ROUTLEDGE HANDBOOK OF THE STUDY OF THE COMMONS

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Chapter 26

THE ROLE OF PSEUDO-COMMONS IN POST-SOCIALIST COUNTRIES

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THE ROLE OF PSEUDO-COMMONS IN POST-SOCIALIST COUNTRIES

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Introduction

If Hardin's (1968) widely cited case of a pasture accessible to everyone were the standard for public natural resources, those resources would have the tendency to be depleted, degraded, destroyed or overexploited. Hardin explains that each herdsman found it more profitable to graze more animals than the pasture could support, since each took all the profit from an extra animal but bore only a fraction of the cost of overgrazing. Yet, what Hardin calls a "Tragedy of the Commons" is rather a "Tragedy of Open Access" (Feeny et al., 1990), since Hardin confuses the characteristics of a resource, such as low excludability and high rivalry in consumption, with its property rights regime which can take diverse forms. Hardin describes an open access system, meaning no rules and no property rights regime in place, that leads to overuse and degradation, instead of a resource that is held in common. Later, Hardin (1994) refers to the same case as an "unmanaged commons". With his pasture example, he aimed to contradict the laissez–faire attitude shared by economists in the late 1800s, which was that if each man pursued his own interest then the interests of all would be best served in the long run.

To motivate this chapter, I will recall four possible methods of natural resource management that can resolve this tragedy. I will also highlight the fourth, often overlooked approach, i.e. the public manager option. In fact, there is a continuum between the two polar ends of the spectrum, from governance enacted by a single central authority to a fully decentralized system of individual decision making. Between these two extremes lies a range of governance regimes that might involve higher levels of government along with local systems (Theesfeld, 2008a; Frey et al., 2016).

Hardin concluded that there are two methods to avert the tragedy: either state regulation, when a government would regulate the use of the pasture by establishing limits on the number of cattle each herdsman was permitted to graze; or privatization, when each herdsman would be assigned a section of the pasture for his exclusive use. The latter follows from the idea that each resident would then have a personal interest in conserving his part of the pasture because he would bear the entire cost of overgrazing it. Ostrom (1990, 2005) gives ample empirical cases for a successful third method of managing a natural resource in a sustainable, long-enduring way; namely, the self-organization of actors. With this, analysis of the commons expanded into the sphere of agri-environmental policy, since it offered a new perspective on policy measures that go beyond regulations and market mechanisms; namely, advisory and education measures.

Villagers would encourage one another to act responsibly in the interests of the community: in the pasture example by not adding cattle beyond the number the pasture could sustain. Evidence has accumulated over the last two decades that private, state, and common-property regimes are all potentially viable resource management options.

There is a fourth method to avoid the tragedy of open access which has received considerably less attention in the academic literature (Hardin, 1994; Mirovitskaya and Soroos, 1995). A resource manager, i.e. a civil servant directed by the community, could be hired to look after the herd and make decisions on its size. Any product of profits generated from the herd would be divided among the residents. If the community could instruct to maximize production under the condition that the pasture should be sustained and not degraded, this would prevent overgrazing. This is, according to Hardin in essence, a socialist approach (Hardin, 1994; Mirovitskaya and Soroos, 1995). Particularly this fourth method, which is slightly different from state management, additionally drives why we see so many pseudo-commons in post-socialist countries today. In contrast to the Ostrom notion of common-property regime, where private people with individualized bundles of property rights (Ostrom and Schlager, 1992) argue and agree on a set of rules for managing the natural resource, in a socialist approach, the publicly-owned resource is managed by a civil servant employed by the public. This public manager option is different from a state property regime in the respect that the natural resource itself stays in community or "working people" ownership, not state ownership. The working people own it and employ a manager, whereas in a state-property regime, the state has ownership rights and regulates. Hardin, in a short article from 1994, also follows this idea and describes socialism as a system whereby resources are held as common property yet, instead of being managed by a group (the property-owners, i.e. the people), a manager is appointed to avoid exploitation. Hardin (1994) conceptualizes two general risks: that in practice a self-enriching incompetent manager cannot be fired; and bureaucrats can easily hide their mistakes when the group of people they represent is too big. This fourth method establishes the background for the later, often visible, pseudocommons where resource users do not feel responsible and do not set their own rules, described in the remainder of this chapter, nevertheless it is widely cited as a commons regime.

Commons is defined in this chapter as a management system that allows the resource to be held in common and does not stand for the common-pool resource per se. Based on that, pseudo-commons are initiatives that use the notion of commons and a blueprint of a common-property regime as an artificial nutshell, not functioning on the ground. This could be due to the purposeful set-up of such pro-forma schemes to fulfill other individual benefit-strategies combined with a prevailing Soviet mentality and persisting legacies, hampering voluntary collective action approaches, as explained in the remainder. This chapter discusses the hypothesis of whether post-socialist countries are particularly prone to such misuses of the commons management system. This is widely referred to as commons management, but, as I will highlight, it only exists as a pseudo-format, posing severe risks for a proper implementation of such management regimes in the future.

It is questionable whether, based on Marx and Engels' theory, socialism is less destructive of the environment because it avoids the self-serving, profit-maximizing behavior of capitalist systems and facilitates a societal decision-making process that can effectively balance economic and environmental values (Mirovitskaya and Soroos, 1995, 78). Mirovitskaya and Soroos (1995) focus on the way in which the principles of Marx and Engels were implemented and distorted in the Soviet state by Lenin, Stalin, and more recent leaders. The fact is that first, by the way Marxist theory has been implemented, we rather observed environmental devastation (Cole, 1998, 149) and second, already the economic and anthropocentric attitude toward nature expressed in the theory itself contributed to these outcomes. Cole in his book (1998) particularly outlines how

the labor theory of value by Marx is incompatible with environmentalism, seen in Soviet-style communism. In that sense, human history is interpreted as an effort by man to gain dominance over nature. For instance Engels (1940, 306) outlined that it is the alteration of nature by men, not solely nature as such, which is the most essential and immediate basis of human thought. Based on that legacy, common-pool resource protection is difficult. Marx's labor theory of value has implications on the economic concept of scarcity. For economists, natural resources have value because they are limited, one reason why excludability rules become central in common-property regimes. Yet, based on Marx, only human labor creates economic value, and thus natural resource scarcity could not make any difference in economic valuation (Cole, 1998, 158). This implicitly means, natural resources as such cannot be scarce, thus making many common-property regimes – or commons – rule settings obsolete. This theoretical underpinning, which influenced daily working habits towards natural resources, is another point to keep in mind, when analyzing why successful commons turn out to be so difficult in post-socialist countries.

Another point is that, beginning with Lenin's Decree on Land of November 8, 1917, resources, such as land, minerals, water, and forests, were made public resources and private ownership was dismantled. The natural resources were declared the common property of all working people, yet were managed nationally (Mirovitskaya and Soroos, 1995, 81), slowly driving to a de-facto system which could be provocatively named "bureaucratic private property". The difference for state property regimes is that the ownership of the natural resource stayed with the working people. In theory social ownership meant that everyone owns and is responsible for preserving resources. In practice, either the socialist state took direct control of the natural resources, leaving responsibility for managing them to political leaders, who put their perception of the necessary priorities of national development above the needs of the (local) people, or it turned out that no one was responsible for anything (Cole, 1998, 155). The socialist central planners acted rather economically shortsighted in their mission towards economic progress under socialism (Cole, 1998, 155) Instead of the self-organization of local groups – in the Ostrom sense of local common-property – the state controlled in the name of the national interest. It turns out that the particular problem with the Soviet system was that responsibility for acquiring and managing public property was too often scattered among relevant groups with a strong economic stake in projects involving large state investments in production that were given high priority. Mirovitskaya and Soroos (1995, 87) speak of a "de-facto bureaucratic private property". Indeed, during Soviet times a "system [emerged] of pseudo-public resource property in which environmental and resource management was in the hands of groups with economic interests" (Mirovitskaya and Soroos, 1995, 88).

It has been shown that the above mentioned fourth possible method of solving the tragedy of open access failed. The expanding expropriation of public property is given as an argument why, in the Russian Federation since 1994, Decrees on Sustainable Development – environmental reforms – have not reached their goals. Even after 1990 the socialist economic elite was able to reproduce its social position, for instance through its control of the implementation of privatization processes (Grancelli, 2011). Thus, the question of this chapter arises whether the particular legacy of state management with some economic groups pursuing profit is responsible for the likelihood of the post-socialist countries ending up in pseudo-commons management today.

Furthermore, Babajanian (2005, 449) introduces the notion of the "Soviet mentality" as a serious obstacle to developing active self-organizing communities. He refers to the public sector domination during the Soviet period that enforced citizen passivity and expectations that the authorities would be responsible for community welfare.

Thus, I want to explore here what the particularities of natural resource management in the history of socialist countries are that paved the way for pseudo-implementation or pseudocollective action property regimes in contemporary post-socialist countries. Moreover, what are the risks emerging from that for future commons? I concentrate on the management of two natural resources, i.e. forestry and irrigation water, analyzed in various geographical regions of post-socialist countries. I show the appearance of pseudo-commons and outline reasons for such failed implementation.

The understanding of pseudo and commons

First of all, *pseudo* means not genuine, and by pseudo-implementation I understand the proforma implementation of formal rules, which have little influence on the de-facto behavior of the humans involved.

If we follow North's (1990) view of institutional change, he distinguishes between formal and informal institutions. North (1990, 36) discusses why so many aspects of a society persist despite a total change in the [formal] rules. Defining institutions as constraints, he notes that "informal constraints that are culturally derived will not change immediately in reaction to changes in the formal rules". This leads to a tension between altered formal rules and persisting informal constraints (North, 1990, 45). This pluralism of formal rights and customary claims may contradict itself, but likewise the two may influence each other (Meinzen-Dick, 2014). We often find property rights functioning on the ground that are made up of combinations of both formal secured rules and informal rules.

Understanding the implications of pseudo-implementation requires understanding the role of informal relationships and formal rules. These have been stressed in numerous analyses, including those whose particular focus is the socialist countries. For instance, Zdravomyslova and Voronkov (2002) state that informal and daily public life in Soviet society was regulated by a diversity of unwritten rules, in parallel with the official public realm which was regulated by official rules and controlled by the party-state bureaucracy.

Following Chavance (2008), I link the changes in formal rules, their enforcement mechanisms, and informal rules with four consecutive periods of reform. This is exemplified in the

Table 26.1 Four periods of change in Central Europe

Periods	Formal rules	Enforcement of formal rules	Informal rules
Pre- revolutionary	Significant but partial changes (in Poland and Hungary already in the 1980s)	Uneven, often decreasing	Fast and opportunistic changes
Revolutionary (after 1990)	Radical, wide-ranging and extended systemic changes	Generally weak	Fast, opportunistic and protective changes and innovations (high level of uncertainty)
Post- revolutionary	Continuing frequent changes (e.g. privatization)	Consolidation, uneven depending on domains considered	Opportunistic change, learning processes in stabilizing formal framework
Evolutionary (after EU accession)	Incremental changes	Consolidation, routinization	Changes principally through learning processes, gradual innovations

Source: adapted from Chavance (2008, 2).

following schematically for those Central and Eastern European countries which joined the European Union (EU) in 2004: the last decade of socialism as pre-revolutionary; the first three years after 1990 as revolutionary; the twelve following years as post-revolutionary (the latter two are often referred to as a transition phase); and the period following the 2004 EU accession as evolutionary.

Table 26.1 shows that, particularly during the revolutionary phase, there was a generally weak enforcement of formal rules combined with opportunistic and protective changes in the informal sectors. In addition, common to all post-socialist countries is the fact that in the post-revolutionary periods legislation changed frequently, often following external pressures, such as the preconditions for EU accession or for international development aid. Regarding reforms toward more local participation and self-governance, this had two consequences: 1) a huge discrepancy between formal and informal rules, resulting in pseudo-implementation of reforms; and 2) assuming the implementation was successful, it did not turn out to function under the Ostrom principles. In particular, the opportunistic changes observed in the informal rules point to powerful groups or individuals that strive for personal benefits (in line with Mirovitskaya and Soroos (1995) and Theesfeld (2004)).

This leads me to the second aspect of defining *pseudo* in this context. Pseudo-commons or pseudo-collective action also means that formal rules have been implemented and an active organization has been built, yet there is no collective action or bottom-up self-organization. There is either top-down management or it rather resembles an open access situation with some powerful actor to strive for personal benefits (Theesfeld, 2004). In extreme cases, as described by Theesfeld (2004), for those water user associations, users officially listed as members were often unaware of the existence of those associations.

In this contribution, *commons* are understood as the management system that allows the resource to be held in common and not the common-pool resource per se. Following this understanding, a synonym is a common-property regime. Hardin (1994) refers to resources that are not held by anyone as "unmanaged commons". Unmanaged commons is linguistically very close to pseudocommons, particularly if referring to socialism where the resource owners are the people. For those cases at risk, described by Hardin, the term commons should not, however, be used as this may lead to confusion. In his pasture example, what he refers to is open-access and not a common-property regime, which would be understood by his connotation of unmanaged commons.

Another term that looks at first like a synonym for pseudo-commons is "quasi-commons". This notion emerged in rural China, where we find many different forms of de-facto ownership and a high fragmentation of property rights. Quasi-commons describes a management system with often too much involvement by local governments (Xu, 2010). Xu (2010) shows how local governments have de-facto control over collectively-owned rural land. However, in contrast to the compulsory land acquisition in rural China which deprives farmers of their land, the quasi-commons describes a system where farmers can still keep their community land-use rights and use these rights in a profitable way (Xu, 2010, 568). The corresponding lack of self-governance by farmers and the lack of communal governance of resources still hinders the formation of real commons management in rural China.

Pseudo-commons in the agricultural water and forestry sectors

There are many studies that deal with farm restructuring in post-socialist countries and the evolution of new cooperatives (Rozelle and Swinnen, 2004; Gardner and Lerman, 2006) which often have little in common with cooperative principles (Grancelli, 2011).² Cooperatives are even said to be a misnomer for farms in transition countries (Gardner and Lerman, 2006), thus

pseudo-commons would make a better fit. Their restructuring is often judged to be superficial (Rozelle and Swinnen, 2004). Generally, the notion of cooperation has been overstretched in the socialist legacy (Theesfeld, 2004).³

In contrast is the notion of "lacking a sense of ownership" described, for instance, in the Czech Republic (Prager et al., 2012). During the restructuring process, a decade of weak property rights prevented farmers from developing a sense of ownership and responsibility, especially in areas where a large proportion of land was still leased out. New owners of the often-scattered plots faced high transaction costs if they attempted to withdraw their plots in order to create a new private farm. Yet, without first feeling responsibility for the land, possible engagement in collective action is limited.

In the following section, the appearance of pseudo-commons is exemplified with the management of the natural resources: water and forest. First, I look at the breadth and diversity of problems related to water user associations (WUAs), across various geographic areas. Second, I present the depth and complexity of problems related to another particular case of natural resource management, forestry, in a single geographic area. Initiatives by donors and non-governmental organizations (NGOs) to establish WUAs or joint forest management from the late 1990s to the early 2000s were driven by the normative assumption that commons management would be the best regime in the current post-socialist situation. Thus, the chapter's structure provides a holistic overview of some typical governance problems leading to the pseudo-implementation of natural resource management policies.

Corresponding legal reforms in both sectors followed the first wave of privatization with a time delay of roughly a decade as a by-product of the land restitution and privatization process (Theesfeld, 2008b).

Pseudo-water user associations

First, in the agricultural irrigation sector 80% of the world's freshwater resources are used. Given population growth and climate change predictions, this demand will increase since agricultural production will not only have to intensify to feed the world's population, it will also have to expand to areas with less favored soil and precipitation conditions. For Bromley (1992, 14), irrigation systems represent the essence of a common-property regime:

There is a well-defined group whose membership is restricted, there is an asset to be managed (the physical distribution system), there is an annual stream of benefits (the water which constitutes a valuable agricultural input), and there is a need for group management of both the capital stock and the annual flow (necessary maintenance of the system and a process for allocating the water among members of the group of irrigators) to make sure that the system continues to yield benefits to the group.

Approximately 76% of the world's irrigated area (227 million hectares, 40% of the world's food production) is managed by local WUAs (Frey et al., 2016). Considering irrigation systems in post-socialist countries, most share certain characteristics. First, during socialism irrigation water was regarded as abundant and irrigated agriculture was strongly promoted (Theesfeld, 2008a), and a sense of entitlement to free water still prevails (World Bank, 2009). This is for instance visible in the extreme destruction of the Aral Sea due to cotton irrigation in the past and prevailing non-adapted water withdrawal at present. According to the socialist production strategy, the more water a production cooperative used, the better it could prove its productivity to administrative bodies.

Second, the irrigation systems were built to serve large production units during socialism and could not meet the needs of the huge number of small-scale landowners who emerged following the land restitution process (Theesfeld, 2004, 2008b; Sehring, 2009). Thus, irrigation in transition countries has been drastically affected by the political and economic changes that happened after the collapse of the socialist system. During the first decade of transition the facilities largely deteriorated and the amount of water used for irrigation declined sharply. For instance, in Bulgaria only 5% of the fields equipped with irrigation devices were actually irrigated in this period (Theesfeld, 2004).

Third, collective action, i.e. WUAs, was seen, and strongly promoted by international donors (mainly the World Bank), as a way for post-socialist societies to secure sustainable agricultural water management.

Surface irrigation management in former EU accession and EU partnership countries

In most Central and Eastern European countries the agricultural sector buffered the national economic decline after transition. However, to a large extent, the agricultural sector was also struggling and at the same time highly dependent on irrigation for production. Following the World Bank's push for collective action management solutions in the agricultural water sector, many countries reformed their legislative system accordingly. Most of the associations arising from this, however, were only created formally. In practice, they were pseudo–WUAs, neither functioning nor familiar to the village farmers. Theesfeld (2004, 2008b) argues that there is no common ground where collective action can grow. Features specific to post-socialist countries, such as: 1) the discrepancy between formal political intentions and informal effective institutional change at the local level; 2) the high information and knowledge asymmetries; and 3) deteriorated social capital, lead to behavioral attributes that hamper collective action solutions (Theesfeld, 2004). In particular, the evolution of social capital is constrained by distrust among community members and trust is, in turn, a prerequisite for collective action to emerge (Theesfeld, 2004).

Bulgaria and Romania both joined the EU in 2007 when they were in transition and still reliant to a large extent on their agricultural sector. Despite legislative reforms and rehabilitation programs for the irrigation sector, I categorize their irrigation sector during the second decade of transition as a common-pool resource with the formal institutional arrangement of a common-property regime. But the effective local rule seemed to be open access; that is, no property regime supported by efforts of a formal institution to exert some authority. Theesfeld (2008a) even talks about pseudo-devolution in Bulgaria due to the country's actual implementation process of legislative reforms (the Bulgarian Water Law of 2000 followed by the Water User Association Act of 2001), which resulted in a concentration of property rights by the state authorities. Evidence shows that what gave the impression of facilitating collective action was, in fact, a further concentration of power in the irrigation sector. State actors perceived the WUAs as a threat to their power and reacted by undermining efforts to support their serious development (Theesfeld, 2008a).

Since 2004, the South Caucasus states have been part of the European Neighbourhood Policy, encouraging closer ties between them and the EU. For instance, in February 2017, a revised Comprehensive and Enhanced Partnership Agreement was announced between Armenia and the EU on deepening their political and economic ties in line with Armenia's wish to cooperate and work with both the EU and the Eurasian Union.

Also in Armenia the World Bank supported collective action by investment projects to promote the participation of local communities in their own economic and social development, including the rehabilitation of irrigation systems. Yet, the existing patterns of local social organization turned out to be resistant to change. Babajanian (2005) concludes that changing

patterns of interpersonal social relationships are not effective without changes in the nature of the country's governance. In Armenia, Babajanian (2005) finds well-established trust and reciprocity among the rural population which would be a strong basis for collective action yet, at the same time, limited community participation. The existing formal WUAs were established by the government and they have experienced limited participation in decision making with regard to the formulation and design of local policies and resource allocation (Babajanian, 2005). For the irrigation projects, community members were only involved in the identification meeting and for mobilizing community contributions for instrumental reasons, i.e. to satisfy formal requirements. As the reason for this implementation failure, Babajanian (2005) mentions the survival of the Soviet networks for allocating goods and services and redistributing resources. Moreover, norms of personalized relationships, unwritten rules, favoritism, misuse of public positions, and rent-seeking continue. As in the forestry sector described below, the inability of the state to control and enforce regulations effectively creates an environment where bureaucrats and local elites can take advantage of their positions for personal gain and is another reason for this pseudo-implementation (Babajanian, 2005).

Surface irrigation management in Central Asian states

Following its independence, the economic crisis in the Central Asian states resulted in a reduction of finance for the water sector to a fraction of that of the late 1980s (Soliev et al., 2015). This made the sector very dependent on donor money. Thus, the states decided on similar water governance reforms including the transfer of local irrigation management to WUAs. But, in Kyrgyzstan and Tajikistan, for instance, proper implementation is lacking – the corresponding land reform and decentralization reforms are even regarded as mainly cosmetic (Sehring, 2009). The primary incentives for conducting reforms seem to be donor pressure.

For example, across Tajikistan WUAs have been created supported by a law of 2006 (Sehring, 2009; World Bank, 2009). Set up by a top-down program, Sehring (2009) estimates that, in 2005, roughly 100 WUAs managed around one-fifth of the total irrigated land in Tajikistan. Yet, as in Bulgaria, a survey revealed that many rural people were not even aware of WUAs, and that those established were not functioning (Sehring, 2009). Since 2011, WUAs have been further supported in the region by the United States Agency for International Development (USAID), but water users still have little knowledge of the exact tasks of the WUA or awareness of the rights attached to membership. Also, there appears to be a lack of clarity about the method used for levying irrigation services fees (Balasubramanya et al., 2016).⁵ In all, the result is a situation that would be inconceivable with effective local self-organization under a common-property regime, because there is no knowledge and experience in such governance forms to draw from.

For WUAs in Tajikistan it has been shown that if the organization is not functioning well in terms of a reliable water supply this further erodes user confidence in the regime (World Bank, 2009). WUAs could not meet their obligations, such as canal maintenance, due to the low rate of fee collection. The World Bank study further shows that much work is needed for the successful implementation of community-based water initiatives without the placing of favorite, but largely ineffectual, elites in key positions in the associations. A sign of a pseudo-WUA is that after donors disengage, a WUA fails due to a lack of sense of ownership by local people (World Bank, 2009). It seems that reforms were conducted only on paper in order to receive urgently-needed financial resources. Similar outcomes are reported for Kyrgyzstan where a law and a new water code approved in 2005 allowed for greater participation by stakeholders, but

lacked ownership among experts, basically because the international donor had written the law (Sehring, 2009). In 2004, 59% of the irrigated land in Kyrgyzstan was managed officially by 353 WUAs (Sehring, 2009), but their development took place mainly within the framework of donor projects. For Uzbekistan, official numbers show that up to 70% of inter-farm and on-farm irrigation canals are served by WUAs, mostly established between 2003 and 2006. However, these WUAs represent a wide heterogeneity and largely do not fulfill their promised tasks (Abdullaev and Rakhmatullaev, 2015).

In Turkmenistan, agriculture is almost totally dependent on irrigation. After independence, due to a program of self-sufficiency in grain production, little of the limited government funds could be invested in the eroded infrastructure system. However, the Turkmen government has started to introduce measures aimed at improving water use and reducing demand (O'Hara, 1999). Over-watering represents a major problem here and the expectation of having abundant water available is an obstacle to the implementation of self-organized appropriation rules. Furthermore O'Hara (1999) doubts that farmers can change quickly from being purely laborers to decision makers. Thus the precondition of empowered private farmers needed for successful WUAs is in danger. Still, WUAs as part of farmers' associations are suggested for solving problems with collecting fees and water scheduling in the irrigation sector (O'Hara, 1999). There is hardly any literature following up on the implementation of WUAs in Turkmenistan.

For the Central Asian states in particular, the strong dominance of the president and his circle can be shown (Sehring, 2009). The unchallenged position of local patrons reflects a reliance on authorities as a main characteristic of the political culture. Thus, similarly to the Soviet mentality, people expect these local patrons to take care of them and are not used to being proactive themselves (Sehring, 2009). Sehring (2009) shows that clientelism, corruption, and personalistic leadership patterns undermine formal democratic structures. She further outlines that such an administration actively resists reforms that threaten the status quo. Again, WUAs have been established for the most part by international donor agencies.

Another reason for the pseudo-WUAs in Central Asia is the fact that effective local self-organization demands, first of all, independent farmers as the decision makers for their crop choice and water use. If farmers are not empowered, because, for instance, land reform results in quasi-privatization and has no impact in practice, then WUAs cannot be effective.

Groundwater irrigation associations in China

Similarly, in China, WUAs have been advocated as an organizational form for self-management. While most research (see our examples above) focuses on surface-water irrigation, this case presents the formation of WUAs in charge of groundwater irrigation in China. In areas with arid alluvial aquifers in South Asia, farmers adapt to less available irrigation water by both drilling deeper and shifting to salt-resistant cash crops. They expect to continue to make use of groundwater despite the deteriorating water quality and falling water table. The establishment of groundwater user associations in Minqin county from 2007 onwards to resolve the problem did not, however, lead to participatory solutions. The function of such pseudo-WUAs was instead to better implement direct regulatory measures from water authorities since such associations also reduce the number of actors with whom the administration needs to interact (Aarnoudse et al., 2012). WUAs have been identified as an important tool used by the county government to enable effective direct regulation measures. Improved control of water users facilitated the closure of wells and the per capita water use restriction (Aarnoudse et al., 2012).

Pseudo joint forestry management

In post-socialist countries the first goal after transition was to overcome poverty. In Russia in particular, since its economy is based on the extraction of natural resources, there is a specific danger from the myth that raw-material economies generate widespread wealth and reduce poverty (Murota and Glazyrina, 2010).⁶ But the real impact of the raw-material economy (including the forestry sector) on human welfare is not very significant in Russia.

I focus on Russia as a post-socialist country because, since the early 1990s, Russia has experimented with the reallocation of authority between the center and the regions particularly in the forestry sector (Libman and Obydenkova, 2014). In addition, Russia's forest sector constitutes the largest forest area in the world, accounting for approximately 20% of global forest area (FAO, 2010). At the same time, Russian forests have a long history of mismanagement, resulting in both low productivity and the systematic overuse of resources (Carlsson, 2000; Eikeland et al., 2004) likewise culminating in extensive forest fires in 2010 (Libman and Obydenkova, 2014).

Unfavorable conditions for self-organization in forestry

Libman and Obydenkova (2014) study the allocation of jurisdiction between the center and the regions in Russia's forestry sector, and they call for the forest to be managed in a polycentric way instead of mere decentralization. They treat forests as a common-pool resource and therefore consider any management of that resource as commons management, which is not necessarily a common-property regime in the way I define commons management in this chapter. Libman and Obydenkova (2014) describe how the state capture alliances between regional governments and a number of privileged firms remained resilient after the 1990s and how the set-up makes local bureaucrats - even after reforms in 2006 -myopic and not interested in improving the quality of the forest. Ulybina (2015) also raises the fact of the historical predominance of top-down forest management and abundant regulations is not a favorable condition for the evolution of self-organized resource management. Therefore, there is no basis for an effective common-property regime and there never was an aim to develop one. Even effective decentralization turned out to be "pseudodecentralization", due to the history of local alliances, the prevailing non-democratic system and the large country with inefficient control mechanisms (Libman and Obydenkova, 2014, 304). Andersson and Ostrom (2008) point out that decentralization may fail to deliver the expected outcomes when dominant groups of political and economic elites are further strengthened by the process.

As in the agricultural water sector, in Russia we find no cultural basis for the self-organization of appropriation rules due to prevailing local norms of unlimited resource use (Libman and Obydenkova, 2014). This, in fact, has its roots also in Marx's labor theory of value, which says that only labor gives economic value to a natural resource. Komarov (1980, 69–70) illustrated this for Soviet times in Siberia, where giant piles of trees could be seen rotting next to railroad tracks, awaiting trains that never came to take them to market. When asked to explain why loggers nevertheless continued harvesting, the local manager replied that they had a constitutionally guaranteed right to work. Another obstacle to more sustainable forms of natural resource management in Russia is the lack of a tradition of local ownership. If there is private ownership, owners often operate out of Moscow and have strong connections with the federal authorities (Eikeland et al., 2004). Eikeland et al. (2004, 285) refer to the combination of hierarchical structures and personal networks causing corrupt management practices and high transaction costs in the forestry sector as "Soviet heritage". This implies for the post-socialist countries that there might be an inherited behavior promoting a pseudo-implementation of rules and organizations for the management of common pool resources.

Furthermore, there is no central back-up for a real common-property regime. Official recognition is otherwise referred to as Ostrom's (1990) seventh design principle for stable long-enduring local common property management, i.e. self-determination of the community, recognized by higher level authorities. The new Russian Forest Code, passed by the Federal Parliament in 2006, does not require regional governments to include regional and local interest groups in the decision-making process (except for certain relatively broad conditions, that Libman and Obydenkova (2014) regard as easy to circumvent). Thus, local users' involvement – already at an initial stage in common-property management – is limited.

The new Forest Code is aimed at a decentralization process that to a great extent shifted the former comprehensive federal government's responsibilities to regional bureaucrats and politicians. These regional governments thereby gained power over the allocation of forest access rights and the setting of standards for forest use. Not only did the federal government lose its de jure right to allocate access rights, but also the de facto decision-making right became the duty of regional bureaucrats who were responsible for monitoring the process (Murota and Glazyrina, 2010). This means that the federal government may still establish basic standards for forest use but cannot ensure compliance with these rules at the regional level (Libman and Obydenkova, 2014). Consequently, it is not capable of ensuring adequate protection against illegal logging (Eikeland et al., 2004), forest fires or pollution. At the same time, large areas that once belonged to the state remain with de-facto, unclear management responsibilities. Murota and Glazyrina (2010, 38) name this "unmanaged commons", although they do not represent commons in the first place.

In many territories in Russia it became an informal practice that timber auctions were highly influenced by the strong ties between certain logging companies and the local administration, which allowed them to win the tender (Murota and Glazyrina, 2010). The problem is that informal "rent-seeking" alliances led to unsustainable and destructive forest use. This disregarded the replenishment of natural resources and kept the Russian forestry sector inefficient (Murota and Glazyrina, 2010). Only if the new forest owners recognize that it would be an advantage to collaborate can commons as a management system emerge.

Role of leskhoz, models farms and national park zoning

In the study of commons and forestry in Russia, the Soviet leskhoz is often referred to. Leskhozy (plural of leskhoz) are the territorial organizations responsible for both forest use and forest development (Libman and Obydenkova, 2014).7 They began to appear after 1945 when the forest mining approach was diminished and there was a need for a permanent skilled labor force to develop local management organizations in remote areas. In the early 1990s, there were 1,831 leskhozy in Russia (Eikeland et al., 2004). These decentralized agencies are partly referred to as "community-based" Soviet-type institutions (Eikeland et al., 2004). Therefore, I want to analyze if they qualify as a common-property regime and what their current situation is. This is triggered by the fact that, for instance, Eikeland et al. (2004) name them as one of the very few community-based institutions that survived the post-socialist transition phase. Yet, when looking at their organizational set-up and responsibilities, they do not represent a commons management from a common-property regime perspective and rather resemble pseudo-commons. Carlsson (2000) argues that instead of community management which might contribute to social capital that could enhance more sustainable management, the leskhozy were rooted in a robust state forestry organization that included Communist Party involvement. The leskhozy supervised the planning of the state logging enterprises and oversaw their activities. They also directed the implementation of the new conservation principles introduced by the state, and thus did not set their own rules or resource management aims. A local incentive to fulfill ever-rising national production targets evolved during socialism. NGOs, such as the Russian branch of the World Wildlife Fund and Greenpeace, accused the *leskhozy* in the 1990s of illegal cutting and disregarding sustainable forestry practices (Eikeland et al., 2004), thus they represented a pseudo-commons – if it can be called a common-property regime at all. Industrial cutting was often hidden behind ostensible sanitary and thinning activities (Eikeland et al., 2004). After reforms, most *leskhozy* have been privatized in a nontransparent way, resulting in a highly fragmented logging industry with owners representing former Soviet managers and local administrators (Libman and Obydenkova, 2014).

Another rather weak attempt to establish common-property regimes in Russia's contemporary forestry sector can be observed in a small fraction of the existing model forests.⁸ One of the four model forests studied by Ulybina (2015) aimed at facilitating local participation by forest users. The objective of engaging the local population in decision-making processes can be seen as an initial step towards commons management system. Yet, the idea of participatory environmental governance is still not widely accepted. Model forests in Russia were proposed as a new form of governance, which could potentially help harmonize the interests of different stakeholders, including forest users, regional and federal authorities, businesses, indigenous people and academia, and increase the role of the public in forest resource management. As such, model forests could be regarded as fulfilling the role of strengthening democracy and the development of local communities (Ulybina, 2015). An actual pseudo-organization in that respect is one model forest described in the study which was set up with the help of an international pulp and paper manufacturer, which also controls logging operations in Russia. Timber companies consider model forests to be a tool that may help them to avoid fines. According to interviews, the real intention of engaging in the local initiative has been to circumvent the law, since model forests grant the opportunity of complying with slightly different, less stringent laws (Ulybina, 2015).

Despite the study on the model forest showing that they failed to provide sufficient incentives for more active public involvement in forestry matters, it also shows underlying obstacles for management solutions based on common-property regimes in general. Following her study, Ulybina (2015) is very pessimistic about the possibility of local people self-organizing in Russia's forestry sector. The Soviet mentality (Babajanian, 2005) arises again when people are regarded as happy to delegate total authority to a few individuals. Ulybina (2015) even talks about a feeling of individuals' impotence to change practices and instead belief in the state's power to reform and improve forest use. The idea of public participation is even regarded as "exotic" (Ulybina, 2015, 481).

Although by law and in principle common-property regimes and local self-governance of forestry would be possible in Russia, these management solutions are also difficult due to the extremely bureaucratic formation process of such organizations.

Finally, Murota and Glazyrina (2010) discuss an exceptional case of common-property regime in the forestry sector, which has been facilitated by the establishment of a national park. The Alkhanay National Park in Eastern Siberia was created with strong support from Siberian scientists of the Russian Academy of Sciences. The park is arranged according to functional zones, one of which represents forest management run by local people. Previously the state held the property rights to the forest in the name of the people, but over-extracted. Yet, self-management of the natural resource can only happen according to scientifically-defined specifications that, for instance, delineate commercial timber cutting, and only allow local people to fell timber for home needs. This predefined common-property regime limits the freedom to develop other rules. The situation prior to, but also after, the establishment of the national park represents a pseudo-commons, either representing the state's mismanagement in the name of the people, or a top-down implementation of local management rules.

Conclusion

The practices of natural resource use under "real socialism" in the Soviet states often demonstrated that there was no working people resource property as in the Marxist vision. The old Soviet-style hierarchical networks at the local level, in combination with a lack of control and implementation capacity for environmental protection rules, partly due to features of socialist political-economy that inherently favored production over environmental protection (including the fact that the party-state, as owner of the means of production, participated directly in the economic risks), provide an environment in which bureaucrats and influential persons can take advantage of their position. This can even last into the transition phase. In fact, for both natural resources under consideration, I could show a pro-forma set up of commons management with some economic groups making profits or political actors strengthening their powerful positions. I conclude that it is the described Soviet legacy in particular that makes the post-socialist countries so likely to end up with pseudo-commons again, meaning structures that are named commons or common-property but show very few key-features of that governance regime.

In the post-socialist countries, the large collective farms were administered almost everywhere under the label "cooperatives", even though they had not evolved out of voluntary associations and had little in common with cooperative principles (Grancelli, 2011). Thus, the rural population started the transition phase with a strong psychological resistance to cooperation, originating from years of abuse of the whole concept by socialist regimes. Authors state that the use of the word cooperative in Central and Eastern Europe not only creates the wrong impression but can even create barriers to progress (Gardner and Lerman, 2006).

Starting from this initial situation, any new pseudo-cooperation that pretends to use cooperation, but in fact either allows a small group to increase personal benefit or a government measure to be better implemented, destroys the trust in real cooperation. What is the starting point for such mistrust? Is cooperation among small producers quite rare as specified for Poland, for instance, because there is a lack of reciprocal trust outside the interfamily network (Grancelli, 2011)? Then distrust would hamper collaboration. Or, is the pseudo-implementation of organizations and the opportunistic behavior responsible for the decline in reciprocal trust among actors? Then distrust would be an outcome of the pseudo cooperation agreement. This vicious cycle of pseudo-collective action leads to further lack of trust in such forms of local self-organization (Theesfeld 2004).

Either way, if societies are not ripe for commons as a management system, their top-down implementation, whether pushed by donor organizations with good intentions directly or by governments in order to fulfill donor requirements, makes it worse. In the long term, it will destroy the opportunity to experiment with this property regime called in the beginning of this chapter a third method to solve natural resource overuse and degradation. The negative role model of pseudo-collective action organizations destroys the trust in such property rights regimes even further. In addition, the general sense of powerlessness within the local communities, together with the inherited norm of "Soviet mentality" of expecting the state to be responsible for solving problems, reinforces the current failure of commons management.

Notes

- 1 These are: 1) well-defined boundaries, 2) congruence between appropriation and provision rules and local conditions, 3) collective-choice arrangements, 4) monitoring, 5) graduated sanctions, 6) conflict-resolution mechanisms, 7) minimum recognition of rights, 8) nested enterprises (Ostrom, 1990).
- 2 The seven cooperative principles are: voluntary and open membership; democratic control; common property of all or part of the enterprise assets; autonomy from the public or private organizations with

- which the cooperative interacts; training of the members and spread of information; cooperation among cooperatives; and finally, concern for the community (International Cooperative Alliance: www.ica.coop/en/cooperatives/what-is-a-cooperative, accessed 08/2017).
- 3 Theesfeld (2004, 268), depicts actors' attitudes towards collective action with extracts from statements, among them: "I am sick of cooperatives and collective working; I only care about how my own things are doing".
- 4 In such community-driven social funds, beneficiaries are expected to play a significant role in the initiation, design and implementation, operation and maintenance, monitoring and evaluation of micro-projects.
- 5 In a study by USAID and IWMI, 52% of WUAs reported that irrigation fees are defined by crop type and area, and only 21% reported that these fees are defined by area. In contrast, when the farms were surveyed, 80% claimed that they paid their fees by area alone (Balasubramanya et al., 2016).
- 6 Whereas the share of financial flow from raw-material sectors in the Russian state budget is 75% (mostly from oil and gas extraction), the share of the raw-material industry in gross domestic product was only 10% in 2006 (Murota and Glazrina, 2010).
- 7 Libman and Obydenkova (2014) refer to it as lespromkhozy and focus on the industrial and logistics responsibilities in contemporary Russia as an outcome of transforming this organization.
- 8 Model forests test and demonstrate innovative national forest programs to promote sustainable forestry worldwide.
- 9 There is also a linguistic issue: in Russian the written word "Kooperativ" is not associated in the same way with cooperation or collaboration as in the English language.

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