



## The trap of care: why Slovak farmers cannot do more for grassland biodiversity

### *An exploratory ethnographic study of grassland farmers' perspectives from the Slovak Carpathians*

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|                                                                                                                                                         | <p>infrastructure, devaluation of farming’s symbolic status and a self-reinforcing erosion of know-how. These mechanisms were also perceived to compound the negative effects of global markets, EU subsidies and competing interests in nature conservation, tourism and hunting.</p> <p>4. Our ‘trap of care’ metaphor summarises the core relational finding: farmers perceived their deep commitment as keeping them farming under a capture that exploited that very commitment. They responded through four strategies: downscaling to hobby farming, care compromises, shielding through political loyalty, or exiting farming. Supplementary botanical data reveal that this arrangement enabled local farming to co-produce remarkable biodiversity on individual plots, but not at the landscape level.</p> <p>5. Effective biodiversity policy must recognise this experienced structural trap—supporting grassland farmers as people deeply bound up with the lives, landscapes and communities they care for, rather than as interchangeable economic or ‘traditional’ actors. Understanding personal, relational and political dimensions of farming is essential to explaining why nature conservation succeeds or fails.</p> |
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| Figure_1.svg<br>Figure_2.svg                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## **The trap of care: why Slovak farmers cannot do more for grassland biodiversity**

*An exploratory ethnographic study of grassland farmers' perspectives from the Slovak Carpathians*

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**Abstract**

1. Semi-natural grasslands in post-socialist Europe, co-created by centuries of non-mechanised, household-based livestock farming, are among the world’s most biodiverse habitats. Despite related formal protections and subsidies, their species richness and area continue to decline. This discrepancy indicates a failure in policy and research to account for what grassland farming means to those who practise it, and for the structures that shape their choices. This study investigates farmers’ perspectives on why they struggle to sustain non-intensive livestock farming in the Slovak Carpathians.

2. Drawing on Bourdieu’s theory of practice, we conducted exploratory ethnographic fieldwork in two rural sites in Slovakia, combining management surveys, observation stays and in-depth interviews across eighteen farming households (spanning two generations) and two cooperatives. Data were analysed using directed qualitative content analysis, guided by a preliminary framework mapping likely influences on grassland biodiversity across local, regional and structural levels.

3. Farmers found their livelihoods unusually meaningful, regardless of income, as they offered engaging work, companionship with animals, embeddedness in grassland landscapes and continuity with a tradition of self-sufficiency. In their experience, several mechanisms eroded this foundational resource: capture of land and farming-support infrastructure, devaluation of farming’s symbolic status and a self-reinforcing erosion of know-how. These mechanisms were also perceived to compound the negative effects of global markets, EU subsidies and competing interests in nature conservation, tourism and hunting.

4. Our ‘trap of care’ metaphor summarises the core relational finding: farmers perceived their deep commitment as keeping them farming under a capture that exploited that very commitment. They responded through four strategies: downscaling to hobby farming, care compromises, shielding through

political loyalty, or exiting farming. Supplementary botanical data reveal that this arrangement enabled local farming to co-produce remarkable biodiversity on individual plots, but not at the landscape level.

5. Effective biodiversity policy must recognise this experienced structural trap—supporting grassland farmers as people deeply bound up with the lives, landscapes and communities they care for, rather than as interchangeable economic or ‘traditional’ actors. Understanding personal, relational and political dimensions of farming is essential to explaining why nature conservation succeeds or fails.

**Keywords:** ethnography; grassland conservation; human–nature relationships; post-peasant dynamics; post-socialist agriculture; Slovakia; species-rich grasslands; trap of care.

**1. Introduction**

**1.1 The grassland biodiversity crisis in post-socialist Europe**

Semi-natural grasslands in post-socialist Europe (PSE) are among the most species-rich habitats on Earth and have been in long-term decline (Chytrý et al., 2015). At fine spatial scales, their vascular plant species richness rivals or exceeds that of tropical rainforests (Wilson et al., 2012; Stevens et al., 2022). This extraordinary diversity was co-created and co-shaped by centuries of non-mechanised household-based livestock farming (Habel et al., 2013; Janišová et al., 2021, 2024). Since the mid-twentieth century, these meadows and pastures have suffered sustained losses in area and species richness, driven by both intensification and abandonment of grassland farming (Janišová et al., 2021, 2024; Pe'er et al., 2020).

This decline has persisted despite wide-ranging European conservation policies and agricultural support aiming at reversing it — the Habitats Directive, Natura 2000 and agri-environment schemes under the EU's Common Agricultural Policy (CAP) — indicating a mismatch between policy design and lived practice (European Court of Auditors, 2020; Pe'er et al., 2020). Slovakia, the focus of this study, reflects the pattern: its protected grassland habitats continue to decline in both extent and quality (Janišová et al., 2021).

**1.2 Policy, research and the everyday farmer: a persistent disconnect**

An important source of the policy–reality disconnect lies in how farmers are conceptualised. Dominant policy frameworks treat them as rational economic actors responding primarily to incentives and regulations (Vanclay & Lawrence, 1994; Brown et al., 2021), tending the environment as a set of priced goods for which they are paid to deliver (Fish et al., 2006). By contrast, empirical studies show that farmers' practices emerge from far more complex, interdependent economic, ecological, social and personal circumstances (Dessart et al., 2019; Brown et al., 2021; Burton, 2004b; Krzywoszynska, 2016).

An alternative framing prevalent in the literature, though similarly reductive, treats farmers as custodians of cultural heritage rather than as situated practitioners. Rooted in UNESCO-style approaches to intangible cultural heritage (UNESCO, 2003; Mannia, 2024), this perspective has been essential for documenting 'traditional', pre-modern ecological knowledge (Babai & Molnár, 2014; Janišová et al., 2021, 2024) but risks treating farmers as static bearers of tradition while overlooking the societal pressures that shape their practice (Bindi, 2022; Iuga et al., 2024).

### **1.3 Critiques converging on a relational turn**

Within environmental science, an emerging self-critical literature calls for more integrated, relational accounts of human practice (Martin et al., 2024; Pratson et al., 2023). A recent synthesis of human-action theories found the field fragmented across economistic, cognitive and cultural frames, each alone insufficient to capture the complexity of circumstances shaping 'environmental behaviour' (Eyster et al., 2022). Methodological reviews invite qualitative approaches to integrate practice, meaning and political economy (Caggiano & Weber, 2023).

Anthropology has long offered a rich toolkit for studying farmers as situated beings. Agricultural anthropology treats farmers as relational actors embedded in meaning, power and socio-ecological entanglements (Ofstehage, 2020; Veteto & Crane, 2014). Multispecies ethnography extends this by treating animals, plants, soils and landscapes as co-constitutive of human practice rather than its backdrop (Haraway, 2008; van Dooren et al., 2016). Tsing (2015) further reframes such entanglements as patchy, precarious multispecies collaborations 'in capitalist ruins', recasting marginal farming as a hopeful experiment rather than a pre-modern residue.

**1.4 The PSE gap and its emerging correctives**

In PSE, relational approaches to farming have lagged behind the region's well-developed scholarship in natural science and cultural heritage. Regarding grasslands specifically, a rich body of work has accumulated both on ecology (Habel et al., 2013; Janišová et al., 2021) and the material and symbolic aspects of 'traditional management' (Babai & Molnár, 2014). The pastoral heritage of the Carpathians has been extensively documented (Bindi, 2022; Iuga et al., 2024). For Slovakia, this is exemplified by Podolák's (1982) foundational study of folk sheep farming. Yet in-depth work on PSE farmers themselves — including their perspectives, attachments, social embeddedness and political situations — remains scarce.

The emerging relational work does indicate a more complex picture than either the economistic or the heritage framings predict. For Romania, Verdery showed how post-socialist decollectivisation produced overlapping, 'fuzzy' property claims rather than a clean return to private farming (Verdery, 1999); how formal entitlements coexist with a striking lack of real access to the land they nominally cover (Verdery, 2003); and how, as a result, rural households remain tethered to informal networks and institutional legacies inherited from state socialism (Verdery, 1996). Recent work on Romanian shepherds shows how EU regulations, market imperatives and technical devices assemble a complex 'new pastoral regime' (Papasima & Iorga, 2024). Reviews of the wider region document abundant small-scale private 'quiet sustainability' practices that deliver measurable environmental benefits but are systematically misread by Western-derived policy categories as pre-modern remnants (Smith & Jehlička, 2013; Sovová et al., 2025). For Slovakia, Kandert (2004) and Buzalka (2021, 2022) offer parallel findings, describing a durable, 'post-peasant' social divide running between collaborators and resisters to modernisation, which also continues to structure who can farm where, with whom and how.



## 1.5 Aims

Against this background, we ask how Slovak grassland farmers themselves understand what supports or hinders their mechanised, yet non-intensive, livestock farming on meadows and pastures. To translate the insights summarised above into a workable ethnographic approach, we draw on Bourdieu's (2000) theory of practice, which holds that practices emerge from the interplay of structural conditions, embodied dispositions and available resources, and that their logic can be captured through in-depth research into actors' everyday reasoning, combined with sociological analysis.

Within this framing, the study pursues two specific aims: (i) *to identify what circumstances the farmers experienced as pushing them towards or away from non-intensive livestock farming*; and (ii) *to assemble those circumstances into a structured explanatory framework that captures the farmers' accounts of where they come from and how they interact*.

The study is intended to support more effective, relational grassland conservation and restoration policy in Slovakia and, more broadly, across PSE. It deliberately foregrounds the farmers' perspectives as a critical point of departure, providing a missing input regarding biodiversity's key co-producers to other influential actors across society — from municipal and conservation authorities to policymakers. We summarise the central finding as the *trap of care*: the farmers experienced the relational attachments that drove their biodiversity-supporting farming as simultaneously exposing them to intensifying structural exploitation.

**2. Methods**

**2.1 Study context**

This paper reports on the initial phase of the social-scientific component of broader applied research investigating how the conservation and restoration of species-rich grasslands can be better supported across the Carpathians. The research combines botany, geography and anthropology to deliver integrated knowledge in three interlocking areas: the current condition of the grasslands and the care practices that sustain or erode them; the physical geography and land-use history that have shaped them; and the people, institutions and structural conditions that support or hinder favourable grassland practices (Janišová et al., 2021, 2024, 2025; Barandun et al., 2026).

The social-scientific component follows an iterative exploratory design (Caggiano & Weber, 2023): (1) develop a preliminary map of likely grassland biodiversity influencers; (2) explore those influencers ethnographically; and (3) produce an explanatory framework from the fieldwork findings. This study covers all three stages, focusing on livestock farmers, identified as the principal local-level influencers of grassland biodiversity in Slovakia (Janišová et al., 2021, 2025). Future studies are planned to extend the same approach to other influencer groups identified in this study (e.g., municipalities, farmers' associations, EU subsidy administrators and central-state clerks).

**2.2 Theoretical framework and its operationalisation**

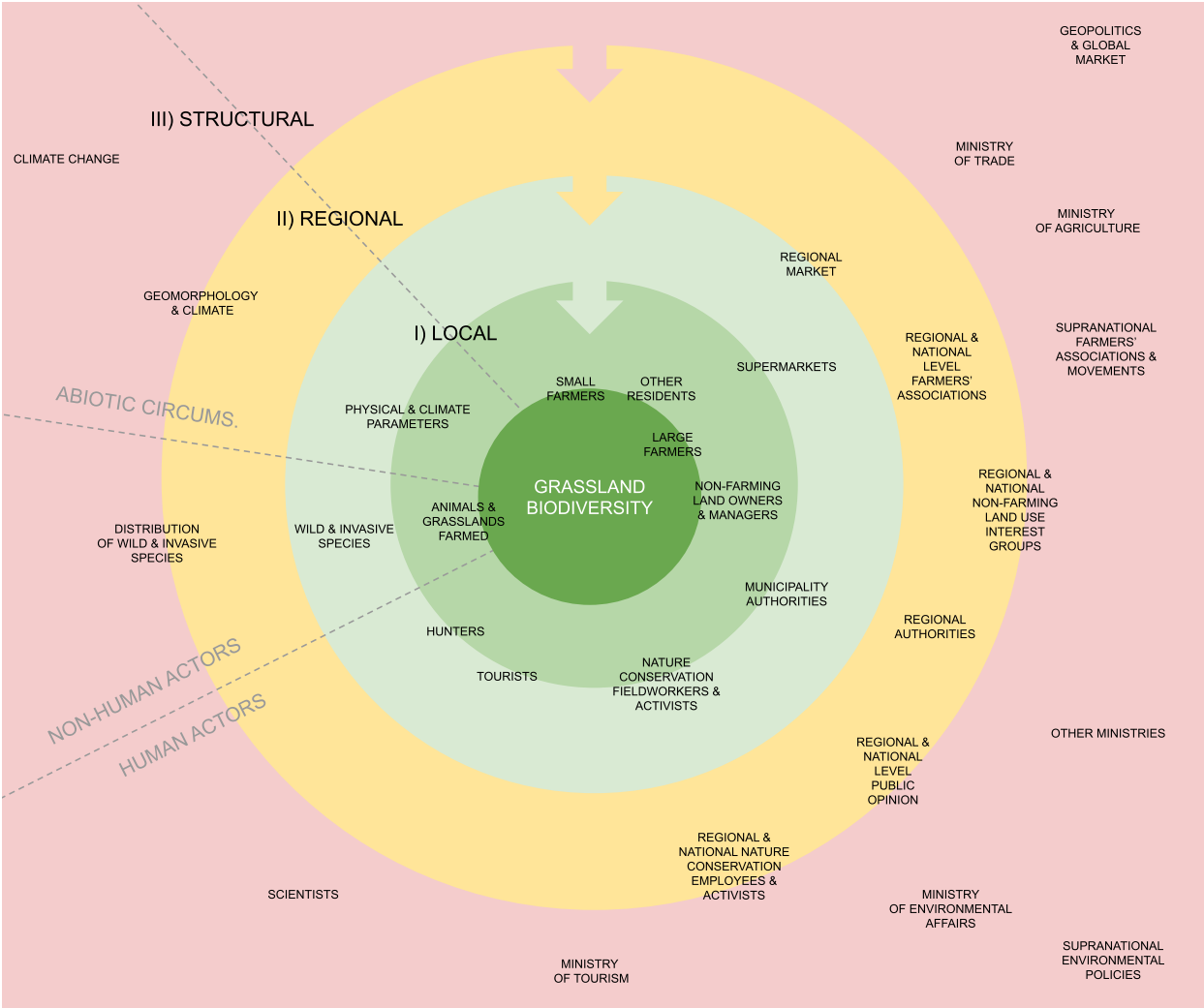
To assess the grassland farmers' perspectives, the exploratory design was operationalised in three stages:

**1. Drawing a preliminary theoretical framework** — a multi-level map of likely grassland-biodiversity influencers was built (Fig. 1) by synthesising related environmental-science and anthropological literature

(§1.4), in-depth interviews with the botanist co-authors (D.G., M.J., K.S.) and involvement in the parallel 'grassland-management' surveys conducted with the studied farmers (Janišová et al., in prep.).

**2. Carrying out the exploratory ethnographic fieldwork with farmers** — drawing on Bourdieu's (2000) practice theory and employing the standard ethnographic tools (Hammersley & Atkinson, 2019), regular stays moved from informal observations and open-ended conversations on the logic of the farmers' everyday practice to semi-structured follow-up interviews. The preliminary framework was used at this later stage to seed questions, ensuring that every theoretically relevant influencer was discussed, even where farmers had not raised it themselves (see Appendix 1 for the initial interview guide).

**3. Building the explanatory framework** — through a cycle of analysing the ethnographic data, formulating preliminary specific findings and refining them through follow-up discussions with the participating farmers, we identified the circumstances they experienced as systematically supporting or hindering their non-intensive livestock farming, as well as the sources of, and relations between these circumstances. This enabled us to approach and organise the circumstances as a system of 'social mechanisms' — configurations of actors and their activities arranged so that they regularly produce a particular effect (Hedström & Ylikoski, 2010) — forming a relational explanatory framework.



**Figure 1.** Preliminary theoretical framework: a multi-level map of influencers of grassland biodiversity, derived from environmental science and anthropology literature. Grassland biodiversity is placed at the centre, with potential influencers in concentric circles (local, regional, structural), divided into human actors, non-human actors and abiotic factors. Arrows between layers indicate the indirect influence of more distant actors through closer ones.

### 2.3 Study locations, sampling and data acquisition

Site selection followed a shared-criteria/contrasting-axes approach. Two rural mountain valleys in the Western Carpathians were selected from a pool of valleys previously mapped for grassland vegetation and for current and historical farming practices in Slovakia (Janišová et al., 2021, 2025). In both, their 20th-

century histories of high-biodiversity grassland landscapes have been shaped by the coexistence of private farmers practising non-intensive livestock farming, an agricultural cooperative established during the socialist-collectivisation period, and a proximate national park. Simultaneously, the valleys differed along the following axes theoretically relevant to farming actors (§1.4): regional affluence, remoteness from administrative centres and level of farming abandonment. The design held key farming conditions constant while exposing variation in the surrounding structural environment. Further descriptive details on the selected sites, including imagery and landscape observations, are provided in Appendix 2.

The final samples across the two study sites (A and B) and the three research stages are summarised in Table 1. We distinguished three categories of grassland farmer by farming's role in household subsistence and area of grasslands held: **mid-size holders** (19-160 ha; 35-101 animals), for whom farming has been a substantial source of household subsistence; **agricultural cooperatives** (1050-1200 ha; 2500 sheep / 777 cows), established in the 1970s socialist era and dominant grassland area holders ever since; and **hobby farmers** (below 3 ha), managing one or a few plots without relying on farming for income. Several interlocutors changed status over the research period (downscaling, exiting farming, etc.), so the final sample reflects the outcome of our sampling across the period rather than a durable farming structure. Where a category changed, we classify interlocutors by the one to which they contributed most material, using selected examples in the Results to illustrate local dynamics. Our final sample included all active mid-size holders (except one small-area intensive pasture farmer in Site A) and active cooperatives in both sites. Site A, more affluent and less remote, served as the core ethnographic site because it offered substantially more active private livestock farmers, both mid-size holders and hobby farmers.

| Stage [Timespan]                                                 | Interlocutors (disaggregated by location, role and gender) / Suppl. data sources                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Stage 1</b> — Drawing the preliminary framework [2023–2024]   | <b>3</b> senior botanists, co-authors: D.G. (♂), M.J. (♀). K.S. (♀);<br><br>Botanical ‘grassland-management’ surveys co-administered with all farming interlocutors across both sites (Janišová et al., in prep.).                                                                                                                                                                                                                                                          |
| <b>Stage 2</b> — Ethnographic fieldwork with farmers [2023–2026] | <b>Site A (core ethnographic site):</b> 15 farming households, two generations: mid-size — 3♂ + 1 married couple [1♀, 1♂]; hobby — 11♂. 1 active cooperative: 1 manager♀ + 1 staff♂; 1 mayor (♀)<br><br><b>Site B:</b> 3 farming households: 2 hobby ♂; 1 mid-size, 2-generations farming family [1♀, 2♂]. 1 active cooperative: 2 managers♀ + 1 manager♂ + 2 staff♀; 2 mayors (♂)<br><br><b>Combined: 18 farming households (2 generations), 2 cooperatives, 3 mayors.</b> |
| <b>Stage 3</b> — Building the explanatory framework [2026]       | Cycles of analyses and informal discussions of preliminary hypotheses with the farmers; closing group discussion in Site A, presenting pre-final findings back to the local public and interlocutors from Stage 2 in a closing discussion (all mid-size holders from Stage 2; 10 additional general-public participants) [March 2026]                                                                                                                                       |

**Table 1.** Sampling plan as realised, organised by the three research stages (§2.2). Two active cooperatives and 18 farming households across the two study locations participated in Stages 1 and 2; Stage 3 engaged a subset of these. Fieldwork unfolded between February 2023 and March 2026, with regular stays at each location, focused on mid-size holders and timed to the agricultural calendar. Peak-season visits centred on observing work; off-season visits enabled longer, in-depth surveys and conversations, extending to additional informal discussions with other local actors, including mayors. All conversations were in Slovak; semi-structured follow-up interviews with farmers were audio-recorded and transcribed verbatim. At both sites, our rapport with cooperatives was poorer than with other farmers, and both cooperatives declined audio

recording. Botanist co-authors cross-checked interlocutors' ecological claims against the parallel survey and geographical data, resolving discrepancies in follow-up interviews. The final data corpus comprised fieldwork diaries (written records of informal observations and conversations), audio-recorded semi-structured interviews ( $\approx 17$  hours across 13 sessions) and extensive supplementary materials (e.g. photographs, historical satellite imagery, parallel botanical survey data — see Appendix 2).

## 2.4 Analytical procedure and reporting

The ethnographic data corpus was stored and analysed by A.B. in MAXQDA (VERBI Software, Berlin, Germany) using *directed qualitative content analysis* (Hsieh & Shannon, 2005). Cycles of analysis focused on identifying the everyday circumstances experienced by the farmers as supporting or hindering non-intensive livestock farming on meadows and pastures — as this type of farming has historically been a key contributor to local grassland biodiversity (§1) — and the sources and mutual relationships among these circumstances. In the initial pass, seed codes were derived from the nodes of the preliminary framework (Fig. 1), with unanticipated material flagged inductively. Moves from codes to higher-order categories proceeded abductively, with candidates tested against the full corpus. Indicative claims regarding biodiversity outcomes rest on the consortium's parallel botanical research (Appendix 2).

The Results that follow are organised by the study's two declared aims (§1.5). Section 3.1 focuses on the everyday circumstances experienced by interlocutors as supporting, hindering or ambivalent to local non-intensive livestock farming. Section 3.2 assembles those circumstances into social mechanisms within a relational explanatory framework that reflects the interlocutors' meta-accounts. Broader social-scientific relevance and limitations are tentatively assessed in the Discussion (§4). The analyses did not identify substantial discrepancies in the perspectives of the interlocutors regarding the explanations presented. Variation was nonetheless present and is noted where relevant: attachments ran along gendered lines

(§3.1.1); newcomers without inherited tradition reasoned differently from those born to farming; and views on the subsidy system ranged from outright rejection to reliance. What interlocutors shared was the core structural reading, not a uniform stance on every issue.

**2.5 Positionality and reflexivity**

A.B., the principal ethnographer, is a Slovak male social anthropologist of urban origin with long-term ethnographic experience in the Slovak countryside (Belák et al., 2024). His background in biology lent him credibility with farmer-naturalists and eased exchange with the botanist co-authors. K.S., a Slovak female senior botanist of mixed urban–rural background and A.B.'s life partner, joined most of the fieldwork. Working as a researcher couple greatly eased rapport with farming households, though we monitored interpretive convergence throughout the analysis. Where our readings diverged, we treated the divergence as data and resolved it against the transcripts. D.G. and M.J., senior Slovak vegetation ecologists with urban–rural backgrounds, conducted parallel botanical surveys at both study locations. Drawing on local contacts, they engaged most closely with the Site A cooperative representatives, who considered participation in a biodiversity-focused study risky. The protectiveness appeared to centre on in-depth scrutiny of farming quality, perceived as threatening the cooperative employees' livelihoods. As a non-farmer social scientist sympathetic to structural accounts of exploitation, A.B. may have been inclined to encourage participants to articulate rather than naturalise such difficulties. This was checked by two features: critical input from the botanist co-authors, who brought a distinct epistemological lens, and iterative engagement with the farmers. The unexpected salience of findings on local farming resources (§3.1.1) and the unequivocal agreement with the final explanatory framework in the closing public discussion (Table 1) suggest that this inclination did not misrepresent the perspectives studied.



## **2.6 Ethics, consent and data protection**

The study was conducted in accordance with the Declaration of Helsinki and the ethical guidelines of the European Association of Social Anthropologists (EASA), of which A.B. is a member. No formal institutional ethics review was required under the SAS Plant Science and Biodiversity Centre's procedures governing the project. All participants provided written informed consent, covering research aims, voluntary participation and the right to withdraw. Participants are referred to by pseudonyms. While the geographical identity of the two study sites may be inferred from the included imagery, the personal identities of all farmers remain obscured; all individuals shown in the photographs in Appendix 2 have consented to publication.

## **3. Results**

### **3.1 What was experienced as supporting or hindering non-intensive farming with livestock**

Our analysis identified circumstances experienced by the farming interlocutors as supporting, hindering or ambivalent towards their mechanised but non-intensive livestock farming. Table 2 provides an overview of the circumstances, explains how each influenced the farmers involved, and indicates the likely direction of its effect(s) on plant biodiversity, based on related ecological knowledge (Janišová et al., 2021, 2025). The first three subsections of the Results unpack and illustrate these circumstances (§3.1.1–3). Two further subsections introduce the farmers' adaptation strategies and the historical formation of the current state as themes that lie beyond the focus of our analysis but help explain its findings (§3.1.4–5).

| Circumstance [Effects]                                                                                                                                                                                 | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><i>Supporting circumstance (§3.1.1) — The farmers experienced non-intensive livestock farming as an unusually meaningful sustenance, in stark contrast to available wage work alternatives.</i></b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Farming practices [+]                                                                                                                                                                                  | <p>Key aspects of the farming practice considered unusually rewarding:</p> <p><i>Captivating work</i> - Adventurous, requires varied, rich skills and increases personal freedom.</p> <p><i>Companionship with animals</i> - Enables close, personal bonds with the animals, offering a high emotional return</p> <p><i>Attachment to local landscape</i> - Fosters aesthetic and moral attachment to local meadows, pastures and the wider landscape</p> <p><i>Continuing a self-sufficiency tradition</i> - Meets a moral obligation to keep the village more independent, understood as a community-level analogue of personal freedom.</p> |
| <b><i>Hindering circumstances (§3.1.2) — In the farmers' experience, several mechanisms eroded the non-intensive livestock farming and personal bonds that supported it.</i></b>                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Capture of land and farming support [-]                                                                                                                                                                | The institutions and infrastructure designed to underpin livestock farming experienced as increasingly missing or even working against it                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Devalued symbolic status of smallholder farming [-]                                                                                                                                                    | The prestige of household-based livestock farming widely perceived as low and further declining, feeding farmers' growing conflicts and isolation within the community                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| Circumstance [Effects]                                                                                                                                                                                     | Explanation                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vicious circle of residual farming know-how erosion [-]                                                                                                                                                    | With experienced farmers already scarce and steadily leaving, apprenticeship-style skill transmission considered as broken and feeding back into still more farming exits.                                                                                                                   |
| <b><i>Ambivalent circumstances (§3.1.3) — In the farmers' experience, several mechanisms both supported and hindered non-intensive livestock farming simultaneously, with a gross negative effect.</i></b> |                                                                                                                                                                                                                                                                                              |
| Global market [+/-]                                                                                                                                                                                        | The market viewed as providing outlets that kept some livestock farming possible, but too unstable, and exposing farmers to competition that undermined their local value.                                                                                                                   |
| EU subsidy system implementation [+/-]                                                                                                                                                                     | The EU subsidies acknowledged as indispensable for most farmers, yet their implementation as increasingly bordering on bullying and supporting the capture of land and infrastructure by favouring area over quality.                                                                        |
| Competing landscape interests — nature conservation, tourism and hunting [+/-]                                                                                                                             | Nature conservation, tourism and hunting all seen as benefiting from the local biodiverse landscape and providing some (small, indirect) support for the farmers who maintained the landscape's character, while each also imposing claims that significantly narrowed the room for farming. |

**Table 2.** Summary of the circumstances experienced as affecting non-intensive livestock farming in our sites (§3.1.1–3.1.3). The +, - and +/- signs indicate likely positive, negative or ambivalent effects of the circumstances on grassland plant biodiversity, based on related ecological knowledge (Janišová et al., 2021, 2025).

271 **3.1.1 Supporting circumstance: Farming experienced as an unusually meaningful sustenance**

272 When reflecting on what motivated them to continue non-intensive livestock farming, our farming  
273 interlocutors (incl. cooperative representatives) consistently described their farming lives as worth  
274 defending despite a multitude of related hardships. None pointed to income. Rather, they typically framed  
275 the nature of the farming work as intrinsically rewarding, in direct contrast to the nature of (other) wage-  
276 labour alternatives available to them. Four positive aspects were salient.

277 ***A captivating work: 'For the fun, the beauty and the joy of it!'***

278 What made farming life defensible was, first, its sheer *adventurousness*. Conditions never repeated, and  
279 doing the work well required improvisation rather than routine. Animals had distinct personalities,  
280 meadows yielded different herbs each year, and the weather kept shifting. '*Everything is always in flux —*  
281 *that's what makes the work interesting,*' as Mr Čerňanský (54, mid-size, Site A) put it. This stood in sharp  
282 contrast to wage labour. Mr Pospíš (49, mid-size, A), who had spent years at a paper factory, recalled how  
283 four shifts a month had left him '*like crazy*' and economically barely better off, with none of the on-the-  
284 job autonomy, framed as *personal freedom*, that farming offered. Most farmers kept returning to one  
285 phrase — '*master of oneself*'. Mr Ivan (73, hobby, A), now reduced to hobby farming by age-related health  
286 problems, summed it up when his niece asked why he keeps farming despite earning no income from it:  
287 '*Why, why, why?! For the fun, the beauty and the joy of it!*'

288 ***Companionship with animals: 'Give me three goats, and I'll move to Mars!'***

289 The closeness of animals, one of *mutual recognition*, extended the intrinsic pleasures. Mr Bohdan Sr (62,  
290 mid-size, B) put it most directly: '*The livestock — that is what I know, that is what I am.*' Mr Ivan, at 73 and  
291 with limited mobility, kept a ram on his land for what he called '*the feeling, wonderful*' of having an animal  
292 that knew him; the bond was mutual, giving back '*something the city people can't understand*'. For Mr

293 Pavlík (55, mid-size, A), this bond was inseparable from skill itself: he had grown up working his father's  
294 flock at the cooperative sheep summer-station (*salaš*) from early childhood, and animal closeness was  
295 *'simply part of how one learned'*. Mrs Pospíšová (44, mid-size, A) felt their cattle were *'like family'*. Mr  
296 Čerňanský described the underlying texture: *'There is an enormous amount of good energy there. ... You*  
297 *sit down somewhere, and suddenly three or four animals lie down beside you. They look around with you*  
298 *— something is happening there, something that you can't fake.'* He captured how completely it could fill  
299 in for almost anything else: *'Do you want me to move to Mars? Give me three goats, and there I go!'*

300 ***Attachment to grassland and landscapes: 'Meadow overgrowth breaks my heart.'***

301 Distinct from, but closely tied to, animal companionship was the farmers' attachment to the meadows  
302 and pastures themselves. A gendered pattern emerged: male farmers more often expressed bonds  
303 through animals, while women expressed them through plants and meadows. In Mrs Pospíšová's words:  
304 *'The cows don't get me as much — I love the herbs.'* The meadows' ecological complexity fascinated  
305 everyone and, in Mr Čerňanský's words, translated into care practices *'respectful of the wider web of life'*.  
306 He timed his mowing not by the calendar but by whether insects were still feeding: *'I always went to look*  
307 *at the meadow, and when I saw a mass of insects, I stopped — because they were feeding. When it began*  
308 *to quiet down and stopped being interesting [for the insects], I said: Now, let's mow.'* Mrs Pospíšová's  
309 reaction to overgrowth conveyed not mere aesthetic displeasure but grief close to solastalgia, the distress  
310 of watching one's home environment change: *'When I see that meadows are overgrowing, it breaks my*  
311 *heart. I wish I had some laser that could cut all the scrubs out in an instant.'* Similar recollections inscribed  
312 the landscape with family history and infused the abandonment of grassland with personal disloyalty. Mr  
313 Bohdan Jr. recalled his father taking him on a four-hour walk to a forest clearing: *'Dad tells me, we used*  
314 *to mow here. Uncle Dušan was still in nappies, and they rocked him here. ... These places have long been*  
315 *eaten by forest. ... Soon, we will be collecting wild berries from our windows!'*

***Continuing a self-sufficiency tradition: ‘Before, unmown land meant shame!’***

The fourth aspect was the sense of *pride and dignity* from continuing a long tradition of *self-sufficient double standing*: internal interdependence among neighbours and external independence from outsiders for basic food and care. The community once held land care, organised around non-intensive farming, as the shared material basis of local life, central to subsistence, identity and standing, with neighbours informally policing each other's efforts. Mr Ivan captured it thus: *'Before collectivisation, not to mow a furrow at a metre's width was a public shame, a mockery!'* The gains intrinsic in the tradition were framed by the interlocutors as a community-level analogue of the personal on-the-job freedom described above. Read against today's arrangements, in Mr Pavlík's words, the community-scale logic that once made local self-sufficiency feasible has been lost: *'Nowadays, most people depend on jobs and supermarkets instead.'*

**Ethnographic Vignette 1 — Adopting the farming way of life**

An appreciation of farming life's advantages did not always coalesce within an inherited trajectory. The Pospíš family was a younger-generation couple with two children who had entered farming in their late 20s with no inherited tradition. What had pulled Mr Pospíš in was exhaustion from debilitating factory work. The opportunity had come when Mrs Pospíšová's elderly relatives, facing administrative threats over unfulfilled subsidy obligations, gave up their land. The couple took it on, started from scratch with three young heifers and a Communist-era animal-breeding manual borrowed from the local library, and immediately broke local norms by leaving cattle outdoors in the snow (a neighbour reported them for animal cruelty). Through years of stubborn trial and error, discouragement from family and neighbours, and economic precariousness, they had slowly built what was now generally viewed as a growing, respected farm.

337 Asked whether he regretted the decades of hardship, Mr Pospíš answered without hesitation: *‘Not*  
 338 *at all. Now, I decide everything myself. Nobody orders me anything. I depend on myself, and I*  
 339 *answer to myself. I get up in the morning when I want; I finish in the evening when I want.’*

340 Strikingly, by his own account, the deep bonds with animals and meadows or the sense of  
 341 continuing a meaningful tradition were not among Mr Pospíš’s original motivators. He entered the  
 342 field with a vision of financial independence. Appreciation of the other aspects grew only along the  
 343 way, once installed in the farming life: a working partnership with a herd Mrs Pospíšová could call  
 344 *‘family’*, a slowly built capacity to read the surrounding landscape, and, more deliberately, an  
 345 archival and walking project through which he spent years going through parish registers until he  
 346 could read the landscape as a record of past life. *‘I see those ancestors everywhere — across these*  
 347 *mountains, where they normally were. I can see how they lived. And I know where those people did*  
 348 *what. I can’t even imagine it any other way.’*

349 The Pospíš case is instructive because it shows that all the positive aspects of non-intensive farming  
 350 were available beyond inherited lineage: they could be assembled over time by farmers who sought  
 351 to reclaim a historic agrarian landscape and the social standing once attached to it.

### 352 **3.1.2 Circumstances experienced as hindering**

353 From the farmers’ experience, three interconnected factors emerged as actively hindering non-intensive  
 354 livestock farming, on which the species-rich grasslands in our sites depended.

#### 355 ***Capture of land and farming support: ‘The best qualification for farming? Law degree!’***

356 By farmers’ accounts, the institutions and infrastructure designed to underpin non-intensive livestock  
 357 farming were now increasingly either missing or captured — systematically working against it. The state’s  
 358 withdrawal from the rural economy had stripped local processing, including slaughterhouses, dairies,

wool-rendering plants and veterinary services. Land tenure, subsidy procedures, export licensing and machinery supply had largely been seized by large, often absentee agri- and other businesses whose interests ran counter to the tending of grassland with livestock. Together, this was perceived as leaving an environment hostile to attentive care on three fronts: material (land and machinery out of reach), procedural (paperwork that obstructed more than it guided) and infrastructural (nowhere left to process or sell). Summed up in an inspector's remark to Mr Čerňanský during a routine subsidy check: *'I'm amazed you want cattle. Nobody wants cattle anymore. Everyone just wants crop payments.'*

Land itself was viewed as a key locus where the hollowing-out and the capture converged rather illustratively. The best plots, the productive pastures near the villages, had long been leased to the cooperatives, a legacy of socialism, when they alone could farm. With land owners accustomed to drawing almost nothing from their plots, ownership restituted after 1989 in extreme, inheritance-driven fragmentation, and the state withdrawn from meaningful stewardship, what remained was easy to take. *'The cooperatives won't give land to anyone,'* said Mr Ivan, *'if they gave it up, they'd lose subsidies.'* Further out, larger, sometimes nominal agribusinesses moved in from the 1990s onward, chasing area payments, outbidding smallholders, and/or exploiting a 'deemed-delivery' clause of the lease law, which allowed them to secure plots without owners' consent. Newcomers experienced the worst of the squeeze: the Pospíš household, assembling grassland for farming from over fifty owners, felt watching *'bigger players buying up at scale and the state land fund officials serving only the chosen few.'* Mr Bohdan Jr described the underlying rules as *'written so complicatedly that a few groups of lawyers run farming and keep small farmers out',* concluding: *'The best qualification for farming? Law degree!'*

***Devalued symbolic status of smallholder farming: 'Nowadays, I have to hide the herd not to offend.'***

In our interlocutors' experience, the wider society, including most of the local rural population, no longer regarded household-based livestock farming as a respected livelihood. Locals and the media alike were



perceived as treating mid-size farmers and their animals as backward, unreasonable, smelly and *'feasting on subsidies'*. This baseline of *mockery and suspicion*, rather than moral support in the community and beyond, bred conflict, isolation and an atmosphere of hostility. Mr Čerňanský traced it to *'recurring waves of anti-farmer media and political commentary'*. Mr Pospiš kept returning to how difficult transhumance had become in Site A: *'In the old days, moving the herd was a festive event for the whole village. Today, we get up at three to move it along the main road before we block traffic, and people complain about cow shit on the road. Last year, a cooperative worker used his tractor to push one of my cows off the road!'*

Moreover, the resentment was felt as unfairly selective: mid-size farmers were branded subsidy parasites despite typically operating at close to zero profit and doing the most hands-on work, while larger operators, including cooperatives, escaped the same scrutiny. Towards the cooperatives, however, the milder public attitude was perceived as resting less on respect for their farming than on their history as local employers and on people's detachment from the land. Mr Pavlík summed it up, as our own observations confirmed: *'Nobody here buys their cheese. Ask around — everyone says the same: it smells bad. ... But at the common-land assembly, people stay quiet because the chairwoman has spoken, and no one contradicts her. Even though they get zilch in return, everyone believes that without her, the cooperative would be long gone — the sheep and the jobs with it. And they are probably right.'*

***Vicious circle of residual know-how erosion: 'They mess up the kids' heads in the schools!'***

According to our interlocutors, the embodied competence required by livestock farming was once shared across an entire community, until the socialist era thinned it to the brink of disappearance. The oldest generation had typically farmed most of their lives; most of the middle generation retained only childhood memories of working alongside them; the youngest had almost no one left to learn from directly. From this depleted base, the competence was now being lost at a rate that fed itself. With each new exit, the apprentice-like collaborative work that once gave the young 'the feel' could no longer be recreated, with

fewer animals kept, fewer mowings to watch and fewer cross-household exchanges. The void was filled by frustrating improvisation from scratch, which deterred newcomers and drove still more exits. Summed up in a pun by Mr Čerňanský: *'self-teaching how to care for a single goat would take 130 years'*.

Meanwhile, children growing up in farming households were viewed as pushed by the dominant economy and pulled by the dominant culture ever further towards wage labour in the cities or abroad. Mrs Pospíšová captured the bind thus: *'He gets angry that the children don't want it, but they've been with us since childhood ... now they dream about Germany, and the cities.'* The institutions that might have carried farming forward were perceived as incapable: with the competence learned hands-on, the agricultural schools could hardly step in, and the public schooling local children received no longer encouraged farming. Mr Pospíš was blunt: *'Nowadays, they mess up the kids' heads even in the schools!'* Mr Ivan concurred, recalling how local teachers once walked children past mown fields to admire the work — *'This is beautifully mown, this is how it should be. ... Today they don't teach the children anything of that.'*

### **3.1.3 Circumstances experienced as ambivalent**

Three circumstances were viewed as at once indispensable and harmful to non-intensive livestock farming: the global market, the EU subsidy system and competing claims on the landscape from nature conservation, tourism and hunting. Each of them was perceived as both supporting and undercutting the farming, often by also working through the supporting and hindering circumstances already described above (§3.1.1–3.1.2). In the farmers' experience, negative effects prevailed.

#### ***The global market: 'Like weather but worse.'***

On balance, the global market was seen as opening one narrow door while pulling farmers away from their ideal of attentive, locally consumed farming. After the post-socialist transformation had swept away local processors and shops, a foreign trader turning up to buy cattle for export represented the difference

between farming and giving up, especially for the mid-size farmers. But this lifeline kept their work alive only as a commodity feeder: the animals left as raw export rather than local food, and the value of the farming, economic and cultural alike, drained out of the place that produced it. It was also experienced as tying farmers to volatile forces no one local could steer: the market lurched with global geopolitics, wars, sanctions, currency and commodity swings, *'like weather but worse'*, in Mrs Pospíšová's words.

The pressure was felt from both ends. Upstream, export corridors were centrally licensed and rationed to particular destinations, so when one closed, there was nowhere to redirect the cattle, and whoever held the scarce licences took most of the margin. Downstream, the home market was dominated by retail chains, which stocked the shelves with cheap, often imported produce and held the farm-gate price on the floor. Even getting in meant going round to the chains, as Mr Pospíš put it, *'begging the bastards to take something off me'*, and even then they sold as price-takers, on others' terms. As a result, most mid-size farmers kept exporting produce and propping up the farm with outside work, such as construction and ski-piste maintenance, while aiming, as Mr Čerňanský put it, for *'farmers' magic number called zero'*.

***The EU subsidy system implementation: 'I wish subsidies were cancelled, for everyone.'***

The EU subsidy system, too, was experienced as ambivalent: as keeping many operations alive while rewarding the destruction of the quality farming it nominally supported. In a heavily subsidised European market, farmers felt they could not stay in business without it, as area payments were usually what turned a year's work into the 'magic zero' or a slim surplus. Yet the system's *implementation* was also experienced as bordering on bullying: the national paying agency that delivered it offered little guidance and *much policing*, in the form of absurd, shifting rules, paperwork, inspections and fees. Moreover, as it *paid for the area held*, not for ecological value or the produce, it was viewed as rewarding the held area despite insufficient care. Landholders were seen to profit from ground they did not actually farm: with no grazing

449 or produce feeding required, large holders could draw big payments simply by doing the bare minimum  
450 (too low-intensity grazing or mowing, mulching, leaving hay behind), all the while harming biodiversity.

451 Mr Pavlík's predicament showed why the setup was also viewed as feeding land capture. He had asked  
452 the cooperative for 24 ha of its peripheral grassland in exchange for 24 ha near the village that his family  
453 had leased to it. The cooperative agreed to release only 17 ha, claiming that only that much of the Pavlíks'  
454 land was still eligible for the area payment, while the rest was now scrub. Mr Pavlík was furious: *'But this*  
455 *happened through their neglect! Chasing the area payments, they keep taking on more land than they can*  
456 *tend!'* Such loopholes bred such deep distrust that several farmers wished the whole subsidy system were  
457 gone. Mr Čerňanský wanted no part of it: *'I don't want to rely on any subsidies, on anyone ... I need a little*  
458 *bee that takes care of itself.'* Mr Pospíš put it from the other side, *'Subsidies are an instrument of blackmail.*  
459 *It would all work differently if nobody took them and everyone lived from what they produce. ... 'I wish*  
460 *they were cancelled, but for everyone. That would bring fairer competition based on product quality.'*

461 ***Competing landscape interests – conservation, tourism and hunting: 'Cows too heavy for the biotope.'***

462 Nature conservation, tourism and hunting were all viewed as relying on open, biodiverse grasslands  
463 maintained by non-intensive farming, while providing farmers with at best questionable returns. Formally,  
464 conservation frameworks recognised traditionally managed grasslands and tied some payments to them.  
465 In theory, tourism might have brought extra income to the wider community. In declarations, hunting put  
466 some checks on predator and game numbers. Yet, in the farmers' everyday experience, each mainly  
467 pressed competing claims that significantly narrowed the room for farming. Conservation arrived in the  
468 form of restrictions and sanctions that pushed farming out and *'allowed the forest to take the meadows*  
469 *back'*. Tourism brought crowds of hill hikers, leaving behind mostly full waste bins and agitated stock.  
470 Hunters, for their part, did too little to keep the predators and game out and also disturbed pasturing. The

471 farmers felt the total balance grossly negative, with the same paradox cutting across all three: everyone  
 472 wanted the grasslands, but no one paid enough, in money, respect or labour, for the work that kept them.  
 473 Conservation was viewed as the most adverse of the three. Perhaps the sharpest blow was Mr Čerňanský's  
 474 loss of his grazing lease, and his exit from farming, after a national-park expert judged his cows *'too heavy*  
 475 *for the biotope'* – a hardy breed he had brought in to give his herd a chance against the protected  
 476 predators. Indeed, nature conservation was perceived as the key culprit in the *increasing farming–wildlife*  
 477 *conflicts*. Bears and wolves tore into the flocks ever more often as the forest crawled closer to the village,  
 478 while farmers themselves had ever less sanctioned means to defend their animals. Tourists, by contrast,  
 479 were free to roam where the cattle were barred, scattering the herds by day and night, pitching camp at  
 480 the water troughs, etc. When Mr Pavlík set guard dogs among the sheep to protect them from predators,  
 481 walkers called the police on him. For most farmers, strict nature conservation and mass tourism blended  
 482 into a creeping new *'city-people arrogance'*. Mr Pospíš summed it up: *'They are basically stealing the local*  
 483 *landscape from those who made it, on behalf of bored urbanites fantasising about wilderness.'*

#### 484 **Ethnographic Vignette 2 — From frustration to mistrust to conspiracies**

485 A recurring pattern across many interviews was that hindrances experienced as absurd did not stay  
 486 within their administrative bounds. Over time, frustrations compounded into systemic mistrust of  
 487 the institutions themselves and, eventually, into doubting whether their purposes were genuine.

488 For the Pospíš family, market frustration began as a practical question (where to sell beef?) and  
 489 ended as a structural one. Local processing was gone, supermarkets sold cheaper imported meat,  
 490 and the only reliable buyer was a single trader exporting live cattle abroad at prices and under  
 491 licences set far above the farm gate. Mr Pospíš concluded bluntly: *'It is so because the conditions*

492 *are set up that way, so that real animal husbandry will be liquidated.*' Mrs Pospíšová concurred: *'It*  
493 *didn't happen by chance. It didn't fall from the apple tree — someone deliberately ran it this way.'*

494 The same arc repeated with subsidies. Each year brought new minimum stocking thresholds,  
495 shifting mowing dates and paperwork that seemed designed less to support farming than to  
496 obstruct it. When the ecological-scheme threshold was lowered from 0.5 to 0.25 livestock units per  
497 hectare, Mrs Pospíšová read this not as a technical adjustment but as confirmation: *'It is globally*  
498 *directed — so that as little real farming as possible takes place.'* Taken individually, the absurdities  
499 looked like ordinary bureaucratic dysfunction; taken together, they read as a system.

500 Conservation supplied another layer. What the Pospíšes called *'new, awkward solutions'*, such as  
501 bear-intervention teams, no-touch zones or narrowing windows for mowing, were read as further  
502 evidence that the local landscape was being managed for someone else's idea of nature, while the  
503 people who had kept it thriving were being pushed out of decisions about it.

504 Across these layers, what had begun as frustration with specific, often individually absurd negative  
505 effects had hardened into a coherent emic reading: market, subsidies, conservation and tourism  
506 were experienced as connected instruments for the elimination of an older agricultural autonomy  
507 that the rural population had once enjoyed — in Mr Pospíš's invocation of *Slovanstvo*, a Slavic  
508 village self-sufficiency held against an externally imposed state.

509 In some passages, this reading shaded into more conspiratorial framings whose specific targets fell  
510 well outside the scope of structural analysis. What the vignette shows instead is the structural  
511 pathway: under sustained absurdity in these ambivalent circumstances, frustration gave way to  
512 mistrust, which in turn fed a broader worldview postulating hidden, vile and powerful organisers.  
513 Read out of context, such material risks reinforcing the very 'backward peasant' image our analysis

rejects. Our point is the opposite: rather than as evidence of rural credulity, we emphasise these framings as an intelligible response to sustained experience of structural absurdity.

#### **3.1.4 Farmers' adaptation strategies**

Beyond the focused analysis, our data revealed how farming households and cooperatives responded to farming conditions. We identified four distinct adaptation strategies, which we now briefly introduce, explaining what each consisted in, why and which farming actors across our sites embraced it most.

##### ***Strategy A — Downscaling to hobby farming***

The strategy meant continuing non-intensive livestock farming to one's own quality standards, but scaling it down: it brought little or no household income and was run with only a few animals on a small area, often to the disapproval of close relatives and neighbours. Farmers did so because, for them, the work remained the most meaningful way of life available. As Mr Matušek put it, '*I just couldn't live otherwise. I will keep the animals until the end.*' Across both locations, it was the most common among former mid-size holders with deep embodied competence and strong personal bonds, whom the cumulative weight of the experienced hindrances, or simply age, had reduced from full-time to hobby farming.

##### ***Strategy B — Care quality compromises***

The strategy meant countering the experienced hindrances by bending farmers' own preferences (e. g., for local production and consumption, dignified dealings with animals and officials, peaceful village life, personal safety). These compromises ran across three registers. *On the market side*, several farmers established export channels with foreign traders after local outlets had gone, despite preferring local buyers. Mr Pospiš, for instance, sold his beef to the Near East, calling it '*a necessary evil*'. Towards the institutions viewed as captured, the farmers relied first on *evasion*: tailoring paperwork to whatever officials would currently wave through, '*playing dumb*' when it mattered and working through informal

536 go-betweens. And when evasion ran out, they turned to *open confrontation* with whoever, in their view,  
537 embodied the trap locally — from clerks and park officials to hostile neighbours and intruding hikers. All  
538 farmers kept returning to stand-offs of the '*Tell it to the cows yourself!*' kind. Farmers ran such risks to  
539 keep their farming going at almost any price. Mr Pospiš, for one, had deliberately built a reputation of '*a*  
540 *crazy person*': '*Even the hunters are afraid of me ... they know that if I ever found out [who stole his bales],*  
541 *that person would disappear. I am afraid even of myself in this.*' His wife weighed the cost: '*Sure. But if we*  
542 *take this too far, our barn might burst into flames one night.*' The strategy was mainly adopted by younger,  
543 economically successful mid-size farmers, but cooperative officials also admitted to resorting to evasion.

#### 544 ***Strategy C — Shielding through political loyalty***

545 The strategy meant shielding against hindrances through loyalty to socialist-era political successor  
546 networks: provisional protection from market and regulatory pressure (help with subsidies, infrastructure  
547 and sales channels) was bartered for informal political services, such as political promotion. Through such  
548 barter, the pressures of the global market, the implementation of EU subsidies and the competing  
549 landscape interests could be repositioned far more advantageously. It naturally worked best for the  
550 cooperatives, which, unlike most mid-size holders, had inherited such ties directly. Mr Bohdan Jr described  
551 one stark variant: a state forest enterprise had run a former cooperative at a loss for decades, persisting  
552 '*because it controlled local employment and, with it, municipal election votes*'. Cooperatives' staff did not  
553 deny such shielding and defended it as a reasonable response to the harsh structural conditions.

#### 554 ***Strategy D — Exit from farming***

555 The strategy was to stop farming altogether. It typically occurred either when succession had finally  
556 collapsed or when a final catastrophic event (a major predator attack, a denied subsidy, a withdrawn lease



or one confrontation too many) tipped a long-deteriorating balance. Thus far, it has mostly concerned mid-size families, but the cooperatives' representatives have also felt '*on the edge, constantly*'.

### **Ethnographic Vignette 3 — Rivals who close ranks**

The four farmer adaptation strategies described in 3.1.4 are idealised types; in practice, actors mixed them. Care compromises (B) were mostly with mid-size farmers, and political shielding (C) was mostly with cooperatives, yet the two camps continued to experiment with combinations, including side-by-side.

This also held for the Pospíš household and the local cooperative, whose dealings often ran hot. They commonly traded accusations over varied boundaries crossed, and Mr Pospíš could call the cooperative chairwoman '*a proper witch*'. Yet the same household also leaned on her. When an outside party moved to grab their leased land, Mr Pospíš recalled, it was the chairwoman who walked him from room to room through the Ministry of Agriculture in Bratislava, where '*everyone knew her*'. She could grovel before officials in a way the proud mid-size farmer could not, as he admitted: '*She can completely abase herself before them. I couldn't do that.*'

In the actors' accounts, such collaborations rested on two bonds that outranked the daily friction. As fellow farmers, the rivals also regularly swapped know-how and propped one another up through catastrophes, as when the household bought replacement calves from the cooperative after a catastrophe struck its own herd. And as fellow locals, they closed ranks against outside power. '*We advise each other, we help each other,*' Mr Pospíš explained, '*and when they attacked us from outside, we banded together.*' Mixing the strategies was thus less a calculated tactic than an expression of the local ethic itself: rivalrous within the village, opportunistically united against the structures beyond it.

**3.1.5 Historical roots of the present situation — the dilemmas and consequences of modernisation**

Beyond the focused analysis, our material showed that farmers understood their current conditions as largely rooted in the country’s history. In their accounts, the supporting resource appeared as a residue of an older Carpathian agrarian culture of self-sufficiency, mutual obligation between neighbours and informal community control over land. By contrast, they saw most present hindrances to non-intensive livestock farming as stemming from two waves of externally imposed modernisation: socialist collectivisation from the 1950s, and post-1989 capitalism increasingly governed by EU rules. Tellingly, the farmers did not describe the waves as one-sided impositions: they were experienced as genuine dilemmas, bringing gains alongside losses. Table 3 summarises the waves and their current impacts as felt.

| Wave                                                                   | Headline content                                                                                                                                                                                                                                                 | Positive consequences                                                                                                                                                                               | Negative consequences                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Wave 1 —</b><br>State-socialist<br>collectivisation<br>(≈1950–1989) | State endorsement of<br>central planning; farms<br>forcibly merged into<br>cooperatives;<br>smallholder non-<br>intensive farming<br>replaced by mechanised,<br>chemical-intensive<br>production; state<br>provision of wage labour,<br>free public services and | Lighter physical labour;<br>electrification, roads<br>and basic<br>infrastructure; near-<br>universal schooling and<br>healthcare; wider social<br>mobility and new<br>wage-labour<br>alternatives. | Non-intensive livestock<br>farming pushed to the<br>margins; land ownership<br>devalued, fragmentised<br>and people distanced from<br>animals and land; villages<br>split along the<br>modernisation<br>collaborator/resister line;<br>private farming skills<br>depleted and generational<br>transfer broken. |

| Wave                                                                                                     | Headline content                                                                                                                                                                                                                                                                                | Positive consequences                                                                                                                                                                                                                            | Negative consequences                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                          | community infrastructure.                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                |
| <b>Wave 2 —</b><br>Post-1989<br>capitalism,<br>progressively<br>under EU<br>governance<br>(1989–present) | Cooperative assets<br>privatised, largely by<br>former political elites;<br>state withdrawal from<br>rural processing and<br>infrastructure; opening<br>to the market and the<br>EU; CAP funds routed<br>through administrative<br>gatekeepers; nature<br>conservation legally<br>strengthened. | Open borders, free<br>movement and trade;<br>access to new<br>technology and<br>information; agri-<br>environmental and<br>ecological subsidies<br>that helped committed<br>farmers persist; legal<br>recognition of the<br>value of grasslands. | Collapse of local<br>processing and marketing;<br>cheap imports stripping<br>local produce of value;<br>gradual capture of land,<br>payments, licensing,<br>machinery and processing;<br>conservation built without<br>a rural-economy vision,<br>reinforcing individualism<br>and community<br>fragmentation. |

**Table 3.** The two waves of rural modernisation in Slovakia, with their main content and their lasting positive and negative consequences for present-day non-intensive livestock farming, as understood by farming interlocutors. The positive consequences map onto the positive side of the circumstances experienced as ambivalent (within §3.1.3); the negative ones onto the circumstances experienced as hindering (§3.1.2 and within §3.1.3).

The collectivist modernisation (Wave 1), in particular, was recalled with marked ambivalence. On the one hand, it was viewed as loosening many personal and community constraints; on the other hand, as disrupting and endangering many of the advantages of the then-standing social-ecological order. Older

595 interlocutors recalled in the same breath the relief of no longer being bound to endless hand-mowing or  
596 manure-cart work as a family duty and the loss of household autonomy. Mr Pavlík recalled his late father's  
597 account of how the related opinions ruptured even among the closest relatives: *'The sister of the first*  
598 *cooperative director threw herself under the tractor when they came to take away her cows.'*

599 The post-socialist transformation was viewed in a similarly mixed register: open borders, free movement  
600 and new technologies on one side, and cheap imported produce, consumerism and the gradual capture  
601 of the farming prerequisites by 'big players' on the other. Mr Čerňanský, conveying the story of land  
602 capture: *'In the early nineties, the Slovak Land Fund was flexible. You filled out a form, signed a contract,*  
603 *and within a week, you were working. Those were genuine people back then, former cooperative managers*  
604 *and similar. Then the system shifted: land began to be handled in ways it shouldn't have been. Some people*  
605 *discovered that there was room, to put it bluntly, for corrupt behaviour. As those projects started flowing,*  
606 *a huge number of people emerged who hadn't a clue [about farming] but knew what money looks like.'*

607 In the farmers' accounts, the two waves compounded rather than acting separately. The residual pre-  
608 modern resource was viewed as facing a sandwich squeeze: cultural, by drift, devaluation and broken  
609 transmission across generations; and material, by the capture of the land and the infrastructure on which  
610 farming depended. The impact appeared far more severe at Site B, where, by the time of our research,  
611 almost no animals remained in private hands, save those of one mid-size household. Local interlocutors  
612 attributed this to the municipalities' inability to withstand the second wave: the region has always been  
613 poor, and its municipalities lie too far from any administrative centre (see Appendix 2). As one local mayor  
614 put it, admittedly: *'The communists were the only ones who ever did anything for this God-forsaken place.'*

615

### 3.2 The relations pinned between the identified circumstances — an explanatory framework

Reflecting on the whole setup, all interlocutors viewed the current livestock-farming circumstances described in §3.1 as a complex set of mutually reinforcing problems. We summarise these reflections schematically in Fig. 2 as a set of interdependent social mechanisms, and describe them below per the scheme's five tiers, from the top to the bottom.

**I. PAST ROOTS.** The present configuration was perceived as rooted in both deep and modern history (§3.1.5; Table 3). A pre-modern Carpathian culture of agrarian self-sufficiency was traced as the main positive inspiration of the past. Two waves of imposed modernisation — socialist collectivisation and post-1989 capitalism under EU governance — were understood as the historical origins of the present hindering and ambivalent circumstances.

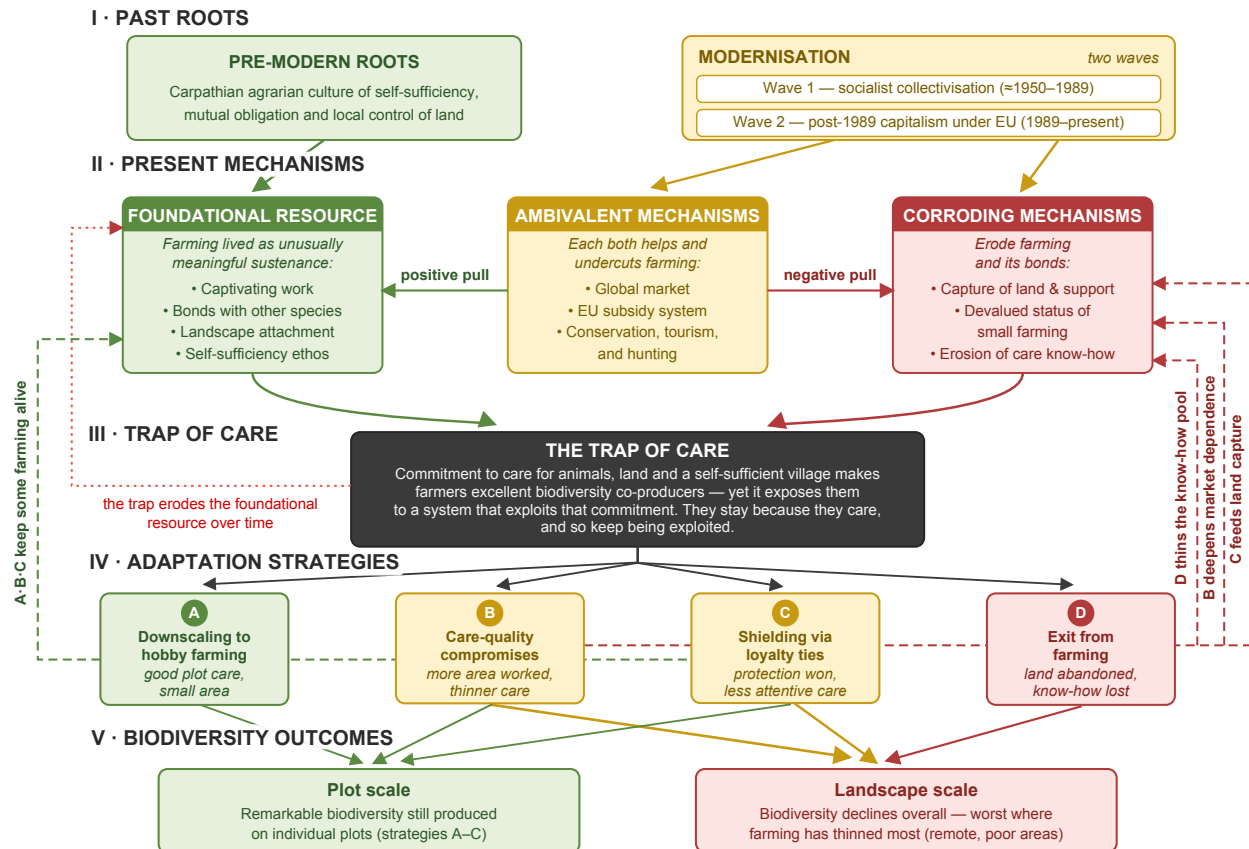
**II. PRESENT MECHANISMS.** The farmers' experience of non-intensive farming as an unusually meaningful form of sustenance (§3.1.1) kept being emphasised by them as the foundational driving force sustaining the practice despite harsh conditions. The identified hindering circumstances (§3.1.2) were conveyed as active erosion mechanisms that wore down the farming practice and the bonds it created, both directly and indirectly, through the negative pulls of the more ambivalent circumstances (§3.1.3).

**III. TRAP OF CARE.** The farmers felt that the foundational resource and the erosion mechanisms kept them in a position we named *the trap of care*: the very qualities that made them effective co-producers of grassland biodiversity, namely their personal bonds with animals, grasslands, landscapes and a commitment to self-sufficiency (§3.1.1), exposed them to a system exploiting that commitment while undermining its conditions. The farmers stayed because they cared; because they stayed, they kept being exploited. From within, the trap felt like a single absurdly ironic predicament. Mr Čerňanský caught it in a bitter dig at urban audiences who prize organic food, often shipped in from afar, while overlooking the

638 local farmers who could supply it instead: *'These days, when I hear about eco-bio food on the television*  
639 *[referring to the Green deal], I have to switch it off — or the knife starts opening in my pocket.'*

640 **IV. ADAPTATION STRATEGIES.** The four farmers' strategic adaptations to the trap (§3.1.4) were perceived  
641 as feeding back onto the farming conditions in mixed ways. Some eased the pressure: downscaling (A),  
642 care compromises (B) and political shielding (C) each kept some farming alive, reinforcing the supporting  
643 resource. But some also deepened the trap: C reinforced the networks that had captured land and  
644 support; B's evasion normalised the captured bureaucracy, and its exports deepened market dependence.  
645 Farming exit (D) thinned the pool of practitioners, contributing to the erosion of care know-how (§3.1.2).

646 **V. BIODIVERSITY OUTCOMES.** Based on the farming actors' accounts and as corroborated by parallel  
647 botanical observations (Janišová et al., in prep.), the consequences of the described structural setup for  
648 local grassland biodiversity appeared *strongly asymmetric*. Each active strategy (A–C) was evidently  
649 capable of co-producing notable biodiversity within individual plots; yet, under current conditions, their  
650 combination failed to sustain it at the landscape level — and even less so in sites with low affluence and  
651 high remoteness (Site B). More specifically, strategy A appeared to provide the best care per area unit but  
652 had little landscape impact: its diverse plots were small and typically close to the villages' residential areas.  
653 Strategies B and C seemed the most ambivalent: mid-size farmers and cooperatives worked larger areas  
654 than hobby farmers, but biodiversity per area unit appeared to decline with the area farmed and with  
655 compromises in livestock care (e.g., fewer well-kept animals). By all accounts, cooperatives tended to fare  
656 worse than mid-size farmers in both respects, reflecting how holding more land than they could attend to  
657 attentively usually translated into thinner care per hectare. Strategy D (farming exit) appeared the most  
658 damaging, both directly (grassland abandonment) and indirectly, by removing already scarce nodes of  
659 non-intensive farming competence and catalysing community-wide erosion of such care know-how.



**Figure 2.** The trap of care: conditions for biodiversity-supporting farming as experienced by the farmers across our research sites in Slovakia, from the past to the present. The foundational resource currently supporting non-intensive livestock farming was perceived as rooted in a pre-modern agrarian culture of self-sufficiency. Two waves of modernisation were perceived as giving rise to the present-day mechanisms eroding the practice. Together, these present-day streams were found to entrap the farmers: they stayed, because they cared; because they stayed, they were being exploited. The farming actors responded with four strategies (A–D), each with distinct consequences for local grassland biodiversity. The dashed loops mark feedback; the colours show positive (green), ambivalent (yellow) and negative (red) effects on biodiversity, as reported by interlocutors and corroborated by parallel botanical observations (Appendix 2).

## 4. Discussion

We set out to explore, ethnographically, what supported and what hindered farmers in the Slovak Carpathians in maintaining grassland biodiversity through non-intensive livestock farming. We found that the farmers experienced their practice as an unusually meaningful form of sustenance — more rewarding than the available, better-paid wage-labour alternatives — as to them, the work itself was captivating and grounded in deep, multi-stranded bonds with their animals, landscapes and a tradition of community self-sufficiency. This experience was perceived by them as the foundational resource sustaining their farming. Grinding against this resource, they saw a system of mutually reinforcing corrosive forces. This configuration, which we named a *trap of care*, included what the farmers experienced as a gradually intensifying capture of land and farming support, a decline in farming's symbolic status and a self-reinforcing erosion of care know-how. The farmers responded with three active adaptation strategies: downscaling to hobby farming, making compromises in care and shielding through political loyalty. According to the farmers' views and as corroborated by supplementary botanical data (Janišová et al., in prep.), each strategy was capable of supporting notable biodiversity within individual plots, yet their current joint application failed to sustain it at the landscape level. In what follows, we discuss how the identified farmers' perspectives align with previous findings.

### 4.1 Foundational resource: non-intensive livestock farming as an unusually meaningful sustenance

The farmers found their practice attractive for four distinct aspects intrinsic to the practice itself, rather than for income or sentiment. This supports established critiques of the two dominant framings of farmers — as rational economic actors (Dessart et al., 2019; Brown et al., 2021) or as custodians of static tradition (Bindi, 2022; Iuga et al., 2024). The first aspect was the work's captivating character. Varied, ever-changing



and self-directed, the work appealed because it demanded attentive, improvisational skill rather than any settled routine. This echoes Ingold's (2000) classic account of skill as something grown through engaged, attentive practice rather than reducible to encoded rules. Krzywoszynska (2016, 2019) identifies such attentive growing as the very core of care in farming. The second and third aspects, deep personal attachment to the farmed animals, the meadows and the wider landscape, support the multispecies turn in conservation research: Haraway's (2008) 'becoming with' on the animal side and Tauber's (2024b) 'grass socialities' on the land's.

Documenting the fourth aspect, moral attachment to a tradition of family and community self-sufficiency, is where our material adds most. At first sight, it resembles the 'quiet sustainability' documented across the wider PSE region (Smith & Jehlička, 2013; Sovová et al., 2025): undemonstrative, household-based provisioning that yields real environmental benefit without presenting itself as either tradition or protest. Across our sites, however, the preference was presented with a political charge: as a stance in favour of preserving the original independence of one's household and village from distant authorities and supply chains, experienced as imposed and intrusive. This evokes the kind of autonomy van der Ploeg (2018) places at the heart of peasant farming: a labour-driven pursuit of relative freedom from external control.

#### **4.2 Erosion mechanisms: land and support capture, devaluation and care know-how erosion**

Three mechanisms were experienced by the farmers as corrosive: the capture of land and support infrastructure, the devaluation of farming's symbolic status and a vicious circle of care know-how erosion (§3.1.2). The first two extend patterns already established for the region. The capture of land and support echoes the 'fuzzy' property and institutional legacies of decollectivisation (Verdery, 1996, 1999, 2003) as well as the EU-driven 'new pastoral regime' assembled from regulation and market pressure, described both for PSE settings (Papasima & Iorga, 2024) and beyond (Tauber, 2024a). The experienced devaluation

of symbolic standing tracks the durable, cultural 'post-peasant' divide identified in Slovakia by Buzalka (2021, 2022). Read together with the farmers, their convergence resembles Tsing's (2005) 'friction': global designs (agri-environmental schemes, export licensing) collide with local realities (PSE tenure, dismantled processing, capture) to produce outcomes no single actor intended, such as payments that reward abandoning the very practice they fund.

Identifying the third mechanism experienced is where our material adds the most. The continuing loss of the competence that gives non-intensive farming its appeal (§4.1) was not perceived as a mere by-product of land capture and status decline. It was being described as a distinct mechanism in its own right, one that amplifies the effects of the other two, because it was held not in individuals but between them, passed on through participation in a community of practice (cf. Lave & Wenger, 1991). Below a critical density of practitioners, the everyday occasions for shared work and cross-household exchange thinned out, the repertoire stopped accumulating, and transmission ceased to be restorable at will: each farming exit was perceived as removing a node of competence hard to replace. The gap did not stay empty; it gave way to lone trial-and-error 'from scratch'. Akin to the salvage labour Tsing (2015) finds in 'capitalist ruins', here, however, it marked a symptom of loss rather than future promise.

#### **4.3 How the identified circumstances come together: the trap of care**

In their totality, the farmers experienced their farming conditions (§3.1) as a frustratingly deepening entrapment (§3.2 and Fig. 2). We named it '*trap of care*' to emphasise how it differs from exploitation, labour precarity and peasant marginalisation more generally. Distinctively, the configuration includes all: (i) a strong affective attachment to animals, land and a way of life; (ii) biodiversity outcomes that depend on that attachment; (iii) institutional arrangements that draw value from the attachment while eroding its conditions; and (iv) an inability to withdraw without a loss of identity. Feminist care ethics and feminist

ecologies resonate most closely here, now reflected in a wider relational turn in sustainability science (Gould et al., 2023; Martin et al., 2024; Pratson et al., 2023). Tronto's (1993) point that care work is at once essential and politically subordinated, and Puig de la Bellacasa's (2017) extension of it to more-than-human worlds, directly transfer to the multispecies care we observed: the personal, caring bonds between farmers, animals and land were perceived as relied upon but never institutionally underwritten by a system that expected biodiversity without securing the conditions for it. This matches a broader political-economic logic. Van der Ploeg's (2018) 'Empire' describes how distant agrifood and regulatory orders capture the means of production and squeeze the autonomous, labour-driven pole of farming. Ojeda et al.'s (2022) feminist political-ecology framing names the same logic, on a larger scale, as extractivism (production without reproduction), of which the subsidy–mulching loop seemed a local instance.

What our material adds is a sharpened farmers' account of the conversion mechanism itself: how, in the everyday operation of post-socialist Slovak agriculture, personal commitment was translated step by step into structural vulnerability through the very channels designed to support farming, such as land tenure, subsidy payments, conservation rulings and export licensing. The trap of care conveys, in this sense, an institutionalised form of exploitation that can occur when supporting institutions become captured by actors whose relationship to the landscape is extractive rather than caring. Read alongside Bjork-James et al. (2022), this indicates why food-sovereignty framings are gaining traction in PSE settings: the issue might primarily be the asymmetric configuration of markets and support, rather than their absence. Where the care-in-farming literature has shown care to be unevenly valued and supported (Krzywoszynska, 2019), our material goes further: under a captured institutional order, care might become felt and used as the very channel through which farmers are made extractable.

#### 4.4 The historical formation of the trap: a *longue-durée* peasant resistance?

Our farming interlocutors directly traced the present-day circumstances they experienced as hindering their farming back to the two most recent waves of externally driven modernisation (§3.1.5; Table 3). But their 'urbanites versus villagers' framing, treating each regime as the latest distant 'improvement' imposed on a working countryside, evoked a longer story. The classic literature on state–periphery relations substantiates and predicts such a framing: modernist state projects destroy local practical knowledge (*métis*) in favour of 'legible schemes' (Scott, 1998); peripheries resist quietly through 'everyday resistance' and 'weapons of the weak' (Scott, 1976, 1985, 2009); neoliberal governance works not by confiscation but by restructuring the institutional landscape until farming without backing becomes impossible (Ferguson, 2010); and the extraction of value from peripheries, whose attachment to land makes them extractable, is an old feature of state order (Graeber, 2011). Might our trap of care represent a local instance of these broader historical patterns? We pursue this question as a tentative interpretation rather than a demonstrated finding.

Connecting the previously documented post-peasant dynamics of contested modernisation (Kandert, 2004; Buzalka, 2021, 2022; Verdery, 1996, 1999, 2003), mirrored in our material, with these classic *longue-durée* patterns of centre–periphery extraction would allow extending the picture in two interesting directions. The first is depth: the roots of the capture they felt may run deeper than the two modern waves. For example, several of our interlocutors pointed to the extreme fragmentation of ownership, rooted in customary division of land among all heirs, already reinforced through Habsburg-era land reforms (cf. Hartvigsen, 2014), as one of the 'imposed rules' that make Slovak farmland easy to consolidate and control. The second extension is scale: the farmers felt the extraction ran not only between domestic centres and rural peripheries but also at the European level. Here, their experience aligns with Kalmar (2022), who places the PSE region in a 'white but not quite' semi-peripheral position — included in Europe

yet coded as backward, so that Western solutions can arrive as improvements of the East in need of catching up.

#### **4.5 Methodological reflections and limitations**

The study's principal strength was the combination of theoretical comprehensiveness, in-depth openness and iterative design: the preliminary theoretical framework ensured systematic coverage of expected influencers, while ethnographic sensitivity allowed unexpected dimensions to emerge as central findings. More specifically, the design worked because it enacted Bourdieu's (2000) structural constructivism: it interrogated the farmers' embodied dispositions — their farming habitus — against the structures of land, subsidy and market power that those dispositions now meet. This allowed personal meaning and political economy to be held within a single analytic frame. In the closing discussion of pre-final results, the 'trap of care' concept was presented back to the farming households, whose strong agreement gives added confidence that the analysis did not misinterpret the perspectives studied.

Four limitations apply — two by design and two incidental. The first two reflect deliberate scope choices. Focused on animal husbandry in two Carpathian locations, the study cannot represent the diversity of biodiversity-supporting farming in post-socialist Europe (large-scale arable and lowland farming fall outside its scope), as depth was prioritised over breadth. Also, as the first stage of a broader research programme, the study reports only farmers' perspectives, although conservation officials, subsidy administrators, policymakers and cooperative managers may see things differently. This single-actor focus is a deliberate strategy as much as a limitation: beginning with the people whose care directly maintains the grasslands gives the other actors a concrete shared reality to bring in. The remaining two limitations were mitigated. The possibility that verbal accounts may diverge from practice was addressed through observation and parallel management surveys that cross-checked key management claims. The

cooperatives engaged only to a limited extent (§2.5), but this was mitigated in two ways: what they did share aligned with the views of other farmers, and their reluctance to engage more deeply corroborated the political-shielding strategy attributed to them by other farmers. Accordingly, we present the cooperative-related claims as perceptions triangulated across farmers' accounts and our own observations, not as a full account of cooperative conduct. Taken together, these scope choices and mitigating measures give us confidence that the findings provide a credible exploratory account of the perspectives under study.

## **5. Conclusion and implications**

This study asked why Slovak farmers caring for species-rich Carpathian grasslands could not do more for biodiversity than they already did, and what stood between their commitment and its full effect on the landscape, according to their experience. We found that the farmers saw their biodiversity-supporting practice as primarily sustained by their experience of non-intensive livestock farming as an unusually meaningful form of sustenance — rooted in the captivating nature of the work itself and in deep personal bonds with animals, landscapes and a local tradition of family and community self-sufficiency. We also found that they felt this very commitment exposed them to a wider system that exploited it through interlocking, corrosive mechanisms: a capture of land and support, a devaluation of farming's symbolic status and a self-reinforcing erosion of care know-how. We termed this configuration the trap of care. The farmers responded with active adaptation strategies (downscaling, care compromises and political shielding) or with a reluctant exit from farming. According to parallel botanical observations, this configuration appeared incapable of sustaining grassland biodiversity at the landscape level. The farmers' perspectives thus indicate a crisis not primarily of ignorance, insufficient incentives or inadequate regulations, but rather a structural problem in which the most committed farmers become the most

825 vulnerable, and in which a (post)peasant orientation towards local self-sufficiency is being drained from  
826 several sides at once.

827 Our material also points to where this trap could become loosened, once confirmed by further research.  
828 Conservation could begin by *working with local farmers along agroecological principles* when biodiversity  
829 schemes are designed and run (treating their care as the central resource) and, in parallel, by helping to  
830 *dismantle the structural mechanisms that seem to turn that care into vulnerability*. What follows is a brief  
831 map of the levers.

832 **For conservation practice**, two broader implications stand out. The first concerns what conservation  
833 cannot do on its own. Species-rich Carpathian meadows are not maintained by 'biodiversity' as an abstract  
834 policy object; they are co-produced by people whose attentive, care-based farming makes the meadows  
835 what they are. Conservation policies that treat farmers as interchangeable operators or ask them to  
836 comply with conservation goals defined from outside the practice will not save these grasslands in PSE  
837 settings or beyond. Effective conservation will need to incorporate, rather than work around, the local  
838 peasant cultures in which non-intensive farming is rooted.

839 The second implication concerns strategic direction. Given the indicated nature of these cultures,  
840 conservation is likely to make more headway by aligning with the wider movement towards post-growth,  
841 ecoagricultural reform of agrifood policy — articulated around principles of care, the commons,  
842 regeneration, distribution and sufficiency rather than efficiency, accumulation and control (McGreevy et  
843 al., 2022; EASAC, 2022). This direction speaks the same language as our farmers' own commitments. By  
844 contrast, strict-protection approaches that envisage removing people from working landscapes in favour  
845 of large-herbivore rewilding may be read locally as another form of colonisation from a distant centre and  
846 resisted accordingly, a dynamic now well documented in upland Britain (Wynne-Jones et al., 2018).

847 Within Slovakia and the wider PSE region, challenging the indicated trap of care along these lines would  
848 mean:

- 849 • tying basic area payments to actual livestock keeping, to break the subsidy–mulching loop;
- 850 • reforming land-tenure legislation to end cooperative and corporate monopolies and give small  
851 farmers real access to land;
- 852 • rebuilding local processing infrastructure, including slaughterhouses, rendering plants, veterinary  
853 services and local retail, to move from export dependency towards local food self-sufficiency;
- 854 • creating peer networks and mentoring schemes to slow the vicious circle of care know-how  
855 erosion;
- 856 • establishing functional territorial coordination between farming, tourism, wildlife protection and  
857 hunting, so these complement rather than displace one another;
- 858 • supporting education and cultural change that restores genuine respect for non-intensive animal  
859 farming as a valued way of life;
- 860 • providing meaningful protection from unfair global competition, especially the everyday  
861 availability of cheap imported food that strips local production of its value;
- 862 • recognising and supporting the specific farmer families who carry the relational commitments and  
863 practical knowledge that produce biodiversity, rather than treating all operators as equivalent.

864 **For *People and Nature's* broader readership,** the study makes a case on the research side. The farmers  
865 we worked with were not obstacles to biodiversity, but its primary co-producers, and their care is precisely  
866 what conservation policy depends on. In-depth, relational research of the kind reported here, by  
867 foregrounding how farmers themselves experience their work, can help overcome the reductionist  
868 narratives that sustain the disconnect between policy and the everyday life of farming. The first step is to



help all key actors speak out, especially wherever similar configurations of relational commitment and institutional extraction appear to shape human–nature relationships on which living landscapes depend.

## **Author contributions**

Andrej Belak: conceptualisation, methodology, investigation, formal analysis, writing — original draft, project administration. Katarína Skokanová: investigation, formal analysis, writing — review and editing. Dobromil Galvánek: investigation, validation (ecological claims), writing — review and editing. Monika Janišová: investigation, validation (ecological claims), funding acquisition, writing — review and editing. All authors contributed critically to the drafts and approved the final manuscript.

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**Conflict of interest**

The authors declare no conflicts of interest.

**Data availability statement**

The qualitative data underlying this article — verbatim interview transcripts and fieldwork diaries — contain identifiable personal information from a small rural population and cannot be shared in full without breaching the informed-consent terms agreed with participants. Anonymised excerpts beyond those quoted in the article and the final coding frame applied in MAXQDA are available from the corresponding author on reasonable request. The parallel botanical-management dataset is reported separately (Janišová et al., in prep.).

**Statement on inclusion**

The study was designed and carried out by a four-author team based at the Institute of Botany SAS in Slovakia, including scholars who grew up alongside the rural communities studied. All authors were engaged from the outset in shaping the research questions, fieldwork design and interpretation. The participating farming households and cooperatives were invited to comment on preliminary findings at a public closing discussion (March 2026), and their feedback informed the final framing of the analysis.

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**Appendix 1 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)****Semi-structured interview guide****1. Farming, Animals and Grasslands in the Context of Personal Life**

How did you get into farming?

- Family tradition? Personal decision? Land ownership, access to land?
- When, how and why did it start? What were the major turning points?

Overall, how satisfied are you with this choice?

- What does farming give you? What does it take away from you?
- What has it given or taken from you so far? What are your hopes for the future?

How did you become involved in livestock farming?

*(Alternative: mowing and fertilisation instead of livestock keeping)*

- The story: when, how, at what scale, and what major changes occurred?

What interests you about your grasslands?

- How important are they to you, and why?
- Do you distinguish between grasslands of different quality? In what way? Why is this important to you?

How does your immediate family view your farming?

How about your friends and neighbours?

**2. Personal Obstacles and Sources of Support**

During which period was farming easiest for you?

- What made it easier?
- The same question specifically regarding livestock farming and its alternatives.

Conversely, when was farming most difficult?

- What made it difficult?

What currently makes farming most challenging for you?

- How does it affect you?
- Why do you think this is happening?

What do you need most at the moment?

- Why?
- Do you think you will get it? Why or why not?

***Appendix 1 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)***

In what ways do you think your situation is more difficult than that of other farmers?

In what ways is it easier?

**3. Other Actors**

What do you think other people in the village think about farming?

And what about people in the country more broadly?

- In what ways do you think they are mistaken?
- Why do you think they hold these views?

Who or what do you think contributes most to the decline of farming?

- How?

Who or what benefits farming the most?

- Family, friends, neighbours, the municipality, competitors, the market, government offices, ministries, the state, the EU, etc.

**4. Expectations of the Research**

What do you think about our research?

- What would you like it to show?
- Do you have any concerns about it?

**Appendix 1 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)****Clues regarding 'other actors' from the preliminary theoretical framework**

**HOW** might likely influencers affect the biodiversity of meadows and pastures?

**I) LOCAL INFLUENCERS** [whole mechanisms within municipality]**I.1) Local influencers with systematic mostly DIRECT influence on the biodiversity of local meadows and pastures**

*Human actors*

**A) Small farmers** [subsistence (also) from farming, < 5 employees/helpers]

**+++** [Practice(s) supporting biodiversity in mid-intensity use]

- Grazing
- Mowing + manuring
- Cleaning
- Extensive corralling
- Transhumance
- Biodiversity-promoting measures

**---** [Practice(s) curbing biodiversity]

- Abandonment or insufficient-intensity management
- Use conversion
- Mulching
- Fertilizers
- Seeding
- High-intensity management

**B) Bigger farmers, incl. cooperatives** [subsistence (also) from farming, > 5 employees/helpers]

**+++**

- Grazing
- Mowing + manuring
- Cleaning
- Extensive corralling

**Appendix 1 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)**

- Transhumance
- Biodiversity-promoting measures

---

- Abandonment or insufficient-intensity management
- Use conversion
- Mulching
- Fertilizers
- Seeding
- High-intensity management

**C) Non-farming land managers, incl. hunters' associations, land users' associations, forestry, municipality staff, etc.** [no subsistence from farming, managing (also) local meadows and pastures on behalf of their owners]

+++

- Mowing
- Cleaning
- Biodiversity-promoting measures

---

- Abandonment or insufficient-intensity management
- Use conversion
- Mulching
- (Fertilizers)
- Seeding

**D) Non-farming residents** [no subsistence from farming, managing own or municipal meadows and pastures]

+++

- Grazing
- Mowing + manuring
- Cleaning
- Extensive corralling

**Appendix 1 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)**

- (Transhumance)
- Biodiversity-promoting measures

---

- Abandonment or insufficient-intensity management
- Use conversion
- Mulching
- Fertilizers
- Seeding

**E) Nature conservation employees and activists** [subsistence from or private interests in the conservation of local nature, managing (also) local meadows and pastures]

+++

- Mowing
- Biodiversity restoration via mid-intensity management

---

- Abandonment or insufficient-intensity management
- Mulching
- Restriction or disruption of farming activities in protected areas

**F) Tourists** [people systematically visiting (also) local meadows and pastures for leisure]

+++

---

- Disruption of farming activities

*Non-Human Actors*

**G) Wilderness**

+++

- Source of species diversity

---

- Source of expansive plant species
- Source of invasive plant species
- Source of succession (forest takeover)

**Appendix 1 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)**

- Source of animals disrupting farming activities

*Abiotic influencers*

**H) Physical (geography)** [moisture, soil, inclination, orientation, altitude] **and climate parameters** [temperature, precipitation]

+ + +

- Provide variable living conditions for meadow and pastures’ species

- - -

- Limit suitable living space available for specific species, their specific activities, as well as in general

**Appendix 1 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)****I.II) Local influencers with systematic mostly INDIRECT influence on the biodiversity of local meadows and pastures [via I.I]***Human actors***H) Farmers' closest significant others, incl. relatives, employees/helpers, friends, neighbours and other farmers**

+ + +/ - - -

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity
- Encourage/discourage farmers from farming
- Encourage/discourage farmers from farming in ways supporting biodiversity

**I) Municipality authorities, incl. political representatives, police, veterinarians, etc.**

+ + +/ - - -

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity
- Encourage/discourage farmers from farming
- Encourage/discourage farmers from farming in ways supporting biodiversity

**J) Entrepreneurs, incl. in tourism and hospitality, regional development, groceries, and animal products market, etc.**

+ + +/ - - -

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity
- Encourage/discourage farmers from farming
- Encourage/discourage farmers from farming in ways supporting biodiversity

**K) Other non-farming landowners, users, and their representatives, incl. forestry and hunting representatives, church representatives etc.****E) Nature conservation representatives and activists** [subsistence from or private interests in the conservation of local nature, managing (also) local meadows and pastures]

+ + +/ - - -

Supporting, restricting, regulating and/or disrupting farming activities in protected areas

**L) Other residents and local general public opinion(s)**

**Appendix 1 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)**

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity
- Encourage/discourage farmers from farming
- Encourage/discourage farmers from farming in ways supporting biodiversity

*Non-Human Actors*

**G) Wilderness**

+ + +/ - - -

- Source of species supporting / disrupting farming activities
- Source of animals supporting / disrupting nature conservation activities
- Source of species supporting / disrupting hunting and forestry activities

*Abiotic influencers*

**H) Physical (geography)** [moisture, soil, inclination, orientation, altitude] **and climate parameters** [temperature, precipitation]

+ + +/ - - -

- Provide/limit favourable living conditions for specific human managers of meadows and pastures

**II NON-LOCAL INFLUENCERS** [mechanisms partially outside municipality]

**II.1) Regional-level influencers with systematic mostly INDIRECT influence on the biodiversity of local meadows and pastures [via I]**

*Human actors*

**M) Regional-level authorities, incl. political representatives, clerks, police, veterinarians, etc.**

+ + +/ - - -

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity
- Encourage/discourage farmers from farming
- Encourage/discourage farmers from farming in ways supporting biodiversity

**N) Regional-level entrepreneurs, incl. in tourism and hospitality, regional development, groceries, and animal products market, etc.**

+ + +/ - - -



**Appendix 1 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)**

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity
- Encourage/discourage farmers from farming
- Encourage/discourage farmers from farming in ways supporting biodiversity

**O) Other regional-level non-farming landowners, users, and their representatives, incl. forestry and hunting representatives, church representatives etc.**

+ + +/ - - -

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity
- Encourage/discourage farmers from farming
- Encourage/discourage farmers from farming in ways supporting biodiversity

**P) Regional-level nature conservation representatives and activists** [subsistence from or private interests in the conservation of local nature, managing (also) local meadows and pastures]

+ + +/ - - -

Supporting, restricting, regulating and/or disrupting farming activities in protected areas

**Q) Other residents and local general public opinion(s)**

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity
- Encourage/discourage farmers from farming
- Encourage/discourage farmers from farming in ways supporting biodiversity

*Non-Human Actors***G) Regional-scale wilderness distribution**

+ + +/ - - -

- Source of species supporting / disrupting local wilderness

*Abiotic influencers***H) Physical (geography)** [moisture, soil, inclination, orientation, altitude] **and climate parameters** [temperature, precipitation]

+ + +/ - - -

- Provide/limit favourable living conditions for required species, domesticated and wild

**Appendix 1 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)****II.II National-level influencers with systematic mostly INDIRECT influence on on the biodiversity of local meadows and pastures [via I and II.I]***Human actors***R) National-level regulators of farming, esp. Ministries of Agriculture, Environment, Trade, and Finance**

+ + + / - - -

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity

**S) National-level organizations servicing agricultural and environmental donation schemes**

+ + + / - - -

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity

**T) Other national level regulators, esp. Ministries of Transportation, Education, Health**

+ + + / - - -

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity

**U) National-level entrepreneurs, incl. in tourism and hospitality, regional development, groceries, and animal products market, etc.**

+ + + / - - -

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity

**V) Other regional-level non-farming landowners, users, and their representatives, incl. forestry and hunting representatives, church representatives etc.**

+ + + / - - -

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity

**W) National-level nature conservation activists**

+ + + / - - -

- Supporting, restricting, regulating and/or disrupting farming activities in protected areas

**X) National level general public opinion(s)**

**Appendix 1 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)**

- Support / hinder farmers at farming
- Support / hinder farming in ways supporting biodiversity

*Non-Human Actors***Y) National-scale wilderness distribution**

+ + + / - - -

- Source of species supporting / disrupting regional wilderness

*Abiotic influencers*

**Z) Physical (geography)** [moisture, soil, inclination, orientation, altitude] **and climate parameters** [temperature, precipitation]

+ + + / - - -

- Provide/limit favourable living conditions for required species, domesticated and wild

**II.III International and global influencers with systematic mostly INDIRECT influence on on the biodiversity of local meadows and pastures [via II.II]**

Regulators

Global warming

Global social crises

**Appendix 2 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)****Site A****Description of natural conditions, population and agriculture in Site A.**

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Geography                                | Valley A is located between two mountain ranges, the Veľká Fatra Mts. and the Nízke Tatry Mts., in the Western Carpathians (Central Slovakia). The landscape is characterised by rather steep slopes, ranging from 19° to 45°, at elevations between 700 and 1,600 metres above sea level. The valley floor rises sharply to forested ridgelines and alpine grasslands.                                                                                                                                                                                                 |
| Municipalities                           | One village municipality, including three distinct residential parts strung along the valley corridor. The settlement of this area was first mentioned in the 13th century. However, the village's written history dates back only to the period of Wallachian colonisation (by Wallachians of Ruthenian origin) at the turn of the 16th and 17th centuries. Further colonisation under the " <i>kopanice</i> " law in the 17th century contributed to its expansion.                                                                                                   |
| Population and structure <sup>a, b</sup> | Total population 1,424; density approximately 19 persons/km <sup>2</sup> ; men 47.8%, women 52.2%. Age structure: 11.5% pre-productive age (0-14), 68.9% productive age (15-64) and 21.9% post-productive age (65+). The population has declined by 33.36% since 1970, but has stabilised over the last few decades.                                                                                                                                                                                                                                                    |
| Civic amenities                          | The valley is relatively well served, with good civic amenities including a primary school and kindergarten, four grocery stores, four pubs and a guesthouse with a restaurant. Cultural life remains active, with regular festivals and community events, and bus connections to the nearest town are reasonably frequent.                                                                                                                                                                                                                                             |
| Area and land use <sup>a</sup>           | Total area: 7,690 ha (76.91 km <sup>2</sup> ). Agricultural land accounts for 29% of the total area, consisting almost entirely of grasslands (28.74%), with negligible arable cropland. Non-agricultural land represents 71%, dominated by forests (67.66%), the remainder comprises built-up areas, watercourses and others.                                                                                                                                                                                                                                          |
| Historical agriculture <sup>b</sup>      | The initial agricultural system was rooted in Wallachian colonisation (16th/17th centuries), which introduced transhumant sheep farming and fundamentally transformed the mountain landscape. This was combined with cattle and horse farming. The most significant structural transformation occurred under the communist regime: a sheep state cooperative (one of the largest in Slovakia) was built in 1972 following the belated collectivisation of agriculture in the area. Only a few resilient independent mid-size farmers persist alongside the cooperative. |
| Present agriculture                      | The successor sheep cooperative manages the majority of the agricultural land. A substantial part of the area is farmed by mid-size cattle or sheep family farmers (3 active, one terminated 2 years ago, 1 recently retired). Householders manage parcels near their homes; some are hobby farmers of sheep, cows or horses (5-10 active, 1 recently relocated).                                                                                                                                                                                                       |
| Nature protections                       | The greater part of the area lies within Veľká Fatra National Park; the rest lies within the buffer zone of Nízke Tatry National Park.                                                                                                                                                                                                                                                                                                                                                                                                                                  |

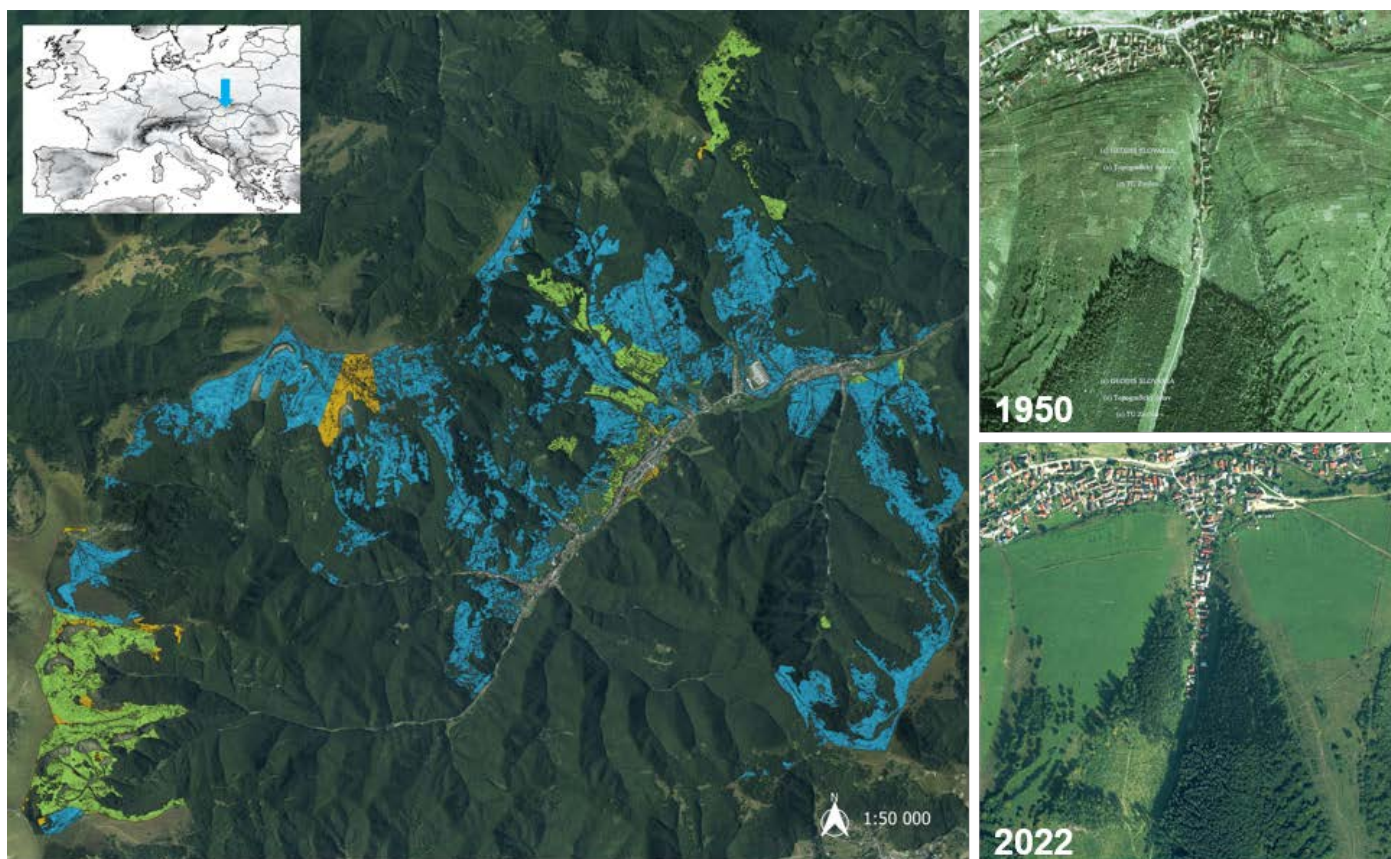
<sup>a</sup> Statistical Office of the Slovak Republic (2026); Municipality statistics, available at: <https://mojaobec.statistics.sk>. (Accessed: 3.6.2026)

<sup>b</sup> Kropilák, Miroslav (1977) *Vlastivedný slovník obcí na Slovensku II*. Veda, Bratislava

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Novák J (2019) *Salašnictvo v Karpatoch – Carpathian mountain sheep milk farming*. J. Novák, Nitra

## Appendix 2 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)



The map documents the receipt of subsidies in Site A in 2023: **blue** – large farmers, including the local cooperative, **green** – mid-size farmers, **yellow** – non-subsidised areas. On the right, comparison of the landscape structure in Site A in 1950 and 2022: during this period, agricultural land consolidation occurred in the 1970s, and part of the grasslands became overgrown, especially after 1989, due to a decrease in the number of farmed animals. Maps taken from: Historická ortofotomapa © GEODIS SLOVAKIA, s.r.o., Historické LMS © Topografický ústav Banská Bystrica, and Ortofotomapa © EUROSENSE, s.r.o. a GEODIS SLOVAKIA, s.r.o.; both available at: <https://mapy.tuzvo.sk/hofm/>. Based on data of the Agricultural Paying Agency (2023; Farmer-declared agricultural parcel boundaries 2023 shp [Dataset]. National Open Data Catalogue of the Slovak Republic. <https://data.slovensko.sk/datasety/bdf6beef-be17-015a-2559-462762605808>)

**Photo documentation of Site A** (next page). Pastoral landscape formed through deforestation during the Wallachian colonisation: mosaic of grasslands in the valley (A) and pastures along the mountain ridge (B). Details on pastures on the mountain ridge (parallel botanical survey; Janišová et al., in prep.) (C) and shepherd huts (*salaš*) used for summer sheep grazing (D); sheep cooperative (E); small-plot field structure visible on non-consolidated areas (F), hand-mowed meadows near the village (G), steep gardens beside houses in the valley (H). Interviews with farmers (I-K) and documentation of their work: hay collecting (L), hay storage (M) and driving a newborn calf with its mother down to the village overnight to protect them from predators (N). Examples of species-rich meadows (Janišová et al., in prep.) (O, P), intensively managed meadow (R) and meadows overgrown by blueberries as a result of low-intensity grazing (S). Photos by the authors (A.B., K.S.).



**Appendix 2 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)**





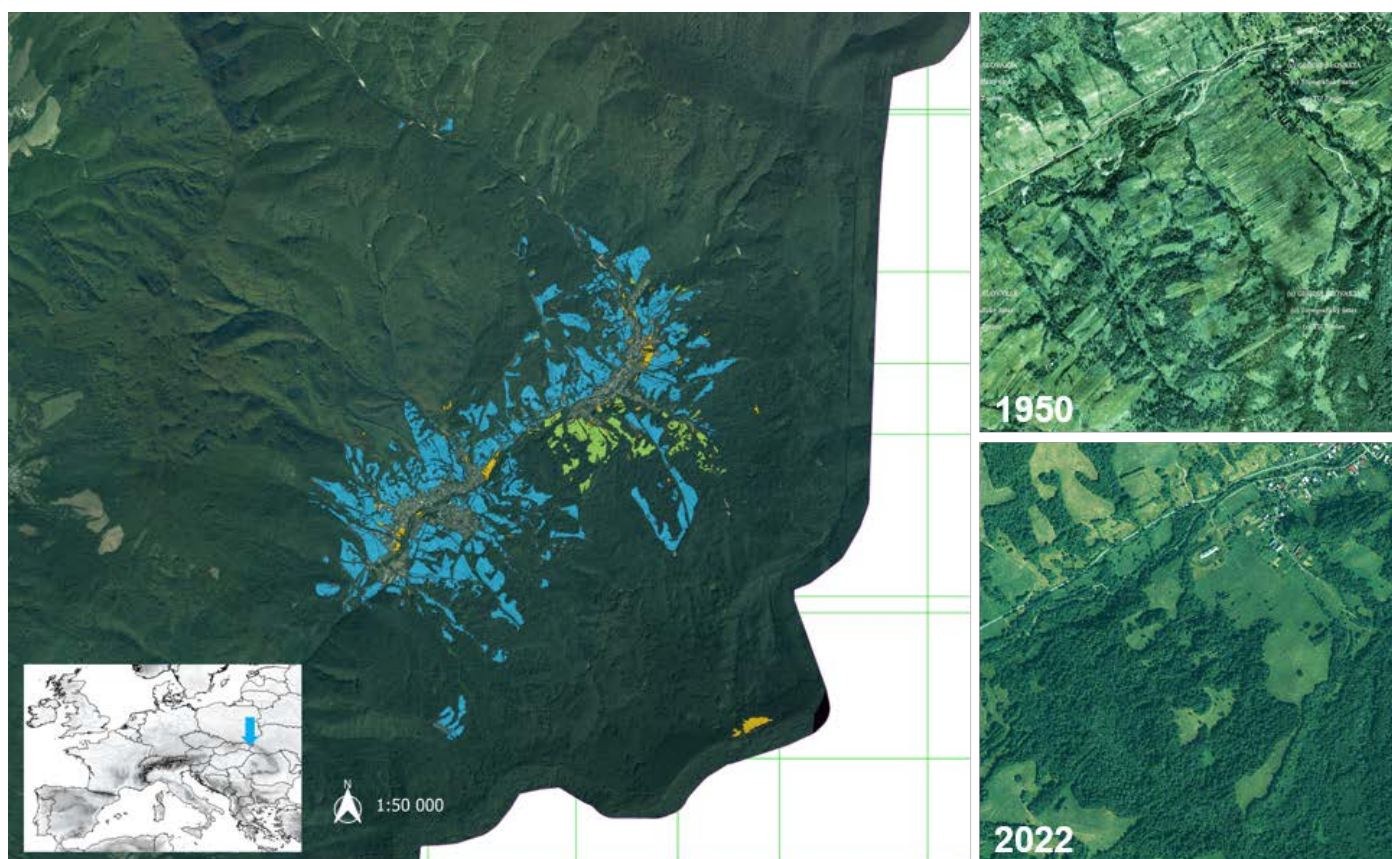
**Appendix 2 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)****Site B****Description of natural conditions, population and agriculture in Site B.**

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Geography                                | The valley is located in the eastern part of the Bukovské vrchy Mts. in the Eastern Carpathians (Eastern Slovakia). The landscape is characterised by a distinctly rugged mountain surface with deep valleys, at elevations between 320 and 1,221 metres above sea level, with higher elevations almost entirely covered by forest.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Municipalities                           | Two village municipalities strung along the valley corridor. The villages were founded at the end of the 16th and beginning of the 17th century according to Wallachian law.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Population and structure <sup>a, b</sup> | Total population: 484; density approximately 6 persons/km <sup>2</sup> ; men 52%, women 48%. Age structure: 6.6% pre-productive age (0-14), 60.5% productive age (15-64) and 32.9% post-productive age (65+), indicating a significantly ageing population. The population has declined by 74.8% since 1970, reflecting long-term rural depopulation trends common across the region. The ethnic composition: 64% Slovaks, 29% Rusyns, 1.5% Ukrainians, 1.5% others.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Civic amenities                          | Civic amenities in the valley are limited: the primary school and kindergarten have both closed, and residents are served by two small grocery stores, a single pub and a guesthouse with a restaurant. Cultural life is sporadic, and bus connections to the nearest town are infrequent.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Area and land use <sup>a</sup>           | Total area: 8,335 ha (83.35 km <sup>2</sup> ). Agricultural land represents 20% of the total area, consisting predominantly of grasslands (17%), with arable land a negligible 3%. Non-agricultural land dominates at 80%, with forests covering 77% of the total area, reflecting the area's densely forested character; the remaining area comprises watercourses, built-up areas and other areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Historical agriculture <sup>b, c</sup>   | The valley was settled under Wallachian law, with cleared land used primarily for sheep, cattle and horse breeding, and, to a lesser extent, for cereal, maize and potato cultivation. Forestry, too, played a significant role throughout the valley's entire history of settlement. The feudal lord's land passed into private ownership only at the beginning of the 20th century. During socialism, a state cooperative was established here relatively late, in 1972, triggering sweeping changes to the landscape. Much of the cleared land was reforested, while previously fragmented agricultural plots were mechanically consolidated (by levelling) into large, unified ones. Small private farmers continued to operate alongside the cooperatives. After the fall of communism, cooperative-run sheep and horse breeding was gradually abandoned, and the number of private farms rose, but many were later terminated or have since slowly died out. |
| Present agriculture                      | Most of the agricultural land is managed by a state enterprise primarily focused on forestry. It also specialises in dairy cattle, though only a small share of the herd is kept directly in the valley. The enterprise additionally grows maize for silage and clover for fodder. The valley has only one mid-size private farmer, who raises beef cattle. No household in the valley currently keeps livestock of any kind — sheep, goats or cows.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Nature protections                       | The majority of the valley is part of the Poloniny National Park; the rest lies within its buffer zone.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

<sup>a</sup> Statistical Office of the Slovak Republic (2026) Municipality statistics. Available at: <https://mojaobec.statistics.sk>. Accessed: 3.6.2026.

<sup>b</sup> Kropilák, Miroslav (1977) Vlastivedný slovník obcí na Slovensku II. Veda, Bratislava  
Kropilák, Miroslav (1978) Vlastivedný slovník obcí na Slovensku III. Veda, Bratislava

<sup>c</sup> Chronicle of the village – handwriting original deposited in the municipal office

**Appendix 2 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)**

**The map documents the receipt of subsidies in Site B in 2023:** **blue** – large farmers, including the state enterprise running the former agricultural cooperative, **green** – mid-size farmer, **yellow** – non-subsidised areas. On the right, comparison of the landscape structure in Site B in 1950 and 2022: during this period, agricultural land consolidation and reforestation of a large part of the grassland occurred in the 1970s. Maps taken from: Historická ortofotomapa © GEODIS SLOVAKIA, s.r.o., Historické LMS © Topografický ústav Banská Bystrica, and Ortofotomapa © EUROSENSE, s.r.o. a GEODIS SLOVAKIA, s.r.o.; both available at: <https://mapy.tuzvo.sk/hofm/>. Based on data of the Agricultural Paying Agency (2023; Farmer-declared agricultural parcel boundaries 2023 shp [Dataset]. National Open Data Catalogue of the Slovak Republic. <https://data.slovensko.sk/dataset/bdf6beef-be17-015a-2559-462762605808>)

**Photo documentation of Site B** (next page). A mosaic landscape structure, characterised by the alternation of forest and non-forest habitat complexes (parallel botanical survey team; Janišová et al., in prep.) (A, B). Meadows managed by a state cooperative (C, D), State Nature Conservancy of the Slovak Republic (E), a mid-size farmer (F), householders (G, H) and a pasture of a state cooperative (I). Interviews with farmers and inhabitants (J-K). Abandoned haystacks (L); a closed grammar school (M); and the central part of the municipality reconstructed under an EU grant (N). Examples of species-rich meadows (Janišová et al., in prep.) (O, P), intensively managed meadow (R) and meadows overgrown by woody species as a result of long-term mulching (S). Photos by the authors (A.B., K.S.).



**Appendix 2 - The trap of care: why Slovak farmers cannot do more... (Belak et al., 2026)**

