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Seeing like the state or like pastoralists? Conflicting narratives on the governance of Sámi reindeer husbandry in Finnmark, Norway

Kathrine Ivsett Johnsen, Tor A. Benjaminsen & Inger Marie Gaup Eira

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The article examines key actors' perceptions on why Norwegian policy objectives aimed at securing sustainable reindeer husbandry through participation have failed in West Finnmark. Based on government documents, media debates, and interviews with the actors, the authors identify two competing narratives on why there are 'too many reindeer' despite continued state efforts at destocking. The dominant narrative claims that participation is unsuccessful because herders do not accept expert advice, but increase their herds for personal gain. The Sámi pastoralists' counter-narrative claims that lack of transparency hinders participation and policy implementation. Inspired by political ecology and perspectives on governance within development studies, the authors examine why the government's narrative dominates public debates, while the counter-narrative remains marginalized. They find that the dominant narrative frames destocking as an apolitical and objective measure based on unequivocal scientific advice, while the pastoralists' rejection of such advice is presented as ignorant and irrational. The dominant narrative's authority is further increased by numerous press reports (repeated in social media) of overstocking threatening biodiversity and economic development. The authors conclude that due to the persistence of the dominant narrative, it has become an undisputed truth in Norwegian debates that Sámi pastoralists are overstocking to maximize their benefits.

Keywords: *governance, narratives, reindeer husbandry, Sámi*

Kathrine Ivsett Johnsen, Department of International Environment and Development Studies (Noragric), Norwegian University of Life Sciences, PO Box 5003, NO-1432 Ås, Norway. E-mail: katjohns@nmbu.no; Tor A. Benjaminsen, Department of International Environment and Development Studies (Noragric), Norwegian University of Life Sciences, PO Box 5003, NO-1432 Ås, Norway. E-mail: t.a.benjaminsen@nmbu.no; Inger Marie Gaup Eira, Sámi University College, Hannoluohkka 45, NO-9520 Kautokeino, Norway, and International Centre for Reindeer Husbandry, Bredbuktnesveien 50B, NO-9520 Kautokeino, Norway. E-mail: ingermge@gmail.com

Introduction

Sámi resistance to the construction of a high dam in the Alta-Kautokeino River (Alta-Kautokeinovassdraget) in the late 1970s and early 1980s increased national awareness of the rights of the Norwegian Sámi. Even though the struggle over the dam was lost, it led to some compensatory initiatives from the state, such as the institutionalization of indigenous peoples' rights in government and law. In 1987 the Sámi Act was introduced, and in 1988 the 'Sámi Paragraph' (§110a) was incorporated into the Norwegian Constitution as a measure to redress past injustices (Skogvang 2013). One year later the Sámi Parliament (Sámediggi) was established, and in 1990 Norway was the first country to ratify the International Labour Organization's convention on indigenous peoples' rights to preserve and develop their own culture, ILO Convention No. 169.

Today, some 30 years after the Alta dispute, there is a common assumption in Norway that the historical injustices against the Sámi have been rectified and that the Sámi enjoy extensive rights in the management of land and natural resources. Some have argued that the rights allocated are too extensive and that they are at the expense of majority needs and interests (e.g. *ABC Nyheter* 2009; *Fremskrittspartiet* 2014). Meanwhile, the Sámi Parliament holds that state authorities constantly contest Sámi ownership and use of traditional land and resources, and challenge the Sámi's opportunity to exercise control over their own economic, cultural, and social development (Sámediggi n.d.). This controversy over the Sámi people's ability to participate in the management of land and resources is especially apparent in the case of reindeer pastoralism, as state authorities and reindeer herders have contrasting perspectives on the current management regime.

Government officials and national politicians have for many years been concerned that a growing number of semi-domesticated reindeer in Finnmark is leading to the overstocking and degradation of pastures and increased rates of animal diseases, starvation, and loss of

reindeer to predators. While herders to a certain extent agree that there are currently too many reindeer some places in Finnmark, they do not concur with the authorities' explanations for why the reindeer numbers are increasing or on the general consequences of the high numbers. Paine (1996, 130) shows that herders have a contextualized view on the concept of 'too many reindeer', and explains that an owner losing animals to others may recognize that he has 'too many' to handle and seek help with the herding; though, when the herders' children are old enough to help out, the same number of reindeer might be considered 'too few'. Paine (1996) further explains that in another context, too many reindeer could mean too little pasture at certain seasons.

Further, herders and government officials have diverging perspectives on the pastoralists' possibilities to engage in political decision-making related to solving the problem of too many reindeer. There is a dominant policy narrative claiming that herders hold a considerable amount of decision-making power, and a counter-narrative among the pastoralists arguing that the state neglects the herders' rights to participate in decision-making relevant to their livelihoods. While the views among state officials and politicians are often reflected in media and online discussions, the pastoralists' counter-narrative is rarely represented in public debates. This latter point triggered us to study the diverging perspectives and their differing appeal to the general public. In line with Forsyth (2008), we believe actors' explanations of phenomena reflect the interests and values of those who formulated these explanations. Forsyth (2008) explains that the perspectives of the more powerful groups in society are more likely to become the conventional explanations, the dominant narratives. Hence, facts and knowledge are situated, partial, and struggled over.

Based on narrative analyses in political ecology (e.g. Adger et al. 2001; Benjaminsen & Svarstad 2008; Benjaminsen et al. 2009; Vik et al. 2010) and inspired by theoretical contributions within development studies on 'governance' (e.g. Scott 1998; Li 2007), we

explore the interests, values, and power in the governance of reindeer pastoralism imbued in the conflicting narratives. We start by exploring the state officials' and herders' perspectives on participation in reindeer management. Then we identify four themes embedded in the narratives – *participation, knowledge, Sámi rights, and actor rationality* – and discuss the contrasting interpretations and power struggles that the two narratives involve through a focus on these themes. Thereafter, we critically assess the dominant accounts of reindeer governance and why the pastoralists' counter-narrative remains largely unknown or ignored in Norwegian public debates.

We define governance as patterns of rule, which include politics and power relations. In line with Bridge & Perreault (2009), who discuss environmental governance, we understand the governance of reindeer husbandry as both the social organization of decision-making related to reindeer and the production of social order through the administration of reindeer herding and husbandry. In this article, we use the term 'herder' to refer to both reindeer owners and individuals who carry out practical work with reindeer, and we use 'herder' and 'pastoralist' interchangeably.

Our approach to issues concerning the governance of reindeer husbandry is based on previous research on circumpolar reindeer husbandry, pastoral systems in Africa, and lived experience (as one of the authors is from a reindeer herding family). Guided by political ecology, we subscribe to both environmental sustainability and social justice as core values.

Our study is based on qualitative interviews conducted during the period 2012–2014 with 32 individuals, of which 10 were Sámi reindeer herders from West Finnmark; the remaining interviewees were undertaken with regional and national government officials (20) and politicians (1 in the Norwegian Parliament (Storting) and 1 in the Sámi Parliament). Those interviewed included staff at the Office of the Auditor General (Riksrevisjonen) and former and current leaders of the Sámi Reindeer Herders Association of Norway (Norske

Reindriftssamers Landsforbund, NRL). The interviews, which were conducted in Norwegian, recorded, and transcribed. They provided information on the actors' experiences and perspectives on reindeer management generally and more specifically on the recent decision-making process for setting the upper limits for reindeer numbers (i.e. the carrying capacity of the summer pastures in West Finnmark). In order to understand the background to the current situation, we read historical records on reindeer husbandry, government reports, correspondence between the actors, transcripts of discussions in the Norwegian Parliament and Sámi Parliament, and followed debates in the media. In this article, all quotes from Norwegian sources have been translated by us. In order to preserve the informants' anonymity, we refer to them by number (e.g. #3 refers to informant 3 or informants group 3).

Reindeer policies and governance

In Norway, c.250,000 semi-domesticated reindeer are currently herded on land covering c.40% of the mainland area of the country (Reindrifftsforvaltningen 2013). Only people of Sámi ethnicity may own reindeer in Norway, with the exception of a few concession areas in southern parts of the country (Vistnes et al. 2009). All reindeer herding is regulated by the Reindeer Herding Act (Lov om reindrift) passed in 2007. Approximately 73% of all reindeer are found in Finnmark, the northernmost county of Norway. Nearly all of Finnmark is part of the reindeer herding area; the interior south is used as winter pastures, while the increasingly developed coastal area is used as spring, summer, and autumn pastures. Most herds cross a number of municipalities on their way between the winter and summer grazing areas.

The state-led rationalization of Sámi reindeer husbandry was intensified from the late 1970s onwards with both the introduction of public investments to maximize meat production and herders' income (Paine 1994) and the formal organization of the herding district boards.

The governance of reindeer pastoralism in Norway is divided into 77 different herding districts, which are administrative and geographical units covering the seasonal pastures of one or several herding groups. However, in the interior of Finnmark the winter, spring, and autumn pastures are defined by the state as communal pastures shared among more than 100 herding groups despite the fact that individual customary herding institutions (*siida*) have traditionally controlled these pastures, albeit with some flexibility in time and space (Sara 2009; Mikkel Nils Sara, personal communication 28 February 2014). From the 1960s onwards, motorized vehicles (snowmobiles and all-terrain vehicles) made herding more efficient and thus possible to increase the size of the herds (Riseth 2013).

However, since the late 1980s, there has been growing concern that high numbers of reindeer would lead to overgrazing, land-use conflicts, and inefficient meat production, especially in Finnmark. Ecological, economic, and cultural sustainability became the main objectives of the Norwegian reindeer husbandry policy of 1992 (St.meld nr. 28 (1991–1992)). Under the policy, new laws, regulations, and economic incentives were implemented to motivate herders to restructure and reduce the size of their herds, but the implementation of the policy had little success in Finnmark. The general trend was that the reindeer numbers continued to increase, their slaughter rate remained low, and reindeer meat productivity declined (Reindrifftsforvaltningen 2014).

In 2007, a new Reindeer Husbandry Act was adopted. The Act was designed to improve the efficiency of the management regime and to develop sustainable reindeer husbandry through internal self-management and increased participation (Reindrifftsforvaltningen 2009). A new tool for planning at community level was introduced: rules governing seasonal pasture use, migratory routes, and reindeer numbers. The purpose of these policy measures was to let the herding district boards develop their own management plans by integrating the traditional use of pastures with public legislation

(Reindrifstforvaltningen 2009). A working group consisting of two biologists, two government officials, and six herders was commissioned to identify indicators for calculating ecologically sustainable reindeer numbers. The indicators were presented as guidelines that included scientific knowledge as well as herders' experience-based and traditional knowledge of reindeer and pasture ecology (Landbruks- og matdepartementet 2008b). In the cases where herding districts had more reindeer than was considered as ecologically sustainable, the districts were requested to develop reduction plans. The process of establishing maximum reindeer numbers formed the basis of the analysis presented in this article.

With the guidelines in place, a deadline of July 2009 was set for the summer pasture districts to submit management plans. The procedure was as follows: the districts would develop internal plans, the plans would then be endorsed by the area boards (*områdestyrene*), and thereafter the central Reindeer Husbandry Board (Reindrifststyret) would give final approval for reindeer numbers for each district (Reindrifstforvaltningen 2009). In cases where the Reindeer Husbandry Board rejected the plans, the districts could revise and resubmit a proposal. If the Board rejected their proposal a second time, the district could file a complaint to the Ministry of Food and Agriculture (Landbruks- og matdepartementet, LMD). From the beginning of 2014, the national and regional management of reindeer husbandry has been vested respectively in the LMD and the five northernmost County Governor's Offices.¹

The Reindeer Husbandry Board is a decision-making and advisory body that was established under the Reindeer Husbandry Act of 1978 (Landbruks- og matdepartementet 2013). While NRL has the right to propose board members, they are appointed by the Sámi Parliament (three members) and the LMD (four members) (Landbruks- og matdepartementet 2009). From 1978 to 2013, the management regime included six area boards, one for each reindeer pasture region in Norway. Again, NRL had the right to propose members, who were appointed by the Sámi Parliament and the County Councils (*Fylkesting*). The area boards had

the authority to object to development plans that would affect reindeer grazing and migration areas. However, amendments to the Reindeer Husbandry Act terminated the area boards at the end of 2013, and the boards' mandate was transferred to the respective County Governors (*Fylkesmennene*) in the five northernmost counties. NRL and the Sámi Parliament have expressed concerns that the organizational changes make it more difficult for herders to influence decision-making affecting their livelihoods because the County Governor's Office is not a politically representative body.

The process of securing sustainable reindeer husbandry in Finnmark, especially in West Finnmark, has been a policy objective since 1992 (St.meld nr. 28 (1991–1992)). On two occasions, in 2004 and 2012, the Office of the Auditor General has evaluated the LMD's ability to implement sustainable reindeer husbandry in Finnmark (Riksrevisjonen 2004; 2012). Both reports criticized the LMD's lack of results in terms of reducing reindeer numbers. Holding the LMD accountable, the Norwegian Parliament has repeatedly emphasized the urgent need to secure sustainable reindeer husbandry in the north. There have been several public debates about the possibilities for forced slaughter of reindeer in Finnmark (e.g. *NTB* 1999b; *Nordlys* 2005; *Aftenposten* 2011a; 2011b). In January 2013, the LMD instructed the Reindeer Husbandry Board to make herd reduction plans for those herding districts that had not developed their own reduction plans. A divided board followed by making reduction plans for almost all summer pasture districts in West Finnmark and some of the districts in East Finnmark (Landbruks- og matdepartementet 2014b). In West Finnmark, 16 districts and herding groups were requested to reduce their reindeer numbers by between 6.5% and 62.4%, an average of c.30% over the period 2012–2015 (Reindrifftsforvaltningen 2012; 2013).

Actors' perspectives on deciding reindeer numbers

Based on transcripts of interviews and other written material, we identified the key actors' differing claims about the decision-making process of setting maximum reindeer numbers for the herding groups in West Finnmark. The interviewed government officials described the reindeer husbandry policy as being in line with international indigenous peoples' rights (government officials #10, group interview September 2012) and claimed that the policy secures a bottom-up approach to reindeer management (government officials #9, group interview August 2012) (for the rationale behind the 2007 Act, see Landbruks- og matdepartementet & Reindrifstforvaltningen 2007). Lars Peder Brekk, Minister of Agriculture and Food in the period 2008–2012, argued that the 2007 Act is based on the herders' perspectives and gives herders an increased opportunity for participation in decision-making and increased responsibility for reindeer management (Brekk 2011). The interviewed government officials argued that reindeer herders formed the majority of members of the committee that drafted the 2007 Act, as well as in the working group that developed indicators for estimating sustainable reindeer numbers (government officials #10, group interview September 2012). According to the same government officials, no other regulations in Norway secure the same level of stakeholder participation in decision-making as the Reindeer Husbandry Act.

One government official (#7, interview August 2012) emphasized that the estimates of carrying capacity were not based on layman's knowledge but on 'thorough and proper research' by experts on reindeer and pastures. While admitting that the political objective of sustainable reindeer husbandry from 1992 had not been met, the interviewed government officials did not question the appropriateness of the strategy and regulations. One government official (#8, interview August 2012) argued that abandoning the strategy would mean discarding 12–15 years of work and would jeopardize any opportunity to improve the reindeer

industry. He claimed that there were no alternative ways of achieving the political objective, only alternatives for worsening the situation.

In accordance with the 2007 Act, the herding districts were given a deadline to identify maximum reindeer numbers, and if needed, to develop herd reduction plans within the herding districts (Reindrifftsforvaltningen 2009). However, as many herding district boards in Finnmark were not able to develop management plans, the authorities had to develop the plans for them (government officials #10, group interview September 2012). Trygve Slagsvold Vedum, Minister of Agriculture and Food in the period 2012–2013, informed that although large herds of reindeer are considered prestigious within the herding community, the herders should rather think in terms of economy and ecology in order to save the reindeer industry (*Aftenposten* 2012).

The interviewed herders said that although herders had participated in the development of the 2007 Act and the indicators for estimating sustainable reindeer numbers, they still experienced that their input and concerns were not recognized in the practical management of reindeer husbandry. Initially, they had confidence in the decision-making processes, and according to one herder almost all herding groups in West Finnmark started to work on establishing sustainable reindeer numbers and developing reduction plans: ‘we even started slaughtering more than we had ever done before’ (reindeer herder #4, interview June 2013). Another herder claimed that when they had finalized their herd-reduction plans, the authorities suddenly introduced new indicators that were not compatible with the plans they had developed (reindeer herder #3, interview June 2013). The interviewed herders explained that the LMD dismissed the herders’ plans and required the Reindeer Husbandry Board to define maximum reindeer numbers based on the new indicators. One herder said: ‘The LMD claims we did not make reduction plans but that is a lie!’ (reindeer herder #4, interview June 2013). Several herders (e.g. reindeer herder #9, interview June 2013) argued that although

Norway has signed international conventions on indigenous peoples' rights, the LMD did not apply them in its decision-making. The herders claimed that the LMD's decisions were rather driven by the national goal to increase industrial development in Finnmark and referred to the state's costly investment in mapping mineral resources in northern Norway. One herder (herder #6, interview June 2013) said that the state regarded reindeer husbandry as a negligible industry and a bottleneck for 'real' resource extraction, while another herder (herder #8, interview August 2013) claimed that it was not by chance that the state's pressure to reduce reindeer numbers had increased after the launch of the Government's Strategy for the High North (Regjeringens nordområdestrategi).²

Clearly, the actors have very different ways of interpreting the decision-making process related to establishing a ceiling on reindeer numbers for herding groups in West Finnmark, and they emphasized different aspects of the process. While the government officials focused on herders' formal possibilities for involvement in the development of the policy and regulation, the herders focused on the lack of involvement in and ownership of the decisions when the regulations were implemented. Further, while the government officials emphasized the inclusion of herders' knowledge in the crafting of the herding district management plans, herders emphasized that their knowledge was not recognized in the final decisions on reindeer numbers. The actors had different views on whether the indigenous peoples' rights were applied in decision-making, and the two groups of actors presented each other as a threat to the sustainability of reindeer husbandry.

The opposing claims on the governance of reindeer husbandry can be presented as two short narratives. We define narratives as stories with a beginning, middle, and end, or when cast in the form of an argument, with premises and conclusions (Roe 1991). Hence, narratives are social constructions about specific cases formed as stories. We follow Vik et al. (2010, 37), who 'understand narratives to be the underlying patterns in the stories told by

individuals'. Based on grounded theory³ with an open coding of the interviews carried out, we have identified a dominant narrative expressed by most government officials and by politicians, the media, and many scientists in Norway, and a counter-narrative articulating the views of many reindeer herders, especially in West Finnmark.

The dominant narrative argues that despite participatory decision-making, the governance of reindeer husbandry has failed in the northernmost parts of Norway because herders would not act in a rational way and accept available scientific ecological knowledge as a basis for dealing with the problem of too many reindeer. Consequently, the state had to intervene to ensure sustainable reindeer husbandry for the benefit of the next generation of Sámi herders. The counter-narrative claims that the LMD's talk about participation and indigenous peoples' rights in the governance of reindeer husbandry is only lip service because the authorities do not recognize either the herders' knowledge or their rights. The ultimate result of this policy would be to free the land of reindeer for the benefit of industrial development. As a consequence, the herders have never had a real opportunity to participate in the decision-making on reindeer numbers.

Four shared themes

On the basis of our interviews and written documents, we have identified four shared themes that the actors stressed when discussing why the agreed process of decision-making on reindeer numbers in West Finnmark was not successful: the *participation* of reindeer herders in reindeer management; herders' *knowledge* relevant to the governance of reindeer husbandry; *Sámi rights*; and *actor rationality*. We explore these four themes by assessing the interpretations and opinions expressed through the informants' statements on the governance of reindeer husbandry. We also discuss examples of diverging views within the actor groups.

Participation

The actors presented strongly differing stories describing the herders' participation in the management of reindeer husbandry. Interviewed government officials argued that the lack of results raised the question as to whether herders in Finnmark had the capacity to participate in the decision-making processes related to herd reduction (government officials #10, group interview September 2012). They argued that herders dominated the working group that developed the premise for ecological sustainable numbers. According to the interviewed government officials, the politicians and bureaucrats were sceptical towards giving herders full responsibility for establishing maximum reindeer numbers, and therefore the Reindeer Husbandry Act of 2007 gave the authority to the Reindeer Husbandry Board to evaluate whether the herders' proposals for herd size were sustainable and make final decisions on reindeer numbers. The Act also increased the state's possibility for sanctioning herding districts and individual herders that did not comply with the regulations (government officials #9, group interview August 2012). Hence, in the cases where the herding districts could not demonstrate that their proposed reindeer numbers would be sustainable and in accordance with the sustainability indicators, the authorities set the carrying capacity and made herd reduction plans for those districts (government officials #9, group interview August 2012).

The Norwegian Parliament gave further legitimacy to the LMD's actions by, on several occasions, criticizing the Ministry for not achieving the political goal of reducing the reindeer population in Finnmark to a sustainable level. There was a strong view among some politicians that the state should use a much tougher approach in order to cut reindeer numbers. They found support in the findings of a research project at the University of Tromsø called Ecosystem Finnmark (Økosystem Finnmark) that co-management and participative

management did not work in the reindeer industry. The project's leader, Professor Rolf A. Ims, stated: 'the project has also debunked a few myths, such as the theory that participation, voluntary agreements and economic incentives, so-called "carrot" methods, are more efficient than the good old stick' (*forskning.no* 2010).

Trygve Slagsvold Vedum (former Minister of Food and Agriculture), assured the Norwegian Parliament, in a debate in January 2013, that the LMD had shown commitment to reducing the number of reindeer in Finnmark through its strong and direct involvement in the decision-making process (Stortinget 2013). Staff at the Office of the Auditor General commended the LMD for altering the indicators and instructing the Reindeer Husbandry Board to make decisions on maximum reindeer numbers (government officials #6, group interview August 2012). They argued that the LMD's intervention was a necessary step in reducing the reindeer numbers.

While government officials stated that the herders had not been capable or able to use the tools allocated to engage in decision-making, the interviewed herders argued that in reality herders did not have the possibility to participate in the decision-making because the authorities did not recognize their input to the process. Late in 2010 the Reindeer Husbandry Board started reviewing proposed reindeer numbers from districts in West Finnmark. The proposals were discussed in meetings between representatives of the herding districts and the Norwegian Reindeer Husbandry Administration (*Statens reindrifstforvaltning*), and the districts were advised to lower further their proposed reindeer numbers, which they did (government official #3, interview August 2013). The Reindeer Husbandry Administration was aware that the revised reindeer numbers were not as low as they should have been according to the indicators, but the thinking was that it was important to reach consensus with the herders, secure their feeling of ownership to the decision, and start implementing the reduction plans (government official #5, interview January 2014). The first six proposals from

districts in West Finnmark were approved by the Reindeer Husbandry Board, but the LMD reversed the approvals, arguing that the decisions on maximum numbers were not sustainable and instructing the Board on how to interpret the indicators for ecologically sustainable reindeer numbers (letter from the LMD to the Board, dated 28 January 2011).⁴ The LMD requested that the Board should work together with the districts in setting lower reindeer numbers, but herders were reluctant to re-engage in the process. During 2011 the Reindeer Husbandry Board set maximum reindeer numbers on behalf of all but one summer herding district in West Finnmark.

In a letter to the LMD, the Sámi Reindeer Herders Association of Norway (NRL) explained that the herders' dissatisfaction with the decision-making process was primarily related to the fact that their assessments had been dismissed without explanation (letter dated 6 December 2011; for source, see note 4). NRL argued that the Reindeer Husbandry Board's decisions on maximum reindeer numbers were not in accordance with the agreed decision-making processes, the Reindeer Husbandry Act, or the European Convention on Human Rights. Many of the herding districts in Finnmark appointed lawyers that assisted them in objecting to both the decision-making process and the final decisions on reindeer numbers. One of the lawyers argued in a letter to the Reindeer Husbandry Administration that the LMD's instructions to the Reindeer Husbandry Board had turned the process into top-down decision-making, which had deprived both the herders and the Board of their rights to do make their own assessments of the need for reductions in herd sizes.⁵ The lawyer claimed that the state's reduction plans were not in accordance with Norwegian or international law and consequently the herding districts would not accept the plans.

One of the herders (herder #8, interview August 2013), who was a member of the working group that had developed the first set of indicators for calculating ecologically sustainable reindeer numbers, said that there was a common understanding in the working

group that the indicators were to be seen as guidelines. He argued that since 2009 the authorities had not only altered the indicators, but also started to interpret them as instructions. According to many of the interviewed herders, the authorities had laid down new premises for the decision-making process, and therefore the only way for them to participate in the process was by accepting those premises. One of the district leaders used a metaphor to describe the herders' possibility to participate in the decision-making: 'Imagine that you are in a house. You are told that you are free to leave anytime you wish, but all of the doors and windows have been sealed, so you have nowhere to exit' (herder #9, interview June 2013).

The primary purpose of the indicators for calculating ecologically sustainable reindeer numbers was to develop a decision-making tool that could address the authorities' concern about the overstocking of reindeer in Finnmark. Allowing the herder representatives to form the majority in the working group can be seen as a measure to gain legitimacy among the reindeer herders on the follow-up use of the indicators. However, as Agrawal & Gibson (1999) have shown, communities are not necessarily homogenous groups. In the case of the working group, the reindeer herders did not represent one uniform interest or knowledge system. Rather, NRL had appointed herders from different parts of the reindeer husbandry area in Norway to ensure that various concerns were represented in the working group. The representatives from Finnmark were a minority in the working group, despite the fact that challenge of 'too many reindeer' was regarded as primarily a Finnmark problem. By contrast, Sámi herders in the south of Norway have implemented the LMD's model for sustainable reindeer husbandry to a greater extent.

Knowledge

Both government officials and herders recognized the importance of including experience-based knowledge in the management of reindeer husbandry, but the two groups had different interpretations of the degree to which the governance of reindeer husbandry reflected herders' knowledge. The interviewed government officials claimed that the current management regime for reindeer husbandry is based on traditional knowledge and organization as the herders were represented in developing the Reindeer Husbandry Act and in identifying indicators for ecologically sustainable reindeer management. However, interviewed herders argued that in practice traditional knowledge was downplayed. They emphasized the lack of Sámi traditional knowledge in the implementation of the law and in practical decision-making on reindeer numbers and reduction plans.

The government officials based their arguments for decision-making on mathematical models for estimating the carrying capacity of grazing land. A regression model developed by Lenvik (1990) on the relationship between reindeer densities and carcass weights became prominent in the decision-making. The model, used and further developed in a number of biological studies (e.g. Ims & Kosmo 2001; Tveraa et al. 2007), presents an inverse relationship between the density of reindeer and weights of individual animals. A former director of the Reindeer Husbandry Administration (government official #3, interview June 2013) expressed concern about the LMD basing their thinking and decisions on one-sided input from one particular academic group, and said that the same researchers were repeatedly invited by the LMD to lecture herders and staff at the Reindeer Husbandry Administration about carrying capacity. Furthermore, the method for estimating carrying capacity seems to have influenced the findings of the working group that had developed indicators for ecologically sustainable reindeer numbers: the indicators – such as carcass weight and the calving percentage of the reindeer – were classified as objective indicators, while traditional criteria of a healthy herd – such as the quality of the animal's coats and the morphology of the

reindeer antlers and body – were classified as subjective and supplementary indicators (Landbruks- og matdepartementet 2008a).

While ecological research in support of destocking and increasing animal weights was referred to by the politicians and government officials, research arguing that the relationship between reindeer numbers and vegetation changes is more complex than indicated by the regression models was neglected (Benjaminsen et al. in press). In addition, based on a much larger sample than Ims & Kosmo (2001), but carrying out the same type of regression analysis, Borgenvik (2014) found much lower correlations between carcass weights and densities of reindeer.

Sara (2011, 142) argues that the current management regime is based on scientific theories that ‘cannot begin to appreciate the subtleties of age-old herding traditions, tailored over centuries to the topography of the land and the specific needs of particular herds throughout the seasons’. He is concerned that herders are requested to develop internal management plans using foreign language and foreign concepts, which are ‘poor substitutes for their own rich and complex understanding of their lands and herds’ (Sara 2011, 142). One regional official said that although the government officials in Oslo had the best intentions for reindeer husbandry, they were ignorant of the complex system made up by this type of livelihood and the herders’ customs (government official #4, interview March 2013). Another official from of the Reindeer Husbandry Administration argued that LMD bureaucrats did not have the necessary scientific insights to address the current challenges of the reindeer industry (government official #2, interview June 2013). The same official explained that the relationship between staff at the Ministry of Food and Agriculture and staff from the Reindeer Husbandry Administration was strained because the LMD would not listen to professional input from the Administration.

The actors had different interpretations of the causes and effects of high reindeer numbers in Finnmark. Interviewed government officials argued that the growing number of reindeer was a result of internal competition within the pastoral community, which led to a ‘tragedy of the commons’. By contrast, interviewed herders provided a more complex explanation, and pointed to a combination of factors: state incentives encouraged calf production; herders slaughtered fewer reindeer than planned due to unreliable access to the market; the state’s introduction of common winter pastures undermined traditional land management and made it possible for some herders to move into new territory as well as to expand their herds; opposition to the state-driven destocking led to a higher reindeer population, competition between pastoral groups and more intensive use of land was increasing; and larger herds and more intensive grazing were used as a way to claim rights to land threatened by encroachment.

Although most of the herders we interviewed were critical of the current production-intensive management regime, some herders in Finnmark were in favour of the regime and argued that they had increased their income by reducing and restructuring their herds according to the state regulations for slaughter and meat production. By adapting to state regulations, these herders were also entitled to state subsidies. They were used as role models to give legitimacy to state regulation of reindeer numbers and their cases were presented in media and at conferences as success stories.

Interviewed critical herders saw the ‘successful’ model herders as being co-opted by the LMD, and pointed to some commonalities that had made it easier for them to adapt to state-promoted reindeer husbandry: the model herders received relatively low destocking requirements because they had easy access to common grazing land for longer periods than most other herders), and they had their winter pastures close to roads and could therefore give their reindeer extra fodder during unfavourable grazing conditions when poor snow

conditions made it difficult for the reindeer to access lichen through the snow (conditions referred to as *guohtun*) (Eira et al. 2010a). Some interviewed herders were critical of how some of the model herders had appropriated parts of the commons for their own benefit, sometimes by fencing in and establishing their own private winter pastures.

Sámi rights

A common aspect of the dominant narrative and the counter-narrative is the focus on indigenous peoples' rights. Both narratives refer to these rights as underlying values and reasons for the actors' argumentation. However, the actors differed in their opinions on whether the decisions on reindeer numbers were in accordance with the Sámi reindeer herders' rights.

In a letter to Kautokeino Municipality, the LMD argued that,

the authorities have an obligation under international law to ensure that future generations have the opportunity to practice reindeer herding and continue the Sámi reindeer herding culture. By protecting the pastures through animal reductions, and by demanding ecological sustainable reindeer husbandry practices, the process [of reducing reindeer numbers] will help fulfil the government's obligations [to international law] (letter dated 17 June 2013).⁶

Further, the LMD argued that the alternative – *not* interfering in the decision-making on reindeer numbers – would have violated international law and the rights of the next generations of Sámi herders (letter from the LMD to the Reindeer Husbandry Administration, dated 28 February 2011; for source, see note 4).

NRL and the Sámi Parliament criticized the Norwegian Parliament for requesting decisions on herd reduction plans before the social and economic impacts of the reduction

plans had been assessed (Sámediggi 2012; NRL n.d.). They argued that a consequence of the reduction plans would be that a number of herders would no longer have enough animals to secure a viable income. Moreover, the enforced reduction of reindeer would affect a large portion of Finnmark's reindeer herders in a negative way. NRL and the Sámi Parliament claimed that prior to the decisions the affected herding districts should have been consulted in accordance with the 2005 agreement on procedures for consultations between the state authorities and the Sámi Parliament (Kommunal- og regionaldepartementet & Sametinget 2005). The herders argued that it was unfair and unreasonable to exclude them from any decision-making that had great impact on their livelihood.

The minutes of the Reindeer Husbandry Board's meeting held in February 2013 show that the majority of the board members were in agreement on the necessity to make decisions that affected individuals in order to preserve pastures for the benefit of the Sámi reindeer husbandry culture (letter from the Reindeer Husbandry Administration to a reindeer herder, dated 27 February 2013).⁷

A leading government official claimed that the decision-making process had 'one hundred per cent legitimacy' (NRK Sápmi 2013) as the decisions were in accordance with the Reindeer Husbandry Act, which had been passed by the Norwegian Parliament after consultation with the herders. The majority of members of the Reindeer Husbandry Board legitimized their decision on reindeer reductions by stating that the rules on pasture use had been developed through a bottom-up approach and that it was the districts' responsibility to ensure that their management plans addressed the needs of the districts and individual herders, and fulfilled the requirements of the law. However, one official at the Reindeer Husbandry Administration agreed with the herders who claimed that the herding districts should have been consulted about reindeer reductions (government official #2, interview June 2013). He was concerned that the decisions might have been in conflict with the law, since on

instructions from the LMD in Oslo the Administration had not consulted herders prior to the decisions on the reduction plans.⁸

Actor rationality

Both the dominant narrative and the counter-narrative provide explanations for the behaviour and rationality of government officials and herders in Finnmark. The dominant narrative describes the herders as irrational actors who do not understand or act according to their own good and thus, the government has had to take certain measures to save indigenous livelihoods. By contrast, the counter-narrative portrays herders as the victims of an arrogant and controlling state.

Lars Peder Brekk, former Minister of Food and Agriculture, described the herders in Finnmark as opportunistic because they let their herds grow at the expense of animal welfare, biodiversity, and their fellow herders (interview August 2012). Eilif Aslaksen, a journalist at the Norwegian Broadcasting Corporation (NRK) reflected the dominant narrative when writing: ‘The collapse of reindeer husbandry reflects failed self-management’ (NRK Sápmi 2010). The journalist claimed that ‘cynicism and greed have developed freely on the tundra [while] Norwegian governments have failed to intervene to prevent the disaster’. Trygve Slagsvold Vedum (former Minister of Food and Agriculture), commented on the herders’ rationality as follows: ‘What is beneficial for the collective community, can be seen as demanding for individuals’ (*Finnmark Dagblad* 2012). He claimed that instead of reducing the size of their herds, herders pointed to the need to reduce numbers in neighbouring herding districts, and he urged herders instead to ‘behave like businesses and ensure sustainable operations’ (*Nationen* 2012). As a response to herders’ perceived irrational behaviour, the Government made it a political goal to ‘develop reindeer husbandry as a rational market-

oriented industry that will be sustainable in the long term' (Landbruks- og matdepartementet 2014b, 13).

However, the interviewed herders claimed that the state had an arrogant attitude to Sámi traditions. They argued that the state-enforced destocking efforts were counter-productive for reducing herd sizes, as the decision-making only created mistrust and opposition amongst the herders towards the authorities. According to one herder, the decision-making became unpredictable and non-transparent (herder #8, interview June 2013). Another herder even claimed that the LMD changed the 'rules of the game just to harm the reindeer industry' (herder #6, interview June 2013). Many of the herders interviewed, supported by interviewed members of the Sámi Parliament as well as staff at the national and regional Reindeer Husbandry Administration, said that it seemed as if the LMD had set a politically acceptable number of reindeer for Finnmark before the herding districts were tasked with identifying the maximum sustainable numbers of reindeer. One of the Administration's officials said it seemed as though it was more important for the LMD to achieve a specific target than to facilitate a bottom-up decision-making process as first agreed (government official #2, interview June 2013). The interviewed herders speculated that the LMD's motivation was to wipe out reindeer husbandry in order to facilitate the exploitation of natural resources (e.g. minerals) of the high north.

We have shown a clear contrast between how the main actors described their own rationality and the rationality of the other actor group: government officials as responsible rescuers as opposed to arrogant and controlling; and herders as irrational and backward as opposed to powerless victims. Thus, the two narratives on reindeer management present the archetypes of heroes, villains, and victims, archetypes that recur in global environmental discourses (Adger et al. 2001). The dominant narrative portrays the herders as villains and the state as hero, while the counter-narrative describes the state as the villain and the herders as

victims. However, our findings also show that there were discrepancies within the actor groups. State officials interpreted the West Finnmark herders' behaviour differently depending on where they worked within the management system, whether in the Reindeer Husbandry Administration in West Finnmark, the central Administration in Alta in Finnmark, or the LMD headquarters in Oslo. The lower down in the hierarchy – and the geographically closer to the reindeer herders – the more nuanced were the state officials' views of reindeer herders' rationality. Although all interviewed state officials agreed to a certain extent that there is a need for destocking, staff at the regional Reindeer Husbandry Administration also sympathized with the claim that state's decision-making was unpredictable and non-transparent, thus making it challenging for the herders to influence this decision-making. Some government officials at the Reindeer Administration in Finnmark were even very critical of how the LMD in Oslo had interfered in the processes of setting reindeer numbers and making reduction plans (government officials #2, #3, and #5, respective interviews June 2013, August 2013, and January 2014).

Seeing like the state or like pastoralists

The state and reindeer herders have contradicting narratives on the governance of reindeer pastoralism, but why is the LMD's perspective well known and recognized amongst the general public, in contrast to the herders' alternative perspective? In the following, we examine how the dominant narrative marginalizes the counter-narrative.

The dominant narrative – that there are too many reindeer and the herders lack ability to take responsibility – is a presentation that seems to resonate well with the general public. In recent decades, the media has presented stories about too many reindeer, which cause desertification, lead to reindeer grazing on farmers' crops and in private gardens, block

industrial development, and result in increased conflicts with the conservation of protected predators. In 2009, the LMD even promoted destocking reindeer herds as a measure to cut greenhouse gases (St.meld nr. 39 (2008–2009)). The LMD stated that methane emissions from domesticated reindeer in Norway were equivalent to 53,000 tonnes of CO₂ per year and argued that destocking the herds by 30,000 animals would reduce the national emissions of greenhouse gases by c.10,000 tonnes of CO₂ equivalents per year (St.meld nr. 39 (2008–2009)).

Thus, ‘too many reindeer’ has been presented as a problem for Norwegian society in many different ways: too many reindeer threaten biodiversity, hamper animal welfare, block economic development, contribute to global warming, and claim too much space. Since most Norwegians might internalize one or several of these problems as a concern, the narrative might resonate with many different interest groups. The dominant narrative therefore unites ‘communities that might otherwise seem disparate’ (Robbins 2012, 140), such as environmentalists and mining companies.

The Norwegian state’s narrative on reindeer husbandry is neither new nor original. There are long historical continuities in how states tend to see pastoralism. For example, since colonialism, African states have perceived pastoral systems as unproductive (regarded as not contributing to national economies), unorganized (as pastoralists are considered to roam around), and environmentally destructive (because they are seen as causes of overgrazing and desertification) (Pedersen & Benjaminsen 2008; Benjaminsen et al. 2009). The Norwegian state’s narrative on ‘too many reindeer’ falls into a global neo-Malthusian discourse on land degradation and desertification (Adger et al. 2001).

The Norwegian state management of reindeer husbandry is vested in the Ministry of Food and Agriculture (LMD), and government officials use agricultural theories to describe and measure sustainable reindeer husbandry, with a focus on standardizing the herd structure.

However, in traditional Sámi reindeer husbandry attention is paid to structuring a herd to fit the landscape and available pastures, and finding the right mix of animals of different sex and ages to utilize the various pastures and ease migration (Oskal 2000; Paine 2004). By defining and modelling sustainable reindeer husbandry in terms of ‘modern’ agriculture, the state has redefined what reindeer husbandry ought to be (Paine 1996). As herders in Finnmark have to a lesser degree than other herders adapted to the state definition of ‘proper’ reindeer husbandry, they are regarded as less successful and less capable. Their characterization as ‘irrational’ herders is used to legitimize the need for a controlling state.

Debates about rational herding and sustainable reindeer husbandry take place also in Sweden and Finland. Heikkilä (2006, 79–80) argues that the approach to nature as a resource and the integration of ‘the idea of production rationality into environmental management practices’ was emphasized in both Finland and Norway during the 1990s. Based on a study of pasture management in Sweden, Beach (2004) argues that the focus on the ‘sustainable development’ of reindeer husbandry legitimized state control and management of the Sámi traditional livelihood. He presents the term ‘eco-colonialism’ to describe the practice of using ecological arguments to increase regulation of the Sámi herders. With a focus on Finland, Heikkinen et al. (2007) argue that reindeer husbandry management that emphasizes ecological carrying capacity and economic rationalization erodes the sociocultural sustainability of traditional Sámi reindeer husbandry.

In his book *Seeing Like a State*, Scott sets out ‘to understand why the state has always seemed to be the enemy of “people who move around”’ (Scott 1998, 1). He argues that states tend to see mobile people as threats to classic state functions such as taxation, conscription, and the prevention of conflict or rebellion. This leads states to attempt to make complex land and resource use ‘legible’ and ‘simplified’. Hence, simplification and standardization of pastoral landscapes and practices form part of the state’s attempts at making society ‘legible’.

Following up on this idea, Li (2007) says that in the art of governing, the state needs to establish a serious problem that its policy will solve. In the case of pastoralism, this will often take the form of ‘overgrazing’, economic ‘inefficiency’, or increased land-use conflicts. Thereafter, the state may claim that this problem can only be solved through scientific and technical means. Li (2007) calls these two steps ‘problematization’ and ‘rendering technical’, and science plays a key role in both steps. According to Berkes (2008), the positivist-reductionist approach in Western science has dominated contemporary resource management and has synthesized knowledge about the world into ‘value-free’ generalizations independent of context, space, and time. Heikkinen et al. (2007) argue that there is a tendency within governance of reindeer pastoralism to detach the economic and ecological variables from broader political, economic, and ecological contexts, and not to recognize the interplay between the variables and the politics of power and knowledge. Hence, problems that are rendered technical by government policy and practice are simultaneously rendered non-political.

In the case of Sámi reindeer pastoralism in Norway, the simplification, standardization, and ‘rendering technical’ take place when government officials both define the challenges of reindeer husbandry in Finnmark and when they define the solutions to these challenges. As we have shown, the stated political objective is to ensure sustainable reindeer husbandry (St.meld nr. 28 (1991–1992)) and to ‘develop reindeer husbandry as a rational market-oriented industry’ (Landbruks- og matdepartementet 2014b, 13). Further, the LMD has identified ‘too many reindeer’ as the main threat to achieving this objective in Finnmark. According to government officials, solving the problem of too many reindeer will also solve related concerns such as overgrazing, animal welfare, economic inefficiency, and land-use conflicts.

The state and its experts argue and act as though they ‘*know* what pastoral utility and

profitability should be (and they have a unitary view of it)' (Paine 1992, 13; emphasis and parenthesis in the original text). Norwegian values and premises have therefore become models for Sámi pastoralism (Paine 2004), and as Heikkilä (2006, 83) observed in Finland, 'herders are not regarded as experts in their own field'. Herders who wish to make an effective and valid case have to adapt their argumentation and rational to the authorities' view of reality (Heikkilä 2006). In this reality one particular technical approach is used to assess whether or not reindeer herds are adjusted to the grazing land. First, the average carcass weights are examined, and if the weights are below a desired level, the conclusion is drawn that the herd is beyond carrying capacity. Next, a regression model based on the idea of density-dependent carcass weights is used to identify the 'proper' herd size for a herding district. The terminology used by government officials to describe sustainable reindeer numbers further reflects the state's simplified view of reindeer husbandry, as the carcass weights are divided into three 'traffic light' categories: green, yellow, and red (*Reindriftnytt* 2012). Weights that give a green light indicate sustainability, while yellow blinking lights and red lights indicates too many reindeer (government official #8, interview August 2012).

The standardization of the herd structure and setting maximum reindeer numbers are tools designed to simplify the reindeer sector and to render it technical and thereby legible to bureaucrats in the LMD and other government offices. However, governance of reindeer pastoralism based on these simplifications leaves little room for the herders' complex situated and local knowledge of reindeer and pasture management, and may even undermine it. Traditional elements of Sámi reindeer management, such as diversity, flexibility, and mobility, build adaptive capacity to deal with habitat fragmentation, pasture degradation, and climate change (Mathiesen et al. 2013). The herders' knowledge includes how to use pastures and alter migration patterns to adapt to weather conditions or insect plagues, and the size and composition of the herd depends on the location, quality, and quantity of available pastures

(Paine 1996). The consequence of undermining traditional knowledge is a weakening of the adaptive capacity in reindeer herding communities (Mathiesen et al. 2013).

Robbins (2006) argues that whether a knowledge system is recognized as legitimate depends on the economic and discursive power of the knowledge promoters. In his study of environmental knowledge and power in the greater Northern Yellowstone region, he found that the least economically powerful actors (the local hunters) were marginalized in discussions on resource management; the local hunters' knowledge was dismissed as 'barstool biology'. Labelling hunters as ignorant created antipathy for their arguments in the discussion on wildlife conservation and legitimized management practices, which in turn reduced the local hunters' traditional access to hunting and nature (Robbins 2006). In a case study of politics, administration, and planning in the Danish town of Aalborg, Flyvbjerg (1998, 117) explains that it 'is not whether one or the other interpretation is "correct" or "true" but which party can put the greatest power behind its interpretation'. He argues that 'power produces knowledge, knowledge produces power' (Flyvbjerg 2004, 293). Robbins (2012) too argues that the persistence of particular narratives is a cause and consequence of their power in decision-making policy management. In Norway, the narrative about too many reindeer has been presented repeatedly for several decades (NTB 1978; 1992; 1999a; NRK Sápmi 2015; *Aftenposten* 2011a; NRK 2012; *Nationen* 2014).

In the competing efforts of the state and the herders to define 'proper' reindeer husbandry, the actors have unequal access to information and decision-making as well as uneven access to arenas for promoting their stories, which skews the power relation between them (Dryzek 2005). The dominant narrative is often reflected in the media, online discussions, and in debates in the Norwegian Parliament, whereas the counter-narrative is rarely presented in Norwegian public debates. Norwegian society at large has varying perceptions of the credibility of the respective actors. While government officials are regarded

as objective, Sámi herders are seen as subjective and acting to maximize their own gain. This perception is reinforced by the media's rather one-sided presentations of reindeer herders who exploit the state's weakness and naivety regarding the reindeer industry (NRK Sápmi 2010; 2011; 2012; *Altaposten* 2011; 2012a; 2012b). At the same time, the LMD and the Reindeer Husbandry Administration promote herders that have 'properly' adapted to the governance regime and present these as success stories (*Altaposten* 2013; *Reindriftnytt* 2013; *Finnmark Dagblad* 2014).

In August 2013, the LMD and NRL co-hosted a conference with the stated purpose of enabling the actors to create a better dialogue between herders and government on challenges to reindeer husbandry. However, while a number of the keynote speakers, including a researcher and a herder from West Finnmark, gave presentations supporting the dominant narrative, none of the presentations represented the herders' counter-narrative. The only opportunity to put forward alternative perspectives was through brief comments or questions from the audience. Consequently, the dominant narrative was not challenged and a balanced dialogue between the actors did not occur.

Conclusions

Two contrasting perspectives on self-management in the governance of reindeer pastoralism have been examined: a dominant policy narrative claiming that pastoralists enjoy considerable decision-making power and explains growing reindeer numbers by a 'tragedy of the commons' and the pastoralists' counter-narrative arguing that there are obstacles to participation in practice and that the state-driven decision-making processes lack transparency and predictability. Our findings show that both the LMD and herders used arguments of *participation, knowledge, Sámi rights, and actor rationality* to provide legitimacy for their

own narratives.

The dominant narrative is recognizable as it is part of a global environmental discourse on land degradation and desertification caused by overstocking of pastoral land (Adger et al. 2001). By attributing full responsibility for overstocking and land degradation to the herders, the dominant narrative establishes herders as villains driven by the aim to maximize their own gain. The story of the irrational pastoralist creates antipathy for the herders and serves to legitimize the need for a responsive and controlling state.

Furthermore, the narrative of ‘too many reindeer’ is usually modified to fit different audiences, but is often portrayed as a threat to society at large: overstocking is said to threaten biodiversity, hamper animal welfare, threaten economic development, and contribute to global warming. Thus, groups with different and sometimes conflicting agendas use the dominant narrative and promote destocking to advocate their interests.

We have shown that the LMD defines the solutions to the problem of too many reindeer by simplifying and rendering Sámi reindeer husbandry technical: informed by certain scientific contributions, vegetation changes and animal weights are used to guide decision-making. Destocking is presented as the solution to ensure a ‘proper’ reindeer industry that is ecologically sustainable and economically rational. The interplay between the economic and ecological variables and the politics of power and knowledge is not recognized (Heikkinen et al. 2007). The dominant narrative presents a view of herders that do not accept government instructions concerning reindeer husbandry as being ignorant, and stories of irrational herders have become more powerful than stories of victimized herders presented in the counter-narrative.

The consistency in the way the dominant narrative is told is both a cause and consequence of the authority this narrative is given (Robbins 2012). While the herders’ counter-narrative is rarely reflected in public, we find the LMD’s narrative presented

regularly in governmental documents, media presentations, and in political debates in the Norwegian Parliament. Also, the media plays a role in legitimizing the LMD's perspectives by rather one-sided presentation of the dominant narrative. One consequence is that in Norwegian public debates it has become a truth that Sámi pastoralists are overstocking and degrading the land to maximize their own benefits. However, while the dominant narrative is recognized by the general public, the herders' counter-narrative remains marginalized.

Notes

1 The Norwegian Reindeer Husbandry Administration, organized as part of the LMD, functions as secretariat for the Reindeer Husbandry Board. In July 2014 the Reindeer Husbandry Administration was merged with the Norwegian Agricultural Authority (*Statens landbruksforvaltning*) and became the Norwegian Agriculture Agency (*Landbruksdirektoratet*) (Landbruks- og matdepartementet 2014a).

2 The overall objective of the strategy 'is to create sustainable growth and development in the High North' (Norwegian Ministry of Foreign Affairs 2006, 7). In the follow-up to this strategy there has been a strong focus on facilitating a 'new industrial age in the High North' (Norwegian Ministry of Foreign Affairs 2011, 15).

3 An epistemological approach in qualitative studies that provides a strategy for developing theories grounded in empirical knowledge and induction (Svarstad 2010).

4 A copy of the letter was requested from the archives of the LMD and the Reindeer Husbandry Administration and was received in March 2014.

5 Copy received in October 2013 of letter dated 15 April 2012 from the herders' lawyer to the Reindeer Husbandry Administration.

6 A copy of the letter dated 18 June 2013 was provided by a member of Kautokeino Municipal

Council.

7 A copy of the letter dated was provided by the recipient in October 2013.

8 Based on instructions and guidance from the LMD, the Reindeer Husbandry Administration developed guidelines on how to interpret the 2007 Act and procedures for issuing orders for reindeer number reductions (Reindrifststyret, 'Grunnlagsdokument – Reindrifstloven §60 – Vedtak om pålegg om forholdsmessig reduksjon. 63/12. Møtedato: 6. desember 2012'; copy of the document provided by the Reindeer Husbandry Administration from the archives of the LMD and the Administration). The guidelines were adopted by the Reindeer Husbandry Board.

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References

- ABC Nyheter*. 2009. Frp-stormløp mot samiske rettigheter. 22 May.
<http://www.abcnyheter.no/nyheter/politikk/090522/frp-stormlop-mot-samiske-rettigheter> (accessed 4 February 2015).
- Adger, W.N., Benjaminsen, T.A., Brown, K. & Svarstad, H. 2001. Advancing a political ecology of global environmental discourses. *Development and Change* 32, 681–715.
- Aftenposten*. 2011a. Departementet truer med tvangsslakting av 80000 reinsdyr.
<http://www.aftenposten.no/iriks/Departementet-truer-med-tvangsslakting-av-80000-rein-6318937.html> (accessed 20 September 2014).
- Aftenposten*. 2011b. Statsråd truer med masseslakt av rein.
<http://www.aftenposten.no/nyheter/Statsrd-truer-med-masseslakt-av-rein-6722084.html> (accessed 20 September 2014).
- Aftenposten Morgen*. 2012. Næringen må tilpasse seg beitegrunnet, *Aftenposten* 25 September, pp. 4–5.
- Agrawal, A. & Gibson, C.C. 1999. Enchantment and disenchantment: The role of community in natural resource conservation. *World Development*, 27, 629–649.
- Altaposten*. 2011. Få i gang dialogen. 19 December.
- Altaposten*. 2012a. Pusekattene: Det er pusekatt-politikk som gjør at reinen er mager. 22 February.
- Altaposten*. 2012b. Riksrevisjonens refs. 18 June.
- Altaposten*. 2013. Reduksjonenn virker etter hensikten. 27 August, p. 3.
- Beach, H. 2004. Political scology in Swedish Saamiland. Anderson, D.G. & Nuttall, M. (eds.) *Cultivating Arctic Landscapes: Knowing and Managing Animals in the Circumpolar North*, 110–123. New York: Berghahn Books.
- Benjaminsen, T.A. & Svarstad, H. 2008. Understanding traditionalist opposition to

- modernization: Narrative production in a Norwegian mountain conflict. *Geografiska Annaler: Series B, Human Geography* 90, 49–62.
- Benjaminsen, T.A., Maganga, F.P. & Abdallah, J.M. 2009. The Kilosa killings: Political ecology of a farmer-herder conflict in Tanzania. *Development and Change* 40, 423–445.
- Benjaminsen, T.A., Reinert, H., Sjaastad, E. & Sara, M.N. In press. Misreading the Arctic landscape: A political ecology of reindeer, carrying capacities and ‘overstocking’ in Finnmark, Norway. *Norsk Geografisk Tidsskrift–Norwegian Journal of Geography*.
- Berkes, F. 2008. *Sacred Ecology*, 2nd ed. New York: Routledge.
- Borgenvik, J. 2014. ‘When You Think Like the State’: *The Political Ecology of Pastoral Modernization in Finnmark, Norway*. MSc thesis. Ås: Department of International Environment and Development Studies, Norwegian University of Life Sciences.
- Brekke, L.P. 2011. Reindrif skal styres. *Dagbladet* 29 March, p. 73.
- Bridge, G. & Perreault, T. 2009. Environmental governance. Castree, N., Demeritt, D., Liverman, D. & Rhoads, B. (eds.) *A Companion to Environmental Geography*, 475–497. Singapore: Blackwell Publishing.
- Dryzek, J.S. 2005. *The Politics of the Earth: Environmental Discourses*. Oxford: Oxford University Press.
- Eira, I.M.G., Henrik, M.O. & Eira, N.I. 2010. Muohtatearpmaid sisdoallu ja geavahus. *Sámi dieđalaš áigečála* 2/2010, 3–24.
- Finnmark Dagblad*. 2012. Mye bedre enn i fjor. 29 September, pp. 14–17.
- Finnmark Dagblad*. 2014. Rein lykke for ministeren.
<http://www.finnmarkdagblad.no/nyheter/article7195728.ece> (accessed 10 March 2014).
- Flyvbjerg, B. 1998. *Rationality and Power: Democracy in Practice*. Chicago: University of

Chicago Presso.

Flyvbjerg, B. 2004. Phronetic planning research: Theoretical and methodological reflections.

Planning Theory & Practice 5, 283–306.

forskning.no 2010. For mange rein. <http://www.forskning.no/artikler/2010/februar/242206>

(accessed 22 January 2014).

Forsyth, T. 2008. *Critical realism and political ecology*. LSE Research Online.

http://eprints.lse.ac.uk/4760/1/Critical_realism_and_political_ecology_%28LSERO%29.pdf (accessed 20 December 2012).

Fremskrittspartiet. 2014. *Sametinget bremsekloss for utvikling i nord*. 13 March.

<http://www.frp.no/nor/fylke/Velg-ditt-fylke/Sametingsgruppen2/Sametinget-bremsekloss-for-utvikling-i-nord> (accessed 4 February 2015).

Heikkilä, L. 2006. The comparison of indigenous and scientific perceptions of reindeer

management. Forbes, B., Bölter, M., Müller-Wille, L., Hukkinen, J., Müller, F.,

Gunslay, N. & Konstantinov, Y. (eds.) *Reindeer Management in Northernmost*

Europe, 73–93. Berlin: Springer.

Heikkinen, H.I., Lakomäki, S. & Baldrige, J. 2007. The dimensions of sustainability and the

neo-entrepreneurial adaptation strategies in reindeer herding in Finland. *Journal of*

Ecological Anthropology 11, 25–42.

Ims, A.A. & Kosmo, A.J. 2001. *Høyeste reintall for distriktene i Vest-Finnmark*. [Alta]:

Reindriftsforvaltningen.

Kommunal- og regionaldepartementet & Sametinget. 2005. *Prosedyrer for konsultasjoner*

mellom statlige myndigheter og Sametinget.

[https://www.regjeringen.no/nb/tema/urfolk-og-](https://www.regjeringen.no/nb/tema/urfolk-og-minoriteter/samepolitikk/midtspalte/prosedyrer-for-konsultasjoner-mellom-sta/id450743/)

[minoriteter/samepolitikk/midtspalte/prosedyrer-for-konsultasjoner-mellom-](https://www.regjeringen.no/nb/tema/urfolk-og-minoriteter/samepolitikk/midtspalte/prosedyrer-for-konsultasjoner-mellom-sta/id450743/)

[sta/id450743/](https://www.regjeringen.no/nb/tema/urfolk-og-minoriteter/samepolitikk/midtspalte/prosedyrer-for-konsultasjoner-mellom-sta/id450743/) (accessed 4 February 2015).

- Lenvik, D. 1990. Flokkstrukturering: tiltak for lønnsom plassering og ressurstilpasset reindrift. *Rangifer* 4, 21–35.
- Li, T.M. 2007. *The Will to Improve: Governmentality, Development, and the Practice of Politics*. Durham, NC: Duke University Press.
- Landbruks- og matdepartementet. 2008a. *Kriterier/indikatorer på økologisk bærekraftig reintall*. Rapport fra arbeidsgruppe opprettet av Landbruks- og matdepartementet. http://www.regjeringen.no/upload/LMD/Vedlegg/Brosjyrer_veiledere_rapporter/Rapport_okologisk_reintallskriterier.pdf (accessed 20 September 2014).
- Landbruks- og matdepartementet. 2008b. *Veileder for fastsetting av økologisk bærekraftig reintall*. Landbruks- og matdepartementet http://www.regjeringen.no/upload/LMD/Vedlegg/Brosjyrer_veiledere_rapporter/Veileder_fastsetting_okologisk_baerekraftig_reintall_des_2008.pdf (accessed 20 September 2014).
- Landbruks- og matdepartementet. 2009. *Instruks vedrørende Reindrifststyrets oppnevning og virksomhet*. http://www.reindrift.no/asset/1292/1/1292_1.pdf (accessed 20 September 2014).
- Landbruks- og matdepartementet. 2013. *Endringer i reindrifstforvaltningen*. <http://www.regjeringen.no/nb/dokumentarkiv/stoltenberg-ii/lmd/Nyheter-og-pressemeldinger/nyheter/2013/endringer-i-reindrifstforvaltningen.html?id=720652> (accessed 29 October 2013).
- Landbruks- og matdepartementet. 2014a. *Endringer i organiseringen av den offentlige forvaltningen av reindriften*. <http://www.regjeringen.no/nb/dep/lmd/aktuelt/nyheter/2014/jan-14/endringer-i-organiseringen-av-den-offent.html?id=749637> (accessed 27 January 2014).
- Landbruks- og matdepartementet. 2014b. *Statens tilbud ved reindrifstavtaleforhandlingene*

for avtaleåret 2014/2015.

http://www.regjeringen.no/upload/LMD/Vedlegg/div/STATENS_TILBUD_TIL_NRL_2014-2015.pdf (accessed 29 January 2014).

Landbruks- og matdepartementet & Reindriftsforvaltningen. 2007. *Orientering om Reindriftsloven av 15. juni 2007*. Landbruks- og matdepartementet, Oslo.

Nationen. 2012. Reintallet må ned. 28 September, p. 2.

Nationen. 2014. Nesten 100.000 reinsdyr døde på vidda i fjor.

<http://www.nationen.no/naering/nesten-100-000-reinsdyr-dode-pa-vidda-i-fjor/> (accessed 30 May 2014).

Nordlys. 2005. Vil åpne for tvangsslakting. 3 June, p. 13.

Norwegian Ministry of Foreign Affairs. 2006. *The Norwegian Government's High North*

Strategy. <https://www.regjeringen.no/globalassets/upload/ud/vedlegg/strategien.pdf> (accessed 6 March 2015).

Norwegian Ministry of Foreign Affairs. 2011. *The High North – Visions and Strategies*.

https://www.regjeringen.no/globalassets/upload/ud/vedlegg/nordomradene/ud_nordomrodene_innmat_en_web.pdf (accessed 6 March 2015). NRK. 2012. *Frykter massedød på vidda*. <http://www.nrk.no/nordnytt/frykter-massedod-pa-vidda-1.7988373> (accessed 30 May 2014).

NRK Sápmi. 2010. *Den varslede tragedien*. http://nrk.no/kanal/nrk_sapmi/1.7424247

(accessed 28 October 2012).

NRK Sápmi. 2015. *Frykter sultkatastrofe på vidda*. <http://www.nrk.no/sapmi/frykter-sultkatastrofe-pa-vidda-1.7382888>

(accessed 4 February 2015).

NRK Sápmi. 2011. *Vil være tøffere enn forgjengerne*.

http://www.nrk.no/kanal/nrk_sapmi/1.7608423 (accessed 21 December 2013).

NRK Sápmi. 2012. *Reintallet må ned*. http://www.nrk.no/kanal/nrk_sapmi/1.8199481

- (accessed 30 May 2014).
- NRK Sápmi. 2013. *Vi følger reindrifsløven*. http://www.nrk.no/kanal/nrk_sapmi/1.10921290
(accessed 17 December 2013).
- NRL. n.d. *De menneskelige sidene ved en reintallsreduksjon må ivaretas*. http://www.nrl-nbr.no/index.php?option=com_content&view=article&id=365:pressemeling (accessed 2 June 2014).
- NTB. 1978. *Reindriften truer naturen i Finnmark*. 28 October.
- NTB. 1992. *For mange reinsdyr i Finnmark*. 11 June.
- NTB. 1999a. *Krisemøte om reindriften*. 18 January.
- NTB. 1999b. *Mot harde tak i reindriften*. 16 March.
- Oskal, N. 2000. On nature and reindeer luck. *Rangifer* 20, 175–180.
- Paine, R. 1992. Social construction of the ‘tragedy of the commons’ and Saami reindeer pastoralism. *Acta Borealia*, 9, 3–20.
- Paine, R. 1996. Saami reindeer pastoralism & the Norwegian state, 1960s–1990s. *Nomadic Peoples* 38, 125–136.
- Paine, R. 2004. Saami reindeer pastoralism: Quo vadis? *Ethnos* 69, 23–42.
- Pedersen, J. & Benjaminsen, T.A. 2008. One leg or two? Food security and pastoralism in the northern Sahel. *Human Ecology* 36, 43–57.
- Reindriftsforvaltningen. 2009. *Veileder for utarbeidelse av bruksregler*.
http://www.reindrift.no/asset/1145/1/1145_1.pdf (accessed 20 September 2014).
- Reindriftsforvaltningen. 2012. *Reintallsoversikt*. <http://www.reindrift.no/?id=6523&subid=0>
(accessed 29 January 2014).
- Reindriftsforvaltningen. 2013. *Ressursregnskap for reindriftnæringen: for reindriftsåret 1. april 2011 – 31. mars 2012*. http://www.reindrift.no/asset/6609/1/6609_1.pdf
(accessed 4 February 2015).

- Reindrifftsforvaltningen. 2014. *Ressursregnskap for reindrifftsnaeringen: for reindrifftsåret 1. april 2012 – 31. mars 2013*. http://www.reindrifft.no/asset/6800/1/6800_1.pdf (accessed 4 February 2015).
- Reindrifftsnytt*. 2012. Varsellysene for reindrifften. *Reindrifftsnytt* Vol. 4, pp. 14–15. Alta: Reindrifftsforvaltningen.
- Reindrifftsnytt*. 2013. Reindrifftsforvaltningen presiserer: For økt lønnsomhet i reindriffta – slakt mer kalv. *Reindrifftsnytt* Vol. 2, pp. 34–39). Alta: Reindrifftsforvaltningen.
- Riksrevisjonen. 2004. *Riksrevisjonens undersøkelse av bærekraftig bruk av reinbeiteressursene i Finnmark*. Document nr. 3:12 (2003–2004). https://www.riksrevisjonen.no/SiteCollectionDocuments/Dokumentbasen/Dokument3/2003-2004/Dok_3_12_2003_2004.pdf (accessed 4 February 2015)
- Riksrevisjonen. 2012. *Riksrevisjonens undersøkelse av bærekraftig reindrifft i Finnmark*. Dokument 3:14 (2011–2012). https://www.riksrevisjonen.no/rapporter/Documents/2011-2012/Dokumentbase_3_14_2011_2012.pdf (accessed 4 February 2015).
- Riseth, J.Å. 2013. Reindriffta i Nord-Norge: Fra vikeplikt til bærekraft? Jentoft, S., Nergård, J.-I. & Røvik, K.A. (eds.) *Hvor går Nord-Norge?* Bind 3. *Politiske tidslinjer*, 401–416. Stamsund: Orkana akademisk.
- Robbins, P. 2006. The politics of barstool biology: Environmental knowledge and power in greater Northern Yellowstone. *Geoforum* 37, 185–199.
- Robbins, P. 2012. *Political Ecology: A Critical Introduction*. Chichester: Wiley-Blackwell.
- Roe, E.M. 1991. Development narratives, or making the best of blueprint development. *World Development* 19, 287–300.
- Sámediggi. 2012. *Reinstallstilpasning i Finnmark*. Ášši/Sak SP 059/12. http://innsyn2.e-kommune.no/innsyn_sametinget_norsk/wfdocument.aspx?journalpostid=2012033255

- &dokid=414166&versjon=5&variant=A&ct=RA-PDF (accessed 21 September 2014).
- Sámediggi. n.d. *Report to the United Nations – Norway's Compliance with the Covenant on Civil and Political Rights 2005–2009*.
http://omega.regjeringen.no/pages/15244703/Sametinget_skyggerappport.pdf (accessed 4 February 2015).
- Sara, M.N. 2009. Siida and traditional Sámi reindeer herding knowledge. *Northern Review* 30(Spring 2009), 153–178.
- Sara, M.N. 2011. Land usage and siida autonomy. *Arctic Review of Law and Politics* 3, 138–158.
- Scott, J.C. 1998. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven CT: Yale University Press.
- Skogvang, S.F. (2013. *Sameparagrafen: Store norske leksikon*. <http://snl.no/Sameparagrafen> (accessed 29 October 2013).
- St.meld. nr. 28 (1991–1992). *En bærekraftig reindrift*. Oslo: Landbruks- og matdepartementet.
- St.meld nr. 39 (2008–2009). *Klimautfordringene – landbruket en del av løsningen*. Landbruks- og matdepartementet, Oslo.
<http://www.regjeringen.no/pages/2196816/PDFS/STM200820090039000DDDPDFS.pdf> (accessed 20 September 2014).
- Stortinget. 2013. *Innstilling fra kontroll- og konstitusjonskomiteen om Riksrevisjonens undersøkelse av bærekraftig reindrift i Finnmark*. <http://www.stortinget.no/no/Saker-og-publikasjoner/Publikasjoner/Referater/Stortinget/2012-2013/130124/1/> (accessed 5 February 2013).
- Svarstad, H. 2010. Why hiking? Rationality and reflexivity within three categories of meaning construction. *Journal of Leisure Research* 42, 91–110.

Tveraa, T., Fauchald, P., Gilles Yoccoz, N., Anker Ims, R., Aanes, R. & Arild Høgda, K.

2007. What regulate and limit reindeer populations in Norway? *Oikos* 116, 706–715.

Vik, M.L., Benjaminsen, T.A. & Daugstad, K. 2010. Synergy or marginalisation? Narratives of farming and tourism in Geiranger, western Norway. *Norsk Geografisk Tidsskrift–Norwegian Journal of Geography* 64, 36–47.

Vistnes, I.I., Burgess, P., Mathiesen, S.D., Nellemann, C., Oskal, A. & Turi, J.M. 2009.

Reindeer Husbandry and Barents 2030: Impact of Future Petroleum Ddevelopment on Reindeer Husbandry in the Barents Region. Alta: International Centre for Reindeer Husbandry.