

The Well-being effects of localized multi-level environmental governance: Case of Kilpisjärvi

Mikko Jokinen*, Simo Sarkki** & Hannu I. Heikkinen**

* Natural Resource Institute Finland (Luke), Economics and Society.
e-mail: mikko.jokinen@luke.fi

** Cultural Anthropology, Faculty of Humanities, University of Oulu, Finland.

Abstract: Equality among stakeholders and sustainable environmental impacts are important themes for good environmental governance. Good governance is a tricky theme to address as localized environmental decision making is deeply connected to issues and actors at various governance levels, from the local to the global, embedded with power relations. The examined case of Kilpisjärvi also includes issues from various governance levels and involves contested relationships between stakeholders. The aim of this paper is to examine the Kilpisjärvi case in order to identify: 1) How key governance problematics originating from various levels are manifested in local level land use decision making; 2) What kinds of implications these problematics may have on local well-being; and 3) How good governance can be enhanced regarding these identified problematics. The Kilpisjärvi case illuminates the complexities associated with local environmental governance. The key stakeholders in the area are Sámi reindeer herders, tourism entrepreneurs, local inhabitants, land use governance officials, and protected area management officials as well as scientists. The lessons learned relate to: 1) Enhancing the environmental sustainability of herding and understanding different conceptualizations on what “environmental sustainability” actually means; 2) Enhancing the dialogue between land users to increase social capital among stakeholders; 3) Clarifying the position of Sámi as indigenous people, 4) Clarifying local rights and ways to structure stakeholder interaction in order to increase the possibility for action and self-determination at the local level; and 5) Enhancing the transparent link between international guidelines and local practices and highlighting international guidelines, such as Akwé: Kon, to increase a local sense of being respected by external actors. Only by considering tangible environmental impacts and the well-being implications of governance can scholars make concrete proposals on how to enhance the sustainability of localized multi-level governance.

Keywords: multi-level governance, land use, local environmental decision making, stakeholders, contradictions, well-being



Introduction

Environmental and social sustainability can be enhanced by good governance if the practices have the capacity to regulate, incentivize, and encourage stakeholders towards sustainable behavior (Lemos & Agrawal 2006). However, good governance

may be difficult to assess as governance is multi-level in character (Andonova & Mitchell 2010). Furthermore, the aim of environmental governance is to ensure environmental sustainability, but also local social equity and well-being (e.g. Pascual *et al.* 2014). Local well-being has been approached, for example, by ecosystem

service assessments which define well-being quite broadly as consisting of the material basis for a good life, social relations, self-determination, possibilities for action, health, safety, a sense of being respected, and living in harmony with nature (MA 2005; Pascual *et al.* 2014; Díaz *et al.* 2015). Stakeholders and issues at multiple governance levels, from the local to the global, interact and have implications for local well-being and environmental sustainability.

This paper aims to concretize such a complex situation by examining how multiple issues are localized and contested in environmental decision making in Kilpisjärvi Northwestern Finland. An important question is what kinds of implications do the related decision-making processes have on local well-being and environmental sustainability in an area where local actors have a strong sense of attachment to a place, who shape that place, and who form an integral part of the local environment (Kaján 2014). The key stakeholders in the Kilpisjärvi area are indigenous Sámi reindeer herders, tourism entrepreneurs, local inhabitants, environmental management officials, and scientists. All these actors have linkages to other governance levels, thus making the resolution of contested issues complex. The actors from various governance levels interact in several ways. It is often assumed that larger scale actors have a causal power relation to local practices (Marston *et al.* 2005). However, the power of local people and communities in the context of globalization has been outlined in many studies (Cox 1997), and even though environmental problems are often global

and international in character, they also have a strong local reach (Escobar 2001; Redford & Brosius 2006). Therefore, local well-being is a joint outcome of external influences as well as local practices and actions.

Swyngedouw (2004: 132–133) considers ‘scalar configurations as the outcome of socio-spatial processes that regulate and organize social power relations’. Here, we point out that governance levels are also in a process of shaping and re-making, and this entails power relationships between the state, market-actors, civil society, and science (Lemos & Agrawal 2006; Chilvers & Evans 2009). Consequently, local level governance and power in negotiations are impacted by factors and actors from various levels and therefore the local processes of decision making involve a mix of issues from various governance levels with implications for local well-being.

The objectives of this paper are to examine the case of Kilpisjärvi to identify: 1) How key governance problematics originating from several levels are manifested in local level land use decision making; 2) What kinds of implications these problematics may have on local well-being; and 3) How good governance can be enhanced regarding these identified problematics. This paper will begin by outlining background information on Kilpisjärvi after which we present our material and methods. We then discuss how the local, national, and international levels are linked to local socio-cultural and environmental sustainability in the Kilpisjärvi area. The paper is concluded by summarizing the lessons learned from the case study for both practice and theory.

Background

Kilpisjärvi is located in the municipality of Enontekiö in the northwestern part of Finnish Lapland (69°03' N, 20°50' E) at 475 m.a.s.l. close to Sweden and Norway. The landscape is dominated by fells (mountains or high plateaus above the tree line) extending into the Scandinavian mountain range, such as the Saana fell (1029 m.a.s.l.) and Pikku-Malla (738 m.a.s.l.). Kilpisjärvi lies about 100 km north of a continuous coniferous forest and belongs to the sub-alpine birch forest zone, with mountain birch being the dominant tree species. The area is dominated by a wide range of ecosystems from mountain birch forest at low altitudes (tree line 480–600 m) to alpine tundra (above 600 m). The majority of the area is a mosaic of treeless alpine heath and ponds. Due to the calcareous bedrock, the Kilpisjärvi area is a hotspot for many calciphilous and endangered mountain plant species. Close to the village of Kilpisjärvi is the Malla strict nature reserve, which is oldest nature protection area in Finland, established in 1916 (Jokinen 2005a; Metsähallitus 2014). There are also smaller preservation areas around the Saana fell, close to the village of Kilpisjärvi. The Kilpisjärvi area is surrounded by vast wilderness areas with lower conservation status in the protected area classification system of the world conservation union (IUCN Ib) (Heinonen 2013; Figure 1).

The Kilpisjärvi region provides rich natural environments for reindeer herding, nature-based tourism, natural sciences, and subsistence use (fishing, hunting, gathering) for local people, as well as recreation. Large-scale reindeer herding has been practiced

for centuries or even longer, and the area has been inhabited since the most recent glacial period for 11,000 years (Manninen 2014). The Sámi people have traditionally based their living on culturally important reindeer herding, fishing, and hunting, and today also on modern livelihoods. However, the non-Sámi population is the majority in the village of Kilpisjärvi and tourism is the major industry, which started after the Second World War. The present population in Kilpisjärvi is slightly over 100 inhabitants. The population boomed after the 1970s due to the expansion of nature-based tourism in the area. Furthermore, botanists and entomologists have conducted studies in Kilpisjärvi for more than 100 years (Jokinen 2005b).

Land and waters in the area are almost entirely owned by the state and governed by Metsähallitus (“State forests” formerly Finnish Forest and Park Service), except for the real estate area inside the village of Kilpisjärvi. Metsähallitus uses participatory regional Natural Resource Planning and Management and Land-use planning tools in order to reconcile competing interests and to ensure sustainability. Metsähallitus has obligations to take care of natural heritage (nature protection and recreation) and make a profit utilizing natural resources, mainly by selling timber, soil, and land. Metsähallitus is both a profit and non-profit organization, an authority and enterprise that may have contradictory aims. In some environmental disputes, Metsähallitus has been a stakeholder, an official, and mediator in the process and thus its multi-purpose role has been questioned (Jokinen 2014; Raitio 2008). Concerning its nature conservation activities, Metsähallitus is

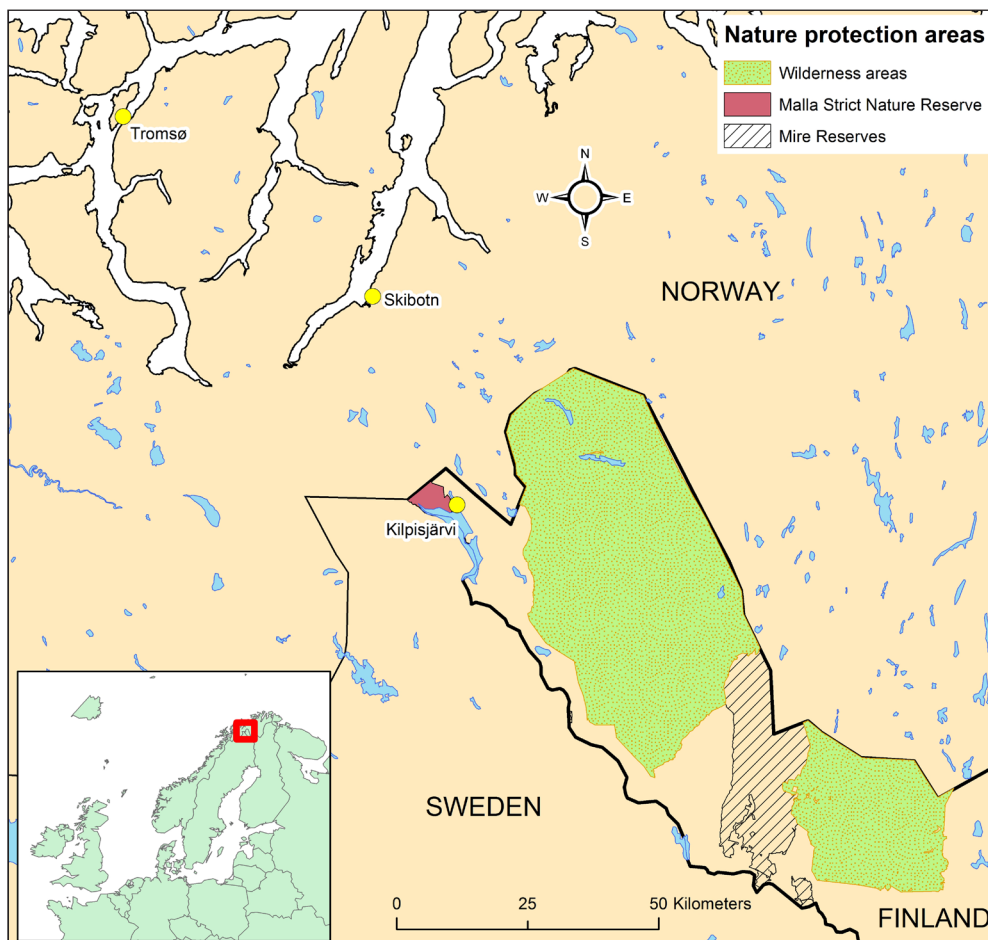


Figure 1. Study area and large protection areas in north-west Lapland.

steered by the Ministry of the Environment, and its activities related to the use of natural resource are steered by the Ministry of Agriculture and Forestry.

Kilpisjärvi (Gilbbesjávri in Sámi) is part of the official Sámi homeland where Sámi reindeer herders have certain privileges in land-use. However, Sámi rights and ownership to their traditional areas is an open political question that has been debated during recent decades, and is a sensitive

political question which continuously influences land-use governance issues (Raitio 2008; Nykänen & Valkeapää 2016).

Kilpisjärvi and the surrounding wilderness areas in the Käsivarsi region are places with widely diverging opinions concerning land-use issues. Tourism, nature protection, reindeer herding, natural sciences, infrastructure building, and possibly mining are livelihoods and interests that have had competing needs

and have even come into conflict in recent decades (Table 1). Reconciliation of these divergent needs is the key question for sustainable land-use governance. The Kilpisjärvi region is a place where different opinions and values—cultural, ethnic, economic, and administrative—meet and sometimes collide. Sámi reindeer herders, nature conservationists, and ecologists usually agree that subarctic nature should be protected from large constructions, independent of whether the question concerns tourism, transportation, power plants, or mining. However, among tourism business and municipality there are conflicting discourses (Mäkistö & Ylisirniö 2013). These stakeholders have also criticized mechanized cross-country traffic consisting of snowmobiles and quadbikes.

Table 1. Background information for contextualizing environmental governance in Kilpisjärvi.

Ownership of the area	State owned and governed by Metsähallitus. Ownership challenged by the Sámi, who have open land claim regarding their homeland.
Economic development	Nature-based tourism and reindeer herding provides majority of the income.
Involved actors	Citizens of the municipality, nature-based tourism entrepreneurs, reindeer herders, Metsähallitus, University of Helsinki, researchers, tourists, environmental NGOs
Main ecosystem services	Provisioning services: (pastures for reindeer, habitats for game, berries, freshwater, fish) Cultural services: (homeland of the Sámi people, nature heritage areas, national landscape, nature-based tourism and recreation, subsistence use local people) Regulation and maintenance services: (carbon sequestration and water purification by undrained mires, flood control by clean and freely running waters, primary production and carbon sequestration by mountain birch forests)
Governance instrument(s)	Participatory Natural Resource Planning (NRP) and Management and land-use plans tool developed and used by Metsähallitus.
Main pressures on environmental sustainability	Climate change, reindeer grazing, random reindeer grazing in Malla Strict Nature Reserve, potential nearby mining and wind energy developments, increasing insect disturbances under warming climate, increasing pressure by tourism, increasing movement of people in the nature.
Trade-offs and / or synergies regarding land use	Tourism entrepreneurs, reindeer herders, environmental NGOs, nature conservationists and researchers share a common goal to maintain the beautiful natural landscape and natural environment. Among tourism business and municipality there are opinions on land use that confront with views of other groups mentioned.) and interests to build infrastructures that are resisted by herders, ENGOS and some scientists and tourism entrepreneurs. The effect of reindeer herding, especially of debated overgrazing, on the biodiversity is disputed and there have been contradictions between conservationists/scientists and Sámi herders.

Material and methods

The primary empirical material for the Kilpisjärvi case study is based on the long-term sociological and anthropological field work of two of the authors in the Kilpisjärvi area. The field work and material consists of, for example, surveys targeted at local people of northernmost Lapland (1998 and 2013, total number of responses 881), interviews with experts in the sustainable use of northern nature (n=12), Sámi reindeer herders (n=30), Delphi panel and E-mail surveys of experts in the sustainable use of northern nature (n=32) and participation in several management and planning meetings during the period 1998–2013, participatory observation on reindeer activities (since 1998), follow-up of public discussions, and review of planning and policy documents on the Kilpisjärvi area (e.g. Heikkinen *et al.* 2010; Jokinen 2005a; Heikkinen 2002; Sarkki *et al.* 2016b). This paper synthesizes the results of these previous research activities.

With this starting point the Kilpisjärvi case description was further analyzed by using directed content analysis, which is a middle ground tool between inductive and deductive approaches to content analysis (Hsieh & Shannon 2005). The rationale for this further analysis was to crystallize the challenges and opportunities for good local environmental governance related to the Kilpisjärvi case study. This further analysis was guided by assumptions that local level decision making and governance can be seen as a location where various trends, rules, guidelines, and practices come together, sometimes in contested ways

(Eriksen 2001). Furthermore, as the focus is on environmental decision making, it is also important to address environmental sustainability (Newig & Fritchs 2009). On the basis of these assumptions found from the literature, four pre-identified categories were identified as a starting point for the analysis: 1) environmental sustainability, 2) local level interactions, 3) interactions between local and national level, and 4) interactions between the local and international level. The insights from the Kilpisjärvi case description were clustered under these broad themes and are elaborated on further in section 4. In addition, the implications for local well-being in each category are discussed. Finally, the analysis was complemented by insights derived from recent follow-up of Kilpisjärvi governance discussions.

Challenges and opportunities for good governance

Environmental sustainability

In recent decades Kilpisjärvi has dealt with several disputes concerning the development and well-being of the area. Tourism entrepreneurs and representatives of the municipality of Enontekiö have promoted the building of roads, hotels, and other infrastructure for tourism and recreation purposes, while the competing vision for the area is to retain its “natural state”. Those who support the development vision stress the well-being implications for jobs and the economy, while opponents

are motivated by preserving Sámi culture, reindeer pastures, small scale eco-tourism and recreational values, and nature values such as biodiversity, as well as the conditions for conducting ecological research.

Although conservationists, ecologists, and Sámi reindeer herders often have shared views on land-use policy, there have been disputes since the 1990s on the use of the Malla strict nature reserve. Herders see it as part of crucial traditional pastures, and some scientists see it as an important nature reserve for scientific experiments into which reindeer should not enter. The size of the reserve is 30 km² and grazing there has been banned since 1981. However, herds have entered the reserve for many summers since 1998, and there is an ongoing process led by Metsähallitus handling Malla Park's use and management planning process and how the problem should be solved. The effects of such a prolonged conflict situation have negative impacts on social relations between stakeholders and thus the well-being of the local community. Dispute is not only at the local level but also between non-local scientists who do not agree on what is the optimal natural state for the nature reserve and if some grazing should be allowed (Jokinen 2005a; Metsähallitus 2014).

Reindeer overgrazing is seen one of the major threats to alpine nature in Finland and the Kilpisjärvi region. On the other hand, it has been claimed in Malla that reindeer herding not only decreases ecological values but also increases biodiversity by having positive impacts on some species (Olofsson & Oksanen 2005; Välimäki 2005; Bernes *et al.* 2015). This is a valuable lesson for herders, but also for scientists, who argue in

principle that herding should be restricted for biodiversity benefits. Herders would need to be more self-reflexive about the negative environmental impacts of over grazing.

The aspect of well-being, living in harmony with nature, is here particularly interesting. Local reindeer herders believe that herding in traditional pasture areas represents harmony, while some scientists believe that harmony, especially in the Malla nature reserve, would best be achieved by banning herding from the area. This distinction has been observed by Ingold (2000) by the idea of globes (people outside nature) and spheres (people acting in and being part of nature). The question here is, if the herders, who are acting “within” nature, are actually doing so in a sustainable manner. Reflections on the tragedy of the commons theory illuminates this issue.

As the pastures are a limited resource, there have been contradictions and even conflicts between sub-groups of herders consisting of families who have traditionally used the pastures in the area. Measures to enhance collaboration between different herding groups would be useful. The competition among herders could have been interpreted by Hardin's (1968) idea of the tragedy of the commons where individual herders aim to maximize their benefits while the costs of the degradation of pastures is paid equally by all herders. However, such an approach is too simplistic. For example, the role of ability for movement by herders has been argued to be one of the key features enhancing the resilience of pastoral livelihoods (Oteros-Rozas *et al.* 2013). In the case of Kilpisjärvi the fences

at national borders significantly hinder the movement of reindeer, forcing them to graze in a rather limited area lacking access to alternative pastures. National laws and agreements have not allowed herds to cross Finnish (as part of Russia) borders since late 19th century. Furthermore, increase of other land uses, such as tourism and nature conservation, leads to decrease and fragmentation of available pastures. As a consequence, the tragedy of commons is more complex than the logic proposed by Hardin.

On the other hand, Dietz *et al.* (2003) for example, have pointed out that tragedy of commons is not taking place because the resources used by local groups are actually not in a state of open access, but rather managed by internal and informal rules. However, the Kilpisjärvi case study highlighted that competition between different herding groups is also taking place, leaving the interpretation of informal rights to use the pastures contested. While there is some truth in critiques of tragedy of commons thinking, it seems that Hardin's arguments may be relevant to some extent. This is a significant finding as often opinions of social and natural scientists examining pastoralism are quite polarized regarding whether the theory on tragedy of the commons is key to understanding pastoral dynamics or whether it is a tool to further marginalize herders by blaming them for unsustainable practices and a lack of motivation and tools to use pastures in a sustainable way.

Reindeer herding is not the only livelihood that results in negative environmental impacts. The impacts of tourism in the Kilpisjärvi region may also be controversial.

To control land use in the region it was suggested in 2013 that a national park should be established in the Kilpisjärvi region for promoting both sustainable tourism and environmental well-being. The idea of establishing a national park in the Käsivarsi region was originally the initiative of environmental non-governmental organisations (ENGOS) proposed to the environment minister of that time, Ville Niinistö, who proceeded with the proposal. The Sámi people and ENGOS were in support of the idea, but there was a lot of local resistance among the residents of Kilpisjärvi and the administration of Enontekiö municipality. Metsähallitus directed the planning process and different stakeholders participated in it (Metsähallitus 2013). Finally, the Minister of the Environment decided not to proceed with the suggestion (Wallen *et al.* 2016).

The debate over a national park stresses a different kind of relationship with nature. Even if the park had been established, it would not have excluded all human activities from the park. The issue of “globes and spheres” (Ingold 2000) takes on new nuances: the question becomes one of how much human activity is allowed in nature rather than banning all human activities as threats to the integrity of nature. Human well-being in the north requires at least some degree of living “in nature”, and the claim or aim of living in harmony with nature is not a black and white phenomenon, but the concrete activities allowed in nature need to be negotiated between the various stakeholders. It is also critical for stakeholders in governance discussions to define transparently what dimension of well-being and whose well-being or benefits

they are promoting. The next sections show and discuss how divergent ideas could be better joined together in environmental decision making.

How to enhance collaboration among local stakeholders

Metsähallitus uses a multi-stage planning system covering regional decisions on land use as well as detailed local plans for a particular operation. The main instruments are participatory Natural Resource Planning and Management and Land-use Planning, which take place on a regional scale. Key stakeholder groups can take part in the planning, including representatives from reindeer herding, tourism, hunting, ENGO, research, landowners, and the Sámi. The stakeholders identify and discuss different regional alternatives for the scope of various land-use options, such as nature protection, tourism, recreation, and reindeer herding. In some cases, surveys have been conducted to gain public opinion on the matter. However, this tool has been criticized by ENGOs, reindeer herders, tourism entrepreneurs as well as academics as not being truly participatory or having a very small impact on real decision making (Raitio 2008; Jokinen 2014).

For good local environmental governance, well-functioning and multi-directional communication is important. It would be important for local people that they are at least heard, but more so, that their concerns are genuinely taken into account by local administrations. In Kilpisjärvi, a key identified challenge was communication breakdowns between different land user

groups. The land use discussions are characterized as mutual blaming of other actors for bad practices rather than as respectful deliberations. In fact, the open mindedness of participants has been identified as a key prerequisite for successful deliberations (e.g. Barabas 2004). In northern Finland, social scientists have for at least a decade identified conflicting views as deadlocked situations where constructive discussions seldom take place (e.g. Kyllönen *et al.* 2006).

Some proposals to break such deadlocked situations can be made. A proposal that worked in negotiations between ENGOs and Metsähallitus was to perform site-specific negotiations on various locations while at the same time allowing small victories leading to increased acceptance of small losses (Sarkki & Heikkinen 2015). In the Kilpisjärvi case study, the lack of socio-cultural sensitivity for the planning settings could be advanced by multiple methods, including respectful discussions, fair facilitation of meetings (e.g. in principle, not presenting the ready plan without zero-option, crafting management options for collaboration groups so that there are significant differences between the options, building collaboration groups so that voting between different interests is fair), and enhancing genuine opportunities to influence land use planning decisions. Furthermore, the locations of the meetings, the selection of facilitator or moderator and their socio-cultural (e.g. Sámi; local person, from Rovaniemi or Helsinki) and institutional (e.g. Metsähallitus, Ministry of the Environment, Ministry of Agriculture and Forestry, university, Sámi Parliament, research institute) backgrounds could also

vary so that diverse social and ethnic groups would feel comfortable to join the planning processes.

Another proposal would be to first identify fundamental values (Keeney 1992) that are shared by all the stakeholders. Such values may relate to employment, environmental values, economic benefits, social equity and community continuity, and good governance. The point is to start the process rather from shared values than from conflicting views. This could lead to a common vision for land use planning in the area and by those means to increased commitment, a sense of responsibility, and acceptance of the decisions when it is known that the decisions serve mutually shared values.

Local level negotiations have key impacts on well-being, especially on social relationships between different stakeholders. Thus, it can be expected that the proposals given above would not only contribute to enhancing the social sustainability of governance, but also local well-being. When there is social capital among the actors involved, it is more likely that commonly accepted land use solutions would be found and issues can be discussed in a more collaborative spirit. Therefore, it is crucial for well-being how the interactions and value discussions between the different stakeholders are arranged at the local level.

Unresolved issues on the national scale are reflected in local governance

At the national level the management of state forests is facilitated by Metsähallitus. However, at the same time, Metsähallitus

is an interest group that aims to gain economic benefits from the state's lands. This creates a dual role for Metsähallitus as biased facilitator of planning processes with a vested interest in the issue. This bias goes back to the national level where the subnational governance systems are defined. Such a bias has occasionally led to the use of external facilitators to resolve confrontations between Metsähallitus and other stakeholders (e.g. reindeer herders, ENGOs). However, these facilitators have often failed to break the deadlocked positions (Raitio 2008).

While previous social science literature on land use controversies in northern Finland has focused on the planning practices and included the participation possibilities of local actors in planning processes arranged by Metsähallitus (e.g. Sarkki 2011), the current situation also reflects the need to consider the participation of the Sámi and other local people in legal preparations. Recently, new legislation concerning Metsähallitus was drafted and enacted. In 2015, the preparation of the new legislation was criticized by Sámi reindeer herders for not communicating with them at all during its preparation. The new legislation was enacted in April 2016 and it does not take into account Sámi rights and needs concerning natural resources as the previous legislation did. Also, ENGOs have been critical towards the legislation. One of the main concerns has been that the legislation leads to negative impacts on biodiversity, nature-based tourism, and reindeer herding. National level policy-making impacts on local environmental governance and therefore examinations on participation and local governance should

also take into account developments in national legal contexts.

National level decisions impact also on local well-being. For example, the fact that the Finnish government has not ratified ILO Convention 169 to safeguard Sámi rights to land and waters in the Sámi homeland area (municipalities of Enontekiö, Inari, Utsjoki and part of Sodankylä) undermines Sámi self-determination. The uncertainty over Sámi rights to land are formally recognized as decreasing predictability in the future and therefore makes planning for the future uncertain and decreases the prerequisites for well-being. On the other hand, the fact that there are some biases in the position of Metsähallitus as a facilitator and interest group with vested interests decreases local possibilities for action and is a structural issue at the national level that has potentially negative effects on social relationships at the local level.

At the moment of finishing this paper (fall 2016) the Ministry of the Environment has given its statement on Malla strict nature reserve management and land use plan, as defined by Metsähallitus. The ministry is the highest official body that authorizes management plans, but in this case the ministry stated that the plan does not hold with jurisdiction. The reason is that the plan suggests building a fence to prevent reindeer from entering the reserve. The ministry sees a prohibition on reindeer husbandry as a unilateral decision that cannot be seen as a good management when considering Sámi indigenous rights and former regulation of the reserve. However, the ministry suggests that the grazing problem needs to be resolved immediately and the matter should be dealt

with locally involving Metsähallitus, the Käsivarsi Reindeer Herding Cooperative, and local herders (Ympäristöministeriö 2016).

It is interesting that the Ministry of the Environment also suggests multilevel and local governance while it sees itself as incapable of resolving a simultaneously local and non-local matter. Meanwhile at the local level, the Käsivarsi Reindeer Herding Cooperative (Telephone discussion with Juha Tornensis, the head of Käsivarsi Reindeer Herding Cooperative on October 12th, 2016) and Metsähallitus (Karjalainen 2016) feel disappointed and frustrated that the ministry, as the highest authority, has returned the matter to the local level where it has been unresolved for years. If the ministry had made an administrative decision, it would have enabled the right to appeal the decision.

Implications of international guidelines on local governance

International policies often have impacts on local level environmental governance. For example, Metsähallitus has recently adopted the Convention on Biological Diversity's (CBD) Akwé: Kon guidelines in the Sámi homeland area. The Akwé: Kon guidelines refer generally to "Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessments Regarding Developments Proposed to Take Place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities" (Secretariat of...2004). The guidelines aim to sustain biodiversity and, in this case, Sámi traditional knowledge in

a process where the participation of the Sámi is concrete and the needs of Sámi culture are truly recognized. This also has implications for well-being as the Akwé: Kon guidelines provide a concrete example of respecting indigenous and local rights by highly influential international conventions and actors.

However, these are voluntary guidelines to safeguard local and indigenous rights and preconditions of local well-being alongside biodiversity. A gap between international guidelines and implementation at the national and local level is manifested also more generally in the CBD's performance; the CBD is a soft instrument without the ability to implement regulations effectively at the national level (Harrop & Pritchard 2011). This is also the case in Finland, where there are responsibility gaps among ministries and policy sectors to implement the CBD's guidelines (Sarkki *et al.* 2016a). Yet even the soft law approach has led Metsähallitus to establish local Akwé: Kon working groups where the relationships between conservation objectives and local concerns can be discussed (Muddusjärven paliskunnassa...2016). However, critics may argue that these working groups provide discussion forums, but without the power to have an effect on concrete land use decisions.

Even without effective practical implementation the Akwé: Kon guidelines provide an example of international recognition of indigenous rights and justification for promoting Sámi rights. This being the case, the Sámi may use the Akwé: Kon objectives in their argumentation in governance discussions and negotiations. The Akwé: Kon discussion forums may

also create social capital between the local people and Metsähallitus, and therefore enable successful collaboration in the future. Therefore, if implemented successfully in the future, the Akwé: Kon guidelines represent a new kind of effort to arrange multi-level governance between local, sub-national, national, and international actors. This may, or may not, lead to institutional learning which changes the whole logic by which local level environmental decisions are made (Pahl-Wostl 2009). Such a proposal has actually been made previously linked to the multi-level governance issues in Kilpisjärvi (Heikkinen *et al.* 2010).

Previous examinations of the implementation of Natura 2000 and effects of IUCN protected area classification (IUCN 2016) on local environmental governance in Kilpisjärvi and Pallas-Ylläs national park have remarked that international guidelines may lead to tightening regulations on reindeer herding in protected areas. This was noted in the Malla strict nature reserve (IUCN I) and in Pallas-Ylläs national park (IUCN II). The key finding was that international conservation guidelines and their relevance for the implementation of concrete land use decisions at the local level were very non-transparent. In fact, there were many rumours circulating among local people on the role of international guidelines in concrete local level decisions (Heikkinen *et al.* 2010). The Akwé: Kon guidelines represent a different direction in international environmental and protected area governance: to move from fortress conservation towards more collaborative approaches aimed at meeting conservation and local social development objectives at the same time (Thaddeus *et al.* 2011).

Table 2. Summary of the well-being challenges for governance. Governance problems and proposals to enhance good governance.

Governance problematics in Kilpisjärvi	Implications on local well-being	Proposal to enhance good governance
Ecological sustainability of land use: over-grazing; building infrastructures for tourism;	The ways in which sustainability is understood and enacted has implications on well-being of diverse stakeholders and nature (economic, health, socio-cultural or ecological well-being).	Finding solutions for reindeer over-grazing including reflexivity by herders to admit unsustainable grazing practices; Increase scientists' understanding on positive environmental impacts of grazing; Collaborative planning of land use activities and negotiating also what "sustainability" and well-being for diverse stakeholders means.
Land use controversies between local actors	Conflicts between stakeholders effect negatively on social relationships.	Enhancing collaborative relationships between reindeer herders, tourism entrepreneurs, scientists and representatives of Metsähallitus; Resolving deadlocked polarized positions among local stakeholders by enhancing negotiation practices, such as: 1) creating a forum for deliberations of common values to find commonly accepted solutions; 2) outlining "victories" of stakeholders in land use decisions to provide grounds for accepting "losses"; 3) increased cultural sensitivity practiced in land use negotiations.
Unresolved issues at national level are reflected in local land use decision making	The national level formal recognition of Sámi land rights would allow better self-determination and provide more room for locally initiated action.	Resolving or providing clear solutions on the position of the Finnish government to indigenous land rights of the Sámi people; Enhancing participation (e.g. Sámi people) in drafting, approving and implementing new laws and legal frameworks.
How international governance trends complicate local level decision making	International conventions, agreements and actors can function as examples on clear recognition of local and indigenous rights and can enhance a sense of being respected among local actors.	Clearing the relationships of national legal frameworks and international agreements in local level implementation of land use decision processes and their outcomes; Communicating the effects of international agreements (e.g. CBD's Akwé: Kon) transparently so that local stakeholders have realistic expectations on their impact. Further developing the collaborative implementation of international guidelines with participation by local actors.

Therefore, even with the remaining challenges it can be concluded that the Akwé: Kon guidelines and working groups represent a clear move towards more collaborative governance, where local actors can be heard and their concerns acknowledged. Table 2 summarizes our findings regarding the research questions.

Conclusion

Kilpisjärvi represents a case on environmental governance where various issues from multiple governance and ecological matters are manifested in local land use decision making. As demonstrated, these issues are contested and reflected in the objectives and aspirations of local stakeholders. Therefore, the findings of this study may be relevant for many other cases of environmental governance where various issues from multiple levels are contested in local land use decision making. Understanding how the multiple governance issues are reflected in local level decision making is essential when providing grounds for making proposals on how 'good' environmental governance can be enhanced.

As pointed out in Table 2, it seems that well-being is closely intertwined with governance. When looking at general lines, it seems that issues of ability for self-determination, social relationships, and trust between local stakeholders, and a sense of being respected should be key general targets that can be enhanced by governance. At a minimum, local level actors should be aware of what kinds of possibilities they have for impacting on governance decisions concerning their lives.

Also, a broad awareness of the implications deriving from international and national governance levels to local negotiations is important. This stresses that transparency about what participatory processes can and cannot do, and why, is a pre-requisite for good governance. Self-determination and the sense of being respected by others can be advanced in governance discussions by paying careful attention to specific features of local level issues, understanding local histories and cultures, and matching governance discussions and decisions with these.

Having illustrated the need for paying attention to local socio-cultural diversity, it should also be noted that environmental sustainability should not be undermined by allowing unlimited use and access to protected areas. Yet, the environmental sustainability and development objectives do not necessarily have to be in contradiction. Some international developments, such as the rise of the anthropogenic ecosystem service paradigm, discussions of co-management, and also opening protected areas for increased local rights, are all signs that international science and policy communities are searching for novel solutions to old dilemmas, such as the one presented in this paper. However, deadlocked local cases, such as the long conflict in the Malla strict nature reserve might benefit from using an outside mediator holding or developing mutual trust between all stakeholders (Daniels & Walker 2001). A mediator "from outside of the box" could perhaps come up with fresh initiatives that stakeholders can commit themselves. Development of mutual and honest respect and trust should

be considered as an offset before fruitful collaborative governance arrangements have a real chance to thrive. In order to fulfil international policy targets and objectives, and ideas from science for enhancing good governance, principles and proposed actions should be turned into concrete practices at the local level with active efforts. Only by considering tangible environmental impacts and the concrete implications of governance on local well-being can scholars make concrete proposals on how to enhance social and environmental sustainability and good environmental governance in the context of intermingled governance levels.

Acknowledgements

This paper was supported by the SENSFOR (ESSEM COST Action ES1203 – Enhancing the resilience capacity of SENSitive mountain FORest ecosystems under environmental change) project. The research has been co-supported by the Academy of Finland's RELATE Center of Excellence.

References

- Andonova, L. B. & R. B. Mitchell (2010). The rescaling of global environmental politics. *Annual Review of Environment and Resources* 35, 255–282.
- Barabas, J. (2004). How deliberation affects policy opinions. *American Political Science Review* 98, 687–701.
- Bernes, C., Bråthen, K. A., Forbes, B. C., Speed, J. D. M. & J. Moen (2015). What are the impacts of reindeer/caribou (*Rangifer tarandus* L.) on arctic and alpine vegetation? A systematic review. *Environmental Evidence* 4:4. DOI: 10.1186/s13750-014-0030-3.
- Chilvers, J. & J. Evans (2009). Understanding networks at the science–policy interface. *Geoforum* 40, 355–362.
- Cox, K. (1997; ed.). *Spaces of globalization: reasserting the power of the local*. 292 p. Guilford, New York.
- Díaz, S., Demissew, S., Carabias, J., Joly, C., Lonsdale, M., Ash, N., Larigauderie, A. et al. (2015). The IPBES conceptual framework — connecting nature and people. *Current Opinion in Environmental Sustainability* 14, 1–16. DOI:10.1016/j.cosust.2014.11.002.
- Daniels, S. E. & G. B. Walker (2001). *Working through environmental conflict – the collaborative learning approach*. 299 p. Praeger Publishers, Westport, CT.
- Dietz, T., Ostrom, E. & P. Stern (2003). The struggle to govern the commons. *Science* 302, 1907–1912.
- Eriksen, T. H. (2001). *Small places, large issues. An introduction to social and cultural anthropology*. 2nd edition. 342 p. Pluto Press, London.
- Escobar, A. (2001). Culture sits in places: reflections on globalism and subaltern strategies of localization. *Political Geography* 20, 139–174.
- Hardin, G. (1968). Tragedy of the commons. *Science* 162, 1243–1248.
- Harrop, S. R. & D. J. Pritchard (2011). A hard instrument goes soft: The implications of the convention on biological diversity's current trajectory. *Global Environmental Change* 21, 474–480.
- Heikkinen, H. (2002). *Sopeutumisen mallit - Poronhoidon adaptaatio jälkitekolliseen toimintaympäristöön Suomen läntisellä poronhoitoalueella 1980–2000*. 369 p. Suomalaisen Kirjallisuuden Seura, Helsinki.

- Heikkinen, H. I., Sarkki, S., Jokinen, M. J. & D. E. Fornander (2010). Global area conservation ideals versus the local realities of Reindeer herding in Northernmost Finland. *International Journal of Business and Globalization* 4, 110–130.
- Heinonen, M. (2013). *Applying IUCN protected area management categories in Finland. Summary based on the original Finnish document approved by the Ministry of the Environment.*
- Hsieh, H. F. & S. E. Shannon (2005). Three approaches to qualitative content analysis. *Qualitative Health Research* 15, 1277–1288.
- Ingold, T. (2000). *The perception of the environment: Essays in livelihood, dwelling and skill.* 466p. Routledge, London & New York.
- IUCN (2016). Protected areas categories. 25.11.2016. <<https://www.iucn.org/theme/protected-areas/about/protected-areas-categories>>
- Jokinen, M. (2005a; ed.). Poronhoidon ja suojelun vaikutukset Mallan luonnonpuistossa. Metsäntutkimuslaitoksen tiedonantoja. *The Finnish Forest Research Institute, Research Papers* 941.
- Jokinen, M. (2005b). Tutkimuksen intressit Kilpisjärvellä ja Mallalla. In Jokinen, M. (2005; ed.): *Poronhoidon ja suojelun vaikutukset Mallan luonnonpuistossa. Metsäntutkimuslaitoksen tiedonantoja. The Finnish Forest Research Institute, Research Papers* 941, 25–31.
- Jokinen, M. (2014). Heated and frozen forest conflicts: Cultural sustainability and forest management in arctic Finland. *IUFRO World Series* 32, 381–398.
- Kaján, E. (2014). Community perceptions to place attachment and tourism development in Finnish Lapland. *Tourism Geographies* 16, 490–511. DOI: 10.1080/14616688.2014.941916.
- Karjalainen, S. (2016). Ympäristöministeriö pesi kätensä: Mallan laidunnuskiistat ratkaistava paikallisesti. *Enontekiön Sanomat* 6.10.2016.
- Keeney R. (1992). *Value-focused thinking. A path to creative decisionmaking.* 432 p. Harvard University Press, Cambridge, MA.
- Kyllönen, S., Colpaert, A., Heikkinen, H. I., Jokinen, M., Kumpula, J., Marttunen, M., Muje, K. & K. Raitio (2006). Conflict management as a means to the sustainable use of natural resources. *Silva Fennica* 40, 687–728.
- Lemos, M. C. & A. Agrawal (2006). Environmental governance. *Annual Review of Environment and Resources* 31, 297–325.
- Manninen, M. A. (2014). Culture, behaviour, and the 8200 cal bp cold event–Organisational change and culture–environment dynamics in late Mesolithic Northern Fennoscandia. *Monographs of the Archaeological Society of Finland* 4. Helsinki.
- Marston, S.A., Jones III, J. P. & K. Woodward (2005). Human geography without scale. *Transactions of the Institute of British Geographers* NS 30, 416–432.
- Metsähallitus (2013). Metsähallituksen selvitys Käsivarren kansallispuiston perustamisedellytyksistä. Metsähallituksen selvitys, asianro MH 1747/2013/06.02.03, Vantaa. 6.6.2916. <<http://julkaisut.metsa.fi/assets/pdf/lp/Muut/kasivarsikpselvitys.pdf>>
- Metsähallitus (2014). Mallan luonnonpuiston hoito- ja käyttösuunnitelma - Mallä luonddumeahci dikšun- ja geavahanplána. MH 4765/623/2014. 101 p. 10.10.2016. <http://www.metsa.fi/documents/10739/1110148/malla_hks_vahvistettavaksi.pdf/a13697aa-4c52-4be2-8220-4ec9c2fa6842>
- Muddusjärven paliskunnassa aletaan soveltaa Akwé: Kon –menettelyä. (2016). Yleisradio. 12.12.2016. <http://yle.fi/uutiset/osasto/sapmi/muddusjarven_paliskunnassa_aletaan_soveltaa_akwe_kon_menettelya/9186112>

- Mäkitie, T. & A. L. Ylisirniö (2013). Conflicting discourses in tourism development. In Müller, D., Lundmark, L. & R. H. Lemelin (eds.): *New issues in polar tourism. Communities, environments, politics*, pp. 163–176. Springer, Dordrecht.
- Newig, J. & O. Fritsch (2009). Environmental governance: participatory, multi-level – and effective? *Environmental Policy and Governance* 19, 197–214.
- Nykänen, T. & L. Valkeapää (2016; eds.). *Kilpisjärven poliittinen luonto - matkoja Käsivarren kulttuurimaisemassa*. 340 p. Suomalaisen Kirjallisuuden Seura, Helsinki.
- Olofsson, J. & L. Oksanen (2005). Effects of reindeer density on vascular plant diversity on North Scandinavian mountains. *Rangifer* 25:1, 5–18.
- Oteros-Rozas, E., Ontillera-Sánchez, R., Sanosa, P., Gómez-Baggethun, E., Reyes-García, V. & J. A. González (2013). Traditional ecological knowledge among transhumant pastoralists in Mediterranean Spain. *Ecology and Society* 18:3, 33.
- Pahl-Wostl, C. (2009). A conceptual framework for analysing adaptive capacity and multi-level learning processes in resource governance regimes. *Global Environmental Change* 19, 354–365.
- Pascual, U., Phelps, J., Garmendia, E., Brown, K., Corbera, E., Martin, A., Gomez-Baggethun, E. & R. Muradian (2014). Social equity matters in payments for ecosystem services. *BioScience* 64, 1027–1036. DOI:10.1093/biosci/biu146.
- Raitio, K. (2008). "You can't please everyone" – Conflict management practices, frames and institutions in Finnish state forests. PhD thesis, University of Joensuu. *Publications in Social Sciences* No: 86.
- Redford, K. H. & J. P. Brosius (2006). Diversity and homogenization in the endgame. *Global Environmental Change* 16, 317–319.
- Sarkki, S. (2011). *The site strikes back: Multi-level forest governance and participation in northern Finland*. PhD thesis. University of Oulu, Finland. Acta Universitatis Ouluensis B 102.
- Sarkki, S. & H. I. Heikkinen (2015). Why do environmentalists not consider compromises as legitimate? Combining value- and process-based explanations from Finnish forest controversies. *Forest Policy and Economics* 50, 110–117.
- Sarkki, S., Niemelä, J., Tinch, R., Jäppinen, J.-P., Nummelin, M., Toivonen, H. & M. Von Weissenberg (2016a). Building responsibilities for mainstreaming biodiversity: Case of Finnish biodiversity strategies and action plans. *Journal of Environmental Planning and Management* 58, 1377–1396. DOI: 10.1080/09640568.2015.1076384.
- Sarkki, S., Komu, T., Heikkinen, H. I., Acosta García, N., Lépy, É. & V-P. Herva (2016b). Applying a synthetic approach to the resilience of Finnish reindeer herding as a changing livelihood. *Ecology & Society* 21:4, 14. <http://dx.doi.org/10.5751/ES-08819-210414>.
- Secretariat of the Convention on Biological Diversity (2004). Akwé: Kon voluntary guidelines for the conduct of cultural, environmental and social impact assessment regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities. 25 p. Montreal. (CBD Guidelines Series). 11.10.2016. < <https://www.cbd.int/doc/publications/akwe-brochure-en.pdf> >
- Swyngedouw, E. (2004). Scaled geographies: nature, place and the politics of scale. In Sheppard, E. & R. B. McMaster (eds.): *Scale and geographic inquiry*, 129–153. Blackwell, Oxford.
- Thaddeus, R. M., Minteer, B. A. & L-C. Malan (2011). The new conservation debate: the view from practical ethics. *Biological Conservation* 144, 948–957.

- Välimäki, P. (2005). Porolaidunnuksen vaikutus perhosten (lepidoptera) yhteisörakenteeseen kahdella Pohjois-Fennoskandian tunturilla. In Jokinen, M. (2005; ed.): Poronhoidon ja suojelun vaikutukset Mallan luonnonpuistossa. Metsäntutkimuslaitoksen tiedonantoja. *The Finnish Forest Research Institute, Research Papers* 941: 179–227.
- Wallen, H., Nykänen, T. & A. Perälä (2016). Kamppailu Käsivarren kansallispuistosta – Toiveet, uskomukset ja mahdollisuudet kansallismaisemassa. In Nykänen, T. & L. Valkeapää (2016; eds.): *Kilpisjärven poliittinen luonto - matkoja Käsivarren kulttuurimaisemassa*, 310–340. Suomalaisen Kirjallisuuden Seura, Helsinki.
- Ympäristöministeriö. (2016). Lausunto Mailan luonnonpuiston hoito- ja käyttösuunnitelmasta. YM1/5741/2016. 11.10.2016. <http://www.ymp.fi/fi-FI/Ajankohtaista/Lausunnot/2016/Lausunto_Mallan_luonnonpuiston_hoito_ ja_%2840498%29>