



Norwegian University of Life Sciences  
Department of International Environment  
and Development Studies, Noragric  
Faculty of Landscape and Society

Philosophiae Doctor (PhD)  
Thesis 2018:87

# **Conflicting knowledges, competing worldviews: Norwegian governance of Sámi reindeer husbandry in West Finnmark, Norway**

Motstridende kunnskap, konkurrerende verdensbilder: Norsk forvaltning av samisk reindrift i Vest-Finnmark, Norge

Kathrine Ivsett Johnsen



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*Tenk deg at du er inne i et hus med igjenlåste dører og vinduer.  
Til tross for at alle utganger er stengt, påstår myndighetene  
at du selv kan bestemme når du vil forlate huset.*

*Imagine you're in a house with locked doors and windows.  
Despite the fact that all the exits are closed, the authorities claim  
that you can decide to leave the house whenever you wish.*

– Female reindeer pastoralist from West Finnmark about self-governance in Sámi  
reindeer husbandry, interviewed June 2013



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## PART 2

**Paper 1:** Johnsen, KI, Benjaminsen, TA, & Eira, IMG. (2015). Seeing like the state or like pastoralists? Conflicting narratives on the governance of Sámi reindeer husbandry in Finnmark, Norway. *Norsk Geografisk Tidsskrift – Norwegian Journal of Geography*, 69(4), 230–241. doi:10.1080/00291951.2015.1033747

**Paper 2:** Johnsen, KI. (2016). Land-use conflicts between reindeer husbandry and mineral extraction in Finnmark, Norway: Contested rationalities and the politics of belonging. *Polar Geography*, 39(1), 58–79.  
doi:10.1080/1088937X.2016.1156181

**Paper 3:** Johnsen, KI, & Benjaminsen, TA. (2017). The art of governing and everyday resistance: "rationalization" of Sámi reindeer husbandry in Norway since the 1970s. *Acta Borealia*, 34(1), 1–25. doi:10.1080/08003831.2017.1317981

**Paper 4:** Johnsen, KI, Eira, IMG, & Mathiesen, SD. (2017). Sámi reindeer governance in Norway as competing knowledge-systems: A participatory study. *Ecology and Society*, 22(4), Article 33. doi:https://doi.org/10.5751/ES-09786-220433



## Summary

This thesis contributes to the field of political ecology by presenting an empirically driven analysis of the power dynamics between the state and Sámi reindeer herders and the knowledge systems that inform the governance of reindeer husbandry. The phenomenon studied consists of the actors' competing accounts of what reindeer husbandry *is* and what it *ought* to be. This phenomenon is addressed through four research questions:

1. What values and knowledge systems inform the actors' presentations about reindeer husbandry?
2. What are the actors' presentations of the 'proper' management of reindeer, herders and land?
3. How do the actors influence and claim authority in decision-making concerning reindeer husbandry?
4. How does the state's governance of reindeer husbandry affect power relations among the actors?

The research was qualitative. The core data have been collected from in-depth interviews and informal conversations with herders and government officials in the 2012–2015 period. One of the case studies of the thesis was based on participatory research. The study has also been informed by direct observations of meetings between the actors and written sources such as government documents, letters between the actors and scientific publications.

The study used a grounded theory approach to conceptualise the information that was collected. It engages the concepts of *governmentality*, *weapons of the weak*, *politics of belonging* and *political ontology* – concepts that were useful in the analysis of how policies meet practice, and how state regulations affect power relations between the state and herders, as well as within the herding community.

The geographical scope of the study is West Finnmark, in the far north of Norway. This is the largest reindeer-herding region in terms of numbers of reindeer and herders.

For more than a century, the Norwegian state has been concerned that there are ‘too many reindeer’ and ‘too many herders’ in West Finnmark. The state has therefore used regulations and incentives since the late 1970s to rationalise reindeer husbandry to make it economically efficient. Since 1992, sustainability has been an added objective. To make decision-making more effective, new policies were introduced in 2007 to strengthen the aspect of self-governance within reindeer husbandry. At the same time, it also increased the state’s capacity for sanctioning unwanted herding practices. Although the rationalisation policies have been in place for 40 years, government officials state that this objective has not been met. West Finnmark has specifically been identified as a region where herding practices continue to be irrational. At the same time, the region faces an increasing number of land-use conflicts between reindeer herders and other interests such as mining, wind power and hydropower installations, and roads and other types of urban development. The state’s destocking efforts and the land-use conflicts form the backdrop of the study.

The thesis is built on four separate, but interrelated papers. They explore the actors’ narratives about decision-making related to reindeer husbandry, techniques for governing and being governed. The papers also report on the conflicting knowledge systems and competing worldviews that inform the actors’ presentations about ‘proper’ management of reindeer, herders and the land on which reindeer husbandry depends. Further, the papers explore the power structures that affect the actors’ ability to present their accounts and their ability to be understood by society at large. They examine how the actors describe the decision-making processes, explain their own actions, and claim authority.

The study shows that the herders and government officials hold different and competing narratives about destocking and land-use decisions. However, one collective actor – the government officials – holds more economic and discursive power to legitimise its presentation. Thus, their narrative is perceived as objective and rational, while the herders’ counternarratives are labelled subjective and opportunistic. Further, the actors have unequal access to arenas for promoting their

stories. The government officials' narratives are repeated in Parliament and by the media and society; the counternarratives are almost invisible in the public debate. Moreover, the persistent dominant narratives have established an undisputed *truth* about Sámi reindeer herders – that the herders are overstocking the range to maximise their personal benefits and that reindeer husbandry is a bottleneck for the economic development of Finnmark.

The thesis identifies four 'techniques of power' – discipline, neoliberal rationality, sovereign power and truth – used by the state to stimulate 'rational' herding practices, together with the techniques of resistance used by the herders to hamper the implementation of the rationalisation policies in West Finnmark. The analysis reveals the forms of resistance that the herders use daily to maintain control of their own livelihoods and practices. A common strategy is to partly adopt and partly avoid state regulations. Individual responses to the rationalisation are determined by personal desires and capacity, as well as relationships with and the behaviour of fellow herders.

The thesis argues that the state governance of reindeer husbandry promotes herding practices that are primarily based on Western knowledge and the Western way of understanding the world. The governance regime is in conflict with traditional Sámi reindeer-herding knowledge and worldviews. Despite 40 years of attempting to transform reindeer husbandry by means of policies, the Sámi worldview continues to influence the herders' understanding of the relationship between humans, reindeer and nature and how this relationship should be governed. The conflicting knowledge systems and competing worldviews about what reindeer husbandry is and ought to be undermine the identity and rights of the herders.

The state's attempts to control the Sámi reindeer husbandry skews the power relations between the state and the herders to the benefit of the state, and it creates winners and losers within the Sámi herding community. The Sámi herders' ability to engage in reindeer husbandry and claim the right to land has become dependent on their success in adapting to a Norwegianised form of reindeer husbandry.



## Sammendrag (Norwegian summary)

Denne avhandlingen bidrar til feltet politisk økologi ved å presentere en empirisk drevet analyse av maktforhold mellom staten og samiske reineiere, og av kunnskapssystemene som ligger til grunn for reindriftsforvaltning. Fenomenet som undersøkes består av aktørenes (reineierne og staten) motstridende narrativer (fortellinger) om hva reindrift *er* og hva det *burde være*. Fenomenet utforskes gjennom fire forskningsspørsmål:

1. Hvilke verdier og kunnskapssystemer ligger til grunn for aktørenes narrativer om reindrift?
2. Hvordan forstår aktørene 'god' forvaltning av rein, reineiere og beiteland?
3. Hvordan påvirker aktørene beslutningsprosesser for reindrift, og hvordan styrker de sin egen legitimitet i prosessene?
4. Hvordan påvirker den statlige styringen av samisk reindrift maktforholdet mellom aktørene?

Forskningen var kvalitativ. Dataene kom i hovedsak fra dybdeintervjuer og uformelle samtaler med reineiere og myndigheter i årene 2012–2015. En av casene i avhandlingen var basert på deltakende forskning. Studien bygget også på observasjoner av møter mellom aktørene og skriftlige kilder som offentlige dokumenter, brevkorrespondanse mellom reineiere og myndighetene og vitenskapelige artikler.

Studien brukte *grounded theory* (empiribasert teoriutvikling) som tilnærming for å konseptualisere dataene som ble samlet inn. Forskningen dro vekslers på begreper som *governmentality* (styringsmentalitet), *resistence* (motstand), *politics of belonging* (tilhørighet) og *political ontology* (politisk ontologi) – konsepter som var nyttige i analysen av hvordan politikk møter praksis, og hvordan statlig forvaltning påvirker maktforholdet mellom staten og reineiere, samt maktforholdet innad i reindriften.

Det geografiske fokuset for avhandlingen er Vest-Finnmark. Dette er den største reindriftsregionen i Norge i antall rein og reineiere. I mer enn et århundre har den

norske staten vært bekymret for at det er 'for mange rein' og 'for mange reieiere' i Vest-Finnmark. Og siden slutten av 1970-tallet har staten brukt ulike forskrifter og subsidieordninger for å rasjonalisere reindriften og gjøre den økonomisk effektivt. Siden 1992 har også bærekraft vært et uttalt politisk mål. For å gjøre beslutninger mer effektive, la reindriften av 2007 til rette for internt selvstyre i reindriften, samtidig som den også innførte nye sanksjonsbestemmelser for å håndtere uønsket praksis blant reieierne.

Rasjonaliseringspolitikken har eksistert i 40 år, men ifølge myndighetene har målet om rasjonell reindrift ikke blitt oppfylt. Spesielt Vest-Finnmark blir presentert som en region som forsetter å ha et for høyt reintall. Samtidig står denne regionen overfor et økende antall arealbrukskonflikter mellom reindrift og annen type arealbruk som gruvedrift, vindkraft og vannkraft, veier og andre typer infrastruktur. Statens tiltak for å redusere antall rein og arealkonflikter utgjør bakteppe for denne avhandlingen.

Avhandlingen er basert på fire individuelle, men relaterte forskningsartikler. Disse undersøker aktørenes narrativer om beslutningsprosesser knyttet til reindrift, styringsteknikker og teknikker som brukes for å motstå å bli styrt. Artiklene beskriver også de motstridende kunnskapsformene og konkurrerende verdensbildene som ligger til grunn for aktørenes narrativer om 'god' forvaltning av rein, reieiere og beiter. Videre ser artiklene på maktstrukturer som påvirker aktørens evne til å kommunisere sine narrativer og til å bli forstått av storsamfunnet. De undersøker hvordan aktørene beskriver beslutningsprosesser, forklarer sine egne handlinger og hvordan de styrker sin egen legitimitet i prosessene.

Studien viser at reieiere og myndighetene har ulike og motstridende narrativer om reintallsreduksjonen og beslutninger om arealbruk. Men én av aktørene – myndighetene – har mer økonomisk og diskursiv makt til å fremme og legitimere sine historier. Således blir deres framstillinger oppfattet som objektive og rasjonelle, mens reieierens narrativer blir oppfattet som subjektive og opportunistiske. Aktørene har også ulik tilgang til arenaer for å fremme sine historier. Myndighetenes narrativer blir



gjentatt i Stortinget, i media og blant folk flest, mens reineiernes narrativer er bortimot usynlig i den offentlige debatten. Seiglivetheten til de dominerende narrativene er med på å etablere disse som ubestridte sannheter om samisk reindrift – nemlig at reineiere bygger opp reinflokkene for å maksimere egen profitt og dermed nedbeiter vidda, og at reindriften er en flaskehals for Finnmarks økonomiske utvikling.

Denne avhandlingen identifiserer fire 'maktteknikker' – disiplin, økonomiske insentiver, suveren makt og sannhet – som staten bruker for å stimulere til en 'rasjonell' reindrift, samt reineierne motstand mot rasjonaliseringspolitikken i Vest-Finnmark. Analysen viser hvordan reineierne bruker ulike former for motstand for å opprettholde kontroll over sin egen reindriftsutøvelse og levevei. En vanlig strategi er å delvis oppta og delvis unngå statlige beslutninger. Reineieres individuelle respons på rasjonaliseringen er imidlertid avhengig av egne ønsker og behov, samt forhold til andre reineiere og responsen deres.

Avhandlingen viser at statens styring av reindriften fremmer en reindriftspraksis basert på vestlig kunnskap og et vestlig verdensbilde. Dette styringsregime er i konflikt med tradisjonell samisk reindriftskunnskap og verdensbilde. Til tross for 40 år med politikk for å endre reindriften, fortsetter likevel et samisk verdensbilde å påvirke reineiernes forståelse av forholdet mellom mennesker, rein og natur, samt hvordan dette forholdet bør styres. Men de motstridende kunnskapssystemene og konkurrerende verdensbildene på hva reindrift er og burde være undergraver reineiernes identitet og rettigheter.

Den statlige styringen av samisk reindrift forskyver maktforholdet mellom staten og reineierne til fordel for staten, og den skaper vinnere og tapere i den samiske reindriften. Samiske reineieres mulighet for å drive med rein og hevde en rett til beitearealene er betinget av deres evne til å tilpasse seg en 'fornorsket' reindrift.



## Čoahkkáigeassu (Northern Sámi summary)

Dát dutkkus lea buvttá politihkalaš ekologijjasuorgái dan bokte ahte ovdanbukta empiralaš analiisa fápmodilis gaskal stáhta ja sámi boazoeaiggádiid, ja máhttovuogádagain, mat leat vuodđun boazodoallohálddašeamis. Fenomena mii guorahallojuvvo leat gilvaleaddji mitalusat maid aktevrrat (boazoeaiggádat ja stáhta) geavahit go čilgejit mii boazoealáhus *lea* ja mii dat *galggašii leat*. Fenomena guorahallojuvvo njeallje dutkangažaldaga bokte:

1. Makkár árvvut ja máhttovuogádagat leat vuodđun aktevrraid mitalusaide boazoealáhusa birra?
2. Movt aktevrrat oidnet mii lea “buorre” hálddašeapmi das mii guoská bohccuide, boazoeaiggádiidda ja guohtuneatnamiidda?
3. Mo váikkuhit aktevrrat mearridanproseassaide boazoealáhusa dáfus ja mo nannejit sii autoritehtaset?
4. Mo váikkuha stáhtalaš boazoealáhusa stivrejupmi fápmodillái aktevrraid gaskka?

Dutkan lea kvalitatiivvalaš. Dieđut leat čohkkejuvvon vuosttažettiin čiekŋalis jearahallamiid ja eahpeformálalaš sagastallamiid bokte boazoeaiggádiiguin ja eiseválddiiguin 2012-2015 áigodagas. Okta oassi dutkamis lea vuodđuduvvon oassálasti dutkamuša ala. Dutkosis geavahuvvojit maid observeremet aktevrraid deaivvademiin, almmolaš dokumeanttat, reivvet ja čálašeamit boazoeaiggádiid ja eiseválddiid gaskka, dieđalaš artihkkalat ja eará čálalaš gáldut.

Dutkkus geavaha *grounded theory* (vásáhusvuđot teorijjaovdáneami) lahkonanvuohkin ásahan dihte doahpágiid čohkkejuvvon dieđuin. Dutkan ávkástallá doahpágiid nugo *governmentality* (stivrenmentalitehta), *resistence* (vuosteháhku), *politics of belonging* (gullevašvuohhta) ja *political ontology* (politihkalaš ontologiija) – doahpagat mat ledje ávkálačča analyseremis das mo politihkka deaivvada práksisiin, ja mo stáhta hálddašeapmi váikkuha fápmodillái stáhta ja boazoeaiggádiid gaskkas, ja maid boazoealáhusa siskkildas fápmodillái.

Dutkosa geográfalaš fokus lea Oarje-Finnmárku. Dát lea stuorámuš boazodoalloguovlu boazo- ja boazoeaiggádiid loguid dáfus. Badjel 100 jagi lea norgga stáhta fuolastuvvan ahte Oarje-Finnmárkkus leat “beare ollu bohccot” ja “beare ollu boazoeaiggáda”. Ja loahpageahčen 1970-logu rájes lea stáhta geavahan iešguđetlágan lánkaásahusaid ja movttiidandoaimmaid rationaliseret boazoealáhusa ja dahkat dan ekonomalaččat beaktileabbon ja – 1992 rájes – maddái dahkat ealáhusa bistevažžan. Dahkan dihte politihkalaš mearrádusaid beaktileabbon, heivehuvvui 2007 boazodoallolágas siskkáldas iešmearrideapmi boazoealáhussii, seammás go áсахuvvui odđa ráŋggáštanmearrádus, mii gieđahallá sávakeantes práksisiid boazoeaiggádiid gaskka. Rationaliserenpolitihkka lea guston 40 jagi, muhto eiseválddiid mielde eai leat joksan mihttu oažžut rašuvnnalaš boazoealáhusa. Earenoamážit ovdanbukto Oarje-Finnmárku guovlun gos ain leat “beare ollu bohccot”. Seammás lassánit dán guovllus eanet ja eanet areálariiddut boazoealáhusa ja eará areálageavaheami gaskka, nugo ruvkedoaimmat, bieggamillot ja čáhcefápmu, luottat ja earálágan infrastruktuvra. Stáhta doaimmat unnidit boazologu ja areálariidduid leatge dutkamuš duogážin.

Dutkkus lea vuodđuduvvon njeallje individuála, muhto dutkanguoski artihkkaliid ala, mat dutket aktevrraid mitalusaid mearridanproseassaid birra mat leat čadnon boazoealáhussii, stáhta stivrengugiid ja boazoeaiggádiid práksisiid birra vuostálastit ahte stáhta sin stivre, vuostálasti máhtuid ja gilvaledji máilmmigovaid birra, mat leat vuodđun aktevrraid mitalusaide dasa mii lea “buorre” hálddašeapmi bohccuid, boazoeaiggádiid ja guohtoneatnamiid dáfus. Viidáset guorahallá dutkan fápmovuogádagaid, mat váikkuhit aktevrraid návccaide ovdanbuktit mitalusaideaset, ja návccaide oažžut stuoraservodaga sin ipmirdit. Dutkan guorahallá mo aktevrrat govvidit mearridanproseassaid, čilgejit doaimmaideaset ja mo sii nannejit iežaset autoritehta.

Dutkan čájeha ahte boazoeaiggádiin ja eiseválddiin leat goabbatlágan ja gilvaledji mitalusat boazologu unnideami ja areálageavaheami mearrádusaid birra. Nuppi aktevrras – eiseválddiin – lea eanet ekonomalaš fápmu ja stuorat vejolašvuohta ovddidit ja duodaštit mitalusaideaset. Dainna lágiin ipmirduvvojit sin mitalusat

objektiivvalažžan ja ulbmillažžan, dan ektui go boazoeaiggádiid mitalusat ipmirduvvojit subjektiivvalažžan ja opportunisttalažžan. Aktevrain leat maiddái goabbatlágan vejolašvuohta beassat arenaide gos sáhttet ovddidit mitalusaideaset. Eiseválddiid mitalusat geardduhuvvojit Stuoradikkis, medias ja eanas olbmuid gaska, dan ektui go boazoeaiggádiid molssaevttolaš mitalusat eai bálljo oidno almmolaš digaštallamiin. Ráđđedeaddji mitalusat, maid lea váttis jávkadit, leat mielde ásaheamen dáid biehttalkeahes duohtavuohtan sámi boazoealáhusa birra – namalassii ahte boazoeaiggádat stuoridit ealuideaset oažžun dihte alcces eanemus dietnasa ja danin guorbbadit duoddariid, ja ahte boazoealáhus lea hehttehussan Finnmárkku ekonomalaš ovdáneapmái.

Dát dutkkus identifisere njeallje “fápmovuogi” – disipliidna, ekonomalaš movttiidandoaimmat, ollisválddalaš fápmu ja duohtavuohta – maid stáhta geavaha stimuleret “rašuvnnalaš” boazoealáhussii, ja mállet maid boazoeaiggádat geavahit eastadit stáda beaktilis rationaliserenpolitihka čađaheami Oarje-Finnmárkkus. Analiisa čájeha mo boazoeaiggádat geavahit iešguđet vuostaldanvugiid beassat doalahit kontrolla iežaset boazoealáhuslágis ja eallinvuogis. Dábálaš strategiija lea belohakkii čuoovvilit ja belohakkii garvit stáhta mearrádusaid. Boazoeaiggádiid individuála responsa rationaliseremii lea dattege čadnon sin iežaset sávaldagaide ja dárbbuide ja maiddái oktavuodaide eará boazoeaiggádiiguin ja sin responsaide.

Dutkkus čájeha ahte stáhta boazodoallostivrejupmi ovddida práksisa man vuodđun lea oarjemáilmmi máhttu ja máilmmigovva. Stáhta stivren- ja ráđđenvuogis lea vuostálasvuohta sámi árbevirolaš boazoealáhusmáhttui ja máilmmigovvii. Vaikko 40 jagi lea leamaš politihkka mii lea geahččalan rievdadit boazoealáhusa, de sámi máilmmigovva joatká váikkuhit boazoeaiggádiid ipmárdusa olbmuid, bohcco ja luonddu gaskavuhtii ja mo dát gaskavuohta berrešii stivrejuvvot. Muhto vuostálasti máhttuvuogádagat ja gilvaleaddji máilmmigovat das mii boazoealáhus *lea* ja *galggašii leat*, goarida boazoeaiggádiid identitehta ja vuoigatvuođaid.

Nu movt stáhta stivre sámi boazoealáhusa, de sirddiha dat fápmogaskavuoda stáhta ja boazoeaiggádiid gaska ovdamunnin stáhtii, ja dat dagaha sámi boazoealáhussii vuitiid ja vuoittuháliid. Sámi boazoeaiggádiid vejolašvuodát bargat bohccuiguin ja gáibidit vuoigatvuodaid guohtuneatnamiidda eaktuduvvo dasa movt sii nagodit heivehit iežaset “dáruiduvvan” boazodollui.

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Kathrine I. Johnsen

Grimstad, 31 December 2018



## Abbreviations

FPIC – free prior and informed consent

ICR – *Internasjonalt reindriftssenter*/International Centre for Reindeer Husbandry

LMD – *Landbruks- og matdepartementet*/Ministry of Agriculture and Food

NMBU – *Norges miljø- og biovitenskapelige universitet*/The Norwegian University of Life Sciences

NRL – *Norske Reindriftsamers Landsforbund*/Sámi Reindeer Herders' Association



## Part 1

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# 1 Introduction

## 1.1 The subject matter and the objective of the thesis

For more than a century, Norwegian government officials have been concerned about the problem of ‘too many reindeer’ and ‘too many herders’ in Sámi reindeer husbandry, especially in Finnmark, the northernmost and largest reindeer-herding region in Norway. In the official view, too many reindeer might overgraze the tundra, and land degradation and too many herders might jeopardise the economic viability of reindeer husbandry in the north (LD, 1976; Villmo, 1978; Lenvik, 1998). After World War II, it became apparent that Sámi reindeer herders had not progressed economically at the same pace as the rest of Norwegian society (see, for example, Vorren, 1946). Combined, these concerns formed the basis for a political reform of the state governance of reindeer husbandry (Storli & Sara, 1997).

The political reform, implemented in the 1970s, was a rationalisation programme to transform Sámi reindeer husbandry into a more economically efficient and environmentally sustainable industry (Paine, 1994).<sup>1</sup> The programme introduced new policies and regulations for standardised herd structures and slaughter strategies, optimal reindeer numbers, and the professionalisation of herders. The reform also centralised the marketing of reindeer products and introduced a concession system for owning and managing reindeer.

During the 40 years since the programme was introduced, the laws and regulations for reindeer husbandry have been revised numerous times. However, the objective of the current policies remains the same, namely to rationalise reindeer meat production. Government officials have sought to facilitate the policy objectives by adjusting economic incentives, intensifying the focus on herders’ participation and strengthening the state’s capacity to control the number of reindeer and herders.

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<sup>1</sup> The state refers to reindeer husbandry as a *‘næring’*, which is commonly translated to ‘industry’. In the late 1970s, pastoralism was legally regarded as an occupation rather than an inherited livelihood (Paine, 1994, p. 30).

However, although “an enormous amount of money and planners’ energy have been spent” (Paine, 1994, p. 157) on the rationalisation of Sámi reindeer husbandry, the anticipated changes have not occurred everywhere. Some herders in West Finnmark have adjusted their practices in accordance with the policy objectives. Herders from the area are still often portrayed as a group that has not responded in a rational and sustainable way to the incentives to decrease the reindeer numbers (see, for example, St. meld. 28, 1991–1992; Riksrevisjonen, 2004, 2012; Riseth, 2014; NRK P2, 2017).

*Rational* and *sustainable* are ambiguous words; their meaning depends on the values and experiences of the person defining it. Although herders and government officials have different ways of understanding and presenting ‘rational reindeer husbandry’ and ‘sustainable reindeer numbers’, the government officials’ perspective dominates in the public debate. The dominant story – that there are too many reindeer and that the herders behave in an irrational way – seems to resonate well with the general public. In recent decades, the media have published reports that the reindeer numbers are too high, purportedly creating a diverse range of problems for society at large: degrading the land, threatening biodiversity, hampering animal welfare, challenging the conservation of protected predators, grazing on farmers’ crops and in private gardens, blocking economic development, contributing to global warming, and claiming too much space. Since most Norwegians could internalise one or several of these problems as a concern, the dominant story has the ability to unite “communities that might otherwise seem disparate” (Robbins, 2012, p. 140), such as environmentalists and mining companies.

Over successive government periods, the media and the political opposition have accused the Norwegian Minister of Agriculture and Food of not taking enough action to rationalise reindeer husbandry in West Finnmark. Instead of exploring why the state has failed to rationalise reindeer husbandry in West Finnmark, the study addressed the conflicts in the state’s governance of Sámi reindeer husbandry by examining the herders’ and government officials’ competing accounts of what reindeer husbandry *is* and what it *ought to be*. Using political ecology as a framework, based on an

empirically driven analysis, it scrutinised the knowledge base that informs the actors' presentations and the power structures affecting the actors' ability to present their accounts and to be understood by society at large. By means of four case studies on governance-related conflicts between the state and Sámi herders in West Finnmark, I observed how the actors described decision-making processes, explained their own actions and claimed authority. I studied the techniques used to govern, and those used to avoid being governed. As Sámi reindeer herders' perspectives are seldom presented in the government reports and the science used to inform policies, an additional objective of my study was to give attention to and reflect the voice of the herders. The research questions of the study are presented in Chapter 4.

In this thesis, the terms *reindeer husbandry* and *pastoralism*, and *herder* and *pastoralist* are used interchangeably. Hansen and Olsen (2007, pp. 204–2005) define pastoralism, based on the herding of animals as opposed to ranching and stall feeding, as a human-animal relationship where humans have domesticated the animals and continue to influence the size and genetic properties of the herd through consciously selecting some animals for slaughter and saving others for reproduction. Pastoralism considers the herd as private property and a source of living and treats it accordingly (Hansen & Olsen, 2007). Pastoralism is a form of animal husbandry especially adapted to marginal and unstable grazing resources (Pedersen & Benjaminsen, 2008); it is a system based on extensive land use, which often involves moving the herds in search of fresh pasture as a way of dealing with the spatial and time variations of the grazing conditions (Niamir-Fuller, 2000; Dong *et al.*, 2011). Reindeer husbandry is a type of pastoralism practised by many different indigenous peoples across the Arctic. The thesis uses the terms *herder* and *pastoralist* to refer to both reindeer owners and individuals who carry out practical work with reindeer.

The term *government official* is used to refer to an individual who represents a public administration or government, through employment or election. I do not differentiate between active and former/pensioned officials and herders. I define *governance* as patterns of rule, which include strategic directions, politics, values and power

relations. In line with the description of environmental governance by Bridge and Perreault (2009), I understand the governance of reindeer husbandry as both the social organisation of decision-making related to reindeer and the establishment of a social order through the *management* of reindeer-herding and husbandry. Management is the routine decisions and administrative work related to the daily operations, for example the use, protection and distribution of pastures and reindeer. Governance and management of reindeer husbandry are applied by both pastoralists and government officials, but as this thesis indicates, the two actors have competing strategic directions and *knowledge bases* – the content of particular fields of knowledge – for understanding the ‘proper’ management of Sámi reindeer husbandry.

## 1.2 Thesis structure

Part 1 of this thesis discusses the theoretical perspectives that have guided the analysis (chapters 2 and 3), and presents the research questions of the study (Chapter 4). Subsequently, it gives a detailed account of the methodology and ethical considerations of the research (Chapter 5), before it situates the study by giving a background to Sámi reindeer husbandry and the state-led rationalisation of Sámi pastoralism since the 1970s (Chapter 6). Further, Part 1 of this thesis presents the abstracts of four scientific papers published from the study (Chapter 7), discusses the interconnectedness of the findings in the papers and how they jointly address the research questions (Chapter 8) and offers the conclusions of the research findings (Chapter 9). Part 2 of the thesis presents the full-length scientific papers, which have all been published in peer-reviewed journals.

## 2 Relevant philosophical viewpoints

This thesis seeks to explain a social phenomenon, the conflict related to the governance of reindeer husbandry, by examining agency and structures as complementary forces in human behaviour. The approach is in accordance with the meta-theoretical perspective of methodological relationism. According to Ritzer and



Gindoff (1992, p. 132), methodological relationism assumes “that explanations of the social world must involve the relationships among individuals, groups, and society”. I have accordingly explored the governance conflicts by studying the key actors, the relationship between them and the social structures (power and knowledge systems) that influence the actors’ presentations about reindeer husbandry. I also assessed how the actors’ presentations (rationale) affect the relationship between and among the individuals, the actor groups and society.

I have followed the philosophical approach of *critical realism*. Critical realism is a juxtaposition of ontological realism and epistemological constructivism (Maxwell, 2013). Critical realism might be interpreted as a product of successive critiques of a complacent and overly confident modernism in social science, and its radical underestimation of the complexity, diversity and multiple meanings of the social world (Sayer, 2000). A critical realist accepts the existence of an objective reality that is independent of our knowledge about it, for example water flows, freezing points and vegetation growth. At the same time, critical realists recognise that people’s understandings and claims about reality (what the world is and ought to be), are socially constructed and reflect the values and the agenda of the community that created them (Forsyth, 2001; Benjaminsen & Svarstad, 2010; Robbins, 2012, p. 97; Maxwell, 2013). Consequently, various competing constructions or perceptions about reality exist. For example, an environmental condition that one community might regard as degraded land might be viewed as important pastures by another community.

On the one hand, critical realism is an approach that expands and deepens, rather than simply confirms, one’s understanding of phenomena (Maxwell, 2013, p. 43). Through empathy and interpretation, research processes can open the door to different yet reasonable interpretations of the same factors (Maxwell, 2013). On the other hand, researchers, like all other individuals, have ontological assumptions that influence their studies. Research findings are therefore “contingent upon what one looks for, and what one looks for is to some extent contingent upon what one expects to find”

(Gerring, 2004, p. 351). In the words of Corbin and Strauss (2008, p. 10, italics in original):

concepts and theories are constructed by researchers out of stories that are *constructed* by research participants who are trying to explain and make sense out of their experiences and/or lives, both to the researcher and themselves. Out of these multiple constructions, analysts construct something that they call *knowledge*.

Addressing the research community, (Gerring, 2004, p. 352) states: “insofar as our ontological presuppositions influence our construction of cases, we had best be cognizant of this fact”. In other words, the constructivist viewpoint requires reflexivity. I offer a discussion on reflexivity in Chapter 5.3.

### 3 Conceptual framework of the study

#### 3.1 Introduction to political ecology

Political ecology forms the framework for this thesis. Political ecology is a field of critical research that explores the condition of and the dominant accounts about the environment, the people who live and work within it, and the power relations in land and environmental governance. Scholars have, over time, defined political ecology in different ways. However, the different stances of political ecology share three linked assumptions: 1) the costs and benefits of environmental governance are not distributed equally among the actors; 2) environmental governance influences the existing social and economic inequalities by maintaining, enhancing or reducing them; and 3) environmental policies and change therefore affect the power relations among the actors (Bryant & Bailey, 1997, in Robbins, 2012, p. 20). Researchers in the field of political ecology acknowledge that environmental change and ecological conditions are products of political processes. For example, changes in the governance of reindeer, herders and pastures affect the members of the herding community differently and

therefore affect the power relations within the community and between the herders and the governing actor.

For political ecologists, it is essential to study the social structures of environmental governance regimes, identify the winners and losers, and analyse the various actors together with their interests, actions and accounts (Schubert, 2005, p. 31). This can include exploring the ambiguous meanings of environmental governance, examine the critique of authoritative knowledge and look into unequal discursive and material power relationships (Blaikie, 1999, p. 144). Furthermore, Benjaminsen and Robbins (2015) acknowledge the need for assessing how power relations affect the actors' struggle over access to material resources like pastures and subsidies as well as their struggles over meanings. The latter concerns the social construction of the meanings of environmental change (such as land degradation and overgrazing) and solutions (such as sustainable resource management).

Political ecologists acknowledge that these definitions are a blend of physical impacts and a social interpretation of the biophysics, and can engage "with the constructed nature of environment, and the role of discourse and political action in establishing accepted definitions of environment" (Forsyth, 2001, p. 2). The social meaning of environmental conditions is relational as their meanings are influenced by social relations, politics and power (Becker, 1998). Moore (2004) refers to relational concepts as *concept metaphors* which often embody a range of assumptions, such as rights, obligations, membership, culture, power and politics. Metaphors influence the way people interpret and respond to the concepts being described (Anderson, 2004). For example, people have different – and sometimes conflicting – understandings of the Arctic, such as 'frozen', 'wilderness', 'homeland', and 'frontier'. Yet, while the social explanations can vary from community to community, the conventional explanation about a phenomenon is likely to "reflect the experiences and values of powerful groups in history" (Forsyth, 2001, p. 8). Bryant (1998) adds that the process of defining meaning may facilitate and maintain more powerful actors' control over both people and environments. However, as language and concepts are consciously given new

meaning and used in new ways by opposing actors, we have to treat terms like ‘overgrazing’, ‘rational’ and ‘sustainable’ as ambiguous (Andersen, 2003; Moore, 2004).

Poststructural thinking (associated with the writings of Michel Foucault) challenges the concepts we usually take for granted. According to Foucault, “truth is an effect of power, one that is formed through language and enforces social order by seeming intuitive or taken for granted” (Robbins, 2012, p. 70). By combining the study of environmental governance with the study of narratives about environmental governance, researchers can question and deconstruct ideas that are taken for granted (Benjaminsen & Robbins, 2015, p. 192). The deconstruction of truth claims can further support alternative realities of dominant ‘apolitical’ concepts, like overgrazing, rational production and sustainable reindeer husbandry (Robbins, 2012). Robbins (2012, p. 20) explains that political ecology attempts to be both a *hatchet* and a *seed* by “critically explaining what is wrong with dominant accounts of environmental change, while at the same time exploring alternatives, adaptations, and creative human action in the face of mismanagement and exploitation”.

### 3.2 Political ecology and the land degradation discourse

For more than a hundred years, government officials and scientists have warned against the degradation of common pastoral rangelands in Africa, northern Norway and other geographies where pastoralism is prevalent (Hongslo, 2011). The pastoralists, who based their livelihood on seasonal movements throughout these rangelands, were seen as backward and irrational (Benjaminsen & Svarstad, 2010). In 1968, Garret Hardin introduced the idea of the ‘tragedy of the commons’. The theory argues that herders’ rationale is to maximise their own profit by keeping as many heads of livestock as possible on the commons at the expense of other herders and the rangeland ecosystems (see Hardin, 1968). Since it was published, Hardin’s theory has continued to influence resource governance and a public perception of pastoralists as drivers of land degradation.

This perception forms part of what Adger *et al.* (2001) refer to as a global *discourse* about land degradation. These authors define discourse as a shared meaning of a phenomenon, which is produced, reproduced and transformed through people's written and oral statements. They argue that although global discourses are perceived as truth, they "are often based on shared myths and blueprints of the world and therefore, the political prescriptions flowing from them are often inappropriate for local realities" (Adger *et al.*, 2001, p. 683). A discourse can be analysed in terms of its *narratives*. A narrative can be understood as the underlying patterns in the stories that individuals tell about a specific phenomenon (Vik *et al.*, 2010). It is a story with a beginning, middle and end, or it is an argument with premises and conclusions (Roe, 1991). Furthermore, a narrative contains certain archetypes as actors: villains (for example, those degrading the environment), heroes (those who have the solution) and victims (those negatively affected by the environment change and/or the solution) (Adger *et al.*, 2001). Though presented as an apolitical explanation, a narrative reflects the interests and values of those who formulated it; the perspectives of the more powerful groups in society are more likely to become the conventional explanations (Forsyth, 2001).

During the 1980s and 1990s, interdisciplinary research programmes on land use and environmental change in sub-Saharan Africa increased considerably. From the research, two bodies of work emerged, namely disequilibrium ecology and political ecology (Little, 2002). Together, the disequilibrium – also called non-equilibrium – ecologists and the political ecologists have challenged the land degradation discourse and the concept of 'carrying capacity', which refers to the notion of applying climax vegetation stages and optimal grazing to preserve or reverse land degradation and reach equilibrium. Instead, these scholars argue that in the dry savanna ecosystems, a high variability in precipitation has a greater influence on vegetation growth than grazing. They also point out additional factors that affect the use and state of rangelands. These factors include wildlife grazing, land-use conflicts between herders and farmers, and political changes in people's access to grazing and water resources (Little, 2002). In 1988, Ellis and Swift concluded from their research in northern Kenya

that pastoral ecosystems are non-equilibrial but persistent because of their dynamic and adaptive behaviour (Ellis & Swift, 1988).

However, despite they having been proven wrong empirically, global discourses continue to thrive. For example, the staying power<sup>2</sup> of the notion of the tragedy of the commons is related to the ability of this narrative “to stabilize and underwrite the assumptions needed for decision-making” (Roe, 1991, p. 290). Although researchers can identify dominant discourses and narratives about environmental conditions and prove them wrong, Roe (1991) argues that this is not enough to raise doubt and uncertainty among decision-makers. He suggests that researchers should engage with counternarratives that tells a better story – an alternative blueprint for livestock rangeland project designers and policy-makers. The counternarratives should be based on realistic investigations of environmental change (Benjaminsen *et al.*, 2010). Given the increased awareness of what constitutes environmental explanations, it is possible to construct a new and more effective knowledge base for environmental policy that is biophysically more accurate, includes local ways of knowing, and is socially more relevant and just (Forsyth, 2001; Robbins, 2012).

While one view of political ecology emphasises an understanding of ecology in environmental explanations, another focuses on the politics of environmental conditions and conflicts. This thesis holds the latter view. This approach identifies the power relationships supported by hegemonic environmental narratives, explores their consequences and examines how these constrain possibilities for self-determination (Stott & Sullivan, 2000). Through exploring the “politics of knowledge, political ecologists have emphasised how scientific arguments have been used to silence those (often the disempowered) who have developed their own understandings of environmental change in ways that deviate from the western scientific programme” (Turner, 2009, p. 195). This approach can open the door to the different and invisible

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<sup>2</sup> Trygve Slagsvold Vedum, Ekko P2, 14<sup>th</sup> December 2017, <https://radio.nrk.no/serie/ekko: Fremtidens reindrift. Blir det små flokker på kunstgress?> (Reindeer husbandry of the future. Will there be small herds on astro turf?)”

yet reasonable counternarratives held by the less powerful actors in society. Hence, political ecology has the potential to be emancipatory.

### 3.3 Political ecology and theories of development and modernisation

#### 3.3.1 The Enlightenment and the modern state

The Enlightenment, emerging in the sixteenth century, signalled the end of feudalism and the unrestricted powers of authority legitimised by divine rule. It announced the beginning of the modern state, the industrial revolution, the development of disciplines in science and public education, the philosophy of liberalism, and a transformation of economic, political and cultural life in Europe (Smith, 1999). The Enlightenment is often referred to as the period in history when reason, rationality and freedom gave rise to politics, philosophy and science. Knowledge and new discoveries of the scientific disciplines were collected, catalogued, studied and stored (Smith, 2006).

However, the Enlightenment also had what Best (2001, p. 20) refers to as a “dark side”, in which human beings were made subjects of the state. The concept of *the modern state* embodied “claims to sovereignty, independence, representativeness and legitimacy” (Held, 2007, p. 37) and a framework that was “equally constraining and enabling for all its members” (Held, 2007, p. 147). Foucault describes three disciplinary procedures by which the state sought to govern and control people: dividing practices, scientific classification, and subjectification (Foucault, 1982; Rabinow, 1984; Best, 2001).

Firstly, dividing practices involve physically constraining and institutionalising individuals who are perceived as threats to society. Foucault mentions the establishment of leper colonies, placing the insane in mental hospitals and putting criminals in prison as examples of dividing practices. The second procedure, scientific classification, includes the observation and examination of individuals to classify their behaviour as ‘normal’ or ‘abnormal’, so that the ‘abnormal’ can be treated. And thirdly,

subjectification consists of “the process of self-formation, self-understanding and the way in which conformity is achieved” – a process that is influenced by societal norms of what is normal (Best, 2001, p. 21). Through disciplinary procedures, the state seeks to stimulate certain behaviour by internalising social norms and ethical standards in individuals (Foucault, 2008). Through discipline, citizens can be transformed and improved: “In a factory, the procedure facilitates productivity; in a school, it assures orderly behaviour; in a town, it reduces the risk of dangerous crowds, wandering vagabonds, or epidemic diseases” (Rabinow, 1984, p. 17).

### 3.3.2 The development discourse

Today, the paradigm of the modern state constitutes the ideal of the well-ordered, Western, modern political community, and is considered a model which any political community that strives towards ‘modernity’ would embrace (Axtmann, 2004). After World War II, a development discourse evolved in the Western world that appealed to the ideals of the Enlightenment (Peet & Hartwick, 2009). The discourse was based on Western policy-makers’ notions of modernity, rationality, material progress, the potential of science, the value of equality and social justice, and “aspirations for a better life for the poor” (Peet & Hartwick, 2009, p. 225). In the development discourse, *rationalism* was regarded as humans’ capacity to control the world through thought, logic, and calculation. In this thinking, ‘underdeveloped’ societies could be modernised and the world could be changed for the better through rational and purposive human action (Tucker, 1999; Hettne, 2005, p. 26; Peet & Hartwick, 2009). In other words, the world could be changed for the better through rationality – often measured in economic imperatives (Tucker, 1999; Peet & Hartwick, 2009).

Tucker (1999) suggests that to recognise the premises on which development and modernisation are based, one has to deconstruct the mainstream Western concept of ‘development’. He advises deconstructing the concept by distinguishing between what he defines as two different processes of change: “the production of goods, the mastery over nature, rational organisation and technological efficiency”, and “the production of structures of power and ideology”. To recognise the two processes of change, Tucker



(1999) further suggests assessing the knowledge base and worldview of ‘development’ and examining how development supports the economic and political structures of domination. Furthermore, because the actors in development and modernisation processes hold unequal amounts of power, researchers should seek to identify who is in control over the destinies of whom and “[w]hich values must be abandoned and which retained in order to make way for modernization?” (Tucker, 1999, p. 3).

The idea that modernisation and development are universal and evolutionary necessities for improved well-being, stems from a Eurocentric<sup>3</sup> way of understanding the world. It is a social imagination or myth based on the idea that the world is divided in two, namely the centres of modern progress (the West), which facilitate the progress of the peripheries of traditional backwardness (everyone else) (Tucker, 1999; Peet & Hartwick, 2009, p. 104). Western ontology makes a distinction between nature and society (Latour, 1993) and holds a notion of progress that includes humanity’s conquest of nature, industrialisation and material abundance through superior technology (Norgaard, 2006). Furthermore, in the Eurocentric construction of the world, ‘development’ and ‘progress’ mean replicating the experiences of the West (Munck, 1999; Peet & Hartwick, 2009).

In his discussion of the development of the Sámi reindeer husbandry in northern Norway from the 1960s to the 1990s, social anthropologist Robert Paine distinguishes between the rationalisation and modernisation of pastoralism (Paine, 1994). He explains modernisation as changes that come of their own accord (for example, motorised vehicles and electricity) and rationalisation as an induced change “informed by an economic ideology of equality combined with market efficiency” (Paine, 1994). Using this differentiation, Paine (1994, p. 155) articulates the paradox of how the mechanisation of reindeer husbandry “is a story of how modernization can buck, or run contrary to, rationalization”. While the objective of the rationalisation programme

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<sup>3</sup> As Sundberg (2014, p. 34) states, “I use ‘Eurocentrism’ when referring to a contingent conceptual apparatus that frames Europe as the primary architect of world history and bearer of universal values, reason, and theory.”

introduced in the 1970s was to encourage smaller herds with more meat production per animal, access to vehicles made it possible for herders (independently of pastoral skills) to build and control larger herds. This thesis adopts Paine's understanding of rationalisation and concurs with Tucker about the way in which the rationalisation policies have altered both the production of goods and structures of power and ideology in Sámi reindeer husbandry in West Finnmark.

The critique of the dominant development discourse encourages researchers to look at the politics of 'development' and to reinsert the perspective of autonomy for the indigenous and the excluded (Munck, 1999, pp. 201, 204). However, despite sustained criticism of the modernisation theory, "the notion that there is a proven path to development" has continued to inform geopolitical ideas and policies (Peet & Hartwick, 2009, p. 140). For example (see Chapter 3.2), despite extensive criticism, the concept of the tragedy of the commons continues to inform the development discourse (Adger *et al.*, 2001; Benjaminsen & Svarstad, 2010).

Benjaminsen and Robbins (2015, p. 192) argue that the norms, interests, and values that govern an individual's understanding of environmental phenomena "are themselves the product of political processes that determine control over what ideas are taken-for-granted or 'true'". In the words of Sullivan (2017, p. 234), what is considered true "is always the outcome of dialogue, agreement, thought and reflection, access to artefacts, texts and archives, accepted methodologies, and so on, all of which arise in historical and sociocultural contexts". She claims that those who have a say in defining the truth, do so with the help of particular power relations and specific rules of verification – not through direct access to The Truth (Sullivan, 2017, p. 234). Moreover, although it is not always evidence-based, modern Western science has become dominant in the field of regulating "all forms of experience, interpretation, and understanding" (Peet & Hartwick, 2009, p. 204). According to Munck (1999, p. 204), however, "the notion that the whole world could be analysed according to objective universal criteria of truth, justice and reason", masks the "underlying power relations".

### 3.3.3 The state and colonisation of indigenous peoples

According to Smith (2006, p. 93), the imperialism and colonialism which indigenous peoples are opposing today also emerged from the period of Enlightenment and formed how “the West came to ‘see’, to ‘name’, and to ‘know’ indigenous communities”. Smith (1999, p. 59) argues that:

The development of scientific thought, the exploration and “discovery” by Europeans of other worlds, the expansion of trade, the establishment of colonies, and the systematic colonization of indigenous peoples in the 18th and 19th centuries are all facets of the modernist project.

Colonisation occurred through various disciplinary measures: indigenous ways of knowing were excluded and marginalised (for example, by redefining land as ‘empty land’ and then confiscating it); indigenous children were classified as fit for education or ‘ineducable’ and therefore not permitted to attend school; and indigenous populations were assimilated into the dominant society in which they lived. Assimilation included physically removing children from their communities for ‘adoption’, sending them to boarding schools or forbidding the use of native languages. The curriculum children were taught was another tool for assimilation. These measures suppressed the indigenous ways of knowing and living, and the languages for these ways. They eliminated collective identities and memories as well and imposed a new order on the colonised (Smith, 1999). According to Smith (2006, p. 96): “The nexus between cultural ways of knowing, scientific discoveries, economic impulses and imperial power enabled the West to make ideological claims to having a superior civilization.”

For example, in Norway, the official state policy from approximately 1850 until the end of World War II was to assimilate the Sámi and the Kven – both ethnic minorities – into the majority society (Minde, 2003; NOU, 2008). The assimilation politics had its roots in Norwegian state building and social Darwinism (Minde, 2003). In school, the Sámi and Kven languages were forbidden and crown land could only be sold to individuals

who could read and write Norwegian and used it as a first language (NOU, 2015). Assimilation is revisited in Chapter 6.5.

### 3.3.4 Seeing like a state

Under the modern state, “power relations have been progressively governmentalized, that is to say, elaborated, rationalized, and centralized in the form of, or under the auspices of, state institutions” (Foucault, 1982, p. 793). As a way to look after the interests of and possible threats to society, state institutions “gather information about the human activities; such as birth and death rates, unemployment, public health, epidemic diseases and crime” (Best, 2001, p. 20). The American political scientist and anthropologist, James C Scott, explains that while the pre-modern state knew little about its subjects or their wealth, location and identity, it did develop standards for weights and measures, create censuses and population registers, develop standards for language and legal discourse, and design cities (JC Scott, 1998, p. 2). The new science of statistics revealed patterns of health, fertility and prosperity that could be managed for optimising the well-being of the population (Li, 2005).

The standardisation presented society in a more legible, simpler and administratively convenient format (JC Scott, 1998, p. 3). As such, the purpose of the simplifications was not to represent the realities of society, but rather to rationalise the issues that interested the state. However, the operations of classification, interpretation and connection generated “new ways of seeing oneself and others, new problems to be addressed, new modes of calculation and evaluation, new knowledge, and new powers” (Li, 2005, p. 389). From this administrative social organisation flowed new discourses (enforced by law) about ‘proper land tenure’, ‘proper’ work habits, ‘proper’ living patterns, and so on (JC Scott, 1998).

In the “state’s attempt to make a society legible, to arrange the population in ways that simplified the classic state functions of taxation, conscription and prevention of rebellion”, it also strived to permanently settle “people who move around”, such as pastoralists, hunter-gatherers, Romani and homeless people (JC Scott, 1998, p. 2). The

state constructs models of the world that it can control, develop and improve (Li, 2005). JC Scott (1998) refers to these simplifications of the world as “seeing like a state”. But, while the simplification and standardisation of pastoral practices, landscapes and complex ecologies have made nomadic societies ‘legible’ from the state’s point of view, the simplifications contest the role of herders’ knowledge and know-how.

The constructions of the world hold notions of the governing measures needed to ensure the desired development and improvement. While these measures are often understood as ‘apolitical’, Ferguson and Lohmann (1994, p. 179) argue that development should be understood as “a means by which certain classes and interests attempted to control the behaviour and choices of others”. Based on their research in Lesotho, they describe the “anti-politics machine of development” as a machine that portrays *political questions* of land and resources as *technical problems* that can be addressed by technical measures (Ferguson & Lohmann, 1994, p. 180, my emphasis). Their observations are supported by Li (2005, 2007b), who points out that problems that are rendered technical by government policies and practices are simultaneously rendered non-political and that the state tends to identify problems in accordance with its competence and technical tools available.

### 3.3.5 The art of governing and the art of resistance

A key interest within political ecology is to deconstruct government rationality – *governmentality* – of environmental management. Governmentality is a concept introduced by the French philosopher Michel Foucault and concerns the art of governing; that is, the process that occurs when an authority, by calculated means, shapes, guides or affects human behaviour so that people, “following only their own self-interest, *will do as they ought*” (D Scott, 1995, pp. 202-203, italics in original). In other words, governmentality denotes the disciplinary procedures or processes that take place when people or institutions naturalise and accept the logic of governance as their own and govern themselves accordingly (Evans, 2012; Robbins, 2012, p. 75).

To study governmentality, Li (2007a) suggests exploring the following questions: What are the objectives of the governing actor? How do they define the problems? What do they want to happen? What are the strategies and techniques used to make this happen? The last question, which concerns the art of governing, can be explored further by looking into the techniques of power used to monitor, shape and control the behaviour of individuals in accordance with societal norms (Gordon, 1991; Ettlinger, 2011, p. 539). Foucault (2008, p. 313) identified four different techniques of power: 1) *Discipline*, which, as explained above, seeks to stimulate a certain behaviour by inducing individuals to internalise social norms and ethical standards; 2) *neoliberal rationality*, which provides incentive structures focused on maximising individual benefit; 3) *sovereign power*, which is the top-down construction of rules and threat of punishment if rules are not obeyed; and 4) governing according to truth as prescribed by, for example, a religion or particular conceptions of the nature and order of the universe (Foucault, 2008; Fletcher, 2010).

However, it is important to note that a governing power is neither homogenous nor totalising, because it may be contested and resisted by target groups (the governed) with the capacity for action and critique (Li, 2007a). Wherever government is employed, those who are to be governed have the possibility to ignore, avoid, fight, transform or reclaim the intervention (JC Scott, 1998). The very idea that indirect governance can be applied through governmentality “rests on the presumption that actors have choices; that is, they can conform to, reproduce, and elaborate discourses and prescribed norms”, and these actors can also challenge the discourses and norms (Ettlinger, 2011, p. 539). Different groups of actors – government authorities, religious communities, scientists, political activists and pastoralists – apply competing visions, mandates, and techniques for regulating human behaviour to ensure the enhancement of ‘proper’ development, welfare, conservation and production (Li, 2007a). Moreover, governmental interventions can be contested, resisted and limited, for example when the actors disagree about what constitutes an improvement and/or what is an acceptable cost of achieving the improvement, or when the interventions produce effects that are contrary to the objective (Li, 2007a). The power relations between the

governor and the governed can also be affected by the consequences of the intervention of a third actor, technology change or external structures (Gaventa, 1980, p. 23).

The governed struggle against state governance and the social, economic and political changes it introduces by everyday resistance – what JC Scott refers to as “the weapons of the weak” (JC Scott, 1985). The weapons of the weak are forms of resistance that require little or no coordination or planning and include “foot dragging, dissimulation, desertion, false compliance, pilfering, feigned ignorance, slander, arson, sabotage, and so on” (JC Scott, 1985, p. 29). An approach to exploring the patterns of resistance and structures of domination is to examine the divergence between what JC Scott (1990) refers to as “public transcripts” and “hidden transcripts”. Public transcripts are narratives that the actors (the authority and the governed) present in each other’s presence; hidden transcripts are narratives that the actors present ‘offstage’, removed from the observation by the other. While public transcripts can inform us about power relations, JC Scott (1990, p. 2) argues that they are “unlikely to tell the whole story about power relations”. He explains that the hidden transcripts include a critique of power communicated behind the back of the authority and the practices and claims of the authority’s rules that the governed cannot or will not acknowledge openly. The hidden transcripts also include narratives expressed openly, but disguised in the form of rumours, jokes, parodies, gossip, gestures, folktales, and so on.

### 3.4 Towards a political ecology of indigenous peoples

Political ecology is informed by postcolonial studies, which provides a critique of Eurocentric theory “as the only body of work relevant to ontological questions about nature and culture” (Sundberg, 2014, p. 42). Further, in line with postcolonial theory, political ecology seeks to explore the Eurocentric dichotomy between ‘us’ (the modern and civilised West) and ‘them’ (the primitive and backward ‘other’) and the divide between ‘nature’ and ‘culture’, and tries to explain how this logic supports Western domination of local and indigenous peoples, environmental systems and resources, and thereby contribute to global inequality and oppression (Robbins, 2012).

To explore this domination, Escobar (2010) suggests an ontological turn in political ecology that acknowledges the existence of socio-natural worlds based on non-Western ontologies. Within this field of political ecology, the main interest is “to study in postconstructivist ways non-Western understandings of ‘nature’ and ‘the environment’” and “cultural constructions such as ‘persons’, ‘property’ and ‘the economy’” (Escobar, 2010, p. 99). Escobar (2010) refers to this approach as a “political ecology of difference” or a “political ontology”. The latter term was introduced by the Argentinian-Canadian anthropologist Mario Blaser, who explains political ontology in the following way (Blaser, 2010, p. 23):

On the one hand, it refers to the power-laden negotiations involved in bringing into being the entities that make up a particular world or ontology. On the other hand, it refers to a field of study that focuses on these negotiations, but also on the conflicts that ensue as different worlds or ontologies strive to sustain their own existence as they interact and mingle.

Blaser (2009a) situates Eurocentred modernity as a particular worldview among many others, including indigenous ontologies. Where Western ontology separates nature from culture and tends to view the first as an object that must be appropriated and exploited through privately owned entitlements, indigenous ontologies regard the natural environment as an entity that “constitutes their territory and includes earth-beings who must be respected” (Acuña, 2015, p. 86). According to indigenous ontologies, a more appropriate way to understand people’s relationship with nature is that people belong to the land rather than the other way around (Blaser, 2009a, p. 891). Needless to say, indigenous knowledge is “inconsistent with the positivist-reductionist tradition in Western science, and the assumption that the professional expert knows best” (Berkes, 2008, p. 258).

As discussed above in Chapter 3.3.2, the Euro-modern ontology is based on the idea of universalism, namely that only one reality, or one truth, exists (Blaser, 2009a). The nature/culture and object/subject divides of modernity that are taken for granted



suppress subaltern ontologies and knowledge (Escobar, 2010). Therefore, the inclusion of indigenous knowledge systems in projects and assessments can be understood as a political act, because it challenges the balance of power between indigenous groups versus governments, developers, or conventional resource management scientists (Berkes, 2008, p. 263). This inclusion forces those who govern to deal with indigenous values and worldviews and breaks Western science's monopoly on 'truth' (Berkes, 2008). Furthermore, by rewriting history from the colonised perspective, researchers can foster learning and dialogue between worldviews (Sundberg, 2014); by addressing competing ontologies they could also offer an approach to understanding how socio-environmental conflicts emerge (Acuña, 2015; Ruiz Serna & Del Cairo, 2016).

### 3.5 Political ecology and Sámi reindeer husbandry

Compared to the number of political ecology studies about the Global South, relatively few have been carried out in the Global North. However, while political ecology is traditionally a field that has focused on southern geographies, it is increasingly recognised that the research themes of political ecology are also relevant and needed in the north (Schroeder *et al.*, 2006). In the words of Benjaminsen and Robbins (2015, p. 195): "The focus on power and on the linkage between materiality and meaning is just as important in, for example, Norway as it is in Namibia."

In the Norwegian context, scholars in the field of political ecology have explored competing narratives and knowledges about farmed salmon (for example, Aasetre & Vik, 2013; Christiansen, 2013; Movik & Stokke, 2015), and how the notion of 'the common good' influences decisions about the distribution of fishing rights between Sámi fishermen and tourists (Ween, 2012). Other topics addressed by political ecologists in Norway include the 'environmentalisation' of tourism and rural affairs (for example, Benjaminsen & Svarstad, 2008; Svarstad, 2010; Vik *et al.*, 2010), public perceptions of and participation in landscape planning and conservation (for example, Vik & Refstie, 2014; Eiter & Vik, 2015; Hongslo *et al.*, 2016), and the politics of maps (Hongslo, 2017).

Although not everything falls strictly within the category of political ecology, this thesis also draws on a growing number of critical studies of Sámi reindeer husbandry in Fennoscandia. For example, Bjørklund (2016) and Löf (2014) examine the governance of reindeer husbandry in Norway and Sweden, and Sandström (2008) and Widmark (2009) address institutional arrangements in Sweden. Myrnes (2010) uses a political ecology approach in her research on the relations between Sámi herders and other inhabitants of the southern Sámi reindeer-herding area of Norway. Robbins and Heikkinen (2006) and Heikkinen *et al.* (2010) explore the conservation discourses and conflicting ecologies of northern Finland, and Beach (2004) and Sandberg (1999) respectively examine similar issues in Swedish Sápmi and Norway. Bjørklund and Brantenberg (1981), Dalland (1983, 2005) and Briggs (2006) scrutinise the winners and losers of the Alta dam development that affected herders' access to pastures in Finnmark in the early 1980s.

Other fields that have engaged scholars are that of land tenure and the 'commons' of Finnmark (Marin & Vedeld, 2003; Marin, 2006; Marin & Bjørklund, 2015, 2016), and the notions of carrying capacity, overgrazing and rational reindeer husbandry (Heikkilä, 2006; Heikkinen *et al.*, 2007; Benjaminsen *et al.*, 2015; Benjaminsen *et al.*, 2016b). ES Reinert (2006, 2008, 2016) assesses the political economy of reindeer husbandry, Benjaminsen *et al.* (2016a) discuss alternative perspectives on 'proper' herd structures, and Skum *et al.* (2016) address the role of the bull and the castrate in the herd. IMG Eira *et al.* (2016) and MN Sara *et al.* (2016) present conflicting narratives of sustainable pastoralism and the meaning of reindeer numbers, Helander-Renvall (2007) and EI Turi (2016) critically assess the use of reindeer herders' traditional ecological knowledge in science and state governance, and Beach (2007), Kuokkanen (2011) and Reimerson (2015, 2016) discuss the Sámi and self-autonomy. In addition, ES Reinert (2001), H Reinert (2014), Benjaminsen *et al.* (2015) and Benjaminsen *et al.* (2016b) present criticism and discussions about research on reindeer husbandry. Most of these scholars directly or indirectly discuss the power relations between Sámi herders and society.

## 4 The research questions and placing the thesis within political ecology

Several of the above-mentioned studies on reindeer husbandry in Norway published since 2015 were part of the multidisciplinary project titled *The Economics and Land-Use Conflicts of Sámi Reindeer Herding in Finnmark: Exploring the Alternatives*. The project ran from 2012 until 2015 and was a joint project of the Norwegian University of Life Sciences (NMBU), the International Centre for Reindeer Husbandry (ICR) and the Sámi University of Applied Sciences. The short name of the project was *Dávvggas*, a northern Sámi word which can be translated as elastic, resilient, flexible or tough. The project had three objectives:

- To contribute to a new understanding of the economics of reindeer-herding through a historical investigation of its political economy and the value chain of reindeer meat.
- To describe and analyse land-use conflicts in Sámi reindeer pastoralism with reference to geographical conditions, climatic dynamics, actors, narratives, values and knowledge.
- To strengthen cooperation between researchers and reindeer herders in research and dissemination of knowledge.

This thesis, also part of the *Dávvggas* project, contributes to the field of political ecology by presenting an empirically driven analysis of the power dynamics between the state and reindeer pastoralists regarding the governance of Sámi reindeer husbandry. I studied the conflict related to the governance of reindeer husbandry, exemplified by the actors' conflicting presentations of what reindeer husbandry is and ought to be. I studied this phenomenon through four research questions:

1. What values and knowledge systems inform the actors' presentations about reindeer husbandry?

2. What are the actors' presentations of 'proper' management of reindeer, herders and land?
3. How do the actors influence and claim authority in decision-making concerning reindeer husbandry?
4. How does the state's governance of reindeer husbandry affect power relations among the actors?

The research questions were explored through four case studies, presented in four peer-reviewed scientific papers that examine different dimensions of the power relations in governance-related conflicts between reindeer herders and the state or society at large. Through a narrative analysis, I examined the actors' descriptions of the destocking process that commenced in 2007 and the power structures that influenced the herders' ability to participate in the decisions affecting the reindeer numbers (Paper 1). I studied the rationale for decision-making and the herders' ability to claim authority and rights to land by comparing two land-use conflicts (Paper 2). I explored the techniques of power used by the state to ensure rational reindeer husbandry and look at the herders' responses to these techniques (Paper 3). Lastly, I studied knowledge systems and worldviews that inform the state and herders' perspectives on 'proper' reindeer husbandry (Paper 4). The geographical scope of the study was West Finnmark and the temporal span from the 1970s to the present time.

To explore the complexity of governance conflicts and their nuances, the four papers examined how the herders and government officials explained policy development and implementation. I scrutinised the unequal discursive and material power relationships between the two sets of actors, and I assessed the herders' critique of authoritative knowledge. While each paper presents a different case, together they contribute to a broader discussion about discourses, knowledge and power relations. The four papers explore the ambiguous meanings of three different concept metaphors that are often referred to as ideals in the public discussion about the governance of Sámi reindeer husbandry: *rationality*, *sustainability*, and *participation*.

I place the thesis in the field of development studies. The particular development project explored in this thesis is the ongoing rationalisation of Norwegian Sámi reindeer husbandry that was introduced in the late 1970s. Following Tucker (1999), the thesis deconstructs the knowledge base and worldview of rationalisation. It examines how rationalisation narratives and regulations support the economic and political structures of domination and constrain possibilities for self-determination. The thesis adds to the increasing diversity of development studies by providing a case on environmental governance and indigenous people's issues in Norway, one of the world's richest countries.

The study is innovative as it uses participatory research and future narratives to assess the political ontology of reindeer husbandry (Paper 4). As such, the research contributes to a relatively new field within political ecology. Moreover, the thesis is an attempt to broaden the ongoing debate about sustainable reindeer husbandry in Norway and sustainable pastoralism internationally by specifically emphasising herders' presentations of the governance of reindeer husbandry – perspectives often ignored in the public debate.

In line with political ecology, the study aims to be both a hatchet and a seed. The study probes the political barriers that hinder herders' participation in decision-making and the mechanisms that undermine the herders' traditional knowledge. It also presents alternative ways to understand sustainable pastoralism and sheds light on how reindeer-herding knowledge provides nuances and complexity that could inform decision-making and make policies more relevant and more in line with Sámi worldviews. Moreover, the study serves "as a record to future scholars about the way thing looked in the dawn of the twenty-first century" (Robbins, 2012).

## 5 Methodology

### 5.1 Methodological approach and research design

As described in Chapter 4, the overall objective of the study on which this thesis is based was to examine the herders' and government officials' conflicting accounts of what reindeer husbandry is and what it ought to be. The research was designed as a case study of the governance of reindeer husbandry in West Finnmark as practised by the state and Sámi. My approach was to explore different types of governance-related conflicts. Apart from studying the conflicts themselves, I was interested in the actors' presentations of the conflicts – why the conflicts occurred and how they could be solved. Further, I wanted to examine the power relations that influenced the conflicts, as well as the knowledge and values that informed the actors' accounts of the conflicts and the contexts in which they appeared.

#### 5.1.1 The case study approach

A case study includes four different, but related elements of investigation:

- A methodology typically addressing 'how' and 'why' questions about contemporary events out of the researcher's control (Yin, 2009).
- A type of research design involving in-depth data collection from multiple sources of information (for example, interviews, observations and written material) to understand the complex and particular nature of the event, phenomenon or instance in question (in this study the governance of Sámi reindeer husbandry).
- An object of study, for example an event, a process, a programme or a group of people.
- The product of the inquiry presented as a conceptualisation of the material gathered (Creswell, 2007).

Due to its in-depth approach, a case study is well suited to examining complex issues like power and knowledge and determining whether an event is really what it appears to be at first sight (Flyvbjerg, 2006, p. 126).

While the case study inquiry focuses on the patterns and variations that can be observed within a phenomenon, it also aims “to understand features of a larger class of similar phenomena” (Gerring, 2004, p. 341). As such, the researcher explores the particular as well as the general characteristics of an event (Gerring, 2004, p. 345). The purpose of my research was nevertheless not to make broad generalisations about governance or pastoralism, but rather to gain an in-depth and situated understanding of the actors’ perspectives on and rationale for the governance of Sámi reindeer husbandry. I sought to gain this understanding through the four subcases of the investigation.

### 5.1.2 Identifying cases

Following the advice of Maxwell (2013), I started with a flexible research design. I refined the research questions as my insights on Sámi reindeer husbandry and the governance regime increased. I identified the conflicts to be studied before I started to formulate the research question for each subcase.

When I was accepted as PhD candidate at Noragric in autumn 2012, my plan was to study grazing conflicts between pastoralists and sedentary farmers on the coast of West Finnmark. However, by the time I had my first visit to the field, another conflict had escalated and received considerable attention in the public debate; namely, the state-led process to reduce the number of reindeer in Finnmark. I decided that the destocking in West Finnmark initiated by the 2007 Reindeer Husbandry Act would be the topic of my first subcase (Paper 1). I was interested to understand the meaning, consequences and solutions to ‘too many reindeer’ according to the two main actors, being government officials and the herders who purportedly had too many reindeer. Hence, the subcase provided a narrative analysis of the herders’ and authorities’ accounts of the decision-making related to the destocking. Further, the study looked at mechanisms that give authority to the state narrative and undermined the counternarrative of the herders.

Many of the herders interviewed about the destocking process mentioned encroachment on pastures as both a driver and a consequence of having too many reindeer. The second subcase (Paper 2) therefore addressed land-use conflicts. The subcase provided a comparison of two conflicts between pastoralism and mineral extraction in two different municipalities in West Finnmark. The study explored the actors' conflicting rationalities and competing claims to the land and how the politics of belonging affected the actors' ability to make claims.

During the data collection for the two first subcases, I often heard government officials refer to the long-standing irrational and unsustainable practices of herders in West Finnmark. I also heard herders refer to the reindeer policies as an attempt to Norwegianise Sámi pastoralism. To investigate these statements further, I decided that the third subcase (Paper 3) would focus on the state's vision and policy objectives for reindeer husbandry. This subcase presented the laws and regulations introduced to address the concern of excessive numbers of reindeer since the 1970s, as well as the authorities' and herders' accounts of the appropriateness of these policies. The study used *the art of governing* (Foucault, 1991; Li, 2007a; Foucault, 2008) and *everyday resistance* (JC Scott, 1985, 1990) as analytical concepts to assess how the policy regime affected herding practices, social structures and power relations between the herders and authorities, as well as within the herding community. The initial plan was also to examine the accounts of and power relations between the Sámi Reindeer Herders' Association (NRL) and the Ministry of Agriculture and Food (LMD). However, my repeated requests to observe the annual negotiations were rejected, and I was not able to interview members of the NRL Board about their dialogue with LMD.

The three subcases addressed the differences in the pastoralists' and authorities' perceptions about governance and reindeer husbandry, and this is explored further in the fourth subcase (Paper 4). Through participatory research – and with the use of future narratives as a method to stimulate discussion – the study explores the political ontology of reindeer husbandry. The study assesses conflicting knowledge systems and competing worldviews that inform the actors' presentations of what reindeer



husbandry is and ought to be, and their presentations about the proper management of reindeer, herders and the land on which reindeer pastoralism depends.

### 5.1.3 Method and data collection

The research was qualitative. I used a combination of in-depth interviews and informal conversations with the actors of the cases studied and direct observations of meetings between the actors. Written material also informed the study. The main part of the data collection took place during 2012 and 2015 in Kautokeino, Kvalsund, Alta, Oslo, the Røros area and Troms. (See Appendix 2 for an overview of field visits.) Most of my time in the field was spent in Kautokeino, the hometown of most of the herders from the West Finnmark herding region.

The fact that I was studying ongoing conflicts had some challenges that prolonged the period of data collection: It was difficult to decide when to stop collecting data, as the cases continued to develop.

#### 5.1.3.1 Interviews

Except for one, all the in-depth interviews were done face-to-face. Most of these interviews were conducted in a one-to-one setting – at the Sámi University College, at a conference, in the participants' office, in their home, or outdoors. The interview language was always Norwegian – the second language of the majority of the pastoralists and the first language of the government officials interviewed. Most of the participants were full-time pastoralists from the so-called problem districts in West Finnmark, namely herding districts that according to the official public statistics, had too many reindeer. (Figure 1 is a graphic presentation of the problem districts.) I also interviewed reindeer owners who were retired herders or derived their main income from jobs outside reindeer husbandry. To get alternative perspectives on the conflicts in West Finnmark, I interviewed some pastoralists from the southern part of the Sámi reindeer-herding region, the Røros area. I also conducted in-depth interviews with

representatives of LMD, the Norwegian Reindeer Husbandry Administration<sup>4</sup>, the West Finnmark Reindeer Husbandry Administration (now organised as part of the County Governor), the NRL and the Sámi Parliament.



**Figure 1: Facsimile from Reindriftnytt**

The facsimile shows the first page of an article titled “Here are the problem districts in West Finnmark” (see Reindriftnytt, 2014, pp. 40-45). The map presents the so-called problem districts as red.

Most participants consented to audio-recorded interviews to retain a full, un-interpreted record of what was said. Altogether, I gathered more than 60 hours of audio-recorded interviews, from which close to 40 hours were transcribed for the analysis. Table 1 gives an overview of the actors I interviewed. Appendix 1 outlines the interviewed pastoralists from West Finnmark.

<sup>4</sup> In 2014, this institution merged with the Norwegian Agriculture Authority and formed the Norwegian Agriculture Agency.

**Table 1: Overview of actors interviewed and the number of interviews conducted**

Participants	Number of participants	Number of interviews
Reindeer herders (West Finnmark)	20	32
Reindeer herders (Røros area)	6	7
Reindeer herders ( <b>other places</b> )	2	2
Government officials (Oslo)	12	10
Government officials (Finnmark)	11	14
Other (scholars, NGOs, industry)	7	8
	<b>58</b>	<b>73</b>

The key objective of the interviews was to collect the participants' accounts of how they made sense of the governance-related conflicts, and how their perceptions informed their actions (Maxwell, 2013, p. 81). To explore the complexity of the conflicts in West Finnmark and their nuances, I sampled the participants through purposeful selection (Maxwell, 2013). The sampling method was not chosen to secure a representative selection of participants. My aim was rather to select participants that could provide a broad spectrum of perspectives describing, interpreting and explaining the conflicts and processes studied, and to identify the trends and variations of the participants' perceptions of the conflicts (Bryman, 2008; Maxwell, 2013). The interviews were semi-structured; I did not use an interview guide. Most of the time, I only presented some key issues that I wanted the discussions to cover. However, when a specific theme emerged from previous interviews or I identified gaps in the collected data, I probed the participants about these issues in the subsequent interviews.

The study was further informed by informal conversations with people I met during my trips. These unplanned discussions often occurred in the coffee breaks of conferences, during public transportation, in the canteen of the Sámi University College, during social events in Kautokeino and in the field while visiting herding groups. Many people I met, asked questions about my research and commented on the cases I was studying. These comments helped me identify new potential participants

and new aspects of the conflicts, and their accounts added variation to and helped triangulate the data collected.

Studying a profession and livelihood and working within a culture and knowledge system that I am not a part of, was challenging in many ways. To better understand the practices in Sámi pastoralism and the dynamics within the herding community, I had regular discussions with some key participants. These key participants were themselves part of the pastoral community and they helped clarify the cultural context of the situations I experienced, translated words I did not understand, explained technical aspects of reindeer husbandry and were individual sounding boards on which I could test my own thoughts.

#### *5.1.3.2 Participatory research*

The methodology of the fourth subcase differed from the others, being based on participatory research. While the whole study focused on locally defined priorities and perspectives, this subcase also had a bottom-up approach, where the participants engaged in mutual learning, analysis and co-production of knowledge through storytelling (Cornwall & Jewkes, 1995; Bergold & Thomas, 2012; Paschen & Ison, 2014).

The research team included four Sámi pastoralists, myself and two other scientists – a biologist and a linguist. The participating herders were selected based on purposive sampling; we identified the participants strategically to ensure that they would be relevant to our research objective (Bryman, 2012). They were selected according to the following criteria: they had to be members of reindeer-herding families; should have practical experience in reindeer-herding and husbandry in West Finnmark in the late 1950s and 1960s, as well as after the political reform; should have participated in political bodies for reindeer husbandry; possess deep knowledge of and the ability to master and use reindeer-herding terminology; be interested in the research question; and – of course – be willing to share views and reflections on changes to the governance of Sámi pastoralism.

The research team was large enough to elicit a variety of experiences and opinions and to enable collective recollection and reflection on past events. At the same time, it was small enough to fit around a kitchen table and for all members to engage in the discussions. We emphasised creating an informal and dynamic atmosphere during team gatherings. We served coffee and food, and people could move around during the discussions.

The research team met twice for half-day gatherings. Both meetings were recorded, transcribed, and shared with the team. Before the gatherings, I defined topics for discussion together with the two other scientists. In reality, however, the discussions resembled a conversation among friends. We did not follow a strict step-by-step research approach, but took a more organic approach in dealing with research questions. The team members were free to raise any issue they found relevant to the question of concern, to tell anecdotes and jokes, and to question one another's stories and arguments. This semi-structured approach enabled in-depth explorations of issues that the participants found relevant to the discussion topic. Another constellation of participants might have altered the focus of the discussions.

During the first gathering, the topic of discussion was the political reform of reindeer husbandry in the 1970s, and how the new policies and regulations corresponded with the participants' and other pastoralists' traditional herding practices and knowledge. Before the second gathering, the two scientists and I developed two future narratives describing two very different governance structures for reindeer husbandry. The future narratives were used as a tool to stimulate engagement and reflections on the traditional Sámi reindeer-herding knowledge and worldview.

Future narratives are a form of scenario; they are qualitative descriptions of possible futures, used for discussing *What will happen?* (predictive scenarios), *What can happen?* (explorative scenarios), and *How can a specific target be reached?* (normative scenarios) (Börjeson *et al.*, 2006, p. 725). The future narratives that we developed were explorative. However, rather than to determine probable future governance

structures, the purpose of the narratives was to establish a shared platform for the conversations within the research team.

The first narrative described a governance regime with more state control, implying more detailed regulation of reindeer husbandry; the second narrative described a decentralised governance structure in which the pastoralists had more internal control, implying little state regulation and a strengthening of the traditional *siida* institution. The scenarios were informed by the accounts made by the research participants during the first gathering, conversations with other pastoralists, and statements by government officials on preferred herding practices. The narratives were exaggerated scenarios, which represented two opposing futures for Sámi pastoralism in which pastoralists' knowledge and worldviews played different roles.

During the second meeting, we explored what these two future narratives would mean for Sámi reindeer husbandry. Paschen and Ison (2014, p. 1086) explain that people interpret scenarios based on their own knowledge, values, and worldviews and that when the participants communicate their interpretations, they use their own words and their own stories to “re-work and order experience, evaluate events and construct meaning and knowledge”. Hence, the empirical data presented in Paper 4 come mainly from the participating herders' own life experiences. Through the facilitated discussions, the whole research team engaged in data analysis; in the process, we took an innovative approach to researching reindeer husbandry in Norway. (More details on the methodology of the fourth subcase are provided in Paper 4.)

#### *5.1.3.3 Observations and field notes*

To collect more data on the actors' narratives and power relations, I attended a number of public seminars targeting pastoralists to observe the actors' interaction in natural social settings. (See Appendix 2 for an overview of events attended.)

In the autumn of 2012, at the start of my research, the local branch of the NRL organised an internal meeting for the so-called problem districts in West Finnmark to

exchange views on the ongoing destocking process. The participants of the meeting had recently received letters from the Norwegian Reindeer Husbandry Administration with advance notice of a forced reduction of reindeer. I was invited and given an opportunity to present myself and my research, and although my attendance was brief, it gave me an overview of potential participants and some first inputs on their perspectives on the destocking.

Attending seminars – or rather the coffee breaks of the seminars – was an effective way to meet new people and to get an overview of the actors and their narratives. Facebook was a complementary arena for observing discussions on the governance of Sámi pastoralism. I followed two public and one closed discussion group for issues related to Sámi reindeer husbandry: *Samisk Reindrift – veien videre*, *Reindrift – Boazosagat*, and *Reaksjon mot TVANGS SLAKTING av Private reinsdyr*. All the groups were established and administrated by pastoralists.

Not all the attempts to access information were successful. I was interested in observing the annual negotiations for the Reindeer Agreement to get a better understanding of the relation between the state and the NRL. In both 2013 and 2014, I sent several requests for observer status to the NRL, but the first year, my requests were turned down. In the second year, I never heard from the organisation. In December 2014, I went to Oslo to observe the meeting of the National Reindeer Husbandry Board. The Board meetings are generally open to the public, but observers are asked to leave the room when issues discussed are exempt from public disclosure. Despite that I had been granted extended access to information (*forskerinnsyn*) from both the Norwegian Reindeer Husbandry Administration and LMD, I sat in the corridor during most of the meeting and could observe little of what was going on inside the meeting room.

I have observed the landscape and different seasonal pastures on several road trips across the interior of Finnmark and along the coast of West Finnmark and Northern Troms. I was also invited to visit two *siidas* in June 2013 during the earmarking of

young calves. I stayed for five days with one of the *siida* and participated in the practical work.

The observations I made during meetings, field visits and via Facebook gave me more insights into reindeer husbandry, the governance regime and how people discussed regulations and decision-making. I was therefore better prepared for the interviews and could identify relevant participants and discern information gaps in my data. To track the observations together with my ideas, assumptions, reflections and ethical concerns throughout the research period, I followed the advice of Maxwell (2013) and took notes in field journals.

#### 5.1.3.4 Document analysis

The interviews and observations were supplemented by an analysis of the written material. The study was informed by academic papers on the topic of reindeer husbandry and governance, in addition to state policies and regulations, White Papers, publications by the Norwegian Reindeer Husbandry Administration, minutes from the meetings of the National Reindeer Husbandry Board, debates in Parliament, official statistics, commentary trends and press coverage. As the research project was studying ongoing conflicts, I followed the public debates to ensure that my questions were relevant and kept abreast with the latest developments.

As already mentioned, I was granted extended access (*forskerinnsyn*) to three archives – the Norwegian Reindeer Husbandry Administration, LMD and the Ministry of Local Government and Modernisation (responsible for land-use planning). This provided rich material on old and new cases about the governance of reindeer husbandry. LMD requested an opportunity to review my work before I published anything based on their archives. Before publishing Paper 1, the manuscript was therefore sent to the Ministry for review, but I did not receive any feedback.

One participant, a pastoralist, said he wanted me to understand the dynamics between herders and the state, and so he gave me copies of his letter exchanges with



government officials on the destocking process between 2009 and 2013. Another pastoralist invited me to her home to go through all letters and documentation she had archived on the destocking in her district during the 1970s to 1990s. The analysis of the written material helped portray the narratives and perceptions of the actors without disturbing the setting in any way (Marshall & Rossman, 2006).

All quotes from interviews, letters, public documents, etc. presented in this thesis and in the scientific papers I have published are my own translations from Norwegian into English.

#### 5.1.4 Data analysis

A way to summarise and analyse data within qualitative research is to work with *concepts* (Becker, 1998; Klag & Langley, 2013; Lund, 2014). However, defining concepts from empirical data is not necessarily straightforward, and Becker (1998, p. 124) warns about “letting the concept define the case”, pointing out the risk that “we don't see and investigate those aspects of our case that weren't in the description of the category we started with”. To avoid defining a concept based on bias or a narrow range of data, Becker suggests “letting the case define the concept” and doing this by a sampling method that allows the widest possible variety of collected data. This approach could help us discover things “that enlarges our ideas about what might be present in the world we study” (Becker, 1998, p. 120).

I recognise that there is a difference between the physical meaning of a concept and the social interpretation of the concept. As discussed in Section 3.1, I acknowledge that concepts are relational and that social relations like politics and power affect the social meaning of a concept (Becker, 1998). However, my role as a researcher was not to resolve the ambiguity of the concept metaphors, but rather to recognise them (Moore, 2004). I therefore increased my chances of obtaining a broad understanding of the concepts I studied by diversifying my sources of data. This approach also gave me a broad insight into the social relations that influence the meaning and use of these concepts.

Accepting that concepts are ambiguous and relational means accepting that qualitative research is filled with uncertainty (Klag & Langley, 2013). This ambiguity also means that all research can potentially make theoretical contributions by providing new aspects and alternative perspectives that need to be included as a dimension of the phenomena studied (Becker, 1998).

To identify new variables that should be incorporated into the definition of a concept, Becker (1998) suggests that researchers also search for what is not said and events that are ignored, covered up or explained away. In addition, Walsh (2005) warns against overlooking or downplaying the *obvious* observations; that is, perspectives that are obvious to the participants but not necessarily articulated in a conversation. By asking questions like *Why are they saying this and not something else?* and *What are they not saying?*, researchers can assess how the statements, events and the world are observed and explained by individuals, organisations or systems, and critically assess these observations and explanations to identify the participants' biases – or what the German sociologist Niklas Luhmann calls the blind spots (Andersen, 2003). In this way, the researcher becomes a *second-order observer* – an observer of the observations of other observers – perceiving the world as polycontextual and broadening their own understanding of a concept or phenomenon (Andersen, 2003).

Yet, according to Luhmann, there are no privileged positions for observation (Andersen, 2003), or as Haraway (1988, p. 581) states, there is no “god trick of seeing everything from nowhere”. Researchers have their own blind spots – their own assumptions about the issue that they study – that will frame how the world appears and does not appear to them (Andersen, 2003). While the goal of the research is to question presuppositions, researchers need to assume something to recognise and observe the object that they study. The researchers' perspective constructs both the observer and the observed with implications for how they interpret their data (Andersen, 2003). As such, “it is always possible to observe the second order in a different way” (Andersen, 2003, p. 94) and consequently, the researchers have to be

conscious about their choice of analytical strategy and be open and transparent about their choice of perspective.

Narrative analysis draws attention to the competing understandings of what is going on. This type of analysis emphasises the stories that people tell and explores the forms and functions of the stories that people employ to explain connections between past, present and future events, between events and contexts, and peoples' sense of their role within the events (Bryman, 2008). How the participants tell their stories is relevant, because language is not a neutral medium for transmitting information. Rather, "language shapes our perception of the world, our attitudes and identities" (Walliman, 2011, p. 143). An analysis of people's accounts is an approach to identifying power structures and the dominant narratives, and furthermore to identifying alternative narratives and revealing undercurrents that might be embedded in people's stories (Walliman, 2011, p. 142).

A grounded theory approach was used in the analysis to conceptualise the observations made. Grounded theory provides a strategy for developing theories and *categories of meaning* grounded in empirical knowledge and induction (Svarstad, 2010; Willig, 2013, p. 70, italics in original). In accordance with this research approach, I applied open coding to the collected data and treated the data collection and analysis as interrelated processes (Corbin & Strauss, 1990). Through conceptualising the data, I explored theories that could shed light on my observations. Following Lund, I went back and forth between the data collection and the analysis in the processes of understanding the studied "phenomenon empirically and describe it conceptually" (Lund, 2014, p. 228). I found, for example, that engaging with the concepts of *governmentality* (Foucault, 1991; Li, 2007a; Foucault, 2008), *weapons of the weak* (JC Scott, 1985, 1990), *politics of belonging* (Yuval-Davis, 2006), and *political ontology* (Blaser, 2009a, 2009b; Escobar, 2010) was helpful in the analysis of how policies meet practice, and how state regulations affect power relations within the herding community as well as between the state and pastoralists.

To store and manage the data collected, I used the NVivo software to help code and analyse qualitative data (especially for paper 3 and 4), and the Aeon Timeline software to help me keep track of the chronological order of events in policy development and decision-making concerning reindeer pastoralism (especially for Paper 1).

#### 5.1.5 Reliability and validity

Bryman (2008) suggests assessing the authenticity and trustworthiness of a study to examine its validity. Authenticity concerns the practical outcomes of the research. In his study, he points out that a study is authentic when it represents participants' viewpoints in a fair way and contributes to an increased understanding of the social phenomenon (Bryman, 2008).

Bryman (2008) divides trustworthiness into four criteria: credibility, transferability, dependability and confirmability. Credibility is enhanced when the research is conducted according to ethical standards and seeking confirmation of research findings among participants. Credibility is further enhanced through triangulation; that is, using more than one method or source of data to study the phenomenon under focus. Transferability can be secured by providing the reader with enough information – for example, “rich accounts of details” (Bryman, 2008, p. 378) of an event – to judge whether the findings can be transferred to other cases. Though time-consuming, dependability is enhanced by adopting “an ‘auditing’ approach” (Bryman, 2008, p. 378) to all phases of the research; that is, allowing peers to review the interview transcripts, field notes, data analysis, etc. Lastly, confirmability is enhanced when the researcher acts in good faith and does not let her/his personal values and theoretical inclinations dominate the research findings (Bryman, 2008).

I sought to enhance the credibility of my research by interviewing multiple participants to identify trends and variables in their accounts. I found that repeating the same questions to different participants gave me access to the similarities and nuances in the participants' perspectives, values and objectives. By visiting Finnmark regularly throughout the research period, I met many of the participants repeatedly. I

used these occasions to ask follow-up questions and test my interpretation of the stories they shared during the in-depth interview. Sometimes I conducted a second or third in-depth interview with the same person; other times we just had an informal conversation. I corresponded by text messages with some herders, to obtain their immediate input to illuminate former discussions. Following the public debates was an additional way of triangulating the data I had collected. As a way to both triangulate and enhance the dependability of my study, I regularly discussed my findings with the other researchers in the *Dávvgas* project, and on several occasions, I presented my research and observations at public seminars in Kautokeino. I found, however, that it was easier to receive feedback from herders and others in more informal one-on-one conversations with people.

## 5.2 Ethical considerations

As my research concerned “people and their relationships to each other and to the world” (Walliman, 2011, p. 151), and because I was researching an indigenous minority, I found it particularly important to consider the ethics of my study. What was ‘only’ a study subject to me, was – and still is – someone else’s everyday concern. Research ethics comprise a set of moral values that guide the conduct and actions of researchers and promote respect for individuals, ensuring objectivity, integrity, accuracy, honesty and sound intellectual reasoning (Bryant & Jarosz, 2004). Guidelines for the social sciences require special attention to ethics when researchers study cultures other than their own. According to the Norwegian guidelines for social sciences, a researcher must seek informed consent from research participants, have “knowledge about and respect for local traditions”, cooperate with local members of the community being studied, and formulate a research agenda according to the communities’ needs and concerns (NESH, 2016, p. 24). The study on which this thesis is based was conducted in accordance with these guidelines, as well as the ethical guidelines of the International Centre for Reindeer Husbandry (see ICR, 2006).

Because research findings can influence policy and decision-making, researchers have a particular responsibility to society (Shrader-Frechette, 1994). By providing the

public with information relevant to the common good, researchers can contribute to shaping an informed public opinion and a better quality of life. Conversely, allowing research results to be misused and misinterpreted could legitimise repression by political and economic elites in society (Shrader-Frechette, 1994; NESH, 2016). To preclude social and political prejudices, researchers should pay attention to how data is selected, used and interpreted (Shrader-Frechette, 1994). Particular care should be taken to avoid classifications that give grounds for unreasonable generalisations and lead to the stigmatisation of certain social groups, such as minority cultures (NESH, 2016). Thus, responsible research has the potential to increase the understanding of natural and human-driven processes, disclose power relations and contribute to more relevant and just decision-making that might be less damaging to people previously unrepresented in the scientific process (Forsyth, 2001).

### 5.2.1 Research on an indigenous livelihood

The history of Norwegian–Sámi relations complicates social science research on Sámi issues. Many members of the Sámi community experience contemporary Norwegian research on Sámi issues as a continuation of colonial relations, controlled by ‘outsiders’ and top-down perspectives. Kuokkanen (2007) explains that studies of indigenous peoples tend to reproduce Western knowledge rather than reflect indigenous peoples’ own concepts of knowledge, worldviews, values and histories. She argues that for centuries, the conventional approach to researching indigenous peoples was to study, measure, categorise and represent indigenous peoples through the ethnocentric lenses of the dominant society (Kuokkanen, 2007).

During my research in West Finnmark, I met many pastoralists who criticised researchers and government officials for emphasising Western science and ignoring the pastoralists’ knowledge and explanations of causalities about the reindeer and landscape. Many pastoralists had a general low confidence in outsiders’ research on Sámi reindeer husbandry as they did not recognise the reality described by these studies. Several of the participants had personal experience of being members of scientific and political bodies from the 1970s and onwards. These herders claimed that

they were not told how the information they provided would be used and that the scientists often manipulated the information they collected before it was presented as findings. Many pastoralists did not trust scientists because they regarded them as serving the authorities and giving them the grounds to make decisions that negatively affected the pastoralists. Participants told me that a common strategy among herders was to withhold information, for example, by not revealing their true reindeer numbers. Consequently, the participants argued, many scientific publications about reindeer husbandry contain incorrect information. The same participants furthermore claimed that these publications were used uncritically as sources in current research and political decision-making.

In their assessment of reindeer husbandry and encroachment in Finnmark from 1981, Bjørklund and Brantenberg (1981, p. 16) argue that the authorities had a Norwegian perception of reindeer husbandry that disregarded the social and cultural aspects of pastoralism and regarded the herders as individual meat producers, similar to farmers.<sup>5</sup> These authors state: “Instead of understanding Sámi reindeer husbandry in its cultural context, Norwegian authorities insist on managing based on [the knowledge and vocabulary of] agronomists and grazing consultants” (Bjørklund & Brantenberg, 1981, p. 16). ES Reinert (2001, p. 7) makes similar observations. He argues that research on reindeer husbandry has mostly been conducted by natural science researchers with a heavy focus on the biology of reindeer and lichen. Also, he claims that much of the scientific knowledge produced about Sámi pastoralism lacks local or cultural context and sensitivity. In 2013, during the time I was collecting data for this study, both the NRL and the Sámi Parliament Council publicly criticised outsider researchers for being biased and speculative when they collected and interpreted their data.<sup>6</sup> The research results were criticised for not including input

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<sup>5</sup> Bjørklund and Brantenberg (1981, p. 16) assessed impacts from infrastructure development on pastoralism in Finnmark few years after the introduction of the rationalisation programme.

<sup>6</sup> Press releases from NRL, dated 5 July 2013, “Do not trust Tveraa’s research on predators” (*Har ikke tillitt til Tveraa’s rovviltforskning.*), and the Sami Parliament Council, dated 24 June 2013, “Speculations about loss to predators” (*Spekulativt om rovdyr tap*).

provided by herders during the study, and for not reflecting what herders experienced on the ground.

### 5.2.2 Being relevant

With this critique of Sámi research in mind, this study was designed to overcome the conventional power relations between scientists and Sámi reindeer herders. To deal with herders' scepticism, and to ensure that my study met the herders' needs and concerns, I engaged in an open and continuous dialogue with Sámi scholars, pastoralists and other experts. This dialogue provided insights that helped me identify relevant case studies, provided a backdrop to understanding the actors' concerns and interests and kept me updated on pasture conditions, land-use conflicts, herding practices throughout the year, and perspectives on current policy and politics. Moreover, this dialogue was essential for developing trust and relationships within the herding community in West Finnmark, and access peoples' concerns and aspirations. The topic of the study was close to the heart of the participants, and all of them had perspectives, knowledge and lived experience relevant to our conversations and to the study.

### 5.2.3 Informed consent

The concept of *free prior and informed consent* (FPIC) is a central factor of indigenous peoples' rights (see Article 31.1 of UNDRIP, 2007). Shrader-Frechette (1994) argues that the requirement of informed consent is important because researchers have a conflict of interest. On the one hand, they need research participants to conduct interviews and collect information, and on the other hand, they have a responsibility to protect the well-being of research participants. The concept of FPIC requires that researchers provide full information about the potential risks and benefits of the research, ensures that participation in the research is voluntary and that the participants are emotionally, mentally and physically competent to give their consent (Shrader-Frechette, 1994). One way to accommodate informed consent, suggested by



Israel and Hay (2006), is to invite participants to engage actively in the exchange of information.

My own experience indicates that this exchange of information is easier when there is some trust between the researcher and the participant (see Section 5.3.3). When I first started contacting individuals for interviews, I used a formal approach. I emailed, called or spoke face-to-face with each potential participant, I provided them with a standard information sheet<sup>7</sup> about the research project and gave them an electronic link to the full project description of *Dávvgas*. However, I quickly learnt that while this was a useful procedure when requesting interviews from government officials, this approach was an ineffective method when recruiting participants from the herding community. I got very few responses and few read the information sheet.

A much more efficient approach was to vocally explain the study as part of a dialogue instead of a presentation. Prior to the interviews, I told the participants that they could withdraw at any time and that they were not obliged to respond to any of my questions. I asked permission before audio-recording and made clear that I could stop the recording at any time. One of the participants did not agree to recording the interview, and several participants (both pastoralists and government officials) asked me to pause the recording so that they could share information and personal opinions that they did not want to have on record. One participant specifically asked me to delete the recording when I had finished using it. Very often, the discussion with the participants continued, and new information was shared after the interview had been formally ended and the recorder turned off.

Although the pastoralist participants were sometimes initially sceptical towards me, my experience was that once they learnt a bit about me, they became more positive

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<sup>7</sup> The *Dávvgas* project was granted permission by the Norwegian Social Science Data Services (NSD) to collect data at the individual level. NSD also approved the project procedures for obtaining consent. Part of the requirement of NSD was to formulate a standard information sheet for obtaining informed consent of the research participants. The information sheet was written in Norwegian and outlined briefly the project partners, research objectives, purpose of data gathering through interviews, and how data would be stored to secure confidentiality.

and willing to engage in conversations. Gradually, I became a more familiar face and it became easier to approach pastoralists for interviews and informal talks. There were also examples of pastoralists who had approached me; they had heard about me through the grapevine and they had experiences and stories that they wanted to share with me.

#### 5.2.4 Anonymity

It was important to ensure the anonymity of the participants. Kautokeino is a small community, and so are the overall Sámi pastoral community and the group of government officials working with issues related to the governance of reindeer husbandry in Norway. Government officials are vulnerable because they cannot reject a researcher; part of their job is to provide official information to the general public, including researchers. Through my research, many participants (both pastoralist and government officials) have entrusted their personal accounts and sensitive information to me. Some government officials have been open to the extent that their loyalty to their employer could be doubted.

Due to the sensitive information and the rather small communities of key actors, I have left out information that could disclose the identity of the source when discussing this information in this thesis, in my articles, with my supervisors and other participants. Only when I use quotes from the public discussion (for example, press releases, commentaries and interviews in newspapers and other media, debates in Parliament, public lectures or seminar presentations) do I refer the source by using full name and title in my writing.

For one of the articles (Paper 4), it would have been appropriate to acknowledge four pastoralist participants as co-authors, in accordance with the Vancouver convention for academic publishing (International Committee of Medical Journal Editors, 2015). However, when asked, the relevant participants responded that they preferred to remain anonymous.

### 5.3 Reflexivity and positionality

Reflexivity concerns how social researchers affect and become affected by their participants and the phenomena they investigate through their methods, values, biases and decisions, and their mere presence in the very situations they investigate (Bryman, 2012; Maxwell, 2013). Reflexivity can both facilitate and hinder various aspects of the research (Maxwell, 2013, p. 91). Positionality refers to the positioning of the researchers in relation to the social and political context of the study (Coghlan & Brydon-Miller, 2014). In this section, I reflect on my relationship to my study topic and the participants.

Natural resource management and human rights are issues that have interested me for most of my life. In my earlier days, I was an environmental activist, and I still have friends and continue to be a member – though a less active one – of several NGOs with ambiguous attitudes towards reindeer husbandry in Finnmark. As a young adult, I took a bachelor's and a master's degree in the field of environmental studies. In the decade before the start of this PhD study, I worked for GRID-Arendal (a Norwegian non-profit public foundation) on projects related to ecological management and indigenous peoples' livelihoods. Since 2009, my work has focused on environmental change and its impacts on reindeer pastoralism in the Arctic and sub-Arctic. Through this work, I developed a network within the world of reindeer husbandry in Norway and internationally. I have visited pastoralists and herding areas in Norway and Mongolia and learnt about different actors' perspectives on the obstacles and possibilities for sustainable pastoralism.

Being born and raised in the south of Norway, and growing up knowing very little about pastoralism and Sámi issues, this was a new world to me. I started following the political debate about reindeer husbandry in Norway and used every opportunity to have conversations with herders to learn about their aspirations. It became clear to me that the herders and the Norwegian public at large had different understandings of how to govern and practice sustainable reindeer husbandry. I further noticed that the accounts presented in Parliament, by the press and in the social media rarely included

the herders' perspectives. This triggered my interest in seeking a better understanding of the conflicting perspectives on sustainable pastoralism and finding out why the public debate seemed to only reflect one of the perspectives – that of the general public.

### 5.3.1 Value judgement

The ethical guidelines for the social sciences require that researchers cooperate with local members of the community being studied, and formulate a research agenda according to the communities' needs and concerns (NESH, 2016, p. 24). However, my close cooperation with scholars from the pastoralist community throughout this study has raised questions about my value judgement. To address these questions, in line with the advice of Shrader-Frechette (1994, p. 40), I present my values upfront here to enable anyone to ethically scrutinise my research.

My philosophical starting point is that knowledge is situated, partial and struggled over. Thus, the research aimed to be sensitive to various knowledge systems and worldviews and take these into account when interviewing and analysing information from the participants. (Paper 4 has a special emphasis on knowledge systems and worldviews.) I wanted my study to make it clear that the herding community in West Finnmark is not a homogenous group of people. Within this community, there is a diversity of herding practices and attitudes towards the state governance regime for reindeer pastoralism. Therefore, the stories each herder shared with me had to be understood in the context in which they were told. As mentioned, these nuances were not clearly reflected in the press and in political debates, which often portray herders as one body with one voice and one attitude. Moreover, the herders in West Finnmark tend to be presented in general and negative terms, socially stigmatising the group (see Paper 1 for more about the dominant narrative and counternarrative). The intention of my study was to address the lack of nuances by revealing the broader diversity between the herders' stories, and thereby to be more accurate and socially relevant than reflections emphasising the dominant accounts (Forsyth, 2008).

Guided by political ecology, I subscribe to both environmental sustainability and social justice as core values (bearing in mind that these concepts are ambiguous). I have sympathy for the reindeer herders' political and environmental struggles, but I do not regard them as victims or actors without agency (see Paper 3 for more on forms of resistance within the herding community). The thesis presents a critical analysis of the governance of pastoralism in Norway; however, while the thesis is explicit, it is not judgemental. By following high ethical standards (see Section 5.2 on ethical considerations), I have sought to combine a value-based motivation for research with an open-minded approach to the study.

### 5.3.2 Research relationships

Creswell (2007, p. 243) argues that whether researchers know a topic well or not – and whether they are regarded as insiders or outsiders by the community they study – they have to be “conscious of the biases, values, and experiences that [they bring] to a qualitative research study”. My knowledge, past experiences, culture and values certainly affected how I designed and conducted the study, but there is no simple answer to how my approach and access to participants would have differed if my ethnicity, gender, age, livelihood or ideology had been different. England (1994, p. 316) argues that “there is no clear landscape of social positions to be charted by an all-seeing analyst”. And when it comes to research relationships, I share the perspective of Moser (2008), who suggests that a researcher's personality could play a more important role in the power structures between the researcher and participants than positionalities. She argues that researchers' ability to access participants, their stories and hence their production of knowledge depends on their social skills, namely how they conduct themselves and how they navigate the personalities of those they meet.

In this and the following section, I share some reflections on my research relationships made during the study, factors that might have affected my access to information, and my approach to developing good relationships with participants from the herding community.

As explained in Section 5.3.1, I was already somewhat familiar with the political and environmental issues related to reindeer husbandry when I started the PhD research. Yet, while my insight in these issues felt like an advantage when developing my research project, I was also aware of the possibility that this could make me think that I was more knowledgeable than I really was and hence blind me to certain issues. I sought to address this risk by asking 'naïve' questions about issues that I thought I already knew the answers to. Sometimes the naïve questions elicited in-depth explanations by patient participants; at other times I had to show I had some insight and ask more informed questions to trigger a response from a participant.

I conducted the research in my own country and could use my first language in dialogue with the participants. However, in the Sámi herding community, I was a 'foreigner' – an outsider. I was studying someone else's culture. Although everyone agreed to do interviews in Norwegian, Northern Sámi is the first and preferred language for most of the pastoralists I engaged with. On several occasions, a participant would remark: "This would have been so much easier for me to explain in Sámi language." The Sámi pastoral terminology is more sophisticated and precise in describing reindeer husbandry. Therefore, conducting interviews in Norwegian might have limited my access to all the complexities of Sámi pastoralism.

However, the advantage of being perceived as an outsider could be that the participants did not expect me to know everything about pastoralism. Therefore, most participants took the time to explain the contexts of the stories they shared during the interviews. For example, El Turi (2016, p. 54), a scholar born and raised within a Sámi reindeer-herding family, found that her knowledge of reindeer-herding praxis and terminology enabled her to ask in-depth questions and access information "which someone with no experience in reindeer pastoralism might not have been able to do". On the other hand, she found that the participants sometimes assumed that she knew more than she actually did. She explains that this created misunderstandings and complicated the process of data collection. Like El Turi (2016), I recognise that an individual may be an insider according to some parameters (culture, interests, gender,

age, etc.) but an outsider according to others. As a non-Sámi researcher, I acknowledge that there are insights that will be very difficult for me to access. Ignorance might affect my “ability to ask more meaningful questions and read non-verbal cues” (Merriam *et al.*, 2001, p. 411). However, if I had been closer to the Sámi culture, it might have affected my ability to ask naïve, provocative and taboo questions.

Independent of whether a researcher is an insider, outsider or in the space in between (England, 1994; Dwyer & Buckle, 2009), I recognise that there are multiple ways to interpret what is going on. To increase my chances of understanding the cases I studied, I tried to sensitise myself to the herders’ traditions and practices (Kuokkanen, 2007), as well as their knowledge systems and worldviews. I knew that ignorance could affect my observations and understanding of the research findings, and therefore, I found it useful to discuss my observations during informal talks with herders and other scholars within the *Dávvgas* project. These discussions helped me to discern different ways of understanding observations and to contextualise my empirical data.

I realise that the power relations between a researcher and the participants are yet another factor that can affect the data collection and interpretations (Forsyth, 2001). The participants hold the power to decide whether to share their stories with me or not, and the researcher holds the power to analyse the stories and make conclusions. However, “how a research project is understood is not entirely a consequence of the relation between researcher and researched” (Rose, 1997, p. 319); different readers of this thesis might therefore develop different interpretations of my research project. Although the ethical commitment of my research has been to do no harm to those that have agreed to share their stories with me, and although my intention has been to contribute to enlightening the discussion on what Sámi reindeer husbandry is and what it ought to be, there will always be a risk that my interpretations are skewed or that my thesis is misread. I have found that in the state governance of Sámi pastoralism, scientific texts are seen as more objective and *truer* than people’s personal accounts. As such, government officials and the general public tend to give

more weight to the second-level observations of a researcher than the first-hand experiences of a herder. By discussing my observations with herders and scholars, as well as reviewing processes, I have sought to minimise the risk of misinterpreting and being misinterpreted.

### 5.3.3 Building trust

Because I was well aware of the obstacles that could affect the research relationships, I focused on building trust with the reindeer herders. In doing this, I found it useful to try to see myself from the herders' perspective. Though I might have been categorised as a Norwegian by the participants, I do not believe that this is the only way I was categorised.

For example, I think my affiliations mattered. As explained in Chapter 1, my research was part of a larger project, the *Dávvgas* project, namely a joint project of NMBU, where I have been a PhD fellow, the ICR and the Sámi University of Applied Sciences. The University is also the home of my second supervisor, who is a scholar and a reindeer owner, born and raised in a Sámi reindeer-herding family. My close cooperation with Sámi institutions and individuals from the herding community helped me to gain access to potential participants within the community. Simultaneously, my affiliation with NMBU was a possible obstacle for engaging with herders. Many pastoralists criticise the NMBU – the former Norwegian College of Agriculture – for being the hub that developed the knowledge base for the rationalisation policies of reindeer husbandry. To gain the trust of the herding community, my strategy was to be open about my affiliation with NMBU.

In June 2013, during my first year as a PhD candidate, I attended the annual meeting of the NRL. The three-day event gathered delegates from the eight local branches of the NRL, guests and other pastoralists (mostly from the Kautokeino area) who observed the meeting. My second supervisor was one of the delegates from the local branch of Kautokeino. In the Sámi language, she introduced me to other delegates at the meeting. She explained the *Dávvgas* project and facilitated conversations between myself and



delegates. At my next visit to Kautokeino (August 2013), she introduced me at a meeting between representatives of the so-called problem herding districts in West Finnmark. The 12 representatives who attended had met to discuss the state-led destocking of reindeer in Finnmark. I did not observe the meeting, but I was given the chance to introduce my research project before they started their internal discussions. Furthermore, my second supervisor gave me an overview of the members of different *siidas* and herding districts in West Finnmark.

Tapping into my second supervisor's networks and insights gave me a good basis for identifying people to approach for interviews. Many people remembered me from the introductions, which facilitated my dialogue with members of the pastoral community in Kautokeino and made it easier to approach herders on my own. Throughout the study, I continued attending open meetings and seminars targeting pastoralists from West Finnmark. I used these opportunities to talk to people, widen my network and request interviews. (See Appendix 2 for an overview of events attended.) Participating in seminars and visiting the offices of my affiliated Sámi institutions was also an effective way to meet herders.

Furthermore, I found it important to build other, independent relationships. Kautokeino is a small community, the herding families are both competitors and partners, and I did not want to be seen as being tied to one particular family or *siida*. However, I found that many pastoralists that I approached on my own for the first time were sceptical towards me. It was only after I had explained my research objectives, telling them about the *Dávvgas* partners and who my supervisors were, that they agreed to participate in the research. Some pastoralists whom I contacted by phone wanted to meet me face-to-face before they would consider being interviewed. I had to approach other pastoralists repeatedly, over several years, before they were willing to talk with me – without being audio-recorded. Often, I was assessed prior to an interview; pastoralists would ask me about my interest, political belonging, my marital status, whether I had children, and about my research assumptions and preliminary

findings. I responded openly to the questions, because this probing facilitated transparency, informed consent and trust-building.

Visiting a community where everyone tends to know each other, my presence was noticed and triggered questions. People I met at seminars, on the bus, in cafés and elsewhere would often ask me who I was and, when they learnt that I was a researcher, ask about my study and findings. Early in the study, I made a conscious decision to share some of my observations with anyone who asked. Often, I experienced that this sparked longer conversations as my discussion partners would share their own views on the same matter. These conversations were not formal interviews, but they helped me gain additional perspectives and a better understanding of the differences and similarities in attitudes within and about the herding community. During these informal conversations with reindeer herders, I was often told: “You have understood us.”

Openness about the purpose of the research is a way of building trust and facilitating informed consent, but I realised that it could also influence the responses of the participants. There was a risk that the participants’ answers were formulated to skew my research conclusions in a certain direction. On the other hand, my openness could also lead to more effective interviews and informal discussions because if the participants understood what kind of information I sought, they could elaborate on the relevant issues. I also experienced that the participants helped broaden my scope by bringing up new issues that they found important and relevant to my study.

I have heard from my research partners in Kautokeino that I have been well received within the herding community in West Finnmark. I have been described as humble in my approach. I am a good listener and I am genuinely interested in the topics I discussed with the participants – and I believe they noticed. I acknowledge that the herders are experts in their field and without their willingness to share information with me, I would have no data to analyse and no thesis. I have treated the participants with respect and assessed the situation before raising sensitive issues. There were

certain types of personal questions that I never asked, for example, about people's number of reindeer<sup>8</sup> and personal relationships between and within *siidas*. I am very grateful to the many people who have invited me into their homes for reindeer meat, coffee and interesting conversations, and to those that wanted to share very personal and sensitive stories with me.

When discussing my research relationships with my second supervisor, she told me that she had been surprised how quickly herders took an interest in my research project. In the beginning, she said, she thought that it was my name that helped me build a good relationship with the herders. When I was first introduced to herders in Kautokeino (see Section 5.2.3), many responded very positively to my name. I realised to my surprise that I share my name with the 'mother of Sámi radio' (*Sameradioens mor*). Through her teaching and ceaseless work as Programme Secretary in Norwegian national broadcasting NRK, Kathrine Johnsen (1917–2002) has been recognised for her great importance to the Sámi language and culture (Lindkjølen, 2009). My name might have been an effective icebreaker in my meetings with older generation Sámi. However, my second supervisor told me that she also observed how quickly I was able to gain the trust of the younger generation too – people who are not familiar with Kathrine Johnsen. Non-Sámi women are sometimes referred to as *rivgu*. *Rivgu* is a neutral term but is often used to refer to someone for whom people have a lower regard, in a negative and patronising way. As far as I am aware, I have never been called a *rivgu* and have certainly never felt treated like one. In general, the reindeer-herding community has treated me really well.

Just as my personality and behaviour affected my access to participants and information, the personality of the participants also affected the fieldwork process and outcomes. I assume that other researchers collecting data through interviews also experience what I did, namely that my ability to access the participants' stories and

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<sup>8</sup> Asking how many reindeer someone has is considered rude.

reflections depended on the chemistry between the participant and myself. Some participants were just easier to engage than others.

## 6 Situating the study

### 6.1 Pastoralism and traditional Sámi reindeer husbandry

Pastoralism is one of the most sustainable food systems on the planet and it plays a major role in safeguarding natural grasslands and rangelands (McGahey *et al.*, 2014, p. viii). However, when addressing the issues of pastoralism, a challenge is the myriad of definitions of the concepts. For example, Jenet *et al.* (2016) explain that “estimates of the numbers of pastoralists worldwide range from 22 million to more than 200 million, depending on the definition used and the age and quality of the data”. On the other hand, UNEP and IUCN (2009) state that pastoralism is practised by between 200 and 500 million people worldwide. Further, according to McGahey *et al.* (2014), pastoralism is conducted in more than 75% of the countries in the world, across a quarter of the world’s land area, and provides a livelihood for approximately 500 million people. The FAO (2001) and WISP (2010) state that pastoralism supplies 10% of the world’s meat production through approximately one billion head of livestock, making a significant economic contribution – especially in some of the world’s poorest regions. The types of livestock kept by pastoralists depend on climate, landscapes and ecosystems, access to water and other natural resources, and may include many different species – cattle, camels, goats, sheep, yaks, horses, llamas and reindeer (Rota & Sperandini, 2009).

Mobility is a key feature of pastoralism. Many pastoralists are nomadic or semi-nomadic, as these practices offer a way to exploit the seasonal variability of marginal and unstable grazing resources – such as the drylands and steppes of Africa, the Mideast, Central Asia and Mongolia, the highlands of Tibet and the Andes, and the tundra and taiga of Scandinavia and Siberia (FAO, 2001; Pedersen & Benjaminsen, 2008). Another common pastoral practice is maintaining pastures for contingencies

such as periods of drought or frozen grounds (McGahey *et al.*, 2014). Seasonal migration between different grazing lands is a key strategy to reduce the risks of food shortages. Through herding and migration, pastoralists disperse the impacts of grazing over several pasture lands in a relatively large area and allow the recovery of seasonally used pastures (Reid *et al.*, 2008).

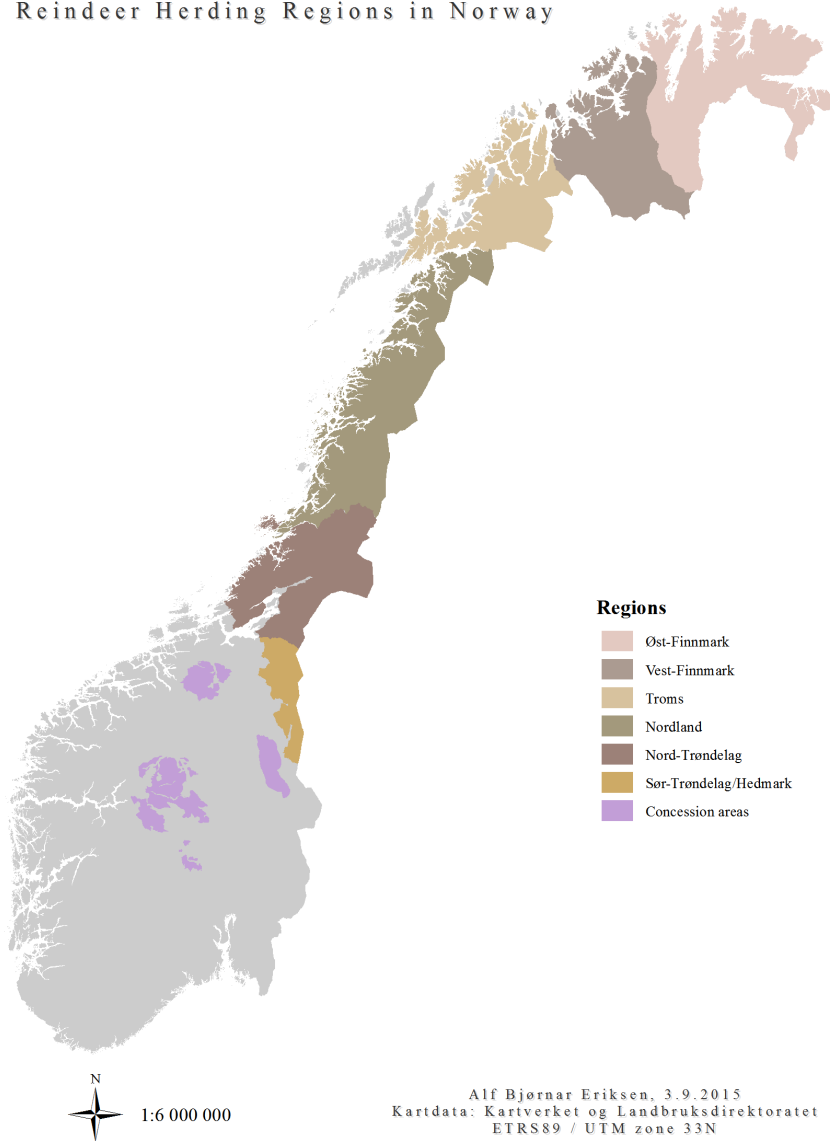
Nomadic and semi-nomadic reindeer pastoralism provides a livelihood for approximately 24 different indigenous peoples living on the Arctic tundra and sub-Arctic taiga. Most of these indigenous groups live in the Russian Federation, but reindeer husbandry is also practised in Norway, Sweden, Finland, Mongolia, China, Alaska, Canada, Greenland and Scotland. The livelihood involves some 100,000 herders, nearly 2.5 million semi-domesticated reindeer and approximately four million square kilometres of pastures in Eurasia (CAFF, 2006).

In Norway, reindeer husbandry is recognised as an indigenous livelihood. According to national legislation, only people of Sámi descent may own reindeer, with the exception of a few concessions areas in the south where both Sámi and Norwegians are reindeer owners. In the Sámi population, those engaged in reindeer husbandry are a minority. In 2017, there were 541 concessions<sup>9</sup> for managing a herding unit in Norway, and there were 3,233 registered reindeer owners with a total of 213,913 semi-domesticated reindeer (Landbruksdirektoratet, 2017a). There are six reindeer-herding regions, which together cover about 40% of the Norwegian mainland, from Finnmark in the north to the counties of Sør-Trøndelag and Hedmark in the southern part of the country (see Figure 2). This area is sometimes referred to as the Norwegian part of *Sápmi*, which is the traditional homeland of the Sámi people – a transnational area which also covers parts of Sweden, Finland and the Kola Peninsula of Russia.

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<sup>9</sup> The concession system is explained in Section 6.4.2.

Reindeer Herding Regions in Norway



**Figure 2: Map indicating Sámi reindeer husbandry regions in Norway**

(Reprint from Paper 3, made by Alf Bjørnar Eriksen, September 2015)

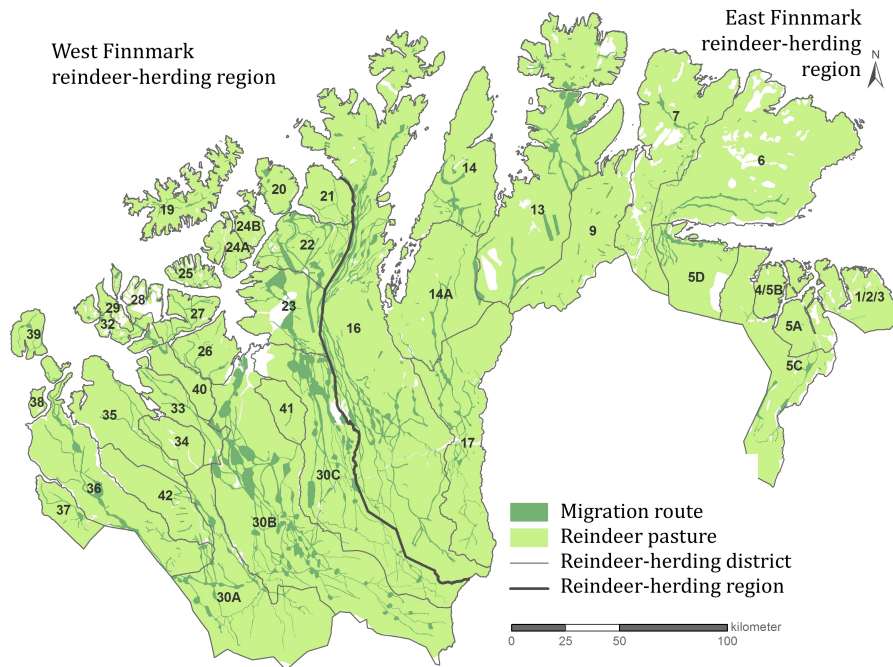
The Norwegian reindeer-herding regions are further divided into reindeer-herding districts. According to the County Governor (2017), there were 72 summer and year-round grazing districts in 2017, as well as 10 districts that are only used for grazing in autumn and winter. Within Sápmi, Finnmark is the largest reindeer-herding region. It is Norway's northernmost county; roughly 75% of the pastoralists and 70% of the semi-domesticated reindeer in Norway are registered in Finnmark (Landbruksdirektoratet, 2016a). Roughly the whole county is reindeer pasturage, and according to Riseth (2014, p. 85):

[Finnmark has] by far, the best natural conditions for reindeer husbandry in Norway. The poor bedrock with good lichen pastures and dry, cold winter climate with little snow, provides stable and reliable pastures in the interior areas, while the nutritious bedrock in mountainous islands and peninsulas, provides lush summer pastures.

In West Finnmark and most of East Finnmark, the interior in the south is used as winter pastures, while the coastal areas are spring, summer and autumn pastures. Most herds cross a number of municipalities during the annual migration between winter and summer grazing areas (see Figure 3 and 4). The majority of the pastoralists in West Finnmark have their primary homes in Kautokeino municipality, where the winter pastures are located. In square metres, this is the largest municipality in Norway, but its population is only about 3,000 people. Those with a primary home in Kautokeino can vote for the local government. The municipality collects their tax payments, and their children attend school there. In addition, many herders also spend a considerable amount of time in second homes in their summer pastures closer to the coast.

Traditionally, the use of seasonal pastures and the division of labour are organised within *siidas* (MN Sara, 2009). The concept of the *sida* is known throughout Sápmi and can be loosely translated as 'community' (Mustonen & Mustonen, 2011; MN Sara, 2013). In the West Finnmark pastoral context, *siidas* are kinship-based groups of

herders and the customary management units of Sámi reindeer husbandry (Bjørklund, 1990; Paine, 1994).

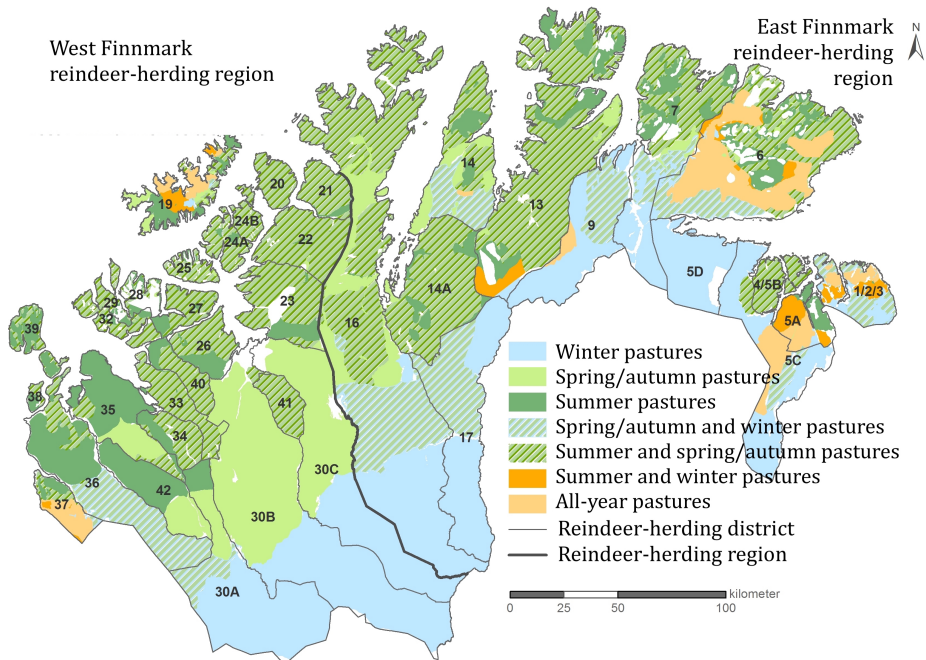


**Figure 3: Pastures, migration routes and herding districts in West and East Finnmark**

The numbers indicate the codes used to refer to the different herding districts. (Made by Statistics Norway, 2011).

The key role of the *siidas* is to deal with issues related to “ecology, herding strategies, coordination of herding tasks, and relations to surrounding *siida* units” (MN Sara, 2009, p. 158). However, *siidas* are not static organisations. The *siida* members and herds often differ in size and composition throughout the herding season. In addition, every *siida* unit is continuously formed by ongoing practices and *siida* members’ participation in daily discussions and actions in response to events and processes within the herd and the landscape in which they operate (MN Sara, 2009, p. 176). The *siidas*’ practices are therefore continuously formed and diversified by their distinct local adaptation and the knowledge base of the *siida* members (MN Sara, 2009).





**Figure 4: Seasonal pastures in West and East Finnmark herding districts**

The numbers indicate the codes used to refer to the different herding districts. (Made by Statistics Norway, 2011).

Though the reindeer are organised in *sida* herds, it is important to note that each animal is the private property of an individual owner. Traditionally, new-borns, boys and girls alike, are given reindeer and a personal mark that is cut in the ears of their animals. As such, all reindeer owners get a chance to develop a herd by earmarking offspring from their own reindeer and animals they receive as gifts throughout their lives. Moreover, the tradition is that after marriage, both husband and wife retain the ownership of their own reindeer and their offspring.

## 6.2 Traditional Sámi reindeer-herding knowledge

Traditional knowledge can be defined as “[a] cumulative body of knowledge, practice and belief, evolving by adaptive processes and handed down through generations by

cultural transmission, about the relationship of living beings (including humans) with one another and with their environment” (Díaz *et al.*, 2015, p. 13). In northern Sámi, a language spoken in northern Norway, northern Sweden, and northern Finland, traditional knowledge is translated as *árbevirolaš máhttu* or *árbediehtu*. According to IMG Eira and Sara (2017), the concept of traditional knowledge is relatively new in the Sámi language; its recent use stems from the need to articulate indigenous livelihoods and knowledge in relation to other forms of knowledge. The concept of *árbediehtu* encompasses practical knowledge and competence, as well as knowledge related to social relations as information exchange, consultation, participation, and discussion concerning practical tasks and human–nature relationships (AJH Eira, 1998).

In the transfer and practising of knowledge, language is of particular importance. The Sámi herding language is systematic and specialised, and has a high level of precision for describing herding strategies, climatic conditions, land use, and the morphology, physiology, behaviour and ecology of reindeer (IMG Eira, 2012). MN Sara (2009, p. 175) explains that traditional Sámi reindeer-herding knowledge is not static; it is constantly “carried out, tested, and renewed”. Knowledge is developed by continuous adaptation to the surroundings. The *siida* members acquire reindeer-herding knowledge through participation in daily life and carrying out various chores throughout the year (MN Sara, 2013; IMG Eira *et al.*, 2016). A herder’s knowledge thus reflects his or her position in their household and the *siida*, the *siida*’s adaptation to the landscape, its migration system, and the environment in which it operates (IMG Eira *et al.*, 2016).

Although there is a diversity of herding strategies and local knowledge within Sámi pastoralism in West Finnmark, the herding communities share cosmological perspectives on the human–nature relationship (MN Sara, 2013; IMG Eira *et al.*, 2016). Sámi reindeer herders, as do many other indigenous peoples, tend to have a broader understanding of the relationship between humans and nature than do Western scientists (Huntington *et al.*, 2006; Berkes, 2008; Díaz *et al.*, 2015, p. 13). Both national and international conventions (for example, the Norwegian Nature Diversity Act and

the Convention on Biological Diversity) recognise the role of traditional knowledge in achieving biodiversity conservation and sustainable development. However, scientists and resource managers tend to assume that indigenous knowledge systems can be fully translated and integrated into the Western science knowledge system (Nadasdy, 1999; Mistry & Berardi, 2016). Blaser (2009b, p. 15) argues that there is a dominant trend within environmental governance that indigenous “knowledges and practices are translated into discrete packages” suitable for being incorporated in the existing toolkit of practitioners and decision-makers. Nadasdy (1999) makes a similar argument. He also states that traditional knowledge should rather be understood as “one aspect of broader cultural processes that are embedded in complex networks of social relations, values, and practices which give them meaning” (Nadasdy, 1999, p. 5). Likewise, Huntington *et al.* (2006) emphasise the importance of listening to and understanding traditional knowledge statements “within a larger political, spiritual, and epistemological context”.

### 6.3 Increasing state interest in organising Sámi reindeer husbandry

Over time, the attitude of the Norwegian society towards Sámi pastoralism has correlated with the number of land-use conflicts between the herders and other land-use interests (Bull *et al.*, 2001). For example, while public assessments at the end of the 19<sup>th</sup> century describe Sámi pastoralism in the north in positive terms, the increasing herder/farmer conflicts in the Røros area (Sør-Trøndelag and Hedmark counties) have resulted in a very negative attitude towards pastoralism in the south (Bull *et al.*, 2001).

From the end of the 1880s, the authorities began to divide Sámi reindeer husbandry areas into smaller herding districts (Bull *et al.*, 2001). All pastoralists belonging to a particular herding district were made responsible for damage caused on farmland by reindeer belonging to the district (MN Sara, 2009). Though the summer pastures in Finnmark also were divided into districts, a law about economic liability was not introduced in this county until 1933 (Bull *et al.*, 2001). The autumn/spring and winter pastures in the interior of Finnmark continued to exist as more autonomous and larger areas organised by the *siidas* (MN Sara, 2009). Inner Finnmark was regarded as “the

nomads' land", an area without important natural resources or any potential for economic development (Bull *et al.*, 2001, p. 265). It was only after World War II that infrastructure development opened this area for competing land uses. As the competition increased, the description of reindeer husbandry in the interior of Finnmark became more negative (Bull *et al.*, 2001).

While the legislation of the first decades of the 20<sup>th</sup> century was aimed at limiting the extent and rights of reindeer husbandry (Bull *et al.*, 2001), a national focus on integrating reindeer pastoralists into the modern welfare state developed during the postwar period (Arnesen, 1979; Riseth, 2009). The ethnographer Ørnulf Vorren, who assessed reindeer husbandry in Norway in 1946, described the need for a radical modernisation and rationalisation of the livelihood. Vorren said that especially in West Finnmark, the herding practices were "out of date" (Vorren, 1946, p. 217). He observed that while Sámi pastoralism elsewhere in Norway had become more sedentary, whole West Finnmark families continued to migrate with the herd throughout the year as in former times. Vorren argues that "if this source of livelihood is not to be lost", the herders in this region had to alter their nomadic lifestyle and become more modern and rational like reindeer herders had done other places in Norway (Vorren, 1946, p. 220). Still, while pastoralism south of Finnmark had gradually begun to settle before the turn of the 20<sup>th</sup> century, pastoralism in West Finnmark remained fully nomadic until approximately 1960 (Paine, 1994; Riseth, 2000; MN Sara, 2001).

After the war, and especially from the 1960s, reindeer husbandry everywhere experienced extensive technological, economic and political changes that entailed the introduction of obligatory schooling, infrastructure development and different kinds of subsidies. For example, a state housing programme was introduced in 1958 (Lenvik, 1998, p. 9), and in 1969, a fund was established to cover losses related to extreme weather and reindeer deaths, and the early retirement of herders (St. meld. 13, 1974–1975). Access to motorised vehicles made herding more effective and households became more dependent on the external market for both selling and buying products, which also gave them a regular income for purchasing goods (Paine, 1994; Riseth,

2000). In the same period, Norway experienced a baby boom; from the 1950s, the population of Sámi pastoralists tripled (OK Sara, 2004, p. 36). In addition, government officials were becoming increasingly concerned that too many pastoralists were building up their herds, creating internal land-use conflicts and overgrazing (Villmo, 1978; Bjørklund, 1990; Storli & Sara, 1997; Lenvik, 1998; Bull *et al.*, 2001; Bjørklund, 2004; Paine, 2004). Simultaneously, there was a public worry that the reindeer, and thereby wealth, were unevenly distributed among the pastoralists (Bjørklund, 1990). The government officials were also concerned that some – especially in Finnmark – had lost too many animals during the war to sustain their families. Despite the concerns about overstocking and overgrazing, the poorest families therefore received state support from 1953 to 1978 to purchase reindeer to rebuild their herds (Bull *et al.*, 2001).<sup>10</sup>

The public concerns about the growing reindeer numbers and outdated pastoral practices were also reflected in the report of a consultative committee (established in 1960 to revise the Reindeer Husbandry Act of 1933) (LD, 1966). Twenty years after Vorren published his assessment of reindeer husbandry in Norway, this committee acknowledged that the reindeer industry had not progressed at the same pace as the rest of society in Norway. Like Vorren, the committee argued that reindeer pastoralism had to change. It claimed that reindeer pastoralism could only be safeguarded by very rapid development – it took the agricultural sector several generations to achieve a similar development (Hætta *et al.*, 1994). The committee recommended engaging science and innovation to modify and adjust the old traditions and practices of reindeer husbandry to a new reality (Storli & Sara, 1997).

Scholarly experts rather than practitioners were hence appointed as advisers on the development process (Paine, 1994; Riseth, 2000). According to Riseth (2000), the knowledge base for the reindeer husbandry politics was developed by a relatively small number of people during the 1970s. A scientific approach to optimising reindeer

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<sup>10</sup> Subsidies for restocking were distributed in 1953, 1955, 1963-1971 and 1976-1978 (Hausner *et al.*, 2011).

meat production through optimal herd composition and slaughter strategies, coupled with the government officials' concerns about an oversupply of reindeer and too many pastoralists, formed the value and knowledge base for the political reform – often referred to as the modernisation, rationalisation or optimisation of Sámi reindeer husbandry (Bjørklund, 1990; Lenvik, 1990; Paine, 1994; Berg, 1996; Riseth, 2000; Bjørklund, 2004; Paine, 2004; H Reinert, 2008; Hausner *et al.*, 2011) – of reindeer husbandry governance in the 1970s.

Since the 1970s, the state's governance regime for Sámi reindeer husbandry has been revised in several ways. At the end of the 1980s, the notion of sustainability entered the public debate and became a new rationale for policies, but the overarching focus of the reindeer husbandry policies did not change. Today, 40 years after the political reform, rationalisation is still the main objective of state governance of Sámi pastoralism. A white paper published by the current government<sup>11</sup> in April 2017 expresses the political objective of the government as follows: “to develop reindeer husbandry into a rational market-oriented industry that will be sustainable in the long term” (Meld. St. 32, 2016–2017).

#### 6.4 The state's governance of Sámi reindeer husbandry

Reindeer husbandry is organised under the Ministry of Agriculture and Food (*Landbruks- og matdepartementet*, LMD), which led the political reform of Sámi reindeer husbandry in the late 1970s. The new policies were catalysed through two complementary instruments for optimising meat production and increasing the income and welfare of the pastoralists: The Agreement on Reindeer Husbandry (short name the Reindeer Agreement) between the NRL and LMD signed in 1976, and the Reindeer Husbandry Act of 1978. Together, the Reindeer Agreement and the 1978 Reindeer Act addressed the problems as the state perceived them, namely that there were too many reindeer and too many pastoralists, especially in Finnmark.

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<sup>11</sup> The Solberg Government, 2013–

Through the Reindeer Agreement, the state offered the NRL monetary support to address the needs and challenges of reindeer husbandry in a similar way as was offered to the agricultural and fisheries sectors at the time, “on the understanding that the *rationality* and *efficiency* of production is ensured” (Paine, 1994, p. 159, italics in original). The Reindeer Agreement was based on biennial negotiations until 1993. Since then, the Agreement has been renegotiated annually (St. prp. 66, 1993–1994). Through economic incentives, the Reindeer Agreement has promoted standardised herd structures and slaughter strategies, and centralised marketing of reindeer meat.

The objectives of the 1978 Reindeer Act were to promote the ecologically sustainable use of pastures, enhance the economy of the herders and maintain reindeer husbandry as a way of continuing Sámi culture. The Reindeer Act complemented the Reindeer Agreement by introducing rules and regulations “to facilitate a rationalization and improved viability of the [reindeer] industry, for the benefit of society and those who have reindeer husbandry as a profession” (LD, 1976, p. 2). The Reindeer Act gave the National Reindeer Husbandry Board the mandate to set minimum weights and upper reindeer numbers for the herding districts. In addition, it introduced a concession system for owning and managing reindeer and mechanisms for the participation and capacity building of the pastoralists.

#### 6.4.1 Economic incentives for rational reindeer husbandry

A traditional Sámi reindeer herd has a high diversity of age, sex and other characteristics. The Reindeer Agreement promoted more homogenous herds with a high ratio of productive females to produce more calves. Through subsidies, the Agreement encouraged the practice of calf harvesting and autumn slaughter (Kvakkestad & Aalerud, 2012). The rationale was that young reindeer have a higher growth intensity than older animals. By slaughtering calves in the autumn, more winter grazing areas and nutrition would become available for the pregnant females and thereby increase the weight and survival rate of the females and their new offspring. The autumn slaughter of calves would make the winter herds more

sustainable and the pastoralists would be able to maintain their income with fewer animals.

Subsidies were also provided for infrastructure investments (for example, fences and vehicles) to stimulate more efficient herding. Furthermore, the Reindeer Agreement regulated meat prices and the marketing of reindeer products. The herders were encouraged to concentrate on producing meat. The responsibility for slaughtering, processing, trading and marketing was transferred from the pastoralists themselves to certified slaughterhouses and the Norwegian meat cooperative (*Norges Kjøtt og Fleskesentral*, currently named *Nortura*) (Sagelvmø, 2004; ES Reinert, 2006). The state set a target price and according to ES Reinert (2008), it created a monopsony (a monopoly on purchasing) by only certifying a few large slaughterhouses.

The Reindeer Agreement provided more extensive subsidies from the early 1980s. However, after some public criticism arguing that the subsidy system promoted larger herds, the subsidy system was adjusted from 1987/88 (Riseth, 2000). After 2003, the subsidy system was changed to emphasise production value instead of production volume. Currently, the grants that a herder can receive correlate with the money value of the reindeer meat produced and the number of calves slaughtered (Prop. 92 S, 2017–2018). Subsidies are only granted if the herd size is within the state-set upper limit on reindeer numbers and if the concession holder (see Section 6.4.2) together with their family owns 85% or more of the herd (Landbruksdirektoratet, 2017b).

#### 6.4.2 The concession system for owning and managing reindeer

While the objective of the Reindeer Husbandry Act of 1933 was to control the herders' use of pastures to avoid land-use conflicts between herders and farmers, the Act of 1978 was intended to steer the development of Sámi pastoralism in a particular direction (Bjørklund, 2016). Government officials were aware that the economic incentives for increasing the ratio of productive female reindeer in the herds could potentially increase the problem of 'too many reindeer' (Homstvedt, 1979). To avoid this, the 1978 Act introduced a concession system for owning and managing reindeer –



a mechanism adopted from agriculture to regulate the numbers of reindeer and herders (Bjørklund, 1990, 2004; MN Sara, 2009).

A concession gave the right to establish an operating unit (*driftsenhet*) consisting of a leader (the concession holder), a reindeer herd and its owners. An operating unit would typically include reindeer owned by the household members and extended family. In this way, the 1978 Reindeer Act determined who could claim rights to engage in reindeer husbandry. Before the Act was revised in 1996, only 10% of the registered unit leaders were women (NOU, 2001, p. 84). After the revision, spouses could hold the joint leadership of a unit (Riksrevisjonen, 2004).

On the one hand, the 1978 Reindeer Act recognised the Sámi herders' right and need to access and use the land for pastures. On the other hand, with the introduction of the concession system, the Reindeer Act excluded individuals who did not belong to an operating unit from the right to practise reindeer husbandry (Storli & Sara, 1997). The Reindeer Act defined reindeer husbandry as a collective right (*kollektiv næringsrett*) and thereby ignored the customary right of individual pastoralists and the *siidas* to practise pastoralism (Ravna, 2007). Moreover, the Act altered the perception of land-use rights to the spring, autumn and winter pastures of the interior of Finnmark by referring to these areas as 'common' (*felles*). By introducing the ambiguous concept of common pastures, the Act ignored the fact that the interior of Finnmark was traditionally managed by the *siidas* in a complex system controlling access to and use of the land (MN Sara, 2009; Marin & Bjørklund, 2015).

The current Reindeer Husbandry Act of 2007 sought to bring Norwegian law into closer conformity with traditional Sámi governance structures by replacing the operating units with a new administrative unit, called the *siida*-share (*siidaandel*) (Anaya, 2011; MN Sara, 2013). Although the name changed, there were few practical changes to the new units. The concession system continues; only those who were part of the *siida*-share unit can practice reindeer husbandry.

### 6.4.3 A new organisation of Sámi reindeer husbandry

The 1978 Reindeer Act introduced a new organisation of reindeer husbandry with three new advisory and decision-making bodies responsible for interpreting, applying and enforcing the policy regulations (Paine, 1994): The National Reindeer Husbandry Board, a Regional Board for each of the six reindeer-herding regions of Sámi reindeer husbandry, and District Boards. These are often referred to as a co-management board (Paine, 1994; Ulvevadet, 2012; EI Turi, 2016) as they included representatives of the herding community and thereby gave pastoralists “increased responsibility and influence” (LD, 1976, p. 54).

The highest level in this hierarchical management system is LMD supported by the reindeer husbandry unit in Oslo – the executive unit within the Ministry. However, most decisions regarding reindeer husbandry are delegated to the National Reindeer Husbandry Board. In the beginning, the Ministry appointed all the Board members, but since 1996, the Sámi Parliament<sup>12</sup> has appointed three out of the seven members. The NRL has the right to propose members to the Board. The National Reindeer Husbandry Board is responsible for interpreting, applying and enforcing the policy regulations (Paine, 1994). Within its mandate is also the task to regulate the reindeer numbers for each herding district.

The Norwegian Reindeer Husbandry Administration, organised as part of the Ministry, was a secretariat for the National Reindeer Husbandry Board. It administrated the economic grants from the Reindeer Agreement and acted an advisory body for the Ministry. The Reindeer Husbandry Administration also had the mandate to educate, guide and advise pastoralists on best practices. As a measure to rationalise state administration, the Reindeer Husbandry Administration was merged with the Norwegian Agricultural Authority (*Statens landbruksforvaltning*) in July 2014 and became the Norwegian Agriculture Agency (*Landbruksdirektoratet*), of which the

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<sup>12</sup> Sámi Parliament (*Sámediggi*) was established in 1989.

Reindeer Section, headquartered in Alta in Finnmark, is one of five sections (LMD, 2014).

From 1978 to 2013, the governance structure included six regional boards, one for each reindeer-herding region in Norway. The board members were appointed by the Sámi Parliament and the county councils (*Fylkesting*). Again, the NRL had the right to propose candidates. The regional boards were responsible for the technical and political implementation of regulations, including approving district management plans and applications for reindeer-herding concessions (Labba *et al.*, 2006). The regional boards also had the authority to object to development plans that would affect reindeer grazing and migration routes. The Regional Reindeer Husbandry Administration offices functioned as secretariats for the regional boards.

Following amendments to the 2007 Reindeer Act, the regional boards were discontinued from 2014 and since then, the herding areas have been administered by the county governors (*Fylkesmennene*) in the five northernmost counties. The mandate and authority of the regional boards were transferred to the respective county governors. The NRL and the Sámi Parliament have expressed concerns that the organisational 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 West Finnmark reindeer-herding region is divided into 26 summer districts and 3 large winter/spring/autumn districts, often referred to as the Western, Middle and Eastern Zones of interior Finnmark (Hætta *et al.*, 1994; Landbruksdirektoratet, 2017a). On the local level, the district boards of each of the districts are responsible for managing internal issues, attending to the interests of the herding group in relation to society at large, developing management plans and organising reindeer counts. The district boards consist solely of herders belonging to the concession units of each herding district.

#### 6.4.4 Internal self-governance

The 2007 Reindeer Act laid more emphasis on the participation of herders in the decision-making processes related to reindeer husbandry. The rationale was that greater participation and internal self-governance (*internt selvstyre*) would improve the efficiency of decision-making and the implementation of the policy objectives (LMD & Reindriftsforvaltningen, 2007; Reindriftsforvaltningen, 2009). The district boards were given the responsibility to develop and implement more detailed internal management plans (*bruksregler*), which outlined the use of seasonal pasture and migratory routes and the timing of migration between pastures, and set an upper limit for reindeer numbers for the district. According to the guidelines provided by the state, the management plans had to adhere to both state regulations and the traditional use of pastures (Reindriftsforvaltningen, 2009). The districts' management plans were first assessed and approved by the regional boards and finally the National Reindeer Husbandry Board, which had the final say over the districts' proposed upper limits for reindeer numbers.

However, referring to the so-called commons of Finnmark, the government-appointed committee that recommended internal management plans as a new tool in the regulation of reindeer husbandry argued that clearly defined rights to pastures would be a requisite for this planning tool (see NOU, 2001). The report *Challenges for self-government in the reindeer husbandry industry – Measures to achieve sustainable reindeer husbandry goals*, published by the Norwegian Agriculture Agency in 2016, uses the same argument (see Landbruksdirektoratet, 2016b).

### 6.5 Sámi reindeer herders' rights

While the objective of the 2007 Reindeer Act is to promote ecologically sustainable reindeer husbandry based on Sámi culture, traditions and customs, the Act alone does not fully regulate the rights of Sámi pastoralists.

In 1988, the so-called *Sámi Section* was incorporated into the Norwegian Constitution as a measure to redress past injustices towards the Sámi (Skogvang, 2017). The

Section states that “[t]he authorities of the state shall create conditions enabling the Sámi people to preserve and develop its language, culture and way of life” (§108).

To contextualise the Sámi Section, we need to examine the ethnopolitical context of Finnmark: For close to 100 years, from approximately 1850 until the end of World War II, the official state policy was to assimilate the Sámi (and the Kven<sup>13</sup>) in Finnmark into the majority society (Minde, 2003; NOU, 2008). The assimilation politics are often referred to as the “Norwegianization policies” (Minde, 2003). The schools promoted the Norwegian language and culture, while the Sámi language was prohibited. Crown land could only be sold to individuals who read and wrote Norwegian and used it as their first language (NOU, 2015). Minde (2003, p. 133), who has assessed the consequences of the period of Norwegianisation, concludes:

Based on history, one can safely conclude that the state’s efforts to make the Sami (and the Kven) drop their language, change the basic values of their culture and change their national identity, have been extensive, long lasting and determined.

The postwar initiatives to revitalise the Sámi language and culture focused on the interior of Finnmark, as this area was considered the heartland of the Sámi (NOU, 2008). Here, the strong and autonomous position of reindeer husbandry had kept the Sámi culture and language alive. For example, the Sámi language was re-introduced in schools in Kautokeino in 1967, but the same did not happen until the 1980s on the coast of Finnmark (Hermansen & Olsen, 2012).

The resistance of the Sámi and environmentalists to the construction of a high dam in the Alta River in the late 1970s and early 1980s increased national awareness of the rights of the Norwegian Sámi. The struggle against the dam was lost, but it led to some compensatory initiatives from the state. In 1988, the rights of the Sámi were

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<sup>13</sup> Kvens are an ethnic minority who are descended from Finnish peasants and fishermen who migrated to Northern Norway during the eighteenth and nineteenth centuries.

institutionalised in government and law through the Sámi Section of the Constitution. In 1989, the Sámi Parliament (*Sámediggi*) was established. And in 1990, Norway was the first country to ratify the Convention concerning Indigenous and Tribal Peoples in Independent Countries (often referred to as ILO Convention 169). The preamble of the Convention recognises “the aspirations of [indigenous and tribal] peoples to exercise control over their own institutions, ways of life and economic development and to maintain and develop their identities, languages and religions, within the framework of the States in which they live” (ILO Convention no. 169, 1989).

The Norwegian Sámi people’s right to participate in decision-making processes were formalised in 2005 with an agreement on the Procedures for Consultations between the State Authorities and the Sámi Parliament. The Procedures for Consultation were a practical follow-up of the ILO Convention 169 and had several objectives: facilitating the authorities’ obligation to consult with and ensure the participation of indigenous peoples; increasing the efficiency of decision-making and the implementation of measures; developing shared perspectives on the situation and needs of the Sámi; and strengthening Sámi culture and society (AID, 2006). The Procedures for Consultation require that the authorities provide prior and full information and consult with the Sámi Parliament on matters that might affect Sámi interests directly. In matters that affect Sámi livelihoods (for example, reindeer husbandry), the authorities are also obliged to consult with other representative bodies (such as herders’ organisations and herding districts) (AID, 2006).

Today, the state clearly recognises that the Sámi have acquired collective and individual rights to land through the prolonged use of land and water areas (MD, 2009). Norway has signed the 2007 UN Declaration on the Rights of Indigenous Peoples, and the country is bound by the 1966 UN Convention on Civil and Political Rights, which grants ethnic minorities the right to practise their own culture, religion and language (Article 27). Some 30 years after the Alta conflict, there is now a general 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 (see abc nyheter, 2009; Fremskrittspartiet, 2014).

Meanwhile, the Sámi Parliament holds that state authorities constantly contest Sámi ownership and their use of traditional land and resources and challenge the Sámi's prerogative to exercise control over their own economic, cultural, and social development (Sámediggi, undated). The government appointed the Finnmark Commission in 2008 to investigate individual and collective customary rights to land and water and settle land disputes among the people of Finnmark (Sámi and non-Sámi), but the investigations of the Commission are slow. So far, it has only examined five areas and it has yet to recognise actual land and water areas to which Sámi have acquired ownership or usage rights (Finnmarkskommisjonen, 2018). The aim of the Commission is to complete the investigations of use and ownership rights in Finnmark by 2033.

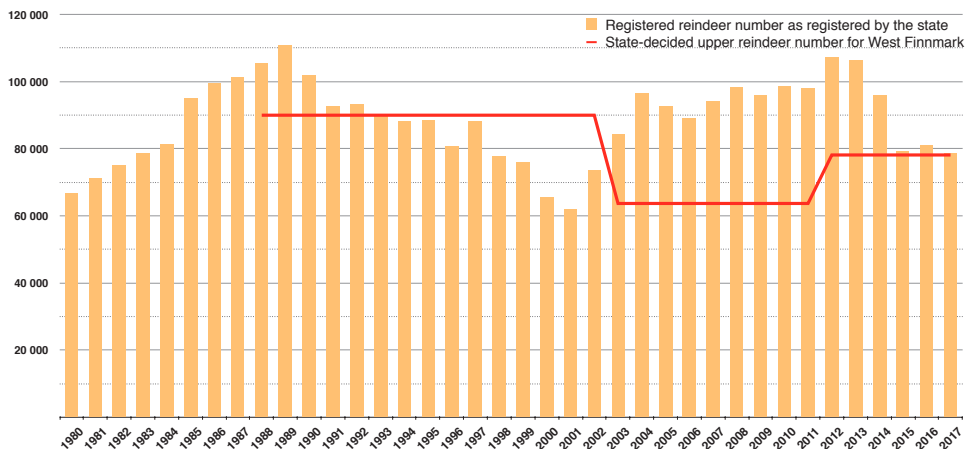
Ravna (2015) argues that the legal protection of Sámi rights to natural resources and lands in Norway is not adequate. Reindeer pastures all over Norway are increasingly pressured by the exploration for minerals, military activities, snowmobile tourism, and the development of new areas for recreational homes. National conservation programmes, such as national parks and regulation of the predator populations, further increase the competition for pastures (Øseth, 2010). The national need for greater capacity on the power grid and the development of renewable energy from wind and water, combined with the municipal interest in creating jobs, also require land. In the public debate, northern Norway is frequently referred to as a frontier for commercial development of natural resources. The competition for pastures and land-use conflicts are also increasing within the reindeer-herding community.

However, while the material basis for Sámi pastoralists' culture and livelihoods is access to seasonal pastures, it is still unclear – despite national and international laws protecting indigenous cultures and livelihoods – to what extent Sámi customary land

use is protected against encroachment in Norway (Einarsbøl, 2005; Bjørklund, 2013). According to the Committee on the Elimination of Racial Discrimination, Norwegian legislation does “not provide sufficient safeguards regarding the obligation to consult the Sámi, in particular the rights to free, prior and informed consent, for all projects [...] that have an impact on their livelihood” (CERD, 2015).

## 6.6 The destocking process in West Finnmark from 2007

Despite numerous political measures to rationalise Sámi reindeer husbandry since the late 1970s, the state has remained concerned about overpopulations of reindeer and pastoralists. Over the last 40 years, authorities such as LMD, members of Parliament and the office of the auditor-general have described reindeer husbandry in Finnmark as both ecologically and economically unsustainable, resulting in overgrazing, degraded pastures and low productivity (see Innst. S. nr. 167, 1991–1992; Riksrevisjonen, 2004; Riksrevisjonen, 2012; Stortinget, 2013).



**Figure 5: Registered reindeer numbers in West Finnmark for the period 1980–2017**

Bars show reindeer numbers per year and the line indicates the state decisions on upper reindeer numbers for West Finnmark. (Source: personal communication with staff at the Norwegian Agriculture Agency (March 2015), Statens reindriftsforvaltning (2014) and Landbruksdirektoratet (2015, 2016a, 2017a))



In Section 6.6, I present the measures taken to decrease the numbers of reindeer after the introduction of the 2007 Reindeer Act. (Figure 5 presents the reindeer numbers of West Finnmark from 1980 to 2017.) The destocking process affected the *siidas* of most of the pastoralist participants of the study and is therefore an important backdrop for understanding the information they shared during interviews, and for contextualising the particular period when this study was conducted. A more detailed discussion about the destocking is presented in Paper 1 and a book chapter that I wrote as part of the *Dávvgas* project (see Johnsen, 2016).

I begin by discussing the notion of overgrazing. The Oxford Dictionary defines *overgrazing* as “excessive grazing which causes damage to grassland”. As a response to a request from Parliament in 2000 to set upper limits for reindeer numbers, the Reindeer Husbandry Administration calculated the carrying capacity of West Finnmark (Ims & Kosmo, 2001). The calculations were done using mathematical models, based on the assumption that a state of balance – or equilibrium – can be reached in the relationship between the pastures and the number of grazing animals (Benjaminsen *et al.*, 2016a). Based on the calculations, the upper limit for reindeer numbers was set to 64,300 animals. Ten years later, more advanced models and new calculations have set an upper limit of 78,150 reindeer in West Finnmark.

However, an alternative way of understanding the tundra ecology is through non-equilibrium thinking (Benjaminsen *et al.*, 2015). (Section 3.2 introduced the concept of non-equilibrium ecology.) According to this thinking, the annual and seasonal climate conditions and variations affect the tundra ecology more than grazing. Also, more than the number of grazing animals, it is precipitation and temperature that affects the reindeer’s ability to access pastures – and thereby, their condition and survival rate. Non-equilibrium thinking fits the traditional Sámi reindeer-herding knowledge about the complex relationship between reindeer and pastures, as described by MN Sara (2001).

As a measure to reduce the number of reindeer, LMD established a working group in 2008 consisting of herders, scientists and government officials, with the mandate to

develop indicators and criteria for sustainable herd sizes. The working group developed a set of indicators that were understood as simple, objective and verifiable. For example, carcass weights were presented as a useful indicator, and the weight criteria for a slaughtered calf were set to 17–19 kg for the reindeer number to be classified as sustainable. Another indicator suggested was meat production; the criteria for a sustainable number of reindeer were set to a production of 8–9 kg of meat per animal in the spring herd (LMD, 2008a). Further, the working group agreed that more subjective indicators would yield important complementary information to assess the sustainability of the herd sizes. They stated that subjective indicators would better reflect the herders' traditional knowledge about the observable features of the animals, which included the morphology of the reindeer's antlers and body and the quality of its coat (LMD, 2008a). However, LMD's final guidelines for the herders, *Guidelines for setting ecologically sustainable reindeer numbers*, put less emphasis on traditional knowledge (see LMD, 2008b).

The herding districts were given until July 2009 to submit their proposals for the upper limits of reindeer numbers based on the guidelines, and districts with slaughter weights and production below the set criteria were required to include plans for reducing herds (Brekke, 2011). At the end of 2010, the proposals of the first six herding districts in West Finnmark were approved by the National Reindeer Husbandry Board. Meanwhile, LMD revised its perception of sustainable weights and overruled the decisions. According to the herders and government officials interviewed, this change was not communicated to the herding community (Johnsen, 2016). A background document developed for the Reindeer Husbandry Board in April 2011 referred to a minimum carcass weight of 19 kg for calves and stated that the preferred carcass weight should be above 20 kg (Reindrifststyret, 2011a). One can also find traces of the adjustment of the weight criteria in a report by the office of the auditor-general in June 2012, which states that LMD had emphasised that the carcass weight of calves should be more than 19 kg (Riksrevisjonen, 2012). In December 2012, an article in *Reindrifstnytt* ("News of Reindeer Husbandry") published by the Norwegian Reindeer

Husbandry Administration explained that the carcass weight for calves should be above 20 kg (Reindriftnytt, 2012).

Given the adjusted understanding of the weight criteria, very few herding districts in Finnmark were regarded as conducting sustainable reindeer husbandry (Riksrevisjonen, 2012), and in the end, only one herding district in West Finnmark got its proposed reindeer number approved. The Reindeer Husbandry Board made decisions about the upper reindeer numbers for the rest of the districts in West Finnmark – on average, the stipulated reindeer numbers were 15% lower than proposed by the districts (Reindrifststyret, 2011a, 2011b, 2011c, 2011d, 2011e, 2011f, 2011g).

The Reindeer Husbandry Administration requested the herding districts to develop plans for reducing their numbers of reindeer to meet the set herd sizes, but most of the districts did not comply. The herders argued that they no longer recognised the criteria for sustainable reindeer numbers, while LMD claimed that the herders had participated in the working group that developed the indicators and criteria (Johnsen, 2016). In December 2011, the Minister of Agriculture and Food, Lars Peder Brekk, stressed the need for accelerating the destocking of semi-domesticated reindeer in Finnmark. The minister announced that if the herders were not willing to reduce their reindeer numbers voluntarily, the state would enforce a destocking process (Aftenposten, 2011). In October of the same year, half the reindeer-herding districts in Finnmark received notifications about slaughter requirements from the Reindeer Husbandry Administration (Reindrifstforvaltningen, 2012).

In January 2013, after some public debate, the Norwegian Parliament's Standing Committee on Scrutiny and Constitutional Affairs unanimously supported coercive measures to bring down the number of reindeer in Finnmark (Stortinget, 2013). In February 2013, LMD instructed the National Reindeer Husbandry Board to make decisions for a "proportionate reduction of the number of reindeer" for herding districts without an approved reduction plan (letter from LMD dated 14 February

2013<sup>14</sup>). A divided Reindeer Husbandry Board followed up by making mandatory reduction plans for most districts/groups in West Finnmark and some of the districts in East Finnmark. Orders for destocking were issued to approximately 220 concession units distributed in 16 herding districts in Finnmark. The decisions implied a destocking of between 6.5% and 62.4% of the herds, an average of about 30%, by 2015 (Reindrifftsforvaltningen, 2012, 2013). The concession holders were also informed that those that did not destock accordingly would be fined.

During 2013 and 2014, the meetings of the National Reindeer Husbandry Board were dominated by herding districts' complaints about the destocking decisions. A young herder from West Finnmark, Jovsset Ánte Sara, whose upper reindeer number was set to 75 animals, took his case to the Inner Finnmark District Court in 2016 and won. Sara argued that the provision on the proportionate reduction of herds, described in §60 of the Reindeer Act, was contrary to his civil and human rights as outlined in the UN International Covenant on Civil and Political Rights and the European Convention on Human Rights. The district court agreed that the destocking decision violated the herders' rights. It stressed that the young herder was particularly affected by the proportionate herd reduction as he was in the middle of establishing his own livelihood and it would be impossible to earn a profit with a herd of 75 animals. The State appealed, but Sara won again in the Hålogaland Court of Appeals. The court found that the ministry's decision on destocking was invalid and an infringement of Sara's right to engage in reindeer husbandry. The State appealed again and in December 2017, the majority of the Supreme Court (four out of five judges) supported the application of the Reindeer Act (Norges høyesterett, 2017b). However, Sara has said he will take the case to the European Court of Human Rights in Strasbourg (Dagsavisen, 2017).

In April 2017, LMD issued a new white paper on Sámi reindeer husbandry (Meld. St. 32, 2016–2017). At a public hearing shortly after, the Sámi Parliament, the Sámi

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<sup>14</sup> The letter is accessible here:  
[https://www.regjeringen.no/globalassets/upload/lmd/vedlegg/brev/brev\\_reindrifststyre\\_140213.pdf](https://www.regjeringen.no/globalassets/upload/lmd/vedlegg/brev/brev_reindrifststyre_140213.pdf)

Reindeer Herders' Association, and representatives of various herding districts criticised the white paper for having a poor knowledge base and proposing a continuation of the Norwegianisation of Sámi reindeer husbandry, which started with the political reform of the 1970s. The issue of the Norwegianisation of the Sámi population (all Sámi, not only herders) is receiving increasing attention in the public debate. In June 2017, the national Parliament approved the establishment of a commission to examine the Norwegianisation of the Sámi (and Kven) (Kontroll- og konstitusjonskomiteen, 2017; Larsson *et al.*, 2017). In June 2018, the Parliament decided to establish a Truth and Reconciliation Commission to map out and assess the consequences of the Norwegianisation policies and injustices against Sámi and Kven, and propose measures that will contribute to reconciliation and create greater equality between majority and minority populations (Innst. 408 S, 2017–2018). The commission will submit its report to the Parliament by 1 September 2022.

Meanwhile, in March 2018, the Sámi Parliament issued a press release stating that they would not appoint members for the National Reindeer Husbandry Board for the term 2018–2021 (Landbruksdirektoratet, 2018; Sametinget, 2018). The Sámi Parliament requests reindeer husbandry policies that are better aligned with international law and greater influence for reindeer herders on the Board.

## 7 Results – the abstracts of the four scientific papers

This thesis studies the governance of Sámi reindeer husbandry and the competing accounts of what reindeer husbandry is and ought to be by examining four different cases focusing on a governance conflict between reindeer herders in West Finnmark and the state or society. The cases have been published as scientific papers which are presented in their full lengths in Part 2 of this thesis. The papers are independent but interrelated and jointly address the objective of this PhD study. Chapter 7 presents the abstracts of the scientific papers.

## 7.1 Paper 1

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

*Norsk Geografisk Tidsskrift – Norwegian Journal of Geography*, June 2015.

Co-authored with Tor A. Benjaminsen and Inger Marie Gaup Eira.

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, we 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' counternarrative claims that lack of transparency hinders participation and policy implementation. Inspired by political ecology and perspectives on governance within development studies, we examine why the government's narrative dominates public debates, while the counternarrative remains marginalised. We 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 supported by numerous press reports (repeated in social media) that overstocking is threatening biodiversity and economic development. We conclude that due to the persistence of the dominant narrative, it has become an undisputed truth in Norwegian debates that Sámi pastoralists are overstocking the range to maximise their benefits.

## 7.2 Paper 2

Land-use conflicts between reindeer husbandry and mineral extraction in Finnmark, Norway: Contested rationalities and the politics of belonging

*Polar Geography*, March 2016.

Single-authored.

The article compares decision-making on two mining projects in Sámi reindeer pastures: the Nussir and Biedjovággi initiatives in northern Norway. The key actors are reindeer pastoralists, mining companies, local politicians and the state. Based on interviews, government documents, media debates and observations of meetings between the actors, the study examines the actors' claim to land and rationalities used in political decision-making. The case comparison shows that the actor groups used similar reasoning for claiming land. The mining companies argued that mining responded to local, national and global objectives and win-win opportunities of co-existence. The pastoralists referred to their customary rights to pastures and mining as threats to their livelihoods. In the Nussir case, the politicians approved the project based on environmental assessments, public hearings and the well-being of society. Their assumption was that conflicting interests could be solved through dialogue. However, the decision-making process ignored the contested rationalities and power relations in land-use conflict. In the Biedjovággi case, local politicians rejected the initiative at an early stage. Here, the mining proposal initiated a debate about identity and ethics. In both cases, the politics of belonging influenced the public recognition of the pastoralists' claim to the land.

### 7.3 Paper 3

The art of governing and everyday resistance: "rationalization" of Sámi reindeer husbandry in Norway since the 1970s

*Acta Borealis*, May 2017.

Co-authored with Tor A. Benjaminsen.

Since the late 1970s, a policy objective in Norway has been to rationalise Sámi reindeer husbandry. However, government officials are concerned that this objective has not been successfully met in West Finnmark due to too many reindeer and too many pastoralists that degrade the pastures and jeopardise the economy of pastoralism. Engaging with the concepts of 'the art of governing' and 'everyday resistance', we examined the state rationalisation programme. We identified four 'techniques of power' used by the state to stimulate rational pastoral practices, namely

discipline, neoliberal rationality, sovereign power, and truth. Based on in-depth interviews with pastoralists and government officials, observations, and written sources, we examined the public and hidden transcripts about rationalisation. The analysis demonstrates how everyday forms of resistance are used by pastoralists to retain control of their own livelihoods and practices. A common strategy is to partly adopt and partly avoid state regulations. Individual responses to the rationalisation are determined by personal desires and capacity, as well as the relationships to and the behaviour of fellow pastoralists. However, the governance of Sámi pastoralism since the 1970s has affected power relations between the state and the pastoralists, and within the herding communities.

#### 7.4 Paper 4

Sámi reindeer governance in Norway as competing knowledge systems: A participatory study

*Ecology and Society*, December 2017.

Co-authored with Svein D. Mathiesen and Inger Marie Gaup Eira.

Using a participatory research approach, we assess the knowledge systems and political ontology of reindeer husbandry. The study was conducted by a mixed team of scientists and Sámi reindeer herders who practised reindeer husbandry in West Finnmark, northern Norway, both prior to and during the state-led rationalisation of Sámi reindeer husbandry since the late 1970s. The analysis is based on the participants' reindeer-herding knowledge and their assessment of the governance of Sámi pastoralism. Two future narratives (scenarios) were used to stimulate reflection and discussion. Based on these discussions and by studying secondary sources, we examine how herders and government officials explain what reindeer husbandry is and ought to be and their conceptions of 'proper' management of reindeer, herders, and the land on which reindeer pastoralism depends.

We find that the state's governance of reindeer husbandry since the end of the 1970s promoted, through a combination of economic incentives and sanctions, herding



practices primarily based on Western knowledge and way of understanding the world. This knowledge system and the management techniques it promotes was, and still is, in conflict with and undermines reindeer-herding knowledge and worldviews. However, despite 40 years of policies attempting to transform reindeer husbandry according to the state's perception of proper pastoralism, a Sámi worldview continues to influence the herders' understanding of the relationship between humans, reindeer, and nature and how this relationship should be governed. Nonetheless, the conflicting, asymmetrical knowledge systems and competing worldviews of what reindeer husbandry is and ought to be, compromise the identity and rights of the pastoralists.

## 8 Discussion – revisiting the research questions

### 8.1 Values and knowledge systems for optimal reindeer husbandry

Research question 1: What values and knowledge systems inform the actors' presentations about reindeer husbandry?

#### 8.1.1 Conflicting knowledges

The subcases of this thesis show that the government reports and the interviewed pastoralists have very different ways of presenting Sámi reindeer husbandry (Paper 1, 2, 3 and 4). The overall objective of state policies is to “develop the reindeer husbandry industry as a rational market-oriented industry that is sustainable in a long-term perspective” (Prop. 68 S, 2014–2015, p. 9). The policies and public reports on reindeer husbandry are influenced by positivist-reductionist thinking, which tends to dominate contemporary Western resource management. Since the 1970s, the state perspective on optimal reindeer pastoralism has been based on mathematical models for calculating correlations between reindeer meat production, animal numbers and densities of reindeer (see Lenvik, 1990; Ims & Kosmo, 2001; Fauchald *et al.*, 2004; Tveraa *et al.*, 2007; Bårdsen & Tveraa, 2012; Bårdsen *et al.*, 2014). Based on these studies, the state has identified standardised quantitative indicators and targets for rational pastoralism, and it monitors how the pastoralists follow up on the targets –

the optimal herd structure, carcass weights, reindeer numbers and animal densities (see Reindrifststyret, 2011a, 2012). Every year, the herding districts report on the set targets, and the data are published annually in the “Resource accounting for the reindeer industry” report (*Ressursregnskap for reindrifsnæringen*). And through the Reindeer Agreement, pastoralists that meet the targets for upper reindeer numbers, production, calf harvest figures, etc. receive subsidies. Those with ‘too many reindeer’ can be sanctioned (Paper 3).

By using indicators and targets as tools to regulate reindeer, herders and pastures, the state seeks to enhance the predictability and control of reindeer husbandry, while also achieving the political objectives of maximising meat production and improving the economy of those who engage in reindeer husbandry as their main activity (*hovedvirksomhet*). Furthermore, the state uses the same targets as indicators to assess the sustainability of the practice of the different herding districts.

However, optimal and sustainable carcass weights, reindeer numbers, and animal densities are not exact values; they are defined according to the needs, values and aspirations of those who set the targets. If, for example, as the mathematical model of Bårdsen *et al.* (2014) indicates, the desire is to produce calves with a carcass weight of 19 kg in West Finnmark, one should slaughter about 40% of the herd every autumn and have an upper reindeer number of 85,777. However, if the intention was to produce calf carcass weights of 20 kg, one should harvest about 50% and keep no more than 71,261. The model calculates how to maximise production, but different herders have many additional considerations to consider when planning and practising reindeer husbandry. Mathematical models – based on the concept of ‘carrying capacity’ – are simplified and generalized versions of reality and its causal effects and do not reflect the local and varying realities that pastoralists face on the tundra or in pastoral practices. For example, the model of Bårdsen *et al.* (2014) is based on two false assumptions, namely that there are no adult reindeer bulls in the herd and that calves are the only animal category slaughtered.

The participatory working group that developed the indicators and criteria for sustainable reindeer numbers identified simple, objective and measurable criteria for managing reindeer numbers. However, it acknowledged that these types of indicators did not capture all relevant knowledge, particularly not the pastoralists' own subjective indicators for assessing animal well-being, which include the behaviour of the reindeer, the morphology of its antlers and the quality of its coat (LMD, 2008a). However, in the *Guidelines for setting ecologically sustainable reindeer numbers*, which LMD issued based on the recommendations of the working group, the subjective indicators were not acknowledged in the same way. Instead, the guidelines stressed the objective criteria for sustainable reindeer numbers and said that the herding groups who wanted to, could add subjective criteria to their assessment (LMD, 2008b) (see Paper 1).

While the state seeks predictability in and control of reindeer production and herding practices, the ideal within traditional reindeer husbandry is to seek balance in the relationship between the herd, the herders and the landscape (Paper 4). The notion is that the world is constantly changing, as captured in the Sámi proverb *jahki ii leat jagi viellja* (this year is not last year's brother). According to the herders who participated in the study, the balance between the reindeer, people and nature can best be maintained by remaining flexible and constantly adapting to variations in the seasons, weather conditions, landscape, predators, insects, access to pastures, human disturbances and social relations. According to the same herders, flexibility can be sustained through three key techniques. Firstly, through deep knowledge about the herd and the factors that affect it. This is best achieved by spending time with and observing the behaviour of the herd and the condition of the reindeer. Secondly, flexibility means being mobile and always prepared to move with the herd. And thirdly, flexibility can be enhanced by having access to buffers – that is, extra pastures, extra reindeer and extra labour. Preserved pastures provide alternative grazing in times when the regular pastures are inaccessible, for example because of extreme weather conditions. The rationale for keeping more reindeer than 'needed' is that there are always losses in the herd – some reindeer are likely to be killed by predators

or vehicles, some might die due to illness or extreme weather, and some might become stray animals. The buffer labour force consists of reindeer owners and family members who do not herd on a daily basis but who help out in the more labour-intensive periods of reindeer husbandry such as during migration, earmarking and rounding up the animals for slaughter (Paper 4).

The herders' traditional governance of reindeer husbandry is largely based on practical experience and contextual knowledge accumulated where observations of the reindeer behaviour and morphology are essential. The state governance system, on the other hand, is largely based on conceptualised knowledge about the biology of the reindeer and the ecology of the pastures; regulations are therefore informed by standardised thinking about the causal effects of the grazing conditions, carcass weights and animal health. Moreover, the state fails to recognise the factors and knowledge that underlie the livelihoods of Sámi reindeer herders and undermines the resilience of reindeer pastoralists by insisting on using management tools that do not resonate well with the pastoralists (O'Brien *et al.*, 2009).

While I refer to traditional and indigenous knowledge systems in the study and in this thesis, I recognise that indigenous knowledge is “a tricky idea because most knowledges are not simply local but complex hybrids drawing upon all manner of knowledges” (Watts, 2000, p. 264). And though I make generalisations about both traditional Sámi herding knowledge and Western knowledge, these “generalizations must be recognised as indicative and not definitive” (Barnhardt & Kawagley, 2005, p. 10). As with Western science, indigenous knowledge systems are diverse and “constantly adapting and changing in response to new conditions” (Barnhardt & Kawagley, 2005, pp. 10-11).

According to the state, sustainable reindeer husbandry is achievable through the following logic: Ecological sustainability provides the basis for economic sustainability, and ecological and economic sustainability together make it possible to maintain and develop cultural sustainability. This linear argument was first introduced by a white

paper in 1992 (St. meld. 28, 1991–1992) and has been maintained and included in the latest White Paper on reindeer husbandry from 2017 (Meld. St. 32, 2016–2017).

Traditional reindeer-herding knowledge, on the other hand, has a more complex and integrated understanding of sustainable reindeer husbandry. IMG Eira *et al.* (2016) have visualised sustainable reindeer husbandry as the centre of a wheel with nine spokes, representing nine factors that are all crucial for upholding the centre: The pastoralist, resources (nature and labour), the herd, the knowledge, the worldview (includes ethics), rights, the earmarking system, the household, and the *siida*.

I nevertheless found – as Heikkinen *et al.* (2007) did in their research on the sustainability of reindeer husbandry in Finland – that the governance of reindeer pastoralism tends to detach the economic and ecological variables from the broader political, economic, and ecological contexts, and not recognise the interplay between the variables and the politics of power and knowledge. According to Berkes (2008), the positivist-reductionist approach in Western science has dominated contemporary resource management and has synthesised knowledge about the world into ‘value-free’ generalisations – for example, about overgrazing and overstocking – independent of context, space, and time (Berkes, 2008). The state policies and practices tend to see these problems as technical and non-political. The standardisation of weight targets and calf production simplify the state governance of reindeer husbandry and make it legible to government officials (Li, 2007b). However, governance of reindeer pastoralism based on these simplifications – what JC Scott (1998) refers to as “seeing like a state” – leaves little room for the herders’ complex situated and local knowledge of reindeer and pasture management, and may even undermine it. (Paper 1 provides a longer discussion about the notion of “seeing like a state”.)

For example, from a state perspective, a focus on calf production is rational because younger animals have a higher growth intensity than older reindeer. Thus, by slaughtering calves in the autumn, more nutrition would be provided for the pregnant females during winter and increase the weight and survival rate of the rest of the herd. Consequently, the winter herds would be more sustainable and the pastoralists could

live better with fewer animals. However, from the perspective of traditional herding knowledge, harvesting calves is not considered the right thing to do. If the animals lived another year, their volume and meat quality would be better and the bone structure would have more marrow. The herders have therefore explained that traditionally, the *varit* (one-and-a-half-year-old male) is the preferred animal to harvest. Further, to achieve the calf production target set by the state, the herds have to consist of a very high ratio of female reindeer. According to the herders, these herds are not able to utilise the full variety of pastures within a herding district, because male reindeer are more tolerant of human disturbance and can graze in areas that females and calves avoid.

Furthermore, according to traditional herding knowledge, calf harvesting is understood as an unethical practice. It is regarded as unfeeling to separate calves from their mothers before the young ones are independent. The separation causes stress within the herd because the females, who have a strong connection with its offspring, will search for their calves and sometimes even get lost (IMG Eira *et al.*, 2016). In addition to decreasing the animals' welfare, this also creates more work (Paper 3).

### 8.1.2 Competing worldviews

While Western ontology makes a distinction between nature and society, indigenous ontologies tend to understand people as part of nature – people belong to the land rather than the other way around (Blaser, 2009a, p. 891). Where Western ontology sees a nature/culture divide and understands nature as an object that must be appropriated and exploited through privately owned entitlements, indigenous ontologies see the natural environment as an entity that “constitutes their territory and includes earth-beings who must be respected” (Acuña, 2015, p. 86). The herders I interviewed acknowledged nature as an actor influencing the survival rate and production of the herd. One participant explained that a herder would not be able to increase his or her reindeer number unless nature let it happen. According to this worldview, where nature determines the production of a herd, the state's standardised targets for sustainable animal weight and density have little practical value. The

participants argued that on the one hand, herders should avoid pasture degradation out of respect for nature; however, on the other hand, when a herd grows beyond the state-set upper reindeer numbers, it means that the herd size is within the limit of nature (Paper 4).

Further, according to Sámi ontology, the reindeer is an actor inside the *siida* system; it “chooses its own movements and course of life” (MN Sara, 2009, p. 173). According to this thinking, humans can never obtain complete control over the reindeer. The reindeer belong to the landscape where, according to pastoralists’ worldview, it is free, mobile, and independent (Bull *et al.*, 2001, p. 300). The Sámi myth of the origin of reindeer-herding emphasises a voluntary companionship between humans and reindeer, and herders often refer to reindeer as “a good governed by the wind” (MN Sara, 2009, pp. 171-172). Therefore, the pastoralists’ exercise of control over the reindeer is understood as a compromise based on the herders’ knowledge of and respect for the animals’ needs and nature (MN Sara, 2009). The state governance regime undermines the Sámi pastoralists’ traditional worldviews; the political ontology of Sámi pastoralism hence includes a struggle for recognition for its rationale for sustainable management of reindeer, land and people (Paper 4).

## 8.2 The actors’ accounts of reality

Research question 2: What are the actors’ presentations of ‘proper’ management of reindeer, herders and land?

In all the subcases of this thesis, the herders and government officials had competing presentations of what was going on, namely what the conflicts were all about, and why they had occurred.

### 8.2.1 The dominating narrative

According to the government officials, the conflicts examined in the four subcases were all related to the problem of too many reindeer and irrational reindeer herders.

Excessive numbers of reindeer degrade the tundra ecology, hamper animal welfare, jeopardise the reindeer meat production, contribute to global warming<sup>15</sup>, graze on farmers' crops and in private gardens, occupy too much space, is an obstacle for industrial and economic development, create conflicts with other land-use interests, and threaten the future of Sámi reindeer husbandry. Government officials argued that destocking would strengthen the herders' economy, enable co-existence with the mining industry, agriculture and other land-use interests, and ensure a sustainable reindeer husbandry. Independent of the problem identified, destocking seems to be the answer (Paper 1).

When asked about why there were too many reindeer in West Finnmark, the interviewed government officials referred to the tragedy of the commons and argued that the growing numbers of reindeer were a result of internal competition within the pastoral community. 'Too many reindeer' and herders' well-being were also the government officials' explanation for the introduction of the rationalisation policies for reindeer husbandry in the 1970s (papers 3 and 4). In the subcase of the destocking in Finnmark during 2008–2015 (Paper 1), the government officials explained that where too many reindeer existed, it was because the herders did not follow expert advice on sustainable reindeer husbandry, but instead increased their number of animals for personal gain.

The government officials claimed that the Reindeer Husbandry Act of 2007 gave the herders both the tools and the responsibility to ensure the sustainable development of their livelihood (Johnsen, 2016). However, the government officials stated that self-governance tools and participation did not facilitate destocking because the herders were self-centred and refused to apply the agreed guidelines and targets for destocking. The officials explained that a mandatory destocking was necessary to preserve pastures and secure – in accordance with international law – the future of the

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<sup>15</sup> In 2009, LMD also promoted destocking reindeer herds as a measure to cut greenhouse gases. In a White Paper titled *Climate challenges – agriculture part of the solution*, it is argued that destocking the reindeer herds by 30,000 animals would reduce the national emissions of greenhouse gases by approximately 10,000 tonnes of CO<sub>2</sub> equivalents per year (St. meld. 39, 2008–2009).



Sámi pastoral society in Finnmark (Paper 1). In the subcase exploring land-use conflicts (Paper 2), politicians in Kvalsund argued that the attempts to find ways in which reindeer husbandry and mineral extraction could co-exist were unsuccessful because the herders were unwilling to be part of a dialogue and unwilling to consider the needs of society at large. The politicians' rationale for approving mineral extraction was securing the economic development and well-being of society.

### 8.2.2 The counternarrative

In the studies, the reindeer herders had a very different way of presenting the governance-related conflicts, why the conflicts had occurred, and how to best solve them. In all cases, they claimed that the conflicts arose because the decision-makers ignored the herders' needs, knowledge and rights. Many of the herders I interviewed about the destocking process in 2012–2014 agreed to a certain extent that there had been too many reindeer at that time compared to available pastures in some places in Finnmark. However, they did not concur with the authorities' explanations for the relatively high reindeer numbers or their accounts about the impact of the high numbers. While the government officials referred to the tragedy of the commons, the herders had a more complex explanation for the high reindeer numbers, and they pointed to a combination of factors, namely the economic incentives that promoted herds with a high ratio of fertile female reindeer, and the fact that large numbers of females enabled the herds to grow rapidly. They added that many herders slaughtered fewer reindeer than planned due to unreliable access to the market and low meat prices. Opposition to the state-driven destocking – or more generally to the state governance of Sámi pastoralism – could cause pastoralists to let their herds grow as a way to resist state-made decisions. Furthermore, the notion of too many reindeer could be understood as a reaction to §60 of the 2007 Reindeer Act, which allows the authorities to proportionally reduce the reindeer numbers of the concession holders if the total number of reindeer within a herding group was too high. Larger herds and more intensive grazing were advocated as a possible measure to claim rights to land threatened by encroachment or competition for the commons by neighbouring herding groups. The herders explained that the state's introduction of common winter

pastures undermined traditional land distribution and management, allowing some herders to move into new territory and to expand their herds. Many argued that as long as the interior of Finnmark was treated as commons by the state, the framework for regulated reindeer numbers could not be developed (Johnsen, 2016) (see also Paper 1).

The herders did not agree with the state's understanding of the impact of having too many reindeer. Rather, they identified the main problem with large herds as the risk of intermingling. They explained that when different herds are located close to each other, it requires more herding than usual to keep the neighbouring herds separate. Intermingling can create conflicts between *siidas*. Paine (1994, p. 130) points out that herders have a contextualised view of the notion of too many reindeer. He explains that an owner losing animals to others may recognise that he has 'too many' to handle; conversely, when the herder's children are old enough to help out, the same number of reindeer might be considered 'too few'. Paine (1996) further explains that too many reindeer during one type of season could mean too little pasture during other seasons. Like Paine, I also found that the herders sought a balance between possessing too many and too few reindeer and that the optimal number varied according to the weather, access to pastures and social relations. For example, when two reindeer herders marry, the tradition is that one of them – often the wife – moves their reindeer to the herd of the spouse. The result is that the reindeer number increases in one herding district and decreases in another district.

Further, while the state defines surplus reindeer numbers and land degradation as the main threats to Sámi pastoralism, the herders are more worried about how the fragmentation and loss of pastures will affect reindeer husbandry. The herders argue that the government officials do not acknowledge the negative consequences of infrastructure development or the destocking or rationalisation policies, because their hidden agenda is to downscale reindeer husbandry to make room for alternative land uses, such as mines, windmill parks, dams and recreational cabins.

The herders had their own way of explaining why participation did not result in destocking and why dialogue did not facilitate a common understanding and solution to the land-use conflicts. According to them, LMD's statements about participation and indigenous peoples' rights in the governance of reindeer husbandry is only lip service. In reality, they said, the government officials do not recognise the herders' knowledge or their rights. The herders argued that they had never had a real opportunity to influence and participate in the destocking process because the government officials changed the agreed targets for destocking without involving or informing the herders, and the state did not apply its own procedures for consultations (Johnsen, 2016) (see also Paper 1). The herders declared that they were invited to dialogue meetings about the land-use conflict, but the decision-makers never acknowledged their concerns (Paper 2).

### 8.2.3 The domination of one narrative over the other

The state's narrative claims that herders hold a considerable amount of decision-making power. The pastoralists' narrative argues that the state neglects the herders' rights to participate in decision-making relevant to their livelihoods. The state's narrative emphasises the need to regulate the number of reindeer and herders to ensure sustainable use of the pastures and the economic viability of reindeer pastoralism, and to safeguard Sámi culture (§1 of the Reindeer Act). The pastoralists' narrative claims that the state regulations are undermining Sámi customs and herding knowledge while creating a Norwegianised reindeer husbandry. While the views of the government officials are often reported in the media and online discussions, the pastoralists' counternarrative is rarely represented in the political debate.

For many pastoralists, the structure of the political debate on Sámi reindeer husbandry makes it challenging to participate. The debate is conducted in technical and bureaucratic Norwegian language – a foreign language with foreign concepts, which are “poor substitutes for their own rich and complex understanding of their lands and herds” (MN Sara, 2011, p. 142). In these debates, the herders' perspectives about animal well-being and land-use management tend to be labelled subjective, while the

state's perspectives on the same issues are understood as objective. Moreover, a premise for participating in public decision-making is to read documents and to follow the procedures and deadlines defined by politicians' schedules. For example, the public hearing about the latest white paper on reindeer husbandry (Meld. St. 32, 2016–2017) was set in the middle of the spring migration – one of the busiest times of the year for reindeer pastoralists. Truth is also discussed in Section 8.3.1.

The story of the irrational herders, the excessive numbers of reindeer and the consequences for the tundra ecosystem, animal well-being, and other land-use interests is reflected in the media by alarming headlines – here translated to English: *Reindeer husbandry threatens nature in Finnmark* (NTB, 1987); *Too many reindeer in Finnmark* (NTB, 1992); *Emergency meeting about reindeer husbandry* (NTB, 1999); *The forecasted the tragedy* (NRK Sápmi, 2010a); *Fear of mass death on the tundra* (NRK Nordnytt, 2012); *The number of reindeer must decrease* (Nationen, 2012; NRK Troms, 2012); *The number of reindeer remains large* (NRK Sápmi, 2014); *The tragedy on the Finnmark tundra* (Adresseavisen, 2014); *The reindeer herders should accept modern animal welfare requirements* (NRK Nordland, 2015); and *Believes that a reindeer reduction can prevent loss to carnivores* (NRK Nordland, 2018) (see also, NRK Sápmi, 2010c; Aftenposten, 2012; Nationen, 2014; NRK Troms, 2014; NRK Nordland, 2018).

The perception that Sámi pastoralists are irrational and that there are too many reindeer in Finnmark has become a dominant narrative that seems to resonate well with the general public. There are numerous threads of discussions on the problem of overstocking in social media and in the comment fields of related online newspaper articles. Since most Norwegians might internalise one or several of the problems associated with too many reindeer, the narrative also resonates with many different interest groups. As such, the dominant narrative unites “communities that might otherwise seem disparate” (Robbins, 2012, p. 140), such as advocacy groups for the protection of protected predators and interests advocating industrial development.

Furthermore, in the comparative case study on land-use conflicts (Paper 2), I found that the politics of belonging affected the politicians' accounts of what was going on. In both land-use conflicts, the mining companies claimed a right to the disputed land by arguing that they were creating jobs and economic development and that through co-existence it was possible for both reindeer husbandry and the municipality to thrive. In both cases, the herders countered that mining activities would jeopardise their customary rights to land and have a severe negative impact on reindeer husbandry. The study shows that the decision-making and the rhetoric that legitimised the decisions in Kvalsund and Kautokeino were different. In Kvalsund, on the northern coast of Finnmark, the herders were referred to as summer guests (outsiders) that claimed rights and benefits at the expense of the majority of permanent residents. In Kautokeino, in the interior of the county, on the other hand, the mining project triggered a debate about the herders' land rights and the importance of reindeer husbandry for the local identity of people in the municipality.

The politics of belonging not only affects how the actors regard Sámi pastoralists; examples of the notion of belonging are also reflected in actors' accounts of the whereabouts of reindeer. The local and national newspapers share many accounts of residents from Kvalsund and other towns on the coast of West Finnmark that observe reindeer where they *ought not be*, namely in urban areas, in gardens, on cultivated grassland, at the roadside (VG, 1998; Altaposten, 2006; Aftenposten, 2009; Finnmark Dagblad, 2011, 2013, 2015, 2016; Finnmarken, 2016). The accounts construct a reality of where the reindeer do not belong – a reality that competes with the nature of semi-domesticated reindeer.

### 8.3 Power relations among the actors

Research question 3: How do the actors influence and claim authority in decision-making concerning reindeer husbandry?

### 8.3.1 The art of governing - techniques of power

As outlined in Chapter 6, the state has for many decades been worried about too many reindeer and too many herders in Sámi reindeer pastoralism – especially in Finnmark. Hence, new policies were introduced in the late 1970s to transform reindeer husbandry into a more economically efficient industry. In the 1990s, sustainability became a second objective of the policies. The idea was that rationality and sustainability would be achieved through standardised herd structures and slaughter strategies, centralised marketing, professionalised herders and proper reindeer numbers. Informed by the concept of governmentality, the study identified four techniques of power used in the state governance of Sámi reindeer husbandry to shape a desired behaviour among the herders: Discipline, neoliberal governing, sovereign power, and governing according to truth (Foucault, 2008; Fletcher, 2010) (see also Paper 3). These techniques of power are distinct but interrelated concepts that might compete, conflict or complement one another within different contexts. Commonly, the state's techniques of power are presented as apolitical measures to ensure a rational and sustainable reindeer husbandry.

*Discipline* is an approach that seeks to stimulate an internalisation of social norms, ethical standards and specific practices through participation, education and capacity building. The study identified many examples of governance through discipline. The training, guidance and advice provided by the Reindeer Husbandry Administration are examples of governing based on discipline. While LMD and Reindrifftsforvaltningen (2007) claim that the 2007 Reindeer Act increased the herders' scope for internal self-governance (*internt selvstyre*), government officials still developed the template for the internal management plans (*bruksregler*), the guidelines for planning sustainable reindeer numbers and land use, and the indicators and targets to be used in the planning and monitoring of Sámi reindeer husbandry. I have observed a number of seminars and conferences hosted by LMD and targeting reindeer herders where keynote speakers – usually a person outside the reindeer-herding community – lecture about optimal carcass weights and reindeer numbers and rational herding practices. The information the speakers presented was usually based on equilibrium thinking;

the agendas rarely included the alternative pastoralist perspectives, and little time was given for discussing the lectures.

Representation is another disciplining technique: The so-called ‘co-management’ boards introduced by the 1978 Reindeer Act gave pastoralists “increased responsibility and influence” (LD, 1976, p. 54) by including them in the body responsible for interpreting, applying and enforcing the policy regulations (Paine, 1994). As described in Section 6.4.3, the National Reindeer Husbandry Board consists mainly of herders; however, LMD appoints the majority of the members. In the 2008–2015 destocking process in Finnmark, I found that the herder representatives appointed by the state voted differently than the representatives appointed by the Sámi Parliament. The former group tended to vote for a reindeer number in line with the recommendation of the Reindeer Husbandry Administration, but the latter group tended to vote for the reindeer number proposed by the herding district. Herders from both groups told me that they felt pressure from LMD to support the proposal presented by the Administration.

There are many examples of participatory ad hoc working groups with mandates to assess different aspects of reindeer pastoralism, but government officials always establish the working groups (though the NRL appoints the herder representatives), define the scope and premise of the work – that is, what should be included and left out of the discussion – and organise seminars to inform the discussions of the group members. Furthermore, a government official acts as secretary to the working group, writing up the minutes and end reports. The reports from these ad hoc working groups are submitted to LMD, who interprets and uses them as they see fit. Examples of such ad hoc groups are the committee that reviewed the 1978 Reindeer Act and suggested changes to the policies in 2001, the working group to develop indicators and criteria for sustainable reindeer numbers in 2008, and the working group assessing ways to strengthen the capacity with reindeer husbandry to self-government (*selvstyre*) and internal control (*internkontroll*) (see NOU, 2001; LMD, 2008a; Landbruksdirektoratet, 2016b).

*Neoliberal governing* provides incentive structures that skew human practices and behaviour in a certain direction, particularly a direction that focuses on maximising individual benefit. The subsidies provided by the Reindeer Agreement are an example of neoliberal governing. The Agreement text and outreach activities motivate pastoralists through economic awards to adopt a specific herd structure and slaughter strategy, and a certain distribution of reindeer among the pastoralists within a herding unit. The Reindeer Agreement encourages the pastoralists to concentrate on producing meat, while the responsibility for slaughtering, processing, trading and marketing is transferred from the pastoralists themselves to certified slaughterhouses and the Norwegian meat cooperative (Sagelvmo, 2004; ES Reinert, 2006). As already mentioned, quantitative indicators (such as carcass weights, upper reindeer numbers, production rate, and the monetary value of the meat sold to a certified slaughterhouse) are used to determine whether a herding group will receive subsidies or not. Over the last 40 years, since the introduction of incentives for calf meat production, more and more herding groups have adapted their herding practices to gain access to the subsidies. During the interviews, however, the herders explained that this type of production would not be economically viable without state support. Many of the pastoralists referred to calf harvesting as ‘Norwegian’ reindeer husbandry (Paper 3). Because many herding groups have become economically dependent on the state subsidies, they now continue practices they do not believe in.

ES Reinert (2008, p. 192) argues that the state regulations “made the Saami herders retrogress economically into a colonial-type situation”. He claims that the rigid price structure was not well suited to a meat production system regulated by weather patterns and nature (ES Reinert, 1997). When production fell in the 1990s, the demand for reindeer meat was higher than the supply but prices did not rise accordingly, and the herders’ income was halved (ES Reinert, 2008, p. 193). The Norwegian government officials responded to the situation by giving a grant per kilogram of meat produced. However, the grants were only given to those who sold their reindeer to the certified slaughterhouses. According to ES Reinert (2008, p. 194), the grant system forced most



herders to sell their animals at an artificially low price, while the relatively well-off herders could sell to the unofficial street market at a much higher price. ES Reinert (2008, p. 197) concludes: “The Saami herders were economically ‘primitivized’ by having the increasing returns activities that add value to their raw materials taken away from them, subsequently to be put ‘on the dole’. Such internal welfare colonialism in Norway has its parallels on a huge scale on the African continent.”

*Sovereign power* is the top-down construction of rules through laws and regulations, and the threat of punishment if rules are not obeyed. Within the state governance of reindeer husbandry, the certification of slaughterhouses, internal management plans (*bruksregler*), the concession system, and the sanctions described in the 2007 Reindeer Act are examples of sovereign power.

The concession system introduced a new administrative and legal hierarchy in the Sámi pastoralist community and gave privileges and obligations to some individuals. The concession holder receives and distributes state subsidies within the herding unit; the concession holder has the right to determine who the members of the unit are and how many reindeer each individual unit member may possess, and he/she is responsible for submitting annual reports on the state of the herding unit. Herders that I interviewed argued that by giving concession holders the authority to make decisions about the reindeer of others, the 1978 and 2007 Reindeer Acts challenge traditional decision-making within the *siida* where everyone who owns reindeer has a say (Paper 3).

The 2007 Act empowered government officials to use economic sanctions towards pastoralists that did not follow the regulations (Riksrevisjonen, 2012). The state can reduce or refuse to issue subsidies to herding units that do not have an approved internal management plan or do not operate within the defined targets for production (described in the Reindeer Agreement) and to issue fines to units that are not following the destocking decisions.

Governing according to truth is an approach that fosters a specific understanding of rational behaviour as prescribed by a religion or particular conceptions of the nature and order of the universe. Repeated public presentations in government reports, at conferences and in the media confirm and maintain the state definition of rational reindeer husbandry. Hence, the state presentation of what reindeer husbandry is and ought to be has become a commonly acknowledged truth in Norwegian society. The herders' ability to influence this established truth is limited by their ability to present their alternative perspectives and knowledge systems (papers 1 and 3). The domination of the state's truth further marginalises the herders' alternative ways of understanding reindeer husbandry and how the reindeer and pastures should be governed. (See Section 8.2.3 on the domination of the state narrative.)

Like Berkes (2008, p. 258), my research found that in public decision-making, the pastoralists' know-how was marginalised by "the assumption that the professional expert knows best". According to Flyvbjerg (1998, p. 117), it "is not whether one or the other interpretation is 'correct' or 'true' but which party can put the greatest power behind its interpretation". Robbins (2012, p. 219) reflects a similar view and with reference to Foucault he states that power precedes knowledge and together the two establish truth.

### 8.3.2 The art of being governed

Despite the 40 years of rationalisation policies, the state's concern about too many reindeer in Finnmark persists (see Landbruksdirektoratet, 2017a; Prop. 92 S, 2017–2018); and throughout the years, there has been both open and hidden resistance against the state's rationalisation measures. The herders are a heterogeneous group of individuals. They operate in different ecological landscapes, relate to different socio-economic contexts, and have different personal needs and aspirations. They therefore respond in different ways to the regulations and use different approaches to maintain or gain control over their own livelihoods.

I found many examples of hidden resistance – what Scott refers to as “the weapons of the weak” (JC Scott, 1985) – among reindeer herders (Paper 3). One pastoralist told me a story of how her family had hindered an official count of their reindeer in 1956. She explained that the state used aerial photos to count the number of animals in the herds on the tundra and that her relatives had hidden reindeer in the neighbouring valley. Another example is how herders obstruct decision-making processes by not complying with deadlines. After the National Reindeer Husbandry Board proposed herd reduction plans at the beginning of 2013, pastoralists I interviewed stated that they would not act upon the decisions – they said they would sit on the fence and wait for the next move from the state.

Sometimes, pastoralists act as if they have complied with state policies, but use their own reasoning for explaining their actions, or ignore the intention of a regulation and find a way to take advantage of the situation, for instance with calf harvesting (see Section 8.1.1). Calf harvesting is a practice that many pastoralists view very negatively. They state that they have now become dependent on the state subsidies for calf production. One of them explained that in this subsidy system, he could also generate an income by slaughtering the smallest calves that were unlikely to outlast the winter.

Other pastoralists maintain traditional governance structures in the shadow of the state. A pastoralist explained that it was common for herding groups to keep two sets of management plans for reindeer-herding: one plan was intended for the state, which included only a minimum of information; and another, ‘real’ plan was drawn up that suited the *siida* needs and was not shared with government officials. Similarly, pastoralists told me that many herding groups operate with two different types of leaders. One is an elected leader of the district board, who is often a person with the capacity to deal with the state’s reporting requirements and the technical terminology used in the reports. The real leader of the herding group – the chief – is a person with deep knowledge and experience of practising reindeer husbandry. The chief is not elected; their role continues as long as they are regarded as one of the most trusted and respected among the *siida* members. MN Sara (2009, p. 153) explains that “the

siida, and its use of traditional herding knowledge, has [...] been living its own life alongside, and often in conflict with, official accounts and decisions”.

These examples come from accounts that pastoralists shared in an interview setting. I have not heard them tell the same stories in public. The transcripts containing criticism of the decision-makers have been hidden from the same decision-makers. These ‘offstage’ presentations can be very different from the pastoralists’ public presentation. The lack of open resistance could create an impression of support of the state governance of reindeer husbandry. According to JC Scott (1985), this is a convenient strategy by actors who realise that they have to continue dealing with the dominant actor, one way or the other.

Another form of hidden transcript that I identified during my research was criticism disguised as folktales. I have observed seminars and conferences, with both state representatives and herders present, where Sámi keynote speakers have referenced Sámi folktales to bring their messages across. One of these speakers told a story about *Stallo*. In Sámi folklore, *Stallo* is a large villain, half human and half devil, who hates and terrorises people. Because *Stallo* is also clumsy and stupid, humans can gain control over him (J Turi, 2011 [1910]). The keynote speaker told a story claiming that *Stallo* is still present in Sápmi; that he uses different tools to control and oppress the Sámi, and therefore the Sámi have to find their own techniques to fight back. Though the speaker never articulated it, it was obvious that the *Stallo* in his story was the Norwegian state.

The pastoralists are not the only actor with hidden transcripts. Government officials present different stories depending on the audience they address. Officials’ accounts about the destocking process in West Finnmark between 2011 and 2013 vary. In January 2011, for instance, LMD revoked decisions made by the National Reindeer Husbandry Board on upper reindeer numbers for several herding districts and requested decisions that would further lower the number of stocks. In January 2013, LMD instructed the Reindeer Husbandry Board to decide on the size of annual

destocking for the herding districts without an approved reduction plan. Then, at a conference co-hosted by LMD and the NRL in August 2012, a government official claimed in her presentation that LMD had no other role in the destocking process than to oversee that the policy decisions were complied with. The government official argued that the herding groups controlled and decided on most issues related to reindeer husbandry, including setting upper reindeer numbers. Furthermore, in one of my interviews with government officials, I was told that pastoralists control most of their livelihood and that there is probably no other business with more self-governance than reindeer husbandry. However, when the Minister of Agriculture and Food addressed the Parliament seven months earlier – away from the direct observation of the herding community – he emphasised LMD’s strong and direct involvement in the destocking process in West Finnmark (Innst. 103 S, 2012–2013). Also, in an interview with the office of the auditor-general, the staff commended LMD for interfering in the decision-making.

Not all resistance to state decision-making is hidden; there are many examples of open confrontation. One of the best-known Sámi cases is the Alta River protest movement during the late 1970s and early 1980s against the flooding of the Sámi village Máze and a substantial amount of reindeer pasture. The construction site was blocked by protesters; three Sámi men tried to blow up a bridge; there was a hunger strike; there were demonstrations outside the Parliament; a group of Sámi women occupied the office of the Prime Minister, and a plea was sent to the United Nations. Less spectacular examples are public protests expressed through conventional and social media, public meetings and festivals against human activities that affect reindeer husbandry negatively. To protest against the state conservation of large carnivores, pastoralists document these animals’ behaviour and the damage they cause through posting photos and videos on Facebook of reindeer hurt or killed by carnivores.

In 2017, the Supreme Court considered two disputes between reindeer pastoralists from West Finnmark and the regional government in one case and the state in the other. In the first legal case – referred to as the Reinøy case – a herding district claimed

that the Troms County approval of an infrastructure development was illegal as there had been no proper impact assessment of the development plans. The herders claimed that an environmental impact assessment would show that the plans would have severe effects on their reindeer husbandry. The pastoralists won in the district court, but the Troms County appealed and won in the court of appeal. The pastoralists requested the supreme court to examine the dispute, but the case was dismissed by the majority of the judges (three out of five) (Norges høyesterett, 2017a).

The second dispute – often referred to as the Jovsset Ánte Sara case – is described in Section 6.6. While the Reinøy case attracted attention by local and regional media, the Jovsset Ánte Sara case became known far beyond the Norwegian borders. Sámi reindeer herders, politicians, and artist used the case to draw attention to state violation of Sámi rights and the continued, covert Norwegianisation of the Sámi. One of the most spectacular awareness-raising actions was an art installation – a curtain made of 400 reindeer skulls with bullet holes – displayed outside the Parliament in the heart of Oslo just before Christmas.

## 8.4 Consequence of the state governance for Sámi pastoralism

Research question 4: How does the state governance of reindeer husbandry affect power relations among the actors?

### 8.4.1 Self-governance vs. state control

In Section 8.3.2, I outlined some techniques used by pastoralists to resist state control. Nonetheless, not all herders protest against the destocking process or the production-intensive management regime of Sámi pastoralism. Some publicly support the state's actions to reduce the number of reindeer in Finnmark in interviews with journalists and in letters to the editor (see, for example, Finnmarken, 2012). However, the pastoralists have different reasons for commenting positively about and implementing the destocking orders.

Between and within the herding regions, pastoralists operate in a variety of landscapes and ecosystems, relate to different socio-economic contexts, and face a variety of external challenges (such as the weather, predators and land-use encroachments) that affect how they respond to state regulations. Therefore, we cannot simply identify the supporters of the rationalisation programme as those who maintain ‘proper’ herding practices according to the state. Nor can we lump all pastoralists with too many reindeer together as being those who oppose these policies. This study shows that the herders’ response to state regulations is among others determined by their personal beliefs, desires and capacity, as well as their relationship to and the behaviour of their fellow herders. Districts that do not comply with state regulations do not receive subsidies, and personal finances are therefore a determining factor when pastoralists consider how to react to state regulations. Also, when a pastoralist wants to destock, this can be hindered by conflicts within the concession unit or between the unit and the herding district. Herders that I interviewed explained that the largest summer districts in West Finnmark consist of more than ten *siida*-shares and include more than 100 reindeer owners, making it challenging to reach consensus on destocking plans. I was also told that apart from herding groups with access to a certain type of pasture suited for calves and close to a road, it was not viable for most other pastoralists in West Finnmark to fully implement the state regulations for reindeer husbandry.

Beach (1981) has studied the state rationalisation of Sámi reindeer husbandry in Sweden and argues that whether an individual herder or a herding group resists or complies with the policies depends on a number of interrelated factors. These include the personal financial flexibility of the herders, their desire to expand their herds or keep them stable, and whether they were experiencing land-use conflicts. Moreover, Beach (1981) argues, one cannot overlook the fact that some pastoralists benefit more from the state’s way of organising and governing pastoralism than from the traditional Sámi governance system. Adopting policies and publicly supporting the state regulations are ways to gain goodwill and recognition from the state.

I found that when herders openly supported the state governance of reindeer pastoralism, it was taken as evidence that the policies are relevant and implementable. These herders were presented in the media and at conferences as role models and showcased as success stories. However, within the herding community in West Finnmark, many of the pastoralists I interviewed questioned the motives of the ‘model’ herders and referred to them as ‘Norwegianised’ or as a *dáža* – a Norwegian person or Norwegian manner, style, or ways (Nielsen, 1979) – co-opted by the state.

The 40 years of state policies and regulations to rationalise Sámi pastoralism have skewed the power relations between the state and herders, as well as within the herding community. As outlined in Section 8.2.1, the state’s concern about too many reindeer and irrational herders and its presentation of ‘proper’ reindeer husbandry have become a dominant narrative often repeated by different actors in the Norwegian public debate. In the public debate, herders in Finnmark are regarded as less successful, less rational and less capable than herders in other parts of Norway because they have to a lesser extent adapted to the state definition of ‘proper’ reindeer husbandry. This perspective legitimises a strong state control of Sámi pastoralism in Finnmark.

The revisions of the reindeer husbandry policies since 1978 have increased the state’s ability to control Sámi pastoralism through enforcements and sanctions directed at the herding districts; such as the possibility to enforce destocking. Simultaneously, the revisions have increased the focus on internal self-governance in the herding community, by encouraging participation in decision-making (for example, the National Reindeer Husbandry Board) and developing internal management plans (*bruksregler*). However, this thesis shows that pastoralists’ knowledge and voices are marginalised as regards decision-making. According to the ad hoc working group that assessed ways to strengthen reindeer husbandry by means of self-government (*selvstyre*) and internal control (*internkontroll*), the main challenge is to design regulations that combine and facilitate both the autonomy of pastoralists and the state’s need for control (Landbruksdirektoratet, 2016b).



In addition, the herders that I interviewed claimed that to develop internal management plans and set sustainable reindeer numbers, clarity on the rights to the so-called common pastures in the interior of Finnmark is a prerequisite and has not yet been achieved. The ad hoc working group concurred and identified this as one of their main recommendations to LMD and the NRL (Landbruksdirektoratet, 2016b). Meanwhile, herding groups that do not develop internal management plans and set upper reindeer numbers in accordance with state regulations are sanctioned.

#### 8.4.2 Power relations within the pastoralist community

The skills set required for being a successful herder in the state governance regime differs from the skills set required for succeeding in a traditional reindeer husbandry system. To succeed within the state system, one has to own a concession, adapt one's practices to maximise the economic awards, comply with reporting requirements, and understand how to influence decision-making that affects one's practices. The state governance regime guarantees an income for herders that is independent of their talent for reindeer-herding and husbandry. According to pastoralists that I interviewed, none of the skills listed above was related to 'pastoral' work. They explained that in traditional Sámi reindeer husbandry, they needed skills such as a commitment to hard work and the ability to grow a healthy herd. The management of the herd is based on an ongoing dialogue in the *siida* and continuously adapted to the local circumstances, and the reindeer number fluctuates over time.

The herders I interviewed stated that the state regulations were intended to promote a transfer from Sámi to Norwegian reindeer husbandry. They listed some commonalities that had made it easier for 'model' herders to adapt to the state-endorsed herd structure and meat production system: These model herders complied with relatively low destocking requirements and had easy access to the commons for longer periods than most other herding groups. Their winter pastures were close to roads, making it easier to give their reindeer extra fodder during unfavourable grazing conditions when the snow blanket made it difficult for the reindeer to reach the lichen – conditions

referred to as *guohtun* by IMG Eira *et al.* (2010). Some herders were also critical of how some of the model herders had appropriated parts of the commons for their own benefit, sometimes even fencing in and establishing their own private winter pastures.

As explained in Section 6.4.2, the 1978 Reindeer Act altered the perception of land-use rights to the spring, autumn and winter pastures of the interior of Finnmark, referring to these areas as ‘common’ (*felles*). The Act ignored the traditional distribution of the land and in the absence of an alternative governance system for regulating land-use and sanctioning conflicts, the legislation de facto created a situation with open access to the pastures (Marin & Bjørklund, 2016). The new situation made it possible for herders to use the areas in a new way. In the struggle for land, newly established herding units and groups with large herds could move into new territories – areas to which they were not entitled according to customary rights – and claim the land by grazing it. The Finnmark Commission, which has started to map claims to land rights in Karasjok (the municipality neighbouring Kautokeino) reports that 30 out of 73 claims concern land conflicts within the herding community. The Commission states: “These disputes have arisen in the tension between the traditional ideas of justice and the intervention by central authorities through legislation and management decisions” (Finnmarkskommisjonen, p. 11).

The concession system introduced along with the 1978 Reindeer Act has affected relations within the herding community. The possibility to grow a herd now depends on access to a concession, not on inherited rights. According to the current regulations, the *siida*-share leader should own 85% of the reindeer belonging to the unit (Landbruksdirektoratet, 2017b). Individuals without their own concession depend on becoming part of someone else’s *siida*-share to own reindeer. In Sámi traditional pastoralism, everyone makes decisions about their own reindeer; however, the state regulations give the *siida*-share leader the right to make decisions about other unit members’ harvest and reindeer numbers. The 2007 Reindeer Act describes the rights and obligations of the *siida*-share, but there is no legal clarification of the Sámi *siida* –

the traditional organisation of pastures, reindeer and labour – in Norwegian laws (Marin & Bjørklund, 2016).

The state governance of reindeer husbandry introduced new ways to understand rights to reindeer and land, contested the traditional code of conduct, and compromised the identity of herders. Pastoralists I interviewed said the economic rewards for maximising calf meat production, the concession system and the introduction of the commons have altered the mindset and value base of Sámi pastoralism and created conflicts between herders with more traditional practices and the model herders. Some older herders described a ‘proper’ pastoralist as one that is born and raised within a pastoralist family. They distinguished between those who had been naturalised to reindeer husbandry by taking part in herding and cross-generational knowledge transfer throughout their childhood, and those who entered reindeer husbandry at a later stage in life. The latter group, they argued, lacked traditional knowledge and a pastoral worldview. In the state narrative, a model pastoralist is one that complies with the regulations, hands in paperwork on time, owns 85% of the herd and engages full-time in reindeer husbandry.

Some herders, supported by government officials, argue that ‘hobby herders’ (*hobbyreineier*, reindeer owners with an income apart from pastoralism) jeopardise the livelihood of full-time herders (see NRK Sápmi, 2010b; NRK Troms, 2013; Altaposten, 2014). Conversely, many of the herders I met advocate the role of the larger family and smallholders in a herding unit. They argue that a concession owner must depend on access to helping hands, but that it will be difficult to train and motivate people who do not feel part of the pastoralist community (those without an earmark and reindeer) to assist during migration, earmarking and other work-intensive periods.

#### 8.4.3 The Norwegianisation of Sámi pastoralism

While the rationalisation policies of the 1970s continue, more attention is being given to reindeer pastoralism as an important bearer of Sámi culture. The current Reindeer

Act of 2007 is intended to facilitate a sustainable reindeer husbandry “with a basis in Sámi culture, tradition and customs, for the benefit of the herding community and society at large”. However, in the public reports and in the government officials’ accounts, the cultural sustainability of Sámi pastoralism is presented as an outcome of ecological and economic sustainability. This has also been observed by the office of the auditor-general, which has criticised LMD for not having defined “culturally sustainable reindeer husbandry” (Riksrevisjonen, 2012). Furthermore, it is not yet clear how the consideration of Sámi interests and national obligations towards the ILO Convention 169 should be included in the operationalisation of the Reindeer Act.

Bjørklund and Eidheim (1999) argue that the Norwegian policies’ lack of recognition of social institutions in Sámi reindeer husbandry has eroded the traditional ways of managing the herds and the pastures. They refer to the political reform of the late 1970s as a national integration of Sámi pastoralism. Other authors have used stronger language; ES Reinert (2016) refers to the political reform as a Norwegianisation of reindeer husbandry. With reference to Paine’s (1977) descriptions of the economic integration of the native population in northern Canada, ES Reinert (2006) uses the term “welfare colonialism” to refer to the state policies that have made Sámi pastoralists dependent on government welfare.

Similar debates about rational herding and sustainable reindeer husbandry are taking place in Sweden and Finland: Beach (2004) and Heikkinen *et al.* (2007) argue that the state’s emphasis on sustainable and rational reindeer husbandry has legitimised state control and eroded the sociocultural sustainability of traditional Sámi reindeer husbandry. Beach (2004) has coined the term “eco-colonialism” to describe the practice of using ecological arguments to increase the regulation of the Sámi herders. Likewise, Brännlund and Axelsson (2011) describe the Swedish state’s regulation of reindeer husbandry as a process of colonisation. Heikkinen *et al.* (2007) observe a tendency within the Finnish governance of reindeer pastoralism to detach the economic and ecological variables from broader political, economic, and ecological contexts, and a refusal to recognise the interplay between the variables and the politics

of power and knowledge. I observed a similar phenomenon in my study of the governance of Sámi reindeer husbandry in West Finnmark.

The policies and decision-making processes do not recognise the contested realities, conflicting knowledges and competing worldviews of the herders and the state. The state sets the framework for participation and representation. As discussed earlier, Western knowledge about optimal production defines sustainable and rational herding practices and identifies the criteria against which the herders' performance will be measured. The herding groups are expected to develop internal management plans and participate in decision-making through a language that they find foreign and by using foreign concepts that are "poor substitutes for their own rich and complex understanding of their lands and herds" (MN Sara, 2011, p. 142).

During the last century, a diversity of traditional knowledge and practice systems around the world has been replaced by Western resource management science (Berkes, 2008). While this replacement is often seen as part of a natural progress among those who govern, the local population cannot always control it and it often subverts the indigenous way of life (Bryant, 1998). Moreover, Western governance of resources applies synthesised knowledge about the world based on 'value-free' generalisations independent of context, space, and time (Berkes, 2008). One of the government officials in Finnmark whom I interviewed, concurred with this view. The official argued that LMD had the best intentions for reindeer husbandry, but that the ministry was ignorant of the complex system of pastoralism and the pastoral culture.

## 9 Conclusion

Since the late 1970s, the Norwegian state's objective has been to rationalise reindeer husbandry. In the early 1990s, ensuring sustainability became an additional objective, and the 2007 Reindeer Act strengthened the notion of self-governance to further enhance the rationality and sustainability of reindeer pastoralism. Building on the idea of rational pastoralism, the political goal of the current government, led by Erna

Solberg since 2013, is “to develop the reindeer husbandry industry as a rational market-oriented industry that is sustainable in a long-term perspective” (Prop. 68 S, 2014–2015, p. 9).

Using political ecology as a framework, this thesis critically examines the state governance of Sámi reindeer husbandry in West Finnmark through an empirically driven analysis of the power dynamics between the state and reindeer pastoralists. I studied the phenomenon of the conflict related to the governance of reindeer husbandry, exemplified in the actors’ contradictory presentations of what reindeer husbandry is and ought to be. My approach to exploring the complexity and nuances of this phenomenon was to examine how herders and government officials explain the rational and sustainable management of reindeer, herders and the land on which reindeer pastoralism depends. Moreover, I was interested in the knowledge systems that informed the actors’ perspectives on the ‘proper’ governance of reindeer husbandry. I also studied the effect of state governance on power relations between the actors and the actors’ ability to present their accounts about decision-making and the causal effects of the state governance regime for reindeer pastoralism. I did not, however, attempt to identify an objective truth, given that I studied people’s accounts – individuals’ subjective understandings – of the governance of reindeer husbandry. The findings of the study have been published in four scientific papers and discussed further in this thesis.

Excessive numbers of reindeer and allegedly irrational herders in West Finnmark have been the premise for state policies for reindeer husbandry over the last 40 years. The study shows that the state’s explanation of the problem has become a dominant narrative. It states that ‘too many reindeer’ is a result of the tragedy of the commons combined with the herders’ lack of willingness to engage in processes for sustainable pastoralism. The pastoralists, on the other hand, maintain a counternarrative claiming that state decision-making is arrogant and non-transparent and that it ignores herders’ knowledge and their customary rights. The frequent and one-sided repetition of the dominant narrative in government documents, in the political debates in the

Norwegian Parliament, and by the national media creates an antipathy for Sámi pastoralists and undermines the pastoralists' counternarrative. Norwegian society's perceptions of the credibility of the respective actors affect the recognition of the counternarrative as well. Government officials are regarded as objective, but Sámi herders are seen as subjective and acting to maximise their own gain. The consistent way in which the dominant narrative is told, establishes a truth that Sámi herders in West Finnmark are overstocking and degrading pastures to maximise their own benefit, and it legitimises the state's techniques for controlling Sámi pastoralism and shaping desired herding practices (Paper 1).

By examining the last 40 years' policies and regulations for rationalising reindeer husbandry, the study has identified four techniques of power as described by Foucault (2008, p. 313). The framework in which the herders have to operate when developing their internal management plans and the guidelines for estimating upper reindeer numbers are two examples of *disciplinary power*. This type of power seeks to achieve a specific behaviour by internalising the social norms and ethical standards of individuals. The Reindeer Agreement's provision of economic rewards to herding groups that achieve the state-set targets for meat production is an example of *neoliberal power* – that is, incentive structures with a focus on maximising individual benefit. *Sovereign power* is the top-down construction of rules and the threat of punishment if rules are not obeyed. In the state governance of reindeer pastoralism, the concession system of owning and managing reindeer and the state's ability to enforce destocking are examples of sovereign power. The fourth technique of power is governance according to truth. Truth is embedded in the dominant narratives and guides our understanding of the world (Paper 3).

We have seen that the state decision-making in regards to reindeer husbandry builds on a theoretical logic of standardised indicators and targets developed by science that can be measured and assessed in an objective, predictable and transparent way (Paper 2). Another idea incorporated in state policies is the idea that the efficiency of decisions can improve through the participation of those affected by the decisions. For

example, the Reindeer Act outlines a governance system where herders participate through the internal management plans (*bruksregler*) developed for and by the herding districts and by being represented in the National Reindeer Husbandry Board.

The tools that the state uses to fix the problem of ‘too many reindeer’ and ensure rationalisation of Sámi pastoralism are based on simplifications and generalisations about reindeer husbandry. Mathematical models are used to estimate strategies for maximising meat production, and targets for carcass weights, reindeer numbers and calf production are used as indicators for monitoring the sustainability of herding practices. The state presents sustainable reindeer numbers and the carrying capacity of the land as apolitical, objective and absolute measures. However, carrying capacity is not fixed, but varies according to the pastoral adaptation to the land and socio-economic goals, for example, “the target income for a pastoralist; the target number of pastoralists; and the target optimal weight of animals” (Paine, 1994, p. 162) (see also papers 1 and 3).

The state’s technical method of dealing with an indigenous livelihood is informed by the positivist-reductionist approach of Western science, which dominates contemporary resource management. However, this approach counters the traditional Sámi reindeer-herding knowledge, which is based on contextualised knowledge and experiences that are dependent on place and time. The state emphasises predictable and stable migrations, use of pastures, reindeer numbers and meat production volumes. By contrast, a key objective in traditional Sámi pastoralism is to seek a balance between nature, the herd and humans by constantly adapting to changes in the landscape, weather, pasture conditions, predators and other factors. And while the state assesses the professionalism of a herder by fixed indicators and targets, traditional Sámi pastoralism focuses on the adaptive capacity of pastoralists, which lies in their ability to move with and observe the herd throughout the years, to recognise reindeer with preferred features, and to build a robust herd that is suited to the local landscape (papers 3 and 4).



The technical procedures for public decision-making about land-use decisions, for instance, affect herders' ability to influence decision-making, because these procedures do not acknowledge the conflicts between the understanding of the state and pastoralists about what reindeer husbandry is and ought to be. The prevalent notion in land-use decisions is that a shared understanding and the best solution can be achieved by combining standardised procedures for assessing impacts and the cost/benefit of the proposed land use with a dialogue between competing land-use interests. In the case of land-use conflicts between pastoralism and mineral extraction, this study shows that formal procedures oversimplify reality by ignoring the contested rationalities and power relations between the actors. The study also shows that the notion of belonging – whether the pastoralists are regarded as insiders or outsiders by the other actors – affects the actors' recognition of the concerns and customary rights of Sámi pastoralists (Paper 2).

Despite 40 years of rationalisation policies, 'too many reindeer' in West Finnmark is still a concern for government officials. This study shows that one of the reasons why policy objectives have not been achieved is the pastoralists' strategies to resist the implementation of state regulations and to maintain or gain control of their own livelihood and practices. The resistance has taken on many forms. Sometimes herders have publicly opposed state decisions about reindeer numbers and land use. At other times, herders have used what JC Scott (1985) refers to as "weapons of the weak" to manipulate reindeer counts by hiding animals. Some herders accept subsidies but ignore their intent; they maintain a traditional governance structure in the shadow of the Norwegian state; and they criticise the state in hidden transcripts such as their portrayal of the state as *Stallo* in public speeches (Paper 3).

The Sámi pastoralists are not the only ones to hold hidden transcripts. The study shows that the state's presentation of too many reindeer differs slightly depending on who the audience is, although the message remains the same. The message portrays overstocking as a threat to the tundra vegetation, animal welfare or economic development. Overstocking is also portrayed as a threat in terms of predator–livestock

conflicts and global climate change. Thus, groups with different and sometimes conflicting agendas refer to the dominant narrative about too many reindeer to advocate their interests. There are also examples of LMD presenting different stories about their involvement in the destocking process in West Finnmark in the 2011–2013 period. For example, at a conference of reindeer pastoralists in August 2012, government officials minimised the role of LMD in the ongoing destocking process. However, when the Minister of Agriculture and Food addressed the Parliament seven months earlier – away from the direct observation of the herding community – he emphasised LMD’s strong and direct involvement in the destocking process in West Finnmark (Paper 3).

Through a participatory research, the study shows that the state and many pastoralists have competing ways of perceiving the world (ontological differences). The state regards reindeer as an object that can and should be controlled by humans, while the research participants held an alternative worldview. They saw the reindeer and nature as actors with their own will that ought to be treated in accordance with certain ethics. The traditional knowledge system for governing reindeer husbandry – based on the ideal of maintaining a balance in the relationship between the reindeer, the people and nature by maintaining flexibility – stands in deep contrast to the state’s knowledge system, based on the ideal of predictability and control. Both the 1978 and 2007 Reindeer Acts acknowledge the importance of maintaining Sámi culture. In fact, traditional Sámi herding knowledge and worldviews were not, and are still not, acknowledged in the implementation of the policies and regulations governing Sámi pastoralism. Rather, the state’s dominating narrative about too many reindeer, its techniques of power and tools for governing, and its notion of relevant knowledge marginalise the pastoralists’ complex situated and local knowledge of reindeer and pastures – and with it, the pastoralists’ ability to influence decision-making (Paper 4).

Moreover, the state governance regime undermines the code of conduct of Sámi herding practices and prescribes what reindeer husbandry is and ought to be, based on a particular understanding of the concepts of rationality and sustainability. According

to the state regulations, reindeer husbandry *ought* to be stable and predictable; according to pastoralists, pastoralism *ought* to be flexible and adaptive. Embedded in the perceptions of what reindeer pastoralism *ought* to be, is the notion that a diverging practice *is* wrong. This divergence might explain why the study found that in West Finnmark, traditional herding knowledge and Sámi ontology continue to play an important role in pastoral practices and ethics, despite 40 years of state rationalisation policies.

Conversely, the study also found that the conflicting, asymmetrical knowledge systems and competing worldviews of what reindeer husbandry is and ought to be, compromise the identity and rights of the pastoralists. The state governance of Sámi reindeer husbandry skews the power relations between the state and the pastoralists to the advantage of the state, and it creates winners and losers within the Sámi herding community. The Sámi pastoralists' ability to engage in reindeer husbandry and claim the right to land has become dependent on their success in adapting to a Norwegianised reindeer husbandry.



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## Appendices

### Participants from West Finnmark reindeer-herding community

**Table 2: Reindeer herders from West Finnmark interviewed**

The table presents an anonymised overview of the study participants from West Finnmark, their gender, age, which herding district and the number of interviews conducted with each of them.

Participant number	Men	Women	Age at the time of the main interview	West Finnmark Zone	Herding district	Number of interviews with each individual
1	x		43	Western Zone	A	1
2		x	76	Western Zone	A	3
3		x	46	Western Zone	B	2
4	x		50	Western Zone	C	1
5	x		72	Western Zone	D	2
6	x		74	Western Zone	D	2
7	x		60	Western Zone	E	1
8	x		51	Western Zone	E	1
9	x		57	Western Zone	E	2
10	x		61	Middle Zone	F	3
11		x	59	Middle Zone	G	1
12	x		41	Middle Zone	G	1
13	x		71	Middle Zone	H	1
14	x		39	Middle Zone	I	1
15	x		35	Eastern Zone	J	1
16		x	30	Eastern Zone	K	1
17		x	64	Eastern Zone	K	1
18	x		56	Eastern Zone	L	2
19		x	30	Eastern Zone	L	2
20	x		60	Eastern Zone	L	3
<b>Total</b>	<b>14</b>	<b>6</b>				<b>32</b>

## Visits to the field, interviews, observations and outreach

**Table 3: Interviews, discussions and Dávggas seminars**

What	Location and date
Dávggas seminar and discussions with representatives from the herding community, government officials and land-use interests	Skaidi, Kvalsund and Hammerfest, July 2012
Visited two different <i>siidas</i> during their calf marking	West Finnmark, June 2013
Dávggas seminar	Arnøya, June 2013
Interviews	Kautokeino, Aug 2013
Interviews and Dávggas book seminar	Kautokeino, March 2014
Interviews and participatory research	Troms, July 2014
Interviews	Røros area, September 2014
Dávggas book workshop	Alta, October 2014
Interviews and participatory research	Kautokeino, March 2015
Interviews	Røros area, July 2015
Field visit to Biedjovággi	Kautokeino, Aug 2015

**Table 4: Events observed and visits to archives**

What	Location and date
Seminar: indigenous peoples and extractive industries (Ministry of Foreign Affairs and the Working group on Indigenous Peoples in the Barents Euro-Arctic Council)	Tromsø, September 2012
Resilience workshop (by Stockholm Environment Institute and ICR) and interviews with reindeer herders	Kautokeino, October 2012
Official meeting and inspection by the Ministry of Environment to the site of a planned copper mine (hosted by County Governor of Finnmark)	Kvalsund, March 2013
Seminar: land-use mapping (by Protect Sápmi)	Alta, June 2013
Annual meeting of NRL and discussions with actors	Kautokeino, June 2013
Conference: reindeer husbandry (by LMD and NRL)	Alta, August 2013
Archive, LMD	Oslo, Nov 2013
Archive, Norwegian Reindeer Husbandry Administration/Norwegian Agriculture Agency	Alta, March 2014
Meeting of the National Reindeer Husbandry Board	Oslo, December 2014
Seminar: reindeer numbers and the reindeer husbandry legislation (by Gáldu)	Kautokeino, January 2015
Seminar: reindeer husbandry, by Sámi Parliament	Kautokeino, February 2015
Archive, KMD	Oslo, May 2015
Annual meeting of NRL	Hell, June 2015
Seminar: self-governance in reindeer husbandry (by Norwegian Reindeer Husbandry Administration/Norwegian Agriculture Agency)	Alta, August 2015

**Table 5: Lectures and public presentations**

<b>What</b>	<b>Location and date</b>
Presentation of the PhD research project at an internal meeting for NRL's West Finnmark branch	Kautokeino, October 2012
Presentation at the seminar "Bringing PE home": competing narratives about reindeer husbandry, hosted by Norwegian University of Science and Technology	Trondheim, December 2013
Lecture/public presentation for Bachelor students and others about participation in the governance of reindeer husbandry, Sámi University College	Kautokeino, March 2015
Presentation at Nordic Environmental Social Science Conference (NESS): rationalities for land management	Trondheim, June 2015
Lecture for Master's students, Noragric, NMBU	Ås, October 2015
Presentation at an internal seminar for Labour Party: perspectives on the destocking in West Finnmark	Parliament, September 2015
Public presentation: Dávggas book launch (Sámi University College)	Kautokeino, February 2016
Lecture/public presentation for Bachelor's students and others: competing knowledge systems in reindeer husbandry governance (Sámi University College)	Kautokeino, April 2018





## Part 2

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Paper 1



**This is an accepted manuscript of the following:**

Johnsen, K. I., Benjaminsen, T. A., & Eira, I. M. G. (2015). Seeing like the state or like pastoralists? Conflicting narratives on the governance of Sámi reindeer husbandry in Finnmark, Norway. *Norsk Geografisk Tidsskrift - Norwegian Journal of Geography*, 69(4), 230-241. doi:10.1080/00291951.2015.1033747

**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

Johnsen, K.I., Benjaminsen, T.A. & Eira, I.M.G. 2015. Seeing like the state or like pastoralists? Conflicting narratives on the governance of Sámi reindeer husbandry in Finnmark, Norway. *Norsk Geografisk Tidsskrift–Norwegian Journal of Geography* Vol. 00, 00–00. ISSN 0029-1951.

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*

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## 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 (Reindriftsforvaltningen 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 (Reindriftsstyret) would give final approval for reindeer numbers for each district (Reindriftsforvaltningen 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.<sup>1</sup>

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 (Reindriftsforvaltningen 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 & Reindriftsforvaltningen 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 (Brekke 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).<sup>2</sup>

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 theory<sup>3</sup> 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*

*reindrifftsforvaltning*), 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).<sup>4</sup> 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.<sup>5</sup> 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).<sup>6</sup>



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).<sup>7</sup>

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.<sup>8</sup>

### *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 CO<sub>2</sub> 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 CO<sub>2</sub> 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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Paper 2



**This is an accepted manuscript of the following:**

Johnsen, K. I. (2016). Land-use conflicts between reindeer husbandry and mineral extraction in Finnmark, Norway: Contested rationalities and the politics of belonging. *Polar Geography*, 39(1), 58-79. doi:10.1080/1088937X.2016.1156181

**Land-use conflicts between reindeer husbandry and mineral extraction in Finnmark, Norway: Contested rationalities and the politics of belonging**

The article compares decision-making on two mining projects in Sámi reindeer pastures: the *Nussir* and *Biedjovággi* initiatives in northern Norway. Key actors are reindeer pastoralists, mining companies, local politicians and the state. Based on interviews, government documents, media debates and observations of meetings between the actors, the study examines the actors' claim to land and rationalities used in political decision-making. The case comparison shows that the actor groups used similar reasoning for claiming land. The mining companies argued that mining responded to local, national and global objectives and win-win opportunities of coexistence. The pastoralists referred to their customary rights to pastures and mining as a threat to their livelihoods. In the *Nussir* case, the politicians approved the project based on environmental assessments, public hearings and the wellbeing of society. Their assumption was that conflicting interests could be solved through dialogue. However, the decision-making process ignored the contested rationalities and power relations in land-use conflict. In the *Biedjovággi* case, local politicians rejected the initiative at an early stage. Here, the mining proposal initiated a debate about identity and ethics. In both cases, politics of belonging influenced the public recognition of the pastoralists' claim to land.

Keywords: belonging, land-use conflicts, rationality, reindeer husbandry, Sámi

**Introduction**

There is a state objective to develop mineral-based industries in Norway. From 2010 to 2014, the state allocated approximately 12 million USD to map the mineral resources of the

northern part of the country.<sup>1</sup> Estimates indicate that the profitable mineral resources of Norway amounts to 160 million USD, with the greatest potential in the north (UD 2013). The largest known copper deposits in Norway are *Nussir* on the coast of Kvalsund municipality and the copper-gold mineralization of *Biedjovággi* in Kautokeino and Nordreisa municipalities in the interior of Finnmark (Figure 1) (NGU 2015).<sup>2</sup>

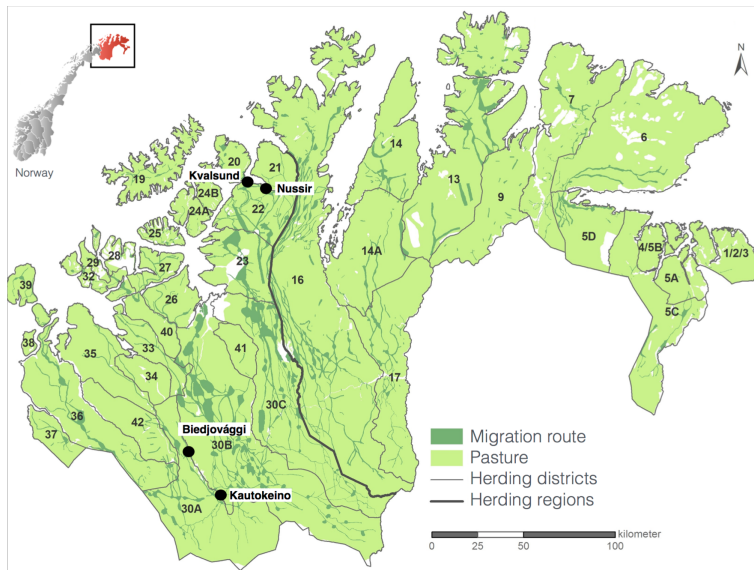


Figure 1. Map of West and East Finnmark Reindeer Herding Regions. Black dots indicate the towns of Kvalsund and Kautokeino and the Nussir and Biedjovággi sites. The numbers indicate herding districts. Numbers 20, 22 and 34 are the summer districts of Fálá, Fiettar and Ábborašša, respectively. Base map: SSB 2011.

The government regards mineral extraction as a way to provide economic growth in local communities in northern Norway. However, it also poses a challenge to Sámi reindeer

<sup>1</sup> Exchange rate 9 December 2015

<sup>2</sup> In this article, *Nussir* refers to a mining project in Nussir and Ulveryggen mountains.

husbandry. Thus, recent initiatives to reopen the *Nussir* and *Biedjovággi* sites in Finnmark have been resisted by the pastoral users of the land. The pastoralists argue that the planned extraction activities will take place on pastures to which they have customary rights and that the mining will threaten their livelihoods. The counter-argument of the developers and their supporters is that there is a local need for jobs and economic development. They also argue that mining is not a new activity in these two sites, and that coexistence between mineral extraction and pastoralism is possible.

At first glance, the *Nussir* and *Biedjovággi* mining projects resemble each other. Both mining sites lie within reindeer calving areas and overlap reindeer migration routes. The planned infrastructure and extraction activities affect several herding communities. The two land-use conflicts differ in regard to how they were addressed in the municipal decision-making. The politicians in Kvalsund approved *Nussir* based on environmental impact assessments and the comments received during a formal consultation process.<sup>3</sup> Kvalsund politicians followed a procedural rationality for planning and decision-making and emphasized the economic growth of Kvalsund municipality. The *Biedjovággi* project, on the other hand, was at an early stage rejected. While the authorities in Nordreisa unanimously adopted the proposal, the Kautokeino Municipal Council rejected it before its impacts were assessed. Here, *Biedjovággi* triggered a political debate about identity, rights to land and ethics and the politicians followed a value-based approach in decision-making. In both Kautokeino and Kvalsund, notions of belonging were part of the politicians' response to the pastoralists' claim to land. However, while the politicians in Kautokeino regarded reindeer husbandry as part of the municipality's identity, authorities in Kvalsund

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<sup>3</sup> Requirements for environmental impact assessments are regulated by the Mineral Act (KMD 2014b). The *Nussir* project is a private proposal and therefore Nussir ASA commissioned and paid for the project plans and impact assessments. The company invited the pastoralist communities to suggest experts who conducted the impact assessment for reindeer husbandry.

addressed the herders as outsiders jeopardizing economic development and job opportunities for the 'proper' Kvalsund population (ABC nyheter 2010; Kommunal rapport 2015).

Due to conflicting land-use interests, *Nussir* and *Biedjovággi* are amongst the most heavily disputed mining projects in Norway. A number of actors are engaged in each of the cases, but this article focuses mainly on four sets of actors: reindeer herding communities, mining companies, local politicians and the state. In order to get a better understanding of the *Nussir* and *Biedjovággi* land-use conflicts, I search beyond the here-and-now struggles of some few square-kilometre of land (Turner 2004). Inspired by political ecology, the article examines actors' struggle over resources, but also conflicting interest and values and struggles over meanings (see Benjaminsen and Robbins 2015). The key questions addressed are: 1) What is the material basis of the land-use conflicts? 2) What are the moral claims to land presented by pastoral communities and mining companies? 3) How are these claims addressed in the political decision-making?

The analysis is based on frameworks for rationality in planning and decision-making (Flyvbjerg 1998; Watson 2003; Richardson 2005; Gezelius and Refsgaard 2007) and the politics of belonging (Yuval-Davis 2006). The study displays the actors' interests and the narratives they use to legitimize these – both concerns commonly addressed in political ecology research (Benjaminsen and Svarstad 2010; Robbins 2012; Benjaminsen and Robbins 2015). Comparing two cases help contrast a diversity in both the actors' rationalities and concepts of belonging.

The study is based on a combination of first hand accounts of the actors and published material. The latter includes company and government documents, municipal council protocols, press releases, and TV documentaries. Through printed and live press coverage, I followed the local and national political debates concerning the mining

proposals. I made field visits to both mining sites and made observations at two seminars (*Extractive industries and indigenous peoples* in Tromsø September 2012 and the official inspection to Kvalsund by the State Secretary of the Ministry of Environment March 2013). I had conversations with the Mayor of Kvalsund and the CEO of Nussir ASA in July 2012. Further, I interviewed and had informal conversations with members of pastoral communities in West Finnmark during 2012–2015, as well as studied their written accounts concerning the mining proposals. When reviewing the data set, I still felt that my database for framing the pastoralists presentation was weak and therefore I conducted additional in-depth interviews in March 2015 with one key informants from each of the two herding communities that are the most affected by the planned mines; i.e. *Fielttar* and *Ábborašša*. The interviews were conducted in Norwegian, recorded, and transcribed. All quotes from Norwegian sources have been translated by me. The study is based on grounded theory with an open coding of the data collected.<sup>4</sup> During the data analysis, 'rationality' and 'belonging' emerged as useful categories to conceptualize the actors' accounts and the perspectives that inform their reasoning.

The article starts by presenting reindeer husbandry in West-Finnmark and national and international laws that protect indigenous rights in Norway. Then, it presents national planning policies relevant for mining projects before it engages in the actors' claims to land, rationalities for decision-making and the politics of belonging in the two cases.

### **Sámi reindeer husbandry and rights to land**

Sámi reindeer pastoralism in Norway dates back to at least the seventeenth century, and some argue that it emerged already in the Viking age (AD 800–1000) (Bjørklund 2013a).

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<sup>4</sup> An epistemological approach in qualitative studies that provides a strategy for developing theories grounded in empirical knowledge and induction (Svarstad 2010).

According to national law, only people of Sámi decent may own reindeer, with the exception of a few concession areas in the southern parts of the country. Finnmark, the northernmost county, is the largest pastoral region both in terms of reindeer stocks and number of pastoralists (Reindrifftsforvaltningen 2014). Approximately 73% of the semi-domesticated reindeer is found here and more or less the entire county is defined as reindeer herding area. Reindeer depends on access to large and undisturbed grazing areas. In West Finnmark, where *Nussir* and *Biedjovággi* are located, the majority of the pastoralist migrates across a number of municipalities between the winter pastures in the interior south and the spring, summer and autumn pastures closer to the coastal area in the north (Figure 1). A vast majority of the pastoralists have their primary homes in Kautokeino municipality. This is where they vote for local government, pay taxes, and where their children attend school. However, many herders also spend a considerable amount of time in secondary homes closer to the summer pasture.

Reindeer husbandry is under the tutelage of the Ministry of Agriculture and Food (LMD) and governed by the national Reindeer Husbandry Board through the 2007 Reindeer Husbandry Act. Reindeer husbandry is divided into six administrative regions, administered by the County Governors since the beginning of 2014, while previously six regional boards governed the regions. The main objective of the 2007 Act is to ensure sustainable reindeer husbandry. The Act does not fully regulate the rights of Sámi pastoralism; Sámi collective and individual rights to land are acquired through prolonged use of land and water areas (MD 2009). The Norwegian Constitution §108 states that: 'The authorities of the state shall create conditions enabling the Sámi people to preserve and develop its language, culture and way of life'. Further, international law protects the rights of the Sámi. The 1966 UN Convention on Civil and Political Rights, Article 27 provides the Sámi the right to practise their own culture, religion and language. And the ILO Convention No. 169 concerning



Indigenous and Tribal Peoples in Independent Countries (ratified by Norway as the first country in 1990) commits states to recognize and protect the Sámi rights of ownership and possession over the lands they traditionally occupy, or have had access to.

The material basis for the Sámi pastoralists' culture and livelihoods is access to seasonal pastures, but despite the conventions, it is unclear what to what extent customary land-use is protected against encroachment (Einarsbøl 2005; Bjørklund 2013b). According to Ravna (2015), the legal protection of Sámi rights to natural resources and lands in Norway is not adequate. Reindeer herders all over the country face increasing pressure from infrastructure development on their pastures; e.g. from military activities, snow-mobile tourism, agriculture, wind and hydropower, development of new areas for recreational homes, and mineral exploration and mining. According to the Committee on the Elimination of Racial Discrimination, national legislation does 'not provide sufficient safeguards regarding the obligation to consult the Sámi, in particular the rights to free, prior and informed consent, for all projects ... that have an impact on their livelihood' (CERD 2015). In 2008, the state established the Finnmark Commission to investigate individual and collective rights of the people of the county (Sámi and non-Sámi) to land and water. However, the investigations are slow and the study has so far examined four areas (Skogvang 2014). And, the Commission has yet to recognize actual land and water areas to which Sámi have acquired use or ownership rights (Ravna 2015).

### **Mineral policies, participation and coexistence**

In November 2011, the Government published their visions and strategies for the High North where it identified development of the mineral sector as a main priority. It stressed the need to strengthen the basis for employment and economic activity in the north, but also recognized that value creation in the High North 'must be done in a way that takes account of the environment, climate and interests of indigenous peoples' (UD 2011, p. 14).

In March 2013, the Government followed up by publishing its *Strategy for the Mineral Industry*. The strategy acknowledges that mining could involve challenges to the environment, Sámi culture and reindeer husbandry and thus, it suggests to find 'solutions for coexistence based on good dialogue and a shared understanding of the challenges to be met' (NHD 2013, p. 12). However, further description of what the concept of *coexistence* means in terms of mineral extraction is not provided (Bjørklund forthcoming). Section 6 of the 2009 Mineral Act states that mining shall be applied in accordance with international law concerning indigenous peoples and minorities. Of especial interest here is ILO Convention No. 169, Article 15, which gives states the obligation to consult, share benefits and compensate indigenous communities (Ravna 2015). The agreed *Procedures for Consultations between the State Authorities and Sámi Parliament* is a follow-up of the ILO 169 and obligates state authorities (and municipalities) to consult with herding communities prior to decision-making that might affect pastoralism (AID 2006).

Prior to extraction, a mining company needs a concession in accordance with the Mineral Act, an approved zoning plan (according to the 2008 Planning and Building Act), and a discharge permit (according to the Pollution Control Act).<sup>5</sup> Potential land-use conflicts related to a new, expanded or reopened mine are addressed during the development of a zoning plan (NFD et al. 2014). The Planning and Building Act formalizes how and when reindeer herders and other interest groups can engage in formal dialogue with the municipality and developer, and it emphasizes 'transparency, predictability and participation' as 'basic democratic and judicial principles' in planning and decision-making' (MD 2011, p. 15). Municipalities are the planning authority for land-use and as such, they have a special duty to ensure that a developer, being public or private, has complied with the

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<sup>5</sup> A zoning plan is a detailed land-use map for planning purposes (KMD 2014b). The first step in developing a zoning plan is to prepare a project proposal.

requirement for public participation in the preparation of project proposals and zoning plans (KMD 2013).

### **Rationalities and the politics of belonging**

The rationality of the national policies on land-use planning and development is that transparency, predictability and participation in planning and decision-making will ensure sound decisions, and that good dialogue and shared understanding of how to minimize or avoid negative impacts of a project will lay the ground for coexistence between various land-use interests. Through these procedures, land-use conflicts can be avoided and good governance ensured.

My approach to analysing the land-use conflicts related to *Nussir* and *Biedjovággi* is that imbedded in these conflicts are the actors' struggle over both resources and meanings (Benjaminsen and Robbins 2015). Turner (2004) argues that the complexity of resource-related conflicts often are overlooked. He encourages research within political ecology on land-use conflicts to look beyond the *here-and-now struggle* over a relatively small (and seemingly insignificant) pastoral area and examine the nonmaterial issues and moral claims of the conflicts; e.g. the underlying ethical stands about proper resource use, historic ties to the place, precedence in customary law, encroachment history, unjust exercise of power by an authority, etc. In this way, the author argues, it is possible to 'shed light on divergent interests, powers, and vulnerabilities of different social groups' (Turner 2004, p. 864).

Rationality in planning and management can be unpacked in several ways. Richardson (2005) differentiates between instrumental, communicative and contested rationalities. Instrumental rationality is 'evidence-based' reasoning based on procedures for examination of technical studies (Richardson 2005). This approach to decision-making applies the ideal of optimality and methodology of cost-benefit analysis (Gezelius and Refsgaard 2007). However, critics argue that the use of technical studies for normative

purposes blurs conflicting values and interest, competing knowledge systems and power struggles among the actors (Richardson 2005; Gezelius and Refsgaard 2007). Further, critics claim that this approach is restricted by processes of path-dependence, i.e. drawing on pre-existing ways of doing things and maintaining the authoritative actors' understandings and assumptions about the nature of the world and therefore, ensuring 'that some elements of policy remain largely unchanged over time' (Cleaver 2012, p. 144).

The communicative rationality emphasizes public deliberation through dialogue and debate (Watson 2003; Gezelius and Refsgaard 2007). The assumption is that differences can be overcome and that consensus can be established through the force of the better argument, i.e. an argument that the actors perceive as relevant and true (Watson 2003). Theoretically, the communicative approach is based on participation that is fair, equal and empowering (Watson 2003). However, Richardson (2005, p. 347, original italics) argues that planners tend to deal with participation 'as a procedural issue rather than one of *value*'. He explains that while public participation is seen as key to work with difference and conflict, value conflicts and competing perspectives are still present throughout the decision-making process.

According to Richardson (2005), both instrumental and communicative rationalities can be regarded as *ideals* for effective and relevant decision-making. These ideals simplify the way things are, whereas *reality* is often fragmented and defined by power (Flyvbjerg 1998). The more powerful actor has more means to define relevant knowledge, interpret the truth and create rationality and as such, power relations influence the consensus-seeking processes. Both the instrumental and communicative rationalities legitimize certain types of arguments as significant, while marginalizing or excluding others.

Furthermore, an actor's ability to participate in planning and decision-making is affected by the politics of belonging, i.e. the ethical and political value systems with which

people judge their own and others' belonging and create 'the boundaries that separate the world population into "us" and "them"' (Yuval-Davis 2006, p. 204). Lund (2011a) found in his study on land rights and citizenship in Africa, that the question of land-use was closely tied to the question of social and political relationships. According to this author, the argument of belonging entails both a claim to access resources and to social status. Lund (2011a) explains that citizenship or belonging entails specific rights and duties with respect to a given political community. These can be the obligation to pay taxes and obey the law, and the right to vote and social services. The political membership of a person implies his/her legitimacy to claim certain rights, but the right to claim rights 'can erode when certain forms of identity are stigmatized, devalued or otherwise marginalized' (Lund 2011a, p. 16). The status of belonging is often fluid and contested and therefore, the politics of belonging also includes struggles for recognition of ethical and political values (Yuval-Davis 2006).

A third approach to planning and decision-making is dealing with the actors' competing rationalities; i.e. to recognize conflicting values and worldviews among the actors (Watson 2003; Richardson 2005). In this line of thinking, rationalities are acknowledged as contested social constructs defined by power and conflicting values and planning is understood as a normative activity (Richardson 2005).

In the following sections, I present the material basis of the land-use conflicts before I move on to examine the actors' moral claims to land and the rationalities of decision-making in the two cases. I start however, with a short introduction to Kvalsund and Kautokeino municipalities.

### **Kvalsund and Kautokeino municipalities**

On a Norwegian scale, Kvalsund and Kautokeino are relatively poor municipalities. The unemployment rate in Kautokeino is 6.8%, compared to 2.7% in Norway and 3.2% in

Finnmark County (NAV 2015). Kautokeino is geographically the largest municipality in Norway. It is also the largest reindeer husbandry municipality where one third of the population of approximately 3000 people are engaged in the industry (Dalgest 2010). Kautokeino is, together with Karasjok, the centre of the Northern Sámi culture and language. There are no official data on ethnicity in Norway (NOU 2015); but then-Deputy Mayor of Kautokeino estimated that 90% of the population of the municipality identified themselves as Sámi and used Sámi as first language (NRK P2 2013).

In Kvalsund, the unemployment rate is only 2.0%, but here a declining population and lack of job opportunities create challenges. Approximately 1000 people are registered in Kvalsund and 40% of the economically active population have jobs outside the municipality (Dalgest 2014). Kvalsund is an old coastal Sámi community. Then-Mayor of Kvalsund estimated that while 90% of the population were Sámi descendants, only 15% speaks or understands Sámi language today (personal conversation, July 2012). Fishing combined with agriculture and reindeer husbandry were traditional livelihoods within the municipality, but these livelihoods were weakened after the Second World War (NOU 2008, p. 179). Between 1950 and 2004, the population declined by 43% – a decline related to the decrease in employment in fisheries (Dalgest 2014). During the last 10–15 years, occupational fishing in Kvalsund has been limited; in 2012 there were only 27 fishermen registered in the municipality.<sup>6</sup>

The municipalities have past experience with mining activities as both planned project sites were operated previously; *Nussir* from 1972–1979 and *Biedjovággi* from 1970–1975 and 1985–1991 (Bjørklund and Brantenberg 1981; Anttonen et al. 2010; SWECO 2011). The closures were due to low copper prices, but new optimism in copper prices led to a new interest for *Nussir* and *Biedjovággi*. During the last century, the copper price has

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<sup>6</sup> Kvalsund Municipal Council meeting invitation, dated 24 April 2012

varied between 1500 and 10,000 USD per ton, with price peaks 100 years ago, in the 1970s and in 2011 (Reinert 2012). The current mining projects were initiated in a period when the copper price was at its highest, but since then the price is halved.

In Kvalsund, the planned extraction activities will take place as underground mining in the Nussir and Ulveryggen mountains (SWECO 2011). The operations will also include new over-ground infrastructure, including buildings, dams and roads. Tailings from the mine will be discharged in the Repparfjord. The area plan covers a total area of 37,6 km<sup>2</sup>; 16,8 km<sup>2</sup> on the mainland and the remaining area is in the fjord (Figure 2).

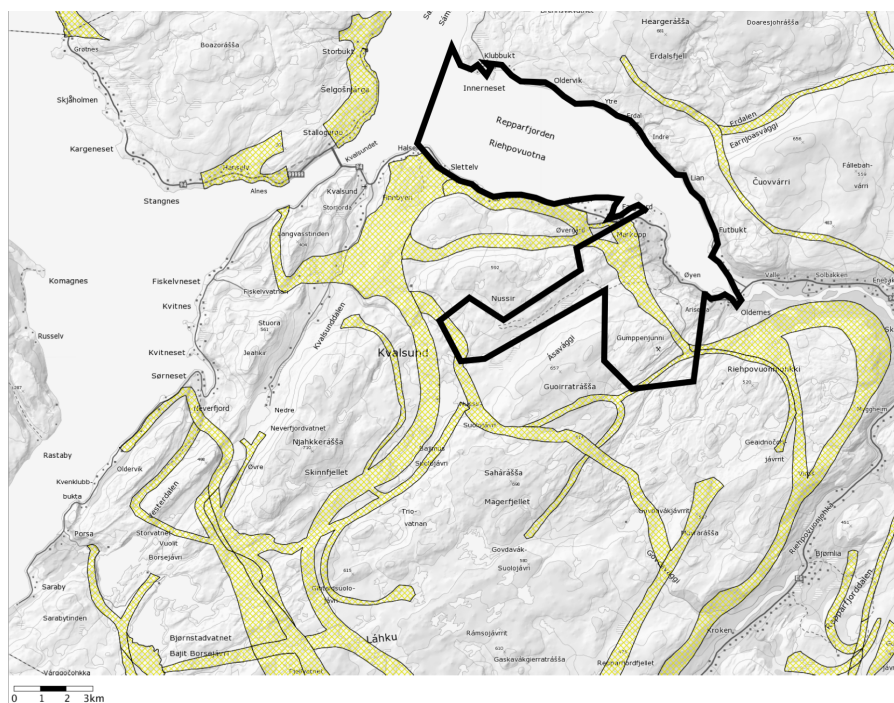


Figure 2. Approximate planning area for Nussir sketched in black. Migration routes are also indicated. Map source: Kilden.no.





were operated. Now there are more infrastructures and a higher number of reindeer in West Finnmark, resulting in few vacant spaces where the herds can move. In the late 1970s, the number of reindeer in West Finnmark was two thirds of the current stocks, but even then development infrastructure reduced reindeer's access to pastures (Bjørklund and Brantenberg 1981).

### **Claims to land in Kvalsund**

In November 2009, the Norwegian mining company Nussir ASA publically announced their interest in mining the copper ores on the coast of Repparfjord. The company estimated that the *Nussir* project would have an operation period of between 25 and 30 years, create 150 jobs and an annual revenue of NOK 600–700 million after the start-up phase (KMD 2014a). The CEO of Nussir ASA, Øystein Rushfeldt, argued that *Nussir* addressed local need for economic growth, as well as the national objective to develop the mining sector and international demand for minerals (Centre for Sami Studies 2013).

At a seminar called *Extractive industries and indigenous peoples* in September 2012, Rushfeldt said that Nussir ASA aimed at reaching public consent to its activities by emphasizing 'early involvement', 'full transparency' and 'true dialogue' (Centre for Sami Studies 2013). He referred to an extensive number of meetings with different rights- and stakeholders, including the pastoralist communities. The CEO argued that though the planned land area covered almost 17 km<sup>2</sup>, the footprint of *Nussir* would only cover a small surface area (0.4 km<sup>2</sup>). He argued that pastoralist use 96% of Kvalsund for pastures, and therefore 'the reindeer herding should to a large extent be able to continue as before' independent of the realization of *Nussir* (Centre for Sami Studies 2013, p. 83).

However, *Nussir* met opposition from actors who argued that mining could not coexist with existing livelihoods. Especially, the plan to deposit tailings in the fjord caused a

controversy.<sup>7</sup> The Repparfjord serves as a breeding ground for cod (Fiskeridirektoratet 2012) and the Repparfjord River is rated among the country's ten best salmon rivers (Norges Jeger- og Fiskerforbund 2014). In a public hearing in 2011, the Regional Reindeer Husbandry Board in West Finnmark, the Sámi Parliament and the Directorate for Fisheries objected to Nussir ASA's zoning plan.<sup>8</sup> The institutions were concerned about the impacts on important habitats for reindeer and fish. However, whereas the protests concerning pastoralism were acknowledged in the Municipal Council decision-making, the Directorate for Fisheries submitted their objection after the deadline and therefore the Council did not take their statement into account.

The Sámi pastoral communities called *Fielttar* and *Fálá* (also referred to as summer districts 22 and 20) repeatedly protested against the *Nussir* project. As of March 2013, *Fielttar* consisted of 108 reindeer owners and a spring herd of 7,326 reindeer (before calving); in *Fálá* there were 22 reindeer owners and a spring herd of 2,682 reindeer (Reindrifftsforvaltningen 2014). *Nussir* is located in the autumn pasture and rutting area, as well as in the migration route of *Fálá* (SWECO 2011). The mining site is also situated within the calving area and summer pastures of *Fielttar*. The latter community is more affected by mineral extraction as it lingers for a longer period on the coast of the Repparfjord. *Fielttar* has also been more active in the public debates concerning *Nussir*.

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<sup>7</sup> Most of the media attention concerning *Nussir* has focused on the plan to discharge tailings in the Repparfjord. Several political parties, the tourist and fishing organizations, recreational interests, and environmental NGOs have publicly protested against this plan.

<sup>8</sup> Some institutions have the authority to object to a zoning plan. The Regional Reindeer Husbandry Boards had – until they were terminated end of 2013 – such authority.

*Fiettar* argued that the project would affect the animals' access to and use of pastures.<sup>9</sup> They claimed that previous mining activities in the 1970s had created dust and caused pneumonia in their herd and they were concerned about air pollution and noise from the new project (see also Bjørklund 2013b). A key informant from *Fiettar* (interviewed March 2015) explained that disturbances from mining activities would have a negative domino effect on pastoralism. He claimed that the wellbeing of the herd during spring influences the survival rate of the herd. He also explained that *Nussir* was just one out of several encroachments (e.g. a 420kV power line, hydropower plants, areas for recreational homes and roads) on *Fiettar's* grazing lands and that Nussir ASA's impact assessments neglected the cumulative effects of all the projects combined.

According to the same key informant, the cost-benefit of the planned copper mine was not distributed fairly; the herding communities carried all the risks as the mineral extraction would come at the expense of pastoralism. Numerous meetings and discussions with Nussir ASA did not help the actors get a shared understanding of the distribution of risks. He explained:

The mining company argues that it is possible to exist side-by-side, but they are not the ones taking a risk. ... [Pastoralism] cannot in any way affect the mining in a negative way. [The company] is the robust actor, while the pastoralists will have to adapt to predicted, as well as unpredicted, consequences. So, it is easy for both the mining company and the municipality – who do not understand the [pastoralists'] concerns – to say that coexistence is possible.

At the Tromsø seminar in September 2012, a representative from *Fiettar*, Ragnhild Marit Sara, argued that the *Nussir* project would threaten the livelihoods for 120 people (Centre for Sami Studies 2013). Sara referred to the pastoralists' customary rights to the land in

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<sup>9</sup> Letters from *Mihkkal Niillasa siida* and *Fiettar* to Kvalsund municipality (dated 7 and 9 September 2011, respectively)

Kvalsund and stated that the court had concluded that the tolerance limit of the herding community to encroachments had been exceeded in the late 1970s or early 1980s.<sup>10</sup> She referred to *Fiettar's* experience with the impact from previous mineral extraction activities and claimed that coexistence between mining and reindeer husbandry is not possible. Sara argued that cooperation would require that all actors feel like winners. She rhetorically questioned the 'need for dialogue if there is no respect for the herders' view' (Centre for Sami Studies 2013, p. 82).

### **Claims to land in Kautokeino**

In April 2010, the Swedish company Arctic Gold AB purchased the right to mine the *Biedjovággi* site. The company estimated five years of profitable production and set a target to find resources sufficient for 10 years of production, 100 jobs and an annual revenue of approximately 22 million USD (Anttonen et al. 2010; Arctic Gold 2010, n.k.).

At the seminar on extractive industries and indigenous peoples (September 2012), the CEO of Arctic Gold, Lars-Åke Claesson, claimed that the main challenge of *Biedjovággi* was the political majority in Kautokeino, which rejected the project without giving the company an opportunity to conduct environmental assessments (Centre for Sami Studies 2013). As such, he argued, the politicians also represented an obstacle for the state objective to develop the mineral sector. The CEO claimed to have good relations with local people in Kautokeino and that the pastoralists were 'happy to do deals' with the company. According to Claesson, *Biedjovággi* would provide opportunities for pastoralism; e.g.

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<sup>10</sup> The court case concerned a claim for compensation for loss of pastures to the development of recreational homes (Hålogaland lagmannsrett, 27 September 2002, Case: LH-2001-812 - RG-2003-1 (1-2003)).

upgrading the road between Kautokeino village and the mining site would improve the herders' access to the pastures and the herd (Centre for Sami Studies 2013).

However, Anders Oskal, Director of the International Centre for Reindeer Husbandry, responded in the following way to the win-win presentation of the road:

Contradictory to the statement from Arctic Gold, the road is seen as a clear problem for reindeer husbandry because of other people's use of it, with subsequent disturbing of reindeer on the winter pastures and so on (Centre for Sami Studies 2013, p. 88).

The *Biedjovággi* site lies within reindeer pastures used by four different reindeer herding communities. *Ábborášša* (summer district 34) is the community most affected by the planned mine. During a public hearing on *Biedjovággi* in late 2011, *Ábborášša* argued against the mine by referring to their current use of, as well as their customary rights to, the land.<sup>11</sup> They argued that approximately 8000 reindeer (including calves) graze and rut in the area during autumn; in spring roughly 2500 reindeer go there for calving; and another approximately 3000 reindeer migrate through the area.<sup>12</sup> A key informant from *Ábborášša* (interviewed March 2015) explained that his resistance towards the project was due to experience with previous *Biedjovággi* extractions. He claimed that mining had limited the reindeer's access to important pastures. (This is also acknowledged by Bjørklund and Brantenberg 1981.) Concerning the relations with Arctic Gold, the key informant argued:

We have talked. I do not call it dialogue. ... It is just so that he can show his investors that he has had a meeting with a local Sámi. ... He talks about how he can adjust, but it is not possible to *adjust* in the middle of a calving and rutting area. It is our production area. And if the mining starts ... it would be like doing carpentry in a maternity ward. What do you think will happen? It will create chaos.

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<sup>11</sup> Letter from *Ábborášša* to Rambøll, dated 6 December 2011

<sup>12</sup> *Ibid.*

The informant explained that *Ábborássa* had survived the previous mining period only by moving their herd illegally onto other herding groups' pastures during critical periods.

The same informant argued that it would be naïve to believe that mineral extraction would improve or save the economy of Kautokeino. He pointed to the important economic and social role of reindeer husbandry in the municipality and rhetorically asked:

Kautokeino, the largest reindeer husbandry municipality within the Nordic countries, why on earth should it pursue mining? Why not pursue something else, like tourism for example, which does not degrade the pastures?

We find that Nussir ASA and Arctic Gold used similar argumentation to morally claim the *Nussir* and *Biedjovággi* projects and associated land. Both CEOs said that the projects concerns more than creating revenue for shareholders; they argued that the initiatives address local, national and global needs for jobs, economic growth and minerals. They further legitimized mining by arguing that coexistence with pastoralism is possible because reindeer husbandry survived mining in the past. Also the argumentation of *Ábborássa* and *Fiettar* resembles each other; they described the land-use conflicts as more than the 'here-and-now' struggle over the mining site areas. They referred to domino and cumulative effects of development projects, and claimed the disputed area by referencing their customary rights to land.

### **Municipal and national decision-making**

The most apparent difference between the two cases is how the local politicians in Kvalsund and Kautokeino assessed the claims of the companies and pastoralist communities; while the majority of the Municipal Council in Kautokeino embraced the perspective of the pastoralists, Kvalsund Municipal Council emphasized the local need for economic growth and adopted the perspective of the mining company.

After a first draft and a public hearing, Nussir ASA submitted a proposal for the *Nussir* project, which the Municipal Council approved July 2010. The company followed up by developing a zoning plan and conducting environmental impact assessments. These were also sent on a hearing before the company presented the final *Nussir* plan in March 2012, along with the comments and objections received during the hearing. In preparing the *Nussir* case for the Municipal Council, the administration recommended an approval of the zoning plan.<sup>13</sup> The administration referred to the objections from the Regional Reindeer Husbandry Board and the Sámi Parliament and argued that there had been extensive dialogue with the objectors on suggestions for mitigating measures, but the objectors never responded to the suggestions. The administration chose not to discuss the protests from *Fieltar*, or address Sámi pastoralists' customary rights.<sup>14</sup> In May 2012, the Kvalsund Municipal Council voted 12 against 3 in favour of *Nussir*. The minority was concerned about depositing mining waste in the Repparfjord, but was otherwise positive to the *Nussir* project.<sup>15</sup> Due to the objections, the case was transferred to the County Governor of Finnmark for mediation, but the mediation was not successful (KMD 2014a). The municipality and objectors did not come to an agreement and – because the Municipal Council maintained its approval of the zoning plan – the *Nussir* case was sent to the Government for a final decision.<sup>16</sup>

Within the state, various ministries play different – and sometimes conflicting – roles. For example, the LMD first recommended rejecting *Nussir* due to the project's impacts on pastoralism.<sup>17</sup> However, after a change of government in 2013 from a centre-left

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<sup>13</sup> Kvalsund Municipal Council meeting invitation, dated 24 April 2012

<sup>14</sup> *Ibid.*

<sup>15</sup> Kvalsund Municipal Council meeting 3/2012, 8 May 2012, issue 34/12

<sup>16</sup> Kvalsund Municipal Council meeting 6/2012, 25 October 2012, issues 80/12

<sup>17</sup> Letter from the LMD to Ministry of Environment (MD), dated 26 August 2013

coalition led by the Labour Party to a conservative government, the LMD supported *Nussir* on the condition that Nussir ASA and the affected herding communities came to 'an agreement on remedial measures [for coexistence] prior to commencement of [mining] activities'.<sup>18</sup> Herders interviewed pointed out the paradox in that the LMD recommends mining in a period when the Ministry is forcing pastoral communities, including *Fieltar* and *Fálá*, to destock to conserve pastures from degradation (see also Benjaminsen et al. 2015; Johnsen et al. 2015).

The Ministry of Local Government and Modernization (KMD) – which is responsible for the Planning and Building Act, Sámi affairs and a number of other issues – gave a final approval of *Nussir* in March 2014. The KMD emphasized the economic development of Kvalsund, but it also acknowledged reindeer husbandry as an indigenous livelihood protected by international law. The Ministry stated: 'According to [the International Covenant on Civil and Political Rights], action resulting in a refusal or a substantial violation of the material basis for the exercise of Sámi culture cannot be allowed' (KMD 2014a). The KMD set as a requirement for the approval that Nussir ASA, 'in consultation with the reindeer industry, develop mitigating measures that secure the continuation of pastoralism in the area' (KMD 2014a). As such, the decision recognized the herders' claim to the disputed land, but it did not give further elaborations on the threshold for 'substantial violation'. The decision did not address domino and cumulative effects of *Nussir* on the herding practices of *Fieltar* and *Fálá*, or the project's consequences for the unsettled land rights of the pastoralists (Bjørklund 2013b). Further, it did not give any directions for the continuation of consultations between the company and the pastoralists; it is unclear whether the pastoralists had alternatives to accepting coexistence. In December 2015 the Norwegian Environment Agency granted Nussir ASA a permit to discharge

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<sup>18</sup> Letter from the LMD to MD, dated 17 December 2013



tailings from the mining extraction in the Repparfjord. The current Mayor, Terje Wikstrøm, called the permit an early Christmas gift to Kvalsund (Altaposten 2015), while the leader of Fiettar, Mikkel Nils Sara, responded by reminding the actors that there was still no agreement between the pastoralists and the company on mitigating measure. 'We have had no contact with Nussir since last year and the matter is unresolved', he said (NRK Finnmark 2015).

The decision-making on the *Biedjovággi* case took another turn. Arctic Gold sent a draft project proposal on a public hearing in late 2011 and submitted a final proposal to Nordreisa and Kautokeino municipalities in spring 2012. Despite some concerns about the environmental impacts of the project, politicians in Nordreisa unanimously adopted Arctic Gold's proposal (Rambøll 2012). In Kautokeino however, the Municipal Council rejected the company's proposal for an impact assessment with 11 against 8 votes. The majority's main argument was that reindeer husbandry would be negatively affected by mineral extraction. The decision stated:

Kautokeino's population has experience with mining in Biedjovággi. Therefore one can, with reasonable certainty, know that new mining activities in the area will have large negative consequences for the natural environment, the livelihoods and the users of the area without having carried out environmental impact assessments.<sup>19</sup>

The Kautokeino decision received a lot of attention by national politicians and media. The controversy concerned whether a municipality had the authority to reject an environmental impact assessment. Due to the controversy, Arctic Gold submitted a revised proposal in December 2013. Again, the Municipal Council rejected *Biedjovággi*; this time with 10

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<sup>19</sup> Kautokeino Municipal Council meeting April 2012, issue 13/12.

against 9 votes.<sup>20</sup>

The Kautokeino decision was the first time that a municipality rejected a proposed area plan before an impact assessment (NRK 2013). According to a government official at KMD (personal communication, July 2015), the *Biedjovággi* case triggered an adjustment of the Planning and Building Act to clarify municipalities' authority to refrain from approving proposals for private zoning plans. July 2013, the Ministry of Justice stated (with some doubts) that a municipality could reject a proposal in cases where it did not want the proposed project (JD 2013). However, critical voices argued that only impact assessments would give a proper knowledge-base for decision-making (Claesson 2012; Morgenbladet 2013; Eek 2014).

### **Conflicting rationalities**

The majority of the Kautokeino Municipal Council went against the 'taken for granted' way of doing things. Instead of following standard procedures for area planning (i.e. to adopt a project proposal), the Council majority addressed the value conflicts in the *Biedjovággi* case.

The Municipal Council decision states:

It would be remarkable if the largest reindeer municipality in Norway approves ... mining in Biedjovággi while there is an on-going examination of rights [to land] in Finnmark. ... There is also a question whether it is morally right of Kautokeino municipality to allow such a significant encroachment before the customary rights of the land-users are clarified. Kautokeino municipality is an indigenous peoples municipality with a vision to be an example to follow ... By rejecting the project

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<sup>20</sup> Kautokeino Municipal Council meeting December 2013, issue 38/12. At this meeting the majority also addressed the need to revise national regulations in order to secure local economic benefits from mineral extraction. The politicians in Kvalsund are currently advocating the need for local benefit-sharing. Here, the politicians are negotiating with Nussir ASA to secure one percent of the company's gross revenue (estimated to 1.2 million USD per year) for new development projects in the municipality.

proposal the municipality gives a clear signal to national and international actors in favour of major infrastructure development that the municipality wants to safeguard the continuation of existing industries.<sup>21</sup>

The decision acknowledged that *Bidjovággi* would create winners and losers; the majority were explicit about the ethical judgements that guided their decision, and they recognized the nonmaterial issues of the land-use conflict by addressing the conflict as one concerning identity, unsettled rights to land and ethics (Turner 2004).

In Kvalsund, on the other hand, decision-making followed standard procedures (KMD 2014a): the land-use conflict was addressed through public hearings, meetings and negotiations. However, this article shows that the herders and the decision-makers had very different interpretations of the dialogue. While the pastoralists claimed that the mining company and the municipality never understood their concerns, the decision-makers claimed that the pastoralists were not willing to discuss solutions for coexistence. Neither local nor national decision-makers acknowledged the nonmaterial issues of the conflict (Turner 2004). They ignored the competing knowledge systems, conflicting rationalities and power struggles of the actors attempting to influence the decision-making (Richardson 2005; Gezelius and Refsgaard 2007; Blaser 2009).

In contrast to the political majority in Kautokeino, the decision-makers in the *Nussir* case did not discuss the land-use conflict beyond the here-and-how struggle for some few square-kilometres of land. It is a familiar argument for development projects in grazing lands to refer to a relative small surface area needed for infrastructure. Bjørklund and Brantenberg (1981) show how the argument was used in relation to hydropower projects and previous mining periods in *Nussir* and *Biedjovággi*.

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<sup>21</sup> Kautokeino Municipal Council meeting April 2012, issue 13/12.

## Politics of belonging

Though *Nussir* and *Biedjovággi* are both located within areas to which pastoralists have customary rights, the decision-making represents two different attitudes towards the perspectives, needs and rights of the pastoralists. In both cases the decision-makers' recognition of the herders' right to claim land is tied to notions of *belonging*, i.e. whether the herders are recognized as *proper* citizens of the municipality (Sikor and Lund 2009; Lund 2011a). However, whereas the rhetoric used by the decision-makers in Kautokeino recognized pastoralism as part of the municipality identity, authorities in Kvalsund presented the *Nussir* land-use conflict as one between an interest group (i.e. *Fielttar*) and 'society at large'. In a media interview, the Mayor of Kvalsund, Ragnar Olsen, argued:

All types of encroachment, big or small, have negative and positive consequences. [From *Nussir*] we get jobs, income for individuals, tax revenues to the municipality, new jobs, better health care, better roads. All of which help society and its people prosper (Kommunal rapport 2015, p. 12).

In another media interview, the County Mayor of Finnmark, Runar Sjøstad, said:

I fully understanding the reindeer industry's need for land ... [but] in Kvalsund, non-residential reindeer owners, who do not pay taxes to the municipality ... claim the entire municipal area. ... It is a paradox that [Finnmark] has an area equal the size of Switzerland and Denmark ... but anywhere we plan a development project, there is a conflict [with herders] (ABC nyheter 2010).

The ethno-political context of Finnmark is an important backdrop when examining the politics of belonging in the two cases. For close to 100 years, from approximately 1850 until the end of the Second World War, official state policy was to assimilate Sámi (and the

Kven) in Finnmark into the majority society (Minde 2003; NOU 2008).<sup>22</sup> Most effort was put to 'Norwegianize' areas with a substantial element of ethnic Norwegians – typically Coast Sámi areas (Minde 2003). In school, Norwegian language and culture was promoted and Sámi language was not allowed, and crown land could only be sold to individuals who read and wrote Norwegian and used this as first language (NOU 2015).

Eythórsson (2003) points to other factors in addition to the Norwegianization policies which stimulated assimilation on the coast of Finnmark: the Russian revolution (1917) terminated the trade in fish and flour between Coast Sámi and Russian Pomors and weakened the economic independence of the coastal communities; and the German forces' scorched earth tactic during their retreat from Finnmark and northern Troms in the autumn of 1944 deleted the material traces of Coastal Sámi culture. The traditional livelihoods of the sedentary Sámi (typically, the combination of fishing, agriculture and reindeer husbandry) were further weakened after the War (NOU 2008, p. 179). And the Reindeer Husbandry Act of 1978 removed the right of sedentary Sámi to own reindeer. A consequence of the latter was less contact and collaboration between Coast Sámi and the pastoralists and less insight and interest in each others' lives and needs (NOU 2008, p. 180). Furthermore, Sámi language was not re-introduced in schools on the coast until the 1980s (in Kautokeino it happened in 1967) (Hermansen and Olsen 2012).

Minde (2003, pp. 133-134) has assessed the consequences of the period of *Norwegianization* and he argues:

[O]ne can safely conclude that the state's efforts to make the Sami (and the Kven) drop their language, change the basic values of their culture and change their national

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<sup>22</sup> Kvens are an ethnic minority who are descended from Finnish peasants and fishermen who migrated to Northern Norway during the 18th and 19th centuries. The assimilation politics had its roots in Norwegian state building and social Darwinism (Minde 2003; NOU 2008).

identity, have been extensive, long lasting and determined. ... The result in the Coast Sami areas was that the Sami 'disappeared' from the censuses, and that Sami interests and identity in the fishing industry were stigmatized.

The post-war initiatives to revitalize the Sámi language and culture focused on the interior of Finnmark as this area was considered the heartland of the Sámi (NOU 2008). Here, reindeer husbandry had a strong position and had kept the Sámi culture and language vital. Olsen (2010) explains that when Sámi politicians joined the international indigenous peoples movement and started categorizing Sámi as *indigenous* in the early 1980s, this was a rhetoric that did not unite the Sámi. This author argues that the struggle for indigenous identity and rights created resistance in the interior Finnmark, but especially in the coastal areas. Along the coast, being Sámi was still stigmatized, people did not have a strong Sámi identity, and there was less interest to differentiate between ethnicities (Olsen 2010). The ethno-political struggle for rights to land and water was seen as controlled by the interior Finnmark and dominated by the reindeer pastoralists (Olsen 2010).

In 2006, the state initiated an investigation of fishing rights on the coast and sea of Finnmark. The working group, which conducted the investigation, visited coastal communities and gathered input from the public through a number of open meetings. The clear advice of the meeting participants was that fishing rights should not be based on ethnicity (NOU 2008, p. 365). Then-Mayor, Ragnar Olsen, stated during the public meeting in Kvalsund, November 2006: 'Rights must not be based on ethnicity. The same rules must apply whether you are Kven, Norwegian or Sámi.' (NOU 2008, p. 432). Minutes from the meeting show that many of the participants vocally agreed with the Mayor. One participant explained: 'It is almost like swearing in church to discuss rights in such a Norwegianized area [as Kvalsund]' (NOU 2008, p. 438).

The history of Norwegianization and the ethno-political struggle for the recognition of indigenous rights have created a public narrative about the 'Sámi' as a Sámi speaking

reindeer herder with indigenous rights protected by international law (Olsen 2010). This is a narrative that constructs a division between pastoralists and other Sámi – a division that can be recognized in the *Nussir* and *Biedjovággi* cases. The Mayor of Kvalsund argued that the pastoralists' opposition to the Nussir project, and their ability to stop development, had created frustration locally (conversation, July 2012). The Mayor explained that 'Sámi' is more than reindeer husbandry and that many Coast Sámi were very annoyed with the pastoralists, which did not understand the needs of society at large. The CEO of Nussir ASA also acknowledged a local aggression towards the pastoralists. He said that after the first public meeting with residents and pastoralists, the company had decided to conduct separate meetings with the two groups (conversation, July 2012). According to him the first meeting was unproductive as undercurrents of racism against the pastoralists dominated the discussion.

Also in Kautokeino, the *Biedjovággi* proposal created a conflict between those that advocated on behalf of the pastoralists and those who advocated new jobs and industries in the municipality. In the press, the latter group was fronted by the political partnership of 'residents' (Sámi: *Guovdageainnu Dáloniid Listu*; Norw: *Kautokeino Fastboendes Liste*). This is a partnership of people who live in Kautokeino all year and who are not engaged in reindeer husbandry. Then-Deputy Mayor and representative of this partnership, Hans Isak Olsen, argued that the land-use conflict was presented as one between the Sámi and society at large, but:

This is not the case in Kautokeino. Here, we are all Sámi. I am Sámi myself, but I do not own reindeer. My mother tongue is Sámi. My parents are Sámi. And it is the same for 90% of Kautokeino's population. But where are our Sámi rights; we who are not engaged in reindeer husbandry and must find other ways to make a living? This is a forgotten aspect [in the debate]. When people talk about the Sámi, it is all about reindeer husbandry (NRK P2 2013).

In both the *Nussir* and *Biedjovággi* cases, the *politics of belonging* affected the pastoralists' social status, as well as their ability to advocate their concerns (Yuval-Davis 2006; Lund 2011a), but this politics take different forms. In Kvalsund, the pastoralists' ability to claim land was limited because they were regarded as 'outsiders'. The local politicians rhetoric and decision-making emphasized the 'insiders'; they were silent about the pastoralists' claim to customary rights to the land. In Kautokeino, on the other hand, the pastoralists' belonging was not challenged. The decision-makers placed the herders' claim to land within a narrative on Sámi rights, international law and ethics.<sup>23</sup> In the *Biedjovággi* case, the supporters of the mine advocated their own interests by presenting a counter-narrative about being 'Sámi'. They made their own claims to the contested land by arguing that also non-pastoral Sámi have a right to make a living.

## **Conclusion**

While mineral extraction provides new opportunities for economic growth in local communities in northern Norway, it also poses a pressing challenge to Sámi reindeer husbandry. The *Nussir* and *Biedjovággi* cases represent two land-use conflicts in West Finnmark. In both cases, developers made moral claims by stating they were responding to local needs for jobs. They referred to extensive dialogue with pastoralists and argued that coexistence was possible because the mining sites were minimal compared to available pastures. The pastoralists, on the other hand, argued that coexistence was not possible. Their moral claim concerned their customary rights to land and that mineral extraction would threaten their livelihood.

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<sup>23</sup> Kautokeino Municipal Council meetings April 2012, issue 13/12, and December 2013, issue 38/12.



The *Nussir* and *Biedjovággi* cases differ in regard to how they were addressed by the decision-makers. In Kvalsund, the local politicians followed a combination of instrumental and communicative rationalities for decision-making (Richardson 2005); i.e. they followed the standard procedure to review technical impact assessments and cost/benefit of *Nussir* and comments received during public hearings. The underlying assumption was that land-use conflicts could be solved through dialogue and that coexistence and win-win solutions could be facilitated by a shared understanding of mitigating measures. However, despite multiple arenas for participation and dialogue, the actors of the *Nussir* case did not come to a shared understanding on how to coexist. The procedural rationality of the politicians simplified reality by ignoring the contested rationalities and power relations (Flyvbjerg 1998).

In Kautokeino, the *Biedjovággi* case triggered a debate about identity and the pastoralists' unsettled rights to land. The decision-making followed a value-based approach in decision-making; i.e. the Municipal Council majority recognized the nonmaterial issues of the land-use conflict, that *Biedjovággi* would create winners and losers, and they were explicit about the ethical judgements that guided their decision (Turner 2004).

In both Kautokeino and Kvalsund, notions of belonging were part of the politicians' narratives about the land-use conflicts. In Kautokeino, reindeer husbandry had a strong position. The livelihood was regarded as part of the local identity and the majority of the politicians saw the pastoralists' claims to the contested land as legitimate. In Kvalsund, the pastoralists were addressed as outsiders and there was less recognition of Sámi rights to claim land. In both cases however, the actors struggled over the categories that constitute 'belonging' (Lund 2011b).

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Paper 3



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**The Art of Governing and Everyday Resistance: "Rationalization" of Sámi Reindeer Husbandry in Norway Since the 1970s**

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**Abstract**

Since the late 1970s, a policy objective has been to rationalize Sámi reindeer husbandry in Norway. Among the government officials, there is, however, a concern that this objective has not been successfully met in West Finnmark due to "too many reindeer" and "too many pastoralists" degrading the pastures and jeopardizing the economy of pastoralism. Engaging with the concepts of "the art of governing" and "everyday resistance", we examined the state rationalization programme and how the main actors perceived it. We identified four "techniques of power" used by the state to stimulate "proper" pastoral practices: *discipline*, *neoliberal rationality*, *sovereign power*, and *truth*. Based on in-depth interviews with pastoralists and government officials, observations and written sources, we have sought to examine the public and hidden transcripts of the actors concerning the implementation of the rationalization programme. The analysis demonstrates how different examples of everyday forms of resistance are used by pastoralists to maintain control of their own livelihood and practices. A common strategy was to partly adopt and partly avoid state regulations. Individual responses to the rationalization programme were determined by personal desires and capacity, as well as relationships to and the behaviour of fellow pastoralists. Government officials presented the policies to the herding community as participatory, while in reality the state had gradually strengthened its control over reindeer husbandry. The governance of Sámi pastoralism since the 1970s affected power relations between the state and the pastoralists, as well as within the herding communities.

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**Keywords**

Governance; pastoralism; rationalization; reindeer husbandry; resistance; Sámi

## Introduction

During the 1970s, Norwegian government officials became increasingly concerned that too many reindeer and too many people engaged in pastoralism would cause overgrazing and jeopardize the economic viability of the Sámi reindeer husbandry (Ot. prp. 9, 1976-1977; Villmo 1978; Lenvik 1998). Also, there was a public perception that Sámi pastoralism had not progressed at the same pace as the rest of Norwegian society. Combined, these concerns formed the basis for a political reform of reindeer husbandry governance (Storli and Sara 1997).

The *Agreement on Reindeer Husbandry* between the Sámi Reindeer Herders' Association (NRL) and the Ministry of Agriculture and Food (LMD), together with the 1978 Reindeer Husbandry Act, are regarded as the two main instruments in the post-war political reform of Sámi reindeer husbandry. Through the *Agreement*, the state offered reindeer husbandry a similar support to what it offered agriculture and fisheries "on the understanding that the *rationality* and *efficiency* of production is ensured" (Paine 1994, 159, italics in original).<sup>1</sup> The 1978 Act complimented the *Agreement* by introducing rules and regulations to enforce more economically efficient and environmentally sustainable practices. The political reform – often referred to as modernization, rationalization or optimization of Sámi reindeer husbandry (Bjørklund 1990, 2004; Lenvik 1990; Paine 1994, 2004; Berg 1996; Riseth 2000; H. Reinert 2008; Hausner et al. 2011) aimed to stimulate livestock-keeping practices that would optimize meat production and increase the income and welfare of pastoralists in accordance with the rest of Norwegian society (St. prp. 170, 1975-1976; Ot. prp. 9, 1976-1977). However, despite later revisions of policies and the *Agreement*<sup>2</sup> – and that "an enormous amount of money and planners' energy have been spent" to rationalize reindeer husbandry since the 1970s (Paine 1994, 157) – the policy objectives have not been met everywhere. Although some herders in Finnmark have adapted

to the policy objectives, West Finnmark in particular seems to stand out as an area where pastoralists have not responded in accordance with the laws and regulations (Riksrevisjonen 2012; Riseth 2014).<sup>3</sup>

Investigating the background to this policy failure, this paper examines 1) the state vision for a rationalized reindeer husbandry and the techniques used to realize this vision; 2) the pastoralists' accounts of their responses to the rationalization; and 3) the authorities' claims about the rationalization project and process.

The article focuses on the perspectives of pastoralists from West Finnmark, but also includes some perspectives from pastoralists from the southern reindeer husbandry region. The two regions are often presented in the public discourse as having very different attitudes toward the rationalization of reindeer husbandry. The study is based on data from various sources. We conducted in-depth interviews with 19 pastoralists from the so-called "problem districts" in West Finnmark who have not – according to the authorities – kept a rational number of reindeer. We also did in-depth interviews with 4 pastoralists from the Røros area in the south and 16 government officials working with reindeer husbandry policies and regulations. We made observations and had informal conversations with pastoralists and government officials at a number of public seminars on reindeer husbandry regulations and field visits between 2012 and 2015. We participated in coffee break talks, followed the pastoralists' internal discussions on Facebook and engaged in discussions with scholars from the herding community. The text also draws on secondary sources such as policy and government reports, media sources and social media discussions, in addition to scholarly publications.

Using a grounded theory approach, we treated the data collection and analysis as interrelated processes (Corbin and Strauss 1990). "Grounded theory involves the progressive identification and integration of *categories of meaning* from data" (Willig 2013,

70; italics in original). Through conceptualizing the data, we explored theories that could shed light on our observations. We found engaging with the concepts of "the art of governing" (Foucault 1991, 2008; Li 2007) and "everyday resistance" (Scott 1985, 1990) helpful in the analysis of how policies meet practice, and how the political reform of reindeer husbandry has affected power relations within the herding community as well as between the state and pastoralists.

When approaching an informant, we explained that we were interested in exploring alternative perspectives on the governance of Sámi reindeer husbandry, and we invited the informant to share his/her accounts. We collected many stories about pastoralists' responses in order to recognize patterns, repetitions and variation in the various representations; and we triangulated the data collected by comparing data from interviews with data from outside observations (e.g., Facebook discussions). We found that pastoralists often present some perspectives in public, while often expressing contrasting views in informal conversations among their peers. We did not have the same opportunity to observe "offstage" presentations of government officials. Instead, we examined how their accounts presented to different audiences varied (Scott 1990).

All quotes used in this article originating from Norwegian sources have been translated by the authors. The informants are anonymized, and we use codes to separate different informants from each other (e.g. informant number four, is labelled #04). In order to contextualize our study, we start by a short presentation of Sámi reindeer husbandry in Norway and West Finnmark.

### **Sámi Pastoralism Prior to the "Rationalization" Programme**

In Norway, reindeer husbandry is recognized as an indigenous livelihood. According to national legislation, only people of Sámi descent may own reindeer, with the exception of a

few concessions in the south. Reindeer herding areas cover about 40% of the Norwegian mainland, from Finnmark in the north to the counties of Sør-Trøndelag and Hedmark (hereafter referred to as the Røros area) in the southern part of the country (see Figure 1).

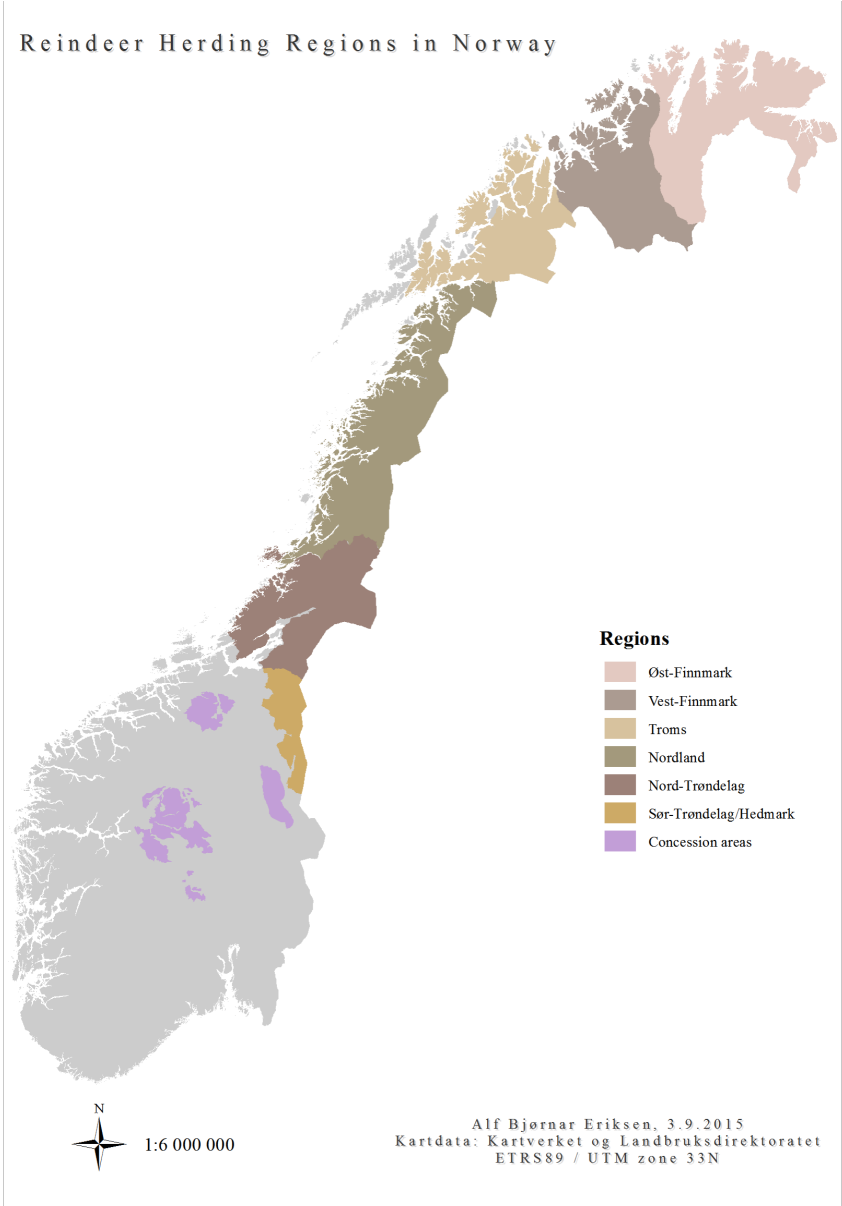


Figure 1: Map indicating Sámi reindeer husbandry regions in Norway. Cartographer: Alf Bjørnar Eriksen, September 2015.

In West Finnmark, the interior south is used as winter pastures, while the coastal areas are spring, summer and autumn pastures. Most herds cross a number of municipalities on their migrations between winter and summer grazing areas. Traditionally, the use of seasonal pastures and the division of labour are organized within *siidas* (M. N. Sara, 2009). The *siidas* (not to be confused with the administrative units called "*siida* shares" introduced by the state in 2007) are kinship-based groups of herders and the customary management units within Sámi pastoralism (Bjørklund 1990; Paine 1994). It is important to note that within the *siida* herd, each reindeer is the private property of an individual. The tradition is to give new-borns, boys and girls alike, reindeer and a personal mark that is cut in the ears of the animals. As such, all individuals get a chance to develop their own herd. Also after marrying, the tradition is that both spouses keep ownership of their own reindeer and its offspring. The *siidas* are not static organizations. M. N. Sara (2009, 176) explains that "every *siida* unit is continuously formed by (...) the on-going practices and *siida*-members' participation in daily communication, discussions, decision-making, actions, and evaluation in response to events and processes in the social-ecological system." It is also important to note that the *siidas'* practices are diversified by their distinct local adaptation and knowledge (M.N. Sara 2009).

Bull et al. (2001) argue that the attitude of the society at large towards pastoralism correlates with the number of land-use conflicts between herders and other land-use interests. While public assessments at the end of the nineteenth century describe Sámi pastoralism in the north in positive terms, the increasing herder/farmer conflicts in the Røros area resulted in a very negative attitude towards pastoralism in the south (Bull et al. 2001). From the end of the 1880s the state started a process of dividing Sámi reindeer husbandry areas into smaller herding districts (Bull et al. 2001). All pastoralists belonging to a



particular district were made responsible for damage caused on farmland by reindeer belonging to the district (M.N. Sara 2009). In Finnmark, only the summer pastures were divided into districts, but not until 1933, 40-50 years after the pastoralist areas further south (NOU 2001). The autumn/spring and winter pastures in the interior of Finnmark continued to exist as more autonomous and larger areas organized by the *siidas* (M. N. Sara 2009). The interior of Finnmark was regarded as "the nomads' country", an area without important natural resources or any potential for economic development (Bull et al. 2001, 265). It was only after the Second World War that infrastructure development opened this area for competing land-uses (Bull et al. 2001).

During the post-war period there was a national focus on integrating reindeer pastoralists into the modern welfare state (Arnesen 1979; Riseth 2000). The ethnographer Ørnulf Vorren, who assessed reindeer husbandry in Norway in 1946, described the need for a radical modernization and rationalization of herding practices. Vorren argued that especially in West Finnmark, the practices were "out of date" (1946, 217). He observed that in this region, the whole family still migrated with the herd throughout the year as in older times. Vorren argued that the pastoralists of West Finnmark had to alter their nomadic lifestyle and become more "modern" and "rational" "if this source of livelihood is not to be lost" (Vorren 1946, 220). Still, while pastoralism south of Finnmark had gradually become more settled since before the turn of twentieth century, pastoralism in West Finnmark continued to be fully nomadic until approximately 1960 (Paine 1994; Riseth 2000; M. N. Sara 2001).

After the war, and especially from the 1960s, reindeer husbandry all over Norway experienced extensive technological, economic and political changes with the introduction of obligatory schooling, establishment of slaughterhouses, housing schemes, and other forms of subsidies.<sup>4</sup> Daily work operations became more mechanized (e.g. motorized

vehicles made herding more effective) and the households became more dependent on the external market, also giving them a regular income for purchasing goods (Paine 1994; Riseth 2000). In the same period, Norway experienced a baby boom. The population of Sámi pastoralists tripled over a generation from the 1950s (O. K. Sara 2004:36). Amongst the authorities there was a growing concern that too many pastoralists were building up their herds and creating internal land-use conflicts and overgrazing (Villmo 1978; Bjørklund 1990, 2004; Storli and Sara 1997; Lenvik 1998; Bull et al. 2001; Paine 2004). Simultaneously, there was a worry that the stocks, and thereby wealth, were unevenly distributed among the pastoralists (Bjørklund 1990). There was also a concern that some – especially in Finnmark – had lost too many animals during the war and could not sustain their families. Therefore, in contradiction to the worry about overstocking and overgrazing, the poorest families received state support to purchase reindeer to rebuild their herds from 1953 to 1978 (Bull et al. 2001).<sup>5</sup>

The concerns about the growing reindeer numbers and out-dated pastoral practices were reflected by the consultative committee established in 1960 to revise the Reindeer Husbandry Act of 1933. In 1966 it reported that the reindeer industry<sup>6</sup> could only be safeguarded by a very rapid development – a development similar to what it took Norwegian agriculture several generations to achieve (Hætta et al. 1994). This development, the committee argued, should be facilitated by science and innovation that could adjust reindeer husbandry to "a new reality" (Storli and Sara 1997). Accordingly, scholarly experts, rather than practitioners, were appointed as advisors on the development process (Paine 1994; Riseth 2000).<sup>7</sup> The science on how to optimize reindeer meat production through optimal herd composition and slaughter strategies, coupled with the authorities' concerns about too many reindeer and too many pastoralists, formed the value and knowledge-base for the political reform of reindeer husbandry governance in the 1970s.

## **The Art of Governing and Resistance**

Social anthropologist Robert Paine studied Sámi pastoralism in northern Norway from the 1960s to the 1990s. In discussing the governance of herding and husbandry, he differentiated between "rationalization" and "modernization" (Paine 1994). Paine saw "modernization" as changes that come of their own accord; e.g. motorized vehicles, electricity, and fewer family camps because the children attend school. The state's rationalization programme, however, he argued, reflected a particular form of modernization "informed by an economic ideology of equality combined with market efficiency" (Paine 1994:142). By making this differentiation, Paine articulated the paradox of how mechanization of reindeer husbandry "is a story of how modernization can buck, or run contrary to, rationalization" (1994, 155). While the objective of the rationalization programme was to encourage smaller herds with larger meat production per animal, access to vehicles made it possible for herders (independently of pastoral skills) to build and control larger herds.

Michel Foucault defined "government" as a "the conduct of conduct" aimed at guiding or affecting the behaviour of an individual or a group of people to achieve desired outcomes (Gordon 1991). According to Foucault, the art of governing could be studied by examining the "techniques of power" practiced to monitor, shape and control the behaviour of individuals (Gordon 1991, 3). In the book *The Birth of Biopolitics*, Foucault (2008, 313) identified four such techniques: 1) *discipline*, which seeks to stimulate certain behaviour by internalizing social norms and ethical standards with individuals, 2) *neoliberal rationality*, which provides incentive structures with a focus on maximizing individual benefit, 3) *sovereign power*, which is top-down construction of rules and threat of punishment if rules are not obeyed, and 4) governing according to *truth* as prescribed by religion, or particular

conceptions of the nature and order of the universe, for example (Foucault 2008; Fletcher, 2010). These techniques of power are distinct, but interrelated concepts that might compete, conflict, or complement one another within different contexts. For example, Fletcher (2010, 175) explains, in efforts to address concerns about "overpopulation", a disciplinary approach might be sought to lower the birth rate through awareness raising and "framing extramarital sex and pregnancy as immoral and irresponsible", while a neoliberal approach might be to simply reduce the welfare benefits provided for children. Introducing a compulsory one-child policy, for instance, would be to use sovereign power to shape behaviour.

However, governmental power is neither homogenous nor totalizing as it may be contested and resisted by target groups with the capacity for action and critique (Li 2007). State interventions may be limited by unintended consequences (e.g., when interventions produce effects that are contrary to the objective) or contestation about what should be achieved (e.g., when actors disagree about what constitutes an improvement and/or what is an acceptable cost of achieving the improvement) (Li 2007). Moreover, the state is not the only entity which applies the art of governing; different groups of actors (e.g. missionaries, scientists, political activists, pastoralists) have competing visions, mandates, and techniques for regulating human behaviour (Li 2007).

James C. Scott (1998) argues that wherever "government" is employed, those who are to be governed are able to ignore, avoid, fight, transform or reclaim the intervention. Cavanagh and Benjaminsen (2015) identify four different forms of community resistance to government action; nonviolent, militant, discursive and formal-legal. Furthermore, Hall et al. (2015) show in their essay on land grabbing and political reactions "from below", that land deals may have differentiated impacts among the actors and within the actor groups. Therefore, various land deals create multiple frontiers of struggles (e.g. against dispossession, against exploitation or about the terms of incorporation). As such, peasants'

and local communities' responses to land deals might be organized or emerge as everyday resistance, but reactions from below may also be in the form of welcoming deals as opportunities for wage labour and improved livelihoods.

Tactics of non-compliance require little or no coordination or planning and include "foot dragging, dissimulation, false compliance, pilfering, feigned ignorance, slander, arson, sabotage, and so forth" (Scott 1985:29). Scott refers to these everyday acts of resistance as the "weapons of the weak"; the "weak" being actors who defend their interests against more powerful and dominating actors. In some cases, resistance can be more effective when hidden than open, because direct confrontation may provoke a response from the elite that could lead to further loss to individuals or communities. Scott argues, however, that though the acts of hidden resistance do not openly "contest the formal definitions of hierarchy and power", it is possible to determine to what degree, and in what ways, marginalized actors accept the social order propagated by elites by studying their behaviour and "offstage" comments and conversations (Scott 1985, 33).

The "offstage" presentations, or "hidden transcripts" as Scott (1990, xii) calls them, are accounts that include the "weak's" critique of power and practices, as well as the dominating actors' "hidden transcript representing the practices and claims of their rule that cannot be openly avowed." The inferior conceals the critique from the elite; the elite conceals their claims from the inferior. Hidden transcripts can also be disguised in the form of rumours, proverbs, jokes, parodies, gossip, gestures, folktales, and so on (Scott 1990). "Public transcripts," on the other hand, are comments and conversations that the actors (the elite and the inferior) play out in each other's presence (Scott 1990). Scott (1990, 2) explains that while public transcripts can inform us about power, they are "unlikely to tell the whole story about power relations." Therefore, he recommends examining the divergence between

the public and hidden transcripts as an approach to study structures of domination and patterns of resistance.

### **State Visions for Sámi Pastoralism and Techniques Used to Realize these Visions**

Before discussing the actors' transcripts, we assess the rationality of the political reform of Sámi pastoralism by addressing the following questions as proposed by Li (2007). What are the objectives of authorities of various sorts? How do they define the problems? What do they want to happen? What are the strategies and techniques used to make this happen?

As mentioned, the political reform of the 1970s was catalysed through two main instruments: the *Agreement on Reindeer Husbandry*, established in 1976, and the Reindeer Husbandry Act of 1978. Together, these instruments addressed the problem, as seen by the authorities: there were too many pastoralists and too many reindeer, especially in Finnmark. The objective was to transform Sámi reindeer husbandry into a more economically efficient and environmentally sustainable industry. The rationale (the vision) was that this would be achieved through standardized herd structures and slaughter strategies, centralized marketing, professionalized herders, "proper" reindeer numbers, and participation. The *Agreement* and the 1978 Act provided the techniques of power that would ensure the desired herding and husbandry practices: subsidies, concessions, co-management and capacity building of the pastoralists. In the following, we will present these techniques in more detail.

Through outreach on how to optimize meat production and economic awards, the *Agreement* aimed to stimulate increased calf slaughter and a higher ratio of productive female reindeer in the herds, which would produce more calves. The rationale was that younger animals have higher growth intensity than older reindeer. By slaughtering calves in the autumn, more nutrition would be provided for the pregnant females during winter and increase the weight and survival rate of the rest of the herd. The winter herds would be more

sustainable and the pastoralists could live better with fewer animals. Subsidies were also provided for infrastructure investments (e.g. fences and vehicles) to stimulate more efficient herding. Furthermore, the *Agreement* regulated the meat prices and marketing of reindeer products. The herders were encouraged to concentrate on producing meat; the responsibility for slaughtering, processing, trading and marketing was transferred from the pastoralists themselves to certified slaughterhouses and the Norwegian meat cooperative (*Norges Kjøtt og Fleskesentral*, currently named *Nortura*) (Sagelvmo 2004; E. S. Reinert 2006).

The authorities were aware that a higher ratio of productive females could stimulate a growth in reindeer numbers (Homstvedt 1979); the 1978 Act addressed this problem by regulating both herders and reindeer. While the Reindeer Husbandry Act of 1933 recognized reindeer husbandry as a "nomadic Sámi" (*flyttsame*) practice, the 1978 Act replaced the term "nomadic Sámi" with "reindeer owner" without distinguishing between active and sedentary reindeer owners (NOU 2001, 81). To regulate the recruitment of herders and the numbers of reindeer, the Act introduced a concession system for owning and managing reindeer – a system adopted from agriculture (Bjørklund 1990, 2004; M. N. Sara 2009). A concession gave the right to establish an operating unit (*driftsenhet*) consisting of a leader, a reindeer herd and its owners. An operating unit would typically include reindeer owned by the household members and extended family. With the introduction of the concession system, individuals who did not belong to an operating unit were excluded from the right to practice reindeer husbandry (Storli and Sara 1997). As such, the Act altered who could claim rights to engage in reindeer husbandry.

The 1978 Act gave the Reindeer Husbandry Administration a mandate to educate, guide and advise pastoralists on best practices, while it also gave pastoralists "increased responsibility and influence" (Ot. prp. 9, 1976-1977, 54) by introducing a new and broader reindeer husbandry administration and a hierarchical system of co-management boards

responsible for interpreting, applying and enforcing the policy regulations (Paine 1994). The new government structure had three levels. The Reindeer Husbandry Board had a mandate to manage the industry on a national level, including the responsibility to regulate the reindeer numbers for the herding districts. The Regional Boards (discontinued from 2014) were responsible for the technical and political implementation of regulations; e.g. approving applications for reindeer herding concessions (Labba et al. 2006). The state authorities appointed the members of the national and regional boards where herder representatives commonly constituted the majority. From 1996, when the 1978 Act was revised, the Sámi Parliament appointed the minority of the board members. On the local level, the District Boards had the responsibility for managing internal issues and attending the interests of the herding group in relation to the larger society. The District Boards consisted solely of herders belonging to the operating units of the herding district.

In 2007, the Norwegian Parliament adopted a new Reindeer Husbandry Act. "Too many reindeer" in Finnmark was still a main concern. The vision of the 2007 Act was to improve the efficiency of the management regime through internal self-management and increased participation (Reindrifftsforvaltningen 2009). The District Boards were given the responsibility to develop internal management plans by following a new set of rules (*bruksregler*) for planning seasonal pasture use, migratory routes and reindeer numbers. The management plans were to integrate state regulations and "traditional use" of pastures (Reindrifftsforvaltningen 2009). Furthermore, the 2007 Act sought to bring Norwegian law into closer conformity with traditional Sámi land management through re-establishing the *siida* as an important management unit for reindeer husbandry (Anaya 2011, 7; M.N. Sara 2013). The operating units were replaced by a new administrative unit – the *siida* share (*siidaandel*). However, while the name changed, there were few practical changes to the new units. The concession system continued; the *siida* share belonged to individual herders



and only those who were part of the *siida* share unit could practice reindeer husbandry. Also, the 2007 Act strengthened the authorities' possibilities for using economic sanctions towards pastoralists that did not follow the regulations (Riksrevisjonen 2012). For example, the unit would not receive subsidies if it had a reindeer number above the approved limit.

We found that the authorities sought to shape, guide and affect the behaviour of pastoralists through a combination of methods that resonate with Foucault's "techniques of power". The subsidies and economic sanctions are examples of neoliberal governing. Regulation of prices and marketing, certification of slaughterhouses, management rules (*bruksregler*), the concession system and threats of punishment are examples of state sovereign power. The training, guidance and advice provided by the Reindeer Husbandry Administration are examples of governing based on discipline, while the state definition of rational reindeer husbandry and "proper" herding practices has gained a hegemonic position representing a commonly acknowledged "truth" in Norwegian society that regularly is presented in government reports, at conferences and in the media. This established truth says what Sámi reindeer pastoralism *is* and *ought* to be (Johnsen et al. 2015).

### **The Pastoralists' Own Accounts of their Responses to Rationalization**

During the interviews and discussions with pastoralists from West Finnmark and the Røros area, there were particularly three measures related to rationalization that emerged as problematic: calf production, the concession system and the destocking process. In the following sections, we present and discuss the pastoralists' own accounts of how they resisted and adopted the regulations. It is important to note though, that not all of the pastoralists' actions are reactions to state governance. Their agency is obviously also affected by personal desires and social dynamics within the herding community.

### *Rational Meat Production: Calf Production*

According to interviewed pastoralists from both West Finnmark and the Røros area, harvesting calves is neither economically, ecologically nor culturally sustainable. Without state subsidies, they argued, the state-promoted harvest strategy would vanish because it is not profitable from a private economic perspective. Many pastoralists argued that if the calves could live another year, their volume and meat quality would be better and the bone-structure would have more marrow. Therefore, the herders explained, traditionally, the *varit* (one and a half-year old male) is the preferred animal to harvest. One pastoralist from West Finnmark (informant #05, March 2013) argued that restructuring a "traditional herd into an industrial herd" (that is, increasing the ratio of female reindeer) changes the herd's behaviour and grazing patterns. An "industrial" herd is not able to utilize the full variety of pastures within a herding district, he explained. Male reindeer are more tolerant of human disturbance and can graze in areas that females and calves avoid. Furthermore, a herd with many calves is more vulnerable during winters, when the snow conditions make it difficult for reindeer to access lichen through the snow (this is referred to as *guohtun* in northern Sámi) (Eira et al. 2010). Informants from both herding regions argue that, according to their traditions, calf harvest is not considered "the right thing to do". They explained that it is seen as insensible to separate calves from their mothers before the young ones are independent. The separation causes stress within the herd because the females, who have a strong connection with its offspring, will search for their calves and, as a consequence, sometimes get lost (Eira et al. 2016). In addition to decreasing the animal welfare, this also creates more work.

A former staff member of the Reindeer Husbandry Administration (informant #41, July 2014) said that many elderly pastoralists in West Finnmark had been worried that the *Agreement* and its subsidies would increase state control over Sámi pastoralism. A similar

scepticism came from a pastoralist from the Røros area (informant #17, September 2014) who claimed that there was no need to subsidize reindeer husbandry, because "the reindeer is a type of animal that goes outdoors all year and finds its own food from renewable resources. Until 1976, reindeer husbandry managed well without state subsidies".

Though the informants from the north and south had a similar attitude towards calf slaughter, most of them practiced it at the time of the interviews. A herder from the Røros area (informant #10, May 2015) said that although his family did not support the state rationale for calf harvest, they had adopted the practice when it was introduced. He explained that his family did not think they had any choice; they interpreted this as an obligation. Other interviewed pastoralists from the south said that their families had first opposed calf harvesting, but then adopted the practice due to the economic incentives. Also, a pastoralist from West Finnmark (informant #15, July 2014) said that his family for a long period refused to harvest calves. "We did not sell calves until 1989", he said. He explained that their rationale for adopting the practice 13 years after the subsidies were introduced was that their herd size had increased extensively during the last decade.<sup>8</sup> With the help of the subsidies, his family could generate income by slaughtering the smallest calves that would likely not outlast winter. Another pastoralist from the north (informant #05, July 2014) explained: "I do not think most people believed calf harvest was the future. People rather thought: 'OK, just let them give us subsidies for the calves, and we can harvest the calves that will not survive anyway'."

For many pastoralists, the *Agreement* and the 1978 Act introduced a system that did not make sense. While some subsidies were seen as very valuable as they made life and work easier (e.g. support for snowmobiles), there were other subsidies that were described as absurd. The interviewed pastoralists said there was suddenly a lot of money easily available. They made jokes about "money being thrown" at them, referring to various

subsidies that they received without having requested them. Interviewed pastoralists in West Finnmark said they received subsidies for purchasing cheese, which they traded for more desired goods at the grocery store; and they continued working and kept funds received for taking time off and paying a replacement to look after the herd. In 1987, the director of the Reindeer Husbandry Administration admitted that the economic improvements provided by the political reform had "in large part, been used not on consumption but on investments in more reindeer" (Paine 1994:163).

We found that those seemingly accepting the regulations (e.g. by harvesting calves) do not necessarily agree with the intentions behind the regulations. During interviews, pastoralists presented their hidden transcripts about the subsidies making jokes about how easy it was to access state funds, while maintaining that it was inappropriate to harvest calves. Instead of fighting the state, many kept quiet, or looked for ways to take advantage of the system, while they continued as long as possible to manage their herds in their own way. The lack of open resistance gives an impression of support, which is a convenient strategy by actors who realize that they have to continue dealing with the dominant actor, one way or the other (Scott 1990).

#### *Rational Organization of Pastoralists: the Concession System*

The 1978 Act defined reindeer husbandry as a "collective right" (*kollektiv næringsrett*) and ignored the customary right of individual pastoralists and the *siidas* to practice pastoralism (Ravna 2007). Through the concession system, the Act gave privileges and obligations to some individuals. Though formally the distribution of the concessions was based on the herders' operational reports (*driftsmelding*) for the previous years, interviewed pastoralists from West Finnmark claimed that in practice the distribution was more random. They explained that some families obtained one concession per active herder, some families

received only one to share, while other families did not receive any concessions at all. In very few cases women were given a concession, which meant that in most cases women had to register their animals within someone else's unit (usually the unit of their husband, father or brother) in order to keep the right to own reindeer. Before the 1978 Act was revised in 1996, only 10% of the registered unit leaders were women (NOU 2001:84). After the revision, spouses could hold joint leadership of a unit (Riksrevisjonen 2004).

When the 1978 Act was first introduced, the intention was to further collectivize reindeer husbandry by reducing the number of earmarks to one per concession unit. This was seen as a direct threat to the economic and social rights of the non-concession holders of the reindeer herding community, typically women and children (Haslie 2013). Losing the earmark would mean losing the possibility to claim ownership of reindeer. A pastoralist from West Finnmark (informant #09, July 2014) explained that when representatives from the Parliament came to discuss the new legislation at a public meeting in Kautokeino, all the women stood up to show their discontent. "All women present – we were fairly numerous – we stood up. And none of the men stood up. They just sat", the informant said. The open resistance had an impact; the law was altered to allow all reindeer owners to keep their personal earmark (Haslie 2013). Also, one of the informants from the Røros area (informant #25, July 2015), talked about local resistance to the state's attempt to cancel earmarks. Only one herding district adopted the collective herding system for a while, she said.

The concession system introduced a new administrative and legal hierarchy within the Sámi pastoralist community. The concession holders received and distributed internally the state subsidies and support, and decided how many reindeer the rest of the unit members could own. Most *siidas* in West Finnmark were divided into a number of concession units and interviewed herders referred to conflicting interests within the *siidas*, and within the units, which divided families. Some cases ended in court. For example, in 2005, a *siida*

share leader filed a case against his sister for jeopardizing his livelihood (*Indre Finnmark tingrett*, 30 May 2006). The leader claimed he had the right to impose a reduction on his sister's reindeer number. He argued that his sister, who had a steady income from a job outside reindeer husbandry, had become a competitor by increasing her stock and not following the agreed harvest plan. By not slaughtering as planned, the sister was threatening the concession unit's access to state subsidises, the leader argued. The sister, on the other hand, argued that her brother tried to reduce her stock below what would be economically viable, and that he did not treat the members of the unit equally. The court concluded that the *siida* share leader could establish his sister's reindeer number, but this number should not be below a viable level as the sister had an individual right to engage in reindeer husbandry, despite not having her own concession.

The concession system produced winners (the concession holders) and losers (all other reindeer owners). Lack of resistance toward the system could be interpreted as a legitimization of regulations, but it could also be understood as resignation or internalization of the policies, or a more opportunistic response by individuals to improve their livelihood or strengthen their relative power (Gaventa 1980; Hall et al. 2015). Based on studies of reindeer husbandry in northern Sweden, Beach (1981) shows how traditional Sámi organization and decision-making had been overruled by the national policies. He explains that whether an individual herder or a herding group resisted or complied with the Swedish rationalization measures depended on a number of inter-related factors; e.g., the personal economic flexibility of the herder, his/her desires for herd expansion or stability, and whether he/she was experiencing land-use conflicts. Moreover, Beach (1981:284) argues that one cannot overlook the fact that some pastoralists will benefit more from the Swedish forms of regulation than from the traditional Sámi forms. The claims made in the court case presented above are ones we recognize from the interviews with informants. Similar claims

were also raised and discussed by participants at a seminar organized by Gáldu in Kautokeino in January 2015. Pastoralists argued that by giving concession holders the authority to take decisions about the reindeer of others, the 1978 and 2007 Acts challenged traditional decision-making within the *siida* where everyone who owns reindeer has a say.

The accounts presented by the pastoralists in our study indicate that they have, to some degree, maintained a more traditional governance structure, operating in the shadow of the Norwegian state. In the book *The Art of Not Being Governed*, Scott (2009) describes how tribal people in Southeast Asia sought to live in the shadow of the state as a measure to not be governed. He explains these shadow societies as "structures of political, cultural, economic, and often religious positioning", which contradict values of the dominant society (Scott 2009, 216). The idea of shadow societies is also discussed by scholars studying reindeer husbandry in Fennoscandia; e.g., Beach (1981) presents Swedish pastoralists' attempts to avoid the governance structures imposed on them, and Laakso (2008) discusses how Finnish pastoralists conduct their practices regardless of regulations. In the case of Norway, Bjørklund (2004, 135) notes that pastoralists adapt to state regulations "by accepting what could be used in their pastoral adaptation and rejecting the rest of the policy and its devices".

In our study, interviewed pastoralists from West Finnmark explained that they kept two management plans for reindeer husbandry: one made for the authorities (*distriktsplan*), which included only a minimum of information; and a "real" plan, which the *siida* used in their practical work with the herds that was not shared with the authorities. Likewise, herders in the north explained that while an elected leader of the District Board (i.e. a state-invented institution) was often a person that knows how to deal with bureaucratic terminology and reporting requirements, the "real" leader – the chief – of a herding group was a person with advanced experienced-based knowledge about pastoralism. A herder

from West Finnmark (informant #04, June 2013) explained that the *siida* chief was not elected; it was a respected herder with deep knowledge of reindeer husbandry who provided leadership for the herding group. Legitimacy as "chief" lasted as long as he or she was the most trusted and respected amongst the *siida* members. "Still, it was clear that everyone was chief of their own animals", the herder stated. Also, one of the interviewed pastoralists from the Røros area (informant #25, July 2015) referred to the important role of the "chiefs" as leaders and mentors within the household, the *siida* and even the larger herding community.

The pastoralists' shadow management represents a management regime that seems to have – amongst our informants – more legitimacy than the state governance regime. However, the tales of shadow governance form part of the hidden transcripts of the pastoralists (Scott 1990).

### *Rational Herd Sizes: Destocking*

Due to concerns about overstocking, upper reindeer numbers for West Finnmark were set by the Reindeer Husbandry Board in 1987 and again in 2002 (see Figure 2), both times without the consent of the pastoralists and neither time the targeted reindeer numbers were met (Joks et al. 2006). The 2007 Act attempted to improve the efficiency of decision-making about reindeer numbers through participation. The pastoralists were given the responsibility to assess the number of reindeer that could be fed from the herding districts' pastures.

A working group commissioned by the Ministry of Food and Agriculture consisting of six pastoralists, two scientists and two government officials were given the mandate to develop a set of criteria that the District Boards could use to determine upper reindeer numbers and preparing internal herd reduction plans as appropriate (LMD 2008). From 2008 to 2011, most District Boards in West Finnmark developed destocking plans, but only a few districts got their plans approved. For the rest, the Reindeer Husbandry Board



dismissed the districts' proposals, arguing that they would not secure ecologically sustainable herd sizes. The Reindeer Husbandry Board decided upper reindeer numbers and reduction plans on behalf of the districts, but the knowledge-base for decisions was not apparent; the decisions were not consistent with the criteria of the working group and they demanded large reductions. On average, the districts were required to destock by approximately 30%, a reduction twice as large as what the District Boards had proposed (Johnsen 2016). According to interviewed herders, it did not help the districts that the majority of the Reindeer Husbandry Board were herders. There was a difference between herder members appointed by the Sámi Parliament and those appointed by the Ministry, they argued. The former tended to support the district proposals, while the latter tended to vote as the Ministry had instructed them. The informants also claimed that some members voted strategically to destock the herds of their competitors.

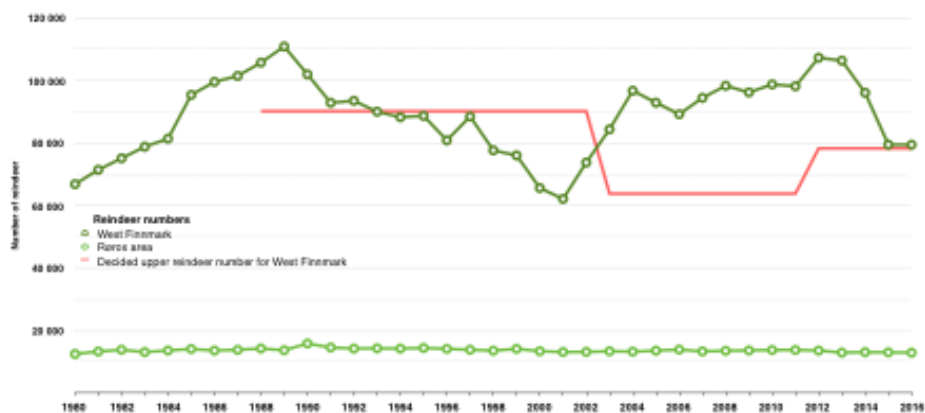


Figure 2: Reindeer numbers in West Finnmark and the Røros area for the period 1980-2016. Available data shows that reindeer numbers have been stable in the Røros area (South Trøndelag and Hedmark), while the stocks have fluctuated in West Finnmark. The red line indicates the state decisions on upper reindeer numbers for West Finnmark. The reindeer number in the Røros area is in accordance with the "carrying capacity". Source: personal communication with staff at the Norwegian Agriculture Agency, March 2015; Statens reindriftsforvaltning (2014); and Landbruksdirektoratet (2015; 2016).

Herders in West Finnmark interviewed in 2013 stated that they in general shared the authorities' concern that there were – at the time – too many reindeer. Still, they stated that they would not act upon the destocking decisions; they would "sit on the fence" and await the next move from the state (Johnsen et al. 2015). They explained that they felt misled by the process and that the decisions were unfair. Moreover, there was an anticipation that the state would request a decision on upper reindeer numbers per *siida* share.

Unless we untangle the relative meanings of "too many reindeer", it seems as a paradox that the herders were unwilling to destock. When asked, the informants explained that rather than being worried about "overgrazing" as the authorities were, they worried that "too many reindeer" would lead to inter-mingling of herds and cause extra labour and potential conflicts with neighbouring *siidas*. Another worry to the informants was that if they implemented the destocking requirement it would be more difficult to claim pastures and hinder encroachment from competing pastoralists or other land-use interests. According to Paine (1996, 130), a herder who loses animals to other herds may recognize that he has "too many reindeer" to manage and that he needs assistance with the herding. But when the children are old enough to help out, the same number of reindeer might be considered "too few". Paine explained that in some contexts "too many reindeer" could mean too little pasture at certain seasons; e.g. in the case of frozen winter pastures. The state, on the other hand, defines the "proper" reindeer number based on the "carrying capacity" of an area. According to Paine (2004, 35), the notion of carrying capacity is "heavily politicized". He argues that the carrying capacity of an area is not fixed, but varies according to the pastoral adaptation to the land and socio-economic goals; e.g., "the target income for pastoralist; the target number of pastoralists; and the target optimal weight of animals" (Paine 1994, 162). In other words, normative standards and desires define the "carrying capacity" of an area (see also e.g., Benjaminsen et al. 2015 and Benjaminsen et al. 2016 for a critical assessment

of the "carrying capacity" of Finnmark, and see e.g. Bårdsen et al. 2014 on how "carrying capacity" may change according to desired carcass weights).

Resistance to state control of the herd size started prior to the political reform of the 1970s. The state has regularly organized official counting of the stock. Earlier, these counts were the basis for imposing taxes and for avoiding grazing conflicts between the nomadic pastoralists and the sedentary farmers (Bull et al. 2001). Today, the main purpose of the counting is to ensure that the stock do not exceed the "carrying capacity". During interviews, pastoralists from West Finnmark presented several stories from the past about how they hid reindeer to mislead the numerators. A pastoralist (informant #09, July 2014) said that during Easter of 1956 the authorities used aerial photos to count reindeer on the tundra. She explained that her uncle and another pastoralist wanted to trick the numerators, so "before [the herd] was photographed, NN1 and NN2 gathered half the herd and moved it to the neighbouring valley". Beach (1981) explains that also among the Swedish Sámi pastoralists it was common to let the reindeer scatter extensively throughout the pastures to prevent official counting of the herds.

Whether a district's reindeer number corresponds to the state-defined "carrying capacity" is not a good indicator for determining a pastoralist's attitude towards the destocking policies. For example, interviewed herders from West Finnmark argued that, generally, the size of herds with summer pastures on islands and peninsulas are more often within "carrying capacity" compared to herds that graze on the mainland during summer. A pastoralist (informant #22, March 2015) explained that animals by the coast feed on more nutritious vegetation and therefore, the calves grow relatively fast during summer. However, many of the calves do not cope well with the transition to less nutritious vegetation in the autumn pastures, the pastoralist argued. Another pastoralist (informant #05, July 2014) with summer pastures on an island said that his reindeer number was in accordance with the

"carrying capacity". He explained that only the most adaptable animals would survive the transition to autumn pastures on the mainland. The less adaptable calves had to be slaughtered. The informant pointed out the irony in that the authorities regard him as one of the "good guys" due to his "proper" herd size, while in reality he strongly opposed both the state-set upper reindeer numbers and the decision-making process. He said: "I am seen as one of those who follow the regulations (...) [However,] I would have let the herd grow ever so much, but it is not possible [with my pastures]. (...) There will not be too many reindeer, whatever I do." From a traditional reindeer herder perspective, the objective is not to maximize production per animal as the state encourages,<sup>9</sup> but to maximize production per unit area. This is a common approach among nomadic pastoralists living and working in marginal and variable environments (Benjaminsen et al. 2016). Also from this perspective, the stock can be seen as too high or too low. In the Norwegian public debate concerning rational reindeer husbandry, on the other hand, there is no worry about "too few reindeer".

The examples above show that the pastoralists and the authorities have different ways of understanding "too many reindeer". However, not everyone who maintains a relatively low reindeer number adopts the state rationale for optimal reindeer numbers. Districts with "too many reindeer" are punished by not receiving subsidies, and therefore, personal economy is a determining factor when deciding how to react to state regulations. Moreover, when a pastoralist wants to destock, this can be hindered by conflicts between or within the concession unit or the herding district. Interviewed pastoralists explained that the largest summer districts in West Finnmark consist of more than ten *siida* shares and include more than 100 reindeer owners, making it challenging to reach consensus on destocking plans. As a measure to enforce the destocking, the authorities made decisions on upper reindeer numbers per *siida* share unit in 2013. They also announced that units that did not destock accordingly would receive fines.

### **State Views on Rationalization**

For decades, the Røros area has been regarded as a model area for reindeer husbandry, which has been presented as a contrast to the less optimal practices in West Finnmark (e.g. see Lenvik 1998; Riseth 2000; Bårdsen et al. 2014). The adoption of a "modern" and "rational" reindeer husbandry model in the south is seen – by the authorities – as a testimony of the relevance and appropriateness of the policies and regulations. Lenvik (1998) claimed that within the reindeer husbandry regions the pastoralists in the Røros area had the most optimal combination of reindeer density, herd structure and calf harvest. A White Paper published in 2011 (St. meld. 9, 2011-2012) singles out the interior of Finnmark and the Røros area as the two reindeer husbandry areas in Norway with the most optimal natural conditions for calf and meat production. However, there was a large difference in the meat production between the two regions. Pastoralists in the north did "not fully utilize the potential for high production offered by favourable winter conditions" (St. meld. 9, 2011-2012:85). Herders in the Røros area harvested approximately 60% of annual calf production, while only about 20% of the calves were harvested in the interior of Finnmark. An interviewed government official (informant #35, August 2012) said: "In Southern Norway, they have adopted ways to optimize the meat production (...). In Finnmark, they have to a larger extent insisted that traditional knowledge is still valid". This statement is part of a public discourse that presents herding practices in Finnmark as irrational (Johnsen et al. 2015).

When comparing official statistics on reindeer numbers in West Finnmark and the Røros area between 1980 and 2016 (Figure 2), we find that the numbers in the south have been stable and in accordance with the state-set "carrying capacity", while in the north there are significant fluctuations that often bring these numbers above the "carrying capacity" (red

line).<sup>10</sup> The statistics seem to support the above argument that pastoralists in the Røros area generally accept the state's rationalization programme, while there seems to be other parameters regulating the reindeer number in West Finnmark. Examining the harvest, we find that the meat production per animal is significantly higher in the Røros area compared to West Finnmark (Figure 3). However, we also find that (although the annual variation is larger in the north) the average meat harvest per square km is around 22 kilos in both regions (Figure 3): 21.8 and 22.4 kilos per square km in the Røros area and West Finnmark respectively.<sup>11</sup> From a traditional reindeer herder perspective, where the focus is on production per area unit, the practices in the two regions are equally rational. The two regions produce more reindeer meat per area unit than any other herding district in Norway.

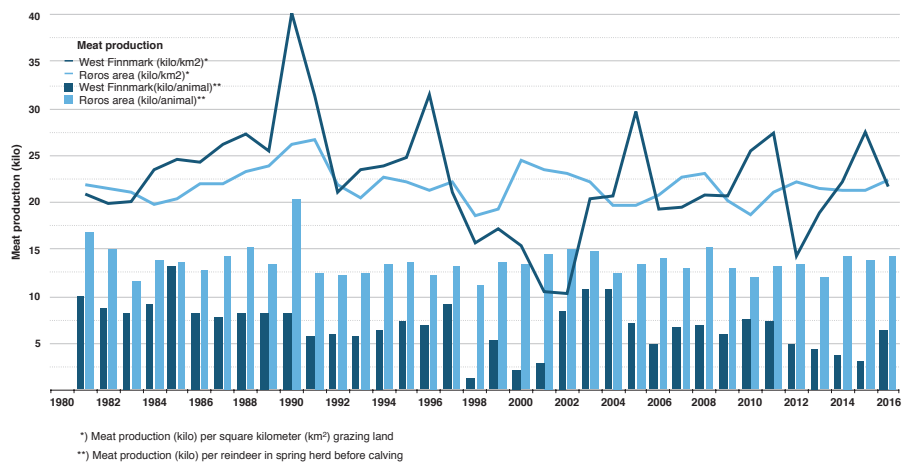


Figure 3: Total meat production in West Finnmark and the Røros area for the period 1980-2016. The figure shows the production per animal (bars) and production per square km (line graph). Source: personal communication with staff at the Norwegian Agriculture Agency, March 2015; Statens reindriftsforvaltning (2014); and Landbruksdirektoratet (2015; 2016).

The White Paper (St. meld. 9, 2011-2012) referred to above gives the impression that reindeer numbers in the south have not been a concern to the authorities. However, correspondence between the regional Reindeer Husbandry Administration and the southern

herding districts show that the authorities were worried about too many reindeer in two out of the three herding groups in the Røros area during the 1980s and early 1990s. A letter from the Administration, dated June 1993, appeals to the two herding districts to destock and adopt the state-recommended herd structure.<sup>12</sup> Nevertheless, the public presentation of conflicts between the authorities and pastoralists related to reindeer numbers does not recognize that outside Finnmark these conflicts have also occurred.

When asked about differences in attitudes towards the "rationalization programme" in the northern and southern reindeer herding regions, a herder from the Røros area (informant #17, September 2014) explained:

There is not much difference between the challenges in the north and south. This is a common misconception I hear everywhere. The only difference is that in the south, we have been oppressed for a longer period. In the north, they have been allowed to carry on with their own business, because there were so few conflicts with agriculture. In the south, we have been forced to adapt to the state's rules, because here the agricultural interests have been stronger.

The informant explained that reindeer husbandry in the south, to a larger extent than in Finnmark, resembles an agricultural production system (i.e. being more stationary and enclosed into confined areas) due to state regulations dating back long before the 1970s. Another informant from the Røros area (informant #24, July 2015) argued that the herders in Finnmark were able to stay more autonomous because they experienced less competition over the land and its resources from other interest groups. She argued that due to more interaction with "Norwegian" society, herders in the Røros area were also more "Norwegianized" than in the north and as such, when the rationalization programme was

introduced in the 1970s, the north and the south had different experiences concerning state interventions. This difference between the north and the south is also recognized by Riseth (2000, 138) who explains that "the southern part of Sápmi was a frontier area for both non-Sami agricultural settlement and governmental regulation efforts". Gundersen and Ryssland (2013) argue that repercussions of the extensive copper mining in Røros from 1644 to 1977, and that the granting of property rights to farmers for areas that previously had been part of "common" land, continue to cause conflicts between pastoralists and other land-use interests in the south.

Another informant from the Røros area (informant #23, March 2015) said that when the rationalization programme was introduced in the 1970s, many pastoralists in the south saw it as a mechanism they could use to justify continued reindeer husbandry in areas with conflicts between reindeer herding and agriculture. However, yet another pastoralist from the Røros area (informant #25, July 2015) argued that the "rationalization" of pastoralism in the south was only advocated by a few herders. The majority of the pastoralists were sceptical to the herd structure and production mode promoted by the new policy.

Independently of the regional differences in benefits of and attitudes towards the political reform, interviewed herders from both West Finnmark and the Røros area stated that they had not understood the consequences of the rationalization measures introduced. A herder from West Finnmark (informant #05, August 2014) explained that the political reform had introduced a new governance system, which herders had not been prepared for. Many of the informants described the reform and the restructuring of Sámi reindeer husbandry as "an experiment" that had large and negative consequences. A herder from the Røros area (informant #17, September 2014) said it this way: "It is an on-going experiment. [The state] has always experimented with reindeer husbandry. They have never bothered to



understand the [pastoralists'] reality, and they have never tried to understand the fundamental principles of Sámi culture."

The authorities' public transcript about the rationalization programme blame the pastoralists in Finnmark for the failure of the rationalization policies in the north. According to interviewed government officials, the pastoralists had the possibility to participate and influence the destocking and other decision-making processes. One of the government officials (informant #39, September 2012) claimed that no other regulations in Norway secure the same level of stakeholder participation as the reindeer husbandry policies. However, we found that the authorities presented different public transcripts about decision-making, depending on the audience they addressed. In seminar presentations targeting pastoralists, they minimized their own role. They claimed that pastoralists, through the co-management system and internal management plans, controlled and decided upon most issues related to reindeer husbandry, including setting upper reindeer numbers. But addressing Parliament, the Minister of Food and Agriculture emphasized the Ministry's strong and direct involvement in the destocking process in West Finnmark (Stortinget 2013).

Scott (1990, 14) explains that hidden transcripts are "specific to a given social site and to a particular set of actors". As such, the authorities' alternative presentation to the Parliament is publically available, but it takes place beyond the direct observation of the herders (Scott 1990, 4). The reality was that with "rationalization", the governance system changed from being predominantly self-organized to state-controlled (M.N. Sara 2009). The standardization of calf production and introduction of reindeer quotas are governance techniques designed to simplify the reindeer sector and to render it technical and thereby legible to government officials (Johnsen et al. 2015). However, governance based on these simplifications leaves little room for the herders' complex situated and local knowledge of

reindeer and pastures, and may even undermine it (Laakso 2008). Moreover, the authorities' conceptions of relevant knowledge and "order of the universe" forms a prescription for appropriate pastoral behaviour (Fletcher 2010, 178) – conceptions that are maintained through the state's techniques of governing (Dean 2010, 42). The simplistic presentation of what pastoralism *is*, combined with the state vision for what it *ought* to be, has become an established truth that is regularly presented in government reports, at conferences and in the media (Johnsen et al. 2015). Moreover, the state failure to incorporate *siida* knowledge and management principles into the governance of Sámi pastoralism is a source of tension in the internal relations within the herding community (Turi 2016:80).

## **Conclusion**

This article has examined the state-led rationalization programme for Sámi reindeer pastoralism in Norway since the 1970s by addressing the state approach for making reindeer husbandry more rational and the main actors' accounts of this rationalization. We have addressed four "techniques of power" used by the state to shape herders' behaviour: *discipline*, stimulating an internalization of specific practices through participation and capacity building (e.g., requesting all herding districts to develop internal management plans and provide guidelines for estimating upper reindeer numbers); *neoliberal rationality*, providing economic rewards for adoption of specific practice of meat production; *sovereign power*, prescribing rules through laws and regulations (e.g. the introduction of the concession system); and *truth*, fostering a specific understanding of rational behaviour through repeated public presentations.

Despite the authorities' governing techniques, the rationalization policies were far from fully implemented in West Finnmark. Interviewed pastoralists shared accounts of their own strategies to resist the implementation of state regulations and maintain or gain control

of their own livelihood and practices. Pastoralists produced public plans (public transcripts) for pasture use and labour in the District Boards according to state requirements, but they made more detailed plans for the operations within the *siida*, which they did not share with the authorities. Further, the pastoralists "weapons" of resistance included to publically oppose the state plans about introducing a collective herding system with only one earmark per operating unit; to manipulate reindeer counts by hiding animals; to accept subsidies, but ignore their intentions; and to keep a more traditional governance structure in the shadow of the Norwegian state.

Interviewed government officials were concerned that pastoralists in West Finnmark continued to keep "too many reindeer" despite the requirement to destock. In public presentations addressing herders, they emphasized the herders' role and responsibility in decision-making and minimized their own role. However, when addressing other audiences (e.g. the Parliament), the authorities emphasized their own control and strong and direct involvement in the process. Moreover, in reality, the political reform changed the previous governance system from being predominantly self-organized to state-controlled. The current governance of Sámi pastoralism, based on the authorities' conceptions of relevant knowledge and "order of the universe", leaves little room for the herders' complex situated and local knowledge of reindeer and pastures. Rather, the governance forms a prescription about what reindeer husbandry *is* and *ought* to be.

The policies have created winners and losers and skewed the power relations within the Sámi herding community, as well as between the state and the pastoralists. For example, while some pastoralists were able to get a concession and build up their stocks, others were not. The Sámi pastoralist population is a heterogeneous group of people that follow different family traditions for reindeer husbandry and herding. Between and within the herding regions, pastoralists operate in a variety of landscapes and ecosystems and face a variety of

external challenges (e.g. weather, predators and land-use encroachments) that affect their livelihoods and influence their strategies to manage reindeer and pastures. Therefore, we cannot simply identify the supporters of the rationalization programme by pointing at those with "proper" herding practices according to the state. Nor can we identify pastoralists with "too many reindeer" as those opposing the policies. Our study shows that the herders' response to state regulations are determined by e.g., personal beliefs, desires and capacity, as well as their relationship to and the behaviour of their fellow herders.

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### **Notes**

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<sup>1</sup> The *Agreement* was based on biannual negotiations until 1993 when they became annual (St. prp. 66, 1993-1994).

<sup>2</sup> The first *Agreement on Reindeer Husbandry* introduced subsidies for calf harvest and autumn slaughter as techniques to conserve winter pastures (Kvakkestad and Aalerud 2012). The subsidies from the *Agreement* became extensive from the early 1980s, but after some public criticism arguing that the subsidy system promoted herd increases, the subsidy system was adjusted from 1987/88 (Riseth 2000). Since then, the subsidies aimed to

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stimulate higher harvest rates, calf slaughter and autumn slaughter (Hausner et al. 2011). After 2003, the subsidy system was altered to emphasize production value instead of volume and currently, subsidies are tied to the following criteria: the unit's stock is within the state-set upper reindeer number; the value of the unit's meat production; calf harvest; and the leader of the *siida* share (together with his/her family) owns 85% or more of the unit's stock (Prop. 68 S, 2014-2015).

<sup>3</sup> Finnmark is Norway's northernmost county and largest reindeer-herding region. Roughly 70% of the approximately 210,000 semi-domesticated reindeer in Norway are found in Finnmark. Nationwide there are 3150 reindeer owners; about 76% are registered in Finnmark. Approximately 55% of the all reindeer and 62% of all reindeer owners in Finnmark are found in West Finnmark (Landbruksdirektoratet 2016).

<sup>4</sup> A state housing programme was introduced in 1958 (Lenvik 1998, 9).

<sup>5</sup> Subsidies for restocking were dispersed in 1953, 1955, 1963-1971 and 1976-1978 (Hausner et al. 2011).

<sup>6</sup> The state refers to reindeer husbandry as a "*næring*", which is commonly translated as "industry". In the late 1970s, pastoralism was legally regarded as an occupation rather than an inherited livelihood (Paine 2004, 30).

<sup>7</sup> According to Riseth (2000), the knowledge-base for the reindeer husbandry politics was developed during the 1970s by relatively few people.

<sup>8</sup> According to the informant, the 1980s were particularly good years for reindeer husbandry. The weather conditions were optimal, there were few predators, survival rate of the reindeer was high and herds grew.

<sup>9</sup> The state defines "production" as total kilos meat sold per animal in the spring herd before calving.

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<sup>10</sup> The upper reindeer numbers for West Finnmark was set to 90,100 animals in 1987, 64,300 in 2002, and 78,150 in 2011 (Joks et al. 2006; Statens reindrifstforvaltning 2014). The upper reindeer number for the Hedemark and South Trøndelag is set to 13,600 animals. Lenvik (1990) recommended an upper reindeer number of 85,000-90,000 in order to maximize the meat production in West-Finnmark, and Bårdsen et al. (2014) estimates that approximately 50,000 animals is an optimal reindeer number for West Finnmark.

<sup>11</sup> Our estimates are based on best available production data provided by staff at the Norwegian Agriculture Agency (personal communication, March 2015), as well as official reports on the state of reindeer husbandry (Statens reindrifstforvaltning 2014, Landbruksdirektoratet 2016).

<sup>12</sup> A copy of the letter was provided by the recipient (informant #24, July 2015).

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Paper 4





Research

## Sámi reindeer governance in Norway as competing knowledge systems: a participatory study

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**ABSTRACT.** Using a participatory research approach, we assess the knowledge systems and political ontology of reindeer husbandry. The study was conducted by a mixed team of scientists and Sámi reindeer herders who practiced reindeer husbandry in West Finnmark, northern Norway, both prior to and during the state-led “rationalization” of Sámi reindeer husbandry since the late 1970s. The analysis is based on the participants’ reindeer herding knowledge and their assessment of the governance of Sámi pastoralism. Two future narratives (scenarios) were used to stimulate reflection and discussion. Based on these discussions and by studying secondary sources, we examined how herders and government officials explained what reindeer husbandry is and ought to be and their conceptions about “proper” management of reindeer, herders, and the land on which reindeer pastoralism depends. We find that the state governance of reindeer husbandry since the end of the 1970s promoted, through a combination of economic incentives and sanctions, herding practices primarily based on Western knowledge and way of understanding the world. This knowledge system and the management techniques it promotes was, and still is, in conflict with and undermines reindeer herding knowledge and worldviews. However, despite 40 years of policies attempting to transform reindeer husbandry according to the state’s perception of proper pastoralism, a Sámi worldview continues to influence the herders’ understanding of the relationship between humans, reindeer, and nature and how this relationship should be governed. Nonetheless, the conflicting, asymmetrical knowledge systems and competing worldviews of what reindeer husbandry is and ought to be compromise the identity and rights of the pastoralists.

**Key Words:** *knowledge; participatory research; political ontology; reindeer husbandry; Sámi; scenarios*

### INTRODUCTION

After the Second World War, a development discourse evolved in the Western world, which was based on the Western policy makers’ notions of modernity, rationality, material progress, the potential of science, and the value of equality and social justice (Peet and Hartwick 2009). In this discourse, rationalism was the capacity for humans to control the world through thought, logic, and calculation. Through rationality, often measured in economic imperatives, the world could be changed to the better (Tucker 1999, Peet and Hartwick 2009). When exploring notions of development, however, Tucker (1999:3) suggests distinguishing between two types of processes of change: one that “concerns the production of goods, the mastery over nature, rational organization and technological efficiency,” and a second that “concerns the production of structures of power and ideology.” To recognize the two types of change embedded in the mainstream Western concept of development, Tucker (1999) suggested deconstructing it and assessing its knowledge base and worldview, as well as how it supports economic and political structures of domination.

Social anthropologist Robert Paine, who studied Sámi reindeer husbandry in northern Norway from the 1960s to the 1990s, distinguished between the “rationalization” and “modernization” of reindeer husbandry (Paine 1994). He explained modernization as changes that come of their own accord (e.g., motorized vehicles and electricity) and rationalization as an induced change “informed by an economic ideology of equality combined with market efficiency” (Paine 1994:142). Using Paine’s distinction

between rationalization and modernization, and with a focus on Sámi reindeer husbandry in West Finnmark, northern Norway, we address two key questions: (1) How do herders and government officials explain what reindeer husbandry is and ought to be? (2) What are the actors’ presentations about “rational” management of reindeer, herders, and the land on which reindeer pastoralism depends?

In line with Bridge and Perreault (2009) and Johnsen et al. (2015), 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. Through a participatory approach, we examine the Norwegian state governance since 1966<sup>(1)</sup> and the traditional Sámi governance of reindeer husbandry in West Finnmark. Whereas traditional knowledge had a dominant role in practical reindeer husbandry prior to the 1970s, the state governance regime has since promoted herding practices primarily informed by a Western scientific perspective on meat production. We show that the state and the reindeer herders had, and still have, conflicting understandings of what Sámi reindeer husbandry is and ought to be. Furthermore, we find that the political reform of the late 1970s undermined the herders’ knowledge and worldviews related to sustainable Sámi reindeer husbandry and challenge their identity and rights.

This article contributes to the academic discussion on political ontology, introduced by Blaser (2009a). Political ontology concerns power relations and conflicts that arise when different

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ontologies (also referred to as worldviews) interact and strive to sustain their own existence (Blaser 2009a,b, 2013, 2014, Escobar 2010, Oksala 2010). In the words of Oksala (2010:447), political ontology “concerns the contestation and struggle over the institution and disclosure of reality.” Oksala (2010) argues that reality, as we know it, is constructed through social practices; it incorporates power relations and concrete struggles over truth and objectivity in social space. According to Blaser (2009b:11), ontologies “are not pre-given entities but rather the product of historically situated practices.” As such, he situates the Euro-centered modernity as a particular worldview among many others, among them, indigenous ontologies (Blaser 2009a). However, the Euro-modern ontology is based on the idea of universalism; that only one reality, or one truth, exists (Blaser 2009a).

The ontological basis for decision making, whether it is acknowledged or unacknowledged, has “profound epistemological, methodological, and practical political consequences” (Hay 2006:79). In cases when those who govern do not acknowledge or are not aware of the alternative ontology of those being governed, conflicts arise (Blaser 2009a). Therefore, addressing competing ontologies could offer an approach to understand how socio-environmental conflicts emerge (Acuña 2015, Ruiz Serna and Del Cairo 2016).

Here, our work is based on a participatory study conducted by a team consisting of three scientists and four Sámi reindeer herders. The empirical data presented comes mainly from the participating herders’ own life experiences. Through facilitated discussions, the whole study team engaged in the data analysis. Secondary sources, including government documents, were also used to inform the analysis. We first contextualize the study and introduce the concept of traditional knowledge. Thereafter, we describe the methods used before presenting the results and discussing the findings of the study. All quotations used here originating from Norwegian sources were translated by the authors.

### Contextualizing the study

Reindeer husbandry is a livelihood among 24 different indigenous peoples living on the Arctic tundra and sub-Arctic taiga. Sámi reindeer husbandry is practiced in the area often referred to as Sápmi, the land of the Sámi people. Sápmi is a geographical area that covers the northern parts of Norway, Sweden, Finland, as well as the Kola Peninsula of the Russian Federation. The reindeer herding areas in Norway cover approximately 40% of the mainland, from Finnmark in the north to the counties of Sør-Trøndelag and Hedmark in the south. According to national legislation, only people of Sámi descent may own reindeer, with the exception of a few concessions in the south. Finnmark is Norway’s northernmost county and largest reindeer-herding region. Roughly 70% of the approximately 210,000 semidomesticated reindeer and approximately 76% of the reindeer owners in Norway are registered in Finnmark. Approximately 55% of all reindeer and 62% of all reindeer owners in Finnmark are found in West Finnmark, making this the largest reindeer herding region in Norway (Landbruksdirektoratet 2016).

Here, we use the respective terms “reindeer husbandry” and “pastoralism,” and “herder” and “pastoralist,” interchangeably. Pastoralism is a form of animal husbandry especially adapted to

marginal and unstable grazing resources (Pedersen and Benjaminsen 2008); it is a system based on extensive land use and often involves moving the herds between pastures as a way of coping with spatial and time variations in the grazing conditions in search of fresh pasture (Niamir-Fuller 2000, Dong et al. 2011). Sámi reindeer husbandry is a type of pastoralism. In West Finnmark, the interior south is used as winter pastures, whereas the coastal areas are spring, summer, and autumn pastures. Most herds cross a number of municipalities on their migrations between winter and summer grazing areas. In Finnmark, the herds migrate up to 350 km between the inland and the coast (Magga et al. 2009).

Traditionally, the use of seasonal pastures and the division of labor are organized within *siidas* (Sara 2009). The concept of *siida* is known throughout Sápmi and can be loosely translated as “community” (Mustonen and Mustonen 2011, Sara 2013). In the West Finnmark pastoral context, *siidas* are kinship-based groups of herders and the customary management units within Sámi reindeer husbandry (Bjørklund 1990, Paine 1994). Although the reindeer are organized in *siida* herds, each animal is the private property of an individual owner. Traditionally, new-borns, males and females alike, are given a personal mark that is cut into the ears of the animals. Therefore, all individuals get a chance to develop their own herd. Also, after marrying, the tradition is that each spouse keeps ownership of their own reindeer and its offspring.

Key to the role of the *siidas* is dealing with issues related to “ecology, herding strategies, coordination of herding tasks, and relations to surrounding *siida* units” (Sara 2009:158). It is important to note, however, that *siidas* are not static organizations. Sara (2009:176) explains that every *siida* unit is continuously formed by ongoing practices and through the *siida*-members’ participation in daily discussions, actions, and evaluation in response to events and processes within the herd and the landscape in which they operate. As such, the *siidas*’ practices are diversified by their distinct local adaptation and knowledge (Sara 2009).

### Traditional knowledge

Díaz et al. (2015:13) define traditional knowledge as “[a] cumulative body of knowledge, practice and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.” In northern Sámi, a language spoken in northern Norway, northern Sweden, and northern Finland, “traditional knowledge” is translated as *árbevirolaš máhttu* or *árbediehtu*. According to Eira and Sara (2017), the concept of traditional knowledge is relatively new in the Sámi language, and its recent use stems from the need to articulate indigenous livelihoods and knowledge in relation to other forms of knowledge. The concept of *árbediehtu* contains practical knowledge and competence, as well as knowledge related to social relations as information exchange, consultation, participation, and discussion concerning both practical tasks and human–nature relationships (Eira and Sara 2017).

In the transfer and practice of knowledge, language is of particular importance; the Sámi herding language is systematic, specialized, and has a high level of precision for describing

herding strategies, climatic conditions, land use, and the morphology, physiology, behavior, and ecology of reindeer (Eira 2012). Traditional Sámi reindeer herding knowledge is not static; it is constantly “carried out, tested, and renewed” (Sara 2009:175). Knowledge is developed based on the results from the continuous process of adapting to the surroundings. Through participation in daily life and the various chores throughout the year, the *siida* members acquire reindeer herding knowledge (Sara 2013, Eira et al. 2016). Therefore, a herder’s knowledge reflects his or her position in the household and *siida*, the *siida*’s adaptation to the landscape, its migration system, as well as the environment in which it operates (Eira et al. 2016).

Although there is a diversity of herding strategies and local knowledge within Sámi pastoralism in West Finnmark, the herding communities share cosmological perspectives on the human–nature relationship (Sara 2009, Eira et al. 2016). Sámi reindeer herders, as do many other indigenous peoples, have a broader understanding of the relationship between humans and nature than do Western scientists (Huntington et al. 2006, Berkes 2008, Díaz et al. 2015). While both national and international conventions (e.g., the *Norwegian Nature Diversity Act* and the Convention on Biological Diversity) recognize the role of traditional knowledge in achieving biodiversity conservation and sustainable development, there is a tendency among scientists and resource managers to assume that indigenous knowledge systems can be fully translated and integrated into the Western science knowledge system (Nadasdy 1999, Mistry and Berardi 2016). Blaser (2009b:15) argues that there is a dominant trend within environmental governance that indigenous “knowledges and practices are translated into discrete packages” suitable for being incorporated in the existing toolkit of practitioners and decision makers. Nadasdy (1999) makes a similar argument. He also states that traditional knowledge should rather be understood as “one aspect of broader cultural processes that are embedded in complex networks of social relations, values, and practices which give them meaning” (Nadasdy 1999:5). Also, Huntington et al. (2006) emphasize the importance of listening to and understanding traditional knowledge statements “within a larger political, spiritual, and epistemological context.”

## METHODS

This work is based on a participatory study; that is, a bottom-up approach that focuses on locally defined priorities and perspectives, where the participants engage in mutual learning, analysis, and coproduction of knowledge (Cornwall and Jewkes 1995, Bergold and Thomas 2012). The study team included four Sámi pastoralists and three scientists (the authors). The participating herders were selected based on purposive sampling; that is, we identified the participants in a strategic way to ensure that they would be relevant to our research objective (Bryman 2012). They were selected according to the following criteria: members of reindeer herding families; practical experience in reindeer herding and husbandry in West Finnmark in the late 1950s and 1960s, as well as after the political reform; experience from participating in political bodies for reindeer husbandry; deep knowledge of and the ability to master and use reindeer herding terminology; and willingness to share views and reflections on changes to the governance of Sámi pastoralism. The selected group of participants consisted of one woman and three men

between 65 and 78 years old, all spoke northern Sámi as their first language, and all had past experience in being part of scientific studies. The participants, who preferred to be anonymous, are referred to here as Participant 1, 2, 3, and 4.

The authors represented diverse science backgrounds (biology, linguistics, and environment and development studies). All have long experience (between 10 and 55 years) in working on issues related to reindeer husbandry. One of the scientists is part of a Sámi reindeer herding family in West Finnmark; the other two are non-Sámi, born and raised outside a Sámi community. The study team was large enough to ensure a variety of experiences and opinions and to enable collective recollection and reflection on past events, and was small enough to fit around a kitchen table and for all members to engage in the discussions. We emphasized creating an informal and dynamic atmosphere during the team gatherings, and we served coffee and food.

The study team met twice for half-day gatherings in July 2014 and March 2015. Both meetings were recorded, transcribed, and shared within the team. Prior to the gatherings, the authors defined topics for discussion. In reality, however, the discussions resembled a conversation among friends. We did not follow a strict step-by-step research approach but took a more organic approach in dealing with research questions. The team members were free to raise any issue they found relevant to the question of concern, to tell anecdotes and jokes, and to question one another’s stories and arguments. The semistructured approach enabled in-depth explorations of issues that the participants found relevant to the topic of discussion. As such, another constellation of participants might have altered the focus of the discussions. Norwegian was the main language used during the discussions, but the participants also used Sámi language as a way to offer more precise descriptions. For the benefit of the two non-Sámi scientists, discussions in Sámi were translated immediately to maintain the flow of conversation.

During the first gathering, the topic for discussion was the political reform of reindeer husbandry in the 1970s, and how the new policies and regulations corresponded with the pastoralists’ traditional herding practices and knowledge. Prior to the second gathering, the authors developed two future narratives describing two different governance structures for reindeer husbandry (see Box 1). Future narratives are a form of scenarios; they are qualitative descriptions of possible futures. Scenario analysis is a way of providing predictions for studying the future. There are three main categories of scenarios proposed for discussion: predictive (What will happen?), explorative (What can happen?) and normative (How can a specific target be reached?) (Börjeson et al. 2006:725). We used a set of explorative scenarios, which is, according to Börjeson et al. (2006:727), particularly useful in cases when the research participants “have fairly good knowledge regarding how the system works at present” and have an interest “in exploring the consequences of alternative developments.” However, our purpose with the future narratives was not to determine probable future governance structures, but rather to establish a shared platform for the conversations within the study team. The issue addressed during the second meeting concerned what challenges the two future narratives would bring to Sámi reindeer husbandry.

**Box 1:**

**Future Narrative X: State governance of reindeer husbandry**

Reindeer husbandry has become a state business. Advanced scientific models are used to calculate herd and slaughter strategies that will optimize meat production. The central authorities have limited the number of concessions for owning reindeer in West Finnmark to 200; no concession-holder can own > 500 reindeer. Traditional earmarks are banned. Instead, all reindeer are marked with an electronic ear-chip and a GPS, which give herders and the state full control of the whereabouts and the behavior of all domesticated reindeer. Pastures are commonly fenced, and therefore, land-use conflicts between pastoralists, conservationists, and the sedentary population are minimized. The workload within reindeer husbandry is reduced because of changes in practices: extensive use of animal transportation and fences; common use of year-round pastures; and use of GPS and drones to monitor the herds. The concession-holders receive a monthly salary from the state for producing meat and maintaining Sámi reindeer husbandry.

**Future Narrative Y: *Siida* governance of reindeer husbandry**

The concession system is abolished, and the state subsidies for reindeer husbandry are terminated. The *siidas* regulate herds, land use, and recruitment. Reindeer number and herd structure vary among *siidas* according to climate and weather conditions, available pastures, markets, and preferences. *Siida* decisions are based on a combination of traditional knowledge, science, and modern technology. Many *siidas* have their own mobile slaughter vehicle, and meat products are one of many income sources from the reindeer. Meat, antlers, skins, organs, and *duodji* (traditional Sámi handicraft) are other products sold within Norway and exported. More people make a living from reindeer husbandry; many of these combine pastoralism and other types of paid work.

The first narrative (called Future Narrative X; Box 1) describes a governance regime with more state control, implying more detailed regulation of reindeer husbandry; the second narrative (called Future Narrative Y; Box 1) describes a decentralized governance structure in which the pastoralists have more internal control, implying little state regulation and a strengthening of the traditional *siida* institution. The scenarios were informed by the accounts made by the research participants during the first gathering, conversations with other pastoralists, as well as statements made by government officials on preferred herding practices. The narratives were exaggerated scenarios, which represented two “opposite” futures for Sámi pastoralism in which pastoralists’ knowledge and worldviews played different roles. The geographical scope of the two narratives was West Finnmark, and the starting point was the year 2035. The narratives described some key aspects (Börjeson et al. 2006) of the governance of reindeer husbandry raised by the participants during the first gathering of the study team: regulation of pastoralists and reindeer, herd structure, pasture management, herding practices, production, and decision making.

The future narratives were presented and discussed at the second gathering of the study team<sup>[2]</sup> and used as a tool to stimulate engagement and reflections on traditional Sámi reindeer herding knowledge and worldview (see e.g., Lynam et al. 2007, Oteros-Rozas et al. 2015 for more on participatory scenario methods). Inspired by Paschen and Ison (2014), we sought to facilitate reflective colearning through “story-telling.” Paschen and Ison (2014:1086) explain that individuals interpret scenarios based on their own knowledge, values, and worldviews. As the participants communicate their interpretations, they use their own words (their own stories) to “re-work and order experience, evaluate events and construct meaning and knowledge.” As such, the empirical data presented here come mainly from the participating herders’ own life experiences. Through the facilitated discussions, the whole study team engaged in data analysis.

In addition to the discussions with the four selected pastoralists, the study was informed by secondary sources such as policy and government reports, in addition to scholarly publications.

## RESULTS

### Knowledge base for the state-driven rationalization of Sámi reindeer husbandry

In 1946, ethnographer Ørnulf Vorren, published an article about reindeer husbandry in Norway in which he argued the need for radical modernization and rationalization of Sámi herding practices. Vorren observed that in West Finnmark, the whole family still migrated with the herd throughout the year, as in older times. The scientist stated that the practices of the herders in this region were “out of date” (Vorren 1946:217). He argued that “if this source of livelihood is not to be lost,” the herders needed to alter their nomadic lifestyle and become more “modern” and “rational” like reindeer herders had done in other places in Norway (Vorren 1946:220).

Twenty years later, a consultative committee (established to revise the *Reindeer Husbandry Act* of 1933) acknowledged that the reindeer industry had not progressed at the same pace as the rest of society in Norway (Landbruksdepartementet 1966). Like Vorren, the committee argued that reindeer pastoralism had to change. It claimed that reindeer pastoralism could be safeguarded by very rapid development, development similar to what it took agriculture several generations to achieve (Haetta et al. 1994). The committee recommended engaging science and innovation to modify and adjust the old traditions and practices of reindeer husbandry (Storli and Sara 1997). Accordingly, scholarly experts, rather than practitioners, were appointed as advisors on the development process (Paine 1994, Riseth 2000).

The state authorities’ perception of Sámi reindeer husbandry reflected a global discourse that holds an understanding of traditional pastoralism as economically irrational (Benjaminsen and Svarstad 2010). The authorities were concerned that there were too many reindeer and too many herders degrading the pastures and jeopardizing the economic development of Sámi reindeer husbandry. Thus, science on how to optimize reindeer meat production through optimal herd structure (i.e., the distribution of the animals’ weight, sex, and age) and an optimal harvest strategy (i.e., autumn calf slaughter) informed the value and knowledge base for the development of policies (see e.g., Lenvik 1988 for an elaboration on optimizing meat production).

In the late 1970s, new policies for reindeer husbandry were introduced. The political reform was catalyzed through two main instruments for optimizing meat production and increasing the income and welfare of pastoralists (Landbruksdepartementet 1976a,b): The Agreement on Reindeer Husbandry, established in 1976, and the *Reindeer Husbandry Act* of 1978.

The Agreement on Reindeer Husbandry between the state and the herders' association described monetary transfers to the industry "on the understanding that the *rationality* and *efficiency* of production" was ensured (Paine 1994:159, emphasis original). The economic incentives promoted an increase in calf slaughter and stimulated a higher ratio of female reindeer in the herds as way to increase calf production. Subsidies were provided for infrastructure investments (e.g., vehicles and fences) to increase the efficiency of the herders. The herders were encouraged to concentrate on producing meat; the responsibility for slaughtering, processing, trading, and marketing was transferred from the pastoralists themselves to certified slaughterhouses and the Norwegian meat cooperative (*Norges Kjøtt og Fleskesentral*, currently named *Nortura*; Sagelvmo 2004, Reinert 2006).

Whereas the *Reindeer Husbandry Act* of 1933 had the objective to control the herders' use of pastures to avoid land-use conflicts between herders and farmers, the *Reindeer Husbandry Act* of 1978 aimed at steering the development of Sámi pastoralism in a particular direction (Bjørklund 2016). The new policies introduced a concession system to control the number of herders and reindeer, and the national reindeer husbandry administration was mandated to educate, guide, and advise herders on best practices (Landbruksdepartementet 1976a).

Since the 1970s, the state's governance regime for Sámi reindeer husbandry has been revised in several ways. For example, the current *Reindeer Husbandry Act* of 2007 introduced tools for increased internal self-governance (*internt selvstyre*) within the herding districts (Landbruks- og matdepartementet and Reindrifstforvaltningen 2007). Herding districts are state-defined administrative units with the responsibility for managing internal issues and attending to the interests of the members in relation to the larger society. In some cases, the herding district corresponds with a *siida* unit; more often, a district comprises a number of *siidas*. The main tool for self-governance was the internal management plans (*bruksregler*), which were to be developed and implemented by each herding district. The internal management plans were to include descriptions of the use of seasonal pasture and the timing of this usage and to set an upper reindeer number for the herding district. Further, the plans were supposed to be developed by integrating state regulations and "traditional use" of pastures (Reindrifstforvaltningen 2009).

Since the end of the 1970s, the notion of "sustainability" has entered the public debate and become a political priority, but the overarching objective of the policies is still to rationalize Sámi pastoralism. Current policy documents declare that the main goal is to "develop reindeer husbandry into a rational market-oriented industry that will be sustainable in the long term" (Landbruks- og matdepartementet 2017). Also, today, the policies are informed by science on how to optimize reindeer meat production. Since the 1970s, the mathematical models for optimization have been further developed through a number of studies on the relationship between the weight of individual animals and the density of

reindeer on the pasture (see e.g., Lenvik 1990, Ims and Kosmo 2001, Fauchald et al. 2004, Tveraa et al. 2007, Bårdsen and Tveraa 2012). Based on these studies, government officials have identified targets for "proper" carcass weights, reindeer numbers, and animal densities (see Reindrifststyret 2011, 2012). The herding districts are required to adopt herding practices and develop internal management plans that will ensure these targets. The targets are further used as indicators to assess whether the plans and practices of the herding districts are sustainable. Those who do not operate within the defined targets are sanctioned by reduced subsidies or through fines.

#### **Traditional Sámi reindeer herding knowledge**

The government officials' standardized indicators for sustainable reindeer management stand in contrast to the research participants' perspectives on "proper" reindeer management. The participants argued that because of the unpredictable and changing nature of West Finnmark, the focus of herders is to seek balance in the relationship between nature, reindeer, and humans. They explained that this balance is constantly challenged by spatial and temporal variations in weather and predators. Therefore, any herder's understanding of a "rational" and "sustainable" reindeer number and herd structure would depend on the local climate, landscape, grazing conditions, predators, and other types of disturbances. The participants claimed that the government officials' use of indicators did not take into account the local specifics of herding and production strategies and made it difficult for herders to adapt to local realities. Participant 1 said, "People believe that reindeer husbandry is the same everywhere, but they are misinformed."

According to the participants, balance in the relationship between nature, reindeer, and humans can be enhanced by maintaining flexibility within reindeer husbandry. They described three essential and interlinked techniques for maintaining flexibility: observation, mobility, and the maintenance of "buffers."

First, they mentioned the value of constantly observing the herd and the landscape. Through observations, herders can monitor the well-being of the animals in the herd and on the land. Rather than use carcass weights and density as indicators for well-being, herders would observe the behavior of the animals and the hair quality, antlers, and body condition of living animals to gain information about the health and function of the animals in the herd. Through long-time observations of the herd, they would also learn to recognize and interpret individual reindeer.

Second, the participants talked about mobility as an essential capacity for Sámi reindeer and pasture management, that is, moving with the herd to observe the reindeer and to ensure the herd's well-being. Participant 1 expressed this idea by quoting a Sámi proverb: *Mana lea buoret go oru* (Better to be on the move than to be in one place). Participant 2 argued that reindeer have strong instincts, "In the spring, they want to move northwards, and there is no way you can hold them back," unless the herd is within fences. Traditional Sámi reindeer herding knowledge informs the pastoralist about how and where to move the herd during *johtit* (the seasonal migration between pastures) and *sirdit* (movements within a pasture), and how to avoid stray animals. However, the state requirement to set fixed dates for the herds' entrance to and exit from seasonal pastures, combined with increasing loss of pastures to competing land-use interests in West

Finnmark, decreases the mobility and thereby the flexibility in reindeer husbandry.

The participants argued that the combination of long-term observations and mobility enables herders to control and facilitate the herd, as well as maintain its productivity. For example, they explained that pastoralists that monitored their herd carefully would be able to recognize a *sáhkkonállli* (a female that gives birth to healthy calves every year, even when the grazing conditions are difficult). Some *sáhkkonállli* tend to produce female calves, and these animals are considered especially valuable. Participant 2 argued that pastoralists without proper observation skills might slaughter a *sáhkkonállli* because he or she would not be able to identify an animal with the desired qualities. Without traditional Sámi reindeer herding knowledge (e.g., about production, mobility, and monitoring), the participants argued, pastoralists would not be able to obtain the information needed to build a robust and productive herd from just a few animals. Pastoralists would not have the skills to keep the animals together as a herd or maintain flexible herding practices.

A third technique to maintain balance in the relationship between nature, reindeer, and humans is to keep buffers within the herd, the pastures, and the labor force. According to Participant 3, a buffer is a measure to increase the resilience of reindeer husbandry in a reality of unpredictable environmental changes. For example, it is important to keep more reindeer than “needed” because “there are always losses in reindeer husbandry,” this participant explained. According to him, it is essential to find a balance where “you do not reduce [slaughter] too much and avoid too many losses” of animals. Likewise, having access to buffer pastures ensures access to alternative grazing in times when the regular pastures are unavailable because of extreme weather conditions or other reasons. The buffer labor force consists of reindeer owners and family members who do not herd on a daily basis but who help out in the more labor-intensive periods of reindeer husbandry; for example, migration, ear marking, and rounding up the animals for slaughter.

### Conflicting knowledge systems

There are many examples of decision-making processes in which traditional Sámi reindeer herding knowledge and Western science compete to define “proper” reindeer management and herding practices. A case that has received a lot of attention, and which was also raised by the research participants, is the recent destocking of herds in West Finnmark. The *Reindeer Husbandry Act* of 2007 (hereafter referred to as the 2007 Act) introduced internal management plans as a tool for increased internal self-governance within the herding districts and as a measure that would support traditional pasture management (Reindriftsforvaltningen 2009). The main concern of the governance officials was the number of reindeer, especially in Finnmark. Therefore, the state issued guidelines to assist the herders in defining a sustainable reindeer number for their internal management plans. The report proposed quantitative and standardized targets based on carcass weights and production volumes; it presented traditional indicators for assessing the well-being of the herd as supplementary and voluntary (Landbruks- og matdepartementet 2008). The national Reindeer Husbandry Board, which manages reindeer husbandry on a national level, including the regulation of reindeer numbers, reviewed the herders’ proposals for upper

reindeer numbers and emphasized the quantitative and standardized indicators, which they regarded as more objective, and thus, more true (Johnsen et al. 2015, Johnsen 2016). Consequently, in the decision making regarding reindeer numbers in West Finnmark, traditional Sámi reindeer herding knowledge was commonly ignored.

The participants argued that the practical implementation of policies eroded, rather than sustained, traditional Sámi reindeer herding knowledge. They explained that the problem was not only the state-defined indicators used to assess sustainable reindeer numbers. The state requirement to have fixed dates for the herds’ entrance to and exit from seasonal pastures also discouraged herders from making management plans based on their own traditional and experience-based knowledge. The subsidy system embodies other challenges. According to the participants, the state regulations stimulated a transfer from Sámi to “Norwegian” reindeer husbandry. They referred to public seminars on sustainable reindeer husbandry where scientists, and what they referred to as “Norwegianized” herders, lectured on “rational” herding practices. Participant 1 said, “A *dáža* [a Norwegian person or Norwegian manner, style, or ways (Nielsen 1979)] teaching reindeer herders about reindeer husbandry? It’s just not right!” Also, a recently published “white paper” on reindeer husbandry (Landbruks- og matdepartementet 2017) has been criticized by the leader of the reindeer herders’ association (Jáma 2017) and others as a continuation of the “Norwegianization” of Sámi pastoralism.

Despite their opposition to the state presentation of what reindeer husbandry ought to be, the participants acknowledged that for many herders, it was rather comfortable to be part of the state’s knowledge and governance system because it gave access to subsidies. The subsidies have become an important source of income for many Sámi pastoralists. However, the participants feared that over time, the economic incentives would lead more and more pastoralists to adopt the state’s standardized and quantitative perception of rational practices. They were concerned that the state governance of Sámi pastoralism would erode the traditional knowledge about how to develop a robust and productive herd and that new generations of pastoralists would only learn the state’s understanding of “proper” herd structures and harvesting strategies. The participants worried that the traditional reindeer herding knowledge would disappear with the older generation because this would mean the end of Sámi pastoralism, and with it, the knowledge about how to recognize the features and functions of animals, including recognizing a *sáhkkonállli*.

Discussing the outlook for reindeer husbandry, the participants were concerned that a future with more state regulations and control (as described in Future Narrative X) would value technological skills as more important than the capacity to observe reindeer and the landscape. They worried that more use of GPS, electronic ear-chips, and drones instead of spending time with the herd; transportation of animals or all-year pastures instead of migration between seasonal pastures; and additional feeding and fences instead of moving the herd to the most suitable pastures, would further weaken herders’ ability to maintain traditional knowledge about ways to enhance flexibility in reindeer husbandry and balance in the relationship between



nature, reindeer, and humans. However, despite this concern, the participants were not able to imagine any future scenario where traditional Sámi reindeer herding knowledge would be totally redundant. For example, Participant 1 acknowledged that although there could be some areas suitable for all-year pastures, most of West Finnmark would not be suitable for all-year use. She stated that it would be impossible to keep the herd in one place throughout the year without extensive use of fenced pastures. Further, she said, keeping the reindeer within fences over long periods would violate the welfare of the reindeer because this would prevent them from escaping insects or finding preferred forage.

The participants claimed that because of the challenging climate and geography of West Finnmark, traditional knowledge has, and will continue to have, a vital role in reindeer husbandry in this region. As such, they stated that those herders who were able to maintain traditional Sámi reindeer herding knowledge would have a competitive advantage because they would know how to avoid losing animals in times of unfavorable grazing conditions. The participants acknowledged that more extensive use of GPS and drones could make it easier to monitor the herd remotely; they claimed, however, that technology could not substitute the added value of being and moving with the herd. Technology could not protect reindeer from predators, prevent animals straying, or ensure the well-being of the herd, they argued.

When discussing a future in which the state no longer governs Sámi pastoralism, and the *síidas* have full autonomy (as described by Future Narrative Y), the participants acknowledged that this scenario would also create challenges. For example, if the subsidy system ceased to exist, this would have a large impact on herders' income. Many herders would have to find income sources outside reindeer husbandry. However, the participants preferred this scenario because it would allow the *síidas* the freedom to establish herd structures and production strategies adjusted to their pastures and preferences. Management plans could be made by combining herding knowledge, science, and technology as the herders found appropriate. The participants recognized that also with full *síida* autonomy, there would likely be some herders that would choose to operate in line with the state perspective of sustainable pastoralism, but only if they found it economically viable without state subsidies. However, traditional Sámi reindeer herding knowledge, for example, about the *sáhkkonálli*, would be vital for the economy of all herders, they claimed.

### Competing worldviews

The participants' discussions about traditional knowledge triggered a debate about pastoral worldviews, identity, and rights. For example, the participants stated that more state regulations (as described in Future Narrative X) would be a threat to Sámi pastoral lifestyle, culture, and ethical perspectives concerning the reindeer and nature. An element of Future Narrative X that was discussed extensively in this regard was the banning of the traditional cutting marks in the ears of the reindeer as a way to indicate the owner of the animal. The participants argued that for Sámi pastoralists, an earmark did not only represent private property, it also symbolized skills, rights, and identity. Participant 2 explained that if one comes across a group of reindeer without earmarks after the earmarking season, this is an indication that a herder has lost control of his or her animals; in other words, it

indicates a herder without "proper" herding skills. The participants explained that according to Sámi customs, *geažotbeallji* (a reindeer without earmarks) is seen as potentially belonging to anyone. Therefore, it can be earmarked by any herder who finds it. Further, without a herd (a group of earmarked animals), it is difficult for a pastoralist to claim the right to pastures because the right to land, as acknowledged by national and international law, is tied to the customary use of the landscape. As such, a personal earmark embodies an individual right to own reindeer, and owning reindeer gives the possibility of engaging in pastoralism, developing a herd, and prescribing rights to land. Participant 2 said, "Do you know what it means to abolish the earmarks? It means removing the Sámi's heart. ... I would lose my identity and everything."

Although the participants emphasized "proper" herding skills as a criterion for succeeding as a pastoralist, the participants also acknowledged nature as an actor that influences the survival rate and production of the herd. For example, Participant 4 explained that a herder would not be able to increase his or her reindeer number unless nature "gives," that is, allows the growth to happen. In this regard, he claimed, the state's current use of standardized targets for sustainable animal weight and density have no practical value because it is nature that determines the production of a herd. Herders should not degrade the pastures, he argued; however, if a herder is able to maintain a herd size beyond what the state has defined as sustainable, this must mean that the herd size is within the limit of nature. Further, the participants stated that the standardized targets did not acknowledge the variability and unpredictability of nature and the consequent variation in animal survival and calf production from year to year. The irregularity of nature is well recognized by herders in West Finnmark and captured in the Sámi proverb *jahki ii leat jagi viellja* (this year is not last year's brother).

The participants mentioned the landscape as another factor that influences the size and production of the herd. Participant 2 said, "It is the landscape that shapes the reindeer." The participants explained that some landscapes produce small reindeer. They referred to areas in West Finnmark where the state-set targets for carcass weights could not be reached, even when the density of animals was way below what the state considers sustainable.

Yet another factor that the participants recognized as essential for being a successful herder was *boazolihkku* ("reindeer luck"). According to Oskal (2000:176), reindeer luck is a state in which the herd grows, that is, when the females produce calves and the herd survives predators and avoids difficult snow conditions. Oskal explains that the path to reindeer luck is to live in accordance with certain ethics, for example, to refrain from complaining about or celebrating one's reindeer number; to use slaughtered animals fully; and to get along with neighboring herders, the reindeer, pastures, and the landscape. The latter includes asking spirits for permission to enter or camp in an area. Oskal (2000:179) says that according to the Sámi pastoral worldview, reindeer herders "should not conquer the world but try to get along with it and come to an understanding with it."

The participants explained that the reindeer has its own needs; rather than fully controlling the herd, the pastoralists' role is to respect the nature of the reindeer and facilitate its biological needs. The Sámi perception of the reindeer as a free animal has been

elaborated by Sara (2009). He explains that within Sámi ontology, the reindeer is an actor inside the *siida* system; it “chooses its own movements and course of life” (Sara 2009:173). As such, humans can never obtain complete control over the reindeer. The reindeer belongs to the landscape where, according to pastoralists’ worldview, it is free, mobile, and independent (Bull et al. 2001:300). The Sámi myth of the origin of reindeer herding emphasizes a voluntary companionship between humans and reindeer, and herders often refer to reindeer as “a good governed by the wind” (Sara 2009:171–172). Therefore, the pastoralists’ exercise of control over the reindeer should be understood as a compromise based on the herders’ knowledge of and respect for the animals’ needs and nature (Sara 2009).

## DISCUSSION

Comparing the state’s and the research participant’s knowledge base for understanding reindeer husbandry shows two very different perspectives on what Sámi pastoralism is and ought to be (conflicting views on reindeer husbandry are also presented in previous research; see, for example, Bjørklund and Brantenberg 1981, Paine 1994, Turi and Keskitalo 2014, Benjaminsen et al. 2015, 2016, Johnsen and Benjaminsen 2017). The traditional Sámi pastoral way of understanding reindeer husbandry with a focus on maintaining flexibility stands in contrast to the positivist-reductionist approach in Western science that dominates contemporary resource management. The latter approach has synthesized knowledge about the world into generalizations independent of context, space, and time (Berkes 2008). The standardized targets for carcass weight and density are simplified generalizations that make the reindeer sector more manageable for the state; however, these simplifications leave little room for the herders’ complex, situated, and local knowledge of reindeer and pastures (Johnsen et al. 2015, Benjaminsen et al. 2016).

Herding practices based on a rationale that emphasizes the agency of reindeer and nature stands in deep contrast to the state governance of reindeer husbandry, which requires pastoralists to control the herd size and whereabouts of the animals at all times. Where the participants see reindeer husbandry as a human-animal-nature relationship, state policies reflect an understanding of reindeer as objects that can be manipulated to produce maximum amounts of meat through streamlined herding practices. We find that the pastoralists and the state operate within two different ontologies that compete to define sustainable, rational, and proper reindeer husbandry.

Similar situations are found in other parts of the world. For example, Natcher (2000) observes that a barrier to comanagement of land and resources in the Province of Alberta, Canada was the conflicting worldviews between provincial authorities and the Whitefish Lake First Nation: While the authorities viewed the future as predictable and wildlife as an entity that could be manipulated, the First Nation community perceived the future as uncertain and beyond human control. According to the latter group, the idea of planning the future could jeopardize the relationship between the human and nonhuman worlds (Natcher 2000). Another example derives from the research of Blaser (2009b) on hunting practices and local wildlife management among the Yshiro people in Paraguay. Blaser (2009b) finds that though the local authorities were concerned that the Yshiro actions corresponded with the biologists’ conservation agenda,

the authorities did not regard the Yshiro rationale for management practices as relevant for the protection of wildlife. We find that authorities in Norway have a similar attitude toward herders’ knowledge base and rationale for reindeer husbandry. For example, the working group that drafted the 2007 Act mentioned the concept of reindeer luck (see NOU 2001:321), but they did not problematize the concept in terms of the policies they were drafting. Also, the internal management plans introduced by the 2007 Act were presented as a tool for self-governance and an approach to integrate state regulations and traditional pasture management, but in practice, the herders had to apply Western science-based targets for sustainable reindeer husbandry when developing the plans.

This lack of acknowledgement of Sámi reindeer herding knowledge and worldviews stands in contrast to Norway’s recognition of indigenous peoples’ rights. Since 1988, the Norwegian Constitution has stated, “[t]he authorities of the state shall create conditions enabling the Sámi people to preserve and develop its language, culture and way of life” (§108). In 1990, Norway was the first country to ratify the *Convention Concerning Indigenous and Tribal Peoples in Independent Countries* (often referred to as ILO Convention 169), which recognizes indigenous peoples’ rights to exercise control over their own institutions, ways of life, and economic development. Despite 30 years of recognition of the right to a Sámi way of life, it is not clear how the right could or should be translated into practical politics (realpolitik; Bjørklund 2013, Ravna 2015).

In April 2017, the Ministry of Food and Agriculture launched a new “white paper” on Sámi reindeer husbandry (Landbruks- og matdepartementet 2017). At a public hearing shortly after, the Sámi Parliament, the Sámi Reindeer Herders’ Association, and representatives of various herding districts criticized the “white paper” for having a poor knowledge base and embodying a continuation of the “Norwegianization” of Sámi reindeer husbandry, which started with the political reform of the 1970s. The issue of “Norwegianization” of the Sámi population (all Sámi, not only herders) is receiving increasing attention in the public debate. In June 2017, the national Parliament approved the establishment of a commission to examine the “Norwegianization” of Sámi (and Kven, an ethnic minority who are descended from Finnish peasants and fishermen who migrated to northern Norway during the 18th and 19th centuries; Kontroll- og konstitusjonskomiteen 2017, Larsson et al. 2017). The commission is yet to be established, and its scope is still to be defined.

Though the recognition of traditional knowledge has increased within the Western research community, this recognition tends to be related to aspects of traditional knowledge that either resemble data generated by scientific methods or provide baseline data in areas where Western scientific data are lacking (Simpson 2004). Most work in the field of traditional knowledge concerns collecting and documenting information, and there is little focus on finding meaningful ways to apply this information (Blaser et al. 2004). Because of the asymmetrical power relations between the knowledge systems, attempts to integrate traditional and scientific knowledge have translated into assimilation of the traditional into the dominant system (Nadasdy 1999, 2005, Blaser et al. 2004, Mistry and Berardi 2016). Nadasdy (1999:5) argues

that the consequence of this integration is that traditional knowledge “must be expressed in forms that are compatible with the already existing institutions and processes of scientific resource management.”

According to Mistry and Berardi (2016), knowledge integration is a way to institutionalize indigenous knowledge into existing environmental governance structures dominated by incentive- and market-based approaches to management. Thus, the integration serves to sustain existing power relations between scientists and resource managers on the one hand, and indigenous peoples on the other hand (Nadasdy 1999). When the use and application of indigenous knowledge are determined by Western science, the danger is that the “indigenous knowledge will change in its use and application, and, most critically, in its ability to deal with complexity,” Mistry and Berardi (2016:1275) argue. Therefore, rather than facilitating participation and self-governance, the approach to knowledge integration risks further marginalization of indigenous people (Mistry and Berardi 2016). Recognizing the asymmetrical power relations between the knowledge systems, Díaz et al. (2015:10) suggest an approach to environmental understanding that embraces the “complementarity, synergy and cross-fertilization of knowledge systems, rather than the integration of one system into another.”

Referring to the French philosopher Michel Foucault’s work on the power-truth-knowledge complex, Peet and Hartwick (2009) argue that modern Western science has become dominant in the field of defining reason. They explain that this particular form of science, through its power of domination, classifies and thereby regulates “all forms of experience, interpretation, and understanding” (Peet and Hartwick 2009:204). However, while the Western understanding of the world has become hegemonic and is often taken as a truth, it is not always evidence-based. For example, Cleaver (2012:155) observes that policy making “is shaped by underlying worldviews which often reflect structural allocations of power and resources in society.” There is, she argues, a need to recognize the worldviews that shape the models of governance.

Moreover, Blaser (2009b:16) argues that the Western understanding of the world “sustains itself through performances that tend to suppress or contain the enactment of other possible worlds.” Recognizing this, Acuña (2015) and Ruiz Serna and Del Cairo (2016) argue that addressing competing ontologies could offer an approach to understand how socio-environmental conflicts emerge. Socio-environmental conflicts are often interpreted as problems of governance (e.g., lack of formal political participation or transparency); however, they could also be regarded as arising from a community’s want to preserve culture and the environment (Acuña 2015). For example, Western ontology makes a distinction between nature and society (Latour 1993) and holds a notion of progress that includes human conquest of nature, industrialization, material abundance through superior technology, and economic development (Norgaard 2006). However, where Western ontology sees nature as an object that must be appropriated and exploited through privately owned entitlements, indigenous ontologies see the natural environment as an entity that “constitutes their territory and includes earth-beings who must be respected” (Acuña 2015:86). According to indigenous ontologies, a more appropriate

way to understand people’s relation with nature is that people belong to the land rather than the other way around (Blaser 2009a:891).

The taken-for-granted nature/culture and object/subject divides of “modernity” suppress subaltern ontologies and knowledge (Escobar 2010): The political ontology of Sámi reindeer husbandry concerns a struggle for recognition between two competing, but not equal, rationales for sustainable pastoralism. Because of an asymmetrical power relation between Sámi ontology and the dominant “modern” ontology, the former is suppressed by the latter. Our study shows however, that despite 40 years of state-effort to “rationalize” reindeer husbandry according to a Western worldview, traditional Sámi reindeer herding knowledge and ontology continue to play an important role in herders’ narratives about what reindeer husbandry is and ought to be.

## CONCLUSION

Using a participatory research approach, we examined how herders and government officials explained what reindeer husbandry is and ought to be and their conceptions of “proper” management techniques for reindeer, herders, and the land on which reindeer pastoralism depends. We find that the state policies for reindeer husbandry since the end of the 1970s promoted herding practices primarily based on Western knowledge and understanding of rational and sustainable herding practices. Science on how to optimize reindeer meat production through optimal herd structures, harvest strategies, and sustainable reindeer numbers still informs the values and knowledge bases for policies. Government officials use carcass weights, reindeer numbers, and reindeer density as indicators for assessing the sustainability of the herding districts’ practices.

The positivist-reductionist approach in Western science that dominates contemporary resource management stands in contrast to the traditional Sámi pastoral way of understanding reindeer husbandry. The research participants emphasized the herders’ objective to seek balance in the relationship between nature, reindeer, and humans. This balance is constantly challenged by spatial and temporal variations in weather and predators in West Finnmark. Therefore, any herder’s understanding of a rational and sustainable reindeer number and herd structure would depend on the local climate, landscape, grazing conditions, predators, and other types of disturbances. The way to cope with these variations is to maintain flexibility in herding and husbandry. Flexibility is sustained through observing the herd, the landscape, and the climate; by moving the herd; and by keeping buffers.

We find that the state focus on meat production and its need for control, combined with its persistence in disseminating “proper” herding practices, marginalize the herders’ context-dependent knowledge about how to adapt to an unpredictable and changing environment. Further, our analysis shows that the state and research participants had competing ways to perceive the world (ontological differences). While the state sees reindeer as an object that can and should be controlled by humans, the participants held an alternative understanding of reindeer and nature and how these should be governed. They saw the reindeer and nature as actors that should be treated in accordance with certain ethics.

Despite 40 years of policies attempting to transform and “modernize” reindeer husbandry according to the state’s perception of “proper” pastoralism, we find that in West Finnmark, traditional herding knowledge and Sámi ontology continue to play an important role in pastoral practices and ethics. According to the research participants, it is likely that the traditional Sámi reindeer herding knowledge will play an important role in reindeer husbandry also in the future, independent of whether the future brings stricter state regulations or the responsibility of reindeer and pasture management is handed over to the *siidas*. Traditional herding knowledge, for example, how to recognize a *sáhkkonáll* and select the best animals to build a robust herd that is suited to the local landscape, will continue to provide a competitive advantage within the pastoral community, they claimed.

However, although the participants were optimistic about the role of traditional herding knowledge in the future, the reality is that traditional knowledge and worldviews are not acknowledged by the current policies and regulations governing Sámi pastoralism. Rather, the current governance regime undermines the code of conduct of the Sámi herding practices. Moreover, we have shown that the conflicting, asymmetrical knowledge systems and competing worldviews of what reindeer husbandry is and ought to be compromise the identity and rights of the pastoralists.

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[1] In 1966, a consultative committee, established to revise the *Reindeer Husbandry Act* of 1933, submitted their recommendations for revised policies (Landbruksdepartementet 1966).

[2] One of the pastoralists (Participant 3) was prevented from participating at this gathering.

Responses to this article can be read online at:  
<http://www.ecologyandsociety.org/issues/responses.php/9786>

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