
Local people and protected areas: identifying problems, potential solutions and further research questions

Simo Sarkki*, Lauri Rantala and
Timo P. Karjalainen

Thule Institute,
University of Oulu, Finland,
P.O. Box 7300, 90014, Finland
Email: simo.sarkki@oulu.fi
Email: lauri.rant@gmail.com
Email: timo.p.karjalainen@oulu.fi
*Corresponding author

Abstract: There are often contradictions between environmental and social sustainability. This friction is clearly manifested in protected areas, which are increasing throughout the world. This article examines the relationships between protected areas and local people in order to map problems, to identify possible solutions and related challenges, and to make suggestions for further research. This paper examines two kinds of solutions to protected area – local community confrontations: 1) co-management arrangements, which promise increased possibilities for participation for local people; 2) tourism-protected area partnerships, which promise more income to the local level. However, our work illustrates that finding synergies between environmental and social objectives requires conscious effort, because promises to find such synergies often fail to deliver the intended objectives in practice. We identify a set of research questions for tackling these problems in protected areas, which is relevant for combining social and environmental sustainability even in other contexts.

Keywords: parks and people; co-management; benefits; burdens; participation; tourism-protected area partnerships; social sustainability.

Reference to this paper should be made as follows: Sarkki, S., Rantala, L. and Karjalainen, T.P. (2015) 'Local people and protected areas: identifying problems, potential solutions and further research questions', *Int. J. Environment and Sustainable Development*, Vol. 14, No. 3, pp.299–314.

Biographical notes: Simo Sarkki holds a docentship (Adjunct Professor) in the field of anthropology of environmental governance. He works as a Postdoctoral Research Fellow at Thule Institute, University of Oulu, Finland. His research interests include environmental governance, participation, northern land use and environmental science-policy interfaces.

Lauri Rantala is a PhD student at the Thule Institute, University of Oulu, Finland. His PhD research concerns co-management approaches in natural resource governance. His thesis focuses on facilitating stakeholder collaboration and working with multiple interests.

Timo P. Karjalainen works as a Senior Research Fellow at Thule Institute (University of Oulu) and holds a docentship (Adjunct Professor) in the field of environmental sociology and interdisciplinary research. His research profile is interdisciplinary, and has focused recently on natural resource governance, participatory research, analytic-deliberative and impact assessment methods.

1 Introduction

Biodiversity loss is accelerating and ecosystem services vital for human well-being are being depleted (MA, 2005). These challenges are acknowledged by policy communities, and the number and extent of protected areas has grown rapidly. Approximately 12% of the world's surface is currently covered by more than 100,000 protected areas (Chape et al., 2005).

The implementation of new rules when establishing and reinforcing protected areas has wide-ranging effects on nature and people, and it makes protected areas a way to regulate and govern certain locations (Duffy, 2005; West, 2006). The exclusion of local residents and livelihoods from protected areas is often based on the ontological and ideological separation of nature and culture, which also has political implications, because the creation of protected areas changes land-use rights in general (Adams and Hutton, 2007). Protected areas can be considered as material and discursive means by which conservation institutions reinvent the world with practical outcomes (West et al., 2006). Establishing protected areas redefines local use and access rights and may lead to a decrease in farmland, the conservation of forests previously used by local communities, the conservation of species harmful for livestock, a decrease in pasture land and even to the relocation of people from the protected areas. Because of these contradictions it has become important to examine what kinds of problems conservation poses for people and what are potential solutions.

In this paper, we bring together literature collected during our previous projects on the relationships between protected areas and locals (Heikkinen et al., 2010, 2011, 2012; Puhakka et al., 2009; Sarkki, 2011; Sarkki et al., 2013b) with the aim of examining the problems and potentials pertaining to protected area – local community relationships. We start by showing that the logic of separating nature and culture tends to lead to the exclusion of people and their practices and livelihoods from protected areas. Next, we focus on identifying some problems posed by protected areas to local people. The following section examines some potential solutions (co-management and protected area – tourism partnerships) to the negative effects of protected areas on local people and the challenges still encountered by these solutions. We conclude by identifying a set of questions and themes for further research on the topic of 'parks and people'.

2 Logic of protected areas: separating nature and culture

There has been much discussion about economic globalisation while other forms of globalisation have perhaps been overrun by the economy-focused discourse (West et al., 2006). However, the globalisation of political ideas is also taking place and influencing the development of protected areas (Zimmerer, 2006). Perhaps the most influential idea

regarding protected areas is the ontological, ideological and political separation of nature and culture. The ontological separation is based on the Christian view on the role of man as the dominant species as well as being grounded in ideas generated during the Enlightenment (Cronon, 1995). This ontological separation has laid the basis for the ideological separation of nature and culture in protected area governance, meaning that protected areas are a means of conserving the intrinsic nature and are seen as places where people and livelihoods are mere visitors. This ideological separation has further led to the emergence of what might be the most dominant model for protected areas, the so-called 'Yellowstone model', which considers the non-human world as a priority conservation target, whereas culture as well as local people and their livelihoods are seen to threaten the ecological integrity fostered by 'islands' of protected areas (see Adams and Hutton, 2007; Mels, 2002). The model was rapidly applied throughout the American west (Stevens, 1997), and American parks operated as models for protected area development around the world (Spence, 1999). Because of problems arising from the strict separation of nature and culture and the resulting exclusion of local people from protected areas, the question has been raised as to whether conservation communities have learned the wrong lesson regarding conservation with the diffusion of the 'Yellowstone model' (Schelhas, 2001).

The Euro-American conservation model has also been adopted by many conservation initiatives and organisations, such as the International Union for Conservation of Nature (IUCN). However, large NGOs have a tendency to introduce a set of ideas to governance practices that are often in conflict with those of local populations (Chapin, 2004; Holmes, 2007). IUCN's seven-level classification system aims to provide a world-wide system by which the level of conservation in protected areas can be assessed. Basically, the classification works so that the less human activities are allowed the higher the park is in the classification. Of course, from a local point of view, problems seem to arise when moving from areas designed for sustainable use towards more strictly protected national parks and nature reserves, all of which are present in the IUCN classification. The classification is not merely a descriptive system but it creates incentives for protected area managers and state officials to lift the status of their park in the IUCN classification. By doing so, the IUCN classification system enforces the traditional Euro-American dichotomy of nature and culture on areas where such categories have not necessarily existed (see Berkes, 2004) and often causes the exclusion of local people and their practices from protected areas (Harmon, 2003; Heikkinen et al., 2010; West et al., 2006). This is especially true in higher-level protected areas in the seven-level classification (e.g. Natural reserves and national parks), while lower-level protected areas (e.g. Protected area with sustainable use of natural resources) may allow local livelihoods.

IUCN and other large conservation NGOs are one example of the political globalisation of the idea of a strict separation of nature and culture (see Chapin, 2004), but there are also other initiatives which tend to see locals and their livelihoods as a threat to the natural integrity of parks. This separation is relevant not only in the developing world but also in the rural areas of developed countries (Heikkinen et al., 2010). For example, the European PAN Parks protected area – tourism certification targets the conservation of non-human wilderness and, depending on the protected area in question, may pose contradictions between the initiative and local livelihoods (Puhakka et al., 2009; Sarkki et al., 2013b).

3 Problems regarding protected areas from the local perspective

Recent trends in researching ‘parks and people’ include approaches from the field of political ecology, where the burdens caused by parks and species conservation have been examined (Sodikoff, 2007). During the last two decades there have been some studies on the history of American parks describing how the Native Americans were pushed away from areas they used to inhabit and use due to the establishment of a protected area (Stevens, 1997; Spence, 1999). More recent relocation practices have taken place in Africa (Agrawal and Redford, 2009), but only a handful of studies examine the economic costs or social impacts of displacement, which is unfortunate, because many states and NGOs often deny that displacement causes social problems (West et al., 2006). Hardly any of these African resettlements have been successful, and people are resisting them and even moving back to their former lands, now declared as parks. Despite of this resistance, resettlement is the most common means of coping with people living inside parks (Brockington and Igoe, 2006; Schmidt-Soltau and Brockington, 2007). State violence and the use of force towards local populations have also been described to be legitimised by conservation: in case of resistance towards relocation the locals may be driven out by using force. Furthermore, international conservation interests may legitimate the state’s use of force (Peluso, 1993).

Another trend in the literature on ‘parks and people’ is to describe local struggles for livelihoods and the ways of resistance possessed by local people towards the ‘hegemony’ of conservation (Holmes, 2007). Resistance may also occur because of other things than relocation. While conservation policies shape use and access rights in national parks, former systems of natural resource management are banished and politico-economic inequalities between locals shape the subsistence possibilities of poor households (Dressler, 2006). It has also been noted that the combination of enforcements by park guards and participatory programmes have provided little space for constructive engagements between parks and, for example, local herders. Furthermore, they have reduced indigenous and local control over livestock movements (Turner, 1999). Sometimes deteriorated local possibilities to use a park’s resources, for example, for grazing, are connected to wider socioeconomic pressures that force the locals to use the park’s resources more intensively, as the other options in the surrounding areas for subsistence are decreasing (Bedunah and Schmidt, 2004). Yet, locals are often blamed for practices harmful to the ecological integrity of parks, even though other forms of land use have pressured them into an increasing use of the parks.

Protected areas often attract a variety of wildlife due to their peaceful habitats. This, however, may lead to encounters and conflicts between wildlife and people. Problems include livestock loss because of predation, crop damages caused by large herbivores and even the loss of human lives and injuries due to the animals (Heikkinen et al., 2011; Jones, 2007).

4 Possibilities for synergies between parks and people

4.1 Co-management as a possibility for more socially just protected areas

In 1980s, IUCN, WWF and the UN Environmental Programme marked a shift from the traditional ‘fences and fines’ conservation approach to including human development

into the conservation efforts in their World Conservation Strategy (Dove, 2006). The emerging approaches were called 'Integrated conservation and development projects' (ICDP), 'community-based conservation', 'grassroots conservation', 'sustainable development and use', and 'devolution of resource rights to local communities'. In this paper, we discuss these approaches under the label of co-management. In our usage, the term 'co-management' broadly encompasses collaborative and participatory planning and decision-making between state organisations, NGOs, local people and other stakeholders, as a means of sharing power, knowledge, resources and responsibilities (Berkes, 2009).

Conservation NGOs have been working with communities since the 1980s and 1990s with strong support from their donors (Chapin, 2004). The role of NGOs as empowering marginalised locals is a topic still under discussion (Chernela, 2005). Some authors consider that NGO interventions help in building social capital (e.g. networks and trust) between actors at various scales (Meyer, 1999). Others have been more critical towards NGOs' engagements with co-management, holding that NGOs bring additional problems for locals (e.g. Chapin, 2004). Thus, co-management arrangements may be dominated not only by NGOs but also by state organisations (Gonzalez and Nigh, 2005) or local elites (Lund and Saito-Jensen, 2013), and it is not self-evident that co-management arrangements will automatically lead to fair possibilities for participation.

A key issue for co-management is that local people are not seen merely as a threat to nature but as people capable of living sustainably with their environment. Anthropologists and other academics have shown that local populations can manage resources in a sustainable manner (McCay and Acheson, 1987; Porter-Bolland et al., 2012). A growing body of literature has also acknowledged the role of local or traditional knowledge and practices in preserving biodiversity (Langton et al., 2005) and examined ways to build resilience and adaptive capacity in local management systems (Berkes et al., 2003). Thus, local resource use could be something to learn from (Schwartzman et al., 2000). Another trend in anthropology has been to perform advocacy and applied research through which local communities are defended against locally harmful conservation initiatives (Stewart and Strathern, 2005).

Despite the efforts to build co-management conservation projects they have not always been successful (Berkes, 2004). There may be two separate reasons for this. Firstly, it has been claimed that the lack of success of these projects is caused by implementation failures, especially related to the devolution of authority and responsibility (Berkes, 2004). The devolution of power regarding conservation efforts may turn out to be mere rhetoric, while the local communities and their knowledge continues to be marginalised despite talk of participation, decentralisation and bottom-up approaches (Goldman, 2003). Another departure has been to argue that development and conservation should be delinked in order to produce more efficient outcomes in both fields (Brandon et al., 1998; Redford and Sanderson, 2000). Wilshusen et al. (2002) lay out nicely not only the critique that has been laid against co-management but also counterarguments to that critique (Table 1).

Table 1 Critique against co-management of protected areas and counterarguments

<i>Critique against co-management of protected areas</i>	<i>Counterarguments supporting co-management</i>
Protected areas require strict protection.	A greater level of protection is needed, but we need to concentrate on how the protection should take place.
Biodiversity protection is a moral imperative.	So be it, but the moral argument ignores the variation in cultural moral conceptions, the fact that 'the common good' refers to elite interests and the fact that by this argument human rights are overrun by nature's rights.
Conservation combined with development does not protect biodiversity, and not all the areas should be subjected to human use.	This ignores the pre-existing use and access rights of locals and the fact that community-based efforts may have failed not because of their structure but because of a failure in application, and overlooks some intervening issues, such as conflicts, organisation, sociocultural contexts and governance.
Ecologically friendly communities are a mere myth, and because of rapid social change locals are unable to protect the environment.	True, but this falsely implies that local people are unable to protect nature and assumes that locals cannot adapt to change sustainably.
Emergency situations (biodiversity loss) require extreme measures, and governments have a duty to restrict individual freedoms in the name of the common good.	This is a fallacy in pragmatic and moral terms. It assumes that governments automatically serve the common good of their citizens and ignores the possibility that conservation can be used to legitimate the use of force or even military actions against locals.

Source: Based on Wilshusen et al. (2002) and Thaddeus et al. (2011)

Other reasons for the failures of co-management initiatives are presented by Walker et al. (2007) and Chapin (2004) as follows:

- 1 institutions remain as top-down management models instead of a genuine devolution of power
- 2 NGOs still prefer 'people-free' parks, ignoring the needs of local people to use the resources
- 3 lack of training on participatory approaches and sociocultural issues of biologists who crowd the conservation NGOs
- 4 the increasing flow of funding from the state and donor agencies to the three largest NGOs (WWF, The Nature Conservancy, Conservation International) enhances the power of these NGOs
- 5 partnerships between these NGOs and states and multinational corporations put the locals in an inferior position.

Others have stated that participation is a mere device which allows practices of development which are unjust in terms of power relationships to continue (Cooke and Kothari, 2001). Walker et al. (2007) propose that when participation takes place it should be concerned with a certain spatial area instead of talking about abstract communication and participation.

Yet, the notions of success and failure may have different meanings for different stakeholders and, furthermore, also for different local people. Local people benefit and also perceive the benefits from the protected areas in different ways. While some locals rank the conservation itself as the most important issue for them, others see education, employment, development, recreation or wood collection as being the most important issue or benefiting them the most (King, 2007). Often the poor bear the burdens of conservation while the wealthy enjoy the benefits, and this dilemma should somehow be reconciled (Balmford and Whitten, 2003). People living in the surroundings of parks should be fully compensated for their deteriorated possibilities to use the nature and its resources (Adams and Hutton, 2007). On the other hand, co-management can lead, for example, to synergies between local livelihoods and protected areas through multi-functional use, or locals may be trained as ecotourist guides or hired as local ecosystem stewards (Heikkinen et al., 2012; Mukul et al., 2012).

Institutions play a key role in co-management. Experiences with co-management-based conservation programmes indicate that conservation programmes must be based on the active support of local resource users and also gain institutional support (Mahanty, 2002). Emphasis has been placed upon institutions which could foster co-management (Leach et al., 1999). Nygren (2005) has stressed that institutional democratisation and political accountability of natural resource managers and community representatives towards local people are important if decentralised governance practices are to succeed in mediating conflicts and to lead to a more equitable distribution of benefits and burdens. Co-management is often beneficial for the success of conservation institutions, as increasing local participation often leads to better rule compliance (Andrade and Rhodes, 2012).

The success of co-management programmes also depends on who are the local people engaged in the programmes. This is important as locals are seldom a homogeneous group, and simplistic assumptions on the local culture may lead to biased co-management solutions. For example, some indigenous tribes near or within protected areas may become models for conservation, which puts the other locals in an awkward position (Robins and van der Waal, 2008). This trend can be connected to the idea of seeing indigenous people as 'noble savages' who live in harmony with nature. Tensions may especially arise if the other locals do not fall into the indigenous category and are thus treated differently (e.g. Dzingirai, 2003). Another problem with the 'noble savages' thinking is that it denies the rights of a tribe to develop and take part in developments in wider society, such as adopting new technology, having connections to markets and diminished population growth (Hames, 2007; Holt, 2005). However, indigeneity is a double-edged sword in the sense that it may force people into a certain category, even denying their right to develop, while on the other hand it can also be used as a political tool to defend local rights (e.g. Brosius, 1999; Sarkki and Rönkä, 2012). Generally, it is very interesting to examine how representations of indigeneity are used and by whom. Sometimes labelling by outsiders causes frictions between the locals and outsiders, but even indigenous representations by themselves may cause contradictions among heterogeneous groups of indigenous people. It is essential for social sustainability that people have the right for self-determination, as positive development may be understood in various ways by different locals, NGOs, state agencies and scientists (West, 2006).

In addition, communities towards which the participatory efforts are directed are heterogeneous, and subgroups within the communities may manipulate the participatory endeavours to their own ends. Thus, the internal dynamics of the communities and

conflict resolution must be considered before implementing participatory processes that will alter the land-use rights and affect development (Agrawal and Gibson, 1999; Jones, 2007). This is why a deeper understanding of local cultures in and around protected areas must be gained in order to create balanced co-management arrangements (see Peterson et al., 2010).

4.2 Tourism-protected area partnerships as a possibility to join parks and people

Conservation is often justified using the idea of global public goods (Deke, 2008). However, the benefits of biodiversity are enjoyed by the whole humanity while the burdens are carried by certain local actors (Ghate, 2003). Ecotourism is turning conservation away from global public good and intrinsic ecological value towards something that can also be harnessed for economic benefits (Brockington et al., 2008). Ecotourism is often considered as a potential way to alleviate tensions between locals and parks, because it can bring additional incomes to the local level and thus increase the economic well-being of the locals (e.g. Duffy, 2008). Protected area – sustainable tourism partnerships have emerged as a new kind of solution for combining conservation and development objectives in protected areas (Fennell and Weaver, 2005; McCool, 2009). For example, IUCN has acknowledged the importance of sustainable tourism in achieving integrated objectives including both nature and humans (Eagles, 2004). Sustainable tourism can be promoted with certifications, which have drastically increased during the last decade also regarding protected areas (Buckley, 2002; Honey, 2002). Certifications represent an emerging hybrid trend of neoliberal conservation governance, which fits both the market economy and conservation targets (Duffy, 2008). Certifications aim to create restrictive governance mechanisms to ensure the meeting of conservation targets by scientific standardisation and to promote responsible consumption contributing to conservation and local development.

The combination of market forces and regulatory efforts promise a triple-win solution for economic growth, nature conservation and local development (Igoe and Brockington, 2007). This neoliberal logic of ‘selling nature in order to preserve it’ assumes that when nature is commercialised, its value rises, thus providing additional resources and incentives for nature conservation (Duffy, 2008; McAfee, 1999). Local motivation for conservation is also seen to increase with the superior economic potential offered by tourism compared to traditional uses of nature (Igoe and Brockington, 2007). Successful tourism – conservation – local community partnerships would have at least the following benefits: increased acceptability of the decisions, joint agreement on the desired future, increased efficiency by avoiding contradictions and unacceptable solutions by identifying possible disagreements early in the process, and providing a model for governance that is more sensitive towards people’s concerns and that enhances the integration of conservation and sustainable tourism (McCool, 2009).

However, there are seldom clear win-win solutions but rather trade-offs within and between conservation and development objectives (Dahlberg and Burlando, 2009). Furthermore, win-win solutions between conservation and the development fostered by increasing tourism may actualise only in rhetoric, while in reality conflicts caused by neoliberal conservation governance may be accelerating in frequency (Büscher and Dressler, 2007). The gap between rhetoric and reality may be due to the scale of analysis and to different views on who ought to be taken into account when determining the

winners and losers (see Morris, 2008). For example, at the municipal scale, it might seem like local economies are prospering with increasing tourism, while the traditional subsistence economies might simultaneously be defined as being inappropriate from the viewpoint of conservation priorities (see Igoe and Brockington, 2007). Neoliberalisation processes and certifications result in the redistribution of fortune and misfortune (Brockington et al., 2008). For example, it has been shown that while protected area certifications aim to attract more visitors to the area and thereby benefit those locals who are engaged with ecotourism, it is uncertain whether tourists actually use the certification as a criterion when choosing their travel destination. At the same time, standardisation practices often result in pressure to exclude local livelihoods from the certified nature in order to enhance its natural attractiveness (Sarkki et al., 2013b).

Another reason for the failures of tourism – protected area – local community partnerships is reliance on expert and science-oriented knowledge, which is, however, inadequate in dealing with change, complexity and uncertainty regarding the management of protected areas. Partnerships that go beyond expert-led management provide a more realistic and integrative approach for managing protected area – tourism – local community relationships (McCool, 2009). Furthermore, the standardisation processes included in certifications may neglect the divergent views on social sustainability at a local scale and thus are insensitive to the distribution of benefits and burdens within the local level (see Medina, 2005). The heterogeneity of local communities poses challenges for successful partnerships, as it is often the case that only few members of a community are represented, who might have different interests than the other members of the same community (Puhakka et al., 2009).

It has also been shown how imagining a ‘third nature’ (an ideal space for wildlife which contributes to the tourism industry) and implementing conservation practices to create it may outweigh the actual physical nature in decision making. This means that conservation actions are no longer taken on the basis of ecological attributes as a whole but on ecological attributes that are tightly connected with tourism and operate as environmental attractions. It has been argued that the creation of an ideal space for wildlife and nature consumed by the tourism industry tends to redistribute use and access rights from locals to ecotourists (Heikkinen et al., 2012; Hughes, 2005). Furthermore, the wildlife previously hunted by local people for subsistence may be hunted in the new system by tourists. This problem may be alleviated in some cases via the combination of increasing the amount of wildlife with locally beneficial tourism. Locals could arrange (trophy) hunting trips for tourists, thereby receiving higher revenue from the wildlife than by hunting the animals themselves. Furthermore, hunting tourism could be used to ease the conflicts between wildlife and local people, since it would control the number of animals. However, those locals who used to hunt for subsistence should be compensated due to moving the hunting from locals to tourists (Hazzah et al., 2009).

In conclusion, instead of treating certifications and the related sustainable tourism as a kind of magic bullets, the certifications’ capacity to hit multiple targets simultaneously should be evaluated critically (Duffy, 2008). Certifications aim to create an ideal nature for conserving nature and increasing local incomes. Tourists are assumed to bring more money to locals, but the actual nature created by the governance principles of tourism – protected area partnerships may still exclude local practices (Sarkki et al., 2013b). Thus, only those who are transforming local livelihoods into tourism entrepreneurship can benefit directly from the increasing incomes for locals. Those who cling to the traditional land uses and ways to use the parks still have to suffer the consequences of the altered

use and access rights. Certifications, even though promising local benefits, still often fall into the same trap as the traditional conservation approaches: They rely on a strict separation of nature and culture, even though their aim is to turn ecological integrity into a commodity consumed in the tourist market. A way forward might be to consider local people and their livelihoods as part of nature and also to turn the local livelihoods into attractions. It can be expected that this would also have problems, but at least nature would not be considered as superior to local people.

5 Conclusions: further research questions

This article has mapped some problems, possibilities and challenges regarding the relationship between protected areas and local people. Recommendations for further research can be drawn.

Firstly, proponents of protected areas often present claims that protected areas benefit ‘the common good’ by protecting biodiversity not only for its intrinsic value but also because it sustains ecosystem services vital for people’s well-being. However, ‘the common good’ should be placed under a critical gaze as it often masks an unequal distribution of benefits and burdens. Furthermore, the common good may be claimed to be promoted by non-governmental ‘goodwill’ organisations, who may fund protected areas while at the same time relying on a strict separation of nature and culture and, hence, seeing the local people as a threat to parks by default. The implementation of new rules or establishment of protected areas often results in the redistribution of benefits and burdens. These redistributions should also be mapped in the future literature on parks and people in order to create knowledge for more just conservation practices and to reveal possible unequal distributions of benefits and burdens behind uncritical promises regarding the promotion of ‘the public good’ or all-encompassing local benefits.

Secondly, many current conservation-tourism initiatives promise that the inclusion of tourism into the conservation efforts increases the money flow to the local level. It seems that the money flow may in fact increase, but some critical questions still remain: To whom is the money distributed and how does the commodification and standardisation of nature as a product sold in the tourism market impact local nature-based livelihoods? Protected area – tourism certifications and similar partnerships may create new inequalities on the local level between those locals engaged in tourism enterprises and those not able or willing to transform their traditional nature-based practices into ones which better fit the commodified and standardised nature within the protected area. Further research should especially map the related trade-offs from the local and other perspectives.

Thirdly, participation and co-management have emerged as a way to reconnect nature and culture by means of including local people into protected area planning. However, the mere stamp of a participatory initiative or co-management arrangement does not guarantee the real devolution of power, and a variety of problems may persist including using participation merely as a justification with no real devolution, the lack of political accountability and the failure to consider local heterogeneity. Conservation initiatives should thus be evaluated against their effects on heterogeneous local groups. Furthermore, it is essential that knowledge about the realities of conservation practices, participation and local contexts is in-depth as opposed to the sometimes superficial studies organised by ENGOs or state agencies. For example, knowledge co-production

and locally sensitive transdisciplinary analyses could ensure a holistic, realistic and context-specific view on local people helping to design more sustainable conservation instruments in practice (see Sarkki et al., 2013a). This is especially true as real devolution of power is unlikely without trust between the conservation institution and local people. A study by Baral (2012) shows that one of the most important factors predicting trust between the conservation institution and local people was the perceptions regarding the conservation institution's staff's understanding of the local culture. Baral argues that frequent meetings and the exchange of ideas, experiences and resources were the factors behind a mutual understanding and good personal relations. However, more detailed studies on trust and trust-building strategies are essential to overcome the bottlenecks of co-management.

Fourthly, the classification systems used in protected areas (such as the IUCN classification or protected area – tourism certifications) can lead to a better verification of the level of conservation, but they should not be considered as merely descriptive devices. These classifications often rely on the separation of nature and culture and, accordingly, the level of conservation is higher in areas where there is no human interference. Thus, there is an (implicit) assumption that local people and their livelihoods are a threat to nature. However, such assumptions have to be verified case by case. Furthermore, those classifications have policy implications and material consequences when protected areas try to meet the goals set in these categorisations. Revealing the political nature and side effects of such classifications and standardisation efforts will be an important research agenda even in the future.

Fifthly, solutions to protected area – local community dilemmas may lead to another set of problems. Co-management and tourism-protected area partnerships create new institutions for environmental governance. Challenges regarding these new institutions relate to:

- 1 the introduction of new forms of expertise that may not be inclusive for local people
- 2 the requirement to cope with additional bureaucracy to take part in these initiatives and to enjoy the benefits
- 3 the justification for the changes in property rights and building commitment and compliance for the new rules
- 4 the need for sensitivity towards local heterogeneities and various positions regarding the new institutions.

Finally, Berkes (2004) states that asking whether co-management-based conservation works or not is not fruitful. Instead, we should be asking under which conditions it works and under which conditions it does not work, and what kind of institutions are successful in managing conservation areas (see Ferraro et al., 2011). The same also applies to tourism-protected area partnerships, which may provide local benefits or lead to exclusion depending on the context.

The above issues outline important research topics for examining the relationship between protected areas and local people. The hope is that the outlined research themes could contribute to a further democratisation of protected area governance and also to a more equitable distribution of benefits and burdens resulting from imposing new rules or establishing protected areas. Here, the role of science could be to increase understanding of local contexts, concerns and values through micro-level studies combined with

macro-level knowledge on national and global power structures in order to make proposals on how multi-level protected area governance can be fair and balanced between different stakeholders. It would also be beneficial to nature conservation if conflicts between parks and people could be resolved, as this would increase the acceptance of protected areas and decrease resistance towards them. In this way, both people and nature could benefit. However, it seems that there are no ‘one size fits all’ solutions. Instead, the management of protected areas should be negotiated in a context-sensitive manner and in collaboration with the various stakeholders, especially including the local people who live, work and recreate in the protected areas.

Acknowledgements

We would like to thank the Thule Institute at the University of Oulu, Finland for funding this research. We are also grateful to the reviewers for their constructive comments.

References

- Adams, W.M. and Hutton, J. (2007) ‘People, parks and poverty: political ecology and biodiversity conservation’, *Conservation & Society*, Vol. 5, pp.147–183.
- Agrawal, A. and Gibson, C. (1999) ‘Enchantment and disenchantment: the role of community in natural resource conservation’, *World Development*, Vol. 27, pp.628–649.
- Agrawal, A. and Redford, K. (2009) ‘Conservation and displacement: an overview’, *Conservation & Society*, Vol. 7, pp.1–10.
- Andrade, G.S. and Rhodes, J.R. (2012) ‘Protected areas and local communities: an inevitable partnership toward successful conservation strategies?’, *Ecology and Society*, Vol. 17, Article No. 14.
- Balmford, A. and Whitten, T. (2003) ‘Who should pay for tropical conservation, and how could the costs be met?’, *Oryx*, Vol. 37, pp.238–250.
- Baral, N. (2012) ‘Empirical analysis of factors explaining local governing bodies’ trust for administering agencies in community-based conservation’, *Journal of Environmental Management*, Vol. 103, pp.41–50.
- Bedunah, D.J. and Schmidt, S.M. (2004) ‘Pastoralism and protected area management in Mongolia’s Gobi Gurvansaikhan National Park’, *Development & Change*, Vol. 35, pp.167–191.
- Berkes, F. (2004) ‘Rethinking community based conservation’, *Conservation Biology*, Vol. 18, pp.621–630.
- Berkes, F. (2009) ‘Evolution of co-management: role of knowledge generation, bridging organizations and social learning’, *Journal of Environmental Management*, Vol. 90, pp.1692–1702.
- Berkes, F., Colding, J. and Folke, C. (Eds.) (2003) *Navigating Social-Ecological Systems: Building Resilience for Complexity and Change*, Cambridge University Press, Cambridge.
- Brandon, K., Redford, K.H. and Sanderson, S.E. (Eds.) (1998) *Parks in Peril: People, Politics, and Protected Areas*, The Nature Conservancy and Island Press, Washington, DC.
- Brockington, D. and Igoe, J. (2006) ‘Evictions for conservation: a global overview’, *Conservation & Society*, Vol. 4, pp.424–471.
- Brockington, D., Duffy, R. and Igoe, J. (2008) *Nature Unbound: Conservation Capitalism and the Future of Protected Areas*, Earthscan, London.

- Brosius, P.J. (1999) 'Analyses and interventions: anthropological engagements with environmentalism', *Current Anthropology*, Vol. 40, pp.277–310.
- Buckley, R.C. (2002) 'Tourism ecolabels', *Annals of Tourism Research*, Vol. 29, pp.183–203.
- Büscher, B. and Dressler, W. (2007) 'Linking neoprotectionism and environmental governance: on the rapidly increasing tensions between actors in the environment-development nexus', *Conservation & Society*, Vol. 5, pp.586–611.
- Chape, S., Harrison, J., Spalding, M. and Lysenko, I. (2005) 'Measuring the extent and effectiveness of protected areas as an indicator for meeting global biodiversity targets', *Philos. Trans. R. Soc. Lond.*, Vol. B 360, pp.443–455.
- Chapin, M. (2004) 'A challenge to conservationists', *World Watch Magazine*, Vol. 17.
- Chernela, J. (2005) 'The politics of mediation: local-global interactions in the Central Amazon of Brazil', *American Anthropologist*, Vol. 107, pp.620–631.
- Cooke, B. and Kothari, U. (Eds.) (2001) *Participation: The New Tyranny?*, Zed Books, London.
- Cronon, W. (Ed.) (1995) *Uncommon Ground: Rethinking the Human Place in Nature*, W.W. Norton & Co, New York.
- Dahlberg, A.C. and Burlando, C. (2009) 'Addressing trade-offs: experiences from conservation and development initiatives in the Mkuze wetlands, South Africa', *Ecology & Society*, Vol. 14, p.37.
- Deke, O. (2008) *Environmental Policy Instruments for Conserving Global Biodiversity*, Springer, Berlin, Heidelberg.
- Dove, M.R. (2006) 'Indigenous people and environmental politics', *Annual Review of Anthropology*, Vol. 35, pp.191–208.
- Dressler, W.H. (2006) 'Co-opting conservation: migrant resource control and access to national park management in the Philippine Uplands', *Development and Change*, Vol. 37, pp.401–426.
- Duffy, R. (2005) 'The politics of global environmental governance: the powers and limitations of transfrontier conservation areas in Central America', *Review of International Studies*, Vol. 31, pp.307–323.
- Duffy, R. (2008) 'Neoliberalising nature: global networks and ecotourism development in Madagascar', *Journal of Sustainable Tourism*, Vol. 16, pp.327–344.
- Dzingirai, V. (2003) '"CAMPFIRE is not for Ndebele Migrants": the impact of excluding outsiders from CAMPFIRE in the Zambezi Valley, Zimbabwe', *Journal of Southern African Studies*, Vol. 29, pp.445–459.
- Eagles, P.F.J. (2004) 'Tourism at the fifth world parks congress, Durban, South Africa, 8–17 September 2003', *Journal of Sustainable Tourism*, Vol. 12, pp.169–173.
- Fennell, D. and Weaver, D. (2005) 'The ecotourism concept and tourism-conservation symbiosis', *Journal of Sustainable Tourism*, Vol. 13, pp.373–390.
- Ferraro, P.J., Hanauer, M.M. and Sims, K.R. (2011) 'Conditions associated with protected area success in conservation and poverty reduction', *Proceedings of the National Academy of Sciences*, Vol. 108, pp.13913–13918.
- Ghate, R. (2003) 'Global gains at local costs: imposing protected areas: evidence from central India', *International Journal of Sustainable Development & World Ecology*, Vol. 10, pp.377–389.
- Goldman, M. (2003) 'Partitioned nature, privileged knowledge: community-based conservation in Tanzania', *Development & Change*, Vol. 34, pp.833–862.
- Gonzalez, A.A. and Nigh, R. (2005) 'Smallholder participation and certification of organic farm products in Mexico', *Journal of Rural Studies*, Vol. 21, pp.449–460.
- Hames, R. (2007) 'The ecologically noble savage debate', *Annual Review of Anthropology*, Vol. 36, pp.177–190.
- Harmon, D. (2003) 'Intangible values of protected areas', *Policy Matters*, Vol. 12, pp.9–22.

- Hazzah, L., Borgerhoff Mulder, M. and Frank, L. (2009) 'Lions and warriors: social factors underlying declining African lion populations and the effect of incentive-based management in Kenya', *Biological Conservation*, Vol. 142, pp.2428–2437.
- Heikkinen, H.I., Moilanen, O., Nuttall, M. and Sarkki, S. (2011) 'Managing predators, managing reindeer: contested conceptions of predator policies in the southeast Reindeer herding area of Finland', *Polar Record*, Vol. 47, pp.218–230.
- Heikkinen, H.I., Sarkki, S. and Nuttall, M. (2012) 'Users or producers of ecosystem services? A scenario exercise for integrating conservation and reindeer herding in northeast Finland', *Pastoralism: Research, Policy and Practice*, Vol. 2, p.11.
- Heikkinen, H.I., Sarkki, S., Jokinen, M. and Fornander, D.E. (2010) 'Global area conservation ideals versus the local realities of Reindeer herding in Northernmost Finland', *International Journal of Business and Globalization*, Vol. 4, pp.110–130.
- Holmes, G. (2007) 'Protection, politics and protest: understanding resistance to conservation', *Conservation & Society*, Vol. 5, pp.184–201.
- Holt, F.L. (2005) 'The catch-22 of conservation: indigenous peoples, biologists, and cultural change', *Human Ecology*, Vol. 33, pp.199–215.
- Honey, M. (Ed.) (2002) *Ecotourism & Certification: Setting Standards in Practice*, Island Press, Washington, DC.
- Hughes, D.M. (2005) 'Third nature: making space and time in the Great Limpopo Conservation Area', *Cultural Anthropology*, Vol. 20, pp.157–184.
- Igoe, J. and Brockington, D. (2007) 'Neoliberal conservation: a brief introduction', *Conservation & Society*, Vol. 5, pp.432–449.
- Jones, S. (2007) 'Tigers, trees and Tharu: an analysis of community forestry in the buffer zone of the Royal Chitwan National Park, Nepal', *Geoforum*, Vol. 28, pp.558–575.
- King, B.H. (2007) 'Conservation and community in the new South Africa: a case study of the Mahushhe Shongwe Game Reserve', *Geoforum*, Vol. 38, pp.207–219.
- Langton, M., Ma Rhea, Z. and Palmer, L. (2005) 'Community oriented protected areas for indigenous peoples and local communities', *Journal of Political Ecology*, Vol. 12.
- Leach, M., Mearns, R. and Scoones, I. (1999) 'Environmental entitlements: dynamics and institutions in community-based natural resource management', *World Development*, Vol. 27, pp.225–247.
- Lund, J.F. and Saito-Jensen, M. (2013) 'Revisiting the issue of elite capture of participatory initiatives', *World Development*, Vol. 46, pp.104–112.
- MA (2005) *Millennium Ecosystem Assessment. Ecosystems and Human Well-Being: Synthesis*, Island Press, Washington, DC.
- Mahanty, S. (2002) 'Conservation and development interventions as networks: the case of the India Ecodevelopment Project, Karnataka', *World Development*, Vol. 30, pp.1369–1386.
- McAfee, K. (1999) 'Selling nature to save it? Biodiversity and green developmentalism', *Environment and Planning D: Society and Space*, Vol. 17, pp.133–154.
- McCay, B.J. and Acheson, J.M. (Eds.) (1987) *The Question of the Commons: The Culture and Ecology of Communal Resources*, University of Arizona Press, Tucson, AZ.
- McCool, S.F. (2009) 'Constructing partnerships for protected area tourism planning in an era of change and messiness', *Journal of Sustainable Tourism*, Vol. 17, pp.133–148.
- Medina, L.K. (2005) 'Ecotourism and certification: confronting the principles and pragmatics of socially responsible tourism', *Journal of Sustainable Tourism*, Vol. 13, pp.281–295.
- Mels, T. (2002) 'Nature, home, and scenery: the official spatialities of Swedish national parks', *Environment and Planning D: Society and Space*, Vol. 20, pp.135–154.
- Meyer, C. (1999) *The Economics and Politics of NGOs in Latin America*, Praeger, New York.
- Morris, A.W. (2008) 'Easing conservation? Conservation easements, public accountability and neoliberalism', *Geoforum*, Vol. 39, pp.1215–1227.

- Mukul, S.A., Rashid, A.M., Quazi, S.A., Uddin, M.B. and Fox, J. (2012) 'Local peoples' responses to co-management regime in protected areas: a case study from Satchari National Park, Bangladesh', *Forests, Trees and Livelihoods*, Vol. 21, pp.16–29.
- Nygren, A. (2005) 'Community-based forest management within the context of institutional decentralization in Honduras', *World Development*, Vol. 33, pp.639–655.
- Peluso, N. (1993) 'Coercing conservation: the politics of state resource control', *Global Environmental Change*, Vol. 3, pp.199–218.
- Peterson, R.B., Russell, D., West, P. and Brosius, J.P. (2010) 'Seeing (and doing) conservation through cultural lenses', *Environmental management*, Vol. 45, pp.5–18.
- Porter-Bolland, L., Ellis, E.A., Guariguata, M.R., Ruiz-Mallén, I., Negrete-Yankelevich, S. and Reyes-García, V. (2012) 'Community managed forests and forest protected areas: an assessment of their conservation effectiveness across the tropics', *Forest Ecology and Management*, Vol. 268, pp.6–17.
- Puhakka, R., Sarkki, S., Cottrell, S.P. and Siikamäki, P. (2009) 'Local discourses and international initiatives: sociocultural sustainability of tourism in Oulanka National Park, Finland', *Journal of Sustainable Tourism*, Vol. 17, pp.529–549.
- Redford, K.H. and Sanderson, S.E. (2000) 'Extracting humans from nature', *Conservation Biology*, Vol. 14, pp.1362–1364.
- Robins, S. and van der Waal, K. (2008) 'Model tribes' and iconic conservationists? The Makuleke restitution case in Kruger National Park', *Development & Change*, Vol. 39, pp.53–72.
- Sarkki, S. (2011) *The Site Strikes Back: Multi-level Forest Governance and Participation in Northern Finland*, PhD Thesis, Thule Institute & Discipline of Anthropology, University of Oulu, Finland, Acta Universitatis Ouluensis B 102.
- Sarkki, S. and Rönkä, A.R. (2012) 'Neoliberalisation in Finnish forestry', *Forest Policy & Economics*, Vol. 15, pp.152–159.
- Sarkki, S., Heikkinen, H.I. and Karjalainen, T.P. (2013a) 'Sensitivity in transdisciplinary projects: A case of reindeer management in Finland', *Land Use Policy*, Vol. 34, pp.183–192.
- Sarkki, S., Heikkinen, H.I. and Puhakka, R. (2013b) 'Boundary organizations between conservation and development: insights from Oulanka national park, Finland', *World Review of Entrepreneurship, Management and Sustainable Development*, Vol. 9, pp.37–63.
- Schelhas, J. (2001) 'The USA national parks in international perspective: have we learned the wrong lesson?', *Environmental Conservation*, Vol. 28, pp.300–304.
- Schmidt-Soltan, K. and Brockington, D. (2007) 'Protected areas and resettlement: what scope for voluntary relocation?', *World Development*, Vol. 35, pp.2182–2202.
- Schwartzman, S., Moreira, A. and Nepstad, D. (2000) 'Rethinking tropical forest conservation: perils in parks', *Conservation Biology*, Vol. 14, pp.1351–1357.
- Sodikoff, G. (2007) 'An exceptional strike: a micro-history of people versus parks in Madagascar', *Journal of Political Ecology*, Vol. 14, pp.10–33.
- Spence, M.D. (1999) *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks*, Oxford University Press, Cary, NC, USA.
- Stevens, S. (Ed.) (1997) *The Legacy of Yellowstone: Conservation Through Cultural Survival. Indigenous Peoples and Protected Areas*, Island Press, Washington, DC.
- Stewart, P.J. and Strathern, A. (2005) *Anthropology and Consultancy: Issues and Debates*, Berghahn Books, New York, Oxford.
- Thaddeus, R.M., Minter, B.A. and Malan, L.-C. (2011) 'The new conservation debate: the view from practical ethics', *Biological Conservation*, Vol. 144, pp.948–957.
- Turner, M.D. (1999) 'No space for participation: pastoralist narratives and the etiology of park-herder conflict in Southeastern Niger', *Land Degradation & Development*, Vol. 10, pp.345–363.

- Walker, D., Jones III, J.P., Roberts, S.M. and Fröhling, O.R. (2007) 'When participation meets empowerment: the WWF and the politics of invitation in the Chimalapas, Mexico', *Annals of the Association of American Geographers*, Vol. 97, pp.423–444.
- West, P. (2006) *Conservation Is Our Government Now: The Politics of Ecology in Papua New Guinea*, Duke University Press, Durham, NC.
- West, P., Igoe, J. and Brockington, D. (2006) 'Parks and peoples: the social impact of protected areas', *Annual Review of Anthropology*, Vol. 35, pp.251–277.
- Wilshusen, P., Brechin, S.R., Fortwangler, C. and West, P.C. (2002) 'Reinventing a square wheel: a critique of a resurgent protection paradigm in international biodiversity conservation', *Society & Natural Resources*, Vol. 15, pp.17–40.
- Zimmerer, K. (2006) *Globalization and New Geographies of Conservation*, University of Chicago Press, Chicago.