



The current Situation of Wildlife Management in Central Asian Countries



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This booklet takes a look at the wildlife situation and the use of wildlife, in particular hunting, in the different countries of the Central Asian region, namely Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. It describes the institutional and legal framework which sets the conditions for conservation, and it presents in few words the support provided by German Development Cooperation. Chapters on regional cooperation and community-based wildlife management conclude the view on this sector.

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Community-based wildlife management in Central Asia

Stefan Michel

Description of the approach and its specifics in the region

Where local people control natural resources, like pastures, forests or wildlife, in the sense that they possess rights and responsibilities and receive direct benefits from their sustainable use, they are likely to manage them sustainably, and to prevent harmful use practices and illegal activities; and thus these resources are more likely to be preserved. This approach can be an effective and cost efficient strategy for the conservation of wildlife, complementary to protected areas and legal regulations. The potential of this approach for the management of game animal populations depends on the specific biology of the target species, social and economic conditions, the market situation for possible sustainable use of wildlife vs. alternative land uses, legal frameworks empowering local people, and various other factors. Local people can benefit through extractive use of wildlife, i.e., hunting, as well as non-extractive use, like nature observation, tourism or the cultural and other values associated with wild animals. Wildlife is also an integral part of functioning and resilient ecosystems, providing services and goods for local people. These benefits are not mutually exclusive and can be of relevance to different parts of local communities.

In its strict sense, “community-based management” refers to a situation where the population of a well-defined rural community, consisting of one or several villages, jointly manages a natural resource as a common property belonging to all households. This resource would formally, or based on customary rights, belong to this community as a whole, and there would be institutions in place through which its members make decisions about the use of the resource. In Central Asia such a situation exists where pastures are jointly used by groups of households. In a wider sense, the term “community-based” is also used in situations where not an entire community is involved, but only some community members, and to some extent other community members or the community as a whole benefit. An example is so-called community-based tourism, where households provide services to tourists; and the community as a whole benefits indirectly due to the overall improvement of the economic situation. Similarly, community-based wildlife management in Central Asia does not fit into the strict definition, but tries to achieve involvement of the community members in a relatively broad manner.

In Central Asia, populations of many ungulates like Asiatic ibex (*Capra sibirica*), argali (*Ovis ammon*), markhor (*Capra falconeri*), urial (*Ovis vignei*), saiga antelope (*Saiga tatarica*), goitered gazelle (*Gazella*

subgutturosa) and maral (*Cervus canadensis*), as well as carnivores like snow leopard (*Panthera uncia*), leopard (*P. pardus*), cheetah (*Acinonyx jubatus*) and brown bear (*Ursus arctos*) have declined due to poaching or unsustainable hunting, forage competition with an increasing livestock population and habitat degradation. Protected areas, in particular those with strict restrictions on economic activities, are limited by size; the enforcement of rules is weakened by the lack of financial and human resources and/or insufficient political support. With growing human and livestock populations, even strictly protected areas (*zapovedniki*, *zapovednye zony natsional'nykh parkov*) are increasingly challenged by pressures to convert them into areas with fewer restrictions on land-use. Outside of protected areas, ungulates may be hunted based on quotas determined by the authorities. Enforcement of hunting bans or of hunting limitations is often difficult for the same reasons as the enforcement of PA regulations. Experience shows that hunting bans do not necessarily prevent serious decline and extinction of local wildlife populations. On the other hand, sustainable use of wildlife - in particular ungulates - can provide an important alternative or complementary land-use option.

Hunting has a centuries-long tradition in Central Asia. Some of these hunting traditions, like in hunting with falcons, golden eagles and traditional dog breeds, are considered as cultural heritage. Legends related to hunting, as the Kaiberen legend in Kyrgyzstan, highlight sustainability and ethical standards of hunting. Many people still remember traditional hunting restrictions like limits of off take, selection for sex and age of game, seasonal and area limitations, as well as the maximum number of hunters in a community. These customary rules largely lost their power with the state taking over formal ownership of wildlife and the introduction of externally imposed regulations, which were nevertheless often violated, as the Red Books published in the 1980s already indicated. These regulations were widely ignored when the Soviet Union dissolved; and members of local communities as well as outsiders poached intensively. During these years, e.g., saiga population numbers in Kazakhstan dropped by more than 95%, the urial population was exterminated from the Wakhan of Tajikistan, and many other ungulate populations were reduced to very low levels.

International hunting tourism started in this region in the late 1980s. Some areas became assigned to companies, owned by outsiders, as hunting concessions. Local people got only involved as temporary service staff, in particular as hunting guides. Contract periods for hunting concessions were short, areas were poorly defined and often too small. Many of these concessionaires used the resource opportunistically and partly illegally and often abandoned the areas after a few years. However, sustainable wildlife management was effective in some concessions, and game populations were rehabilitated and conserved.

With game populations and thus opportunities for local traditional hunters diminishing and at the same time hunting tourism largely benefiting outsiders, members of communities in Tajikistan started to think about how to rehabilitate game populations for trophy hunting, in particular markhor. With the introduction of Joint Forest Management by which management responsibilities on forest plots and benefits from their use are shared between state forest enterprises and local households, local project partners suggested trying similar approaches for wildlife.

In model sites in Tajikistan that have potential for being managed by the communities and providing suitable habitat for ungulates, a facilitation and empowerment process started aiming at traditional hunters and other interested community members. During the participatory analysis and planning processes, they understood that past declines of game numbers were a direct effect of unregulated and intensive hunting. While poaching was considered less intense than in the 1990s, continuous pressure prevented a recovery of ungulate populations. Local hunters agreed to establish legally recognized control over the areas used by them, to prevent community members as well as outsiders from poaching, and after recovery of the populations to start a regulated use. Benefits from hunting and tourism would be used to cover costs of wildlife management, reward the participating traditional hunters and support the socio-economic development of the communities.

The discussion process within the local initiatives in Tajikistan, and later in Kyrgyzstan, showed that the formal institutions at sub-district and village levels have no authority over wildlife, as all wild animals are in state ownership, with central level agencies being in charge, and wildlife management not being in the mandate of the local levels. An alternative considered in Tajikistan was vesting community-based wildlife management in the non-governmental Village Organizations and their associations at the sub-district (jamoat) level. These organizations, however, did not see conservation and

wildlife management as part of their mandate. On the other side, traditional hunters had no interest in integrating “their resource” in a broader institutional context. Many villages in Central Asia use their pastures and maintain irrigation networks as common property, but people are skeptical towards collective approaches with automatic membership of all households. Such approaches are associated with the former collective farm system and related lack of individual responsibility. People fear that the sustainable use of wildlife would not provide tangible material benefits, if spread evenly among all households.

For these reasons, traditional hunters created their own organizational structures and included in their bylaws the conservation and sustainable use of game animals in designated areas, eco-tourism, and support of the wellbeing and development of their communities. In Tajikistan five initiatives choose the form of local non-commercial, non-governmental organizations (NGO, obshchestvennyye organizatsii), while in markhor range areas several family-based small enterprises emerged, which are registered as Limited Liability Companies (LLC). In Kyrgyzstan two community-based initiatives became registered as NGO (obshchestvennyye ob'edineniya) and three initiatives are in the process of registering as community-based organizations (jamaat). While LLCs are controlled by very few people, usually by a single family, the NGOs tend to be more inclusive. However, they too can be controlled by a few powerful people and be perceived as serving individual interests, while on the other hand LLCs can benefit the broader community as well.

The registered local organizations applied then for the assignment of game management areas (okhotnich'i ugod'ya). Game management is formally independent of the land-use rights; i.e., land-use rights on a certain area do not include the rights to manage wildlife, while a legal entity to which the rights of game management are assigned, does not have other land-use rights. However, community-based



wildlife management provides the opportunity that local land-users manage the wildlife on their lands as well, if game management areas are assigned to legal entities established by them. Due to uncertainty about the legal procedure in Tajikistan, some areas were leased from forest enterprises, others were assigned as fixed-term land-use of state reserve land; some areas were assigned as hunting grounds by district authorities, while others were assigned by the republic level agency in charge of forestry and hunting. In Kyrgyzstan, the Department for the Sustainable Use of Natural Resources (formerly called the Hunting Department) assigns game management areas in a competitive process.

Additionally, some of the members of local organizations acquired the status of voluntary rangers of the forest, hunting or nature protection authorities. On the basis of their assigned rights and responsibilities in game management, the active members of these organizations act as rangers and engage in activities like protection against poaching, some habitat management, population monitoring and guiding. Harvest of game animals is based on permits issued by the state agencies in charge of hunting management. The quotas are suggested by the local organizations on the basis of their game survey results.

The quota for ibex could either be used for selling hunts to international hunters or for their own subsistence hunting. Quota for markhor, urial, wild boar and argali would only be used for hunting tourism. Subsistence hunting so far does not play any role, as permit fees are too high compared to the value of meat, population numbers are too low for combining subsistence and trophy hunting, and most of the members of local organizations do not possess hunting rifles.

For trophy hunts, the local organizations purchase all permits on behalf of the hunting tourist and provide all services. Their members guide the tourist and process the trophy for shipping. Other services like pack animals, vehicle-transport, accommodation and cooking might be provided by other community members. The price of the package includes all these costs and the commission, if sold via an outfitter. Expenses for permit fees, payments for import and export of the hunters' rifles and ammunition, food purchased outside of the community and transportation from the airport to the hunting area are included in the price of the hunt too. Only a certain part of what the client pays stays in the community, normally around 50-70%. From this remaining income, services provided by members of the organization and other community members are paid, thus providing individual income at the community level. Similarly, income from nature tourism benefits those providing local services, while the local organizations so far do not charge a share or fee. Profit made by the local organization from the trophy hunts covers the operating costs of the organization and of specific activities, and projects for local social-economic development are supported. In the case of LLCs shareholders earn income.

The German government in 2007 had commissioned GIZ to plan and implement a regional project on sustainable use and conservation of biodiversity in Central Asia with a focus on wildlife. The project assessment mission in 2008 identified Kazakhstan and Tajikistan as project countries. In 2009 this project was integrated in the "Regional Programme for Sustainable Use of Natural Resources in Central Asia", which then partnered with two NGOs that received grant support (Tajikistan) and grant support and later a subcontract (Kazakhstan). Integrated experts provided by CIM provided technical guidance to both NGOs. These NGOs got additional funding from other donors for wildlife conservation activities. From September 2012 until September 2014, consulting companies implemented the activities in Tajikistan on behalf of GIZ. The partner NGO in Kazakhstan did not engage with community-based wildlife management, but focused on other issues.

In Tajikistan the project team integrated the GIZ support into a broader project on "Community-based Conservation and Management of Mountain Ungulates" involving a number of community-based NGOs and LLCs and collaborating with national agencies and scientific institutes. The project was additionally supported by international organizations like the "Zoological Society for the Conservation of Species and Populations" (ZGAP) and "Panthera". From 2010 until 2014 the Regional Programme replicated best practices from this project into Kyrgyzstan in two communities, involving "AkTerek", a national NGO, as implementation partner for local community mobilization.

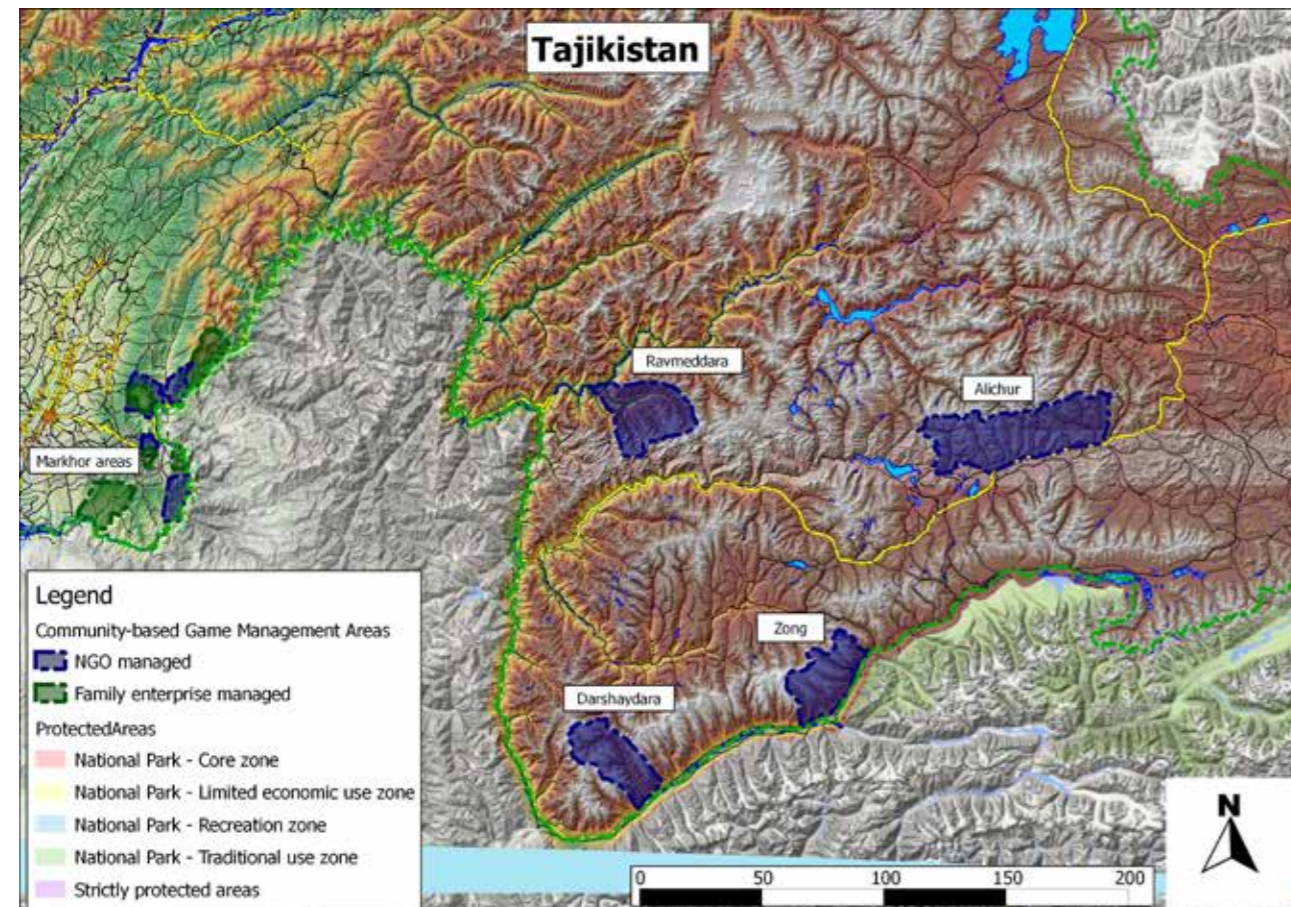
The activities supported until September 2014 by the Regional Programme included facilitation and empowerment of community initiatives in model areas, assistance in the development of community-based NGOs and in the assignment of game management areas to them, provision of basic equipment (uniforms, field and optical equipment), technical advice and training on population surveys, management planning and provision of services to tourists and trophy hunters. Further, the Regional Programme (together with the CIM expert) supported an enabling legal environment, in particular, the development of laws on hunting and game management in Kyrgyzstan and Tajikistan.

Community based wildlife management: Achievements and status of introduction

In Tajikistan the first community-based NGO for wildlife management, "Parcham" in the Ravmeddara Gorge, was registered in November 2008, and acquired land-use rights over 470 km² that were assigned by the district authorities. Soon after, the Committee on Environmental Protection of GBAO Region recognized the 12 active members of the NGO as voluntary inspectors. The State Forestry

Agency in September 2011 assigned to “Parcham” the rights and responsibilities on game management in this area. Following this example, other communities established similar organizations and applied for the assignment of game management areas. Some attempts were unsuccessful where communities lacked sufficiently energetic organizers; private concessionaires had already been assigned the rights; or where areas were not suitable. To date three additional conservancies have been established in the Pamirs: “Darshaydara”, managed by the NGO “Yoquti Darshay” (2010; 413 km²); “Zong”, managed by the NGO “Yuz Palang” (2013; 415 km²), and “Alichur”, managed by the NGO “Burgut” (2013; 927 km²).

Overview of CBWM-areas in Tajikistan



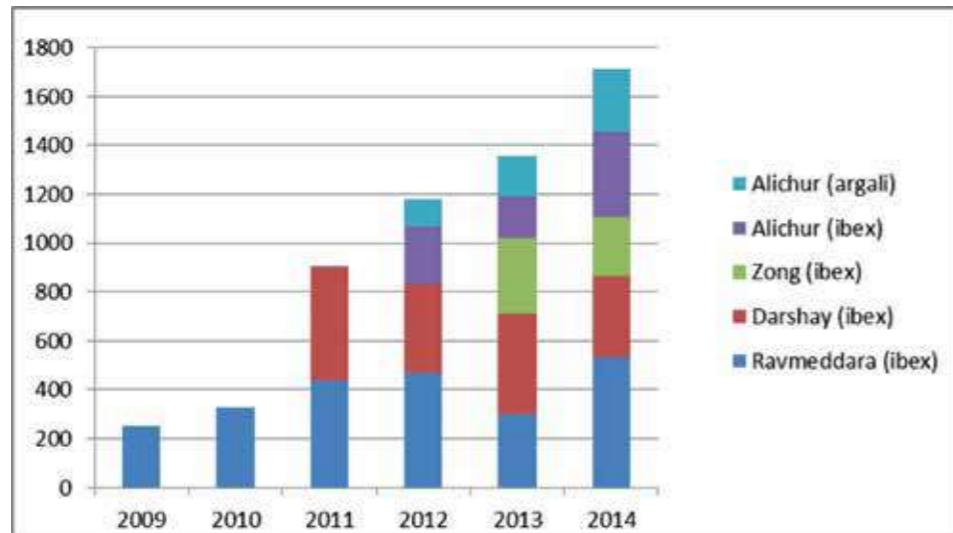
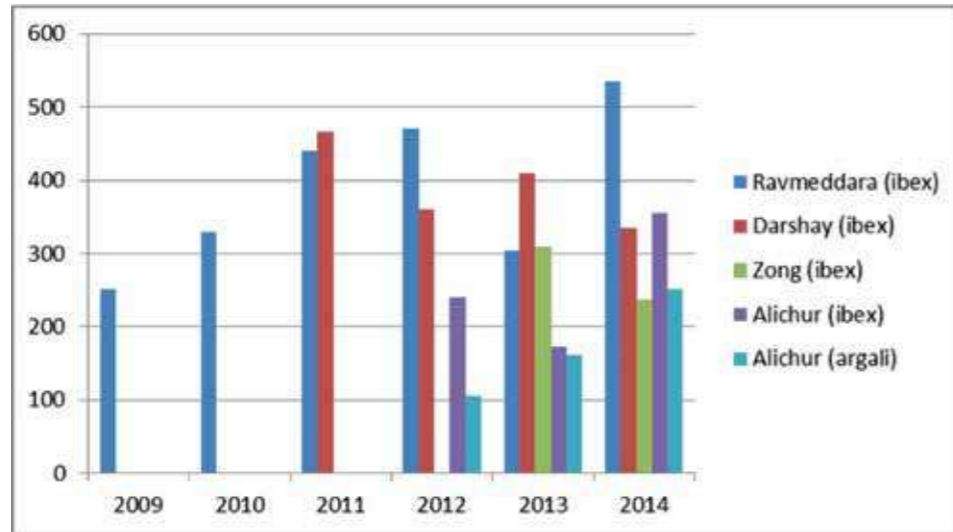
The area of these community-based conservancies at the end of 2014 covered 2,248 km², protected and managed by 40 volunteer rangers. In the markhor range areas in the Darvaz and Hazratishoh mountain ranges one NGO “Muhofiz” (since 2011) and the three family-based LLCs “M-Sayod” (since 2004), “Morkhur” (since around 2008) and “Saidi Tagnob” (since 2012) manage together about 600 km².

The area where community-based organizations actively protect wildlife covers now almost 3,000 km². Project staff together with the rangers surveyed game populations through direct counts. Trends in population sizes are difficult to determine due to variations in survey effort and detectability. Still, these surveys show minimum population numbers in each game management area. In December 2014 in all four sites in the Pamirs in total, Panthera staff and rangers recorded 1,459 ibex and 251 argali. In the markhor areas that are protected by the above-mentioned organizations a survey in March 2014 yielded 1,113 markhor, 158 ibex and 37 urials. Comparison of survey data over the years shows stable or increasing numbers, good reproduction and presence of trophy age males. Ungulates are now less shy and easier to observe, a response to reduced poaching. Panthera’s camera trap records of 21 snow leopards in total from five game management areas additionally indicate healthy ungulate populations.

In late autumn of 2012 the first hunting tourist took an ibex in the area managed by the NGO “Parcham”: for the first time its members and the community earned legal income from wildlife use, as well as meat and a contribution to a micro-credit scheme. In community-based conservancies in the Pamirs, during the hunting seasons of 2012/13 through 2014/15, 12 foreign hunters legally harvested 11 Asiatic ibex in three conservancies. A number of tourists hunted wild boar in the markhor areas, and during the hunting seasons 2013/14 and 2014/15 foreign hunters took legally 11 markhor. Additionally, nature tourism provides some income for conservancies and community members, but hunting tourism provides much more substantial income per client.

At the 12th meeting of the “Conference of the Parties of the Convention on Biological Diversity” in 2014 the Tajikistan Mountain Ungulates Project with the involved community-based organizations has been honored with the CIC Markhor Award. With this prize the “International Council for Game and Wildlife Conservation” recognizes and celebrates outstanding conservation performance by personalities, private and government institutions, enterprises or conservation projects that link the conservation of biodiversity and human livelihoods through the application of the principles of sustainable use, in particular hunting.

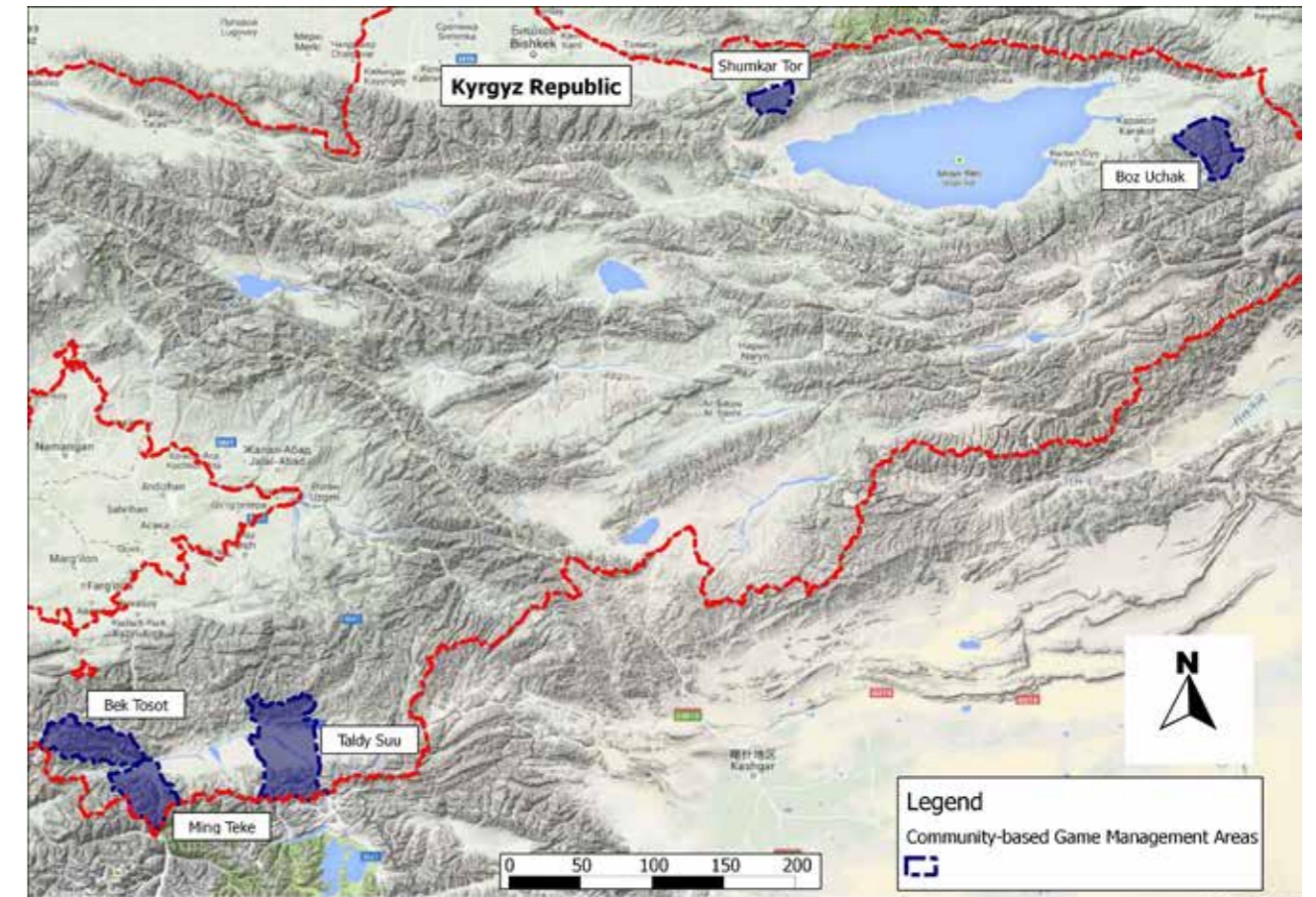
Diagram population development in four community-based game management areas in the Pamirs of Tajikistan:



Note: In years for which no values are indicated the game management area was not surveyed

In Kyrgyzstan, since 2010 two local NGOs registered in Chong-Kemin (Chuy Region) and Ak-Suu (Issyk-Kul Region) and the Department for the Sustainable Use of Natural Resources assigned them game management areas of about 180 km² and 700 km², respectively. The smaller of these areas includes grasslands, coniferous forests and cliffs and thus suitable habitat for each of the ungulate species roe deer, maral and ibex is possibly small for supporting population sizes allowing for sustainable hunting. The Department therefore considers an expansion of the assigned area, thus allowing for a viable operation. Currently populations of all game species are low in both areas, and the NGOs focus on non-extractive use through guided nature tourism.

Overview of CBWM-areas in Kyrgyzstan



Facilitated by the “Kaiberen Project” of the National Center for Mountain Regions Development and Panthera, since 2014 the traditional hunters in three areas in the Alay Valley (Osh Region) have established community-based NGOs and started the application process for getting assigned game management areas of about 2,400 km² in total. Participatory assessments and joint site visits indicate that ibex populations in these areas are far below the capacity of the habitat and argali is only sporadically present despite a suitable habitat being available and the species having been present in the past. The dedication of the members of these NGOs and their protection activities give hope and expectations of recovery of ungulate and snow leopard populations.

Success factors, challenges and risks

The major success factors are the recognition and mobilization of traditional hunters, the development of community-based organizations which are inclusive and open to all community members, the assignment of rights and responsibilities over suitable areas with a long-term perspective, the authority to prevent unauthorized hunting by outsiders, and the benefits directly associated to the presence of healthy wildlife populations. Protection activities by community-based groups can be effective despite low material benefits, as their members carry out their activities either voluntarily or in the context of other activities like herding of livestock.

Marketing of hunts of Asiatic ibex is difficult as most foreign outfitters have already established relationships with concessionaires, and the international demand is limited. The more lucrative argali hunts have thus far not been allocated to community-based conservancies. In Kyrgyzstan, private concessions currently control all areas with huntable argali populations. In Tajikistan, an association of private concessionaires has the right to distribute the country-wide argali quota, so far preventing the allocation of a quota to the NGO managing argali habitat. Thus, the motivation of their members is stimulated by the occasional income from tourism and hunting, meat obtained in hunts by foreign hunters, and the option of some subsistence hunting. Achieving sustainability of the latter is a challenge, as game populations are too small to sustain higher harvest, and subsistence hunting brings a risk of reducing trophy hunting and eco-tourism opportunities.

In the markhor areas the management units are fragmented, and collaboration between the different organizations is hampered by competition. Given the high prices for which markhor hunts sell, outsiders, who want to get involved in this business, put pressure on the local organizations and on the state

agencies in charge of wildlife. Further, the share of the permit fee of USD 40,000 which is allocated to the local level is not yet spent in a way creating incentives for the broader local population to support markhor conservation. As Tajikistan is not yet a party to CITES, decisions about import permits for markhor hunting trophies are made case by case by the authorities of the importing countries. This uncertainty affects the market demand for markhor hunts.

In some community-based conservancies, internal control, peer-pressure and support from some community members are not yet sufficient to ensure full compliance, and the work is further hampered by outsiders, including police and other officials, poaching or hunting without authorization. Some organizations are pushed to accept illegal trophy hunts.

Applicability of community-based wildlife management in other Central Asian countries

The approach of community-based wildlife management as tested in Tajikistan and Kyrgyzstan has potential of being replicated in other countries of Central Asia. The legal framework in Kazakhstan allows for the assignment of game management areas to legal entities. Many hunting concessions have been assigned to outsiders and many of these concessions turned out to be economically not viable. Community-based management might be an alternative as local people can integrate wildlife management with other activities, and involvement of local hunters can improve compliance and thus reduce costs. For this, formal requirements and bureaucratic burdens for game management would need to be adapted to the capacity of community-based organizations. In Turkmenistan, the Union of Hunters and Fisherman controls 43 game management areas, covering 27,000 km². This could be an entry point, for devolution of rights and responsibilities at the community level, as all hunters are members of this union, and game management areas could be assigned to its local units. Also in Uzbekistan, management rights and responsibilities can be assigned to legal entities, and suitable organizations could be established at the local level.

While game species for trophy hunts demanded in the international market provide better opportunities for income, the approach would as well be applicable for local subsistence and domestic sport hunting. An area-based management approach where local people are the legitimate managers allows for the development of ownership and as a result more sustainable use and management of the game

populations. Domestic hunters from outside of the communities should pay local area managers for the hunting opportunities they provide. Permission systems, where state agencies issue hunting permits which are not bound to specific game management areas, create open access situations and cause an overexploitation of wildlife. Sustainable management of game populations is more likely if hunting is permitted only in assigned areas, and permits are issued via the organization—preferably community-based—managing the specific game management area and which then would provide access and services to the hunters.

In Central Asia, community-based wildlife management so far has been tested only for argali and urial sheep, ibex and markhor in mountain ecosystems. The approach would be similarly applicable for more or less sedentary game species where a game population and its habitat are used only by one or a few communities. The approach is difficult to apply and requires adaptation where many communities share limited wildlife habitat and the use potential of game populations is small compared to the number of people expecting benefits. Also for migratory species like the saiga antelope, community-based management is more difficult to develop than in the case of more sedentary species. In the Ustyurt in Kazakhstan and Uzbekistan, few groups of poachers from a limited number of communities use the migratory saiga population, and have driven it to near extinction despite internationally funded projects focusing on research, education, law enforcement and other issues. Involvement of these local poachers, providing them with a clear option of future subsistence and commercial use with a quota depending on the population size might be a more effective option for the conservation of this population.

Conclusions

Community-based wildlife management is far from a panacea for the conservation of wildlife and for the improvement of local livelihoods. However, in societies where hunting bans cannot be realistically enforced, and where protected areas are limited in space and insufficiently guarded, incentive-based management of mountain ungulates is an important and effective approach. Sustainable use of game populations can contribute to the diversification of income and provide benefits to the communities. First experiences in Tajikistan and Kyrgyzstan show that the assignment of rights over wildlife to community organizations can reestablish a sense of local ownership. Even limited revenues from hunting and nature tourism create incentives for local people to refrain from poaching and to protect mountain ungulates.

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