21(8–9):497–510.
- * Shigaeva J, Kollmair M, Niederer P, Maselli D. 2007. Livelihoods in transition: Changing land use strategies and ecological implications in a post-Soviet setting (Kyrgyzstan). *Central Asian Survey* 26(3):389–406.
- Sievers EW. 2002. Uzbekistan's Mahalla: From Soviet to absolutist residential community associations. *Chicago-Kent Journal of International and Comparative Law* 2:91–158.
- * Steimann B. 2008. 'Niemand hier respektiert meine Grenzen' – Konflikte zwischen Hirten und Goldsuchern auf Kirgistans Weiden. *Neue Zürcher Zeitung*, 16–17 February 2008, p 9.
- * Thieme S. 2007. Osh–Bishkek–Almaty–Moscow and return? How different generations sustain their livelihoods in multilocal settings. *International Migration, Multi-local Livelihoods and Human Security: Perspectives from Europe, Asia and Africa*. The Hague, The Netherlands: Institute of Social Studies (ISS). Also available at: http://www.iss.nl/content/download/8279/80795/file/Panel%203_Thieme.pdf; accessed on 27 July 2009.
- Thurman JM. 1999. *Modes of Organization in Central Asian Irrigation: The Fergana Valley, 1876 to Present* [PhD dissertation]. Bloomington, IN: University of Indiana.
- Ul Hassan M, Starkloff R, Nizamedinkhodjaeva N. 2004. *Inadequacies in the Water Reforms in the Kyrgyz Republic: An Institutional Analysis*. Research Report No. 81. Colombo, Sri Lanka: International Water Management Institute (IWMI).
- Verdery K. 2004a. The obligations of ownership: Restoring rights to land in postsocialist Transylvania. In: Verdery K, Humphrey B, editors. *Property in Question: Value Transformation in the Global Economy*. Oxford, UK: Berg, pp 139–159.
- Verdery K. 2004b. The property regime of socialism. *Conservation and Society* 2(1):189–198.
- Wanner C. 2005. Money, morality and new forms of exchange in postsocialist Ukraine. *Ethnos* 70(4):515–537.
- Wood EM. 1994. From opportunity to imperative: The history of the market. *Monthly Review* 46:14–40.