

# Experiencing the double blow of climate change *and* its mitigation: Perspectives from Sámi reindeer herders in Swedish Sápmi

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## Abstract

This article argues that climate change and its mitigation risk threatening Indigenous Peoples' access to land and their ability to maintain their way of life. Focusing on the experiences of the Indigenous Sámi reindeer herders of the Swedish part of Sápmi, the article traces how the Östra Kikkejaure reindeer-herding association sees its lands increasingly fragmented by various encroachments, particularly the construction of the large-scale wind project, Markbygden, in Piteå municipality. At the same time, the herders are forced to adapt to the uncertain impacts of climate change. This double blow is presented through a political ecology analysis emphasizing how climate mitigation projects like Markbygden may trigger rights violations through encroachment, enclosure, exclusion, and entrenchment. Apart from a literature review, the article is based on two months of fieldwork in Sweden in 2021 and 2022. A total of 28 interviews and ten informal conversations were conducted with rights-holders and stakeholders involved in the Markbygden wind project. The article addresses the shortcomings of prevailing approaches to energy justice and seeks to contribute to discussions on how climate mitigation efforts, including energy transitions, are taking shape and how their impacts are evaluated and distributed.

**Keywords:** political ecology, Indigenous Peoples, renewable energy, climate mitigation, Sweden

## Résumé

Cet article affirme que le changement climatique et son atténuation risquent de menacer l'accès des peuples autochtones à la terre et leur capacité à maintenir leur mode de vie. En se concentrant sur les expériences des éleveurs de rennes autochtones samis de la partie suédoise de Sápmi, l'article retrace la façon dont l'association d'éleveurs de rennes Östra Kikkejaure voit ses terres de plus en plus fragmentées par divers empiètements, en particulier la construction du projet éolien à grande échelle Markbygden dans la municipalité de Piteå. Dans le même temps, les éleveurs sont contraints de s'adapter aux impacts incertains du changement climatique. Ce double choc est présenté à travers une analyse d'écologie politique soulignant comment les projets d'atténuation du climat comme Markbygden peuvent déclencher des violations des droits par l'empiètement, l'enfermement, l'exclusion et le retranchement. Outre une analyse documentaire, l'article s'appuie sur deux mois de travail sur le terrain en Suède en 2021 et 2022. Au total, 28 entretiens et dix conversations informelles ont été menés avec des parties prenantes impliquées dans le projet éolien de Markbygden. L'article aborde les lacunes des approches dominantes de la justice énergétique et cherche à contribuer aux discussions sur la façon dont les efforts d'atténuation du climat, y compris les transitions énergétiques, prennent forme et sur la façon dont leurs impacts sont évalués et distribués.

**Mots-clés:** écologie politique, peuples autochtones, énergies renouvelables, atténuation du changement climatique, Suède

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## Resumen

Este artículo sostiene que el cambio climático y su mitigación amenazan el acceso de los pueblos indígenas a la tierra y su capacidad para mantener su modo de vida. Centrándose en las experiencias de los pastores de renos indígenas sami de la parte sueca de Sápmi, el artículo describe cómo la asociación de pastores de renos Östra Kikkejaure ve sus tierras cada vez más fragmentadas por diversas intrusiones, en particular la construcción del proyecto eólico a gran escala Markbygden en el municipio de Piteå. Al mismo tiempo, los pastores se ven obligados a adaptarse a los inciertos efectos del cambio climático. Este doble golpe se presenta a través de un análisis de ecología política que hace hincapié en cómo los proyectos de mitigación climática como Markbygden pueden desencadenar violaciones de derechos a través de la usurpación, el cercamiento, la exclusión y el atrincheramiento. Además de una revisión bibliográfica, el artículo se basa en dos meses de trabajo de campo en Suecia en 2021 y 2022. Se realizaron un total de 28 entrevistas y diez conversaciones informales con las partes implicadas en el proyecto eólico de Markbygden. El artículo aborda las deficiencias de los enfoques predominantes sobre la justicia energética y pretende contribuir a los debates sobre cómo están tomando forma los esfuerzos de mitigación del cambio climático, incluidas las transiciones energéticas, y cómo se evalúan y distribuyen sus impactos.

**Palabras clave:** ecología política, pueblos indígenas, energías renovables, mitigación climática, Suecia

## 1. Introduction

Before our lands have been sacrificed to be exploited and ruined, but now the land is demanded to be used in green colonialism for actions against climate change.

Joint statement by the youth councils of the Sámi parliaments of Norway, Sweden, and Finland.<sup>2</sup>

Indigenous Peoples, who are among those least responsible for climate change, are often inordinately affected by it (Tauli-Corpus, 2017). Increasingly, there is a recognition that climate mitigation efforts, which include renewable energy projects, also impact Indigenous Peoples disproportionately by targeting their lands and natural resources (Schreiber, 2018). This article looks at how this "double blow" of climate change and its mitigation affects the Sámi, an Indigenous People who live in Sápmi, an area covering the northern parts of Norway, Sweden, Finland, and Russia's Kola Peninsula. Specifically, it focuses on how it affects the reindeer herders of Östra Kikkejaure forest *sameby*<sup>3</sup> in Norrbotten County, Sweden. It does so through a case study of the climate mitigation project Markbygden, which is a large-scale wind project that has been under development since 2002 and will cover a quarter of Östra Kikkejaure's winter lands once finalized.<sup>4</sup>

In 2010, the Government of Sweden approved Markbygden's construction on the condition that the project be split into three distinct phases, for which separate permits would need to be sought (Newell, 2018). Furthermore, impacts on the herders had to be limited as much as possible and otherwise compensated (GOS, 2010). The company, Svevind AB<sup>5</sup>, has been developing Markbygden for over fifteen years, with sub-projects being sold off to (inter)national owners and financed by the European Investment Bank and others (e.g. Power

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<sup>2</sup> See <https://www.sametinget.se/162623>.

<sup>3</sup> The word *sameby* refers to a geographical area where reindeer herding is carried out. A *sameby* is organized as an economic and administrative association.

<sup>4</sup> Östra Kikkejaure has its winter lands in Piteå municipality, where it is allowed to graze its herd from 1 October to 30 April. Around April, the herds migrate back to the year-round lands northeast and northwest of Arvidsjaur.

<sup>5</sup> Svevind AB was the predecessor of Svevind Nordic AB, a subsidiary of the privately owned Svevind Energy Group, which specializes in planning and developing renewable energy projects. In October 2023, Svevind Nordic AB officially became part of the Norwegian utility Statkraft.

Technology, 2017). Once finalized, Markbygden will have an estimated installed capacity of 4,000 MW, generated by approximately 700 turbines (e.g. Richard, 2018).<sup>6</sup>

The Sámi are a national minority of Sweden, and its only recognized Indigenous People. Reindeer-herding is a right exclusive to Sámi and a cultural practice protected under (inter)national law (Cambou, 2020). However, herders have had to adapt to not only significant challenges from past and ongoing encroachments on their lands, including from forestry, mining, and hydropower projects, often constituting rights violations, but also to the impacts of climate change on reindeer-herding, which are "neither temporally nor spatially uniform" (Tyler *et al.*, 2021: 1). Climate change impacts in the Arctic include, among others, a shortening of winters, with fewer days of snow cover and more thaw days, causing ice-crusting (Tyler *et al.*, 2021). When this occurs, herders are faced with the choice of providing expensive feed or risking reindeer starvation.<sup>7</sup> Difficult winters are becoming more frequent for Östra Kikkejaure. Herders recount how they used to experience one difficult winter every ten years, but now, they inform us that "during ten winters we have one good winter."<sup>8</sup> During summer, climate change increases heat stress, especially for the calves (Jaakkola *et al.*, 2018; Löf, 2013) and in recent years the spread of ticks and parasites has also become problematic.<sup>9</sup> The Swedish government's interest in expanding wind energy to mitigate climate change (e.g. Energimyndigheten, 2021) poses a novel threat to Sámi traditional lands, where new wind projects are more likely to be approved than in southern Sweden (Cambou, 2020).

This article explores how climate mitigation efforts affect Sámi reindeer herders, particularly their land access and ability to sustainably practice their livelihood. In the context of climate change increasingly requiring their adaptability, this article also addresses how Östra Kikkejaure's herders experience impacts from the Markbygden project. This question is approached with conceptual inspiration from Sovacool's (2021) political ecology framework, emphasizing encroachment, enclosure, exclusion, and entrenchment, as well as the energy justice literature (e.g. McCauley, 2018), with its emphasis on distribution, recognition, and procedural justice. Particular attention is given to instances of misrecognition, which prevents people from participating in society on equal terms.

Two months of fieldwork in Sweden in 2021 and 2022 produced empirical material from 28 in-person and virtual interviews and ten informal conversations<sup>10</sup> with various rights-holders and stakeholders in the Markbygden project. These included reindeer herders from Östra Kikkejaure, Semisjaur-Njarg, and Sirges *samebyar*;<sup>11</sup> civil-society organizations like the Saami Council and MR Fonden; state authorities at the local, regional, and national levels; the developer, Svevind; an investor; and researchers. This material was supplemented by a literature review, including project documentation (e.g. Svevind, 2008; 2010). To observe proper ethics in research with Indigenous Peoples (e.g. Drugge, 2016; Groh, 2018; Paksi & Kivinen, 2021), Svenska Samernas Riksförbund, the national reindeer husbandry association, was contacted in the early stages of the research.<sup>12</sup> The contribution from respondents, particularly Östra Kikkejaure *sameby*, was essential and their help was invaluable. Despite their day-to-day workload and the research fatigue that herders commonly experience, they allowed repeated interviews and the observation of their work in February 2022.

This article is divided into six sections. Section 2 gives a brief overview of the theoretical framework. Section 3, against a background of historic and ongoing developments in Swedish Sápmi, discusses Markbygden as part of a process of encroachment on and enclosure of Sámi lands, resulting in herders losing

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<sup>6</sup> The project was originally scaled for 1101 turbines. Virtual interview, Head of Permit & Environment and Chief Operating Officer – Svevind, June 22, 2022.

<sup>7</sup> Interview, herder Östra Kikkejaure, Arvidsjaur, September 27, 2021.

<sup>8</sup> *Ibid.*

<sup>9</sup> *Ibid.*

<sup>10</sup> Semi-structured interviews were framed by interview guides, with different, targeted questions depending on the research participant. The informal conversations did not follow a pre-conceived structure but did address topics of interest. All interviews were conducted in English.

<sup>11</sup> Sirges is not impacted by Markbygden like the other two *samebyar*. Nonetheless, its experiences of encroachments and exclusion are strikingly similar, illustrating that these experiences are common throughout Sápmi.

<sup>12</sup> This did not result in a formal collaboration with SSR, but their research policy (SSR, 2019) was taken into account.

access to their grazing lands. Section 4 illustrates how the lack of recognition of Sámi rights in Sweden's legal framework ensures that the Sámi have few means to stop projects like Markbygden, even when they oppose them. Section 5 analyzes how Markbygden has entrenched inequalities and has affected social relations. Section 6 addresses the shortcomings of prevailing approaches to energy justice and concludes that beyond the case study, there are important questions about how the impacts of climate mitigation efforts are evaluated and distributed around the world.

## 2. Theoretical framework

Climate mitigation efforts do not only produce winners (e.g. Ramirez & Böhm, 2021). With regards to large-scale onshore wind projects like Markbygden, there is emerging literature exploring their potential for negative social and environmental impacts and rights violations (e.g. Cormack & Kurewa, 2018; Dunlap, 2019; Lawrence, 2014). This article adopts a political ecology framework to explore how climate mitigation projects can trigger these rights violations. Political ecology research broadly addresses "the condition and change of social/environmental systems" (Robbins, 2012: 20) and has a specific purpose in explaining how socio-environmental inequalities are produced (Svarstad & Benjaminsen, 2020). Although political ecology research goes in many different directions, there is "a common focus or shared concern for addressing inequality, injustice, and asymmetric power relations at the nexus of people and the environment" (Sovacool, 2021: 3).

This article deploys the framework developed by Sovacool (2021), which shows how climate mitigation projects like Markbygden may trigger rights violations by upholding processes of encroachment, enclosure, exclusion, and entrenchment. First, *encroachment* may occur through the securing of land and minerals required to construct projects like Markbygden, which may inadvertently damage ecosystems. Encroachment also occurs "as part of a sub-process of 'forum shopping' where perceptive investors or firms look for areas amenable to encroachment to keep costs low and socialize externalities to parts of society with little protection from them" (ibid.: 3). Often, large-scale projects target lands and resources on the margins (Gilbert, 2017) and disproportionately affect groups like Indigenous and rural communities (Temper *et al.*, 2020), made vulnerable through political or strategic neglect. This is echoed by Sovacool *et al.* (2021: 2), who, in this context, use the concept of "sacrifice zones," where the increased and disproportionate disempowerment of vulnerable groups may not be unintentional but rather the result of existing power dynamics and inequalities. The concept has been used in the context of Sápmi to describe how the Sámi, through mechanisms of exclusion, are made to sacrifice their lands, rights, and livelihoods for the sake of energy production and climate action (Össbo, 2023a), as has happened in wind energy projects like Fosen in Norway (Karam and Shokrgozar, 2023). To meet energy and climate goals, a "cost shift" takes place where the damaging impacts of energy projects, hidden through "a rhetoric of salvation," are outsourced to third parties (Zografos & Robbins, 2020: 545). Swedish Sápmi has a long history of being exploited by the Swedish state. This process of "internal colonization"<sup>13</sup>, according to Lawrence, is ongoing (2014: 1039).

Next, *enclosure* is the appropriation of natural assets for the sake of climate mitigation. It can be aimed at more peripheral areas, resulting in people losing access to assets they depend on for their way of life. *Exclusion* refers to efforts to "prevent and manage other actors from interfering in one's own interests" and is dependent on an uneven playing field (Sovacool, 2021: 2). *Entrenchment* occurs when mitigation projects further disempower vulnerable people and worsen existing (structural) inequalities.

Sovacool's framework, rooted in multiple disciplines, "has strong elements of energy justice" (ibid.: 3). Energy justice frameworks, like environmental and climate justice frameworks, are often centered around the three tenets of distributive, recognition, and procedural justice. While *distributive* justice looks at how and where project costs and benefits are distributed, *recognition* justice identifies those who may be particularly vulnerable to negative impacts, and *procedural* justice considers how decisions are made and who is included in the decision-making process (McCauley, 2018). These tenets have their shortcomings: for example,

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<sup>13</sup> "[T]he unresolved processes through which Western society and Indigenous peoples have come to inhabit the same territories, and the continuing Indigenous resistance to colonial occupation of those Indigenous territories" (Lawrence, 2014: 1039).

procedural justice has been criticized for failing to recognize that participation in decision-making can entrench inequalities (Partridge, 2022). Recognition justice, too, has its limits, as this article will show. As his framework is rooted in energy justice, what Sovacool calls a process of *exclusion* may refer to a lack of recognition and due process, while what he calls a process of *entrenchment* can also be evaluated as a matter of (mis)recognition.

Recognition, or rather misrecognition, is a key concept in this article. The modern roots of the concept can be traced to Honneth and Fraser. While for Honneth recognition is "the fundamental, overarching moral category, while treating distribution as a derivative", for Fraser only a combination of recognition and redistribution can address social injustices (Fraser & Honneth, 2003: 2-3). For Honneth (1995), disrespect in *primary relationships* (physical abuse), *laws* (denial of rights or exclusion), and *social relations* (denigration or insult) threaten recognition. For Fraser, misrecognition is "an institutionalized pattern of cultural value [which] constitutes some social actors as less than full members of society and prevents them from participating as peers" (Fraser, 2000: 114). Misrecognition can take the form of *cultural domination*, *non-recognition* (being rendered invisible), and *disrespect* (e.g. through stereotypical representations of one's culture in the public arena or in personal interactions) (Fraser & Honneth, 2003). Following Van Uffelen (2022), Honneth and Fraser's approaches to (mis)recognition can usefully be combined to give the concept more explanatory potential when applied to empirical material. Thus, in examining processes of encroachment, enclosure, exclusion, and entrenchment in the case of Markbygden, the article identifies forms of misrecognition as described by both Honneth and Fraser. A schematic representation of the theoretical framework can be found in Table 1.

According to Partridge (2022), energy research needs to pay attention to energy histories as histories of exploitation, while Helmcke (2022) argues it is important for case studies to consider the wider historical and political-economic context. In Sweden, planning and permit processes may insufficiently consider the cumulative impacts of past and planned developments (Larsen *et al.*, 2017; Österlin & Raitio, 2020). Therefore, Section 3 will describe the Markbygden project against a historical context of internal colonization, and as part of past and ongoing encroachments on Sámi lands.

<b>Political ecology of climate mitigation (Sovacool, 2021)</b>	
<b>Encroachment</b>	Damage to ecosystems through land/resources needed for climate mitigation
<b>Enclosure</b>	Appropriation of natural assets, so that people who depend on them for their livelihoods potentially lose access to them
<b>Exclusion</b>	Efforts to prevent and manage other actors from interfering in one's own interests
<b>Entrenchment</b>	The further disempowerment of vulnerable people and the worsening of (structural) inequalities
<b>Energy justice (McCauley, 2018)</b>	
<b>Distributive</b>	Identifies how and where project costs and benefits are distributed
<b>Recognition</b>	Identifies those who may be particularly vulnerable to negative impacts <ul style="list-style-type: none"> <li>• For Honneth (1995) disrespect through <i>primary relations</i> (physical abuse), <i>law</i> (denial of rights), and <i>social relations</i> (denigration) threatens recognition</li> <li>• For Fraser (Fraser and Honneth, 2003) misrecognition occurs through <i>cultural domination</i>, <i>nonrecognition</i> (being rendered invisible), and <i>disrespect</i> (stereotypical representations of one's culture)</li> </ul>
<b>Procedural</b>	Identifies how decisions are made and who is included in the decision-making process

Table 1: Schematic representation of the theoretical framework.

### 3. Past and present encroachments on, and the enclosure of, Sámi lands

In the 17<sup>th</sup> century, rich silver ore deposits were found in *Norrland*,<sup>14</sup> and farmers were encouraged to settle there through the 1673 *Lappmarks Placat* (Össbo, 2023b). By the 1800s, the state saw *Norrland* as the equivalent of a colony, a place from which resources could be extracted. In its pursuit of *Norrland's* riches and facing increased land-use conflicts, the state deemed Sámi land rights an obstruction (Lawrence, 2014). In 1885, the Lapp Administration<sup>15</sup> was established and strengthened in later years to control the Sámi and reindeer husbandry (Lantto, 2013).<sup>16</sup> Furthermore, through the 1886 Reindeer Grazing Act, Sámi traditional lands were declared Crown property. Customary land rights were reduced to user rights, which were restricted to the Sámi who were reindeer herders, already a minority of Sámi.<sup>17</sup> For those outside this category, the state pursued an assimilation policy, and these Sámi lost all rights to their land and culture, with far-reaching consequences (Lawrence, 2014; Össbo & Lantto, 2011). The Swedish Church played a large part in these efforts (Lindmark & Sundström, 2018). All throughout Sápmi, Sámi were torn from their families and culture to be sent to boarding schools (Hansen, 2022).

For reindeer herders, the state pursued a paternalistic policy known as "Lapp shall remain Lapp," which sought to maintain their nomadic lifestyle and prohibit the pursuit of agriculture next to reindeer husbandry (*ibid.*). To that end, they were segregated from the rest of society. Since 1978, Sweden has recognized the Sámi as Indigenous,<sup>18</sup> and reindeer husbandry is no longer the only marker of Sámi identity today. However, at the time, deviating from the state's narrow conception of Sámi identity meant losing one's land-use rights (Lantto & Mörkenstam, 2008; Larsen & Raitio, 2022; Össbo & Lantto, 2011).<sup>19</sup> The segregation policy persisted until the 1950s and 1960s when the state shifted its perspective to deem nomadism unprofitable (Lantto & Mörkenstam, 2008).

From the turn of the 19<sup>th</sup> century, large-scale hydro-power projects, mines, and forestry took off (Össbo, 2023b; Sehlin MacNeil, 2017). Encroachment from mining sites alone increased from 1,000 hectares in 1960 to over 20,000 hectares in 2017 – including closed mining sites – and it is likely to increase further (Österlin & Raitio, 2020), especially due to the recent discovery of significant transition mineral deposits near Kiruna (Reed, 2023). Already, 12 out of 16 active mines in Sweden are in Sápmi (Mörkenstam, 2019), and the planned exploration and mining of transition materials will likely affect herders even more (e.g. Frost, 2023).

In addition, over 84% of Sweden's forests are productive forests.<sup>20</sup> The forestry industry, a major economic contributor, is mandated by the Swedish government to cut down a certain number of trees annually, which can negatively impact the availability and quality of "lichen."<sup>21</sup> This is found on the ground but also higher up, especially in older trees, and is the reindeer's primary source of nutrition, particularly during the winter (Harnesk, 2022; Löf, 2013).<sup>22</sup> Much of the land in northern Sweden is owned by forestry companies, including most of the land to which Östra Kikkejaure's herders have user rights (Green Investment Group, 2017). The common practice of clear-cutting forests (Orange, 2021) alienates herders; "From one year to another, it's like strange lands we are coming to; everything is gone, and the reindeer get lost and even we are

<sup>14</sup> *Norrland* refers to the northern part of Sweden (Össbo, 2023b).

<sup>15</sup> The term "Lapp", which has been used historically and sometimes is still used to refer to the Sámi, is seen by many Sámi as derogatory and is widely acknowledged to have harmful connotations (López 2021).

<sup>16</sup> It was abolished in 1971 (Lawrence, 2014).

<sup>17</sup> To this day, the (land) rights of Sámi who are not members of a *sameby* are "on equal footing with other Swedish citizens", see: <https://www.sametinget.se/10175>.

<sup>18</sup> As of 1 January 2011, they are also recognized by the Constitution as an Indigenous People, rather than just a minority (Persson *et al.*, 2017).

<sup>19</sup> The last amended Reindeer Grazing Act of 1971 confirms "the exclusive legal definition of a Sámi" (Lantto and Mörkenstam, 2008: 35) of its previous versions (1886, 1898, 1928). It is currently under review, see <https://www.regeringen.se/rattsliga-dokument/kommittedirektiv/2021/05/dir.-202135/>.

<sup>20</sup> See webpage of Swedish University of Agriculture: <https://bit.ly/3ZCo6TM>.

<sup>21</sup> Lichen, *Cladonia rangiferina*, is an organism that forms a symbiosis between fungi and algae.

<sup>22</sup> Sandström *et al.* (2016) found a 71% decline in lichen-rich forests in the last 60 years. Active forest management, they suggest, can reverse this trend.

getting confused."<sup>23</sup> Thus, in 2020, 29 *sameby* representatives signed a call to end the practice of clear-cutting (Aftonbladet, 2020).

#### *Present-day encroachments and cumulative impacts*

As these industries continue to encroach on Sámi lands, threatening their traditional herding practices and cultural survival, a novel threat comes from renewable energy projects like wind farms (e.g. Lawrence, 2014). The number of onshore wind turbines has grown from 48 in 2003 to 1,410 in 2019 (Cambou, 2020), and Sweden plans to generate 80 TWh of wind on land by 2040 to meet its aim of 100% renewable electricity production (Energimyndigeten, 2021, Figure 1). In this context, scholars and activists alike use the term "green colonialism" to signify how it "represents the renewal of historical processes of dispossession through accumulation and colonialism" (Normann, 2021: 1).

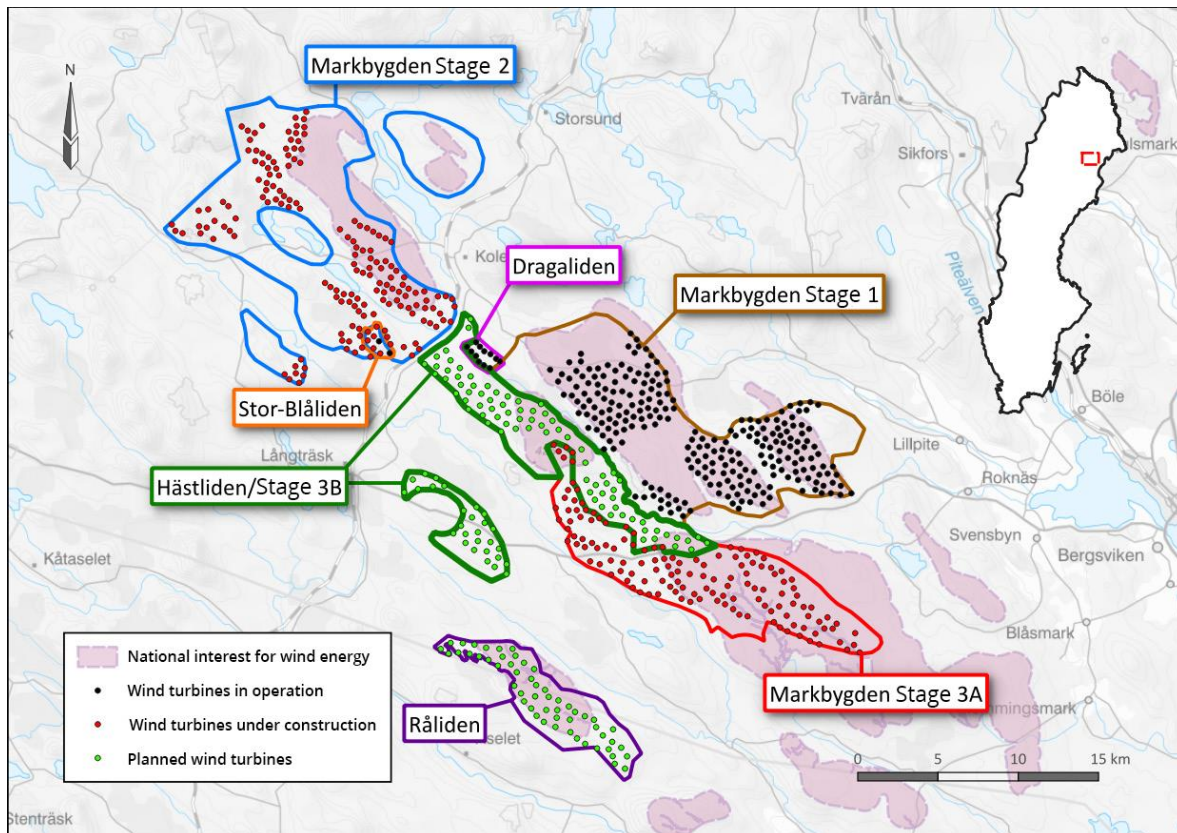


Figure 1: Map of Markbygden as of 2020. Råliden is not a part of Markbygden. Credits: Map, translated from Swedish, from Ecogain and Svevind (2020). Vindkraft vid Hästliden, Piteå kommun. [Wind Power at Hästliden, Piteå Municipality]. Ecogain and Svevind: 4.

For Östra Kikkejaure's herders, Markbygden entails significant encroachments in the form of increased human activity, the construction of energy infrastructure, and new road networks that will negatively affect pastures. When first learning about the project's proposed scale, one herder said, "we thought that this must be a joke; it's not possible to build so many [turbines]."<sup>24</sup> But while Markbygden is the most significant disturbance

<sup>23</sup> Interview, herder Sirges, Jokkmokk, October 6, 2021.

<sup>24</sup> Interview, herder Östra Kikkejaure, Arvidsjaur, September 29, 2021.

to their winter lands, Östra Kikkejaure also experiences significant encroachments from forestry, ski resorts, events like car rallies, and the expansion of industry and infrastructure. Examples include the planned Norrbotniabanen railway between Umeå and Luleå and the urban development east of Piteå near Östra Kikkejaure's winter lands.<sup>25</sup> Markbygden's Social Impact Assessment (SIA) warns that Haraholmen industrial park's port expansion and a rise in collisions due to increased traffic are among Markbygden's possible secondary impacts. Importantly, long before these developments, Östra Kikkejaure had lost Tallträsklandet, which it considered its grazing land; Arvidsjaur airport and car testing facilities were constructed on previously valuable pastures, and the E4 road became a fenced highway, resulting in the loss of a migratory route at Öjebyn (Svevind, 2008).

All these developments cause crazy damage [...] our winter lands are crazy damaged. Much because of the wind farm of course because it's really huge. [...] But it's so many things I probably forget a lot of them.<sup>26</sup>

Herders are frustrated that decision-makers hardly, if ever, consider these cumulative impacts: "We always get the question, this little thing, it doesn't matter for you," indicating the non-recognition of herders' needs.<sup>27</sup> For Östra Kikkejaure,

The big thing is wind power, of course. But all the roads, cars drive faster, and the cities. You see Piteå grow, spread out [...]. So we lose some areas the whole time. It gets smaller and smaller. Maybe it's not such big changes every year, but together it's getting smaller and smaller.<sup>28</sup>

Dealing with similar challenges, a herder from Sirges *sameby* uses a striking metaphor:

It's like [...] every part of your body is important; every part is essential [...]. Then you must choose, shall you lose your foot today or your hand? It's the same thing with the reindeer grazing area. You can't lose a single part.<sup>29</sup>

#### *Enclosure: loss of grazing pasture*

All these encroachments add up to a significant loss of grazing pasture, which is part of what Sovacool (2021) calls a process of enclosure. While physical pasture loss involves pastures being destroyed, transformed, or made inaccessible due to barriers, non-physical loss can be especially vast, as it occurs when grazing rights are withdrawn or when reindeer avoid pastures that have lost their value due to forestry or proximity to infrastructure or industry. This avoidance behavior is well-documented and may persist for years, though avoidance levels may vary depending, for example, on the type of infrastructure (Tyler *et al.*, 2021). Illustrating the scale of the encroachments on Sámi grazing lands, Larsen *et al.* (2017) determined that 54% of one *sameby*'s winter pasture was within zones of disturbance.

Östra Kikkejaure experiences significant physical and non-physical loss of pastures from Markbygden. The project's Social Impact Assessment warned that disturbance from Markbygden would be felt throughout and possibly beyond its 450 km<sup>2</sup> project area, corresponding to 26% of Östra Kikkejaure's winter pastures. The area would typically be used for grazing from October to Christmas, or longer if snow levels allowed. The lands

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<sup>25</sup> For an overview of planned projects, see <https://www.pitea.se/invanare/Kommun-politik/hallbar-samhallsutveckling/alla-projekt-samhallsutveckling/>.

<sup>26</sup> Interview, herder Östra Kikkejaure, Piteå, March 6, 2022.

<sup>27</sup> Interview, herder Östra Kikkejaure, Arvidsjaur, September 27, 2021.

<sup>28</sup> Ibid.

<sup>29</sup> Interview, herder Sirges, Jokkmokk, October 6, 2021.



were even more important before significant forest clearing in Markbygden in the 1960s and 1970s. Today, normal migratory routes to and from the winter lands on the coast are disturbed by 400 km of new roads, 120 km of new transmission lines, and turbines under construction for Markbygden. Furthermore, the SIA warns of rock explosions causing dust and increased traffic during construction, as well as safety concerns regarding ice formation on the turbine blades (Svevind, 2008). Herders can see that the quality of their grazing has been adversely affected and find it hard to keep the herds together.<sup>30</sup>

Reindeer may avoid areas around wind turbines within a five km radius (Skarin *et al.*, 2018), behavior that is recognized by herders of Semisjaur-Njarg, neighbors to Markbygden: "Reindeer and windmills, they don't coexist [...] when you talk about reindeer herds, there's no acceptance there. The research is quite clear."<sup>31</sup> With much of Markbygden still under construction, large parts of Östra Kikkejaure's grazing lands are now a no-go area – "probably over 50%,"<sup>32</sup> a significantly higher estimate than the 26% estimated in the SIA. Herders are forced to take different migratory routes: "Some parts of their moving paths are too disturbed to use. So, they load the reindeer up on trucks and drive them past these parts [...], which is more stressful for the reindeer,"<sup>33</sup> who find their way back easier if they move by foot (*ibid.*). Where their reindeer used to gather as well as spread out to find food in the large Markbygden area, herders are now forced to rely on much smaller areas, allowing less mobility, a key adaptive strategy to climate change (Kelman & Naess, 2019; Löf, 2013). This, in turn, means an increased reliance on expensive feed supplements, which can cause disease in reindeer, especially when weakened.<sup>34</sup>

Climate change impacts contribute further to mobility loss. For example, for neighboring Semisjaur-Njarg *sameby*, ice crusting in the winter of 2022 prevented migration to their winter lands: "I believe three of the last ten years we've spent [the winters] in the summer and fall pastures," where they would have to feed their reindeer additional fodder.<sup>35</sup> For those having to cross frozen rivers on their migration route to and from the winter and summer lands, often on heavy snowmobiles, the ice's increased insecurity can be problematic, especially where dams regulate the waterways, as Sirges *sameby* experiences: "One day it could be good ice, the next day you come and it's open water."<sup>36</sup>

Past and ongoing encroachments and enclosures have had significant implications for Östra Kikkejaure. Migration routes have been disrupted and valuable pasture has been lost with Markbygden's construction. Despite the *sameby* initially opposing the project, processes of exclusion, discussed in Section 4, helped ensure that it would eventually proceed.

#### 4. Exclusion and misrecognition in Sweden

The dispossession of Sámi reindeer herders from their traditional lands through encroachment and enclosure is enabled by a process of exclusion: "unfair planning, policymaking, or lack of representation, recognition, and due process" (Sovacool, 2021: 2). By intentionally limiting their access to and participation in decision-making, this process marginalizes certain stakeholders, like vulnerable groups or minorities, and their knowledge (*ibid.*).

The Swedish state has been criticized for failing to protect Sámi rights, especially their rights to their traditional lands (e.g. ACFC, 2024; Anaya, 2011; CERD, 2018; CESC, 2024; Tauli-Corpuz, 2016). Concerning Indigenous rights, Sweden's national laws do not necessarily reflect its international legal

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<sup>30</sup> Interview, herder Östra Kikkejaure, Piteå, March 6, 2022.

<sup>31</sup> Virtual interview, herder Semisjaur-Njarg, March 9, 2022.

<sup>32</sup> Interview, herder Östra Kikkejaure, Piteå, March 6, 2022.

<sup>33</sup> Interview, Planner – Arvidsjaur municipality, Arvidsjaur, September 29, 2021.

<sup>34</sup> Virtual interview, person with dual occupation as (part-time) herder and Sámi Coordinator – Arvidsjaur municipality, November 19, 2021; Interview, Planner – Arvidsjaur municipality, Arvidsjaur, September 29, 2021.

<sup>35</sup> Virtual interview, herder Semisjaur-Njarg, March 9, 2022.

<sup>36</sup> Interview, herder Sirges, Jokkmokk, October 6, 2021.

obligations.<sup>37</sup> Some scholars have said that Sweden treats the Sámi as a national minority, or a "minority deluxe," rather than as an Indigenous People. For example, the Reindeer Husbandry Act (1971) does not refer to the Sámi as an Indigenous People (Allard, 2018; Johansson, 2016: 427). Furthermore, the Sámi have limited influence on land-use planning and permitting processes, which are regulated by the Environmental Code (1998)<sup>38</sup> in parallel with other legislation, like the Minerals Act, Forest Management Act, and Planning and Building Act. For example, the state does not consult the Sámi in accordance with their right to free, prior and informed consent (FPIC) (Cambou, 2020). Furthermore, for mining explorations, developers are "not legally required to consult with affected Sámi communities" (Lawrence & Larsen, 2017: 1171) nor are impact assessments required (Tarras-Wahlberg & Southalan, 2022).

The shortcomings in Sweden's national legal framework are disconcerting given that, "if there is a conflict between an international convention and existing Swedish laws, the latter prevails in Swedish courts" (ibid.: 243). There are efforts underway to address shortcomings in the national law, partly because of recent court decisions.<sup>39</sup> For example, the Reindeer Husbandry Act is currently under review. Furthermore, national (since March 2022) and local (since March 2024) authorities have a duty to consult the Sámi on issues of significant importance under the new Consultation Act. However, this act does not require consent and applies only to state actors, not to private actors like corporations (Indigenous Navigator, 2023).

The misrecognition of or disrespect for Sámi rights in Swedish law (Lawrence, 2014) is evident in the marginalization of Sámi knowledge, input, values, and rights claims in land-use planning and permitting processes. Environmental impact assessments conducted by developers may be of poor quality (Österlin & Raitio, 2020), and impacts on reindeer-herding excluded from the final assessment (Allard 2018) or insufficiently considered. For example, Lawrence and Larsen (2017) compared a 115-page community-based assessment of a proposed mine's (Boliden) impacts on reindeer husbandry with its nine-page company-led counterpart. Part of this is that the Environmental Code stipulates a focus on the environmental impact of projects, while their social and cultural impacts on reindeer-herding is not required and may be sidelined (Indigenous Navigator, 2023). As the Code is more "bio-technical" in nature, herders may find it difficult to have the social and cultural impacts of any project recognized.<sup>40</sup> Project assessments may also misrecognize what constitutes significant harm to the reindeer husbandry, with decision-makers interpreting this to be the closing down of business, whereas herders set the bar at the loss of traditional herding practices (Lawrence, 2014). Although developer Svevind, to its credit, conducted a SIA for Markbygden, it never mentions the Indigenous right to FPIC – which among other things protects the right of Indigenous Peoples to withhold consent to projects that impact them – and only very briefly references international law relating to the Sámi (Svevind, 2008).

#### *Misrecognition in the consultation process*

Importantly, consultation processes often leave herders disillusioned as Swedish national legislation does not require their FPIC: "If we say no, it's like 'maybe.'"<sup>41</sup> Consultation, in the words of one herder: "In a real sense of the word only means that they sound the horn before they run us over."<sup>42</sup>

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<sup>37</sup> While Sweden has not ratified the ILO Convention 169 on Indigenous and Tribal Peoples, it has ratified several human rights conventions and adopted the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), albeit selectively (Mörkenstam, 2019). The UNDRIP states that Indigenous Peoples have the right to "freely pursue their form of economic, social, and cultural development" (UN General Assembly, 2007: Art. 3).

<sup>38</sup> Its purpose is to promote sustainable development. See Environmental Code, p. 9. Retrieved from <https://bit.ly/3Lk4Q9R>.

<sup>39</sup> The Supreme Court decision in the Girjas court case recognized the Sámi's exclusive hunting and fishing rights, with the right to lease those rights to others belonging solely to them, not the state. Importantly, the Court considered international law, including ILO Convention 169, which Sweden has not ratified, as essential in cases like this (Allard & Brännström, 2021). This sets an important precedent for future cases (Virtual interview, researcher, November 5, 2021).

<sup>40</sup> Virtual interview, Renewable Energy Policy Analyst/Program Manager – Energimyndigheten, September 17, 2021.

<sup>41</sup> Interview, herder Sirges, Jokkmokk, October 6, 2021.

<sup>42</sup> Virtual interview, herder Semisjaur-Njarg, March 9, 2022.

Recognition in legal relations requires respect (Honneth, 1995), yet Östra Kikkejaure's herders consistently expressed the feeling that their rights are disrespected by state authorities: "In Sweden they have not really understood what FPIC is."<sup>43</sup> As for communications with the Piteå municipality, "sometimes they forget to speak with us as early as we want."<sup>44</sup> For one young herder, experiences of having his rights disrespected have somewhat damaged his trust in developers and the authorities:

I understand it's their job, but they cannot understand our situation. They don't give a [expletive] honestly, they do all they can to keep their projects going. They just want us to be understanding of their causes. But it's going to kill reindeer-herding around this area.<sup>45</sup>

If there is a lack of trust in the consultation process, it is not without reason. For example, the Gállok mine in Jokkmokk municipality was approved by the Swedish government (Avraham, 2022), despite vehement Sámi opposition. Prior to the decision, a herder from Sirges conveyed strong feelings on the matter: "If they respect us, if the government respects our rights, then there won't be a mine, but if there will be a mine, we're not respected."<sup>46</sup> The Sámi also experience disrespect for their rights from developers and wider Swedish society. In 2011, the chairman of Gállok's developer Beowulf Mining showed a picture of an empty landscape and insinuated that no local people were affected by the mine, rendering the Sámi invisible. While this is an illustration of what Fraser calls non-recognition, the response illustrates misrecognition through cultural domination (Fraser & Honneth, 2003). Although the Sámi took to the streets in protest, national interest in and media coverage of the conflict over Gállok was initially non-existent. Thus, a dominant discourse of economic growth rendered alternative Sámi discourses of cultural value invisible (Persson, Harnesk & Islar, 2017).

Concerned about the increased encroachment on and fragmentation of their lands, reindeer herders do not feel they can afford to opt out of participating in project consultations, even when they believe they offer the maintenance of the status quo at best (Österlin & Raitio, 2020). For example, in consultations with Sveaskog regarding forest clearings, one of Östra Kikkejaure's herders deplored that "we're forced to come to those meetings, yet we don't get anything from it [...]. They will cut down the forest anyway [...]. And if we don't show up, it is like we say, OK, go ahead."<sup>47</sup>

This points to a finding in the literature that consultations can be disempowering, as Indigenous Peoples "can be unwillingly co-opted into such processes without having a real say into the outcome, while at the same time providing legitimacy to the decision to go ahead with the project" (Papillon *et al.*, 2020: 227). This is a reason for some to pass on consultations altogether: "Because if you engage, they [project planners] go to the media and say we have a dialogue. But if you don't [...] they can't."<sup>48</sup> A lack of resources may be another reason for choosing what (not) to engage with (Larsen & Raitio, 2022; Österlin & Raitio, 2020). As one herder from Östra Kikkejaure explains, "It's like a full-time job for at least one person to talk to everybody. And then we divide it [the consultation burden] amongst ourselves. But we already have more than 100% of work."<sup>49</sup> In another example, Larsen *et al.* (2017) found that Vilhelmina norra *sameby* spent 70 days of 2014 in meetings on competing land uses.

Increased consultation pressure demands herders' time and energy, especially because the fragmented character of planning and permitting regimes requires them to know multiple sectors' regulations (Österlin & Raitio, 2020). In Sweden, the tools to assess the cumulative impacts of adding a project in combination with

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<sup>43</sup>Interview, herder Östra Kikkejaure, Arvidsjaur, September 29, 2021.

<sup>44</sup> Ibid.

<sup>45</sup> Interview, herder Östra Kikkejaure, Piteå, March 6, 2022.

<sup>46</sup> Interview, herder Sirges, Jokkmokk, October 6, 2021.

<sup>47</sup> Interview, herder Östra Kikkejaure, Piteå, March 6, 2022. This sentiment is substantiated also by Brännström (2024).

<sup>48</sup> Interview, herder Sirges, Jokkmokk, October 6, 2021.

<sup>49</sup> Interview, herder Östra Kikkejaure, Piteå, March 6, 2022. Experiences of the Sámi mirror those of the First Nations of Canada, where Montambeault and Papillon (2023) observed complaints about over-consultation in trivial matters and under-consultation in important matters.

existing developments are insufficient. Even getting an overview of one wind project's impacts may be difficult due to the permitting process being fragmented into permits for roads, gravel pits, transmission lines, etc. (Cambou, 2020; Larsen *et al.*, 2017; Larsen & Raitio, 2019). While state actors and developers' lack of knowledge of reindeer husbandry and Indigenous rights<sup>50</sup> seems to be accepted, another illustration of cultural domination is that herders are expected to provide detailed information on land use, for which they are not reimbursed (Sámediggi, 2021).

Regarding Markbygden, Östra Kikkejaure was approached for consultation prior to developer Svevind having received the required land and environmental permits, with consultants watching the herders work on different days throughout the year and observing their use of land. At the same time, Östra Kikkejaure tried to stop the project in talks with the County Administrative Board, which was responsible for the environmental permit. All of this took "a lot of time, a lot of work, a lot of phone calls, a lot of travels" for over a year.<sup>51</sup> Their opposition was however overruled by the Swedish Government:

We tried to stop them for a long, long time. But it didn't go as we wanted, and they were going to build it anyway [...]. The Swedish government approved it and Piteå [municipality] also. So it's hard for just one Sámi village to put an end to it. It's such a huge project and so much money and green energy.<sup>52</sup>

*The struggle for recognition of Sámi rights: Take to the court or settle?*

According to Honneth (1995), experiences of disrespect through exclusion can form the motivation for a collective struggle for recognition. In defiance of Sámi rights being disrespected, "the court has become the ultimate governance arena where conflicts between opposing parties and interests can be mediated and decided" (Cambou *et al.*, 2021: 42). According to one herder from Semisjaur-Njarg: "Since it's not Swedish policy to acknowledge that a right to FPIC exists, [for] that no to be accepted then we have to go to court."<sup>53</sup> However, this requires resources, including time and money to pay for legal advice or representation. According to one researcher, it is not an easy road to take: "If [the Sámi] win, they spent a lot of time protecting what was already there. If they lose, they lose. So it's a lose-lose situation."<sup>54</sup> Rather than fighting the government's decision on Markbygden, one herder from Östra Kikkejaure recalls believing that "our chances would have been so small to win" considering that they were "so few and so small in the big Sweden's eyes."<sup>55</sup> A lack of time and money also played a major part, illustrating how access to justice and remedy are obstructed by the continued misrecognition of Sámi needs.

Furthermore, misrecognition of and disrespect for Sámi rights may persist in the court rulings. The court rarely rules in favor of the Sámi. Courts rejected a wind permit application in seven out of at least 29 cases brought before them between 2006-2019, but in only two cases was reindeer-herding the explicit reason, the Gabrielsberget and Ava cases.<sup>56</sup> What is more, the burden of proof is on the Sámi, as are the legal costs of the opposing party when they lose (Cambou, 2020). Sámi knowledge may be discredited<sup>57</sup> as biased or irrelevant (Österlin & Raitio, 2020), as happened in the court cases for the Norrbäck and Pauträsk wind projects, where the companies disputed that "continuous migration on foot" had been demonstrated (Cambou *et al.*, 2021: 43). In such cases, courts may not be ideally equipped to compare the knowledge of companies with that of

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<sup>50</sup> See Renkens (2024).

<sup>51</sup> Interview, herder Östra Kikkejaure, Arvidsjaur, September 29, 2021.

<sup>52</sup> Interview, herder Östra Kikkejaure, Piteå, March 6, 2022.

<sup>53</sup> Virtual interview, herder Semisjaur-Njarg, March 9, 2022.

<sup>54</sup> Virtual interview, researcher, November 5, 2021.

<sup>55</sup> Interview, herder Östra Kikkejaure, Arvidsjaur, September 29, 2021.

<sup>56</sup> The permits sought to expand or construct wind turbines.

<sup>57</sup> The discrediting of traditional knowledge is common around the world. See, for example, Papillon and Rodon (2019), who in their research on impact assessments in Canada find that traditional knowledge is "not necessarily valued in the same way as expert reports" (p. 266).

traditional knowledge holders (ibid.). As argued by a herder from Östra Kikkejaure: "I think we're the experts in reindeer-herding. But [there are] a lot of people who think they're the experts."<sup>58</sup> Furthermore, in Swedish legislation, herders' interests are weighed equally with other so-called "national interests" like forestry, despite herding being a Sámi right.<sup>59</sup> Disputes on which interest should be prioritized can be decided by the courts, and, from one herder's perspective, "probably not for us."<sup>60</sup> According to Cambou, recent court decisions view Sámi reindeer herders as stakeholders rather than holders of rights, while reindeer husbandry is seen as a mere industry competing with other industry interests, rather than as a socially and culturally significant right (2020). Another issue is the court's belief in the continuous adaptability of reindeer husbandry, where mitigation measures like compensation and the adaptation of timetables and location are assumed to be enough to assure co-existence. Regarding reindeer-herding the courts also assume that the national laws comply with international law and that there is no tension between economically viable and traditional reindeer-herding (ibid.; Lawrence & Larsen, 2017).

Rather than fighting the government's decision in court, Östra Kikkejaure ultimately sought the best possible compensation agreement. Compensation agreements, however, do not offset landscape disturbances remaining long after a project is dismantled. Furthermore, it is hard to compensate for cultural and ecological value (e.g. Trainor, 2006), and compensation may even undermine community cohesion (e.g. Gilbert *et al.*, 2021). Notes from a consultation after the Government's 2010 decision to approve Markbygden indicated that the *sameby* was dissatisfied with how the negotiations were going, with one herder demanding clarification on whether these were merely informative meetings or collaborative meetings and expressing discontent that an agreement had still not been reached (Svevind, 2010). Today, the *sameby* has good communication with the developer, Svevind (even after ownership has been sold to different (inter)national companies) "and they try to do what they can to help," although there is room for improvement.<sup>61</sup>

Outside the agreement, the Sámi Parliament or *Sámediggi*, which is the central administrative authority for reindeer husbandry, calculates and partially reimburses herders' costs of feeding or losses to predators, which kill an estimated 60,000 reindeer each year (Anaya, 2011). In its dual role as a government agency and elected Sámi representative body, the *Sámediggi*'s limited political power has been criticized (Lantto & Mörkenstam, 2008; Mörkenstam *et al.*, 2021), and in practice, its right to self-determination is not recognized (Indigenous Navigator, 2023). Herders often express disappointment with what *Sámediggi* can do for them,<sup>62</sup> which is determined by the national government in what appears to be a pattern of misrecognition of their rights and needs.

Despite international criticism of Sweden, Sámi herders continue to experience exclusion from the decision-making process, as exemplified by disempowering consultations. This exclusion, or disrespect through the law, motivates a struggle for recognition that is often played out in the courts, where cultural domination may nonetheless uphold the marginalization of Sámi knowledge and values. Section 5 shows how Markbygden further entrenched inequalities and social relations, adding to stress and worries about the future viability of reindeer husbandry as a livelihood, and sparking conflicts between neighboring *samebyar*.

## 5. Entrenchment and experiences of misrecognition in social relations

Climate mitigation projects can further disempower disadvantaged groups, entrench societal inequalities, and "cement particular social relations" (Sovacool, 2021: 3). The prospect of Markbygden increased the stress and anxiety of individual herders from Östra Kikkejaure, who worried about their livelihood's viability and loss of traditional knowledge, which was exacerbated by concerns over climate change's unpredictable impacts.

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<sup>58</sup> Interview, herder Östra Kikkejaure, Arvidsjaur, September 27, 2021.

<sup>59</sup> Virtual interview, researcher, November 5, 2021.

<sup>60</sup> Interview, herder Östra Kikkejaure, Arvidsjaur, September 29, 2021.

<sup>61</sup> Interview, herder Östra Kikkejaure, Piteå, March 6, 2022.

<sup>62</sup> E.g. interview, herder Östra Kikkejaure, Arvidsjaur, September 27, 2021.

Furthermore, partly because Markbygden has increased grazing pressure on their lands, reindeer sometimes enter neighboring *samebyar*, entrenching periodic disagreements between neighbors.

A 2010 study found that work-related stress was a key explanatory factor for the occurrence of depression and anxiety among Sweden's Sámi reindeer herders (Kaiser *et al.*, 2010). Research participants in this study corroborated these findings, bringing up their experiences of stress, together with concerns over the future viability of reindeer husbandry as grazing lands shrink:

You can't bargain with the life of your reindeer, the grazing land. It's torture. This morning my son said, 'I see that you are stressed.' I told him, yes, I am, but when the children see that, then it's terrible. They see that something is – I'm tortured. I can't tell them what it is because I don't want them to worry.<sup>63</sup>

The loss of reindeer-herding as a livelihood is a devastating prospect for herders since it is essential to who they are and for the preservation of Sámi culture, of which reindeer husbandry is a strong carrier (e.g. Sámediggi, 2021): "It affects you, and you get so easily emotionally disrupted because you are already on the edge, and then maybe there is a predator and you cannot sleep for nights. It's a bizarre situation."<sup>64</sup>

Before the agreement between Svevind and Östra Kikkejaure, Svevind noted herders' worries in the face of an uncertain future:

It was a period for the Sámi village when there were a lot of thoughts about the future, what would happen, and so on. After we signed the agreement, it was calmer, and they knew what to face [but] the period before the agreement was a little bit hard.<sup>65</sup>

Notes from a 2010 consultation show further dissatisfaction, in that, while decisions had been made to the benefit of the developer, Östra Kikkejaure had been living in uncertainty for three years (Svevind, 2010). Today, Sámi youth question the prospect of reindeer-herding.<sup>66</sup> A young herder from Östra Kikkejaure explains: "There are already a lot of people who can't live on it anymore. [...] Reindeer-herding will die out if the spread of all the industries does not stop."<sup>67</sup> The number of herders in Östra Kikkejaure has fallen since Markbygden's SIA, when the *sameby* counted nine herders, of whom two were of pension age (Svevind, 2008). Another herder recalls: "When I started, we were maybe fifteen reindeer herders, and now we have seven, so."<sup>68</sup> Three of those seven represent the only recently started next generation. Although it is unclear to what extent Markbygden has influenced herders' decisions to quit, one research participant recalls that, in a meeting discussing the prospect of over 1,000 wind turbines, "one herder said, 'I don't feel like I want to let my son and my grandchildren be a part of this.' He had kind of lost his will to be a reindeer-herder."<sup>69</sup> Furthermore, in the SIA, herders cited both an increase in the workload and financial unviability as reasons to potentially quit (*ibid.*). One herder from Sirges relates that devastating prospect: "Without the reindeer I have nothing, I have no life."<sup>70</sup>

Herders' livelihoods are not only threatened by encroachments from projects like Markbygden, but also by the unpredictability of climate impacts and predators: "You can't really plan for them. They just explode in your face, and you have to roll with the dice."<sup>71</sup> Climate change forces herders to adapt by using new tools like

<sup>63</sup> Interview, herder Sirges, Jokkmokk, October 6, 2021.

<sup>64</sup> *Ibid.*

<sup>65</sup> Virtual interview, Head of Permit & Environment and Chief Operating Officer – Svevind, June 22, 2022.

<sup>66</sup> Virtual interview, person with dual occupation as (part-time) herder and researcher, September 22, 2021.

<sup>67</sup> Interview, herder Östra Kikkejaure, Piteå, March 6, 2022.

<sup>68</sup> Interview, herder Östra Kikkejaure, Arvidsjaur, September 29, 2021.

<sup>69</sup> Virtual interview, researcher, March 31, 2022.

<sup>70</sup> Interview, herder Sirges, Jokkmokk, October 6, 2021.

<sup>71</sup> *Ibid.*

GPS or snowmobiles, which are feared for eroding and reducing the value of traditional knowledge (e.g. Jaakkola *et al.*, 2018; Kelman & Naess, 2019): "Everything the herders have learned from their elders, they cannot use it."<sup>72</sup> The loss of traditional knowledge is deeply felt: "I know what I taught my children is useless knowledge, because the knowledge I gave them of the grazing areas can only last for three to five years."<sup>73</sup> The changes in climate and in the landscape demand adaptability from herders. Already, reindeer-herding has changed drastically compared to the old ways when herders would keep the reindeer together by using skis. Younger generations, using GPS and phones, no longer need the skills to recognize where they are and to find each other when lost.<sup>74</sup> While these developments keep reindeer-herding possible for future generations,<sup>75</sup> to some they represent the loss of culture and traditions, not to mention that many of the technological advances are expensive.<sup>76</sup>

Past assimilation policies and continued experiences of having their traditional livelihood and culture disrespected through discrimination, further impact Sámi mental health (Jaakkola *et al.*, 2018; Sámediggi, 2021; Sehlin MacNeil, 2017). Herders have experienced disrespect – a form of misrecognition (Fraser, 2000) – in social relations in the forms described by Honneth (1995): insult, denigration, and discrimination. Experiences hereof vary: "From little things to insulting and degrading talk to actual destruction of equipment. And the worst-case scenario is the killing of reindeer."<sup>77</sup> For example, after the Girjas court case verdict, there were several instances of reindeer being tortured or killed (Abend, 2023; Liljeström, 2020).<sup>78</sup> Discrimination and hate crimes against the Sámi have many roots, poor education on Sámi history being one: "My experience is that we learn more about American First Nations than about our own peoples."<sup>79</sup> Such hate crimes are seen as not getting enough attention from law enforcement, another illustration of perceived disrespect.<sup>80</sup>

Research participants have reported that the lack of respect for Indigenous rights, especially FPIC, also affects their mental health.<sup>81</sup> Herders report feeling powerless when facing land encroachments.<sup>82</sup> Often dismissed as being "so few," when this minority speaks out against a development on their lands, they risk the wider Swedish majority perceiving them as being against development: "If I only say no, then that would be perceived negatively."<sup>83</sup> One herder explained that when a wind project was planned on his land, he chose not to protest as others were already doing this, and he feared the reactions.<sup>84</sup> Recent court decisions like the Girjas ruling, but also the Fosen Vind ruling in Norway,<sup>85</sup> provide herders with hope that legislation will change to respect their rights, but "we can't hope too much, because then we get disappointed."<sup>86</sup>

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<sup>72</sup> Virtual interview, person with dual occupation as (part-time) herder and Sámi Coordinator – Arvidsjaur municipality, November 19, 2021.

<sup>73</sup> Interview, herder Sirges, Jokkmokk, October 6, 2021.

<sup>74</sup> Interview, herder Östra Kikkejaure, Piteå, March 4, 2022.

<sup>75</sup> Fieldnotes March 2022.

<sup>76</sup> Virtual interview, herder Semisjaur-Njarg, March 9, 2022.

<sup>77</sup> Ibid.

<sup>78</sup> Virtual interview, Vice President – Saami Council, September 23, 2021.

<sup>79</sup> Virtual interview, person with dual occupation as (part-time) herder and researcher, September 22, 2021.

<sup>80</sup> Virtual interview, Program Manager & Advisor International Law – MR Fonden, March 24, 2022. Recently, the government adopted an action plan against racism against the Sámi (Indigenous Navigator, 2023).

<sup>81</sup> Virtual interview, person with dual occupation as (part-time) herder and researcher, September 22, 2021; Virtual interview, researcher, November 5, 2021.

<sup>82</sup> Interview, herder Östra Kikkejaure, Piteå, March 6, 2022.

<sup>83</sup> Interview, herder Östra Kikkejaure, Arvidsjaur, September 29, 2021.

<sup>84</sup> Interview, herder Sirges, Jokkmokk, October 6, 2021.

<sup>85</sup> In 2021, the Norwegian Supreme Court ruled that wind projects in Fosen violated the rights of the Sámi. Despite mounting criticism of the government's failure to act on the ruling (e.g. Cambou, 2024; Fjellheim, 2022), the dispute was not settled until Sør-Fosen Sijte herding district agreed to a settlement in December 2023, followed by Nord-Fosen Siida in March 2024 (Mósesdóttir, 2024; Reuters, 2024).

<sup>86</sup> Interview, herder Östra Kikkejaure, Piteå, March 6, 2022.

The process of entrenchment may also refer to situations where social relations become fixed in a certain way. Climate mitigation projects do not necessarily foster positive social relations and there is evidence that Markbygden has spurred conflict between *samebyar*. The project SIA and notes on consultations with affected *samebyar* Västra Kikkejaure and Semisjaur-Njarg revealed their fears that the Markbygden project will result in such severe fragmentation and loss of Östra Kikkejaure's grazing lands, meaning that their reindeer will increasingly spread into neighboring lands (Svevind, 2008; 2010). When they do, it is difficult to catch them without modern, expensive equipment, further increasing the herders' workload. A herder from Sirges explains that every impact is like a little hole, one is no problem, you can avoid it: "But if it gets to too many holes, then it's impossible to avoid, and we have a table full of holes. Then you can't go to the other tables, because it's your neighbors."<sup>87</sup>

Semisjaur-Njarg claims that since the construction of Markbygden began, there has been a clear increase in the number of days that Östra Kikkejaure's reindeer enter their lands, costing them precious grazing days, and straining relations. While Östra Kikkejaure acknowledges the problem, they dispute that it has increased. They also maintain that the 30-40 km line between the *samebyar*, decided upon by *Sámediggi*, is artificial, so that reindeer take no notice of it (Sámediggi, 2021).<sup>88</sup> They therefore advocate for having the borders follow natural boundaries instead (Svevind 2008) and warn that although conflicts among the Sámi exist, "you must remember who the enemy is."<sup>89</sup>

Markbygden has entrenched both inequalities and social relations. It has contributed to stress and worry about the viability of reindeer husbandry as a livelihood, and both are exacerbated by the unpredictable impacts of climate change. Misrecognition in social relations – for example, through discrimination – adds to feelings of being disrespected. Social relations are further affected by Markbygden spurring conflicts between neighboring *samebyar*.

## 6. Conclusion

By combining a political ecology analysis with concepts from energy justice frameworks, this article has illustrated several dimensions of the injustices resulting from the Markbygden wind project. It has shown how Markbygden upholds historical and current processes of encroachment on and enclosure of Sámi lands, losing reindeer herders access to their grazing lands. Furthermore, exclusion from decision-making and a lack of respect for their right to self-determination and FPIC means that challenging court proceedings may be a last resort to stop development projects. Markbygden has entrenched inequalities and social relations by adding to anxieties over the potential loss of land and livelihood – furthered by the unpredictable impacts of climate change – and by negatively affecting relations between neighboring *samebyar*.

By paying particular attention to instances of recognition injustice as conceptualized by both Honneth and Fraser, this article identified examples thereof in relation to Sámi rights in Sweden – from the misrecognition of what constitutes significant harm to reindeer husbandry to the discrediting of Sámi knowledge in the courts. Examples of *cultural domination* could be found in the seemingly accepted ignorance of reindeer husbandry among state actors and developers and the dominance of economic growth discourses. The insinuation that no local people were affected by the Gállok mine was provided as a case of *non-recognition*, while *disrespect* was exemplified by the marginalization of Sámi knowledge, input, values, and rights claims in land-use planning and permitting processes. The sometimes-disempowering nature of consultations and lack of FPIC both illustrated *disrespect through the law*, while instances of discrimination of the Sámi and destruction of herders' equipment revealed *disrespect through social relations*.

There is an emerging awareness that Indigenous Peoples experience disproportionate impacts from both climate change and its mitigation, and that the misrecognition of their rights plays a major part in this. Forcing climate "solutions" on them without their consent risks the continuation of historical processes of dispossession.

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<sup>87</sup> Interview, herder Sirges, Jokkmokk, October 6, 2021.

<sup>88</sup> Virtual interview, herder Östra Kikkejaure, March 17, 2022.

<sup>89</sup> Interview, herder Östra Kikkejaure, Arvidsjaur, September 27, 2021.



The findings underline such notions. Furthermore, they illustrate shortcomings in energy justice frameworks. Specifically, the finding that Sámi reindeer herders continue to experience the violation of their rights, despite Sweden's recognition of the Sámi as an Indigenous People, reveals the limits of recognition and may challenge assumptions of where in the world one can expect rights violations to take place. Moreover, the discovery that consultations can be disempowering and that compensation does not necessarily make up for the loss of cultural values, reveal the limits of procedural justice and show how procedural rights are no panacea.

Additionally, the findings contribute to existing critiques of how project impacts are measured. While impact assessments are conducted at the early stages of an investment, the case of Markbygden, which remains under construction, shows that their long-term impacts may not become clear until much later. Furthermore, Indigenous Peoples are confronted by impacts from past, present, and planned developments from a myriad of industries, as well as increasingly from climate change. Without attention to and knowledge of these cumulative impacts, their adaptability may be taken for granted by those involved in decision-making processes, which, as shown here, may not necessarily be inclusive of Indigenous knowledge and values. Although illustrated here through the situation of Sámi reindeer herders, this may hold true for Indigenous Peoples around the world.

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