

STUDY AREA DESCRIPTION

CINDREL-LOTRU- FĂGĂRAȘ

SIBIU & VÂLCEA COUNTIES, ROMANIA



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1 INTRODUCTION

The Cindrel–Lotru–Făgăraș area brings together three distinct but complementary mountain regions. The Cindrel and Lotru massifs, with their gently rounded peaks rising above 2,000 metres and shaped by glacial cirques and alpine lakes, are separated from the western edge of the Făgăraș Mountains, the highest mountain massif in the Romanian Carpathians, by the Olt Valley. Across all three massifs, old sheepfolds can be found, and traditional sheep grazing remains more intensive here than in other Carpathian regions. On the southern slope of the Lotru Mountains, which is comparable in length to the Făgăraș ridge, lies the particularly picturesque and quiet Lotru Valley. Extensive alpine meadows stretch across the valley floor, forming key pastoral areas for local communities.

The cultural foundation of the Cindrel-Lotru area is rooted in Mărginimea Sibiului, a group of localities situated in the south of Sibiu County (LDSMS, 2024), at the base of the Cindrel Mountains. Shepherding and transhumance are at the heart of the communities here (Constantin, 2024). The local pastoral system developed around long-distance transhumance: seasonal movements of flocks over 100 to 500 kilometres between Alpine summer pastures and the southern winter plains, such as those close to the Danube (Săgeată et al., 2023).

On the Vâlcea County slopes, the communities in Western Făgăraș gravitate towards the Olt Valley and its confluence with the Lotru River, in a landscape dominated by forests and small mountain villages. Today, pastoral traditions persist, but they are less focused on long-distance transhumance and slowly transitioning to cattle breeding. The communities are characterised by occupational pluralism and mixed living strategies, with many combining wage labour with subsistence activities such as animal husbandry, fruit growing, and crop cultivation (Aastrud, 2020).



Figure 1 Lotru Mountains in Vâlcea County (Photo Credit: Mihai Pop)

2 OVERVIEW

- ▶ **Municipalities:** Boița, Cisnădie, Gura Râului, Poplaca, Rășinari, Râu Sadului, Sadu, Tălmăciu (Sibiu County); Boișoara, Căineni, Titești (Vâlcea County).
- ▶ **Geographical size:** 1,126.29 km² (767.43 km² in Sibiu, 358.86 km² in Vâlcea).
- ▶ **Human population:** 52,176 (2020) with a negative trend in Vâlcea County.
- ▶ **Number of livestock farmers (approx.):** Unknown.
- ▶ **Livestock farming systems:** Unknown.
- ▶ **Wild large carnivore species:** Brown bear (*Ursus arctos*), wolf (*Canis lupus*), lynx (*Lynx lynx*).
- ▶ **Bear population:** Sibiu has the highest density at 14.2 bears per 100 km², followed by Vâlcea (12.5) (INCDS, 2025).
- ▶ **Wolf population:** 5-8 packs (rough estimate, based on density data from the Southern Făgăraș Mountains (Iosif et al., 2025), considering a mean number of 4 wolves/pack).
- ▶ **Lynx population:** No data available.



Figure 2: Unguarded dairy cattle on the Titești village pasture (Photo Credit: Mihai Pop).

3 SOCIOECONOMIC CONTEXT

- ▶ The area exhibits remarkable diversity. Sibiu County is better placed economically than Vâlcea County, as a result of strong industrial poles concentrated in the Sibiu-Cisnădie urban area (LDSMS, 2024). Vâlcea County's economy, by contrast, rests on the chemical industry, hydropower, and forestry, with mountain agriculture playing only a marginal role.
- ▶ The Vâlcea County communes on the western edge of Făgăraș combine logging with animal husbandry and incipient mountain tourism. However, without the infrastructure for capitalising on the pastoral products that exist in Sibiu, these communities face economic isolation, low wages and dependence on declining extractive sectors.
- ▶ The pastoral communes of Mărginimea Sibiului benefit from their proximity to a dynamic urban centre, which offers markets, tourism and infrastructure. A deeply rooted transhumant shepherding tradition provides the cultural foundation for the sector's survival.



Figure 3 Boișoara village in Western Făgăraș Mountains (Photo Credit: Mihai Pop).

4 FARMING CONTEXT

Farms are family-run enterprises, organised around kinship relationships that determine how seasonal tasks are shared, how flocks are inherited and how pastoral property is passed down through the generations (Constantin, 2024).

Sheep farming is the most common occupation in Mărginimea Sibiului, valued for the full range of its products: nationally renowned cheese making, traditional sheep meat dishes, as well as wool and leather processing (LDSMS, 2024). The dominant sheep breed is the *Țurcana*, which is adapted to long-distance travel and harsh climatic conditions, kept in dairy or mixed flocks. The sheepfolds in the Cindrel and Lotru Mountains have become true production centres for those seeking authentic Romanian flavours, with local dairy products being certified as traditional products (LDSMS, 2024).

Rășinari stands as the pastoral capital of Mărginimii Sibiului and is today one of only four communes in the area where classical transhumance is still practised (Săgeată et al., 2023).

In Vâlcea County, animal husbandry has long been the backbone of rural life, alongside agriculture and timber exploitation. Farms here are small and primarily subsistence-oriented, with herds typically not exceeding a few hundred heads per sheepfold, managed by local communities. The commune of Boișoara is a particularly striking example: its local community collectively manages seven mountains, with a remarkable continuity of shared ownership spanning six centuries (Voicu and Vasile, 2022).



Figure 4 A traditional sheep farm in Cindrel (Photo Credit: Mihai Pop).

Main Challenges:

- ▶ The pressure from large carnivores is a real constraint. The damage, which is caused mainly by bears and, to a lesser extent, by wolves, directly affects the profitability of cattle grazing and sheep breeding.
- ▶ Pastoral products are sold directly or through informal local markets, without certification, organised short chains, or systematic agrotourism.
- ▶ The labour crisis is the central problem facing the sector. Activity is constrained by a lack of qualified personnel, driven by an aging shepherd population, the out-migration of young people, and the weakening of the traditional mechanisms for transmitting pastoral knowledge. This is a particularly acute problem in the depopulated areas of Vâlcea.
- ▶ Progressive abandonment of less productive land increases the risk of shrub encroachment and medium-term decline in forage quality. It also brings predators closer to farms and settlements.



Figure 5 Abandoned shepherd's hut in the Cindrel Mountains (Photo Credit: Mihai Pop).

5 LOCAL CONFLICT ASSOCIATED WITH LARGE CARNIVORES

Number of attacks:

- ▶ The main conflicts between local farmers and large carnivores involve brown bears (cattle farmers) and wolves (shepherds). There have been no official reports of lynx attacks in the study area.

- ▶ Between 2023 and 2025, brown bears were involved in 87 livestock predation incidents, resulting in 108 sheep and 75 cattle killed.
- ▶ Between 2023 and 2025, wolves were involved in 33 livestock predation incidents, resulting in 503 sheep and 2 cattle killed.

Social conflict:

- ▶ In Boișoara, Câineni and Titești, the existing pressures are exacerbated by geographical isolation and weak institutional capacity. This hinders administrative intervention, complicates property documentation, and severely limits the community's capacity to absorb economic losses.
- ▶ The construction of the Sibiu-Pitesti highway has impacted the grassland areas, disrupting livestock movement, and altering movement patterns of large carnivores in an increasingly human-dominated landscape.
- ▶ Culture of distrust towards any external actors, such as NGOs, researchers and environmental inspectors, is prevalent. This is amplified by a strong pastoral identity among breeders and a long history of institutional autonomy within the community.

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