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Paradigm shift of agroforestry in Slovakia: from an unknown concept to a concrete policy support scheme in less than 5 years

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Abstract Despite growing EU-level support, agroforestry remains poorly developed in many Central and Eastern European countries, including Slovakia. This study presents the first sociological assessment of agroforestry development in Slovakia, focusing on stakeholder perceptions, system preferences, and policy barriers. Using a qualitative, multi-actor case study approach, we conducted participatory fieldwork, focus groups, and open-ended surveys between 2022 and 2023. Findings reveal rapid growth in awareness and interest following targeted engagement activities. Stakeholders identified silvopastoral systems as particularly suitable for abandoned upland areas and silvoarable systems for intensively farmed lowlands. Environmental and cultural benefits—such as biodiversity enhancement, landscape aesthetics, and microclimate regulation—were key motivators, whereas economic incentives played a secondary role. However, structural barriers persist. Respondents cited legal ambiguity, limited advisory services, and restrictive implementation of the first agroforestry support measure under the CAP Strategic Plan (2023–2027) as major obstacles. Many viewed the policy as overly prescriptive and poorly aligned with on-the-ground realities. We conclude that participatory, context-specific approaches are essential to designing effective agroforestry policy. Slovakia's experience offers broader lessons for post-socialist countries aiming to integrate agroforestry into multifunctional land-use systems under the European Green Deal and CAP reforms.

Keywords Agroforestry adoption · Policy support · Slovakia · Common agricultural policy · Participatory research · Central and Eastern Europe

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Introduction

Agroforestry is broadly defined as the intentional integration of woody perennials—such as trees or shrubs—with crops and/or livestock on the same land unit, offering ecological, economic, and social benefits (Nair 1993). These systems range from traditional silvopastoral landscapes to more complex, modern

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silvoarable configurations that include linear arrangements and multilayered crop structures (McAdam et al. 2009). The dynamics and multifunctionality of these systems are their strongest asset. From the perspective of intensively farmed agricultural areas and the impacts of climate change on them, key benefits include: carbon sequestration (Kay et al. 2019; Chapman et al. 2020; Drexler et al. 2021; Mayer et al. 2022), increased biodiversity (Tsonkova et al. 2012; Smith et al. 2013; Torralba et al. 2016), reduced nutrient leaching and pesticide drift, (Udawatta et al. 2011; Fagerholm et al. 2016) improved microclimatic conditions and water availability in the agroecosystem, and protection from both wind and water erosion (Torralba et al. 2016; Drexler et al. 2021). Agroforestry systems can, compared to monoculture systems, increase productivity and provide farmers with additional sources of income (Yates et al. 2007; Rigueiro-Rodróguez et al. 2009; Lehmann et al. 2020). Subsequently agroforestry to a great extent contributes to livelihoods diversification and development of rural areas (McAdam et al. 2009).

Despite this, the adoption of agroforestry practices in many parts of Europe—including Central and Eastern Europe—remains limited due to a combination of policy, technical, and socio-cultural barriers (Tranchina et al. 2024). Understanding farmers' perceptions, motivations, and constraints is thus essential for developing context-sensitive support measures (Rois-Díaz et al. 2018). Previous studies have examined these issues in countries such as Italy (Camilli et al. 2018), Sweden (Schaffer et al. 2024), and Czechia (Krčmářová and Jeleček 2017; Lojka et al. 2022), but Slovakia remains notably absent from this body of research.

This is a significant gap, given the country's distinct agricultural history shaped by socialist collectivization, rural depopulation, and more recently, Common Agricultural Policy (CAP) reforms. These transformations have led to the consolidation of land ownership, marginalization of small-scale farming, and widespread loss of traditional agroecological features such as non-forest woody vegetation (Bezák and Dobrovodská 2019; Izakovičová et al. 2022). Although recent national strategies acknowledge the multifunctional potential of non-forest woody vegetation, agroforestry has not been systematically integrated into Slovak policy frameworks. The term itself is absent from key legislative and planning documents, and prior to 2022, there was virtually no public or institutional awareness of agroforestry in Slovakia.

In response to this, a series of stakeholder engagement activities—including conferences, field excursions, and participatory workshops—were initiated by the Slovak Agroforestry Association between 2022 and 2023. These efforts aimed to raise awareness, identify barriers and opportunities, and co-develop policy proposals to support agroforestry in Slovakia. The present study builds on these activities and presents both a structured review of agroforestry in Slovakia and a sociological investigation into evolving perceptions, knowledge, and support needs related to its adoption.

Research aims

This study addresses the following aims:

1. To compile and contextualize existing knowledge about agroforestry systems, land use, and policy in Slovakia as a basis for understanding current adoption dynamics;
2. To assess the level of awareness and knowledge of agroforestry among stakeholders in Slovakia;
3. To identify the types of agroforestry systems that are of interest under different socio-ecological conditions;
4. To explore perceived barriers, motivations, and opportunities for agroforestry adoption;
5. To formulate legislative and policy recommendations to support the systematic implementation of agroforestry.

Agroforestry in Slovakia: historical and policy context

Land use change and agroforestry legacies

Slovakia's land-use patterns have been profoundly shaped by its socio-political history. Over 48% of the country's land area is classified as agricultural, dominated by large-scale arable fields (SOSR 2022). This structure is a direct consequence of the collectivization process during the socialist period, which led to the consolidation of smallholder plots into extensive cooperative and state-owned farms.

This transformation significantly altered traditional land-use systems, contributing to the disappearance of mosaic agricultural landscapes and the decline of diversified land management practices (Demo 2001; Gajdoš 2005; Izakovičová et al. 2022) such as agroforestry.

Following Slovakia's accession to the European Union in 2004, CAP subsidies further incentivized scale and specialization. The average farm size increased by 54% between 2000 and 2010, from 50.2 to 77.5 ha, with the majority of subsidies allocated to large-scale enterprises (MoFSR 2023). As a result, the socio-economic structure of the agricultural sector became increasingly skewed, marginalizing small and medium-sized farms, and accelerating rural depopulation and land abandonment in less productive regions (Bezák and Dobrovodská 2019).

Extent of traditional agroforestry systems

Despite this trend, Slovakia retains a rich heritage of agroforestry-like systems that have evolved through centuries of traditional land management. These include wooded pastures, meadows with scattered trees, grazed orchards, or terraced vineyards (Lieskovský et al. 2013; Centeri et al. 2016). Terraced vineyards in the Carpathian region are believed to have roots as far back as the Middle Ages (Štefunková and Hanušin 2019). Even grazing in the forest was not alien to the Slovak landscape, but like other traditional forms of farming, it came to an end during the communist period, when the transition to intensive cattle breeding in cooperative farms took place (Demo 2001).

The traces of traditional farming systems have not disappeared from the country completely. Many of them remain visible in the landscape up until today. In Slovakia, they are classified as Traditional Agricultural Landscapes (TAL) and, more specifically, Historical Structures of Agricultural Landscape (HSAL). HSAL, as defined by Špulerová et al. (2017), represent mosaic-like agricultural systems composed of small plots of arable land, grasslands, orchards, vineyards, and non-forest woody vegetation with varying cover.

The HSAL classification identifies four main structural types, 19 subtypes, and on the third level, HSAL are identified by the representation of forms of non-forest woody vegetation. Woody perennials are an integral part of HSAL where the most frequent occurrences are lines of trees or areal non-forest woody vegetation, occasionally also solitary trees, mostly on the boundaries. They feature intentional integration, long-term management, and multifunctionality—characteristics central to agroforestry principles (EP 2013). For example, high-stem orchards (*vysokokmenné sady*) intercropped with hay meadows or grazed by livestock exhibit silvopastoral qualities, while vineyard terraces bordered by tree alleys represent linear agroforestry systems. HSAL thus meet the core definition of agroforestry, understood as land-use systems that combine woody perennials with crops or livestock on the same land unit (Nair 1993).

The nationwide inventory by the Slovak Academy of Sciences (Špulerová et al. 2011) identified over 3,000 HSAL polygons, covering approximately 0.9% of Slovakia's territory and 1.8% of total agricultural land. It can therefore be concluded that historical agroforestry systems (AFS) in the Slovak Republic occupy 44 464 ha. It should be emphasized, that even though these systems are agroforestry in practice, they are not recognized as such.

Extent of agroforestry in modern Slovakia

Agroforestry lacks recognition also in current Slovak land-use classifications. Essentially, no comprehensive national mapping of agroforestry systems exists. However, various estimates suggest a fragmented and underutilized presence. Apart the inventory of HSAL, den Herder et al. (2017) estimates, that agroforestry covered 43.9 thousand hectares in Slovakia as of 2010 — about 0.9% of the national area and 2.3% of agricultural land, with 41.9 thousand hectares attributed to silvopastoral systems. AFS with high-value tree species were found only on 2 thousand ha. The same study evaluated literature data, which estimated the total area of AFS at 92 thousand ha.

In Slovakia, there are also more than 300,000 hectares of abandoned agricultural land that is reverting to shrubland (Midriak and Zaušková 2011). These areas present a substantial opportunity for the establishment of silvopastoral or rewilded agroforestry systems. All in all, there could be as much as hundreds of thousands of hectares of land where agroforestry systems have either disappeared over time or have been preserved or restored in some form.

Methodology

Study design and instruments

This study applied a qualitative, multi-method sociological approach embedded in an ongoing participatory process led by the Slovak Agroforestry Association (SAA) between 2022 and 2023. The goal was to explore the evolving awareness, perceptions, and barriers related to agroforestry adoption in Slovakia, while also facilitating the development of systemic support mechanisms. The research was designed as a longitudinal case study, tracking the shift from near-zero awareness to the development of a policy support scheme.

Five overarching research questions were formulated:

1. What is the current level of awareness and understanding of agroforestry in Slovakia?
2. Which agroforestry systems are of interest to different stakeholder groups?
3. What are the perceived barriers to agroforestry implementation?
4. What motivates stakeholders to engage with agroforestry, and what opportunities do they see?
5. What institutional and legislative measures should be introduced in Slovakia?

The empirical component included a series of sequential stakeholder engagements (Table 1), ranging from observation at public event to structured surveys, focus groups, and stakeholder group reflections. These engagements reflected an iterative process, in which each stage both collected data and influenced subsequent activities. The research design aligns with the participatory action research (PAR) tradition (Cornish et al. 2023) emphasizing co-learning and stakeholder empowerment.

Annex 1 provides more details regarding the instruments, themes, and sampling procedures for each phase.

Stakeholder engagement instruments were designed to collect qualitative, open-ended data on stakeholder knowledge, interest in system types, perceived challenges, and policy recommendations. Instruments used included structured and semi-structured questionnaires, facilitated discussions, and moderated observations. The online survey B1 and D1 event survey used open-ended prompts; focus groups and observations were guided by pre-defined protocols (see Annex 1). Respondents were not required to answer all questions, and data was treated qualitatively. All data collection was approved for research purposes, with participants granting informed consent. Anonymity has been preserved throughout.

Participants and sampling

Participants were selected via purposive and snowball sampling, appropriate for exploratory, context-specific research. The goal was to include a diverse range of agroforestry stakeholders, including:

- Farmers (both early adopters and interested newcomers)

Table 1 Timeline and sequencing of the engagement phases (A-D) and data collection moments

Phase	Event/Instrument	Type	Participants	Focus
A1	AFS Conference I, Face-to-face baseline survey	Short structured interview	21 (event attendees)	Initial understanding of agroforestry
A2	AFS Conference I, Observation	Structured Observation	~50 (mixed)	Awareness and institutional discourse
B1	Online Survey after the conference	Open-ended survey	34 respondents	Knowledge, perceived barriers, motivations
C1	AFS Conference II, Focus Group	Moderated discussion	12 (farmers, researchers, policy reps)	Deep dive on system types, benefits, barriers
D1	AFS Excursion, First Day Survey	Open-ended survey	15 respondents	Evaluation of process and support needs
D2	AFS Excursion, SAA group reflection	Group reflection	15 (incl. ministry reps)	Feedback on legislative draft and CAP inclusion

- Agricultural and forestry advisors
- Researchers and university staff
- Ministry of Agriculture and state agency representatives
- NGOs and civil society actors

In total, over 94 unique individuals participated across the six data points. While not statistically representative, the sample reflects the diversity of stakeholders involved in agroforestry discourse in Slovakia. The data was collected in Slovak, with some interviews translated by the research team for analysis.

Data processing and thematic coding

All qualitative data were transcribed (where relevant), translated where necessary, and analyzed using thematic coding, guided by the five research questions. An initial inductive coding round was conducted by the lead researcher. Themes were refined through comparison with the research objectives and discussed within the research team. Final coding was organized into five overarching categories displayed in Table 2:

Coding and interpretation were conducted by the first and second authors. Where appropriate, descriptive statistics (e.g. frequency of thematic mentions) were calculated to support interpretation.

Results

This section presents findings structured by the five thematic research areas: (1) Awareness and understanding of agroforestry, (2) Agroforestry systems of interest, (3) Perceived benefits and motivations, (4) Perceived barriers and challenges, and (5) Support needs and policy recommendations.

Awareness and understanding of agroforestry

Initial understanding of agroforestry was low. In the baseline survey (A1), 7 out of 21 respondents gave a correct definition, 5 were partially correct, and 9 did not know or misunderstood the term. At the first agroforestry conference (A2), participants often confused agroforestry with afforestation or general tree planting. However, a clear progression was observed. As one participant said during the focus group (C1): *"We used to pasture animals under trees. We didn't call it agroforestry, but we did it."*

Online survey (B1) responses showed increasing awareness, with most respondents supporting tree integration in agriculture, though few were familiar with policy or system classifications. This suggests that dissemination activities played a significant role in raising awareness.

Agroforestry systems of interest

Across the data collection points, stakeholders expressed consistent interest in several system types (Fig. 1):

- Silvopastoral systems were the most frequently mentioned. These were linked to uplands, overgrown land, and regions like the Myjava hills. Many referred to restoring pastures and protecting traditional biotopes (e.g., juniper habitats).
- Silvoarable systems were viewed as suitable for lowlands such as Podunajská nížina, with participants suggesting alley cropping with high-value or fast-growing species.

Table 2 Thematic coding

Theme	Examples from data
Awareness and understanding	Definitions of agroforestry, misinterpretations, references to "trees on farmland" or "old systems"
Systems of interest	Mentions of silvopasture, alley cropping, edible forests, or traditional systems
Benefits and motivations	Shade, biodiversity, animal welfare, landscape aesthetics, resilience
Barriers and challenges	Bureaucracy, lack of support, investment costs, land access, knowledge gaps
Support needs	Legislative clarity, CAP alignment, advisory services, institutional backing

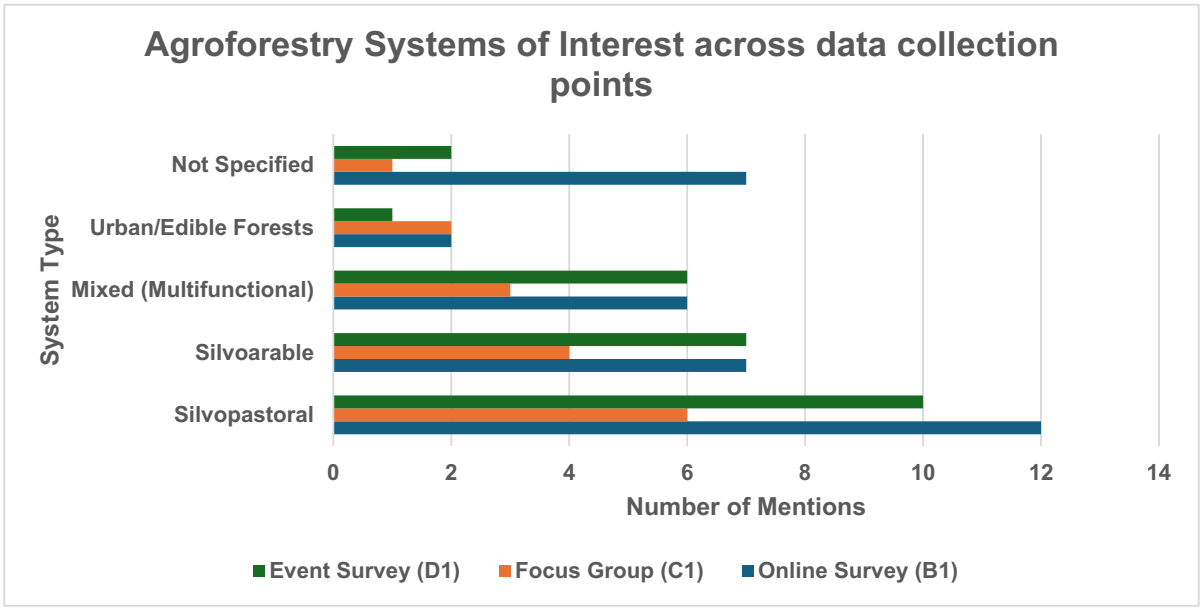


Fig. 1 Agroforestry systems of interest across data collection points

- Multifunctional systems combining tree products, herbs, livestock, and even agro-tourism were described as economically promising.
- Urban and edible forest systems were noted by community actors and permaculture practitioners.

"On our farm, cows rest under black locusts. It makes more sense than building a 5,000-euro shelter they won't use."—C1 participant.

Perceived benefits and motivations

Stakeholders consistently recognized multiple layers of benefit (Fig. 2):

- Environmental: biodiversity, erosion control, water retention, improved soil and microclimate.
- Economic: diversification of income, high-value niche markets (nuts, herbs, biomass), improved animal health.
- Social and cultural: enhanced rural identity, visual appeal, and preservation of traditional practices.

Many participants stressed the role of trees in stabilizing agricultural ecosystems, particularly in drought-prone or degraded regions. One noted: *"Trees bring back life to the land — they are the fastest way to restore biodiversity and soil."*

Perceived Barriers and challenges

Barriers to agroforestry adoption were robustly documented and frequently repeated (Fig. 3):

- Legislative: The absence of a clear agroforestry definition in Slovak law, no LPIS category, and forest law restrictions were seen as primary blocks.
- Institutional and administrative: Poor communication from ministries, a lack of advisory support, and confusion about non-project support mechanisms.
- Economic: High initial costs, uncertain returns, and inaccessible subsidies.
- Land access: Short-term leases, fragmented ownership, and unresolved land rights.
- Management: Lack of technical knowledge and complexity of multifunctional systems.

Support needs and policy recommendations

Stakeholders formulated clear and repeated policy asks:

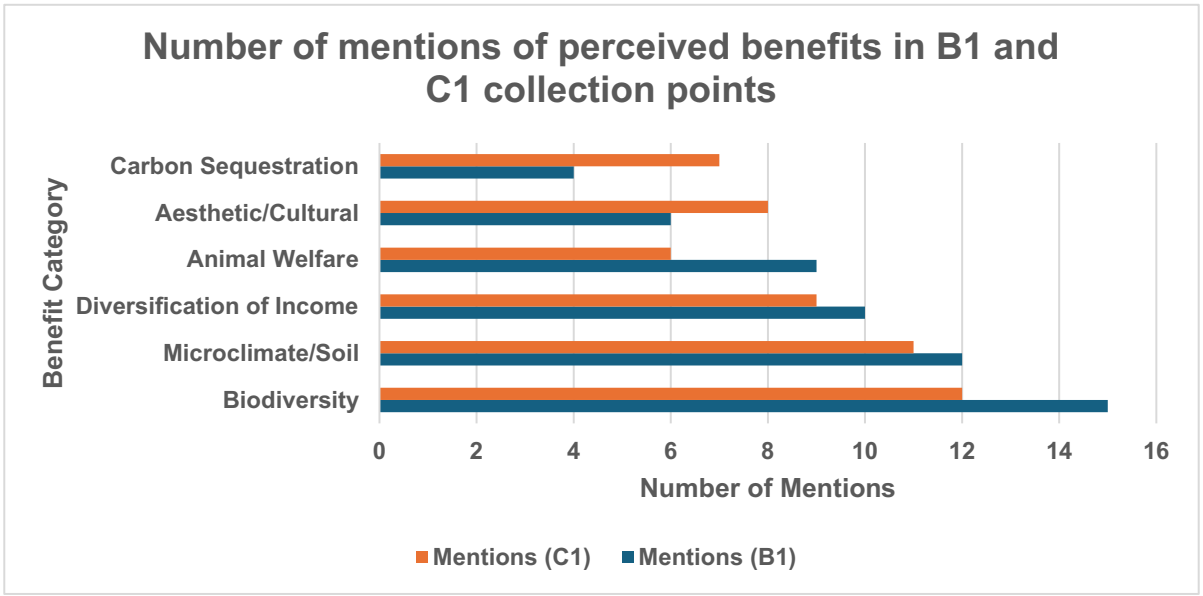


Fig. 2 Number of mentions of perceived benefits in B1 and C1 collection points

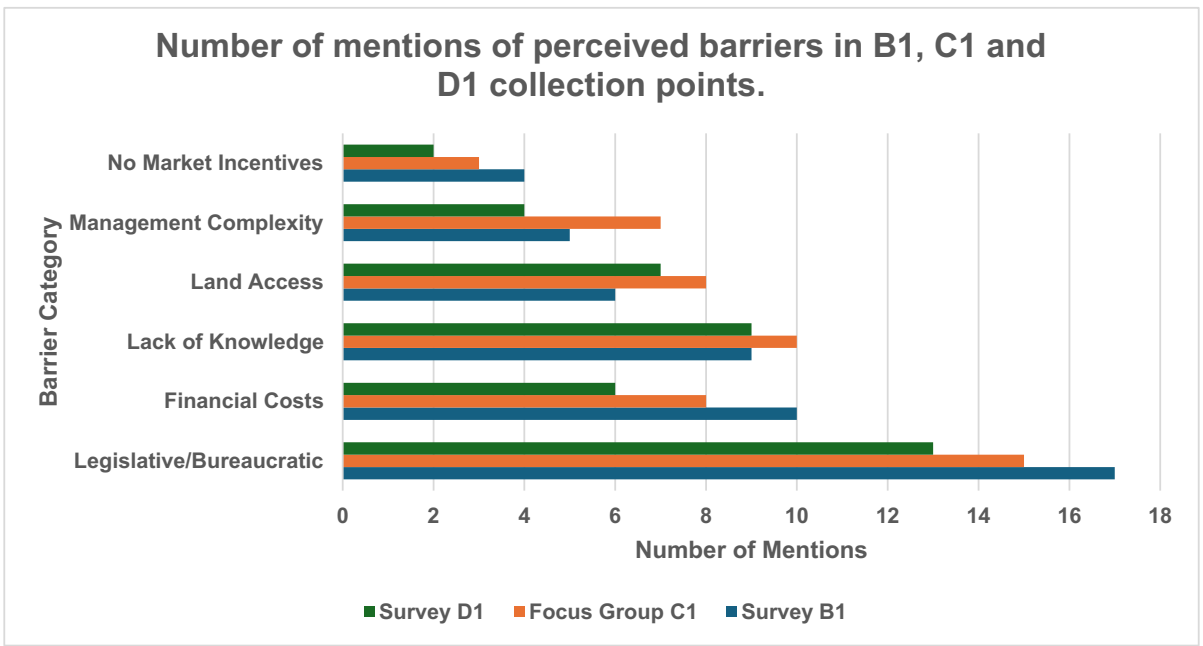


Fig. 3 Number of mentions of perceived barriers in B1, C1 and D1 collection points

- Legally define agroforestry and integrate it into national and CAP frameworks.
- Create dedicated support schemes, including compensation for ecosystem services.
- Allow tree harvesting and adaptive management in supported systems.
- Establish a new LPIS category for agroforestry.

- Develop public advisory services and regional hubs.
- Include agroforestry in land consolidation processes.
- Support the transformation of "white areas" into productive land.

See Fig. 4 for the complete list of 12 suggested changes and legislative measures to improve adoption of agroforestry in Slovakia, which were formulated within the framework of focus group C1 and detailed surveys D1 and D2.

"We're not asking for charity. We're asking for the system to stop punishing us for doing the right thing."—C1 participant.

Discussion

Agroforestry in Slovakia: historical and policy context

Slovakia has a rich agroforestry heritage, particularly through its Historical Structures of Agricultural Landscape (HSAL), which meet the definitional criteria of agroforestry systems (Nair 1993). Yet these systems are not formally recognized as agroforestry, which limits their institutional visibility and policy relevance. Recognizing HSAL as de facto agroforestry would not only validate culturally embedded land-use traditions but also facilitate broader adoption by anchoring agroforestry in familiar practice. This recognition aligns with García de Jalón et al. (2018), who emphasize that culturally rooted practices improve adoption potential.

Similar to other post-communist countries, such as Czechia (Krčmářová and Jeleček 2017), Slovakia experienced dramatic land-use changes during collectivization and later agricultural intensification. These transformations eroded traditional systems, reducing ecological complexity and local knowledge. Unlike other EU countries like Belgium, France, Italy or Portugal (EU CAP NETWORK 2023), Slovakia had no accessible CAP subsidies for agroforestry until 2023. Studies highlight the importance of well-aligned policy frameworks, participatory mechanisms, and financial incentives (García de Jalón et al. 2018) suggesting Slovakia must catch up institutionally to unlock agroforestry's potential.

Mapping agroforestry systems remains a challenge. Remote sensing, while useful, cannot reliably assess management practices a limitation noted in multiple European contexts (Eichhorn et al. 2006).

Awareness and understanding

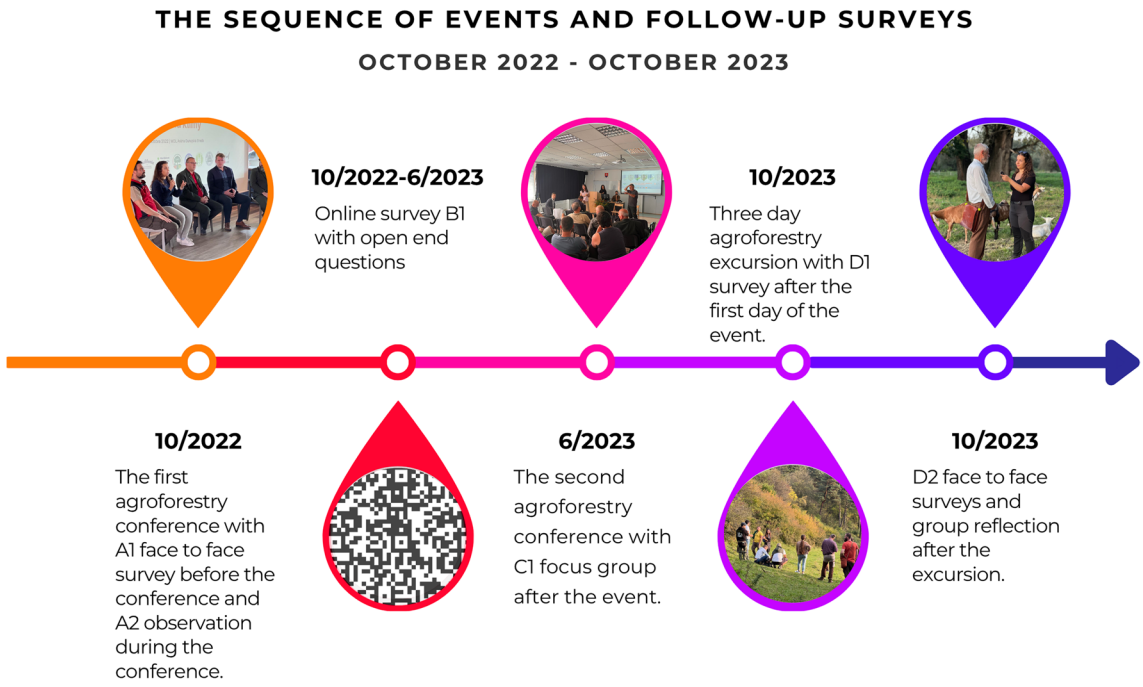
Initial awareness of agroforestry in Slovakia was low, consistent with findings from other regions where farmers had limited exposure to the concept (Borremans et al. 2016). Our study observed a marked increase in awareness following stakeholder engagement and knowledge dissemination, especially through participatory events. This is confirmed by earlier research (Meijer et al. 2015; Buyinza et al. 2020) where knowledge, attitudes, and perceptions played a central role in shaping agroforestry adoption decisions.

However, awareness-raising alone is insufficient. Adoption also depends on whether farmers perceive agroforestry as offering clear advantages over conventional practices (García de Jalón et al. 2018). Tailored outreach, embedded in local socio-ecological realities, is therefore essential. Participatory formats—field excursions, focus groups, and policy roundtables—enabled co-learning and created spaces for deeper understanding of agroforestry as a multifunctional solution rather than a purely technical innovation.

Agroforestry systems of interest

Stakeholders identified silvoarable systems as promising in Slovakia's intensively managed lowlands, while silvopastoral systems were preferred in overgrown or abandoned upland areas—often overlapping with biodiversity-rich biotopes like juniper shrublands. These spatial preferences align with biophysical modelling studies in temperate Europe (Reisner et al. 2007; Kay et al. 2019).

Respondents also expressed interest in multifunctional systems combining trees, crops, and livestock. These included edible forest gardens and urban applications, reflecting both practical flexibility and cultural resonance. Both traditional and modern systems were seen as viable, provided they are economically attractive and institutionally supported. This echoes findings from Fagerholm et al. (2016) who emphasize



SUGGESTED CHANGES AND LEGISLATIVE MEASURES TO IMPROVE THE ADOPTION OF AGROFORESTRY IN SLOVAKIA

- Anchorage of the concept of agroforestry in the national legislation;
- Setting up supports based on knowledge-based interprofessional discussion, with positive motivation of farmers;
- Allowing the cultivation of economically interesting tree species, specifically fast-growing and non-native tree species such as autochtonous fast-growing tree species, hybrid poplars and black walnut;
- Financial support for the transformation of white areas into productive agroforestry systems;
- Introduction of a separate culture for agroforestry systems in the Land Parcel Identification System (LPIS);
- Clear and timely publication of guidelines by ministries and the Payment Agency on the measures to be taken, combined with the organisation of face-to-face and online workshops to improve accessibility for all;
- Establishment of accessible advisory services;
- Support for agroforestry initiatives at national level in the form of grants for both research and civil society organisations, focusing on support for Living Labs;
- Inclusion of agroforestry in the land consolidation process;
- Regulation of overpopulated game animals – deer;
- Introduction of management plans for agroforestry systems similar to those for forests;
- European Union's clear support of agroforestry over industrial agriculture.

Fig. 4 The sequence of events and follow up surveys with suggested changes and legislative measures to improve adoption of agroforestry in Slovakia

the ecological and cultural value of such systems across Europe.

Perceived benefits and motivations

Stakeholders emphasized environmental benefits—biodiversity, erosion control, soil improvement, and microclimate regulation—as key motivations. These are consistent with patterns observed in Northern and Central Europe (Graves et al. 2009; Fagerholm et al. 2016). Aesthetic and recreational values were particularly associated with silvopastoral systems, underscoring the cultural and symbolic importance of trees in rural landscapes (Fagerholm et al. 2016).

Unlike in Mediterranean contexts where economic returns often dominate (Graves et al. 2009), Slovak respondents placed higher value on ecological and cultural benefits. This regional distinction mirrors broader European patterns (Lawson et al. 2019). Nonetheless, economic incentives—especially for diversified products like nuts or silvopastoral meat—remained an important secondary motivation.

Perceived barriers and challenges

Major barriers included legislative uncertainty, lack of advisory support, inaccessible subsidies, high establishment costs, and restrictive land tenure conditions. These findings are consistent with broader European evidence (García de Jalón et al. 2018; Tranchina et al. 2024). Respondents voiced frustration with administrative ambiguity and limited technical guidance, echoing concerns raised by Borremans et al. (2016) regarding institutional misalignment in Flanders.

As in other countries, addressing these barriers requires investment in advisory services, training, demonstration sites, and policy clarity (Burgess and Rosati 2018). Support mechanisms such as payments for ecosystem services and rural development measures—effective elsewhere (Rolo et al. 2020)—are still underdeveloped in Slovakia.

Support needs and policy recommendations

Our stakeholders co-developed 12 recommendations for systemic change, ranging from legal recognition to LPIS integration and dedicated advisory infrastructure. These align with established best practices across Europe (Burgess and Rosati 2018; García de Jalón et al. 2018).

The participatory approach used here proved vital. As in the AGFORWARD project, stakeholder-led processes generated more grounded, actionable outputs. Our three-day excursion catalysed a shift from vague dissatisfaction to specific legislative proposals, demonstrating how engagement in informal, trust-building environments can accelerate innovation uptake.

Nonetheless, the Slovak Ministry of Agriculture still relies on top-down processes that solicit feedback only after policies are drafted. Moving toward co-creation and inclusive consultation would strengthen both legitimacy and effectiveness of agroforestry support.

Synthesis and broader implications

This study contributes to the growing literature emphasizing that agroforestry adoption depends not only on economic feasibility and environmental rationale, but also on social legitimacy, policy alignment, and participatory governance. The Slovak case illustrates how quickly perceptions and institutional responses can evolve when bottom-up engagement is paired with transparent communication and expert facilitation.

While barriers remain, the shift observed here suggests that culturally informed, context-sensitive strategies can pave the way for agroforestry to emerge as a cornerstone of multifunctional land use in Slovakia and other transition contexts across Europe.

Conclusion

This study presents the first structured sociological assessment of agroforestry development in Slovakia, capturing both historical legacies and emerging stakeholder dynamics. It reveals that while awareness and interest in agroforestry have grown rapidly, structural and institutional barriers continue to hinder implementation.

Key findings emphasize that:

- Participatory engagement builds awareness, fosters shared understanding, and supports bottom-up policy design;

- Silvopastoral and silvoarable systems hold promise for revitalizing underutilized and intensively farmed areas, respectively;
- Stakeholders see environmental and cultural benefits as primary motivations for adoption, ahead of profitability;
- Legislative reform, advisory support, and CAP-aligned subsidies are crucial to enable broader uptake.

The Slovak case offers actionable insights for other post-socialist or policy-lagging regions in Europe. Importantly, while practitioners showed high levels of interest and optimism, they were also frustrated by the restrictive design and shortcomings of the first non-project support scheme introduced under the CAP Strategic Plan (2023–2027). If such limitations—especially regarding system design, species choice, and management flexibility—persist, even the most committed land managers may opt for simpler, less sustainable practices.

The findings highlight that advisory systems and regulatory flexibility are not peripheral but central to farmers' decision-making. Therefore, embedding agroforestry into national strategy will require inclusive, evidence-informed processes that ensure farmers are not only consulted but actively engaged. Lessons from Slovakia underscore that without this, support schemes risk missing their transformative potential and may ultimately discourage the very practices they aim to promote.

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Author contribution AMM created the concept and was the main person responsible for the management of the review, surveys, data analysis, and interpretation. She wrote the main manuscript text. LB was the main interviewer, contributed to data analysis and interpretation. MŠ contributed to data interpretation and was the expert supervisor over the whole process. All authors reviewed the manuscript.

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Data availability No datasets were generated or analysed during the current study.

Declarations

Conflict of interest This study was funded by Specific university research and departmental resources of Mendel University in Brno, Faculty of Forestry and Wood Technology and Faculty of AgriSciences. The authors have no relevant financial or non-financial interests to disclose. Data from all surveys (observation notes, answers from online surveys, face-to-face survey and focus group notes) that support the findings are provided as supplementary information.

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