

STUDY AREA DESCRIPTION

JÄMTLAND

HÄRJEDALEN

JÄMTLAND COUNTY, SWEDEN



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**Funded by
the European Union**

CoCo is funded by the European Union's Horizon Europe - Research and Innovation programme (grant agreement No. 101181958). The project, started in November 2024, has a duration of three years.

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1 INTRODUCTION

Jämtland County is located in northern Sweden, bordering Norway, and comprising two regions: Jämtland and Härjedalen. The landscape of Jämtland is characterised by a mosaic of arable land, forests, and pastures. Agricultural fields are typically small yet numerous, a factor contributing to the predominance of dairy and beef production. Dairy farms are often found near the county's larger lakes, where the land is better suited to more intensive crop cultivation. In contrast, Härjedalen's landscape is shaped by a major river, extensive forests, and surrounding mountains. Land use here is largely restricted to producing forage crops and grazing, with small field sizes adding to the challenges of cultivation.



Figure 1: The landscape of the study area is highly variable and includes rugged terrain (Photocredit: Hushållningssällskapet Jämtland).

2 OVERVIEW

- ▶ **Municipalities:** Härjedalen, Berg, Bräcke, Östersund, Krokom, Åre, Strömsund, Ragunda.
- ▶ **Geographical size:** 34,000 km².
- ▶ **Human population:** 120,000.
- ▶ **Number of livestock farmers (approx.):** 1,200.

- ▶ **Livestock farming systems:** Dairy production, extensive beef production, intensive beef production, sheep production (meat).
- ▶ **Wild large carnivore species:** Bear, wolverine and lynx.
- ▶ **Wolf population:** Two individuals (2025 census).



Figure 2: A group of cows grazing on one of the many pastures in Jämtland (Photocredit: Hushållningssällskapet Jämtland).

3 SOCIOECONOMIC CONTEXT

Jämtland is renowned for its diverse landscapes. The western parts are mountainous and close to the Norwegian border, with little arable land. In contrast, the southern and southeastern areas, particularly around the main lake, are agricultural regions with extensive arable land and favourable conditions for crop and forage production. The northern and northeastern parts are dominated by forests.

The socioeconomic standard in Jämtland is relatively high. The forestry industry is a major employer and constitutes a significant part of the local economy. Tourism and recreational activities are also important, with several ski resorts and well-known hiking trails located in the western parts of Jämtland and Härjedalen.

Jämtland-Härjedalen is classified as a Northern Sparsely Populated Area (NSPA) by the European Union. This classification entails several challenges, including long distances between settlements and

from markets, limited access to services, harsh climates, and a low population density. These factors impact local farming and food production, which must cope with long transport distances and a lack of agricultural infrastructure, such as dairies, abattoirs, and veterinarians.



Figure 3: Fjällko, a traditional Swedish breed of mountain cattle (Photocredit: Hushållningssällskapet Jämtland).

4 FARMING CONTEXT

Agricultural practices in the region vary. Most dairy farms are located around the main lake, with an average herd size of 60 to 130 cows and typically one or two milking robots. In the outer regions, beef production is more common, primarily through extensive systems, such as cow-calf operations, although some intensive beef production also occurs. Access to land is a key factor for all farmers. In areas with abundant lowland pastures, mountains, and forests, extensive beef production is particularly well-suited.

Main Challenges:

A common challenge across all production systems is the ageing farmer population, particularly among full-time and large-scale farms. Most farms are family-run and often too small to employ external staff. This results in a reliance on family members and cooperation with neighbouring farms—a system that

can be fragile. Long distances and limited infrastructure (dairies, abattoirs) are persistent issues, though the specific impact varies. While some farms benefit from good land consolidation, they still face long transport distances for dairy trucks, feed deliveries, and veterinary services. Notably, there is only one abattoir in the county, requiring animals to be transported long distances.

5 LOCAL CONFLICT ASSOCIATED WITH LARGE CARNIVORES

Number of attacks: 1

Large carnivore predation is minimal in the area, with most farmers not perceiving it as a significant problem. Farmers tend to have neutral or even positive attitudes towards large carnivores, primarily due to the absence of wolves in the area. If wolves were present, these attitudes would likely be more negative. While several farmers express concerns about large carnivores near their livestock, these concerns are generally related to the risk of damage rather than opposition to the existence of the carnivores. The prevailing view is that grazing livestock in these areas involves a calculated risk, but the incidence of damage has been low enough that it is not considered a major problem.

In the past, some farmers suspected that they had lost livestock to bears or lynx, but these incidents were not always confirmed due to a lack of evidence and were not pursued with local wildlife authorities. Bears appear to be the only large carnivore causing occasional problems for farmers in Jämtland and Härjedalen, typically preying on young or small animals or injuring them. However, such incidents are rare and are often attributed to abnormal bear behaviour (e.g. old or sick animals) or to livestock straying from the herd. There has only been one confirmed bear attack in recent years, involving a calf that became separated from its herd in a forest pasture. Nevertheless, the majority of farmers, including those who have experienced bear attacks, remain neutral or positive towards bears, viewing them as a natural and generally non-problematic part of the ecosystem.

In the Östersund Municipality, farmers report that moose and roe deer cause significant problems by consuming and contaminating stored forage, rendering it unsuitable to use as livestock feed. Moose, in particular, can cause extensive damage to fences, especially during winter. The severity of these problems varies locally, with some farms experiencing major issues and others being only minimally affected.

There is a consensus among farmers that the lack of the carnivore problem is largely due to their proximity to reindeer grazing areas. In Jämtland County, several Sámi villages (*samebyar*) have designated grazing areas and are authorised to eliminate problematic carnivores, including wolverines, bears, and occasionally wolves. As these grazing areas cover almost all of Jämtland-Härjedalen, the presence of wolves is minimal. This was especially emphasised by farmers in Härjedalen, whose livestock graze in mountainous or forested areas.

Social Conflict:

The presence of reindeer grazing areas is not universally viewed positively. Farmers have reported that reindeer can damage crops by trampling fields and breaking fences during their seasonal migrations.

They also consume forage in the fields and pastures, and may contaminate it with urine, making it unsuitable for cattle and sheep. The discussion surrounding reindeer, Sámi villages, and grazing rights is sensitive, with some farmers expressing concerns about voicing their opinions, fearing that they will be perceived as anti-Sámi. Experiences vary depending on the specific Sámi village; some farmers report good communication with reindeer owners, while others feel unheard and concerned.

Farmers in Härjedalen also expressed frustration with the current process for managing wildlife and large carnivores. They feel excluded from discussions that are typically held between Sámi villages, forestry companies and local wildlife authorities. Several farmers have voiced their desire to be included in these discussions so that they can present their perspectives, given the significant impact that these issues have on their operations.

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