WILDCARD D16 (D4.3) - Report on the assessment of the perception and acceptability of citizens and stakeholders on rewilding options

Planned delivery date (as in DoA): 24
Due date of deliverable: 31/12/2025
Work Package: WP4
Work Package leader: USV
Deliverable leader: USV
Version: 1.0
Dissemination level: PUB

Grant Agreement number: 101081177
WILDCARD — HORIZON-CL5-2022-D1-02 / HORIZON-CL5-2022-D1-02-05
Project Acronym: WILDCARD
Effects of rewilding in forests and agricultural lands on carbon sequestration and diversity
Duration of the project: January 1st, 2024 – December 31st, 2027

VERSION HISTORY

Version	Date	Author /Reviewers	Partner	Description
0.1	30.10.2025	Carmen Rodriguez, Lyla O'Brien, Theresa Frei, Marie-Theres Dyckhoff	3-EFI	Early draft. Conceptual and methodological framework
0.2	02.12.2025	Carmen Rodriguez, Lyla O'Brien, Theresa Frei, Arthur Le Bigot, Laura Bouriaud, Liviu Nichiforel, Dorin Pălie, Ionut Balabașciuc	7-USV, 3-EFI	Input from USV
0.3	14.12.2025	Reviewer: Giorgio Alberti	1-UNIUD	Review
0.4	17.12.2025	Laura Bouriaud, Carmen Rodriguez, Lyla O'Brien, Theresa Frei, Liviu Nichiforel, Dorin Pălie Ionut Balabașciuc	7-USV 3-EFI	Final version for submission
1.0	22.12.2025	PSB	All	Final approval

CITATION:

Laura Bouriaud, Carmen Rodriguez Fernández-Blanco, Lyla O'Brien, Theresa Frei, Liviu Nichiforel, Arthur Le Bigot, Marie-Theres Dyckhoff, Dorin Pălie, Ionut Balabașciuc, (2025). D43. Report on the assessment of the perception and acceptability of citizens and stakeholders on rewilding options. Horizon Europe Project No. 101081177, European Commission, 140 pp.

ACKNOWLEDGEMENT

Funded by the European Union

DISCLAIMER

Funded by the European Union

Contents

Funded by the European Union

Funded by the European Union

Executive Summary

Background: Over the past decade, rewilding has become a mainstream approach in nature conservation and is increasingly gaining traction in policy at the national and international level (Carver et al., 2025). Rewilding landscapes is now widely discussed as a land conservation strategy capable of contributing to biodiversity conservation goals while also supporting climate change mitigation.

This Deliverable aims to assess public perceptions on two specific rewilding strategies, as defined in WILDCARD Description of the Action: proforestation, defined as the cessation of forest management to allow spontaneous forest development, and natural afforestation of abandoned land, defined as the recovery of shrubs and/or trees on cleared lands through spontaneous regrowth following the cessation of previous disturbance or land use.

By clarifying how perceptions from different stakeholder groups contribute to shape positive and/or negative local evaluations, of rewilding strategies, this research provides evidence to inform actions and policies at European, national and local levels.

Objectives: The deliverable addresses three objectives:

1. To provide a general assessment of EU citizens' perceptions of rewilding options in selected countries;
2. To identify perceptions of EU- and national- level policymakers regarding the governance of abandoned land and proforestation;
3. To examine local-level stakeholders' perceptions and acceptability of rewilding and specific rewilding options.

Methods: in line whit the abovementioned objectives, the methodology combines different surveys and interviews:

- **EU citizens' perceptions** were assessed using a large-scale a survey (not led by WILDCARD, see section 3 for details) conducted across 30 European countries. For this deliverable, analysis focused on the responses to the three questions directly related to the WILDCARD rewilding strategies.
- **Policy stakeholder perceptions** were assessed at two levels. At the national level, a structured questionnaire was administered in the eight WILDCARD countries, plus Spain and France, resulting in 168 complete responses. At the EU level, 20 semi-structured interviews were conducted with EU policy stakeholders to explore perceptions and policy trade-offs.
- **Local-level stakeholder perceptions** were assessed through semi-structured interviews with 52 stakeholders across five social acceptability case studies: Belgium (Brabantsen Wouden), Bulgaria (Rhodopes), Czechia (Šumava Mountains), Italy (Friuli-Venezia-Giulia) and Romania (Natural Park Vânători Neamț).

Results and key-messages:

<u>Survey 1: EU citizens' perceptions (N=13,743)</u>

The large-scale survey of over 13,700 EU citizens across 30 countries revealed generally positive perceptions of both core rewilding strategies — natural afforestation of abandoned farmland and proforestation. Most respondents believe these strategies would have an overall positive impact, particularly on nature conservation and climate change mitigation. This indicates a broadly pro-environmental orientation among European citizens toward passive restoration approaches. However, collective perceptions are structured along distinct

Funded by the European Union

attitudinal patterns, summarized in two major dimensions identified through Multiple Correspondence Analysis (MCA). The first-dimension contrasts respondents prioritizing nature and landscape values with those concerned about risk and security (e.g., wildfire risk and economic stability). The second-dimension contrasts preferences for conservation and aesthetic values with priorities focused on protection and climate-risk mitigation priorities.

Age emerged as the most influential socio-demographic factor: respondents aged 65 and over were closely aligned with risk and protection concerns, while younger age groups showed stronger preference for nature and landscape values. Other variables, such as gender and rural/urban residence, had limited influence on overall attitudes, although cross-country differences were observed.

Survey 2: Policy stakeholders' perceptions (National and EU Level)

Policy stakeholder perceptions were assessed through a national-level survey from ten countries (N=168) and EU-level interviews (N=20). At the national level, while respondents expressed an overall positive view of rewilding, open-ended responses highlighted substantial concerns about potential negative consequences. Key perceived risks included economic/subsidy loss, increased wildlife conflict, higher fire/security risk, and deterioration of landscape permeability.

A central finding was the perception of significant policy trade-offs between rewilding strategies and existing national policy objectives. Rewilding was often viewed as misaligned with established with national policies in key sectors such as Forestry, Agriculture, and Rural Development. This lack of vertical coherence was particularly evident in relation to EU target to strictly protecting 10% of land under the EU Biodiversity Strategy for 2030.

In contrast, EU-level policy stakeholders were generally more supportive of rewilding, viewing it as crucial instrument for achieving the objectives of the EU Green Deal and the Nature Restoration Regulation (NRR). Their concerns focused less on ecological outcomes and more on the social and political feasibility, particularly potential conflicts with the Common Agricultural Policy (CAP) and the risk of social opposition and/or conflict linked to land use change.

Survey 3: Local-level stakeholders' perceptions (N=52)

The assessment of local-level stakeholders across the five project's social acceptability case studies demonstrated that perceptions of rewilding are highly context-dependent. Acceptability is strongly shaped by local social, economic, and historical conditions rather than by universal attitudes. Stakeholders' views reflect deep-seated concerns about direct impacts on livelihoods and cultural identity.

Proforestation generally high received high level of support for this strategy, primarily driven by perceived ecological benefits, particularly biodiversity enhancement. However, this support was conditional; stakeholders expressed strong opposition to uncontrolled expansion of forests beyond established protected areas. Key concerns included wildfire risk, bark beetle infestations (notably in the Czech Republic and Romania), and the loss of income from commercial forestry.

Natural afforestation of abandoned agricultural land elicited greater scepticism and more localized concerns. Negative perceptions were most commonly linked to fire and security risks, loss of agricultural income and subsidies, and adverse impacts on local aesthetics associated with traditional cultural landscapes and perception of rural decline. Acceptability was higher in

Funded by the European Union

regions where land abandonment is already well established or where rewilding could be clearly linked to benefits such as tourism development or enhanced nature conservation.

The findings reveal substantial differences in perceptions and acceptability of rewilding strategies — particularly natural afforestation and proforestation — across European citizens and stakeholder groups. These divergences indicate that successful rewilding implementation requires a multi-level and context-sensitive approach.

The main key messages derived from the integrated analysis are:

1. Public support contrasts with stakeholder scepticism. The general European public shows a broadly positive baseline perception of passive rewilding strategies, driven mainly by perceived benefits for nature conservation and climate change mitigation. In contrast, national and local-level stakeholders expressed more scepticism, emphasizing negative impacts such as economic/subsidy loss, increased fire/security risk, and wildlife conflicts.

2. Policy incoherence represents a major implementation barrier. National policy stakeholders identify policy incoherence as one of the most significant obstacles to rewilding. Rewilding objectives are widely perceived as conflicting with existing sectoral policies in forestry, agriculture, and rural development. While EU-level stakeholders generally support rewilding as a key instrument for delivering the EU Green Deal and the Nature Restoration Regulation (NRR), they highlight concerns regarding social and political feasibility, particularly in relation to alignment with the Common Agricultural Policy (CAP).

3. Local context is decisive for acceptability. At the local level, perceptions of rewilding are highly sensitive to specific social, economic, and historical factors confirming that rewilding is not a one-size-fits-all solution. Proforestation is more positively perceived due to its biodiversity benefits, but support declines when it is associated with uncontrolled forest expansion and increased risks such as wildfires or bark beetle infestations. Natural afforestation of abandoned agricultural land is met with greater scepticism, largely due to concerns about the loss of agricultural income and subsidies, as well as perceived degradation of culturally valued landscapes.

Overall, advancing rewilding initiatives requires moving beyond the communication of general ecological benefits and directly addressing the economic, security, and policy trade-offs identified by stakeholders. Policy frameworks should aim to improve coherence with existing sectoral objectives and incorporate context-specific compensation mechanisms and risk-mitigation measures, particularly at the local level

.

Keywords

Rewilding, proforestation, biodiversity, conflicts, social innovation, landscape, cultural heritage, wildfire, wildlife, climate change, afforestation

Funded by the European Union

Acronyms

Acronym	Explanation
CAP	Common Agricultural Policy
EFI	European Forest Institute
EU	European Union
LM	Land manager/owner organisation
LULUCF	Land Use, Land-Use Change and Forestry
MCA	Multiple Correspondence Analysis
NGO	Environmental non-governmental organization
NRR	Nature Restoration Regulation
NP	National Park
PLA	Protected Landscape Area
POL	EU authority (European Commission, European Parliament, and related organisations)
RES	Environmental NGO, incl. certification stakeholders
WUR	Wageningen University and Research
USV	University Stefan cel Mare Suceava

Funded by the European Union

1. Introduction

Rewilding of landscapes is increasingly discussed as a land conservation strategy that can contribute to biodiversity conservation objectives and climate change mitigation. The WILDCARD project aims to assess the overall potential impact of natural rewilding of abandoned agricultural land and proforestation on carbon sequestration and biodiversity across multiple spatial and temporal scales.

Deliverable 4.3 reports on the assessment of the citizens' and stakeholders' perceptions and acceptability of rewilding options, in line with the objective 4.2 as defined in the Description of the Action. It presents the results of analyses of perceptions among citizens, national- and EU-level policy stakeholders, and local stakeholders regarding two rewilding strategies: proforestation and natural rewilding of abandoned agricultural land. The Deliverable addresses the specific objectives and the research questions outlined in Table 1 as reported in D4.2 "Synthesis knowledge inventory and surveying methodology" (Bouriaud et al., 2024).

Table 1. Research objectives and research questions for the socio-economic assessment of rewilding

Tasks	Research objective	Main research questions	Methodological approach
Task 4.2.2. Survey 1 – EU citizens	General assessment of **EU citizens' perceptions** in selected countries on rewilding options	- *How do EU citizens perceive the benefits and threats of proforestation in their home country?* - *How do EU citizens perceive the benefits and threats of natural rewilding of agricultural land in their home country?*	- **Large-scale questionnaire (30 countries)**, representative of citizens' perceptions (N=13743)
Task 4.2.3. Survey 2 – Policy stakeholders	Identify perceptions of actors in **EU level policymaking** on governing abandoned land and proforestation	- *What policy options are identified for governing the rewilding of abandoned agricultural land and for proforestation?* - *What can be learned about the associated trade-offs and power-dynamics in the governance of rewilding processes?*	- **20 semi-structured interviews** with EU-level stakeholders
	Identify perceptions of actors in **National level policymaking** on governing abandoned land and proforestation		- **168 structured questionnaires** applied in eight countries represented in WILDCARD, plus an additional two countries, France and Spain
Tasks 4.2.4 Survey 3 – Local level perceptions (Case study type 1)	Identify **local level stakeholder's** perceptions and acceptability on rewilding and rewilding options:	- *How do local level stakeholders perceive the benefits and threats of rewilding in their region?* - *Which local context-dependent factors influence stakeholder's perceptions and acceptability on rewilding?*	- **Five case studies** not covered by studies on social acceptance (i.e., Bulgaria, Belgium, Czech Republic, Italy, Romania) - **52 semi-structured interviews** based on purposeful sampling of respondents

Funded by the European Union

Methodologically, deliverable 4.3 draws on a combination of surveys and interviews:

- To provide a general assessment of EU citizens' perceptions of rewilding options in selected countries;
- To identify perceptions of EU- and national-level policymakers regarding the governance of abandoned land and proforestation;
- to examine local-level stakeholders' perceptions and acceptability of rewilding and specific rewilding options.

Prior to the implementation of the surveys and interviews, ethical clearance was obtained from the Ethics Committee of Suceava University (see Appendix 1). All participants were fully informed about the purpose of the study, the procedures involved, potential risks and benefits, and their right to withdraw at any time without penalty, before providing their consent to participate. The ethical approval also ensures that data collection, storage, and reporting procedures adequately protect participants' privacy and confidentiality.

Deliverable 4.3 is one of six deliverables within work package 4 (WP4), *Socio-economic assessment of rewilding options*. It build upon Deliverable 4.2 *Cross-country comparison of action frames in rewilding policies* by enabling a comparison between the potential conflicts and trade-offs identified in rewilding policies, legislation, and policy instruments (as reported in Deliverable 4.1) and the perceptions of suck policy trade-offs expressed by national- and EU-level policy stakeholders. In addition, Deliverable 4.3 contributes to Deliverable 4.5 *Cost-risk-benefit analysis of rewilding strategies on both abandoned lands as well as in proforestation areas at the EU scale,* by providing evidence on citizen and stakeholder acceptability of rewilding options, which is incorporated into cost-benefit modelling framework of Deliverable 3.5.

The results of Deliverable 4.3 are also closely linked to activities in work package 5 (WP5) *Stakeholder engagement at local and European level.* Findings related to EU- and national-level policy stakeholders inform Task 5.4 *Policy dialogue and clustering*, providing an evidence base for the development of policy briefs. Furthermore, results from the EU citizen survey and from the local stakeholder perception in the five WIDLCARD social acceptability case studies support Task 5.2 (*Social acceptance building process*). Finally, the assessment of perceptions regarding proforestation and natural rewilding of abandonment agricultural lands provides essential inputs for Task 5.3 (*WILDCARD Rewilding Forum*), contributing to the evaluation of the broader implications of rewilding policies.

Deliverable 4.3 is structured as follows. First, a conceptual framework is presented, followed by the background, methodology, and results of each of the four empirical studies:

- **Section 3:** assessment of the EU citizens' perceptions of rewilding options (Survey 1);
- **Section 4:** assessment of policy stakeholders' perceptions and policy trade-offs:
  - **Section 4.1:** National-level policy stakeholders' perceptions and policy trade-offs;
  - **Section 4.2:** EU-level policy stakeholders' perceptions and policy trade-offs (semi-structured interviews);
- **Section 5:** Assessment of local level stakeholders' perceptions.

This deliverable concludes with a brief concluding section that synthesises and compares the findings across the four studies.

Funded by the European Union

2. Conceptual background

2.1. Rewilding

Over the past decade, rewilding has become a mainstream approach in nature conservation and is increasingly gaining traction in national and international policy debates (Carver et al., 2025). Nevertheless, the concept of rewilding remains highly contested and is defined and interpreted in multiple ways. For example, Perino et al. (2019) define rewilding as "*a process emphasising passive management and natural ecological processes […] to enhance ecosystem integrity and resilience while reducing dependence on intensive human interventions*" (p. 351). The United Nations' designation of 2021–2030 as the Decade of Ecosystem Restoration provides a strong mandate for policymakers to bring rewilding concepts to the forefront of discussions on post-2020 biodiversity objectives. In this context, the IUCN published a set of rewilding principles aimed at clarifying the concept and enhancing its effectiveness as a tool for achieving global conservation targets (Carver et al., 2021). These principles can be summarised under three core themes:

1. rewilding projects should prioritise the restoration of key ecological processes, with an emphasis on re-establishing natural dynamics that enable ecosystems to become self-sustaining. This includes trophic interactions (e.g., food webs involving keystone species and large predators) and natural disturbance regimes, while acknowledging that ecosystems are dynamic and must adapt to climate change.
2. rewilding should be implemented at landscape or seascape scales, promoting ecological connectivity between core areas to facilitate species dispersal and the functioning of natural processes.
3. the success of rewilding fundamentally depends on local engagement, community support, and social-ecological coexistence. Projects should therefore be transparent, informed by both scientific evidence and local or Indigenous knowledge, recognise the intrinsic value of nature, and aim for transformative, long-term change.

A comprehensive discussion of the concept and definitions of rewilding lies beyond the scope of this Deliverable. Within the WILDCARD project, rewilding is understood as a restoration approach aimed at reinstating natural processes by allowing nature to operate with minimal or no human intervention (**passive restoration**), following Wentworth (2016). The analyses presented in this Deliverable focus on two specific rewilding strategies as defined in the Description of the Action:

- **Proforestation:** the cessation of forest management to allow spontaneous forest development.
- **Natural afforestation of abandoned land:** the recovery of shrubs and/or trees on cleared lands through spontaneous regrowth following the cessation of previous disturbance or land use.

While the benefits of rewilding for carbon sequestration (Mercer and Gregg, 2023) and biodiversity conservation (Martín-Forés et al., 2020; Perino et al., 2019) are increasingly recognised, their implementation often generates significant social, economic, and policy-related conflicts. Accordingly, the main aim of this Deliverable is to assess citizens' and stakeholders' perceptions of the opportunities and risks associated with different rewilding strategies, to examine perceived policy trade-offs, and to identify local, context-dependent factors that influence the acceptability of rewilding initiatives.

Funded by the European Union

2.2. Perceptions

Perceptions can be understood as the "*input side of the organism*" (Attneave, 1962, p. 1), representing the outcome of cognitive processes through which individuals interpret information captured via the senses. In the social and political sciences, public perceptions are a broad concept, typically rooted in attitudes, preferences, values, and beliefs (Feldman, 1988). By clarifying how perceptions shape positive or negative local evaluations, research can inform policy and practice at multiple scales, including assessments of the social impacts of conservation initiatives, the legitimacy of conservation governance, and the social acceptability of environmental management strategies (Bennett, 2016).

In this study, the focus is on addressing the question "*What does the public think?*". Accordingly, less attention is paid to individual-level perceptual processes of sensing and cognition (Assefa and Frostell, 2007), and greater emphasis is placed on the attitudes of citizens and specific stakeholder groups toward the two rewilding strategies described in Section 2.1 (i.e., proforestation and the natural rewilding of abandoned agricultural land).

Research on forest perceptions identifies several recurring themes. Forests are commonly perceived as complex, multifunctional spaces with recreational, cultural, ecological, and economic significance. They are frequently described as unique and irreplaceable environments associated with emotional well-being and community identity, while also being valued for the ecosystem services they provide, such as air and water purification, resource provision, and tourism opportunities. At the same time, forests are widely recognised as critical ecological systems for biodiversity conservation and climate regulation, although these functions may be outweighed by cultural or livelihood considerations in some regional contexts (Kazungu and Hunziker, 2025).

Perceptions of forests and restoration processes vary considerably across social groups and contexts. Factors such as gender, age, education, proximity to forests, and professional involvement in forestry influence how forests and rewilding initiatives are viewed. Regional differences also shape expectations for restoration outcomes: for example, communities in Mediterranean regions often prioritise fire prevention and erosion control, while boreal regions tend to emphasise wetland protection and wildlife conservation (Kazungu and Hunziker, 2025).

Methodologically, forest perception research spans both qualitative and quantitative approaches. Qualitative studies — such as Kazungu and Hunziker (2025) and Ní Dhubháin et al. (2009) — typically employ structured or open-ended interviews with purposively selected stakeholders to capture narratives, cultural meanings, lived experiences, and landscape preferences. Quantitative studies, by contrast, rely on large-scale, statistically representative surveys at national or international levels to identify broader patterns in perceptions and preferences, using structured questionnaires and Likert-scale items to assess awareness, familiarity, and concern (Saklaurs et al., 2022; Stange et al., 2022). Taken together, these complementary approaches provide a robust foundation for understanding how forests are valued and how rewilding or restoration initiatives are likely to be perceived and accepted.

2.3. Policy trade-offs

Policy trade-offs are defined within the framework of policy coherence. Policy coherence occurs when "*policy goals can be simultaneously achieved without any significant trade-offs*", whereas policy incoherence arises when "*policy goals contain major contradictions where goals cannot be attained simultaneously, thus leading to policy fragmentation or policy integration failure*" (Sotirov and Arts, 2018, p. 962). In other words, policy coherence reflects

Funded by the European Union

the presence of synergies between policy objectives (Briassoulis, 2004), while policy incoherence indicates the existence of trade-offs (Sotirov & Storch, 2018).

For the purposes of this research, rewilding-related policy targets are considered to involve trade-offs when they are misaligned with other policy sectors relevant to rewilding, such as agriculture, forestry, rural development, and wildlife management. Policy coherence can be assessed both vertically — across spatial scales (e.g., EU, national, subnational, local) — and horizontally — across sectors (Sotirov & Arts, 2018). In this study, vertical trade-offs were assessed between policies relevant to rewilding at the EU and national levels, while horizontal trade-offs were examined among key national-level policy sectors.

2.4. Conflicts and acceptability

A central finding in multiple studies is that rewilding often generates socio-political conflicts rooted in differences in values, land use and ownership, risk perceptions, and governance failures. Consequently, the absence of early and meaningful stakeholder participation can lead to resistance, even when ecological benefits are widely recognised (Carver et al., 2025). Hertel et al. (2023) highlight that the success of rewilding initiatives is strongly influenced by non-ecological factors, including political support, transparency, and stakeholder engagement. Poor communication or top-down decision-making increases the likelihood of conflict.

The reintroduction of wildlife species and the active withdrawal of human management are particularly controversial (Dempsey, 2021). Reintroduction projects often provoke conflict because communities directly experience changes in wildlife presence. For example, Holmes et al. (2024) report cases of illegal beaver killings, dam destruction, and threats of violence from land managers who perceived rewilding as imposed. Broader reviews, such as Coz et al. (2020), document similar patterns of illegal killing, mistrust, and resistance in wolf and other carnivore conservation, which mirror conflicts observed in rewilding efforts.

Conflicts are also intensified by differing values and competing visions of "*what nature should be*". Nogués-Bravo et al. (2016) describe rewilding as a "Pandora's box" because stakeholders disagree on its goals — whether to restore past baselines, promote autonomous ecosystems, or provide ecosystem services. Such disagreements can create ideological conflict even before implementation begins. Furthermore, ecologically successful rewilding may still be socially disruptive if rural communities fear it could promote depopulation or reduce agricultural viability, a recurring concern in European contexts (Carver et al., 2025).

Given the potential of rewilding to disrupt established socio-economic systems (Butler et al., 2021), its implementation is strongly conditioned by public support and the capacity of policies to foster social acceptance. Studies have shown that residents' attitudes and perceptions can facilitate effective conservation management in protected areas (Allendorf, 2007; Cihar et al., 2006; Sekhar, 2003), and socio-psychological research indicates that attitudes are key determinants of environmentally oriented behaviour (Glasman et al., 2006).

Therefore, actively engaging stakeholders is mutually beneficial, as it helps identify perceived challenges, benefits, and potential trade-offs, thereby enhancing the social acceptability and legitimacy of rewilding initiatives.

Funded by the European Union

3. EU citizens' perceptions towards different rewilding options (Survey 1 - subtask 4.2.2)

3.1. Background for survey 1

The main objective of sub-task 4.2.2 was to obtain a general assessment of EU citizens' perceptions of rewilding options in the eight WILDCARD countries: Belgium, Bulgaria, Czechia, Germany, Italy, the Netherlands, Romania, and Switzerland.

At an early stage of the project, a substantial overlap was identified between this sub-task and Task 1.5 in wildE, a sister project to WILDCARD funded under the European Union's Horizon Europe research and innovation programme (Grant Agreement No 101081251). Both activities aimed to assess EU citizens' perceptions of rewilding through a survey administrated by a professional polling agency. However, the wildE survey had a broader geographical scope, covering the 27 EU Member States as well as Norway, Switzerland, and the United Kingdom.

To avoid a duplication of efforts and to maximize synergies between the two projects, a coordination meeting involving USV, EFI and WUR teams was held in Month 3 of the project (March 2024). Following this initial meeting and several subsequent discussions, it was agreed that WILDCARD would not conduct a separate EU-wide citizen survey. Instead, WUR incorporated three additional questions in the wildE survey to allow to capture citizens' perceptions of the two rewilding strategies central to WILDCARD: proforestation and natural afforestation.

In this deliverable, we briefly describe the methodology used in the wildE survey, followed by an in-depth analysis of the two WILDCARD-specific questions. A full description of the wildE survey methodology and results is provided in Smith et al. (2025). Survey responses were collected by the polling agency in collaboration with wildE, with a total of 13,763 responses, ranging from 341 to 542 respondents per country.

3.2. Data collection for survey 1

Data collection targeted 27 EU countries, plus Switzerland, Norway, and the UK (Smith et al., 2025). The survey employed quota sampling (Moser and Stuart, 1953), stratifying the sample by age, gender, and rural versus urban residency within each country. This non-probabilistic method allows the creation of a convenience sample divided into pre-defined subgroups (quotas). Population distributions by age and gender were based on the Eurostat database of the European Commission (Eurostat, 2025). In cases where a given subgroup was not represented, respondents were reallocated to existing subgroups (Smith et al., 2025).

The target sample size per country was over 400 respondents, though it varied from a maximum of 542 in the UK to lower numbers in smaller countries (341 for Luxembourg, 350 for Cyprus, and 375 for Malta). Additional socio-demographic information was collected, including respondents' highest level of completed education and approximate household income in 2024.

The questionnaire included three main questions relevant to WILDCARD, designed to assess perceptions of the two rewilding strategies the project focuses on (see Appendix 2):

- Q11: What effect do you believe these changes would have for nature conservation, and for reducing climate change and its impacts, in [Respondent's country of residence]? (composed of 6 sub questions)

Funded by the European Union

- Q12: Imagine that more farmland in your country was abandoned and left unmanaged. Do you believe this would have an overall positive or negative effect for the issues listed below? (composed of 7 sub questions)
- Q18: Imagine that more forest was allowed to develop freely, without management, in the landscape that you have in mind. Do you believe this would have an overall positive or negative effect for the issues listed below? (composed of six sub questions)

Response options to each of the sub questions were provided on a 7-point Likert scale, ranging from 1 (very negative) to 4 (neutral) to 7 (very positive). For each question, respondents also had the option to select 8 (don't know) if they were unsure.

3.3. Data analysis for survey 1

The global dataset comprised responses from 13,763 individuals. However, as noted in Smith et al. (2025), the number of respondents identifying as Gender "other" was very small (n = 20), and these responses were therefore excluded from the analyses. The resulting workable dataset consisted of 13,743 responses. Given the quota sampling method, the dataset provides relative representativity of each country's population structure, warranting a country-by-country analysis as the first step. For each question, the frequency distribution of response categories was computed to identify the dominant answer patterns. The core multivariate structure of respondents' attitudinal patterns was assessed using Multiple Correspondence Analysis (MCA). The aim of this analysis was to identify the responses that most differentiate respondents and to explore how respondents distinguish themselves based on these responses. The analysis focused on items Q12 and Q18, which capture closely related dimensions of respondents' perceptions and priorities through a set of 13 subquestions, all measured on the Likert scale (plus a "don't know" option). These variables were treated as nominal factors, with all substantive modalities retained. MCA was performed on the Burt matrix of Q12 and Q18, with socio-demographic variables included as supplementary variables. Analyses were conducted in R (version 4.4.2) using functions from the FactoMineR package (Josse and Husson, 2008). In addition to MCA, Pearson's Chi-square tests were used to evaluate whether response patterns were significantly associated with socio-demographic variables (e.g., country, age group, gender, education, environmental concern). For each question, contingency tables were constructed, and p-values were used to assess the strength of associations, after verifying minimal expected cell frequencies.

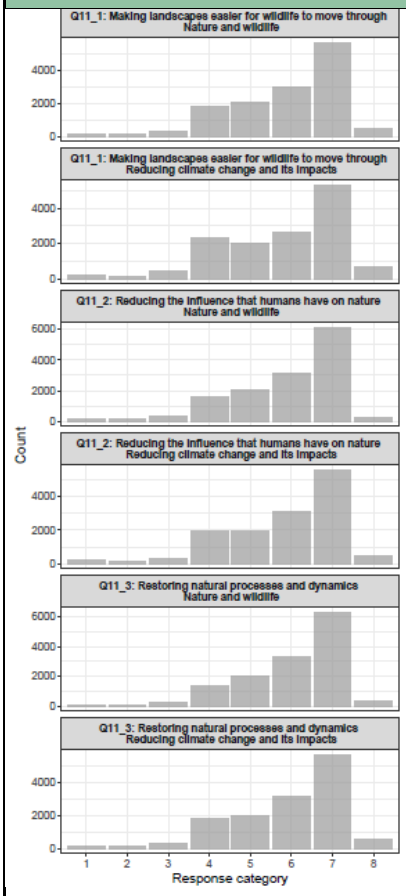
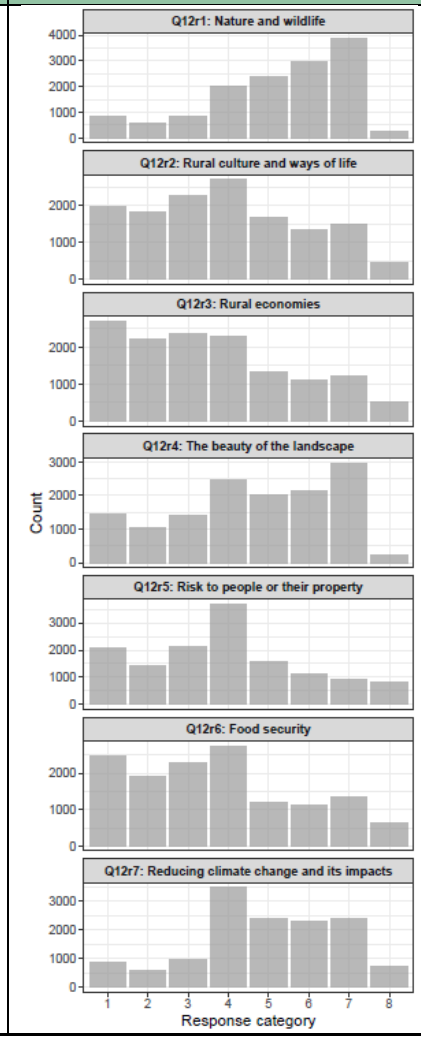
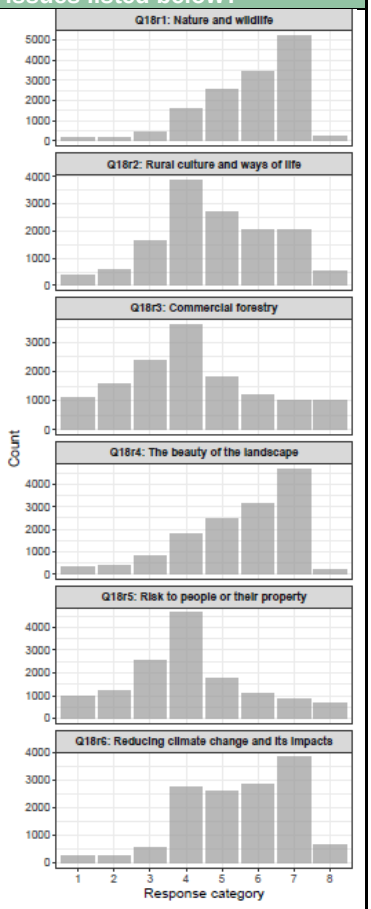
3.4. Results of survey 1

3.4.1. Distribution of answers

The descriptive overview revealed substantial heterogeneity across questions. While some items (Q12-2 to 4, Q12-6, Q18-3) exhibited near-uniform distributions, others showed strong clustering around positive or negative response categories (Q11, Q18-1, Q18-7). Questions where a particular response category predominates indicate a clear overall preference among respondents, but simultaneously show a low level of discrimination, meaning they contribute less to differentiating between respondents' attitudes (Box 1).

For example, the distributions of responses to Q11 were surprisingly homogeneous, with a large share of respondents selecting "very positive effect" (7 on the Likert scale). In fact, for each item in Q11 — "*Making landscapes easier for wildlife to move through*," "*Reducing the influence that humans have on nature*," and "*Restoring natural processes and dynamics*" — over 5,000 respondents out of 13,743 indicated a very positive effect. This indicates that the majority of participants associated these proposed changes with clear benefits for wildlife, nature, and climate change mitigation.

Box 1. Distribution of answers for the three questions of the survey (N=13743)

Q11. What effect do you believe these changes would have for nature conservation, and for reducing climate change and its impacts, in your country?	Q12. Imagine that more farmland in your country was abandoned and left unmanaged. Do you believe this would have an overall positive or negative effect for the issues listed below?	Q18. Imagine that more forest was allowed to develop freely, without management, in the landscape that you have in mind. Do you believe this would have an overall positive or negative effect for the issues listed below?
		

3.4.2. Significance of the dominant answers (option selected by a majority of respondents)

Across countries, certain response patterns are dominant, with a majority of respondents choosing the same option for each question. For example, in Q12 — "*Imagine that more farmland in your country was abandoned and left unmanaged. Do you believe this would have an overall positive or negative effect for the issues listed below?*" — Table 2 highlights the significant preferences observed in the total sample (N = 13,743).

The Chi-square tests indicate unambiguously that the responses are highly significant, meaning they are not the result of a uniform or random distribution (Table 2). For instance, a statistically significant proportion of respondents (48.34%) believe that more abandoned farmland would have a very positive effect on nature and wildlife, while 20.20% perceive a very negative effect on rural economies.

Funded by the European Union

Table 2. The significance of dominant answers for the overall positive or negative effect of abandonment of farmland (N=13743)

Responses (Q12)	Dominant answer	Proportion (%)	Chi² p-value
Nature and wildlife	7: very positive	48.34	0 (***)
Rural culture and ways of life	4: neutral	20.07	< 1e-06 (***)
Rural economies	1: very negative	20.20	< 1e-06 (***)
The beauty of the landscape	7: very positive	25.61	< 1e-06 (***)
Risk to people or their property	4: neutral	46.03	0 (***)
Food security	4: neutral	22.00	< 1e-06 (***)
Reducing climate change and its impacts	4: neutral	40.77	0 (***)

A similar pattern emerges for Q18 — "*Imagine that more forest was allowed to develop freely, without management, in the landscape that you have in mind. Do you believe this would have an overall positive or negative effect for the issues listed below?*" — where the majority of respondents (38.48%) associate proforestation with very positive effects on nature and wildlife (Table 3).

Table 3. The significance of dominant answers for the overall positive or negative effect of proforestation (N=13743)

Responses (Q18)	Dominant answer	Proportion (%)	Chi² p value
Nature and wildlife	7: very positive	38.48	0 (***)
Rural culture and ways of life	4: neutral	29.31	0 (***)
Commercial forestry	4: neutral	28.38	0 (***)
The beauty of the landscape	7: very positive	34.68	0 (***)
Risk to people or their property	4: neutral	35.51	0 (***)
Reducing climate change and its impacts	7: very positive	29.35	0 (***)

In all cases, the observed proportions differ significantly from what would be expected under a random process, indicating that the dominant responses reflect statistically meaningful choices. These proportions were further broken down by country to enable a more detailed, country-level analysis of respondents' preferences.

3.4.3. Identifying pattern of responses – which variables discriminates the respondents?

To evaluate patterns of response choices across all countries, a Multiple Correspondence Analysis (MCA) was performed on the 13,743 respondents, using 12 active items (questions Q12 and Q18 combined). Socio-demographic categorical variables were treated as supplementary variables: they aided in interpreting the results but did not contribute to the calculation of the dimensions.

The MCA generated a large number of dimensions (91), reflecting the high number of categorical variables and response categories. The first three dimensions explained 16.1% of the total inertia (5.9%, 5.3%, and 4.9%, respectively), which is typical for survey MCAs with many categories.

The first dimension contrasts responses emphasizing nature, wildlife, rural culture, and traditional ways of life — reflecting a pro-environmental and cultural landscape orientation — with responses more focused on security concerns, such as risks to people and property, food security, and, to some extent, climate change mitigation (Figure 1).

Funded by the European Union

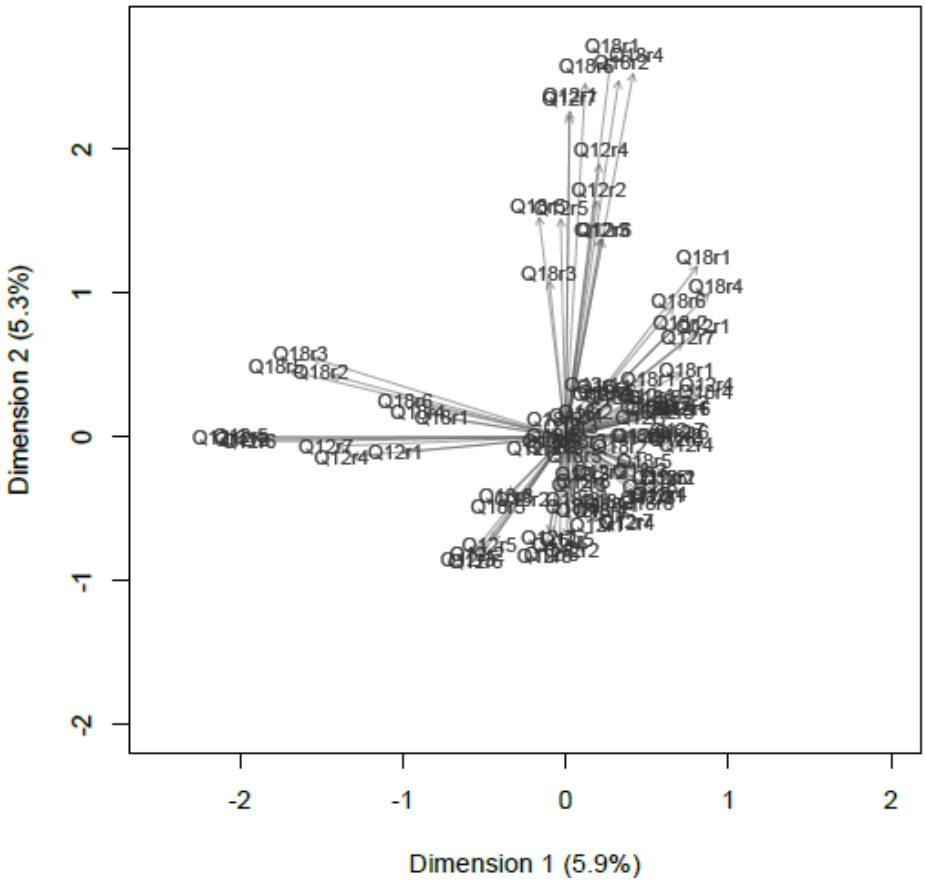


Figure 1: Factor map of active response categories for Q12 and Q18 (MCA Dimensions 1 and 2).

This pole thus groups instrumental, risk-oriented concerns. Dimension 1 reflects a shift toward risk, security, and protection-related priorities, driven particularly by the following question items (Figure 2):

- Q12r5 — Risk to people or their property
- Q12r6 — Food security
- Q12r7 — Reducing climate change and its impacts

Dimension 2 contrasts the prioritization of nature, wildlife, and landscape beauty with risk reduction, capturing the divide between conservation-oriented views and protection- and climate-oriented views regarding forestry. Dimension 2 highlights a shift toward protection, climate, and hazard-reduction actions, dominated by:

- Q18r5 — Prioritising risk to people or their property
- Q18r6 — Reducing climate change and its impacts

The η^2 values for the supplementary socio-demographic variables indicated a very small and non-significant influence on forest value orientations. In particular, gender and rurality had no discernible effect, aligning with findings reported in Smith et al. (2025) regarding beliefs about rewilding. Country-level differences, however, showed significant associations (Figure 3):

- **Finland:** strongly associated with the environmental–cultural pole on Dimension 1
- **Belgium:** positively associated with Dimension 2 (conservation vs. protection orientation)
- **Czech Republic and Denmark:** associated with protection/climate-action priorities on Dimension 2.

Funded by the European Union

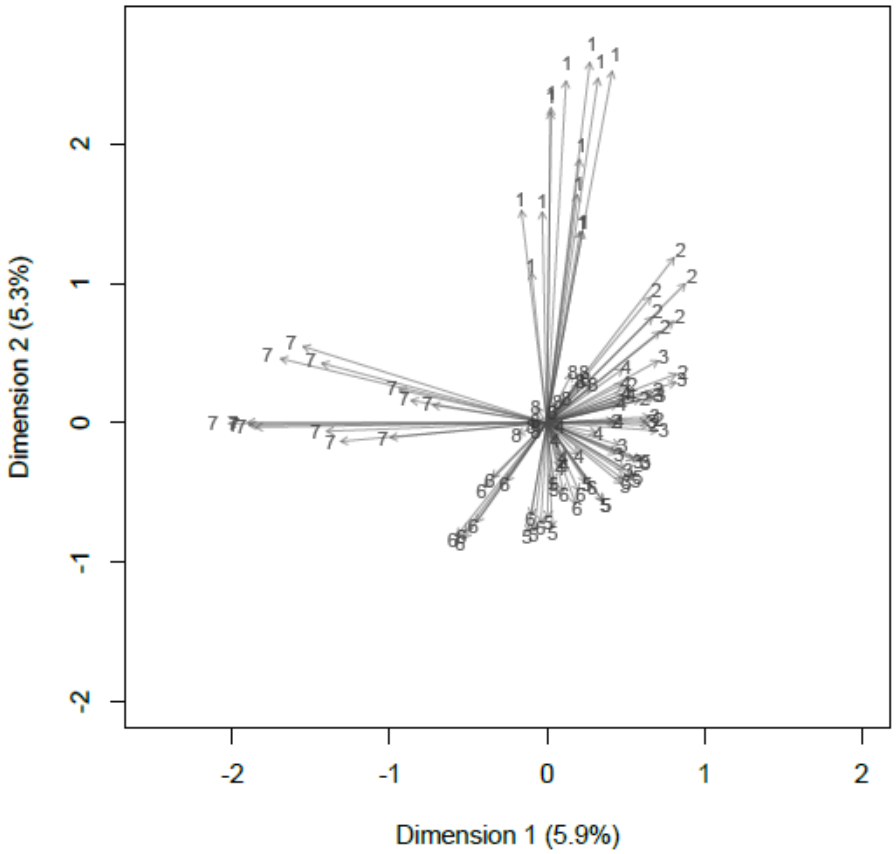


Figure 2: Projection of the options of answers – the Likert scale values (as supplementary variables) on the MCA factor map (Dimensions 1 and 2).

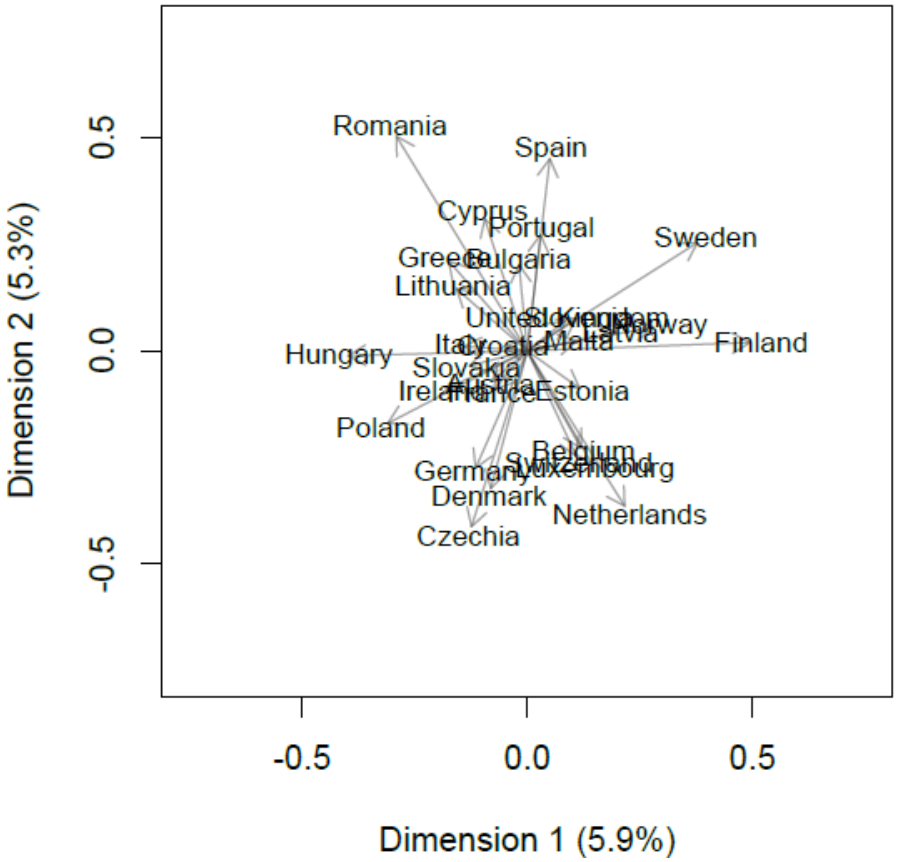


Figure 3: Projection of the countries (as supplementary variables) on the MCA factor map (Dimensions 1 and 2)

Funded by the European Union

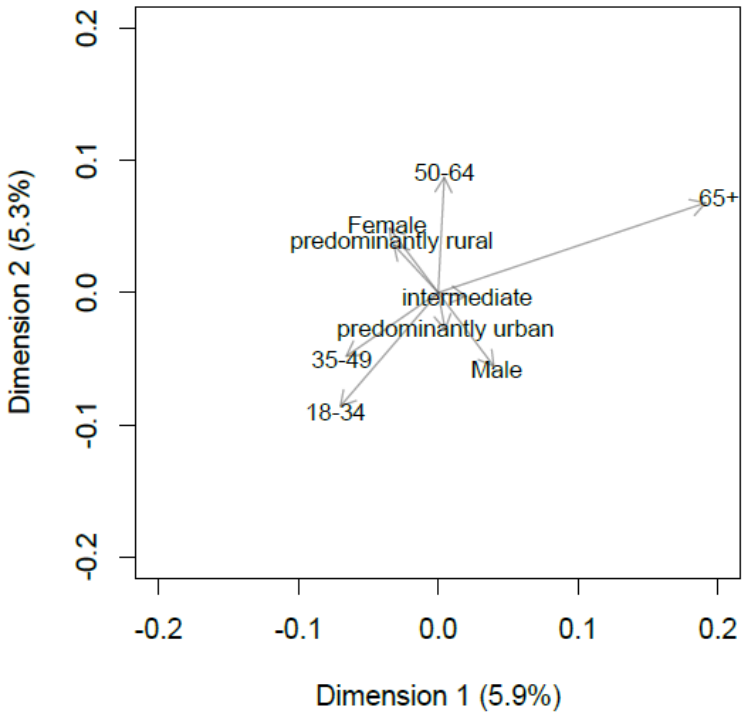


Figure 4: Projection of the age-bracket categories (as supplementary variables) on the MCA factor map (Dimensions 1 and 2).

The dominant socio-demographic association was clearly age, particularly the 65+ age group (Figure 4), which stood out from the rest. This group prioritizes risk to people and property differently, showing a stronger alignment with the protection- and risk-oriented pole (Q12r5–r7) and a weaker association with the conservation/landscape pole (Q18r5–r6) that characterizes younger respondents.

3.5. Preliminary conclusions from survey 1

Across Europe, respondents consistently viewed landscape connectivity, reduced human influence, and restored natural processes (Q11) as highly beneficial for both nature conservation and climate mitigation. Land abandonment (Q12) was widely seen as very positive for nature and wildlife and landscape beauty, but also very negative for rural economies. Concerns about food security and risk to people/property were mostly neutral. Allowing forests to develop freely (Q18) was broadly considered very positive for nature and wildlife, landscape beauty, and reducing climate change impacts, with risk-related concerns generally perceived as neutral. The response patterns were found to be statistically significant: Chi-square tests confirmed that the answers were far from random, indicating strong and consistent public preferences. The Multiple Correspondence Analysis (MCA) revealed two key dimensions:

1. Dimension 1: A contrast between pro-nature/landscape orientations and risk/security concerns.
2. Dimension 2: A divide between values prioritizing conservation/beauty and those focused on protection and climate risk.

A surprising finding was the minimal influence of socio-demographic factors, such as gender and rurality, which had no significant effect on attitudes. However, country differences were notable. The most striking distinction was age: respondents aged 65+ were more aligned with risk and protection concerns, while younger respondents tended to prioritize nature and landscape values.

Funded by the European Union

4. Policy stakeholders' perceptions of rewilding options and potential associated trade-offs at the National level and EU level

This section presents the results of Task 4.2.3, which investigates policy stakeholders' perceptions of rewilding options, including the associated policy trade-offs at both the national and EU levels. To achieve this research objective, two complementary methods were employed:

1. Online surveys conducted at the national level (Survey 2.1).
2. A series of qualitative, in-depth expert interviews carried out at the EU level (Interviews 2.2), providing further nuanced insights.

4.1. Perceptions of different rewilding options by policy stakeholders at the national level (Survey 2.1.)

4.1.1. Questionnaire design for survey 2.1.

The full version of the questionnaire, available in Appendix 3, included several sections designed to assess key aspects of policy stakeholders' perceptions. Specifically, the questionnaire comprised:

1. Socio-demographic questions (Questions 1 to 6).
2. Attitudes towards proforestation and natural rewilding on abandoned agricultural lands.
3. Assessment of policy trade-offs via vertical and horizontal policy coherence.

Vertical policy coherence was evaluated by asking respondents to identify potential conflicts and synergies between two major EU policy targets:

- The EU Biodiversity Strategy for 2030 target to strictly protect 10% of EU land by 2030.
- The EU Nature Restoration Regulation (NRR) legally binding target to restore 20% of EU land by 2030, and all ecosystems in need by 2050.

Respondents were asked to assess these targets in relation to national policies in the following sectors: Forestry, Agriculture, Nature conservation, Wildlife management, Rural development, Wildfire management, Water management, Climate change mitigation, Climate change adaptation.

The justification for the selection of these EU policies is provided in Appendix 4. Note that these vertical coherence questions were not applicable to Switzerland and therefore not included in the Swiss version of the questionnaire.

Horizontal policy coherence was assessed by evaluating the alignment of national policy goals related to proforestation and natural rewilding of abandoned agricultural land. Where no existing policies were identified, respondents were presented with hypothetical scenarios. For example: "*Imagine that a policy supporting the free development of forests without management was established in [country]. Do you think this policy would be aligned or misaligned with national-level policies in [country]?"* For natural rewilding of abandoned agricultural land, all questions were hypothetical, as no specific natural rewilding policies had been identified at the national level. The selected national policy goals related to proforestation are detailed in Appendix 4.

The survey was shared among project participants during the WILDCARD annual meeting in Suceava to gather feedback and ensure all relevant aspects were covered. A preliminary

Funded by the European Union

version of the survey was then tested both internally at EFI and externally with project partners at the University of Suceava. Feedback from these testing phases was incorporated into the final version of the survey. Finally, the survey was translated into the national languages of the target countries using DeepL. Translations were then verified by project partners in each respective country to ensure accuracy, providing a high-quality version of the survey for all policy stakeholders in their native language(s)

4.1.2. Data collection for survey 2.1.

The survey was conducted across the eight WILDCARD countries: Belgium, Bulgaria, Czechia, Italy, Germany, the Netherlands, Romania, and Switzerland. In addition, two more countries, France and Spain, were included. The inclusion of these countries was based on prior research conducted by EFI (Frei et al., 2020, 2022), which provides valuable insights into national-level perceptions. Their inclusion also enhances the relevance of this deliverable, as France and Spain are the second and fourth most populous EU member states, respectively, and are the two largest by land area. Both countries are also experiencing significant trends of land abandonment, projected to continue until 2030 (Perpiña Castillo et al., 2018), along with increasing forest cover due to natural forest expansion and afforestation (Forest Europe, 2020).

Policy stakeholders in this survey are defined as individuals or groups with an interest and/or investment in rewilding-related topics. Specifically, the focus was on stakeholders who directly or indirectly influence rewilding-related policy-making processes, including policymakers, NGOs, lobby groups, and other relevant interest groups. This categorization is grounded in the understanding that policymaking is a complex, networked process, where scientific evidence is just one of many influencing factors (Gluckman, 2016).

The survey also considered sub-national policy stakeholders in the selection criteria, as nature restoration and conservation policies are often managed at the regional level in many European countries (e.g., the Federal States of Germany). For researchers, only those with specific expertise were included, particularly those considered “knowledge brokers” or “boundary workers” (Turnhout et al., 2013). For instance, in Romania, researchers who played an active role in developing the National Forest Strategy were included in the survey distribution.

Table 4: Total number of completed responses per country.

Country	Number of stakeholders contacted	Total complete responses
Belgium	53	13 (11 in French, 2 in Dutch)
Bulgaria	91	15
Czechia	88	15
France	58	15
Germany	94	17
Italy	68	35
The Netherlands	52	9
Romania	81	19
Switzerland	45	13 (10 German, 3 French)
Spain	55	17

To map relevant policy stakeholders, the following methods were employed:

1. WILDCARD WP5's Stakeholder mapping exercise (Milestone 2);
2. support from WILDCARD project partners in identifying relevant national contacts;
3. online desk research using search engines to further expand the list of contacts in each country.

The survey was distributed via email using SurveyMonkey. Participants were encouraged to forward the survey to additional contacts who met the selection criteria, both within and outside their own organizations, in order to maximize the response rate. Data collection took place from June to August 2025. A total of 168 complete responses were collected across the 10 countries surveyed, with the distribution of responses outlined in Table 4.

4.1.3. Data analysis for survey 2.1.

4.1.3.1. Quantitative analysis of the closed questions

Demographic characteristics are summarized in Table 5. The study gathered responses from 168 participants across 10 European countries: Belgium, Bulgaria, Switzerland, Czech Republic, Germany, France, Italy, Netherlands, Romania, and Spain. The sample was predominantly male, with 128 male respondents, 38 females, and 2 participants identifying as other genders. Italy contributed the largest number of respondents (35), while the Netherlands had the fewest (9). In terms of location, most participants came from urban areas (76), followed by rural areas (58) and intermediate areas (34).

Table 5. Distribution of the number of respondents for the national survey (N=168)

Participants	BE	BG	CH	CZ	DE	FR	IT	NL	RO	SP	Sum
Per gender and per country											
Female	2	5	4	0	7	6	6	3	1	4	38
Male	11	10	9	14	10	9	29	5	18	13	128
Other	0	0	0	1	0	0	0	1	0	0	2
Sum	**13**	**15**	**13**	**15**	**17**	**15**	**35**	**9**	**19**	**17**	**168**
Per rurality zone and per country											
Intermediate	2	3	2	4	2	2	10	4	2	3	34
Rural	9	5	4	6	5	8	9	1	5	6	58
Urban	2	7	7	5	10	5	16	4	12	8	76
Sum	**13**	**15**	**13**	**15**	**17**	**15**	**35**	**9**	**19**	**17**	**168**

The core multivariate structure of respondents' attitudinal patterns was analysed using Multiple Correspondence Analysis (MCA). The goal of this analysis was to identify the responses that most differentiate respondents and how these differences manifest. The analysis focused on responses from questions Q7, Q10, Q14, Q17, and Q21, with a total of 166 usable responses. These variables were treated as nominal factors, and all relevant modalities were retained. MCA was performed on the Burt matrix of the selected variables, with socio-demographic variables included as supplementary variables for interpretation, but not directly contributing to the MCA calculation. Analyses were conducted using R (version 4.4.2), and MCA was executed using functions from the FactoMineR package (Josse & Husson, 2008). In addition to MCA, Pearson's Chi-square tests were conducted to assess whether response patterns were significantly associated with socio-demographic variables (e.g., country, gender, professional background). Contingency tables were constructed for each pair of interest, and

Funded by the European Union

p-values were calculated to evaluate the strength of the associations, after ensuring that the minimal expected cell frequencies were met.

4.1.3.2. Qualitative analysis of the open-ended questions

The open-ended responses were initially translated into English using DeepL software. These responses were then analysed and coded in MAXQDA, a software tool for qualitative text analysis, employing both deductive and inductive approaches (Creswell & Creswell, 2017). Deductive coding followed the topics outlined in the Likert scale questions (Table 6). Inductive coding was used to identify emerging sub-topics as well as any additional themes that extended beyond the predefined Likert scale categories. During the coding process, the open-ended responses were cross-referenced with the corresponding Likert scale scores to ensure consistency between the qualitative descriptions and the quantitative ratings. No discrepancies were found between the two.

Given that the Likert scale questions addressed different topics, the open-ended responses were coded separately for two major themes: perceptions of rewilding and policy alignment. Separate codebooks were used for each theme (see Appendix 5). After coding all responses, the frequency of sub-codes under each main topic was calculated to determine the relative significance of each sub-topic. Finally, the codes and sub-codes were exported to Excel and summarized graphically for further analysis.

Table 6. List of topics derived from the Likert scale questions on perceptions of rewilding and policy alignment. These topics were used as the deductive code structure when coding the open-ended responses.

Perceptions	Policy alignment
Nature and wildlife	Forestry
Commercial forestry	Agriculture
Rural culture and ways of life	Nature conservation
Rural economies	Wildlife management
The beauty of the landscape	Rural development
Risk to people or their property	Wildfire
Food security	Water management
Reducing climate change and its impacts	Climate change mitigation
	Climate change adaptation

4.1.4. Results of survey 2.1.

4.1.4.1. Results of the statistical analysis

Respondents generally viewed proforestation (Table 7) most positively in terms of nature and wildlife (35.71% responded “very positive”) and landscape beauty (26.78% said “very positive”). However, the impacts on commercial forestry (23.81% responded “very negative”), rural culture and way of life (20.83% said “very negative”), and rural economies (19.64% said “very negative”) were perceived negatively. For risks to people and property and food security, the majority of respondents expressed neutral views. Climate change mitigation received moderately positive support, with 27.39% of respondents indicating a “positive” effect.

A policy supporting free forest development without management (Table 8) was seen as very positively aligned with nature conservation (30.36%) and climate change policies (both mitigation and adaptation, around 21-23% marked as “very positive”). However, respondents believed such a policy would negatively align with forestry (20.24%), agriculture (23.21%), rural development (19.05%), and wildfire management policies (26.19%). Water management policies were viewed neutrally, with 20.83% of respondents selecting a neutral stance.

Funded by the European Union

Table 7. The significance of dominant answers for the overall positive or negative effect of proforestation (N=168) Q7. Imagine that more of the existing forest was allowed to develop freely, without any management, in [your country]. Do you believe this would have an overall positive or negative effect for the issues listed below?

Question 7	Dominant answer	Proportion (%)	Chi² p value
Nature and wildlife	7: very positive	35.71	0 (***)
Commercial forestry	2: negative	23.81	0 (***)
Rural culture and way of life	2: negative	20.83	0 (***)
Rural economies	2: negative	19.64	< 1e-06 (***)
Landscape beauty	7: very positive	26.78	0 (***)
Risks to people or their property	4: neutral	36.91	0 (***)
Food security	4: neutral	51.19	0 (***)
Climate change and its impacts	6: positive	27.39	0 (***)

Table 8. The significance of dominant answers for the overall positive or negative effect of policy alignment with proforestation (N=168) Q10. Imagine that a policy supporting the free development of forests without management was established in [your country]. Do you think this policy would be aligned or misaligned with national level polices in [your country] related to the following topics?*

Question 10	Dominant answer	Proportion (%)	Chi² p value
Forestry	2: negative	20.24	0 (***)
Agriculture	2: negative	23.21	0 (***)
Nature conservation	7: very positive	30.36	0 (***)
Wildlife management	6: positive	20.24	0 (***)
Rural development	2: negative	19.05	< 1e-06 (***)
Wildfire	2: negative	26.19	0 (***)
Water management	4: neutral	20.83	0 (***)
Climate change mitigation	7: very positive	21.43	0 (***)
Climate change adaptation	7: very positive	23.21	0 (***)

If farmland were abandoned and left unmanaged (Table 9), respondents saw very positive effects for nature and wildlife (26.19%) and somewhat positive effects for climate change mitigation (25.60%). Rural economies were viewed most negatively (27.38% selected “negative”), with rural culture also being adversely impacted (24.40% “somewhat negative”). Commercial forestry, risks to property, and food security received predominantly neutral responses.

Natural forest development on abandoned farmland was seen as very positively aligned with water management (19.05%), climate change mitigation (19.64%), and climate change adaptation (22.62%) policies (Table 10). It was also positively aligned with nature conservation and wildlife management (26.19% and 20.83%, respectively). However, it was viewed as negatively aligned with agriculture (20.83%) and somewhat negatively aligned with forestry and wildfire management (around 18-20%).

Regarding the EU's target to strictly protect 10% of land (Table 11), many respondents selected “don't know” for forestry, agriculture, wildlife management, and water management (16-21%). The strategy was seen as very positively aligned with nature conservation (22.62%) and climate change adaptation (19.64%), and positively aligned with climate change mitigation (19.05%). Rural development and wildfire management received neutral responses (21-24%).

Funded by the European Union

Table 9. The significance of dominant answers for the overall positive or negative effect farmland abandonment (N=168) Q14. In some parts of Europe, farmland is being abandoned as rural populations decline or farming becomes less profitable in some areas. If they are left unmanaged, these areas often turn into shrublands or forests. Imagine that more farmland in [your country] was abandoned and left unmanaged. Do you believe this would have an overall positive or negative effect for the issues listed below?

Question 14	Dominant answer	Proportion (%)	Chi² p value
Nature and wildlife	7: very positive	26.19	0 (***)
Commercial fotrestry	4: neutral	39.88	0 (***)
Rural culture and way of life	3: somewhat negative	24.40	0 (***)
Rural economies	2: negative	27.38	0 (***)
Landscape beauty	6: positive	19.64	4e-05 (***)
Risks to people or their property	4: neutral	42.26	0 (***)
Food security	4: neutral	35.71	0 (***)
Climate change and its impacts	5: somewhat positive	25.60	0 (***)

Table 10. The significance of dominant answers for the overall positive or negative effect farmland abandonment (N=168) Q17. Imagine that a policy supporting the natural development of forest vegetation without human intervention on abandoned farmland in [your country] was established. Do you think this would be aligned or misaligned with national level policies in [your country] related to the following topics?*

Question 17	Dominant answer	Proportion (%)	Chi² p value
Forestry	3: somewhat negative	17.86	4.3e-05 (***)
Agriculture	2: negative	20.83	< 1e-06 (***)
Nature conservation	6: positive	26.19	0 (***)
Wildlife management	6: positive	20.83	< 1e-06 (***)
Rural development	4: neutral	18.45	1.3e-06 (***)
Wildfire	3: somewhat negative	20.24	< 1e-06 (***)
Water management	7: very positive	19.05	< 1e-06 (***)
Climate change mitigation	7: very positive	19.64	< 1e-06 (***)
Climate change adaptation	7: very positive	22.62	< 1e-06 (***)

Table 11. The significance of dominant answers for the overall positive or negative effect farmland abandonment (N=168) Q21. The EU Biodiversity Strategy for 2030 set the target to protect 30% of EU land and 30% of EU sea by 2030. The strategy further specifies that one third of these areas should be strictly protected, representing 10% of EU land and sea. Do you think that the EU Biodiversity Strategy target to strictly protect 10% of EU land by 2030 is aligned or misaligned with national level policies in [your country] related to the following topics?*

Question 21	Dominant answer	Proportion (%)	Chi² p value
Forestry	Don't know	16.67	1.7e-05 (***)
Agriculture	Don't know	19.05	1.9e-06 (***)
Nature conservation	7: very positive	22.62	0 (***)
Wildlife management	Don't know	19.64	3.1e-06 (***)
Rural development	4: neutral	21.43	< 1e-06 (***)
Wildfire	4: neutral	24.40	0 (***)
Water management	Don't know	21.43	< 1e-06 (***)
Climate change mitigation	6: positive	19.05	0 (***)
Climate change adaptation	7: very positive	19.64	0 (***)

Funded by the European Union

The Multiple Correspondence Analysis (MCA) (*Figure 5*) was performed on responses to questions Q7, Q10, Q14, Q17, and Q21, with a total of 166 usable respondents. The analysis revealed two dominant gradients, represented by Dimension 1 and Dimension 2.

Dimension 1 (the first gradient) was primarily characterized by the contrast between responses to Q10, Q17, Q21, and Q24 (Table 11). The key responses are outlined in Table 12. This axis indicates a division between respondents who believe that allowing forests to develop freely or abandoning farmland would have positive effects on nature and wildlife, landscape beauty, and climate mitigation, and those who see these policies as introducing risks and negative impacts on these same factors. Interestingly, those who believe that these actions are aligned with national policies are also more likely to view them positively for nature, wildlife, and other related areas. Conversely, respondents who are sceptical about forest unmanaged development and land abandonment tend to think these policies are misaligned with national goals in forestry, agriculture, water management, and similar sectors. Thus, Dimension 1 captures a general attitudinal divide towards management abandonment, with more sceptical respondents perceiving these policies as risky and potentially harmful, both in terms of their environmental impact and their alignment with national policy frameworks.

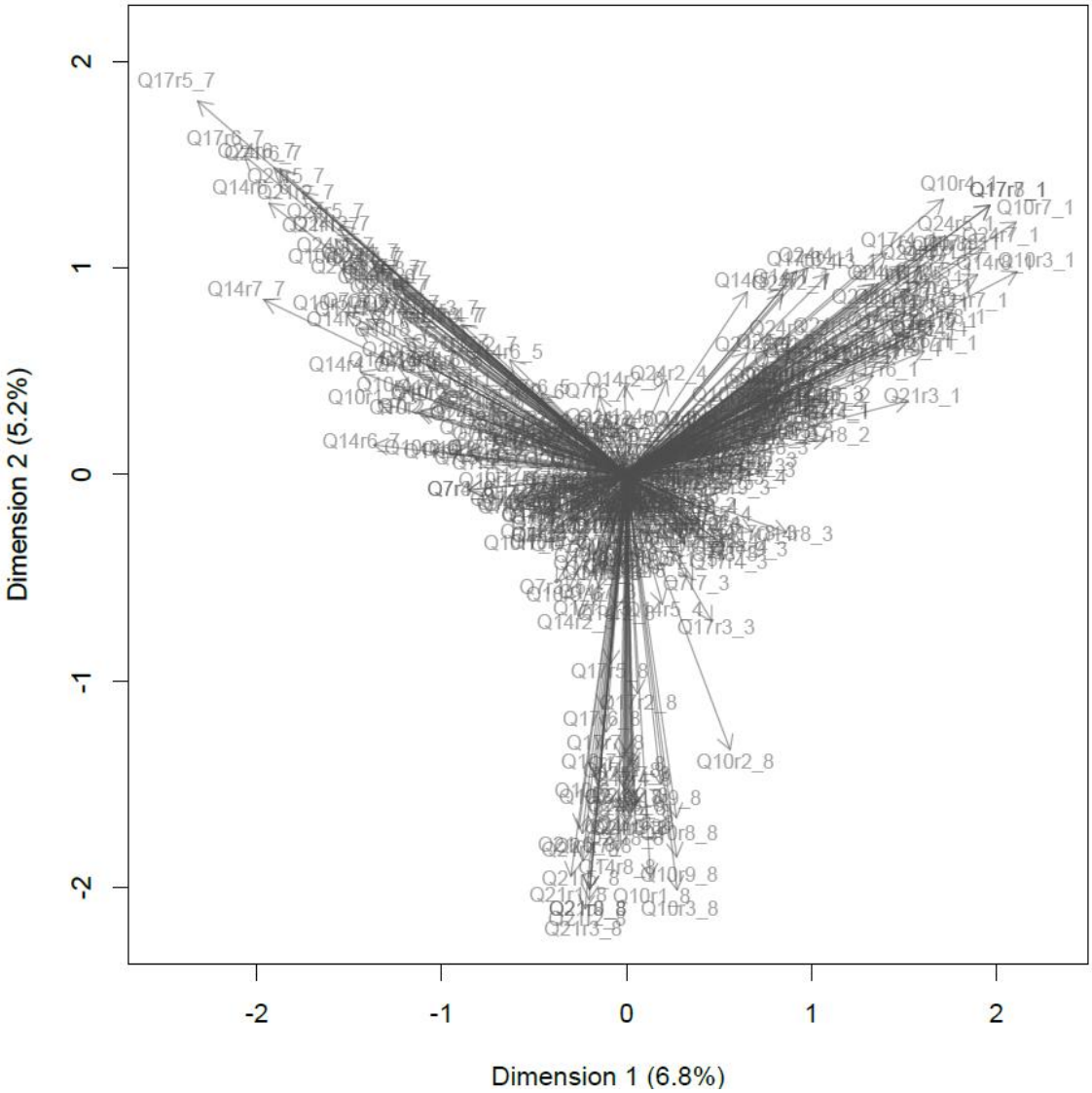


Figure 5: Factor map of active response categories (MCA Dimensions 1 and 2).

Funded by the European Union

Table 12. Dominant loadings (eta²) for Dim 1.

Responses	Q10r7	Q10r8	Q10r9	Q21r7	Q24r7	Q21r8
η²	0.650	0.643	0.624	0.620	0.607	0.604

NB: η^2 represents what share of variance (the inertia) of a given MCA dimension is explained by a specific variable (here, represented by responses to question).

Dimension 2 suggests a factor related to EU or national policy alignments, as indicated by the significant contribution of questions Q21 and Q24 (Table 13), which focus on the alignment of policies with national goals. The dominant responses to these questions point to climate change mitigation as a key factor in policy alignment. Unlike Dimension 1, which primarily reflects attitudes towards forest and farmland management, Dimension 2 focuses more on how respondents perceive these policies in relation to national and EU objectives, especially regarding climate goals. This dimension, therefore, highlights the interpretation of policy alignment, largely independent of respondents' broader attitudes towards management abandonment or environmental impacts as captured in Dimension 1.

Table 13: Dominant loadings (eta²) for Dim 2:

Question	Q21r7	Q24r8	Q21r8	Q21r9	Q24r6	Q24r9
η²	0.707	0.705	0.691	0.688	0.679	0.674

The projection of the supplementary variables (

Figure 6) illustrates a clear opposition on Dimension 1 between NGOs/interest groups, which are positioned near concerns related to water management and climate change mitigation and management, and regional policymakers and business investors, who occupy the opposite side. The gradient on Dimension 2, while less pronounced, generally contrasts the dominance of national versus regional policies.

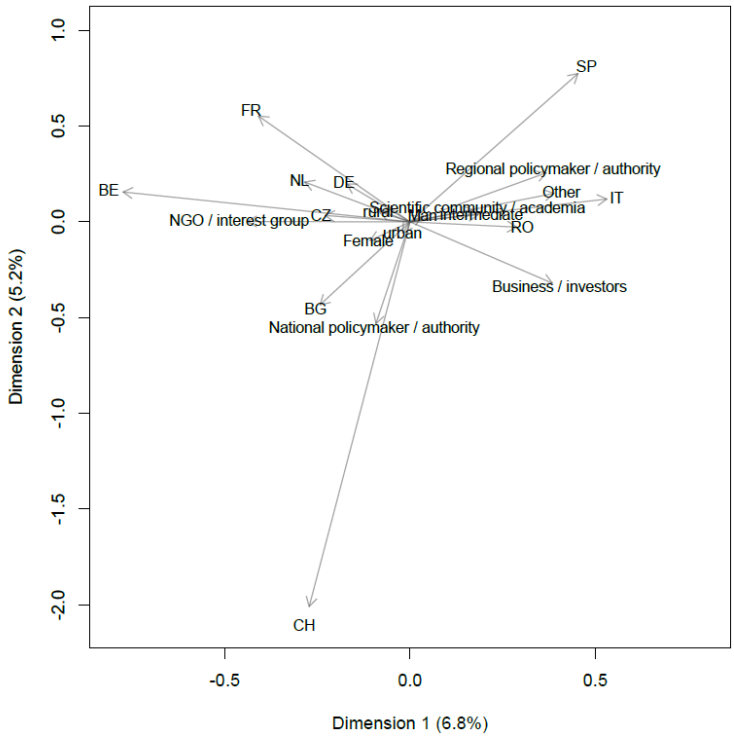


Figure 6. Projection of the supplementary (socio-demographic) variables on the first two dimensions of the MCA. The share of variance represented by each dimension is provided in percent in brackets.

4.1.4.2. Results of the qualitative analysis

4.1.4.2.1. Positive perceptions of proforestation/natural rewilding

When asked about the perceived positive impacts of rewilding, respondents primarily highlighted aesthetic reasons (such as the beauty of the landscape) and nature and wildlife. Other factors were only marginally mentioned (Figure 7). This finding was consistent with the statistical analysis, which showed that respondents generally viewed proforestation as positive for these two aspects. When examining the reasoning behind these perceptions, we found that respondents associated the positive impacts on nature and wildlife mainly with an increase in biodiversity. Specifically, they explained that the natural evolution of the forest through proforestation fosters higher biodiversity. For example:

> "*Freely evolving forest ecosystems contribute to the development and maintenance of relict habitats. For example, long-term free evolution allows for the recovery of mature habitats favourable to certain forest species that have become rare, such as saproxylic communities*" (FR).

The increase in biodiversity was also highlighted in relation to natural rewilding. Respondents noted how this approach would create mosaic landscapes, which they believed would provide habitats for specialized species and create stepping stones for species migration within intensively used landscapes.

Another key positive impact of rewilding mentioned was its effect on the beauty of the landscape. Respondents frequently described untouched or unmanaged nature as inherently beautiful. However, most did not elaborate on why they considered it so. A few, however, did provide further insights. For example, one respondent from Bulgaria pointed out not only the aesthetic value of unmanaged nature but also its economic potential, saying: "*There is a high demand for residential properties with views of forest landscapes without commercial use*"

4.1.4.2.2. Negative perceptions of proforestation/natural rewilding

On the other hand, **perceived negative impacts** were more spread across various topics, though there was a slight predominance of concerns related to risks to people and property and commercial forestry (Figure 8). The emphasis on commercial forestry was also reflected in the statistical analysis.

When discussing the **risks to people and property** associated with rewilding, many respondents, particularly from Spain, Italy, and Romania, specifically mentioned an increased wildfire risk. Several respondents highlighted the long-term effects of land abandonment and the subsequent accumulation of biomass. For example, one respondent noted:

> "*Since the abandonment of the Traditional Agricultural System in Spain since the 60s and 70s, most of the national uncultivated land is in fact abandoned and subjected to the dynamics of natural processes, and this explains the very dangerous increase in the risk of fires that we are witnessing and contributes greatly to the accelerated depopulation processes. To demand an increase in these dynamics is a very serious irresponsibility*" (ES).

Funded by the European Union

.

Positive perceptions of proforestation/natural rewilding

Figure 8: Share of positive topics (inner ring) and sub-topics (outer ring) in open-ended responses. Segment size reflects how many times a topic or sub-topic was mentioned by respondents. For example, the figure shows that many responses refer to positive effects of rewilding on nature and wildlife (topic), particularly due to an increase of biodiversity (sub-topic). For a longer description of the sub-topics, see the codebook in Appendix 5

Negative perceptions of proforestation/natural rewilding

Figure 7: Share of negative topics (inner ring) and sub-topics (outer ring) in open-ended responses.
Segment size reflects how many times a topic or sub-topic was mentioned by respondents.
For a longer description of the sub-topics, see the codebook in Appendix 5

It must be highlighted, however, that some respondents argued the opposite — that rewilding strategies could actually reduce wildfire risk. This divergence in opinion underscores one of the most significant points of tension surrounding the potential impacts of expanding rewilding approaches. As one stakeholder from France explained:

> "*Free-evolving forests may be perceived as conducive to the spread of fires due to the significant presence of biomass that can serve as fuel (vegetation, dead wood, and undergrowth). However, in reality, mature forests in free evolution may nevertheless present factors that counteract this spread: their complex composition with multiple layers slows the progression and speed of fire, maintains soil and biomass moisture levels, and reduces air circulation within the forest*".

Other "risks to people and property" identified by respondents included the perception that unmanaged spaces could become unsafe, with concerns about overgrown vegetation (notably reported in Bulgaria) or the risk of falling trees and branches in the absence of management (observed in Czechia and France).

For respondents who believed rewilding would negatively impact **commercial forestry**, the main concerns were reduced timber production and increased vulnerability to natural disturbances (which, as mentioned earlier, also ties into concerns about wildfire risk). It's noteworthy that concerns about declining timber production were almost exclusively tied to proforestation, and these sentiments were expressed across multiple countries. Stakeholders worried that without active management, forests would lose their economic function, jeopardizing associated jobs and income. These concerns were often linked to potential negative effects on the rural economy and cultural identity. As one respondent explained:

> "*Experience shows that the lack of sustainable forest management measures related to their cultivation and natural regeneration generally leads to the deterioration of forest conditions, the reduction of the economic function of forests and the permanent depopulation of rural and forest areas*" (BG).

In addition to concerns about reduced timber production, some respondents highlighted the potential negative impacts on commercial forestry due to the cessation of natural disturbance management, particularly the lack of sanitary and salvage logging in the event of a bark beetle outbreak.

As mentioned earlier, the perceived negative impacts of rewilding appeared to be more evenly distributed across various topics compared to the positive effects. However, it is worth exploring how the two topics most frequently cited as positively impacted (nature and wildlife, and landscape beauty) were also identified as potentially negatively affected. This duality could offer valuable insights into the most controversial aspects of the rewilding concept.

Regarding the negative impacts on **nature and wildlife**, these were often associated with biodiversity loss. Respondents expressed concerns that natural rewilding might result in the disappearance of open habitats, such as meadows and fens, which require active management to thrive. These habitats are seen as highly biodiverse components of mosaic landscapes. As one respondent explained:

> "*The mosaic landscape has already proven to be a powerful tool for preserving and increasing biodiversity. The increase in biomass is not always synonymous with an increase in biodiversity; in fact, when the biomass increases to the point of not allowing the sun to enter, biodiversity decreases (we are talking about Mediterranean ecosystems)* (ES).

Funded by the European Union

For the **beauty of landscapes,** negative perceptions were generally linked to fears of landscape homogenisation. This is well-explained by one of the answers from an Italian stakeholder:

> "*The abandonment of agricultural land…has led and continues to lead to a… certain alteration of the aesthetic value of the landscape, which from a complex mosaic composed of different environmental tiles risks taking on a disorderly homogeneous appearance*". (IT)

4.1.4.2.3. Vertical policy alignment

General trends in vertical alignment are more clearly illustrated in the quantitative section of the survey results. For the open-ended questions, however, the number of responses was relatively limited. This is likely due to survey fatigue, as these questions appeared towards the end, and respondents may have been less inclined to provide detailed answers. Additionally, the responses spanned a broad range of policy sectors, making it challenging to identify clear patterns across sectors or countries.

Aside from comments on alignment with specific policy sectors, several respondents provided broader assessments, expressing either general alignment or misalignment between the EU Biodiversity Strategy for 2030, the Nature Restoration Regulation, and national-level policies.

One notable statement came from a French respondent, who perceived a general alignment between EU policies and various national policies, as long as the processes were managed appropriately:

> "*There is room for everyone, well-managed forestry and agriculture, and nature that is free to evolve… but the French government needs to work on it instead of sabotaging all the progress made over the last 30 years*". (FR)

On the other hand, a Belgian respondent perceived a substantial misalignment between the two EU policies examined (the EU Biodiversity Strategy for 2030, the Nature Restoration Regulation) explaining how "*There are currently almost no measures in Belgium that would allow the stated objectives to be achieved*," and pointed out inconsistencies between establishing strictly protected areas and national policies, such as wildlife management being "*almost entirely oriented in favour of hunters*", which may conflict with hunting bans in strictly protected areas.

4.1.4.2.4. Horizontal alignment

- **Positive perspectives on policy alignment for proforestation**

When asked about the alignment of national proforestation policies with other policy sectors, most respondents saw a clear alignment with nature conservation and climate adaptation sectors (Figure 9). This finding was consistent with the statistical analysis. In the case of nature conservation, respondents' reasoning mirrored the positive perceptions of proforestation for nature and wildlife discussed earlier. Many believed that allowing forests to develop naturally, without human management, would enhance biodiversity — an outcome they saw as directly aligning with their country's nature conservation policies.

Upon closer examination of respondents' views on proforestation's alignment with climate change adaptation, the majority pointed out that naturally developing forests are better adapted to changing conditions than managed forests. For example, several respondents noted that unmanaged forests tend to be more resilient to climate extremes and better equipped to maintain ecosystem services in the face of climate change:

Funded by the European Union

> "*I am convinced that naturally developing forests are an important resource for climate change adaptation because ecosystem self-organization and self-regulation can occur—that is, the ecosystem can autonomously find a new form adapted to environmental conditions*" (CH).

Some respondents also viewed proforestation goals as being aligned with policies aimed at societal adaptation to climate change. For example, they highlighted how the development of green infrastructure through proforestation could enhance ecosystem services, such as temperature regulation in urban areas. However, it is important to note that there were also opposing views on these topics, with some respondents believing that proforestation could lead to policy misalignment. Similar to negative perceptions about the impact of rewilding on "nature and wildlife", these respondents argued that proforestation could result in biodiversity loss. This view stemmed from the belief that forest management is essential for maintaining habitats for certain species. As one respondent explained:

> "*Many valuable ecosystems are linked to human history. Free evolution will favour certain habitats and species to the detriment of others: homogenization… For example, the closure of beech forests and the increase of predators has expelled the capercaillie from the Picos de Europa National Park in a very short time (a decade)*."

- **Negative perspectives on policy alignment for proforestation**

On the other hand, when asked about the misalignment between proforestation goals and national policies, a broader range of sectors were highlighted, with wildfire management and agriculture being the most frequently mentioned (Figure 10). This focus was also consistent with the findings in the statistical analysis.

Responses related to wildfire management were particularly notable, closely resembling the concerns previously expressed regarding the risks to people and property linked to rewilding. These concerns were most prevalent among stakeholders from Southern European countries, particularly Spain, Italy, and France. Respondents expressed concerns that proforestation would complicate wildfire prevention and management, as it would limit intervention during natural disasters. Many feared that proforestation would lead to an accumulation of combustible biomass, increasing the severity of forest fires. For example, one respondent from Spain elaborated on this concern:

> "*Nature does not need us humans to follow her path. We need her. That is why it is essential to manage our forests. Their life cycle is far superior to ours. A fire that we consider devastating is actually a natural evolution. The question is: Can we afford it? The answer is clear: NO. When a forest is left to natural evolution, it leads to a process of accumulation of biomass, which ends in collapse: fire or plague… Not managing forests in the future would be collective suicide*".

In terms of misalignment with agricultural policies, several respondents noted that leaving forest areas to develop without management could reduce the land available for agriculture. As a result, they felt that with agricultural demand remaining the same, the sector may be pushed towards more intensive or industrial production to maintain output. One respondent expressed concern about this separation between forests and nature:

> "*Regarding agriculture, I fear an even sharper divide will emerge between farming and nature/forests, reinforcing the misconception that protecting a forest as a museum-like island—fenced off (because of wolves), with no*

Funded by the European Union

> *timber harvesting since wood will come from elsewhere, and turning it into a recreation park—means we are not engaging in truly sustainable, integrated solutions. Functions need to be more interconnected and optimized rather than maximized. Building resilience is, I believe, crucial for both people and nature*" (NE).

- **Perspectives on policy alignment for Natural rewilding**

Questions regarding policy alignment between national natural rewilding policies and other policy sectors were hypothetical, as no such policies were identified during our policy mapping exercise. Respondents were asked to provide details if they were aware of any such policies in their open-ended responses, but no relevant policies were reported. In fact, several respondents indicated that in their countries, policies actively prevent natural rewilding (e.g., Bulgaria), or that natural rewilding is already occurring, despite the absence of formal policies to support it (e.g., Spain, France, Italy, Switzerland). For instance, a Spanish stakeholder noted:

> "*Agricultural abandonment is already a reality in Spain; there is no need for a support policy because other factors (lack of generational replacement, lack of profitability...) are already driving this process*."

Since the questions on policy alignment were hypothetical, the responses provide only limited additional insights. However, they echo the arguments presented in other sections, including those from the semi-structured interviews discussed in the following section.

Figure 10: Share of sectors thought to be aligned with proforestation (inner ring) and associated topics (outer ring) in open-ended responses. Segment size reflects how many times a topic or sub-topic was mentioned by respondents. For example, the figure shows that many responses refer to alignment with nature conservation, particularly due to an increase of biodiversity. For a longer description of the topics, see the codebook in Appendix 5.

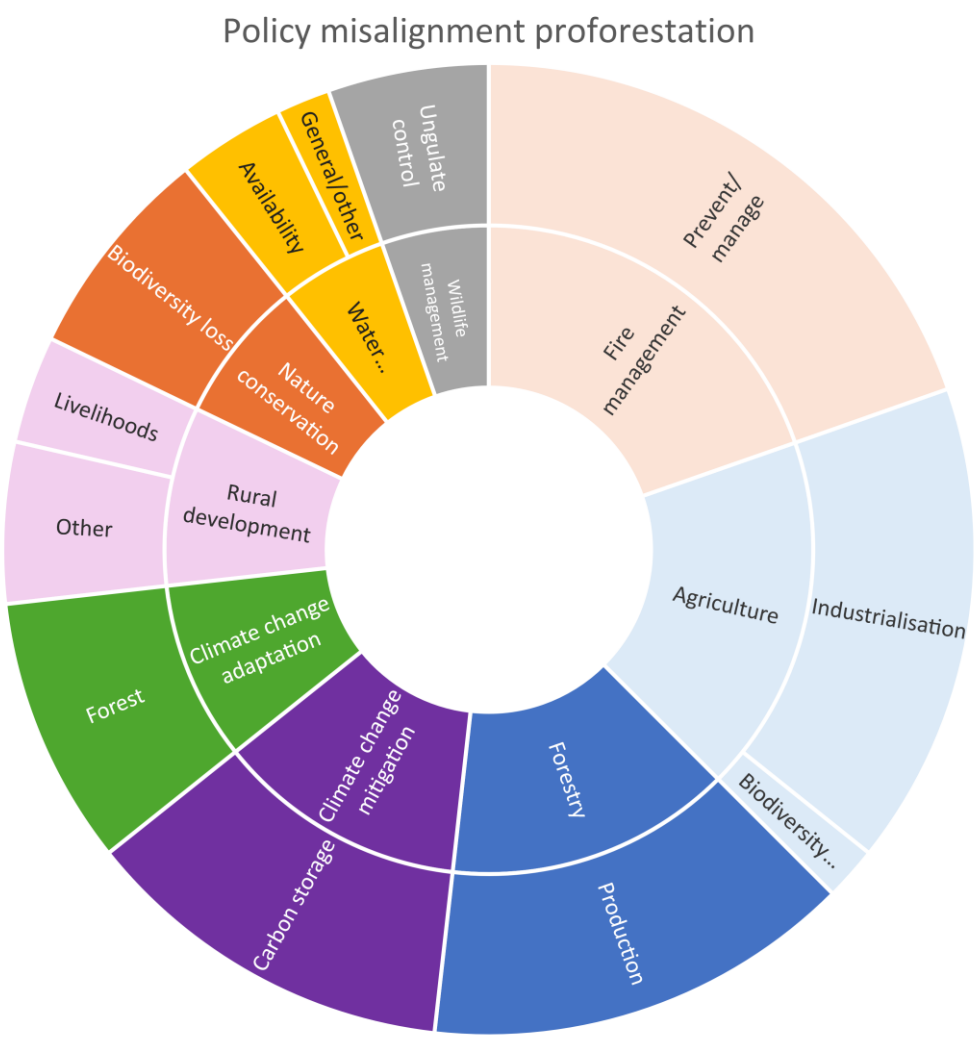


Figure 9: Share of sectors thought to be misaligned with proforestation (inner ring) and associated topics (outer ring) in open-ended responses. Segment size reflects how many times a topic or sub-topic was mentioned by respondents. For a longer description of the topics, see the codebook in Appendix 5

4.2. EU-level policy stakeholders' perceptions of rewilding options (Interviews 2.2.)

4.2.1. Methodology for interviews 2.2

4.2.1.1. Selection of interviewees and data gathering

The perceptions of EU-level stakeholders were assessed through in-depth interviews with a diverse range of key actors engaged in EU policymaking, advocacy, and lobbying related to rewilding. By conducting these expert interviews with stakeholders from EU authorities, land managers' organisations, NGOs, and research bodies, we aimed to complement the survey data collected at the national level. This approach allowed us to capture the nuances surrounding the concept of rewilding, providing a deeper understanding of how policy stakeholders conceptualise and use the term (cf. Sadovnik, 2007; Yanow, 2007).

While no quantitative results can be derived from the EU-level data, the interviews allowed for the exploration of meanings, attitudes, and interpretations connected to rewilding. They provided an interpretive, context-sensitive understanding of rewilding's potential contributions to EU policies, as well as the associated conflicts. The qualitative data provided explanatory depth beyond the descriptive patterns observed in the national survey. Additionally, it helped uncover underlying assumptions, discursive framings, and narratives around rewilding (cf. Hajer, 1995; van Hulst et al., 2025; Yanow, 2007).

The targeted stakeholder groups for the interviews included EU authorities or associated organisations, environmental NGOs, land manager or owner interest groups, and research organisations (Table 14). These stakeholders were selected to represent the policymaking community connected to rewilding at the EU level. The most relevant interviewees were identified through existing networks, desk research on stakeholders active in rewilding or restoration matters, and recommendations from the interviewees themselves (snowball sampling) (Naderifar et al., 2017).

Table 14: Overview of interviews conducted with EU policy stakeholders between April and November 2025.

Number of interviews conducted (total=20)	Stakeholder types	Reference in text
6	EU authority (European Commission, European Parliament, and related organisations)[1]	POL
4	Land manager/owner organisation	LM
6	Environmental NGO, incl. certification stakeholders	NGO
4	Research organisation	RES

The interviews were structured around a set of open-ended questions, addressing the following themes: the general understanding of rewilding, its role in current policymaking, potential conflicts with existing EU policies, implementation challenges, and the role of rewilding in forests, with a particular focus on proforestation and the rewilding of abandoned lands (see Appendix 6). Given the lack of direct policymaking on land abandonment and proforestation as rewilding strategies, as well as the absence of EU policies explicitly addressing these options (Fayet et al., 2022; Frei et al., 2020, 2024), the interview questions

[1] The presented data does not represent any official position from an EU authority, but it only presents the views of the individual interviewee with the experience working for an EU authority.

Funded by the European Union

were designed to explore all forms of rewilding linked to EU policies. The final segment of the interviews concentrated specifically on rewilding within forests.

In total, 20 interviews were conducted with 21 interviewees (including one double interview). The interviews, which lasted between 25 and 80 minutes, were held via online meetings. Table 14Table 14 provides an overview of the interview data. While most interviews were conducted in English, one interview was conducted in German. Of the interviewees, 6 were women and 14 were men.

4.2.1.2. Data analysis

All interviews were recorded and subsequently analysed using MAXQDA ©. The recordings were fully transcribed using the AI transcription tool of MAXQDA. The German transcript was translated into English using DeepL Translator and proofread by the lead researcher.

For the analysis of the interview data, thematic coding was employed to systematically organize and interpret the findings in relation to the research questions outlined in Bouriaud et al. (2024). The coding process involved a combination of deductive and inductive approaches. Deductive codes and sub-codes were initially created by the researcher, based on the primary themes derived from the interview questions. As the coding process progressed, inductive sub-codes were added based on emerging themes observed in the first set of interviews. The primary objective of the coding process was to extract relevant segments from the interview transcripts and organize the data according to thematic categories. These re-organized text segments were then summarized in alignment with the research objectives (Creswell, 2009). The results are presented in a continuous narrative, reflecting the core insights derived from the analysis.

4.2.2. Results of the survey 2.2

4.2.2.1. Rewilding concept in EU policymaking

This section gives insights into the stakeholders' understandings of rewilding at the EU policy level. The interviewees explained with a variety of principles and underlying approaches, with some synergetic as well as conflicting views. The principles of natural processes, local engagement of people and ecosystem functionality and health were the most frequently addressed.

Many interviewees referred to the main guiding principle of rewilding as one which focuses on enabling **natural processes in ecosystems with reduced or no human management, leading to wild(er) ecosystems**. This was expressed in a variety of ways, such as: "*allowing natural processes to take place*" (NGO) or "*letting natural processes flow*" (NGO). A policy stakeholder stated:

> "*The idea is to leverage on the concept of let nature do the job. So, instead of, adhering, let's say, to the, traditional, quite static, approach of nature conservation*".

As one land manager interviewee explained, rewilding could be defined a "*any type of measure that you would put in place for the nature to become wild again*" (LM).

However, there were clear differences in how various stakeholders interpret **what is considered "wild".** As one researcher explained in the context of water ecosystems, rewilding is not about removing humans from ecosystems, but rather removing management. While some stakeholders viewed the "wild" as a state of reduced human intervention or even the

Funded by the European Union

complete absence of human management, others held a different perspective. For instance, one land manager argued that:

> *"[A landscape shaped by humans] does not prevent wilderness to exist. So, I think here, from [our organization's] point of view, we would not be on the hard-line definition that as soon as there is a human intervention, it cannot be wild*" (LM).

In line with this thinking, a land manager explained that planting new forests that are more biodiverse could also be considered as rewilding:

> "*[E]ven if this [new forest] is established by planting, to some extent it is rewilding, because, you know, you remove the former […] silvicultural activity by humankind, you replace it with forest, and […] it brings also certain species because you create a new habitat for the new flora and fauna species. So, all together this can be rewilding*." (LM)

The question of whether rewilding necessitates returning to a specific state of naturalness (or "wilderness", as the prefix "re-" might suggest) was also discussed. Some interviewees emphasized that the naturalness of ecosystems should at least be considered as a key factor in rewilding. However, the majority of respondents did not view this as a central priority, instead highlighting other guiding principles. An interviewee expressed it as follows:

> *"[G]oing back to a situation, which is not necessarily pristine situation, but a situation where ecosystems are in good health*" (POL).

Furthermore, mostly interviewees from research, policy and NGOs, but also a land manager, mentioned the goal of **ecosystem functionality and health** as a key element of rewilding, promoting "*complex and self-regulating ecosystems*" (RES). Rewilding was also described as "*creating the conditions for nature to restore itself*" (LM). In that sense, specific **species conservation is not a primary goal** of rewilding but rather something that happens on the side when securing the ecosystem functioning. From this angle, biodiversity conservation plays an important functional role in dealing with climate change mitigation and adaptation, which was described as "*climate-smart rewilding*" (RES).

Some interviewees also described rewilding as being an **open process** without a "*pre-described outcome*", such as a specific species conservation:

> "*In contrast to some restriction approaches, what it seeks is open-ended results. Where, you know, the ecosystem processes take place with a minimal human intervention or at least as little human intervention as possible. And of course, this depends on different areas and contexts and so on*" (RES).

All stakeholders described a range of **intervention measures** in the context of rewilding. Especially, initial actions were mentioned – except for the rewilding of abandoned land. As put by an NGO interviewee:

> "*[Y]ou remove the pressures, but then you do some interactive interventions to restart the dynamics*" (NGO).

Species reintroduction was an often-named intervention measure: examples included large carnivores (e.g., wolf, lynx) for making trophic chains more complex, or large mammals (e.g., bison, horse) for grazing interventions. A researcher said:

Funded by the European Union

> "*We should also look at the animals and trophic chains because basically without also having back large herbivores and carnivores, […] the natural dynamic will be not the proper one. So basically, forest is going to close all the open spaces in the landscape. And we don't want that this basically because otherwise you are impacting on other ecosystem and other processes*" (RES).

Measures creating new habitats were also considered as rewilding strategies for some interviewees.

The data revealed significant disagreement regarding the **long-term goal of reducing human management and presence** in rewilding efforts. One researcher emphasized that:

> "*We don't want to remove humans, but we want to decrease the pressure of humans, of course, and we want to remove the management*" (RES).

In contrast, a policymaker defined rewilding as:

> "*bringing back nature and biodiversity by setting aside human activities - so no human activities. Biodiversity without presence of active management and human presence*" (POL).

However, land managers offered a different perspective, advocating for a "community-based" approach to rewilding. This approach focused on involving local stakeholders who manage the land, whose support is crucial for long-term success:

> *"[W]e need to be working with people and these interests to get long-term resilience. And that's essentially rewilding with a people-centric approach*".

Additionally, they highlighted the importance of context-specific and site-specific measures. As one land manager put it, many of their members' conservation projects could already be seen as forms of rewilding:

> *"there's a lot of small-scale conservation actions, really community-based, community supported, [and] it's possible to fit this within that whole concept of rewilding" (LM).*

Another interviewee described:

> "*What I really like, from the projects I've seen about rewilding is that this is part of redirecting human activities like as big of a component than the actual nature restoration part. And yeah, so it really fits together*" (POL).

The **distinction between rewilding and restoration** was mostly framed as rewilding being a specific, more passive form of restoration. Several interviewees described rewilding as one approach within the broader field of restoration, closely tied to the principles discussed earlier. As one policy interviewee explained,

> "*Other types of nature restoration could be focused on just a given species or restoring a given habitat without having really a landscape approach or thinking of really reintroducing keystone species that are missing for upkeeping the environment as it is, as it would function normally*." (POL)

Interviewees from NGOs and land management also differentiated between rewilding and restoration. To them, restoration does not always aim to restore wilderness, tends to focus

excessively on species, and often involves ongoing human intervention. As one interviewee explained:

> "*[Rewilding] is more hands off and restoration is more hands on*" (LM).

In contrast, it was primarily researchers who emphasized the need to view rewilding as a form of restoration. One researcher even warned against the dualism between restoration and rewilding — the "old" versus the "modern" approach — arguing instead that rewilding should be seen as one approach within the broader context of restoration.

Regarding the **semantic debate** surrounding the term "rewilding", there were varying opinions on its usefulness. Some interviewees found the concept valuable, especially for its powerful framing and the compelling narratives associated with it. They described rewilding as a term that is not only catchy but also versatile, capable of resonating across various contexts. As one policymaker put it, the strength of rewilding lies in its communicative power:

> "*This idea of having the nature doing the job is something at least not so much in technical terms, but in terms of communication, a powerful concept that I think should be exploited*." (POL).

However, other interviewees pointed out challenges associated with the use of the term "rewilding". In some languages, such as French, the concept carries a difficult connotation, often linked to the idea of "removing people from ecosystems". One land manager predicted that the term would face increasing political opposition from rural interest groups and suggested the use of "safer terminology", such as "nature conservation policies", to avoid potential conflicts. This concern was echoed by an NGO interviewee, particularly when discussing the rewilding of abandoned land in highly depopulated regions. They argued that referring to such initiatives as "ecological restoration" might be a more acceptable approach:

> "*I think it's a much better narrative than rewilding, actually, because it sounds not about removing people, but about bringing nature back*" (NGO).

A few interviewees mentioned that, due to the challenges surrounding the term "rewilding," they no longer attempt to define it precisely. Instead, they prefer to focus on the underlying principles of the concept, emphasizing its core values rather than getting caught up in the semantic debates. An NGO, for instance, said:

> *"[W]e dropped this whole discussion about definition of rewilding already years ago, because we're doing it every day. And I know scientists are interested in definitions, but for us it's more like, it's a term that we use. And the way it's being applied depends very much also on the local context where you do it. But we do have principles*." (NGO)

4.2.2.2. Potential regarding existing EU policy frameworks in supporting rewilding approaches

<u>EU Biodiversity Strategy 2030 (Biodiversity Strategy):</u>

Several interviewees highlighted strong complementarities between rewilding and the EU Biodiversity Strategy. The Strategy's target of 10% strict protection was seen as a promising pathway for integrating rewilding into existing policy frameworks. An NGO representative noted that this target closely aligns with rewilding principles when interpreted as non-intervention management. Several land managers also viewed rewilding as a means to enhance forest biodiversity, improving resilience to disturbances and diseases.

Funded by the European Union

Policymakers recognized rewilding as one specific approach that could contribute to the EU's biodiversity goals, emphasizing its potential benefits for biodiversity conservation and the maintenance of healthy ecosystem functions. A researcher pointed to scientific evidence showing how rewilding could help achieve biodiversity objectives.

While no explicit contradictions between the Biodiversity Strategy and rewilding were reported, a few interviewees criticized the Strategy for its limited funding. One land manager questioned the feasibility of setting aside 10% of EU land for strict protection, pointing out the lack of socio-economic and cumulative impact assessments. They expressed concerns about the availability of land, financial resources, and the high implementation costs, stressing the importance of balancing protection targets with well-managed, productive forests.

Nature Restoration Regulation (NRR)

The EU NRR (adopted in 2024) is a legally binding policy framework embedded in the EU Biodiversity Strategy 2030 and the EU Green Deal, with the aim to restore terrestrial, freshwater and marine ecosystems. All stakeholder groups highlighted the relevance of the NRR for the promotion and implementation of rewilding and underlined the overall alignment of rewilding with the NRR, even if only implementation will show how much this potential will be used. Among NGOs, the importance of the NRR was regularly emphasised.

> *"When it comes to synergies again, the rewilding could be easily linked […] to the [NRR]"* (NGO).

Another interviewee pointed out that Nature-based Solutions are embedded in the NRR policy framework and are in fact "*very close to rewilding principles*" as they can increase "*resilience against the impact of climate change, droughts, flooding*" (NGO). Similarly, most researchers expressed confidence in the potential of the NRR for further advancing rewilding approaches in Europe. More specifically, one researcher highlighted that the articles in the regulation relating to species habitats offer opportunities for rewilding-oriented objectives.

The significance of the NRR for rewilding was underscored by policymakers, who highlighted its role in the ongoing drafting of national restoration plans by Member States. Once finalized, there is a clear expectation that these plans will generate "*important co-benefits for other aspects like human activities or transition in local areas, like economic transitions and local areas*" (POL).

One interviewee flagged, however, that there could always be differences between theory and practice:

> *"[i]t's up to the Member States to select the ecosystems which will be part of their [national restoration plans], and then depending on what they choose, rewilding could potentially play a substantial role"* (POL).

A land manager expressed that the NRR is a good policy for rewilding, provided that Member States develop good national restoration plans, even if the term rewilding is not explicitly used at the EU level. Interviewees also highlighted the support for natural development in ecosystems under the NRR. As put by one interviewee: "*There's one point under the regulation that is explicitly focusing on allowing ecosystems to develop their own natural dynamics by promoting naturalness and wilderness*" (LM), indicating the relevance of rewilding approaches for restoration purposes. Although interviewees did not identify any significant misalignment between the rewilding approach and the NRR, several pointed out key implementation challenges. These included a lack of binding measures to effectively promote climate

Funded by the European Union

adaptation and resilience (noted by NGOs), as well as insufficient funding (raised by both NGOs and land stakeholders).

Land Use, Land Use Change and Forests (LULUCF)

Many interviewees from the four stakeholder groups emphasised the potential of rewilding to support climate mitigation and help achieve LULUCF objectives.

The contribution of rewilding approaches to carbon sequestration goals was particularly flagged by several stakeholders, both from the policy realm and academia. A policymaker underlined that "*the contribution [of rewilding] in terms of carbon sequestration can be very significant*" (POL). A researcher stressed rewilding can "*increase the rates of carbon assimilation by ecosystems*" (RES). In this regard, several interviewees pointed to the importance of both peatland and wetland restoration for climate mitigation. One researcher stressed how different types of wetlands are a natural sink for carbon, but they are being reduced in size. This directly affects their ability to capture and store such carbon. Through restoration and rewilding, these wetlands "*could contribute to the uptake [and] decrease of atmospheric CO_2 and thus to climate mitigation*" (RES). Regarding forests, one interviewee emphasised that "*our biggest chance of meeting the LULUCF targets is having [a] good implementation of the [NRR]*", whose articles remain "*the only binding piece of forest policy we have*" (POL), given that up to this date, the EU does not count with any legally binding forest policy. An NGO interviewee, however, warned that rewilding can have unintended consequences for LULUCF targets. Although a forest may recover and become more biologically diverse through rewilding (i.e., no management), it can take years to regain its previous carbon storage capacity, potentially undermining short-term LULUCF goals, as described by an NGO interviewee.

EU Adaptation Strategy

Strong synergies between rewilding measures and the EU Adaptation Strategy were also highlighted by multiple interviewees belonging to different groups, even though the strategy was perceived to be a weak legislative tool by some. Across all sectors, interviewees emphasised that rewilding, as well as other nature restoration practices, can significantly enhance resilience to climate impacts by providing multiple benefits. An NGO highlighted that nature restoration can offer cost-effective solutions to both flood prevention and water retention, as well as reduce wildfire risk by creating natural mosaics of forest landscapes with grasslands instead of intensive forest plantations. Rewilding was mentioned as a useful tool not only for forest areas, but also for other contexts. For example, it was mentioned as a useful tool to "*cool down cities*" and make them "*safer and more liveable*" (NGO). One researcher also brought to the fore its relevance in coastal areas, in particular the contributions to the protection against sea level rise and extreme events, which are predicted to increase with climate change. A policy interviewee also pointed to the socio-economic relevance. Since rewilding can lead to safeguarding economic activities from climate risks such as flooding and drought, these rewilding practices must be demonstrated to targeted stakeholders to get local support.

However, the lack of dedicated funding was considered a barrier for the integration of nature restoration (including rewilding) into EU climate adaptation plans by different stakeholders. Focusing on specific funding mechanisms, a policy interviewee noted that it was unlikely the upcoming EU budget frameworks would offer direct financing for rewilding, either through the

Funded by the European Union

NRR, the Nature Directives, or the CAP. This is because existing climate funds are primarily directed towards decarbonisation and innovation, rather than nature conservation. In contrast, several interviewees highlighted regional and cohesion funds as the most promising source of support for rewilding within the climate context, due to their strong local focus and close ties to regional economic development.

In this regard, one policymaker interviewed emphasized that recognizing rewilding as a potential contributor to climate policy marks a significant step forward. Rewilding — and nature restoration and Nature-based Solutions more broadly — are only beginning to be integrated into EU climate policies. The policymaker called for greater emphasis on how rewilding can support both mitigation and adaptation efforts. Similarly, an NGO interviewee further emphasised that the European Commission fails to fully recognise the interlinkages between the climate and biodiversity crises, noting that "*through rewilding and better protection of existing areas, the EU would be able to provide an answer to the climate crisis in terms of mitigation and adaptation*" (NGO).

Common Agricultural Policy (CAP)

Our interviews did not show consensus around the relationship between rewilding and the CAP. While some acknowledged potential for synergies, others emphasised significant political and structural barriers as an obstacle to the CAP for rewilding approaches. Among those highlighting the synergies, one land stakeholder mentioned how agri-environmental schemes could align well with rewilding objectives, and carry "huge compatibility" with certain conservation goals, if they remain economically attractive for farmers and well implemented. This same interviewee stressed the need for a "*well-funded Pillar II of the CAP and [...] good rural development programs at the national level*" (LM). The interviewee expressed that good agri-environmental schemes can successfully support pastoralism, traditional livestock grazing, or habitat restoration, as long as farmers are compensated. This interviewee also warned against a "hard-core" rewilding approach, which could be perceived as incompatible with farming, as some farmers associate it with abandoning agricultural activity altogether.

Interviews also showed how broader geopolitical and economic pressures can influence how Member States perceive rewilding within the agricultural sector. Another land manager pointed out that the combination of the Ukraine war, the Covid-19 crisis, and past trade tensions has increased Member States' focus on ensuring food security and economic stability. This context makes biodiversity conservation and rewilding "very tricky" to advance in agricultural and timber-producing sectors. Some policymakers echoed this concern, thus showing an apparent tension between increasing agricultural production and food sovereignty questions, and rewilding strategies for land management. In this regard, a policy interviewee stated how the CAP represents an obstacle for restoration or rewilding policies implementation, as "*it's been portrayed as being contradictory [with farmers' interests]*". The interviewee explained how many decision-makers dealing with them don't want the funds to be used on a purpose "*that they don't like*" and prefer to channel funds exclusively into direct payments (POL). This internal dynamic reinforces misunderstandings among farmers, who often perceive e often told that nature protection threatens food security or will drive up prices.

We also found some more intermediate positions, such as one policymaker who noted how the CAP does offer opportunities to support rewilding but flagged that many Member States fail to use the available funding for such purposes.

Funded by the European Union

NGO interviewees tend to view the CAP as an obstacle to rewilding, pointing to a general policy incoherence between the CAP and the EU biodiversity and restoration policy. The CAP was described by one interviewee as "*gigantic corruption system*":

> *"[E]verything must be under agricultural production, even where it makes no economic sense, even where it makes no social sense […]. So ideologically, the justification for the CAP is a kind of anti-rewilding ideology*" (NGO).

The CAP was also mentioned as a hindering policy for expanding agroforestry practices, precision farming, and even organic farming, partly because it supports "*the business of high output loads of fossil fuels*" (NGO). Another NGO interviewee followed this perspective, arguing that "*a lot of the CAP [constitutes] harmful subsidies that incentivise large-scale and intensive agriculture*" (NGO). The interviewee stated that it is not only representing "*a problem for rewilding, but for all nature conservation*" (NGO).

EU Forest Strategy

Interviewees from different groups highlighted the potential of rewilding approaches to contribute to the Forest Strategy, even though their perspectives differed considerably. A researcher noted that rewilding options such as proforestation are partly reflected in the Forest Strategy, which includes references to old-growth and unmanaged forests. Still, this same interviewee described the Forest Strategy in general as being "*more oriented to the production of wood and non-wood forest products*" (RES). Another interviewee from the political field stated that they "*remain vigilant*" about rewilding implementation into the Forest Strategy, noting that it doesn't sufficiently embrace "*general ecological processes*" (POL).

Divergent views existed regarding the appropriate level of human intervention in forests. For example, one researcher argued that forest management can build productive forests that are economically profitable, while acknowledging that reducing management intensity would likely deliver greater climate and recreational benefits. Aligned with this, we found a policymaker who nuanced this and explained that rewilding should be viewed "*as a choice rather than a conflict*" and that limiting certain types of extraction today could result in more resilient and more productive forests for the timber industry in the long term (POL). Within this discussion, the cascading use principle of the EU Forest Strategy was also highlighted by one interviewee, which is a principle that prioritises high-value material uses of wood before energy production. According to our interviewee, this principle could be even more interesting for rewilding if we agreed to leave the branches and bark of a logged tree in the forest to fertilise the soil – a practice not yet considered.

Nature Directives

Several interviewees suggested that the Nature Directives could serve as valuable tools in supporting rewilding processes, as the objectives are well-aligned, at least in principle. For example, an NGO interviewee described the Birds and Habitats Directives as a "*solid line of defence*" against the destruction of natural spaces and further expanded:

> *"[The Nature Directives] are drivers in their own right because in many Natura 2000 sites, if you were to achieve favourable conservation status of the qualifying species and habitats, you would need to restore and to go down some form of rewilding — and in any case, it's an opportunity*" (NGO).

Funded by the European Union

Along the same lines, a policymaker highlighted the importance of Natura 2000 sites, given that they are "*already well established and managed*", and legally protected, making them relevant instruments for habitat and species conservation. Others saw more challenges connected to the Nature Directives: an interviewee mentioned that for many conservation actors Nature Directives are fixed and rigid instruments, and also warned against unpredictable trade-offs between an overall ecological functioning while still having marginal habitats or species being negatively affected: "*a rewilding project inside a Natura 2000 site could disturb some of the niche habitats […] rewilding can have unpredictable result*" (POL). A researcher added that the EU conservation policy is shaped by the Birds and Habitats Directives, which largely focus on intensive maintenance of "*highly managed landscapes*". The interviewee argued that this focus contrasts with the general idea of rewilding of reducing human intervention: "*The alternative would be just allowing natural processes to happen [...] which is much more cost effective*". A land stakeholder pointed out the financial challenges of biodiversity conservation, describing rewilding as a more cost-effective approach than maintaining the Natura 2000 conservation approach, as creating self-sustaining ecosystems reduces the need for recurrent and expensive management. "*Nature has that incredible power to recover and to drive those systems if we allow it*" (LM). In this view, restoration should focus on ecological processes across forests, grasslands and wetlands, allowing nature to regenerate and maintain balance more efficiently and at a lower cost than constant human intervention, as currently practised under the Nature Directives.

Other EU Directives

During the interviews, multiple other EU policies were mentioned with less detail, which could bear potential or barriers for rewilding approaches. For example, regarding the **Nitrates Directive**, an NGO interviewee stated that without an important reduction in nitrogen deposition, biodiversity will be severely affected, and thus, also rewilding efforts can be undermined. Several other interviewees also highlighted the potential of rewilding for achieving the goals of the **Water Framework Directive**. According to one researcher, this policy could support coastal rewilding actions, which could in turn improve water quality. Similarly, a policymaker saw rewilding as already embedded in the policy and specifically as a means of restoring aquatic ecosystems and improving their conservation and ecological status, and as something that was already embedded in the policy. Along these lines, some interviewees also mentioned the **Marine Strategy Framework Directive**. However, both an NGO representative and a policymaker agreed that its current support to rewilding initiatives is limited. An NGO interviewee highlighted contradictions between the **Renewable Energy Directive** and the different biodiversity regulations mentioned above, which could also affect rewilding efforts. Specifically, the subsidies for woody biomass were mentioned as a harmful action. A few interviewees pointed out that rewilding ambitions for forests could create conflicts with the objectives of the **EU Bioeconomy Strategy.** A policymaker argued that adopting widespread non-intervention approaches could threaten the bioeconomy sector, as it may significantly reduce logging activities. For this reason, the interviewee stressed that the upcoming Bioeconomy Strategy must integrate best practices that foster productive uses while supporting sustainability goals.

4.2.2.3. Rewilding in forests

Preferred forest landscapes and rewilding through proforestation

In general, all stakeholders underscored the importance of rewilding in diverse forest landscapes and regions throughout Europe. They identified various forest types with significant potential for rewilding. While one NGO stressed the need for rewilding in all forested areas, a researcher pointed to opportunities in forests in general. Other stakeholders specifically highlighted the potential for rewilding in lowland forests, primary forests, and those linked to marine and freshwater ecosystems, as well as in **regions such as the boreal forest, the Mediterranean, and the Carpathians in Eastern Europe**.

Furthermore, the significance of certain forest characteristics was recognised. Especially NGOs and researchers expressed that **less productive areas** are very suitable for rewilding, where economic forestry activities do not make sense. They raised the argument that it was cheap and easy to implement rewilding in those areas. An NGO stated:

> *"[R]ewilding could be extremely easy and cheap if you can cut through the ideology […] there is so much forestry, particularly, places like the Mediterranean that is completely artificial. […] I think there is a real opportunity*" – if managers are paid for doing nothing or rewilding interventions or similar (NGO).

Similarly, a researcher expressed "*what sense does it make to continue managing the forest, if you know that there are other benefits that can be gained, reducing or eliminating that management?*" (RES). In that line, rewilding was considered as a potential to increase the resilience, including the biodiversity, especially in highly productive forest areas with a **poor conservation status**, as highlighted by NGOs and policymakers. As stated by an NGO, "*all the forests that are heavily managed and are sort of very simplified in terms of age structure and species composition*" are very suited for and in need of rewilding. A policymaker mentioned:

> "*It's sufficient to look at the state of biodiversity in the different biogeographic regions. And you see, those which are in the greatest need of rewilding are the boreal ecosystems. They are they are the poorest in terms of biodiversity. They are the most standardised. So boreal for sure, but also continental Europe*" (POL)

All stakeholders addressed the potential of rewilding in the forest **connected to climate mitigation and the storage of carbon**. However, a land manager highlighted the tensions between land managers' aims to create climate resilient forests, i.e, through planning of non-native species, and biodiversity conservation. A researcher also concluded that "*there may be some positive effect but rewilding certainly is not a silver bullet now tackle climate change mitigation*" (RES).

Regarding **climate adaptation**, researchers report conflicting findings on the resilience of different forests, especially under future climate change scenarios. While one emphasised ongoing uncertainty, researchers highlighted evidence that secondary forests on abandoned land can adapt and remain highly resilient.

Two interviewees referred to **publicly managed and private forest land** as being particularly useful for implementing rewilding, given the challenge of finding land for rewilding. An NGO highlighted the societal role of state forests in contributing to climate goals: *"[I]f the people of the country own a forest, what's the most rational use of that forest for the people of the country?*".

Funded by the European Union

Although few mentioned proforestation directly, land managers showed their scepticism towards this rewilding option and argued for integrating forest management into the rewilding option. Both expressed the advantage of considering some management of the forest as part of rewilding to mitigate conflicts, as to mediate conflicts, and due to opportunities through the use of wood:

> "*[I]f you see it in a very strict approach, saying that this is an area where we want to work for increased wilderness and the way forward is set aside, then you have a lot of conflict arising. You mentioned climate mitigation and so on. Well, one way of doing climate mitigation is also through harvested with product. If you set aside, you cannot do that*." (LM).

An NGO highlighted the need to change the understanding of forests as closed landscapes:

> *"[W]e call [forests] woody landscapes or woodland landscapes, but it's not per se a closed forest. It's a, it's a whole mixed mosaic of half-open, open landscapes, but also closed forests that will then, of course, at some point also break down again and restart.*" (NGO).

Land abandonment

All stakeholder groups described **opportunities** for rewilding of abandoned land. Many interviewees highlighted that rewilding of abandoned land is already happening: "*it's not only a potential, it's a reality*" (RES). Overall, the potential for restoring degraded land and forest landscapes was addressed, as well as the potential for carbon sequestration, biodiversity conservation, erosion control and water regulation in coastal areas. Interviewees reported a particularly **important opportunity for forests to expand naturally, especially in Eastern and Mediterranean Europe (RES) or old military training areas (LM)**. A researcher highlighted the ability of forests to restore on their own, as visible in France:

> *"[In France, the] forest is coming back with really a lot of power. Forests can restore themselves really quite well unless it has really completely been removed from the landscape."* (RES)

Some interviewees stressed the importance of initial intervention measures in abandoned land to facilitate natural processes to be restored, ensuring the re-establishment of full food chains and ecosystem dynamics.

Several **challenges** related to the rewilding of abandoned land were raised, including the increased wildfire risk associated with expanding forests and higher fuel loads, particularly in the Mediterranean region. Other concerns included the loss of open landscapes and associated biodiversity, as well as the need for active management — an issue emphasized by land managers. However, some interviewees pointed out that wild grazing could serve as a potential solution to mitigate wildfire risk within the context of rewilding. Many interviewees also stressed the difficulty of framing land abandonment purely as an opportunity, noting that this perspective contrasts sharply with local views in highly depopulated regions, where abandonment is seen as a challenge rather than a chance. Some further argued that land abandonment is not a natural outcome, but rather a symptom of existing policies. In light of this, several interviewees suggested a more nuanced approach, advocating for greater sensitivity to the local realities and exploring economic opportunities — such as job creation — linked to rewilding abandoned lands. As one NGO stated:

> "*Some people who are very active on rewilding would then promote this as a big opportunity for rewilding. While it is actually an issue that rural areas are being abandoned. So, I think now rewilding is much more focusing also on having alternative, looking for alternative ways of income for people in those communities so that they can stay and have an income, maybe not via the agriculture they were doing previously, but maybe with nature-based tourism*." (NGO)

Another NGO interviewee also highlighted the high political load of the rewilding discussion and warned that misaligned narratives could further strengthen the rise of right-wing forces in rural areas. In the same line, a land stakeholder stressed:

> "*We say if we promote the dynamic countryside, it [land abandonment] should not happen. So, this is a symptom of the fact that the countryside is left on the side*." (LM).

Ownership concerns were also highlighted, requiring:

> "*stakeholder consultation with either land? owners or […] owners of various sites, like hunting rights or grazing rights or whatever, depending on the country*" (NGO).

Trade-offs among biodiversity and climate mitigation goals were addressed by one NGO interviewee, noting that:

> "*If you would ask my colleagues who are working on climate issues, they would say, this is great. We want more forests […]. While I would be a bit more cautious because I wouldn't like […] to lose also these open areas and open habitats that can be very valuable for biodiversity*." (NGO)

Reference was also made to rewilding not being secured in the long run through official protection status or other means, which would pose a risk.

5. Local-level stakeholders' perceptions of rewilding options (Survey 3)

5.1. Background and case studies selection

Local stakeholder engagement is fundamental to biodiversity conservation and natural resource management projects worldwide (Sterling et al., 2017), and understanding local perspectives is crucial for the successful implementation of such initiatives. Rewilding projects, in particular, can transform social-ecological systems, potentially leading to unforeseen and rapid changes (Titus et al., 2024). Public perceptions play a significant role in how restoration efforts are received, making it essential to engage regional and local stakeholders in discussions that balance ecological goals with community priorities (Kazunku, 2025).

Rewilding decisions are deeply intertwined with social justice, as they not only affect ecosystems but also impact people and societies. As such, these decisions cannot be separated from issues of social justice (Pakeman et al., 2025). Rewilding projects are more likely to gain support and succeed when stakeholders' needs and concerns are actively heard and addressed (Asbeck et al., 2021).

This deliverable investigates local-level stakeholders' perceptions and the acceptability of rewilding options through a case study approach.

Funded by the European Union

The selection of case studies was discussed during the 2025 Suceava Annual WILDCARD meeting and follows several selection criteria:

1) The social-acceptability case studies are connected to the "landscape case studies" identified in WP2 and WP3.
2) They have not previously been covered by in-depth studies on social acceptance, as identified through a literature review (Bouriaud et al. 2024).
3) They provide a balanced representation of proforestation and natural rewilding of abandoned agricultural land.
4) They are considered by WP5 to facilitate synergies for the social-acceptance building process.

Given the resources allocated to Task 4.2, the local-level survey includes five case studies (Bouriaud et al., 2024). Out of the eight potential case studies discussed during the annual meeting (Table 15), the five regions chosen to assess local perspectives were: Brabantse Wouden (Belgium), Rhodope Mountains (Bulgaria), Šumava Region (Czech Republic), Friuli-Venezia Giulia Region (Italy), and Vânători Neamț (Romania).

Table 15: Selection of the five case-studies for the assessment of the local-level stakeholders' perceptions on rewilding activities

WILDCARD partner	Landscape cases (WP2/WP3)	Country	Selected case studies for local level perception (WP4)	Selected cases for the social acceptance building process (WP5)
IBER-BAS	Rhodopes	Bulgaria	X	-
EVINBO	Brabantse Wouden	Belgium	X	X
VUKOZ	Šumava Mountains	Czech Republic	X	X
UNIUD	Friuli-Venezia-Giulia	Italy	X	X
USV	Natural Park Vanatori Neamt	Romania	X	X
ETHZ	Surselva valley	Switzerland	-	X
FVA-BW	Black Forest	Germany	-	-
NW-FVA	Wispertaunus	Germany	-	-

The two German regions initially considered were excluded due to stakeholder fatigue. Preliminary discussions with WILDCARD partners in Germany (Black Forest and Wispertaunus) revealed a high level of engagement saturation among local stakeholders, which led to the exclusion of these areas in accordance with the second selection criterion.

Similarly, early engagement activities conducted in the Surselva Valley (Switzerland) within the WP5 social acceptance–building process highlighted substantial community resistance to external involvement. This context made the implementation of a structured survey in the area impracticable. As a result, the Rhodope Mountains (Bulgaria) were selected to complement the social acceptance case studies, based on the following considerations:

- The Rhodope Mountains fall within the Alpine biogeographical region. From an ecoregional perspective, this makes the Bulgarian case study comparable to the Swiss one and a suitable complement to the stakeholder engagement activities carried out in the Swiss Alpine case study under WP5. Consequently, stakeholder perspectives identified at the local level by WP4 in Bulgaria can be meaningfully contrasted with those identified by WP5 in Switzerland.

Funded by the European Union

- The Bulgarian case study was selected primarily because it is not covered by existing empirical studies, as demonstrated by the analysis conducted in Task 4.2.1 and documented in Deliverable 4.2 (Bouriaud et al., 2024).
- Although the Bulgarian case will not be fully integrated into the modelling exercises under Tasks 2.3 and 3.3, it plays a critical complementary role by: i) enabling comparison of stakeholder perceptions within the Alpine region across different national and governance contexts; ii) testing the transferability of social acceptability insights across diverse socio-ecological and institutional settings; iii) supporting the interpretation of modelling results from other case studies by providing an external social perspective not directly linked to model outputs.

Overall, the selection of the five regions is consistent with the criteria outlined in D4.2 (Bouriaud et al., 2024) and ensures a balanced representation of the two rewilding strategies. The Italian case study (Friuli-Venezia Giulia Region) focuses primarily on natural rewilding of abandoned agricultural land, while the Belgian (Brabantse Wouden) and Czech (Šumava Region) case studies centre on imposed proforestation strategies. The Romanian (Vânători Neamț) and Bulgarian (Rhodope Mountains) case studies, in contrast, adopt a mixed approach, incorporating elements of both strategies.

In the selected case studies, the local level survey aimed to:

- Identify how local stakeholders perceive the benefits and risks of rewilding in their region, using the same thematic framework applied in the previous surveys (i.e., the EU level citizen survey and national policy stakeholder survey), thereby providing a basis for exploratory comparative analysis.
- Address context-specific questions on rewilding, such as anthropogenic resistance to apex predator habitat expansion or risks associated with land abandonment, tailored to the particular characteristics of each selected case-studies.

5.2. Data collection for survey 3

The sampling of local level stakeholders was purposive and targeted the respondents that best fit desired characteristics of the selected case study. The sample of stakeholders included eight stakeholders' categories: landowners and farmers, forest owners, forest managers and local forest administration, representatives of local governments, local NGOs in nature conservation, managers of natural protected areas, local representatives in rural development and wildlife managers or other land users directly involved in operational decisions rewilding relevant (Table 16).

A template for the stakeholder list was distributed to local case study partners, helping them identify at least two stakeholders from each category, along with their email contact details. With the assistance of these local partners, the identified stakeholders were contacted and invited to participate in semi-structured interviews. A target of 8 to 10 interviews per case study was set to ensure representation from a wide range of local stakeholders. Ultimately, the minimum of eight stakeholders was achieved in both Šumava Region (CZ) and Brabantse Wouden (BE). In Friuli-Venezia-Giulia (IT), nine local stakeholders agreed to participate, while 12 interviews were conducted in the Rhodope Mountains (BG) and 15 in Vânători Neamț (RO).

Funded by the European Union

Table 16: List of stakeholder's categories and the number of conducted interviews in each case study. Note: Each local stakeholder is coded with a code comprise by the country code and the order in the list of interviewees (e.g. RO03 represents the third interview conducted in Romania)

#	Stakeholder category	Natural Park Vânători Neamț Romania	Rhodopes Bulgaria	Friuli-Venezia-Giulia Italy	Brabantsen Wouden Belgium	Šumava Mountains Czech Republic
1	Landowners & Farmers agriculture	RO03	BG10 BG11	IT03	B01	CZ01
2	Landowners (forestry)	RO06	BG06		B02	
3	Forest managers Local forest administration	RO01	BG02 BG09	IT05	B03 B04	CZ04
4	Representatives of local governments	RO4 RO5 RO8	BG01	IT02	B08	CZ05 CZ06
5	Local NGOs (nature conservation / rural development)	RO07 RO15	BG12	IT04 IT06	B05	CZ07
6	Managers of natural protected areas	RO0 RO10 RO11	BG03 BG04	IT01	B06 B07	CZ02 CZ03
7	Local representative in rural development	RO12 RO14	BG08	IT07 IT08	-	CZ08
8	Local representative in wildlife management	RO02 RO09	BG05 BG07	IT09	-	
	Total	**15**	**12**	**9**	**8**	**8**

The survey method was based on semi-structured interviews (Appendix 7), covering:

- Common questions on perceptions of rewilding and proforestation, based on the themes used in survey 1 (Q12 and Q18) and survey 2.1 (Q7 and Q14).
- Specific questions on the two rewilding strategies (proforestation and natural abandonment of agricultural lands), addressing the causes and current situation of land abandonment, perceived positive and negative effects and perceived opportunities and threats.
- Questions to assess anthropogenic resistance to predatory and herbivory wildlife.
- Context-dependent questions to capture local peculiarities of each case study and local measures perceived as necessary to address the identified rewilding opportunities and threats.

The wording of the semi-structured interview was discussed internally with the WP4 and WP5 representatives and pretested in the Romanian case study in early June 2025, with five stakeholders. Following this pre-test, the interview categories were refined, and the final version of the interview template was applied, starting with the Romanian case study.

In total, each interview included 39 questions, comprising 29 closed-ended and 10 open-ended questions.

Table 17: Details about data collection in survey 3 – local level stakeholders' perceptions

#	Case study (identified rewilding strategies)	WILDCARD partners involved	Operators	Language used for interviews	Data collection period
1	Natural Park Vanatori Neamț, Romania (proforestation, natural rewilding, active bison introduction)	USV (RO)	Ionul Balabasciuc, Emma Avarvarei, Dorin Pălie, Laura Bouriaud.	Romanian	June, 10th – 20th 2025
2	Rhodope Mountains, Bulgaria (proforestation and natural rewilding)	USV (RO)	Dorin Pălie, Laura Bouriaud.	Bulgarian English	September 8th – 14th 2025
3	Brabantse Wooden, Belgium (proforestation)	USV (RO) PI (BE)	Laura Bouriaud; Lucie Loubaton	French English Dutch	September 15th – 18th 2025
4	Friuli-Venezia-Giulia (proforestation, natural rewilding)	USV (RO) UNIUD (IT) PI (BE)	Liviu Nichiforel, Dorin Pălie; Antonio Tomao; James Cosier	Italian	September 20th – 24th 2025
5	Sumava Forests (proforestation, natural rewilding)	USV (RO) VUK (CZ) PI (BE) EFI	Liviu Nichiforel; Šamonil Pavel; Sara Chiba, Linda Hornakova; Raghav Sharma	Czech English	November 12th –17th 2025

Each stakeholder received an invitation letter with the subject: "Local level stakeholder's perceptions and acceptability on rewilding in selected regions: Invitation to participate in a survey", with information about the survey and details about the consent to participating in the research and about the use of the personal data. The invitation letter and the semi-structured interview template were translated with DeepL into Romanian, French, Dutch, Italian, Bulgarian and Czeck and validated by the WILDCARD local partners. Following the received consent, the stakeholder was scheduled for a face-to-face interview at her/his convenient time.

The interviews were conducted by a mixed team (Table 17). One of the three operators from USV provided the logical support and coordinated to conduct of the interviews. The local representative applied the semi-structured interview in the local language and provided assistance with the translation of the information into English for the open-ended questions. For the case studies that are also included in the WP5 analysis on social acceptance building process, PI had interview operators that were integrated in the team as to get insights into the type of perceptions expressed by the local level stakeholders. The coordination between the WP4 and WP5 was meant to reduce the stakeholder fatigue. The interviews lasted between 50 minutes and 1 hour and 20 minutes.

5.3. Data analysis – survey 3

The responses to the closed-ended questions were recorded as numerical categories on a Likert scale in Microsoft Excel and analysed using descriptive statistical methods. These data were primarily used to describe the interviewees' profiles and their key perspectives on the common questions included in previous surveys (Appendix 9).

Funded by the European Union

The responses to the open-ended questions were translated into English using DeepL and integrated into a Microsoft Excel database, with each entry linked to a respondent ID (country code and interviewee number, e.g., IT01 for the first stakeholder in the Italian case study). The text was initially categorized using a deductive categorization process (Mayring, 2014), which identified the main topics discussed in the interviews related to i) the abandonment of agricultural land and ii) proforestation. The categories included causes, current situations, negative perceptions, positive perceptions, perceived negative effects, perceived positive effects, perceived opportunities, and perceived threats (Appendix 10). In the second stage, each statement was further categorized inductively to reflect case-specific situations derived from the deductive categories. The results are summarized for each case study in tables that show both the deductive and inductive categories, the number of responses per category, and references to the respondent IDs.

5.4. Interviewees' profile – survey 3

❑ Stakeholders' categories

A total number of 52 local stakeholders have accepted to participate to the interviews. Their distribution per professional categories is described in Figure 11. Forest managers and local forest administration dominates with a total number of 13 respondents, followed by the category managers of natural protected areas (8 respondents) and local NGOs (6 respondents).

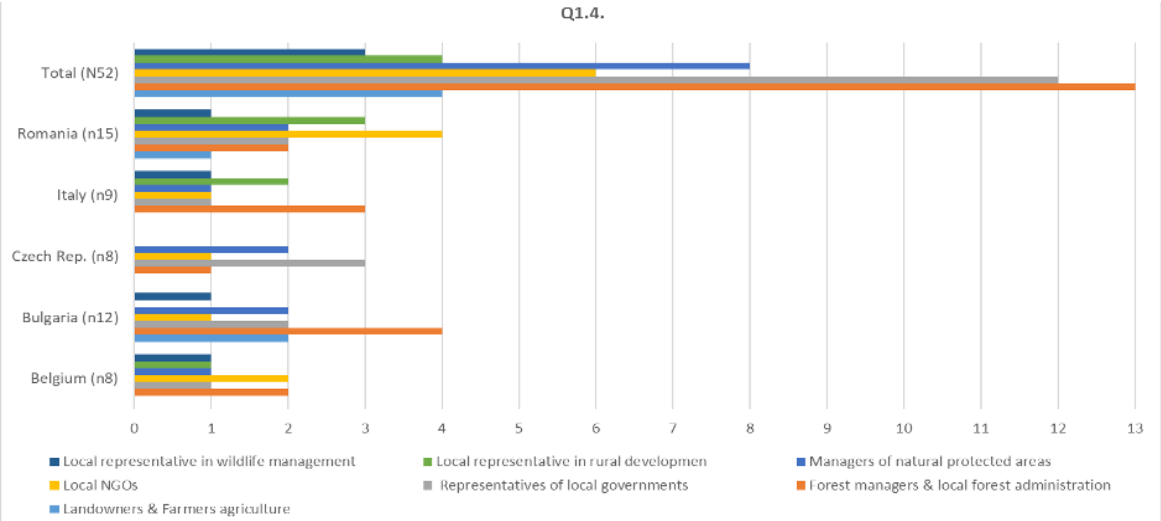


Figure 11: Respondents' own appreciation of the professional category they belong to

Overall, there is some variation in the professional categories of respondents across the case studies, reflecting the methodological approach of defining relevant stakeholders on a case-by-case basis (see also Table 16).

❑ Demographic and professional characteristics of the interviewed stakeholders

Most respondents (19) fall within the 45-54 age group, followed by those in the 35-44 age range (12). In terms of gender, 22 out of 52 respondents are female. The majority of respondents have a high level of education, with 33 holding a doctoral or at least a master's degree. More than half live in rural or predominantly rural areas, and half of them are landowners (Figure 12).

Funded by the European Union

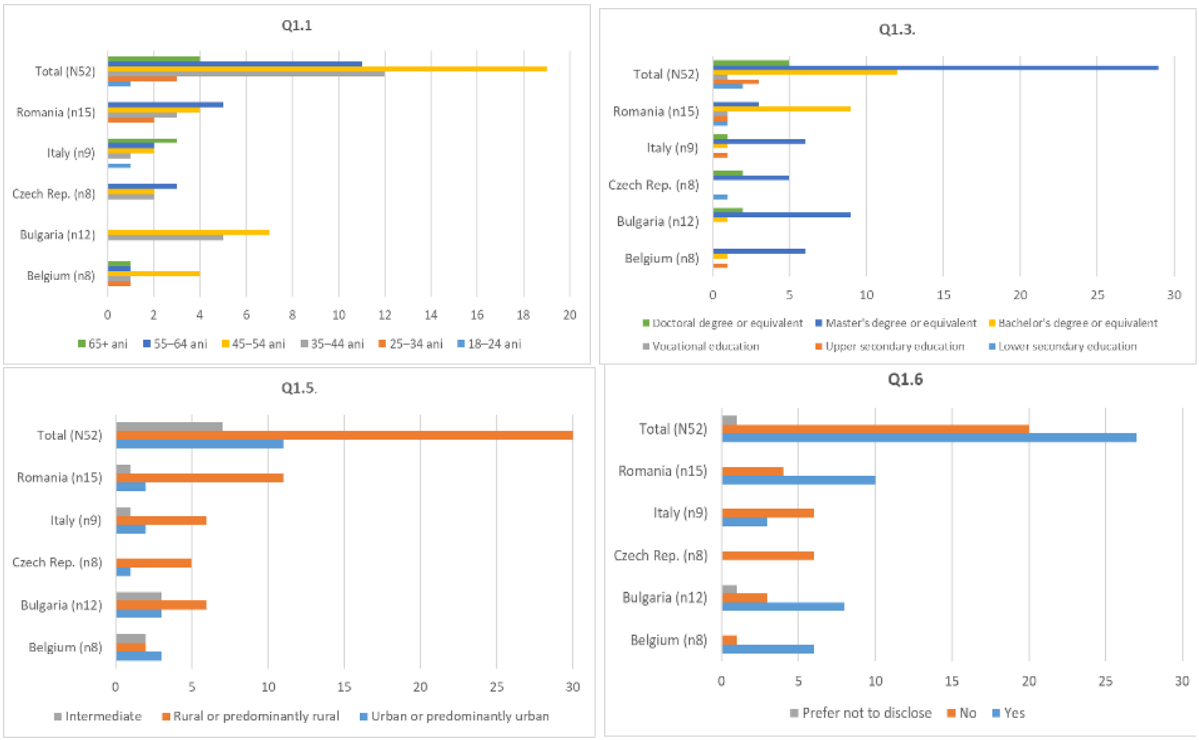


Figure 12: Respondents' demographic characteristics

5.4. Results

5.4.1. Overview of the case studies (N=52) – closed questions

To understand the particularities of rewilding in each region, we compiled responses to a set of general questions about the level of naturalness and wilderness in the area. For example, in response to the closed question Q2.1, *How well-known is the concept of rewilding in your region?*, interviewees gave mixed answers across all case studies. Fifteen out of 52 stakeholders felt that the concept is not well-known, while 13 considered it to be well-known (*Figure 13*).

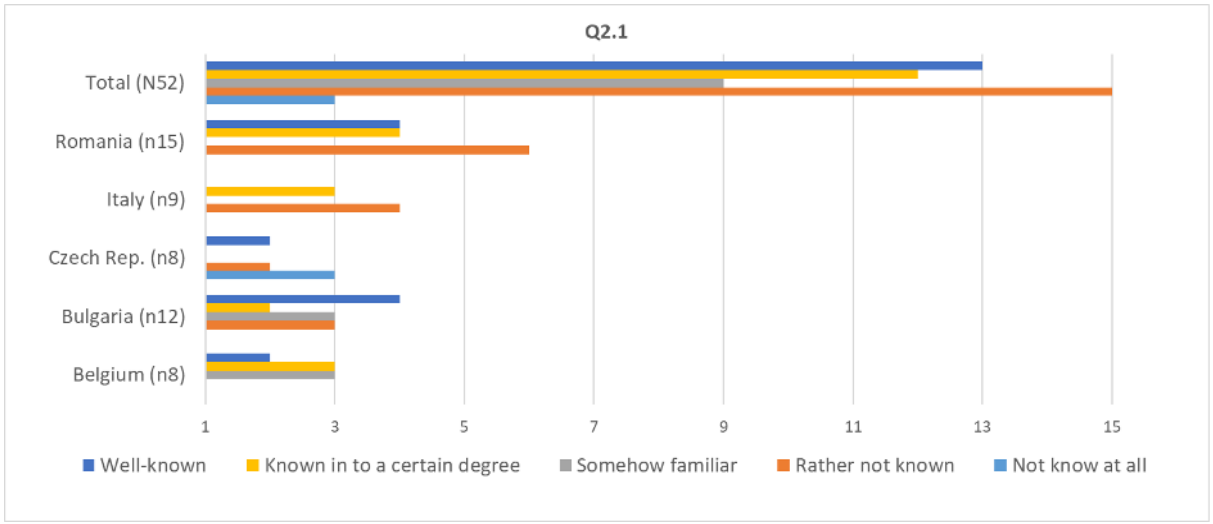


Figure 13: Awareness of the concept of rewilding in the respondent's region

Funded by the European Union

Regarding the naturalness of the region (Figure 14), more than half of the respondents (25 out of 52) indicated that the area with natural landscapes in their region is about right (Q2.3.1). This was the dominant view in the Romanian, Italian, and Czech case studies. However, responses to Q2.3.2, *How natural is the region you are living in?* (Figure 15), showed more variation. Czech, Bulgarian, and Italian respondents tended to rate their regions as very natural, while Romanian respondents were generally satisfied with the current level of wilderness.

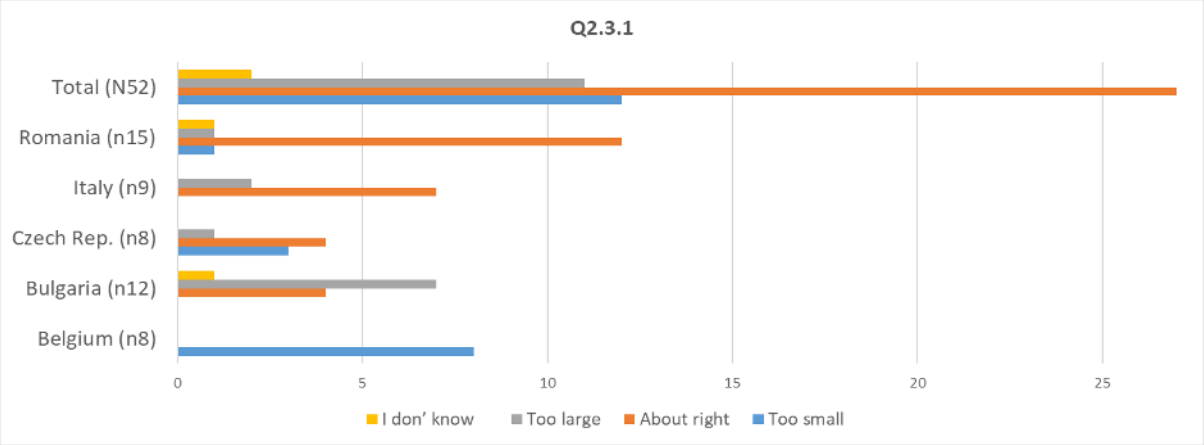


Figure 14: Local level stakeholders' perception of natural landscape size in the region

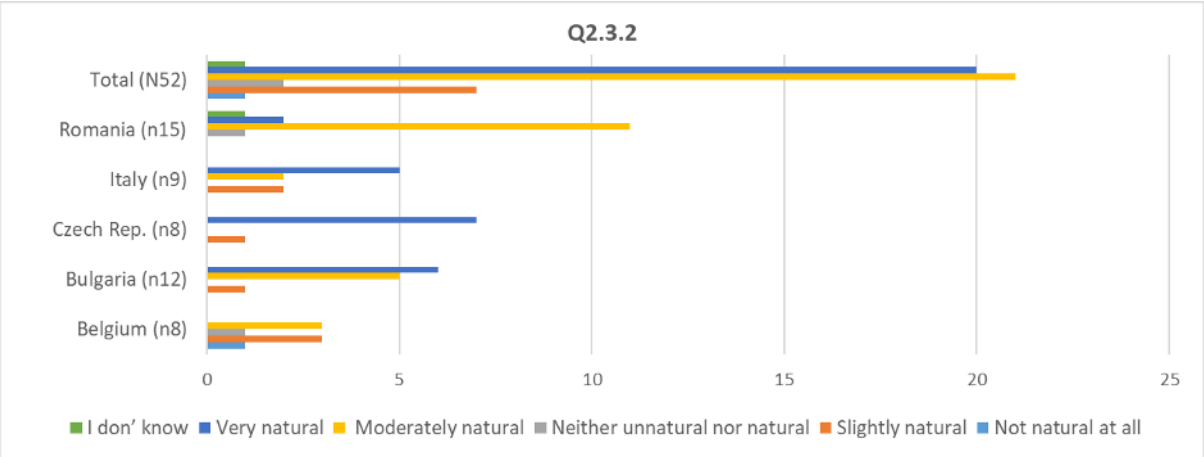


Figure 15: Local level stakeholders' satisfaction with the current level of wilderness in the region

Regarding the analysis of common questions across the three surveys, the local-level perspectives generally align with those expressed by citizens and national policy stakeholders about the effects of allowing existing forests to develop freely, without management (Figure 16). Overall, local stakeholders view unmanaged forest development as beneficial for nature, landscape beauty, and climate change mitigation. However, they also express concerns about its impact on commercial forestry and potential risks to people or property. Perceptions of rural culture and ways of life are more mixed. A significant number of respondents foresee negative or somewhat negative impacts, although some expect neutral or even positive outcomes. This suggests concerns that changes in forest management could disrupt traditional land uses or cultural practices. These results highlight a perceived trade-off between ecological benefits and socio-economic or safety concerns.

Funded by the European Union

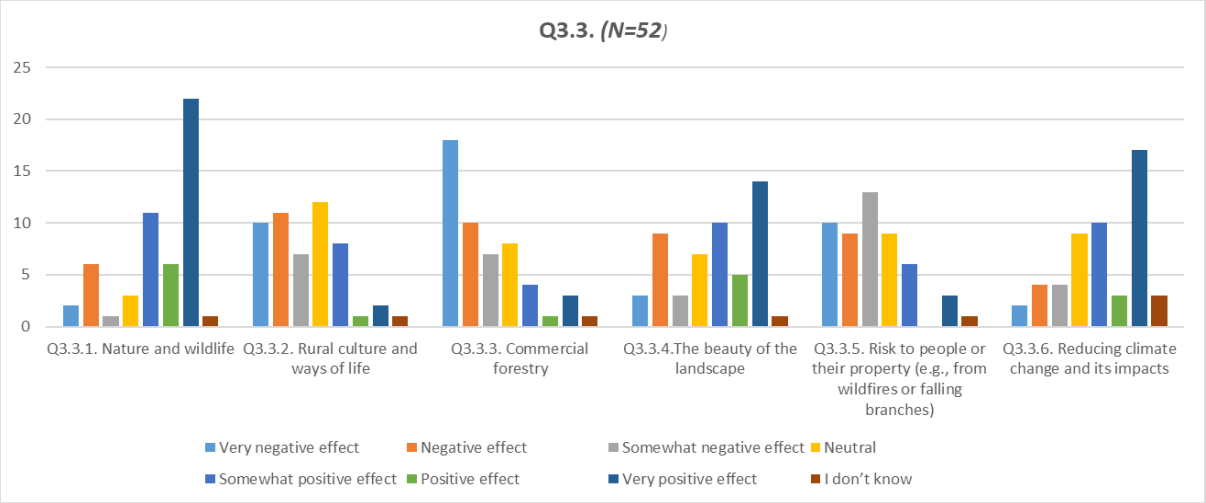


Figure 16: Perceived effects of allowing more forest in the region to develop freely across six thematic areas (N = 52)

This survey of 52 local stakeholders reveals complex and nuanced views on agricultural land abandonment (Figure 17). The data shows no clear consensus, with perceptions differing significantly across various impact areas. Stakeholders recognize both the costs and benefits, rather than viewing abandonment as either purely negative or positive. The rural economy, for instance, shows predominantly negative to somewhat negative effects, which is understandable given that agricultural abandonment often leads to reduced rural employment and income opportunities. In contrast, nature and wildlife receive more positive feedback, with responses fairly evenly distributed between somewhat positive and very positive effects. The predominance of moderate, rather than extreme, responses suggests that these are lived experiences rather than ideological positions.

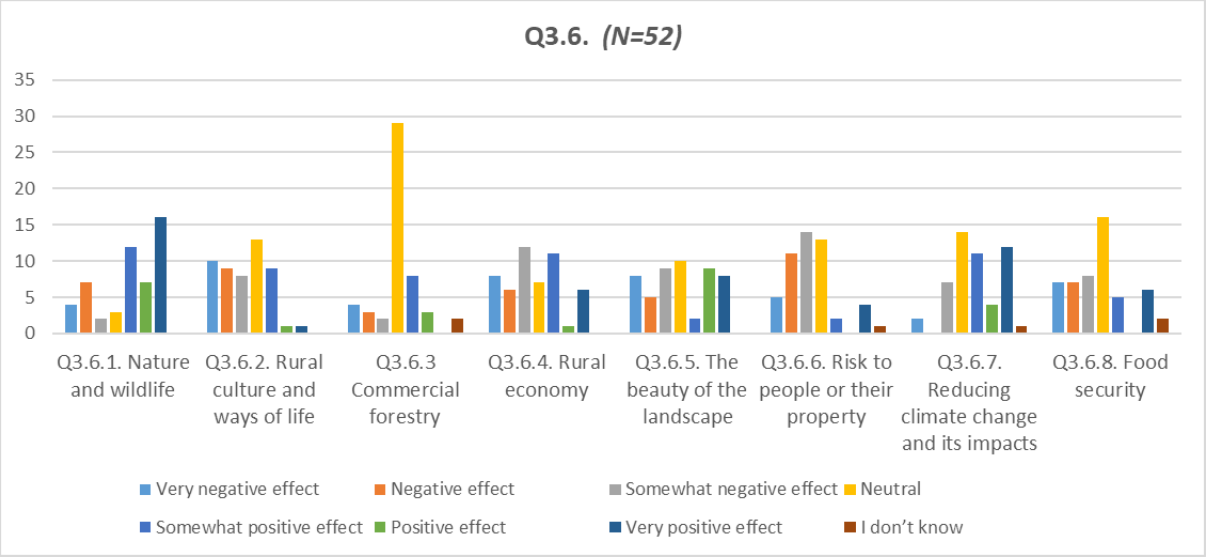


Figure 17: Perceived effects of natural abandonment of agricultural lands across six thematic areas (N = 52)

Funded by the European Union

5.4.2. Qualitative content analysis of interviews conducted in Friuli-Venezia-Giulia (Italy) local level case study

This analysis aggregates the opinions from nine interviewees regarding land and forest management abandonment into shared thematic categories, counts the number of interviewees.

5.4.2.1. Identified perceptions on agricultural land abandonment

The abandonment of agricultural land is primarily attributed to economic factors (lack of profitability) and land fragmentation (micro-parcelling). The most visible current consequence is the widespread resurgence of the forest into former cultivated areas (Table 18).

Table 18: Main opinions expressed on agricultural land abandonment in the Italian case study (N= 9)

Shared Opinion	Count	Interviewees (ID)
Causes of agricultural land abandonment		
Land fragmentation/micro-parcelling (small, dispersed lots making activity impossible)	5	IT1, IT 2, IT 3, IT 7, IT 8
Economic/profitability issues (high costs, low production prices, not profitable)	4	IT3, IT 6, IT 8, IT 9
Post-war population decline/emigration	3	IT1, IT 3, IT 7
Lack of political action/legislation on private property management	1	IT5
Current situation of agricultural land abandonment		
Forest/woody vegetation advance/resurgence into cultivated lands	8	IT1, IT 2, IT 3, IT 4, IT 5, IT 6, IT 8, IT 9
Lack of effective opposition/political action to counteract forest advance	2	IT1, IT 2
Perception on the abandonment of agricultural land		
Negative: Landscape/aesthetic/cultural loss (loss of open spaces)	5	IT1, IT 2, IT 4, IT 5, IT 7
Negative: Loss of biodiversity (especially of open-area species/meadows)	2	IT1, IT 3
Negative: Risk/safety issues (fire/erosion/instability)	2	IT6, IT 8
Positive: Ecological benefits (soil improvement, no chemicals/pesticides)	2	IT4, IT 9
Opportunities about natural vegetations developed on abandoned agricultural lands		
Increased biodiversity/ecosystem services	5	IT2, IT 3, IT 5, IT 6, IT 8
Tourism/aesthetics (new landscape beauty)	3	IT1, IT 4, IT 6
Increased wood production	1	IT 6
Threats about natural vegetations developed on abandoned agricultural lands		
Fire risk	5	IT1, IT 3, IT 4, IT 6, IT 7
Loss of micro-economy/agricultural traditions	5	IT1, IT 2, IT 3, IT 4, IT 5
Wildlife conflict (carnivores/ungulates)	3	IT4, IT 5, IT 7
Socio-cultural/aesthetic loss (fear of disorder/lack of control)	3	IT3, IT 8, IT 9

The causes of agricultural land abandonment in the Italian case study reveal a consistent pattern of post-war decline driven by multiple interconnected factors. In mountain areas, abandonment is closely tied to population decline and the loss of traditional agricultural activities. Interviewee IT1 describes the dramatic demographic shift: "*This valley had 55,000 people in the 1940s, with major agricultural activities taking place*". Today, abandonment is

Funded by the European Union

linked to "*a decrease in population and the activities that used to be done here*", along with "*people moving away*" from the mountains. The 1976 earthquake further exacerbated population loss in these areas (IT2). Additionally, the industrialization of agriculture in lowland areas has contributed to a decline in the number of people farming in the mountains (IT1, IT2).

Abandonment of agricultural land is generally linked to economic issues due to a lack of profitability because of high costs of production especially in mountain areas, low production prices, and low productivity of agricultural lands (IT3, IT6, IT8, IT9). A critical and universal theme across all Italian interviews is the problem of land fragmentation (micro-parcellation). The agricultural area is divided by very small private properties (micro-parcelled) which makes agricultural activity unsustainable and causes the land to no longer be used economically. "*These areas are very micro-parcelled, very small private properties throughout the mountain...you cannot set up an agricultural activity if you have 2,000 square meters of land here, 3,000 a kilometre away* (IT1)". This is linked to a lack of national legislation to limit multiple ownership and fragmentation (IT1, IT2, IT7). Two interviewees (IT1, IT2) specifically link the abandonment to the lack of political opposition to this process "*the forest advances, and political actions of a certain kind are needed to counteract this*" (IT1).

The current situation of abandoned agricultural lands is identified as a complete recovery of forests (woody vegetation, shrubbery) that invade cultivated lands, even those very close to inhabited areas. This situation has been confirmed by eight out of nine interviewees. It is considered that people in the communities are extremely aware of the process of re-naturalization from agricultural land abandonment: "*people are extremely aware, also because they see that this process already includes the fact that they conceive it as a process...we almost certainly experience this ourselves"* (IT2).

Perception on the abandonment of agricultural land is largely negative. The main negative effect is seen in terms of landscape, beauty, and visual aspect: "*The tourist also wants open areas. You cannot visit a valley that sees only forest, so very negative, negative effect*" (IT1) while "*the fact that I think the feeling of having an open space close to inhabited centers is a positive sensation*" (IT5). This may be linked to the fact that the newly formed woody lands are not as aesthetically as the managed forests: "*Tourists are also amazed to see managed meadows, but at the same time, they do not find well-managed woods, but newly formed woods that are not aesthetically pleasing*" (IT4). Moreover, some interviewees emphasize the loss of cultural heritage resulting from the disappearance of pastures and arable land in marginal areas (IT7), "*the rural identity of the area is being lost*" (IT4) as well as their agricultural traditions (IT1). Examples are given for garlic cultivation, saffron, and other products that historically defined the area but are becoming economically unviable. Contrary to typical rewilding narratives, **Italian interviewees emphasize biodiversity decline as a negative aspect of abandonment of agricultural lands**. According to two of the interviewees (IT1, IT3), there is a perception that abandonment is related to the loss of species linked to open areas (like butterflies that need meadows, hare that needs agricultural land). "*Here we have an enormous concentration, in this area, of butterflies that need meadows, so the closing up of the forest at these altitudes would lead to a loss of biodiversity*" (IT1). Conversely, three interviews generally acknowledge the role of abandonment of agricultural land in biodiversity enhancement (IT2, IT6, IT9). Additional positive attitudes are related to the lack of chemicals, fertilizers, or pesticides in the condition of agricultural land abandonment that improve soil conditions (IT4, IT9).

The perceived opportunities about natural vegetation developed on abandoned agricultural lands are universally seen as ecological and tourism-related. New vegetation and mainly the expansion of forest areas can lead to increased biodiversity and increased complexity of the

Funded by the European Union

ecosystem (IT2, IT3, IT5, IT6, IT8). Moreover, opportunities for increased level of ecosystem services (e.g., water retention and quality) are underlined by two interviewees (IT4, IT7). More specifically "*hydraulic stability of slopes*" is a benefit of forest expansion on former agricultural lands (IT6) in the context of high potential areas for runoff (IT2). One interviewee perceives that an increase in the forest area can also result in an increased wood production (IT6). New vegetation can bring tourism/aesthetics benefits and a new landscape beauty (IT1, IT4, IT6) even though the Friulian mountain region is not able to attract as much tourist compared with other regions e.g. Trentino Adige (IT1). Finally, an interesting point of view underlines the opportunity that "slow abandonment" is used as a managed conservation strategy: the controlled abandonment prevents overdevelopment and maintains authentic mountain character (IT2).

The perceived threats about natural vegetations developed on abandoned agricultural lands relate mainly to fire risks and wildlife conflict (carnivores near settlements, and ungulates competing with livestock). Fire emerges as the most instinctive and immediate threat, mentioned by multiple interviewees, four of them directly to the abandonment of agricultural land: "*In terms of risks for people, their properties, forest fires, etc. The fact that one leaves always larger surfaces un-managed absolutely yes, here the non-management must be seen as negative, negative, in very negative terms, very, very negative*" (IT1). The economic decline and loss of micro-economy threat connects the advancement of the forests and the abandonment of agricultural lands to the decline of the local micro-economy based on agricultural products and even to its complete disappear (IT3, IT1, IT4) and thus "*a socioeconomic system that had existed for centuries has disappeared and a balance hasn't yet been found*" (IT5). The socio-cultural and aesthetic loss is also pointed as a threat since people fear a "*medieval mentality*" of uncontrolled environment where they are afraid of the unknown. The loss of landscape order (e.g., a "*mosaic*" of cultivated fields) can be annoying (IT 3, IT 8). This reflects deep cultural values about order and control in land use management. The risk of invasive species on fertile agricultural lands is pointed as an ecological threat by two interviewees. Again, contrarily to the rewilding theories, two interviewees mention the increased risk of hydrogeological instability and erosion linked to the abandonment of agricultural lands. Finally, the wildlife conflict is related also to agricultural land management especially in the interaction between ungulates and livestock competing for the same territories (IT1, IT5, IT7).

5.4.2.2. Identified perceptions on forest management abandonment

Stakeholders highlight the impossibility of managing fragmented private land and the low economic profitability of forestry as key factors leading to management abandonment. A majority of interviewees stress that management is essential for public safety and must be conditional.

The causes of forest management abandonment are fundamentally structural and socio-institutional, distinguishing this situation from deliberate rewilding initiatives. Similar to agricultural land, micro-parcellation makes management economically and legally impossible, absent owners cannot be located, infrastructure is inadequate, and forestry companies cannot operate efficiently, while the institutional framework is perceived as a barrier to tackle these issues. This process is considered as land abandonment by impossibility of performing management given institutional failures, not by choice.

The most critical and universally cited cause is extreme land fragmentation and micro-parcellation. Interviewee 2 describes the regional situation as "*a forestry mess*" characterized by "*only private forest, almost all private coppice, due to the abandoned case*," emphasizing that nearly all forest land is privately owned and divided into impossibly small parcels.

Funded by the European Union

Interviewee 3 provides the most direct assessment, stating that "*There is no forest management, the management is a disaster. The only management is to cut some trees for local needs. There are no harvesting firms. The main reason is the forestland parcelisation in small properties that leads to a lack of possibilities to do forest management planning from a legal perspective*."

This structural constraint makes professional forest management legally and economically unfeasible. Interviewee 4 reinforces this diagnosis, noting that "*There is no forest management in the area. The owners are not always present or doing something. There is also the problem of land fragmentation and the fact that there are no forestry companies*". The problem of absent and untraceable owners (IT2), combined with inadequate land registry updates, creates a situation where identifying legitimate owners becomes nearly impossible, making even more difficult the potential solution of shared forest management.

Table 19: Main perceptions expressed on proforestation in the Italian case-study (N= 9)

Shared Opinion	Count	Interviewees (ID)
Causes of forest management abandonment		
Land Fragmentation/small private parcels/ absent and unknown owners	5	IT1, IT 2, IT 3, IT 5, IT7
Lack of specialized/local capacity (companies/knowledge)/infrastructure	3	IT4, IT 5, IT 6, IT 7
Economic/profitability issues (low wood prices, high costs, lack of investment)	3	IT2, IT 5, IT 9
Loss of traditional forest culture	1	IT2
Perception on allowing forests to develop without human interventions (Proforestation)		
Negative: Management is essential for safety/hydrogeological risk (landslides, floods, fire)	7	IT1, IT 3, IT 4, IT 5, IT 6, IT 7, IT 8
Conditional/planned rewilding (must be in specific, limited areas, marginal)	4	IT1, IT 2, IT 6, IT 7
Socio-cultural/aesthetic opposition (loss of traditional management/creates social unease)	3	IT3, IT 5, IT 7
Positive voice: improve the ecosystems	1	IT9
Opportunities about proforestation		
Increased biodiversity/ecological	3	IT3, IT 6, IT 8
Ecosystem services (water retention/quality)	2	IT4, IT 7
Planned network of old-growth forests	1	IT5
Nature based tourism	1	IT2
Threats about proforestation (letting forests develop freely, without forest management)		
Safety/fire/hydrogeological risk (landslides, floods, forest fires)	3	IT1, IT 4, IT 6
Bark beetle/pests	2	IT3, IT 5
Economic/commercial loss (lower wood prices due to oversupply)	2	IT1, IT 7

Economic/profitability issues are reflected by the absence of forestry companies operating profitably in such fragmented landscapes (IT2). The lack of forest roads, combined with steep topography and small parcel sizes, makes timber extraction economically unviable (IT7). Even when productive forests exist in mountain areas, companies from outside regions (Austria, Trentino) extract the timber rather than local operators, indicating the absence of local infrastructure and expertise (IT7). The economic non-viability of small-scale operations creates a vicious cycle. Interviewee 5 describes how modern forestry requires economies of scale that fragmented properties cannot provide and thus, without sufficient contiguous area and proper access, professional forest management cannot cover its operational costs. The loss of traditional forest culture and practices has accelerated abandonment (i.e., traditional silvo-pastoral systems that maintained both chestnuts and meadows have collapsed while currently

Funded by the European Union

chestnut coppices are being preserved as cultural heritage rather than productive landscapes – IT2).

Regulatory and bureaucratic barriers add additional complexity (i.e., infrastructure development needed for sustainable management faces significant regulatory obstacles – IT8). Moreover, interviewee 5 observes that "*in the Region, it should be clear that there isn't a regional forestry plan*" that could provide strategic direction. Without regional planning to identify areas for production, conservation, or abandonment, individual landowners face uncertainty and lack incentives for coordination.

The identified perceptions express predominantly negative views on allowing forests to develop without human intervention, revealing a fundamental divergence from wilderness-oriented conservation approaches. Strong opposition to widespread non-intervention characterizes the majority of responses rooted in a human-cantered territorial philosophy that views active stewardship as essential to both human communities and healthy ecosystems (IT1, IT3, IT4, IT5, IT6, IT7). The dominant view in the Italian case study holds that forests are not "wilderness" to be preserved from human influence but working landscapes requiring human stewardship to serve ecological, economic, and social functions simultaneously. "*The forest needs management. If you struggle to live in this area you need to get involved in managing the resources, of the lands and of the forests*." (IT3). Additional strong negative positions include repeating three times the phrase "*forests must be managed" (IT1) which emphasize the non-negotiable nature of this position, "man is at the center of the territory, although with all due respect for everyone*" (IT5), "*in general, I disagree with allowing forests to develop without human intervention*" (IT6) or pointing to negative direct experience with non-intervention reflecting dissatisfaction with the ecological and aesthetic outcomes of non-intervention in a specific area (IT7).

However, several interviewees accept context-dependent non-intervention in specific circumstances. Some statements represent pragmatic acceptance that some areas cannot be managed economically due to topography and accessibility (IT1, IT2) suggesting that wilderness is appropriate for peripheries but not for inhabited landscapes (IT7, IT8). Interviewee 6 proposes quantitative limits: "*I would say that 20% of forests that are protected are unmanaged, that is, free to evolve, that is, an acceptable percentage*."

A notable urban-rural cultural divide emerges in perceptions. Interviewee 5 brings into discussion this perspective based on place of residence: "*those who live in urban environments now have a mentality of...cutting down a tree becomes a sacrilege*" while "*the concept of saying let's allow free evolution, I think that from a very social point of view, is a very accepted, very welcome message, especially in urban environments*." Conversely mountain residents view unmanaged forests as "wasted" resources and failed stewardship (IT5). Interviewee 6 emphasizes the injustice of this urban-rural divide regarding policy burdens: "*we who live in the city cannot say how beautiful the virgin forest is, but those who live there must bear the economic consequences of policies formulated by distant urban populations*".

The only positive voice comes from Interviewee 9, who offers philosophical support tempered by social concerns: "*I don't see it as a bad thing, in the sense that leaving natural evolution to its own devices...they will improve the ecosystem in my opinion because the balances that we are perhaps trying to impose would find themselves on their own*."

Perceived opportunities related to proforestation (letting forests develop freely, without forest management) receive limited recognition in interviewees perspectives, contrasting sharply with the extensive list of threats. Biodiversity benefits are acknowledged (IT6, IT8, IT9) but

Funded by the European Union

qualified and often contested (particularly regarding open habitat species loss). Interviewee 6 offers the most straightforward positive assessment: "*the main opportunities are an increase in biodiversity and, so to speak, an increase in wild species, which are in any case interesting in a forest or mountain environment*". Potential biodiversity benefits are also acknowledged for "marginal, inaccessible areas" where they matter least for human communities and where management is impossible anyway (IT8). Interviewee 5 recognizes that some forests developing without intervention may achieve conservation value as old-growth systems, provided they are strategically designated (i.e., active choice rewilding) rather than accidentally abandoned (i.e., passive rewilding). The interviewee advocates for "*a network of old-growth forests, which have their own significance*" as part of comprehensive regional planning that distinguish productive areas from those designated for conservation. Tourism potential receives mention but minimal development. Interviewee 2 identifies "*wild tourism attractiveness*" as a potential benefit from non-intervention, suggesting that unmanaged forests could attract visitors seeking wilderness experiences. Environmental services apply narrowly to specific contexts like erosion control (IT2, IT6). Most critically, nearly all identified opportunities are contingent rather than direct—they depend on first establishing management capacity, strategic planning, infrastructure, and ownership consolidation.

Perceived threats related to proforestation (letting forests develop freely, without forest management) encompass physical safety, ecological integrity, economic viability, social cohesion, and cultural identity that are often not-differentiated from the threats identified for the abandonment of agricultural lands.

Fire risk emerges as the most intuitive and emotionally displayed threat, as for example: "*Having many woods can favour fires and for those who live in villages near the woods there is always the fear of fires*." (IT4). The interviewees 1 describes a past fire incident that blocked the village for ten days created lasting collective memory and ongoing fear. Another risk is related to the perception that the loss of traditional land management that regulated water flow creates downstream flooding impacts, with abandonment in mountains causing disasters in valleys (IT2, IT4).

Biodiversity loss (IT1, IT7), which is nevertheless mainly related to meadows and forest instability (IT8) are identified threats that contradicts typical rewilding narratives. Interviewee 8 raises concerns about the characteristics of abandoned forests, noting that forests developed on formerly managed lands lack the structural features of natural forests, making them unstable and prone to collapse.

Wildlife-human conflicts intensify with forest expansion and abandonment (IT4, IT7). The proximity of wildlife to inhabited areas creates both direct conflicts (property damage) and health risks (tick-borne diseases). The interviewee 7 describes a specific incident: "*a wolf that constantly came from Forlì, it would come to the square peacefully and calmly. My daughter, who was 14 years old, found the wolf 30 meters away from here...It's not normal to accept this close encounter*".

Forest resource accumulation represents a paradoxical opportunity/threat that underlines the economic conflict of abandonment of forest management. Interviewee 5 provides detailed quantification: "*Since the 1960s, the woody mass in the forest has quadrupled, that is, doubled; in terms of area, it has doubled in intensity and mass. And this is clearly an opportunity and a resource that can be managed in various ways; it can be managed for productive and timber production purposes, but it can also be managed for conservation purposes*." The interviewee notes that this represents *"one of the issues for the coming decades that will need to be addressed, first by resolving ownership. Accessibility can be achieved by solving planning issues*."

5.4.2.3. Critical points of agreement and disagreement

Based on the consensus counts, the points of strong agreement among interviewees are:

- **Land fragmentation as the fundamental crisis:** universal consensus exists that extreme micro-parcellation represents the core structural problem preventing any form of effective land management, whether productive or conservationist (IT1, IT2, IT3, IT4, IT5, IT7, IT8).
- **The necessity of Land Cadastre reform:** overwhelming consensus exists that addressing abandonment requires fundamental reform of land ownership structures, though implementation mechanisms remain undefined (IT1, IT2, IT3, IT4, IT8).
- **Depopulation as serious threat:** broad consensus exists that abandonment drives demographic decline, though interviewees differ on whether this represents irreversible crisis (IT3, IT7) or manageable challenge (IT2, IT5, IT6).
- **Infrastructure deficit:** strong agreement exists that inadequate forest roads and accessibility prevent productive forestry and leads to forest management abandonment (IT1, IT5, IT7).
- **Fire risk as major public concern**: strong agreement exists that fire danger represents a critical threat from forest abandonment near inhabited areas, though interviewees differ on whether this is objectively the greatest risk or primarily a public perception issue (IT1, IT4, IT6, IT8).
- **Need for strategic planning:** there is broad consensus that territorial approaches should differentiate between areas suitable for production, conservation, and abandonment, rather than applying uniform policies (IT1, IT5, IT7, IT8).

The most intense conflicts arise:

- **Philosophical stance on human role in nature:** a certain degree of disagreement exists regarding whether humans should be "at the centre" of territorial management (anthropocentric position IT3, IT5, IT6, IT7) or whether nature should be allowed autonomous development (ecocentric position – IT9). This is also emphasised in the perception that ENGO movement may be divided into *"scientific environmentalism*" and *"sentimental environmentalism"* the first "*seeking a fair balance between man and nature*" while the latest is mainly driven by emotions.
- **Acceptable extent of non-intervention areas:** the extent of acceptable non-intervention areas is a subject of significant quantitative disagreement, ranging from limiting them strictly to marginal, inaccessible, or erosion-prone areas (IT1, IT3, IT5, IT7, IT8), to moderately accepting around 20% of protected forests (IT6), or even a broader, context-dependent application (IT2, IT9).
- **Biodiversity impacts**: disagreement exists regarding whether abandonment increases (IT2, IT6, IT9) or decreases (IT1, IT7) biodiversity overall.
- **Urban-rural divide:** whether rural residents directly affected should have primacy (stakeholder legitimacy), or whether broader urban majorities have democratic legitimacy to set conservation policy even if it burdens rural minorities.

Suggested local measures by the interviewees: the necessary measures are primarily focused on addressing land fragmentation through administrative reform (Land Registry

Funded by the European Union

reform) and improving communication to mitigate socio-cultural resistance and perceived threats.

The most consistently emphasized solution is the urgent reform of the land registry to eliminate micro-parcellation and address the lack of legislation limiting multiple ownership and fragmentation (IT1, IT2, IT3, IT4, IT8). The primary goal is to implement joint management of the land by bringing together fragmented properties to manage larger territories and greatly facilitate owner activity. Successfully building participatory processes at the local level is essential, as this acts as a powerful communication tool and can trigger broader engagement. This must be reinforced through dedicated efforts in communication, information, training, and education (IT4, IT5, IT9). There is a need for strategic planning on a broader regional level to achieve a reorganization of areas. This planning should clearly define and allocate areas for specific purposes, such as timber production versus abandoned or reserve areas. It is noted critically that a formal regional forestry plan is currently lacking. Proactive public body investment in forest roads is crucial, as this generates interest in the served areas and provides necessary infrastructure support both for forestry and livestock activities. The creation of a road leads to opportunity. Practical solutions involve working with land associations to consolidate properties, enabling contiguous land management (even if starting small, like three or four hectares). This allows the individual owner to interface with a single organization that manages the aggregated properties.

The long-debated issue of compensating ecosystem services must be actively implemented. This involves providing compensation, especially to mountain dwellers, for the environmental benefits they provide. Work is currently underway to develop an information system to quantify ecosystem services, though this has not yet translated into an active payment system (IT7, IT8).

5.4.3. Qualitative content analysis of interviews conducted in Rhodope Mountains (Bulgaria) local level case study

5.4.3.1. Identified perceptions regarding the abandonment of agricultural land

The abandonment of agricultural land in the Rhodope Mountains area is directly determined by population migration to urban centres (Table 20).

The events that led to the abandonment of agricultural land, as mentioned by the interviewees, are largely related to demographic, socio -economic and political processes. The depopulation of mountain areas, the migration of the population to urban canters and the demographic crisis *(aging population, declining birth rate)* have considerably reduced the workforce available for agricultural activities (BG1, BG6, BG7). From a social and economic point of view, occupational restructuring and the change of the field of activity, together with the abandonment of traditional agricultural activities and small farms, represent the main cause that led to the abandonment of agricultural land (BG3, BG6, BG10). In addition to those mentioned above, in sub-mountainous areas the abandonment of agricultural land is largely associated with current environmental factors, such as prolonged droughts, the expansion of ruderal areas and the high risk of fires (BG1. BG7). These aspects have accentuated the difficulties of land management (BG7). In addition, previous political processes, such as limiting land restitution or difficulties in taking possession (inheritances, successions) of agricultural properties and the lack of a cadastre, have contributed to the increase in the number of abandoned lands (BG9, BG10). Thus, the events that led to the abandonment of agricultural lands result from a combination of demographic pressures, socio -economic decisions, political and natural circumstances (BG10).

Table 20: Main opinions expressed regarding the abandonment of agricultural land in the Bulgarian case study (N= 12)

Common opinion	*n*	Interviewees (ID)
Causes of agricultural land abandonment (q2.4.1.)		
Demographic factors: depopulation of mountainous and sub-mountainous areas, population migration to urban centers, demographic crisis (aging population, declining birth rate).	3	BG1, BG6, BG7
Socio -economic factors: abandonment of traditional agricultural activities, abandonment of land used in agriculture, occupational restructuring, concentration of the active population in cities and change in the field of work activity.	3	BG3, BG6, BG10
Environmental factors: climate change (prolonged droughts, high risk of fires), expansion of ruderal areas.	1	BG7
Current situation of agricultural land abandonment (q2.4.1.)		
There is a significantly higher number of abandoned agricultural lands and properties, a phenomenon exacerbated by the lack of labor.	2	BG2, BG7
The abandonment process is linked to previous policies limiting land restitution.	2	BG9,BG10
Giving up on managing agricultural land in hard-to-reach areas.	1	BG7
Perception regarding the abandonment of agricultural land (q3.4.)		
The abandonment of agricultural land creates dependence on foreign food supplies, an aspect perceived as negative for the local culture.	3	BG1, BG6, BG10
Abandoned lands reforest themselves, contributing to the regeneration of ecosystems.	1	BG1, BG2, BG3 BG7
It is necessary to maintain arable land to prevent the total loss of local resources and biodiversity.	4	BG1, BG9 BG6, BG10
Perceived opportunities regarding natural vegetation developed on abandoned agricultural lands (q7.2)		
Transformation into forests: abandoned lands can be capitalized by increasing the area of production forests with the possibility of obtaining additional income.	1	BG3
Ecological benefits: natural vegetation has a positive impact on the local climate and supports the functioning of ecosystems (food chains). It favors forest vegetation succession by renewing local species.	1	BG9
Long-term social impact: maintaining natural resources and ensuring ecosystem services.	1	BG2
Perceived threats to natural vegetation developed on abandoned agricultural lands (q7.2)		
Risks related to fires and natural disasters: increased risk of fires, especially in the case of forest vegetation established on abandoned lands.	3	BG1, BG6, BG7
Accessibility and management: due to dense vegetation installed in some areas, it makes access impossible to intervene in the event of natural disasters or fires.	5	BG2, BG3, BG9, BG10, BG11
Impact on biodiversity: the abandonment of agricultural land in favor of forest reduces the habitats of animals that need open spaces.	2	BG7, BG10
Social and ecological problems: dense forest vegetation installed on abandoned lands can create conflicts with inhabited areas, due in particular to the increase in the number of predatory animal species	2	BG7, BG9
Food security: the need to ensure a balance between the development of nature and the use of agricultural land to meet the needs of the community	1	BG1

The current situation resulting from the analysis of data obtained through interviews indicates a visible increase in the number of abandoned agricultural lands and properties in the region, a phenomenon aggravated by the lack of labour available for agricultural work or maintenance (BG2 and BG7). Moreover, lands located in difficult to access mountainous areas are prone to abandonment, as the costs and effort required for agricultural management and work increase, and the benefits for farmers decrease (BG7). Thus, the situation in rural and mountainous

Funded by the European Union

areas is the result of demographic, economic and institutional changes (BG7). The structure of communities and the local economy is fragile, and agricultural lands are less and less used or maintained, which accelerates their abandonment and thus the change in the appearance of the rural landscape (BG10).

The perception of agricultural land abandonment, as revealed by the interviews, reflects both negative impacts on local communities and the ecological benefits of natural reforestation. Interviewees noted that the abandonment of agricultural land use *(especially grazing)* leads to greater dependence on external food supplies, which affects local food security and the maintenance of traditional activities (BG1, BG6, BG10). At the same time, the loss of cultivated land and its reduction in use endanger natural resources and local biodiversity, highlighting the need for active maintenance to prevent complete degradation (BG1, BG6, BG9, BG10).

However, abandoned land naturally reforests, favouring ecosystem regeneration and the development of forest vegetation, which is perceived positively, especially in areas such as the sub-Balkan belt or the lower forest floor (BG1, BG2, BG3, BG7). This highlights that, although the social and economic impact is largely negative, land abandonment can bring significant ecological benefits, highlighting the complexity of the relationship between agricultural land management and natural environmental processes (BG7).

The perceived opportunities in the context of abandoned agricultural lands reflect a significant potential for forest development and for improving ecosystem services. Respondents mentioned that abandoned lands can be valorised by transforming them into production forests, which could generate additional income and increase the productivity of forest resources (BG3). Also, the development of natural vegetation contributes to a succession of local tree species and to supporting the functioning of ecosystems by maintaining food chains and biological diversity, having a positive impact on the regional climate (BG9). In social terms, the maintenance of natural resources and associated ecosystem services provides long-term benefits to local communities, supporting both food security and environmental quality (BG2). Thus, abandoned agricultural lands are perceived not only as areas at risk, but also as spaces with important potential for natural restoration and sustainable environmental development.

The perceived threats to vegetation growing on abandoned agricultural lands are varied and include both ecological risks, management and social issues. It was noted that forest vegetation installed on these lands presents an increased risk of fires and other natural disasters, especially in the case of young forests or areas with dense vegetation (BG1, BG6, BG7). The high density of vegetation makes access to land difficult, complicating interventions in emergency situations but also the proper management of forests (BG2, BG3, BG9, BG10, BG11). The transformation of open lands into forests can also affect the habitats of certain herbivorous species and generate conflicts with inhabited areas by increasing the presence of predatory species (BG7, BG9, BG10). At a social and economic level, the abandonment of agricultural land raises issues related to food security, requiring a balance between land use for agriculture and nature conservation (BG1). Thus, the perception of threats combines ecological, accessibility and community safety considerations, highlighting the complexity of managing abandoned land.

5.4.3.2. Identified perceptions regarding forest land abandonment

The abandonment of forest management is perceived as the result of a combination of demographic, accessibility, legislative and socio -economic factors. Migration and the demographic crisis have significantly reduced the available workforce in the regions studied

(BG1, BG3). In isolated, difficult-to-access areas, active management has been abandoned (BG1, BG7). Historical land reversion policies and the lack of a forest cadaster have made forest management difficult (BG7). Moreover, the lack of effective local mechanisms for community involvement has exacerbated the abandonment phenomenon (BG10). Thus, the lack of cohesive communities makes forests vulnerable to neglect and disasters (BG3, BG10).

Table 21: Main perceptions expressed regarding proforestation in the Bulgarian case (N= 12)

Responses	N	Interviewees (ID)
Causes of forest management abandonment (q2.4.2)		
Context: migration and demographic crisis led to the disappearance of the workforce	2	BG1, BG3
Accessibility: management has been abandoned in remote, difficult-to-access areas.	2	BG1, BG7
Legislation, policies and legacies: past policies on land limitation and redistribution, combined with bureaucratic procedures for property redemption, have made active forest management difficult. The lack of effective local mechanisms for community involvement in forest management exacerbates the perception of abandonment of some forest areas.	1	BG10
Socio - economic conditions: without strong communities in the area, forests become vulnerable to neglect and calamities.	2	BG3, BG10
Perception regarding allowing forests to develop without human intervention (q2.4.2/q3.1)		
Benefits considered: increased biodiversity, ecosystem services.	2	BG1, BG7
Risks: access difficulties in case of fires, difficult management in advanced stages.	3	BG1, BG3, BG6
Legislative approach: forest management must comply with legislation and integrate the needs of local communities.	5	BG1, BG2, BG7, BG9, BG10
Strong positive effects of abandoning forest management (q3.3.1)		
Increasing biodiversity: restoring habitats, increasing the number of species	2	BG1, BG7
Natural reforestation and regeneration in the form of natural forests.	2	BG2, BG9
Providing ecosystem services: improving local microclimate conditions, reducing drought stress, reducing soil erosion.	2	BG1, BG7
Strong negative effects of abandoning forest management (q3.3.2)		
Impact on herbivorous wildlife and ecological imbalances: certain species no longer find food or suitable habitat.	1	BG7
Reduction of economic utility and losses for local communities: grazing areas are reduced.	2	BG7, BG10
Difficult access: accumulation of dry wood: increases the risk of forest fires, affects circulation and population safety.	4	BG1, BG6, BG7 BG11
Perceived opportunities for reforestation (q7.1)		
Increased productivity and income potential.	1	BG3
Restoring forests with local species and diversifying ecosystems	2	BG9, BG2
Provision of ecosystem services	1	BG1
Climate change mitigation: measures to combat climate change.	1	BG1
Perceived threats related to reforestation (q7.1)		
Risks of spreading pathogens to trees, which could lead to the loss of species and the destruction of habitats.	4	BG3, BG1, BG6, BG9
Fire risks: concerns/worries related to fire and security risks.	4	BG3, BG1, BG6, BG9
Accessibility: difficulties in intervention and prevention, affecting the safety of the population.	2	BG7, BG11
Reducing resources for local communities affects the local economy.	2	BG7, BG10
Ecological imbalances and the danger of increasing predators	2	BG7, BG9

Positive ecological effects: Perceptions of letting forests develop without human intervention are mixed: benefits mentioned include increased biodiversity and provision of ecosystem services (BG1, BG7), while risks relate to difficulty of access in case of fires and difficult management of mature forests (BG1, BG3, BG6).

Local community acceptance/resistance: The majority of interviewees mention the need to comply with legislation and integrate the needs of local communities into forest management (BG1, BG2, BG7, BG9, BG10). The effects of abandonment are perceived as both positive and negative. Positive effects include natural regeneration of forests *(in their natural*

Funded by the European Union

fundamental form), habitat restoration and increased biodiversity (BG1, BG7; BG2, BG9). The provision of ecosystem services, such as improving the microclimate, reducing stress caused by drought and soil erosion (BG1, BG7), is also frequently mentioned. The perceived opportunities through afforestation are seen in increasing productivity and income potential (BG3), restoring forests with local species and diversifying ecosystems (BG9, BG2), and strengthening ecosystem services for communities (BG1).

Negative effects - include ecological imbalances for herbivorous fauna (BG7), economic losses for local communities through reduced grazing areas (BG7, BG10) and access difficulties caused by the accumulation of dry woody material, which increases the risk of fires and affects the safety of the local population (BG1, BG6, BG7, BG11).

5.4.3.3. Critical points of agreement and disagreement

The analysis of the responses of the interviewees reveals both significant agreements and disagreements in the perceptions on forest management and agricultural land abandonment. Regarding forests left to develop freely, the majority of respondents (BG1, BG2, BG3, BG6, BG7, BG9, BG10) identified clear threats, such as: i) increased risk of fires and spread of pests; ii) difficulties in accessing or maintaining the land, underlining a predominantly negative attitude towards reducing forest management. Some interviewees highlighted ecological opportunities, such as the renewal of local tree species in the context of climate change and the improvement of the state of ecosystems, as well as benefits related to natural vegetation and its role in environmental protection (BG1, BG2, BG3, BG9).

Regarding the abandonment of agricultural land, there is partial consensus on the causes: depopulation of rural areas, migration to urban centres and difficult socio -economic conditions were frequently mentioned (BG1, BG3, BG6, BG7, BG10). However, perceptions on the effects of this phenomenon are more nuanced: some interviewees consider that abandonment has negative effects, such as loss of agricultural production and impact on local livestock (BG10, BG9), while others see a positive effect through the possibility of natural reforestation and the creation of habitats for wildlife (BG1, BG3, BG7).

Regarding local measures, there is disagreement between those who believe that concrete interventions should be implemented to reduce the risks associated with rewilding, such as road infrastructure and access for fire management (BG1, BG6, BG10), and those who do not perceive the need for such measures or support the preservation of forests naturally (BG2, BG3).

Thus, the critical points of agreement mainly refer to the recognition of the risks and causes of the phenomena of forest abandonment and management, and the points of disagreement appear in the assessment of the effects and appropriate intervention measures.

Local measures suggested by interviewees to reduce the risks associated with rewilding and agricultural land abandonment focus mainly on increasing accessibility and more efficient forest management. These include i) improving road infrastructure and roads in mountainous and sub-mountainous areas, so as to allow easy access for teams to prevent and extinguish fires, as well as the transport of wood (BG1, BG6, BG10); ii)ensuring a mosaic landscape, combining forested and agricultural areas, thus maintaining a balance between nature and human activities (BG6); iii) the need for specific interventions to prevent fires in young forests or forest massifs, through protection and monitoring measures (BG7); iv) maintaining natural development, without excessive interventions, to allow the restoration of ecosystems and the conservation of wild species (BG3). Overall, the proposed local measures combine elements of infrastructure, forest management and environmental protection, aiming to reduce perceived risks and capitalize on the opportunities offered by rewilding.

Funded by the European Union

5.4.4. Qualitative content analysis of interviews conducted in Vânători Neamț (Romania) local level case study

5.4.4.1. Identified perceptions regarding the abandonment of agricultural land

The events that led to the abandonment of agricultural lands. Although few cases of agricultural land abandonment are reported, they are associated with a series of demographic, economic and social changes. The migration of the young population, especially to countries in the European Union with the potential to absorb external labour, the aging of local communities and the decline in the birth rate, have significantly reduced the labour force available for agricultural activities (RO8). At the same time, land management is becoming less important for owners, either because of the lack of profitability of agricultural activity or because they have no entrepreneurial interest in this sector (RO1).

Current situation. The analysis of the answers provided by the respondents reflects an uneven picture of the current situation regarding the abandonment of agricultural land, with significant variations between localities and types of land use. In some areas, the phenomenon is reported especially in the case of pastures and hayfields that are no longer cared for, the main cause being the decrease in interest in raising animals and the orientation of the owners only to obtain subsidies (RO1, RO4). There are also specific situations where abandonment is determined by the lack of legal heirs, in which case the lands remain uncultivated (RO15). In some areas, the phenomenon is present, the abandonment being linked to economic and demographic processes, disinterest in traditional agricultural activities but the orientation of properties towards future real estate investments RO08). On the other hand, some respondents consider that the level of abandoned land is reduced or too insignificant (RO1, RO5, RO7, RO10, RO11, RO14).

The perception of agricultural land abandonment varies among respondents. Some consider the phenomenon to be obvious and worrying, while others perceive it as minor or even non-existent. Abandoned lands are perceived as few or relatively small and in some situations the owners accept them without exploiting them (RO1, RO4, RO6, RO12). Opinions are noted regarding the fact that re-naturalization or reforestation is carried out only on small areas, generally in the buffer zone of the park (RO6, RO7, RO12). Positive considerations regarding the abandonment of agricultural lands concern aspects such as accelerating the re-naturalization process, supporting the increase in biodiversity and improving local environmental conditions (RO1, RO2, RO4, RO8, RO14). The negative effects associated with the phenomenon are associated with the loss of agricultural resources, which leads to local economic decline (RO5, RO6, RO7, RO).

The perceived opportunities include both economic, ecological and social benefits. The transformation of abandoned land through re-naturalization could support tourism development, the area becoming an ecotourism destination that could generate opportunities for local businesses and bring economic benefits to local communities (RO15). Also, both the presence of forests and the mosaic natural landscape (alternating pastures/haylands - forests) constitute an aesthetic advantage, contributing to the local identity and tourist attractiveness of the region (RO1, RO7, RO14). The social impact is highlighted by maintaining natural resources and ensuring ecosystem services, which support the quality of life and sustainability of local communities (RO2, RO4, RO8). Thus, abandoned agricultural land is perceived not only as a risk, but also as a resource with potential for tourist, aesthetic and ecological valorisation.

Perceived threats to vegetation relates to the loss of habitats for species dependent on open land and the vulnerability of unsustainable forest vegetation (RO4, RO9, RO10, RO14). Lack

Funded by the European Union

of monitoring can lead to land degradation not being noticed, and the density of vegetation can generate conflicts with local communities by increasing the number of predator species (RO5, RO6). However, discussions highlight the need for a balanced use of land to protect food resources and harmonize natural development with community needs (RO1, RO6).

Table 22: Main opinions expressed regarding the abandonment of agricultural land in the Romanian case (N= 15)

Responses	n	Interviewees (ID)
Causes of agricultural land abandonment (q2.4.1.)		
Socio-economic; Lack of interest of owners in managing agricultural land. Dependence on state subsidies. Reduction of local jobs and economic opportunities – decreases the attractiveness of agricultural activities.	5	RO01, RO6, RO9, RO13, RO14
Demographics: migration, declining birth rate and aging population.	2	RO01, RO08
Institutional/Political: Lack of local support mechanisms – owners are not motivated to manage the land. Issues related to property rights (inheritances/successions).	1	RO13
Current situation of agricultural land abandonment (q2.4.1.)		
There are abandoned agricultural lands, accepted by the owners	3	RO1,RO10, RO14
Abandonment is limited to certain isolated areas, influenced by the presence of agricultural companies that only work on large areas.	2	RO10, RO14
Abandoned land that does not fall within the minimum area for granting subsidies	1	RO1
Perception regarding the abandonment of agricultural land (q3.4.)		
Abandoned agricultural lands are few or relatively small, in some situations being accepted by the owners.	5	RO1, RO5, RO7, RO12, RO14
There is a perception that re-naturalization/reforestation only occurs on small areas, generally the area that interferes with the park boundaries.	2	RO07, RO12
Positive impact: abandoned lands can contribute to the re-naturalization process, increasing biodiversity and improving local environmental conditions.	2	RO12, RO15
Negative impact: loss of agricultural resources, reduced income and decreased local economic opportunities. Loss of habitats and extinction of animal species that require open spaces.	4	RO4, RO6, RO12, RO15
Governance: state intervention is necessary by establishing expert groups to restore land suitable for agriculture, especially for grazing, and otherwise the abandoned land should be included in re-naturalization programs.	3	RO1, RO2, RO7
Perceived opportunities regarding natural vegetation developed on abandoned agricultural lands (q7.2)		
Tourism: Tourism activity in the area can be influenced by the renaturalized environment. The area can become an ecotourism destination which would create opportunities for local businesses, bring economic benefits and contribute to promoting the natural values of the region.	1	RO15
Valorization of the natural landscape: the presence of forests constitutes an important aesthetic advantage for the local identity.	1	RO15
Social impact: maintaining natural resources and ensuring ecosystem services.	1	RO15
Perceived threats to natural vegetation developed on abandoned agricultural lands (q7.2)		
Habitat loss and negative impact on species: the abandonment of pastures can lead to the extinction or migration of species dependent on open lands.	2	RO4, RO9
Accessibility and management: on abandoned agricultural lands, natural forest vegetation is vulnerable or insufficiently supported (managed).	2	RO10. RO14
Indirect risks: lack of monitoring or attention can lead to land degradation without it being noticed.	2	RO10, RO14
Social problems: dense forest vegetation installed on abandoned lands can create conflicts with inhabited areas, due in particular to the increase in the number of predatory animal species	1	RO5, RO6
Food security: the need to ensure a balance between the development of nature and the use of agricultural land to meet the needs of the community	1	RO1, RO6

Funded by the European Union

5.4.4.2. Identified perceptions regarding forest land abandonment

Perceptions identified among stakeholders highlights a diversity of opinions, from support for natural re-naturalization processes to concerns about their impact on local communities and ecosystems. Some respondents consider that re-naturalization and forest development without human intervention are beneficial measures, highlighting the decrease in forest area in certain regions. Such processes can significantly contribute to increasing biodiversity and can bring advantages to both fauna and local communities (RO01, RO02, RO08, RO14). Perceptions regarding the integration of lands into strict protection areas are mixed. Some highlight benefits such as the creation of new protected areas, the development of ecotourism and access to alternative income (RO07, RO10, RO13, RO15). Other opinions highlight that establishing fixed percentages for protection is unrealistic and that the abandonment of agricultural land can affect habitats dependent on grazing (RO04, RO09). There are also concerns about the increase in carnivore populations and possible ecological imbalances (RO05, RO07). Overall, opinions reflect a fragile balance between ecological benefits and risks to traditional activities, safety and ecosystem balance.

The positive ecological effects associated with re-naturalization processes, including reducing forestry interventions and allowing natural evolution, are mainly highlighted by increasing biodiversity and improving conditions for wildlife. Respondents emphasize that forests left to develop spontaneously contribute to both species diversification and the growth of wildlife populations (RO010, RO08, RO14). In addition, the integration of abandoned lands into fully protected areas is perceived as generating ecological benefits and increasing the density of wildlife populations (RO15). Thus, re-naturalization and the expansion of forest areas are seen as measures that support the restoration of habitats, the maintenance of ecological balance and the sustainable use of natural resources, strengthening the resilience of the forest landscape.

The acceptance or resistance of the local community towards the processes of re-naturalization and spontaneous afforestation is strongly influenced by the way in which the benefits and risks associated with these changes are perceived. For some communities, these processes are evaluated positively, being associated with the improvement of the diversity of flora and fauna, as well as with emerging economic opportunities, such as ecotourism, financial compensations or alternative income generation programs (RO7, RO10, RO13, RO14, RO 15). However, there are also forms of resistance, determined by concerns about the loss of income or traditional jobs, the expansion of the number of large carnivores that may affect domestic animals and possible ecological imbalances to the detriment of herbivores (RO05, RO06, RO09, RO13). Thus, the local community manifests a spectrum of reactions, from active support and acceptance, to opposition and reluctance, depending on how the social, economic and ecological effects of the interventions on the environment are perceived.

The negative effects associated with the abandonment of forest management include the loss of essential habitats for certain species and the emergence of biological and management risks. The abandonment of land, especially pastures, for the purpose of natural afforestation without management interventions can negatively affect species dependent on open habitats, such as the ground squirrel (Spermophilus citellus), for which the reduction of suitable areas can lead to the decline or even local disappearance of populations (RO04, RO09). Some respondents also expressed concerns about the possibility of the multiplication of forest pests, such as the woodcock, which could affect neighboring forests (RO08). At the local administrative level, the lack of coherent management can favor the emergence of stilt buildings on abandoned land. At the same time, some land with already established forest vegetation requires interventions to be restored to its initial state or to prevent the loss of

Funded by the European Union

ecological and cultural functions (RO02, RO08). Overall, these negative effects highlight the importance of careful planning, a dynamic monitoring framework, and the involvement of local communities to limit ecological risks and prevent the emergence of social and economic conflicts.

Table 23: Main opinions expressed regarding proforestation in the Romanian case study (N= 15)

Responses	n	Interviewees (ID)
Causes of forest management abandonment (q2.4.2)		
Economic factors: Lack of financial support, decrease in local economic activity in the forestry sector.	1	RO1, RO13
Demographics: depopulation and lack of labour in the forestry sector.	4	RO8, RO11, RO13, RO14
Fragmentation of properties, lack of heirs, lack of forest cadastre.	2	RO12, RO15
Awareness: lack of interest of owners in maintaining forest habitats.	1	RO9
Institutional: limiting access to wood.	3	RO4, RO7, RO8
Perception regarding allowing forests to develop without human intervention (q2.4.2/q3.1)		
Support/agreement: re-naturalization is welcome because the forest area in some areas has decreased.	1	RO01
Biodiversity benefits: it may be a measure that would contribute to increasing biodiversity.	1	RO02, RO14, RO08
Positive local perception: re-naturalization is viewed favourably, as it brings benefits to both fauna and local communities.	1	RO14
Integration into full protection: there are lands that can be included in the strict protection area.	1	RO10
Negative opinions: it is perceived as inappropriate and unrealistic, it is considered that decisions should be based on socio-economic studies and real land characteristics, not on artificially established percentage considerations. Negative impact on habitats dependent on agricultural activity (grazing).	1	RO09
Strong positive effects of abandoning forest management (q3.3.1)		
Biodiversity and wildlife: increases the diversity and density of wildlife.	3	RO01, RO08, RO14
Local economic benefits: following the integration of new forests into the full protection area.	1	RO15
Strong negative effects of abandoning forest management (q3.3.2)		
Habitat loss: the abandonment of agricultural land negatively affects associated habitats, e.g. for the ground squirrel (Spermophilus citellus) the abandonment of pasture can lead to the extinction of the population.	2	RO04, RO09
Biological risks: there is a fear of gradations in lipids	1	RO08
Lack of management: on abandoned lands there is a tendency to build structures on piles in clearings; it is considered that the state should manage these pastures to restore them to their original form.	2	RO02, RO08
Perceived opportunities for reforestation (q7.1)		
Benefits for local communities: compensation and alternative income programs; need to explain benefits: firewood, jobs, tourism income.	3	RO07, RO10, RO13
Protected area development/ecotourism: protecting the environment and creating scientific reserves and natural monuments.	1	RO15
Management: public consultation, flexible regulations, environmental education	1	RO07
Perceived threats related to reforestation (q7.1)		
Economic threats: job losses, loss of income.	3	RO6, RO9, RO13
Conflicts with local communities: there are fears regarding the increased proliferation of predatory carnivorous species, which may affect the safety of domestic animals.	2	RO5, RO7
Ecological imbalances and danger of predator growth at the expense of herbivores.	1	RO5

Funded by the European Union

5.4.4.3. Critical points of agreement and disagreement

Most stakeholders tend to agree on the main causes of land abandonment, which they attribute mainly to social and economic aspects, such as the lack of local opportunities *(which leads to the migration of young people)*, dependence on subsidies and the decline in interest in agricultural activities (RO1, RO08, RO09, RO13, RO14). There is also broad agreement on the ecological benefits of re-naturalization, a process perceived as essential for increasing biodiversity and natural regeneration of forests (RO1, RO08, RO14, RO15). At the same time, respondents recognize the need for local support, through financial compensation, alternative income generation programs and public consultation, to ensure the legal framework and acceptance of protection measures (RO07, RO10, RO13). This consensus alignment is supported by the declared preferences for the development of a more natural environment and the appreciation of wilderness areas as spaces with high value for ecotourism and local identity (RO09, RO10, RO14).

In contrast to the points of agreement, the strongest tensions arise in relation to the modalities of implementing protection and its social and economic implications. Imposing a certain percentage of inclusion in strict protection is perceived as excessive by some groups, considered unrealistic and insufficiently substantiated from a social and economic point of view, while others support it as necessary for conservation, thus creating a clear conflict (of opinions) (RO06, RO7, RO10). Substantial divergences also appear between economic and ecological priorities, with re-naturalization being seen either as an opportunity or as a threat to incomes from the exploitation of agricultural and forestry resources. (RO06, RO09, RO13, RO14). At the same time, there are controversies regarding the consequences of abandonment on species dependent on open spaces, some see it as a stimulus for forest expansion, while others as a threat to sensitive species such as the gopher (RO1, RO4, RO9).

Different perceptions of dense forest *(in this case high density being associated with the early stages of forest development)*, fears of reduced accessibility, as well as fears related to the growth of predator populations and their associated risks, contribute to the set of conflicts that define the positions of local communities (RO1, RO4, RO5, RO7, RO9).

Suggested local measures. Based on stakeholder perceptions, a set of integrated measures is being outlined: economic support for communities, sustainable forest and land management, wildlife protection, strengthening the legal framework, and environmental education. These actions aim to maximize environmental benefits, reduce social and economic risks, and gain community support for ecosystem protection and restoration processes.

- Economic and social support measures - to reduce the negative financial impact of re-naturalization and stimulate community involvement, interviewees suggest implementing compensation and alternative income programs, including compensation for damage caused by wildlife (RO7, RO10, RO13). Local development through ecotourism and the creation of natural destinations (thematic trails) is also recommended, such as new protected areas, scientific reserves or natural monuments, which would generate direct economic benefits and make strict forest protection acceptable (RO15). A clear explanation of the economic benefits for communities is essential to increase local support.
- Landscape planning and management measures - Sustainable management of forests and brownfields is another priority area. This includes forestry work adapted to each stand, local management of brownfields to restore them to their original form and prevention of illegal construction outside the built-up area (RO2, RO5, RO8, RO9). In parallel, wildlife management involves educating communities on how to live with large

mammals and financing protective measures, such as (electric) fencing, to limit conflicts with wild animals.

– Institutional and awareness-raising measures - Improving the legal framework and increasing transparency are essential for the success of re-naturalization. Extensive public consultation and the promotion of environmental education contribute to the acceptance of measures and the awareness of the benefits associated with the protection of ecologically valuable areas (lands) (RO7). Regulations must be flexible and integrate the needs of local communities, and the designation of strict protection areas should be done gradually, based on real criteria and socio-economic studies, in order to balance ecological objectives with social, traditional and economic ones (RO6).

5.4.5. Qualitative content analysis of interviews conducted in Šumava Region (Czech Republic) local level case study

5.4.5.1. Identified perceptions regarding the abandonment of agricultural land

The abandonment of agricultural land in Šumava Region is strongly linked to historical events and economic factors (Table 24).

The following events were mentioned by the interviewees on the causes of agricultural land abandonment:

- Post-WWII displacement and political factors: a significant abandonment occurred after World War II due to the displacement of the German population from border areas, the liquidation of villages, and the subsequent construction of the Iron Curtain after 1950, which turned the territory into a strictly guarded zone. This preserved nature in a relatively untouched state.
- Šumava National Park (NP) and Protected Landscape Area (PLA) establishment: abandonment has continued since the proclamation of the Šumava NP in 1991 with the goal of expanding the non-intervention area.
- Economic factors: contributed to abandonment at the turn of the 19th and 20th centuries. There are opinions expressing that currently agriculture is primarily sustained by subsidies, and arable land is sometimes not considered profitable.
- Local climate (i.e. unsuitable lands for agriculture) and demographic factors (population decrease) are also mentioned as contributing causes.

The current situation shows diverse land use and perceptions (table 24). The decline of agriculture led to the creation of wonderful, diverse natural ecosystems, which are now focal points for land protection (CZ2). One of the interviewed mayors, pointed to the fact that some pasturelands that were naturally afforested are undergoing a “reverse rewilding process”, where owners are reversing afforestation because the land is still registered as agricultural land (CZ1). In another community integrated in the NP, that heavily relies on nature-based tourist activities, the mayor considers that traditional management, primarily grazing, is seen as adequate for pasturelands to maintain viewpoints and assure access; this management is discussed with the NP administration (CZ5). Outside the NP, abandonment in the Šumava PLA occurs primarily in the set protected area and waterlogged areas, where reclamation is now less frequent, and revitalization of the water regime is starting (CZ3). Outside protected areas, in the Šumava Foothills, abandonment is only sporadic (CZ3).

Table 24: Main opinions expressed on agricultural land abandonment in the Czech case study (N= 8)

Shared opinion	Count	Interviewees (ID)
Causes of agricultural land abandonment (q2.4.1.)		
Historical & political: Post-WWII displacement/Iron Curtain, and the establishment of the NP/PLA.	5	CZ1, CZ2, CZ3, CZ6, CZ8
Economic factors: agriculture exists mainly on subsidies, or is not profitable.	2	CZ2, CZ 1
Demographics/climate: influence of local factors.	1	CZ1
Current situation of agricultural land abandonment (q2.4.1.)		
Traditional management/Grazing: favoured for pasturelands, often to maintain viewpoints inside the NP	2	CZ5, CZ1
Creation of natural ecosystems: abandonment led to wonderful, diverse natural ecosystems.	1	CZ2
Abandonment in PLA areas: occurs primarily in waterlogged areas.	1	CZ3
Reverse rewilding process: owners reversing afforestation on pasturelands that are registered for agricultural use in the cadastral records.	1	CZ1
Perception on the abandonment of agricultural land (q3.4.)		
In line with NP/Nature conservation objectives: supports nature conservation or development of the sector.	4	CZ3, CZ7, CZ8, CZ1
High probability of expansion: abandonment likely to expand considering the low economic benefits given climatic conditions	1	CZ2
Acceptance/logical: the process found to be logical or simply accepted as it is.	2	CZ7, CZ6
Perceived opportunities about natural vegetations developed on abandoned agricultural lands (q7.2)		
Increased biodiversity/species diversity: understanding the importance of biodiversity and increased species diversity.	3	CZ2, CZ3, CZ8
Nature protection/abandonment of unprofitable farming: Supports nature goals and economic realism.	2	CZ7, CZ3
Landscape retention: Increased landscape retention.	1	CZ3
Tourism development: opportunities for tourism.	1	CZ8
Increased biodiversity/species diversity: understanding the importance of biodiversity and increased species diversity.	3	CZ2, CZ3, CZ 8
Perceived threats about natural vegetations developed on abandoned agricultural lands (q7.2)		
Economic/subsidy loss: fear of losing subsidy income and economic losses.	3	CZ2, CZ3, CZ6
Wildlife conflict (Wolf): wolfs cause damages to sheep and a psychological impact on farmers.	3	CZ3, CZ5, CZ6
High security risk (fire/drought): risk of fires and droughts.	2	CZ3, CZ6
Deterioration of landscape permeability: loss of easy movement for tourist across the landscape.	2	CZ6, CZ7
Food security: concerns about food security after abandonment / no concerns about food security	1/1	CZ8/CZ1

Perception on the abandonment of agricultural land are generally positive or accepting, often viewing it as a natural or logical development, in line with the development of the sector and nature conservation objectives in NPs (CZ1, CZ3, CZ7, CZ8). Abandonment of small areas can be desirable also outside the NP in PLAs for improving ecosystems and increasing diversity (CZ3). There's a perception that the arable land isn't profitable anyway and only the pastures need to remain in use (CZ1, CZ5). Only one opinion was recorded against the current situation of agricultural land-abandonment from the mayor of a local community who expressed a general strong negative view against any form of rewilding in areas where people are still leaving (CZ6).

The perceived opportunities about natural vegetations developed on abandoned agricultural lands align with conservation and tourism. Nature and biodiversity are seen as an opportunity to understand the importance for biodiversity and achieve increased species diversity (CZ2,

Funded by the European Union

CZ3, CZ8) leading to an increased landscape retention. Among economic and social opportunities, most frequent opinions refer to the positive role in nature-based tourism development, abandonment of unprofitable farming, and potential financial benefits from tourism activities.

The perceived threats about natural vegetations developed on abandoned agricultural lands relate to economic subsidies, safety, and wildlife conflicts. The primary concerns revolve around the loss of subsidy income (CZ2, CZ3, CZ6) and significant safety/environmental risks such as economic damage from fires and droughts (CZ3, CZ6). Furthermore, wolf-related conflict poses a serious threat to livestock and farmer well-being (CZ3, CZ5, CZ6), causing damages to sheep and a significant psychological impact on farmers, sometimes causing them to quit the business (CZ3). There are no reported incidents of encounters of tourist and villagers with wolf and some interviewees don't see it as a problem (CZ1, CZ2, CZ7, CZ8). Conversely, there is an express perception that the wolfs are seen too close to villages that result in fear of the local population and tourist (CZ6), and thus there may be a need for their management if the wolf becomes a threat to tourists (CZ5). Finally, there are worries about declining landscape accessibility for tourist (CZ6, CZ7) and about future food security that it seen as a potential problem by one interviewee (CZ8) and as no concern by another interviewee (CZ1).

5.4.5.2. Identified perceptions on forestland abandonment in Šumava Region

Similar to agricultural land, forest management abandonment in Šumava Region was significant after WWII following the displacement of border areas. Currently, forest management abandonment is seen by most of the interviewees as a deliberate process aligned with conservation goals of the NP. The process began with the establishment of the Šumava National Park in 1991 and is ongoing as part of the expansion of the no-intervention area (CZ2, CZ3). Some interviewees pointed to the fact that the process has faced political interference (CZ2, CZ8) and has been slow, but the non-intervention area has been increasing since 2020 (by 2-3% of NP area per year). There are plans to increase the area for strict protection in the NP to 52% by 2030 and 75% by 2060 (CZ2, CZ8).

The identified perceptions on allowing forests to develop without human interventions (proforestation) pointed to a general agreement with six out the eight interviewees considering that the process is desirable and in line with nature conservation goals in Šumava National Park. Interviewee 6, the mayor of one community having forestlands in the NP, represents the most vocal opposition being against extending non-intervention without evaluation and beyond the legally defined area agreed before. Interviewee 4, a forester, has a more nuanced position considering that the establishment of the NP has change not only the ownership status and the economic impact on forest industry but also created a division between "foresters" and "naturalists" on how to achieve the goal of "green forests"; this turns into the fact that foresters are being perceived in a negative way in the society.

Local community acceptance/resistance: interviewee CZ2 estimates that only 1/3 of the mayors of the communities from the NP are in oppositions with the idea of forestland abandonment in the NP, an opposition that was stronger before: "*I could not imagine 25 years ago that we will reach 25% core zone* (CZ2)." Still, some communities want to adhere to the original zoning agreed for 2035 and oppose the addition of new areas to the core zone (CZ6). According to the interviewee CZ2, 50% of the population accepts the plans to enlarge the core zones, while 50% say they don't want to enlarge it anymore. Same percentages are estimated by the mayor of one community that considers that the opinions in the village are equally split between those accepting and those opposing the core zone extension.

Table 25: Main opinions expressed on proforestation in Sumava region (CZ) case study (N= 8)

Shared opinion	Count	Interviewees (ID)
Causes of forest management abandonment (q2.4.2)		
Post-WWII context: significant abandonment after World War II.	1	CZ3
NP establishment & goal: began with the establishment of the NP in 1991 to expand the non-intervention area.	5	CZ1, CZ2, CZ3, CZ8, CZ6
Political interference: the process has been slow due to political interference	1	CZ2, CZ8
Expansion targets: there are plans to increase the area for strict protection in the NP to 52% by 2030 and 75% by 2060	2	CZ2, CZ8
Perception on allowing forests to develop without human interventions (q2.4.2/q3.1)		
Strong support/agreement: totally support it, it is desirable, or adequate.	6	CZ1, CZ2, CZ3, CZ5, CZ7, CZ8
Opposition to uncontrolled expansion: against extending non-intervention without evaluation or beyond the legally defined area.	1	CZ6
Differences/conflict between “foresters” and naturalists: division on how to achieve the goal of “green forests”.	1	CZ4
Strong positive effects of forest management abandonment (q3.3.1)		
Increased biodiversity: increases the number of species and habitat heterogeneity.	3	CZ2, CZ3, CZ8
Positive effects: non-intervention creates new attractiveness, value, and biodiversity.	2	CZ2, CZ5
Carbon sink/climate change mitigation: dead wood leads to carbon fixation, stability, and resilience to climate change.	2	CZ2, CZ8
Increased landscape retention: increases water retention capacity.	2	CZ8, CZ3
Aesthetic: the wild landscape is very aesthetic and diverse.	1	CZ2
Strong negative effects of forest management abandonment (q3.3.2)		
Aesthetics/not beneficial to anyone: destroyed forests are not beneficial to people, and people still live there.	1	CZ6
Negative effect on commercial forestry: forestry would have to adapt to the reduced space.	1	CZ2
"Nothing Left to Abandon": focus should be on maintaining what is left.	1	CZ6
Perceived opportunities about proforestation (q7.1)		
Tourism/new attraction: opportunity for tourism, new natural attraction, seeing wildlife.	4	CZ1, CZ2, CZ5, CZ8
Nature conservation: supports nature goals and economic realism.	2	CZ7, CZ3
Economic/financial compensation: financial compensation for restrictions.	2	CZ1, CZ3
Climate change mitigation: measures to combat climate change.	1	CZ8
Change in perception: towards greater respect for natural processes.	1	CZ2
Perceived threats about proforestation (q7.1)		
Bark beetle gradation: the main threat/challenge, leading to fear and negative views in communities	8	CZ1, CZ2, CZ3, CZ4, CZ5, CZ6, CZ7, CZ8
Fire risks: concerns about fire, and security risk.	5	CZ2, CZ3, CZ4, CZ5, CZ8
Economic/financial loss: unprocessed disasters, economic losses, not enough revenues.	4	CZ2, CZ3, CZ5, CZ6
Aesthetics/landscape conflict: dislike of unmanaged forest view, "messy landscape."	2	CZ5, CZ6
Access restrictions on entry to protected zones, unclear rules on where to go.	3	CZ5, CZ6, CZ8
Wildlife conflict: issues with herbivores and wolfs coming too close to the village.	2	CZ4, CZ6
Negative sentiment from local government/population: resistance from a certain part of the population, often local government.	3	CZ5, CZ6, CZ8

Funded by the European Union

Multiple interviewees (CZ2, 5, 6) identify a clear generational split. The younger generations and people with higher education welcome the approach to core zone extension as well as the visitors of the park (CZ2). Older people are against the NP citing landscape aesthetic problems (seeing unmanaged, messy, dead forest from windows), access problems (given the restriction into no-go areas) and concerns about traditional forest management. Resistance also stems from a misunderstanding that "*a dead forest equals a bad forest*" (CZ8). Moreover, three interviewees identified a conflict between foresters and naturalists (CZ1, CZ2, CZ4). Foresters keep a traditional view of managing forests (e.g., fighting bark beetle) and may have to change their profession with the core zone extension (CZ1). Conversely, interviewee CZ4 considers that "*Nature protection people should not do forest management without forestry people*".

The positive ecological effects of forest management abandonment are primarily related to ecosystem health, biodiversity, and climate change and are shared by six out of eight interviewees. The positive impacts include an increase in the number of species and a stabilization of the food pyramid. It ensures the natural development of ecosystems and increases forest stability. It supports nature conservation and acts as a climate change mitigation measure. Leaving dead wood (biomass) has a positive effect on increasing biodiversity, retention capacity of the landscape, and plays a key role as an important carbon sink. The wild landscape is considered aesthetic by some interviewees (CZ2) and diverse. In the end, the NP brings a change in the perception of nature towards greater respect for natural processes (CZ8).

In addition to the ecological effects, six of the interviewees (CZ1, 2, 3, 5, 7, 8) underline various **economic benefits**. Ecotourism is perceived as one of the main opportunities, since the NP is a natural attraction and offers an opportunity to see wildlife. Thus, tourism activities can compensate for the concerns expressed by local communities (CZ1, CZ5). One argument for developing tourism is the high interest to buy land in the NP area, with prices of land and houses "*being comparable to those in Prague*" (CZ1). This aspect nevertheless also creates a problem: attracting young people to establish themselves permanently in these communities since they cannot afford the high real estate prices. Finally, some potential benefits can also be seen from the financial compensation for restrictions and an increase in the value of land/houses.

The negative effects of forest management abandonment were identified by two of the six interviewees on safety, landscape aesthetics, distrust and economic viability. The negative economic impacts results from the fact that the existence of the NP imposes a full range of limitations to forest management and industry (CZ4, CZ6). A certain degree of distrust in NP management actions was mentioned as it is hard to explain to the local communities why the NP sometimes cuts affected trees but doesn't replant, or why dry wood is left into the forests (CZ6). The destroyed forests (from bark beetle, left unmanaged) are seen as not beneficial to anyone, thus leading to a negative aesthetics impact (CZ4, CZ6). Moreover, the confusion of the zoning system is mentioned as a social negative impact: locals, tourists, and journalists often do not understand the new zonation and where free access is allowed or not (CZ6).

Perceived threats related to proforestation (letting forests develop freely, without forest management) center on pests, fire, economic loss, and local conflicts. Bark beetle gradation is the biggest concern expressed by all the interviewees. The fear is that non-intervention may spread bark beetle attacks. The biggest challenge is protecting the forest outside the NP from the beetle attacks existing within the park (CZ2, CZ4) and convincing the communities that the forests inside the NP are not dying but follow a natural succession process (CZ2, CZ8). The approach of not reacting to bark beetle attacks is generally not understood by the foresters,

Funded by the European Union

who consider it part of their education and job to react when bark beetle attacks occur (CZ4). Moreover, the deadwood is perceived as a potential fire hazard. It is considered the most fires are started by tourists. This concern has become more discussed in the communities since a fire occurred in another national park in the Czech Republic and people are afraid it will happen also in Šumava National Park (CZ3, CZ5). There is also the perception that the accumulation of dead trees and the unmanaged nature can create a high security risk and bring restrictions on entry to no-go zones (CZ6). A similar perception is that the unmanaged "mess" in the forest is linked to wild animals (e.g., wolves) moving closer to villages, causing problems (CZ6) which is not supported by scientific evidences.

5.4.5.3. Critical points of agreement and disagreement

The highest levels of agreement indicating established facts or widely held views can be summarized as following:

- Causes of abandonment are historical and only recently are driven by rewilding policies. The primary cause of agricultural and forest land abandonment is strongly tied to the historical and political events following World War II, including the displacement of the German population and the Iron Curtain's construction. The main rewilding policy driver is the establishment of the Šumava NP in 1991, specifically the policy of expanding the non-intervention area.
- The bark beetle threat is the most pervasive and consistently feared threat associated with allowing forests to develop without human intervention (proforestation/rewilding). This concern was shared by all interviewees, underscoring it as the single most critical point of apprehension.

The most intense conflicts arise in areas directly affecting the local population's quality of life and traditional practices:

- The economic and aesthetic divide: while most support rewilding conceptually, the most visible local opposition is tied to the landscape aesthetic conflict—the distress caused by seeing unmanaged, bark beetle-affected, dead forests from their windows. This is directly linked to the threat of economic/financial loss.
- Forester vs. naturalist conflict (especially on the bark beetle management): a significant conflict exists between the traditional forest managers and nature conservationists (foresters vs. naturalists), who have the same goal (green forests) but fundamentally different ways of achieving it. This division impacts forest management planning and approaches to bark beetle gradation management.
- Local governance: there is a certain level of conflict regarding the relationship between the State, NP administration and local government, highlighted by the issue of the extension of the NP core zone. Moreover, the mayor of one municipality within the park feels it lacks fair representation on the park's board, as it has the largest share in the park area but only one vote.
- Wildlife conflict (wolf): the threat of the wolf is a specific and emotional conflict point, particularly concerning damage to sheep and the resulting psychological impact on farmers, despite compensation. This concern is shared only by two interviewees (CZ3, CZ6).
- Access and fire risks: The interviewees pointed to the fact that some locals express fear and confusion over access restrictions ("no-go zones") and a lack of understanding regarding the new zonation. Increased fire risks have also become discussed in the communities especially after the fire that occurred in another NP in the Czech Republic.

Funded by the European Union

Suggested local measures by the interviewees involve i) a stable long-term nature conservation strategy that will not change with each government is needed (CZ2, CZ8); ii) financial compensation and taxation e.g. provide greater support to local governments, specifically by addressing the issue of the property tax and offer compensation to private owners for farming restrictions; iii) clearer regulation of entry into protected areas is needed; and iv) implement a documentation of fire-fighting. The NP should help with money for fire prevention, and discussions are underway for buffer zones along villages without dry trees, or even control burning (CZ5).

The qualitative analysis reveals a complex, contested transition from traditional forest and agricultural management to conservation-oriented non-intervention approaches in the Šumava region. While ecological benefits are increasingly recognized, deep concerns about bark beetle outbreaks, fire risk, economic impacts, and landscape aesthetics persist, particularly among older residents and those economically dependent on traditional forestry. The generational divide, combined with gradual rewilding policy driven expansion of the NP core-zone and evolving public understanding, suggests an ongoing process of social-ecological transformation with no simple resolution.

5.4.6. Qualitative content analysis of interviews conducted in Brabantsen Wouden (Belgium) local level case study

5.4.6.1. Identified perceptions regarding the abandonment of agricultural land

The data collected in the study area (Table 26), characterized by a high population density, indicate that the abandonment of agricultural land or land in general is not a significant phenomenon. Urban pressure, together with population growth, determines an intensive use of open spaces.

The current situation regarding the abandonment of agricultural land in the studied region is characterized by intense urban pressure, which causes the phenomenon to be perceived by most respondents as non-existent or insignificant (BE8, BE7, BE4, BE3). Rapid population growth requires an intensive use of open spaces, so that, in rare cases of agricultural abandonment, the land is promptly converted into residential areas or horse pastures, instead of being left to re-naturalize (BE8, BE7, BE3). However, there are also testimonies that signal an increase in the phenomenon in certain areas of the community (BE6), with an expansion of spontaneous (ruderal) vegetation being observed on uncultivated areas (BE2, BE6). There are also reports of occasional cases of temporarily abandoned land, as a result of administrative problems or difficulties related to acquisitions (BE1, BE3).

The perception of agricultural land abandonment is generally balanced, but has a conditional positive potential. Most respondents consider agricultural abandonment to be insignificant or non-existent, due to the intense pressure on land use generated by urbanization and population growth (BE7, BE8, BE4). Moreover, opinions on alternatives to agriculture are divided. Some people support more natural management or even abandoning human intervention in forest management, in order to allow them to develop freely (BE1). In contrast, there is significant opposition to afforestation from landowners and farmers, who fear the expansion of forests, the fiscal implications and the possible negative effects on land values (BE6). Doubts are also expressed about the benefits of complete re-naturalization in the absence of forest management (BE4), as well as concerns about the damage that wildlife could cause to vegetation (BE5). Some observers also report the perception that set- aside rules and those within the Natura 2000 network may conflict, mainly due to the lack of clear information (BE4).

Table 26: Main opinions expressed regarding the abandonment of agricultural land in the Belgian case study (N= 8)

Common opinion	Count	Interviewees (ID)
Causes of agricultural land abandonment (t2.4.1.)		
Demographic factors: elderly farmers who can no longer work the land, depopulation of villages and migration of young people	2	BE02, BE06
Economic factors: low profit, lack of market, high costs of agricultural labour	2	BE02, BE06
Disinterest of the owners: owners left the area, not involved in land management	1	BE02
Lack of incentives: few advantages for maintaining land in agricultural use	1	BE06
Current situation of agricultural land abandonment (t2.4.1.)		
Only “terrestrialization” (gradual transformation of a body of water into dry land through sediment deposition and plant development) is currently happening in very small areas	1	BE01
Expansion of ruderal vegetation: uncultivated lands are transformed into areas with spontaneous vegetation	2	BE02, BE06
Landscape transition: lands around villages become semi-natural or young forests	1	BE02
Two phenomena are distinguished: agricultural abandonment and forest management abandonment.	1	BE06
The phenomenon of agricultural abandonment is almost non-existent in the region or too slow; agricultural land is very scarce or heavily pressured by urbanization.	4	BE04, BE07, BE08, BE03
When abandonment occurs, the land is converted into residential areas, horse pastures, or other non-natural uses.	3	BE03, BE07, BE08
There are cases of abandoned land only in specific situations, related to acquisitions, administrative problems or socio -economic changes.	2	BE1, BE3
Perception regarding the abandonment of agricultural land (t3.4.)		
In principle it is perceived positively if land becomes nature, but this rarely happens in the region	5	BE01, BE02, BE03, BE07, BE08
Measures are needed to guide the process (management, connectivity, invasive avoidance)	3	BE01, BE08, BE07
Spontaneous transformation into forest or natural vegetation is possible, but requires subsequent selective interventions	2	BE08, BE03
Agricultural abandonment is not considered realistic on a large scale in the urbanized areas of the country	2	BE04, BE01
Perceived opportunities regarding natural vegetation developed on abandoned agricultural lands (t7.2)		
It can generate more natural space, increase biodiversity, or connect habitat fragments	4	BE01, BE07, BE08, BE003
Brownfields can function as buffer zones around natural areas	2	BE01, BE08
Could support the transition to more nature-friendly agricultural practices if abandonment is followed by reconversion	2	BE02, BE07
P possibility of the emergence of transitional habitats (edge habitats), valuable for species affected by the disappearance of semi-natural mosaics	1	BE08
Perceived threats to natural vegetation developed on abandoned agricultural lands (t7.2)		
Risk of emergence or expansion of invasive species	4	BE01, BE02, BE07, BE08
Urban pressure: land tends to be changed into buildings, not nature	3	BE04, BE07, BE08
Abandoned land can become a source of conflict with intensive agriculture or farmers (perception of risk)	3	BE02, BE07, BE03
Risk of loss of productive agricultural land and pressure on food security	2	BE03, BE07
The need to manage emerging natural areas that cannot remain completely un-intervened	1	BE08

Funded by the European Union

The perceived opportunities associated with the abandonment of agricultural land align around ecological benefits and alternative socio -economic functions. These lands can facilitate the creation of new natural areas and reforestation, supporting the increase in biodiversity and generating diverse and valuable natural ecosystems (BE1, BE4). Abandonment can also lead to reduced pollution and improved water quality (BE1). From an economic and social point of view, the possibility of developing nature-based tourism and ecotourism (BE4) is highlighted, offering new economic opportunities and recreational areas (BE4, BE5). Some also support the adoption of more natural management or the abandonment of human intervention to allow forests to develop freely (BE1).

The main opportunity is the creation of new natural areas and reforestation (BE4), which can generate diverse and valuable natural ecosystems (BE4) and support increased biodiversity (BE1). Abandonment, through re-naturalization, is seen as a method of reducing pollution (BE1) and improving water quality (BE1). There is also the potential to use abandoned lands to create buffer zones (BE6) that protect existing habitats. The opportunity also lies in adopting a more natural management (BE1) or abandoning human intervention in forest management (BE1), allowing ecosystems to develop freely (BE1). Abandonment opens up also opportunities for new economic activities (BE4), especially nature-based tourism and ecotourism (BE4). The increase in forested areas is perceived by some as an economic opportunity and a source of recreation for local communities (BE5).

Perceived threats to agricultural land abandonment focus on landowners' and farmers' opposition to forest expansion, fearing restrictions on rights and a decrease in land value (BE6). There are fiscal concerns about the implications of natural afforestation (BE6) and the high costs of rehabilitating abandoned land (BE3). From an ecological perspective, there is the threat of wildlife damaging the vegetation (BE5), but also uncertainty about the effectiveness of complete re-naturalization, with some questioning the benefits of total lack of management (BE4). A fundamental problem remains the lack of clarity in establishing the risks and responsibilities associated with abandoned land (BE3).

Regarding economic threats, there is a major concern about the fiscal implications of reforestation (BE6), as well as the decrease in land value following natural afforestation, which discourages landowners (BE6). Also, the high costs associated with the rehabilitation of abandoned land are a significant economic threat (BE3). A strong threat is the opposition of landowners and farmers to forest expansion or natural afforestation (BE6). This opposition is fuelled by the fear that property rights will be restricted or that land use conflicts will arise.

Abandonment can have a negative effect on the landscape (BE6) and can affect ecosystems in unexpected ways. There is concern that wildlife may damage forest vegetation (BE5), jeopardizing regeneration efforts. The big challenge is to clearly establish risks and responsibilities in the management of abandoned lands (BE3). Also, the lack of intervention (letting forests develop freely) is perceived as a threat if there is no sustainable management or if forests are not managed at all (BE4).

5.4.6.2. Identified perceptions regarding forest land abandonment

Perceptions of forest land abandonment are generally favourable, but conditioned by management and biodiversity issues (Table 27). Respondents believe that abandoned forests can develop complex natural structures, favourable to sensitive species and long-term ecological processes. However, risks such as fires, the proliferation of invasive species and the accumulation of dead wood near infrastructure or human settlements are reported. Also, complete abandonment can lead to cultural and landscape losses, as some forests reflect a

Funded by the European Union

historical management with identity value. Overall, perceptions show openness towards non-intervention, provided that it is adapted to the context, risks and conservation objectives.

Table 27: Main opinions expressed regarding proforestation in the Belgian case study (N= 8)

Common opinion	Count	Interviewees (ID)
Causes of forest management abandonment (q 2.4.2)		
Economic factors: declining interest in wood production, urban pressure and high management costs	3	BE02, BE03, BE08
Structural factors: fragmentation of forest ownership which makes it difficult to organize management	2	BE07, BE08
Insufficient resources: low staff (few rangers) and different budgets between regions	1	BE01
Owners' disinterest: private forests left without interventions due to lack of involvement	1	BE07
Social changes: negative public perception of production-oriented forest management	1	BE08
Lack of coordination between regions	1	BE01
Intense human pressure in forest areas, which limits the possibility of non-intervention	1	BE03
Current situation of forest management abandonment (q2.4.2.)		
There are areas where management has been reduced or set- aside.	3	BE01, BE03, BE08
More and more forests are neglected or poorly managed	2	BE07, BE08
The pressure of urbanization and recreational use affects the possibility of continued management	2	BE03, BE08
Fragmented private forests often remain unmanaged	1	BE07
Differences between regions lead to different approaches to non-intervention	1	BE01
Perception regarding allowing forests to develop without human intervention (q2.4.2/q3.1)		
Positive perception: abandonment allows the development of natural, more diverse and resilient ecosystems	4	BE01, BE02, BE07, BE08
Negative perception: neglect favors invasive species, decreased tree vitality, and safety issues	3	BE03, BE06, BE08
Mixed perception: abandonment is only beneficial in certain areas and requires careful evaluation	3	BE01, BE03, BE08
The need for minimal management (control of invasive species, maintaining accessibility, safety)	2	BE01, BE08
Strong positive effects of abandoning forest management (q3.3.1)		
Development of a natural forest structure, more complex and closer to mature forest	4	BE01, BE02, BE07, BE08
Increased biodiversity: emergence of species sensitive to interventions, dead wood, varied micro-habitats	4	BE01, BE02, BE07, BE08
Increased ecological resilience to climate change or disruption	3	BE01, BE07, BE08
Scientific value: the possibility of studying forest dynamics without human intervention	2	BE01, BE08
Improving ecosystem services (carbon storage, microclimate regulation, soil protection)	2	BE07, BE08
Positive perception from the public: "more natural" forest, more authentic recreational experience	1	BE02
Strong negative effects of abandoning forest management (q3.3.2)		
Expansion of invasive species (e.g. acacia, ornamental trees, invasive shrubs), which affect natural regeneration	4	BE01, BE03, BE06, BE08
Decreased tree vitality and increased risk of mass mortality	3	BE03, BE06, BE08
Increased risk to public safety (unstable trees, falling branches, dangerous paths)	2	BE03, BE08
Loss of species dependent on interventions (meadow-specific species, (helio phyle's), species that need openings)	2	BE01, BE07

Degradation of accessibility, which affects recreational or educational activities	1	BE03
Possible reduction in timber production or economic value of forests	1	BE06
Excessive accumulation of combustible material (increased fire risks)	1	BE08
Perceived opportunities of proforestation (q7.1)		
Increased biodiversity: greater structural diversity, emergence of old forests	3	BE01, BE02, BE07
Scientific value: useful areas for monitoring the evolution of ecosystems without intervention	2	BE01, BE08
Ecosystem services: better resilience to climate change and value for urban communities	2	BE07, BE08
Positive image of the forest: perceived as more natural and wilder	1	BE02
Increased biodiversity: greater structural diversity, emergence of old forests	3	BE01, BE02, BE07
Perceived threats related of proforestation (q7.1)		
The spread of invasive or competitive species, which can dominate the ecosystem	4	BE01, BE03, BE06, BE08
Risks related to tree vitality and forest stability	3	BE03, BE60, BE08
Visitor safety risks (falling trees, damaged trails)	2	BE03, BE08
Loss of species dependent on interventions (species from open habitats)	2	BE01, BE07
Intense recreational pressure, affecting natural regeneration	1	BE03

The perceptions identified regarding allowing forests to develop without human intervention are polarized. Some strongly support abandoning management and allowing the forest to develop freely, seeing this as a way of creating a more natural process (BE1). However, there are doubts about the benefits of rewilding if forests are not managed at all (BE4). This concern is amplified by the risk of wildlife damaging the vegetation (BE5) and the perceived regulatory conflicts between *Set- aside* and *Natura 2000* schemes (BE4). There is strong support for adopting more natural management and even for completely abandoning human intervention in forest management (BE1). This approach is seen as an opportunity to allow forests to develop freely and create healthier and more resilient ecosystems (BE1). This perspective emphasizes the need for some level of supervision or intervention to ensure the long-term sustainability of forest ecosystems. A specific concern is related to wildlife, which can damage forest vegetation (BE5). This requires protective measures (such as planting tall saplings) that go against the idea of non-intervention (BE5).

Perceptions of local community acceptance or resistance are mixed, ranging from openness to reluctance depending on the social context and traditional land uses. Local community acceptance/resistance is dominated by resistance from landowners and farmers (BE6), who oppose proforestation due to fear of restricted rights and decreased land values (BE6). Abandonment is also seen as a threat to the landscape (BE6). However, there is also a nuanced acceptance, with some seeing proforestation as an economic and recreational opportunity (BE5). A crucial element is the need for community information and education, as the success of any rewilding strategy depends on dialogue and the active involvement of citizens and landowners (BE4, BE8). There is considerable opposition from landowners and farmers to natural afforestation (forest expansion) (BE6). This resistance is motivated by fears of restricted property rights and a decrease in land value as a result of natural afforestation (BE6). In general, abandonment is perceived as a threat to the landscape (BE6), which suggests a cultural resistance to landscape changes caused by land neglect. Although there is resistance at the private property level, natural afforestation is perceived by some as an economic opportunity and a source of recreation for local communities (BE5), indicating some acceptance of alternative land functions. The need for an active role of the authorities in information, education and consultation is emphasized, as the possibilities of rewilding are considered theoretical in a highly urbanized region (BE4). Successful management involves constant dialogue and efforts to reach out to private owners (BE8). Finally, proforestation is

Funded by the European Union

considered as being a valuable process in certain contexts but it should not become the standard everywhere or be mandatory for a certain percent of the forest area in the region (BE8).

Positive ecological effects of abandoning forest management. The positive ecological effects of abandoning forest management are perceived as significant, especially in terms of restoring natural processes. The main aspects of abandoning forest management are related to increasing biodiversity and creating diverse and valuable natural ecosystems through reforestation (BE1, BE4). This process is supported as a way to allow forests to follow a more natural development process (BE1) and to bring direct benefits to the environment, such as reducing pollution and improving water quality (BE1). Abandonment, through re-naturalization, is seen as a way to support increasing biodiversity (BE1) and generating diverse and valuable natural ecosystems (BE4). This process is anticipated to lead to reforestation (BE4).

The natural development of forests is supported by adopting more natural management or even abandoning human intervention in forest management, to allow them to develop freely (BE1). This is considered a step towards a more natural process (BE1). Re-naturalization of abandoned lands is perceived as an effective means of reducing pollution (BE1) and improving water quality (BE1).

The negative effects of abandoning forest management raise serious questions about the long-term sustainability of ecosystems. A major problem is that leaving forests to develop freely can lead to the deterioration of forest vegetation by wildlife (BE5), which, paradoxically, requires protective measures against non-intervention. Some respondents express personal doubts about the benefits of rewilding if forests are not managed at all (BE4), warning about the risks of lack of sustainability. Also, valuable species, such as beech, may face problems of natural regeneration without intervention (BE5), endangering the maintenance of the current forest composition. In addition, the lack of clarity and information leads to a perception of de facto opposition between the *Set- asides rules* and those of Natura 2000 (BE4), creating regulatory conflicts that undermine conservation objectives.

Perceived threats to natural afforestation are strongly focused on the fear of losing control over property and the negative financial implications. The greatest resistance comes from farmers and landowners (BE6), who oppose forest expansion for fear of restricting their property rights (BE6). This opposition is amplified by the prospect of a decrease in the value of the land after it is naturally afforested (BE6) and by the fiscal implications associated with natural afforestation (BE6). In addition, leaving the land to afforest freely is perceived as a threat to the traditional landscape (BE6). Added to all this are doubts (BE4) about the long-term sustainability of forest ecosystems if forests are not managed at all (BE4).

5.4.6.3. Critical points of agreement and disagreement

The points of agreement relate to the recognition of the urban pressure that limits abandonment and the ecological opportunities brought by re-naturalization (BE7, BE1). In contrast, the disagreement focuses on the conflict between natural afforestation and property rights (BE6), the dispute over human intervention in forest management (BE1 vs. BE4, BE5) and the different perception of the real extent of abandonment (BE4 vs. BE6).

The main points of agreement can be structured as:

- there is general agreement that the phenomenon of agricultural land abandonment is non-existent or very low (BE4, BE7, BE8, BE3) due to intense urban pressure and population growth, which forces an intensive use of open space (BE7, BE8).

Funded by the European Union

- there is consensus (at least at a theoretical level) on the major ecological opportunities, such as increased biodiversity and improved water quality, that proforestation and re-naturalization of land would bring (BE1, BE4).
- the need for an active role of authorities in information, education and consultation, as well as a constant dialogue with private owners (BE4, BE8) is unanimously recognized to ensure the success of any strategy.

Conversely, the main points of disagreement are:

- Natural afforestation vs. property rights represents the strongest point of disagreement is the opposition of farmers and landowners to natural afforestation (BE6). They see natural reforestation as a threat to their property rights and fear a decrease in land value (BE6).
- Forest management *(Intervention vs. Non-intervention)*: there is a fundamental disagreement about forest management: some support abandoning human intervention for a completely natural process (BE1), while others express doubt about the benefits of rewilding if forests are not managed at all (BE4), citing the risks of damage by wildlife and the failure of some species to regenerate (BE5).
- Perception of abandonment: although the majority consider it non-existent and even not possible due to the high pressure on every piece of land, some respondents claim that the expansion of spontaneous vegetation should be managed (BE2, BE8).
- Conflicting regulations: there is an implicit disagreement and perceived confusion within the regulations, where *Set - aside* and Natura 2000 schemes are seen as de facto opposites due to lack of clarity (BE4).

Suggested local measures: Local stakeholders suggest that the success of rewilding management depends on the clear establishment of risks and responsibilities (BE3). An active role of the authorities in information, education and consultation (BE4) is required, facilitating a constant dialogue with private owners (BE8). In addition, it is crucial to implement protective measures to counteract the deterioration of vegetation by wildlife (BE5) and to ensure the rehabilitation of the land through reforestation or organic farming. The specific proposed measures are:

- The active role of authorities in information, education and consultation is essential (BE4). Successful management involves constant dialogue and sustained efforts to reach out to private owners (BE8), as rewilding possibilities are considered to be only theoretical in a highly urbanized region (BE4).
- Although not specifically attributed, interviews suggest the need to rehabilitate agricultural land either through reforestation or by promoting extensive organic farming (reflecting the environmental objectives supported by BE1 and BE4).
- A vital measure is to clearly establish the risks and responsibilities (BE3) associated with brownfield sites, to reduce uncertainty and facilitate intervention.
- In the context of non-intervention, protective measures, such as planting tall saplings (BE5), are needed to prevent damage to forest vegetation by wildlife (BE5).

Funded by the European Union

5.5. Preliminary conclusions about local level stakeholders' perceptions

This analysis synthesizes qualitative interview data from five European case studies (Italy N=9, Bulgaria N=12, Romania N=15, Czech Republic N=8, and Belgium N=8), totalling 52 stakeholder interviews. It is important to note that these findings provide rich, in-depth qualitative insights rather than statistically representative data. The purposive sampling approach captures diverse stakeholder perspectives — ranging from local government officials and foresters to conservation managers and community representatives — offering valuable insight into the complexity of local perceptions. However, these voices cannot be generalized to entire populations or regions. The strength of this qualitative approach lies in its ability to reveal the depth of conflicting values, lived experiences, and contextual factors that quantitative surveys might overlook, rather than measuring the prevalence of particular viewpoints.

In Friuli-Venezia-Giulia (Italy) and the Rhodopi Mountains (Bulgaria), concerns concentrated on the increased wildfire risk associated with unmanaged vegetation and long-term land abandonment. In both regions, stakeholders emphasised that rewilding can accelerate fuel accumulation and thereby heighten risks to settlements and property. At the same time, Italian respondents highlighted biodiversity gains and the aesthetic value of unmanaged forests, while Bulgarian stakeholders stressed the risk of invasive species and landscape degradation if abandonment becomes widespread.

In Vânători Neamț (Romania) and Šumava National Park (Czech Republic), perceptions were strongly influenced by recent experiences with bark beetle outbreaks and debates over forest management. Here, proforestation was viewed with caution: while recognised for its biodiversity benefits, stakeholders were concerned that unmanaged forests may exacerbate pest outbreaks, with secondary effects on tourism, timber revenues, and local employment. In both cases, the acceptability of proforestation was therefore tied to the location of the intervention—more acceptable within protected areas, but contested when applied more broadly.

In contrast, the Brabantsen Wouden (Belgium) case study showed relatively lower conflict intensity. Here, stakeholders often framed rewilding within the context of multifunctional landscapes and saw opportunities for recreation, ecological connectivity, and landscape restoration. However, the loss of agricultural identity and the transformation of well-maintained cultural landscapes remained significant concerns, particularly for farmers.

The qualitative analysis across the five case studies reveals fundamental tensions between conservation objectives and socio-economic realities in managing abandoned lands. While all regions, except Brabantse Wouden region, face land abandonment due to demographic decline, economic restructuring, and historical events, their responses vary significantly depending on urbanization levels, land ownership structures, and cultural relationships with nature.

Land fragmentation emerges as the most critical structural barrier, particularly in Italy and Romania, where micro-parcellation makes economically viable management both legally and practically impossible. **Demographic factors** — post-war displacement (Czech Republic), rural exodus, and aging populations — consistently underpin abandonment across all regions. Economic non-viability of mountain agriculture and forestry, exacerbated by inadequate infrastructure and absent landowners, creates a cycle preventing active management even where desired.

Funded by the European Union

In many received responses, a clear **anthropocentric versus eco-centric divide** emerges in stakeholder positions. Italian and Bulgarian interviewees predominantly view agricultural lands and forests as working landscapes that require human stewardship for safety and productivity. They argue that "*forests must be managed*" and see non-intervention as a failure of institutional responsibility rather than a valid conservation choice. In contrast, Czech respondents largely support rewilding in line with NP conservation goals, though conflicts with traditional foresters persist and local level support is equally split on the proposed measure of increasing the strictly protected core zone of the NP, while in Belgian case the respondents perceive no additional possibilities for land abandonment due to high pressure from urbanisation and recreational needs.

This research highlights also a deeper **urban-rural divide**: urban populations tend to favour wilderness preservation, while rural communities, facing direct consequences of land abandonment, prioritize economic viability, safety, and cultural landscape preservation. This perception was mentioned by several stakeholders in each of the case study area. Mountain residents often perceive urban-driven conservation policies — especially those that favour “virgin forest” ideals — as unjust. They believe that urban populations, who promote these policies, do not face the economic, safety, or social burdens of living near unmanaged forests. This creates a tension between the democratic legitimacy of urban majorities setting policy and the stakeholder legitimacy of local rural residents directly affected by these policies.

Fire risk is the most universally cited threat across all case studies. The accumulation of dead wood near inhabited areas creates tangible fear, especially in Italy, Bulgaria and Czech Republic. In the Czech Republic, **the bark beetle crisis** exemplifies how pest outbreaks become flashpoints for management conflicts, with all eight Czech interviewees citing it as the primary threat. These safety concerns are not merely perceptions but reflect real risks that undermine pure non-intervention approaches in the eyes of local communities.

The Belgian case, where **intense urbanization** has made abandonment nearly non-existent, illustrates that rewilding faces different pressures depending on demographic and economic contexts. While land abandonment is not a significant issue here, the case highlights how rewilding efforts are shaped by local socio-economic realities.

The analysis points toward context-dependent, strategically planned approaches rather than extensive policies. Successful implementation of rewilding strategies requires: (1) differentiating productive, conservation, and marginal areas through regional planning; (2) providing meaningful economic support and alternative livelihoods; (3) implementing targeted interventions for fire prevention and invasive species control; (4) extensive public consultation and environmental education bridging urban-rural divides; and (5) acknowledging legitimate safety concerns while communicating ecological benefits.

Funded by the European Union

6. Conclusions

The WILDCARD project's assessment of rewilding perceptions reveals distinct patterns across four complementary surveys, each providing unique insights into how different stakeholder groups understand and evaluate proforestation and natural rewilding of abandoned agricultural land.

EU citizens' perceptions (N=13,743). The large-scale citizen survey across 30 European countries demonstrates broad public support for rewilding principles, though with important nuances. Citizens consistently viewed landscape connectivity, reduced human influence, and restored natural processes as highly positive for nature conservation and climate mitigation. Proforestation received strong support for nature/wildlife benefits (38% very positive) and landscape beauty (35% very positive), with neutral perceptions regarding risks and rural culture. Natural rewilding of abandoned land showed similar patterns — very positive for nature/wildlife (48%) but raised concerns about rural economies (20% very negative)

Critically, the MCA revealed that sociodemographic factors had surprisingly limited influence on attitudes, with gender and rurality showing no significant effect. The most notable discriminator was age: respondents over 65 tended to align more with risk and protection concerns, while younger respondents prioritized nature and landscape values. This suggests that attitudes toward rewilding transcend traditional demographic divides, reflecting instead deeper value orientations that balance environmental priorities with security concerns.

National policy stakeholders (N=168) across 10 countries demonstrated more ambivalent and context-sensitive perceptions than citizens. While recognizing ecological benefits, these stakeholders were acutely aware of policy trade-offs. For proforestation there is a strong positive alignment with nature conservation (30% very positive) and climate policies (21% very positive) and significant negative alignment with forestry (20%), agriculture (23%), rural development (19%), and wildfire management (26%). The dominant concern that management is essential for safety and hydrogeological risk (7 of 9 respondents in qualitative analysis). For natural rewilding the positive alignment with water management (19% very positive) and climate adaptation (22% very positive) and a negative alignment with agriculture (20%) and forestry sectors. The MCA identified a divide between NGOs/interest groups (emphasizing climate and water management concerns) and regional policymakers/business investors (prioritizing productive uses). Qualitative responses revealed that wildfire risk dominated negative perceptions, particularly from Southern European stakeholders (Spain, Italy, France), who viewed biomass accumulation from abandonment as creating catastrophic fire conditions.

EU-level policy stakeholders (N=20 interviews). In-depth interviews with EU policymakers, NGOs, land managers, and researchers revealed conceptual disagreements about rewilding itself. Unlike national level stakeholders, EU stakeholders emphasized the importance of legal and financial frameworks over local acceptance. They highlighted inadequate funding mechanisms and the need for Member States to develop strong national restoration plans as prerequisites for successful rewilding implementation.

Local stakeholders in five case studies (N=52). The qualitative analysis across five European case studies (Italy, Bulgaria, Romania, Czech Republic, and Belgium) reveals fundamental tensions between conservation objectives and socio-economic realities in managing abandoned lands. While all regions face land abandonment driven by demographic decline, economic restructuring, and historical events, their responses differ significantly based on urbanization levels, land ownership structures, and cultural relationships with nature.

Funded by the European Union

The divergent findings across the four surveys highlight a legitimacy crisis for rewilding at the implementation level, despite broad public and policy support at higher scales. Achieving success requires:

1. **Differentiated strategies**: recognizing that urbanized regions (Belgium), depopulated mountains (Italy), protected areas (Czech Republic), and transitional zones (Romania, Bulgaria) all require fundamentally different approaches.
2. **Bridging the fire risk knowledge gap**: providing transparent communication about actual versus perceived risks, backed by scientific monitoring
3. **Addressing structural barriers**: tackling issues like land fragmentation, cadastral reform, and infrastructure before implementing conservation policies
4. **Open compensation mechanisms**: acknowledging that rewilding creates both winners and losers, with rural communities often bearing disproportionate costs.
5. **Reframing rewilding discourse**: acknowledging legitimate concerns about safety, livelihoods, and cultural landscapes rather than dismissing opposition as ignorance or self-interest

The studies collectively demonstrate that rewilding is not merely a technical conservation issue but a social-political negotiation. It requires sustained dialogue, adaptive management, and willingness to accept that complete non-intervention may not be appropriate in all contexts, particularly in densely populated, historically managed European landscapes.

Funded by the European Union

References

Allendorf, K. (2007). Do women's land rights promote empowerment and child health in Nepal? World development, 1975-1988.

Assefa, G., & Frostell, B. (2007). Social sustainability and social acceptance in technology assessment: A case study of energy technologies. Technology in Society, 29(1), 63–78. https://doi.org/10.1016/j.techsoc.2006.10.007

Attneave, F. (1962). Perception and related areas. In Psychology: A study of a science, Volume 4. Biologically oriented fields: Their place in psychology and in biological science (pp. 619–659). McGraw-Hill. https://doi.org/10.1037/10541-013

Bennett, N. J. (2016). Using perceptions as evidence to improve conservation and environmental management. Conservation biology, 30(3), 582-592. https://doi.org/10.1111/cobi.12681

Briassoulis, H. (2004). Policy integration for complex policy problems: What, why and how. *Greening of policies: interlinkages and policy integration, Berlin*, 3-4.

Bouriaud, L., Nichiforel, L., Gabor, I., Balabașciuc, I., Rodríguez Fernández-Blanco, C., O'Brien, L., Loubaton, L., Faradsch, K., Jeanroy, C., Masiero, M., Dutta, T., & Castelli, F. (2024). D42. Synthesis Knowledge Inventory and surveying methodology (p. 46). Horizon Europe Project No. 101081177, European Commission.

Butler et al. (2021). Decision-making for rewilding: an adaptive governance framework for social-ecological complexity. Frontiers in Conservation Science, 1-8.

Carver, S., Pettorelli, N., & Prior, J. (2025). Rewilding: Ten years of evolution and development. Annual Review of Environment and Resources, 50, 1–24. https://doi.org/10.1146/annurev-environ-111523-102359

Carver, S., Convery, I., Hawkins, S., Beyers, R., Eagle, A., Kun, Z., ... & Soulé, M. (2021). Guiding principles for rewilding. Conservation Biology, 35(6), 1882-1893.

Cihar et al. (2006). Attitudes of stakeholders towards the Podyji/Thaya river basin national park in the Czech Republic. Journal of Environmental Management, 273-285.

Coz, D. M., & Young, J. C. (2020). Conflicts over wildlife conservation: learning from the reintroduction of beavers in Scotland. People and Nature, 2(2), 406-419.

Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches. Third edition. Sage publications.

Dempsey, B. (2021). Understanding conflicting views in conservation: An analysis of England. Land Use Policy, 104, 105362. https://doi.org/10.1016/j.landusepol.2021.105362

Fayet, C. M. J., Reilly, K. H., Ham, C. V., & Verburg, P. H. (2022). The potential of European abandoned agricultural lands to contribute to the Green Deal objectives: Policy perspectives. *Environmental Science & Policy*, *133*, 44–53. https://doi.org/10.1016/j.envsci.2022.03.007

Feldman, S. (1988). Structure and consistency in public opinion: The role of core beliefs and values. American Journal of political science, 416-440.

Frei, T., Derks, J., Rodríguez Fernández-Blanco, C., & Winkel, G. (2020). Narrating abandoned land: Perceptions of natural forest regrowth in Southwestern Europe. *Land Use Policy*, *99*, 105034. https://doi.org/10.1016/j.landusepol.2020.105034

Frei, T., Espelta, J. M., Górriz-Mifsud, E., Hampe, A., Lefèvre, F., Martín-Forés, I., & Winkel, G. (2024). Can natural forest expansion contribute to Europe's restoration policy agenda? An interdisciplinary assessment. Ambio, 53(1), 34–45. https://doi.org/10.1007/s13280-023-01924-2

Gluckman, P. (2016). The science–policy interface. Science, 353(6303), 969–969. https://doi.org/10.1126/science.aai8837

Glasman et al. (2006). Forming attitudes that predict future behavior: a meta-analysis of the attitude-behavior relation. Psychological bulletin, 132(5), 778.

Hajer, M. A. (1995). The politics of environmental discourse: Ecological modernization and the policy process. Clarendon Press Oxford.

Hertel, S. W., Belote, R. T., & Wilding, N. (2023). The role of social and political factors in the success of rewilding projects. Frontiers in Conservation Science, 4. https://doi.org/10.3389/fcosc.2023.1205380

Holmes, G., Rowland, G., & Fox, K. (2024). Eager about beavers? Understanding opposition to species reintroduction, and its implications for conservation. People and Nature, 6(4), 1524-1537.

van Hulst, M., Metze, T., Dewulf, A., de Vries, J., van Bommel, S., & van Ostaijen, M. (2025). Discourse, framing and narrative: Three ways of doing critical, interpretive policy analysis. *Critical Policy Studies*, *19*(1), 74–96. https://doi.org/10.1080/19460171.2024.2326936

Josse, J., Husson, F., & Lê, S. (2008). Multiple Correspondence Analysis. *Applied Mathematics Department: Dortmund*, 7.

Kazungu, M., & Hunziker, M. (2025). Exploring societal perceptions of forests, ecosystem benefits, and restoration. A case study in Sweden, Scotland, Germany, Serbia, Croatia, and Spain. *Journal of Environmental Planning and Management*, 1–23. https://www.tandfonline.com/doi/full/10.1080/09640568.2025.2490716

Martín-Forés, I., Magro, S., Bravo-Oviedo, A., Alfaro-Sánchez, R., Espelta, J. M., Frei, T., Valdés-Correcher, E., Rodríguez Fernández-Blanco, C., Winkel, G., Gerzabek, G., González-Martínez, S. C., Hampe, A., & Valladares, F. (2020). Spontaneous forest regrowth in South-West Europe: Consequences for nature's contributions to people. People and Nature, 2(4), 980–994. https://doi.org/10.1002/pan3.10161

Mayring, P. (2014). Qualitative content analysis: Theoretical background and procedures. In Approaches to qualitative research in mathematics education: Examples of methodology and methods (pp. 365-380). Dordrecht: Springer Netherlands.

Mercer, L., and Gregg, R. (2023). Exploring the carbon sequestration potential of rewilding in the UK: Policy and data needs to support net zero (Climate Change and Law Collection). Grantham Research Institute on Climate Change and the Environment. https://primarysources.brillonline.com/browse/climate-change-and-law-collection/exploring-the-carbon-sequestration-potential-of-rewilding-in-the-uk-policy-and-data-needs-to-support-net-zero;cccc014820230710

Naderifar, M., Goli, H., & Ghaljaei, F. (2017). Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research. Strides in Development of Medical Education, In Press. https://doi.org/10.5812/sdme.67670

Ní Dhubháin, Á., Fléchard, M.-C., Moloney, R., & O'Connor, D. (2009). Stakeholders' perceptions of forestry in rural areas—Two case studies in Ireland. *Land Use Policy*, *26*(3), 695–703.

Nogués-Bravo, D., Simberloff, D., Rahbek, C., & Sanders, N. J. (2016). Rewilding is the new Pandora's box in conservation. Current Biology, 26(3), R87-R91.

Perino, A., Pereira, H. M., Navarro, L. M., Fernández, N., Bullock, J. M., Ceauşu, S., Cortés-Avizanda, A., van Klink, R., Kuemmerle, T., Lomba, A., Pe'er, G., Plieninger, T., Rey Benayas, J. M., Sandom, C. J., Svenning, J.-C., & Wheeler, H. C. (2019). Rewilding complex ecosystems. Science, 364(6438), eaav5570. https://doi.org/10.1126/science.aav5570

Ranacher, L., Sedmik, A., Schwarzbauer, P., & European Forest Institute. (2020). Public perceptions of forestry and the forest-based bioeconomy in the European Union (Knowledge to Action) [Knowledge to Action]. European Forest Institute. https://doi.org/10.36333/k2a03

Sadovnik, A. R. (2007). Qualitative Research and Public Policy. In Handbook of public policy analysis: Theory, politics, and methods (pp. 417–429). CRC/Taylor & Francis.

Saklaurs, M., Liepiņa, A. A., Elferts, D., & Jansons, Ā. (2022). Social perception of riparian forests. *Sustainability*, *14*(15), 9302.

Sekhar, N. U. (2003). Local people's attitudes towards conservation and wildlife tourism around Sariska Tiger Reserve, India. *Journal of environmental Management*, 339-347

Smith, A. M., Dressel, S., Buijs, A., Gamborg, C., & Winkel, G. (2025). Societal perceptions of rewilding and wilderness in Europe: Review and survey across 30 countries (Deliverable D1.4, Horizon Europe Project No. 101081251). European Commission. 229 pp.

Sotirov, M., & Arts, B. (2018). Integrated Forest Governance in Europe: An introduction to the special issue on forest policy integration and integrated forest management. *Land use policy*, *79*, 960-967.

Sotirov, M., & Storch, S. (2018). Resilience through policy integration in Europe? Domestic forest policy changes as response to absorb pressure to integrate biodiversity conservation, bioenergy use and climate protection in France, Germany, the Netherlands and Sweden. *Land Use Policy*, *79*, 977–989.

Stange, E., Hagen, D., Junker-Köhler, B., & Kaltenborn, B. P. (2022). Public perceptions of ecological restoration within the context of Norwegian landscape management. *Restoration Ecology*, *30*(7), e13612.

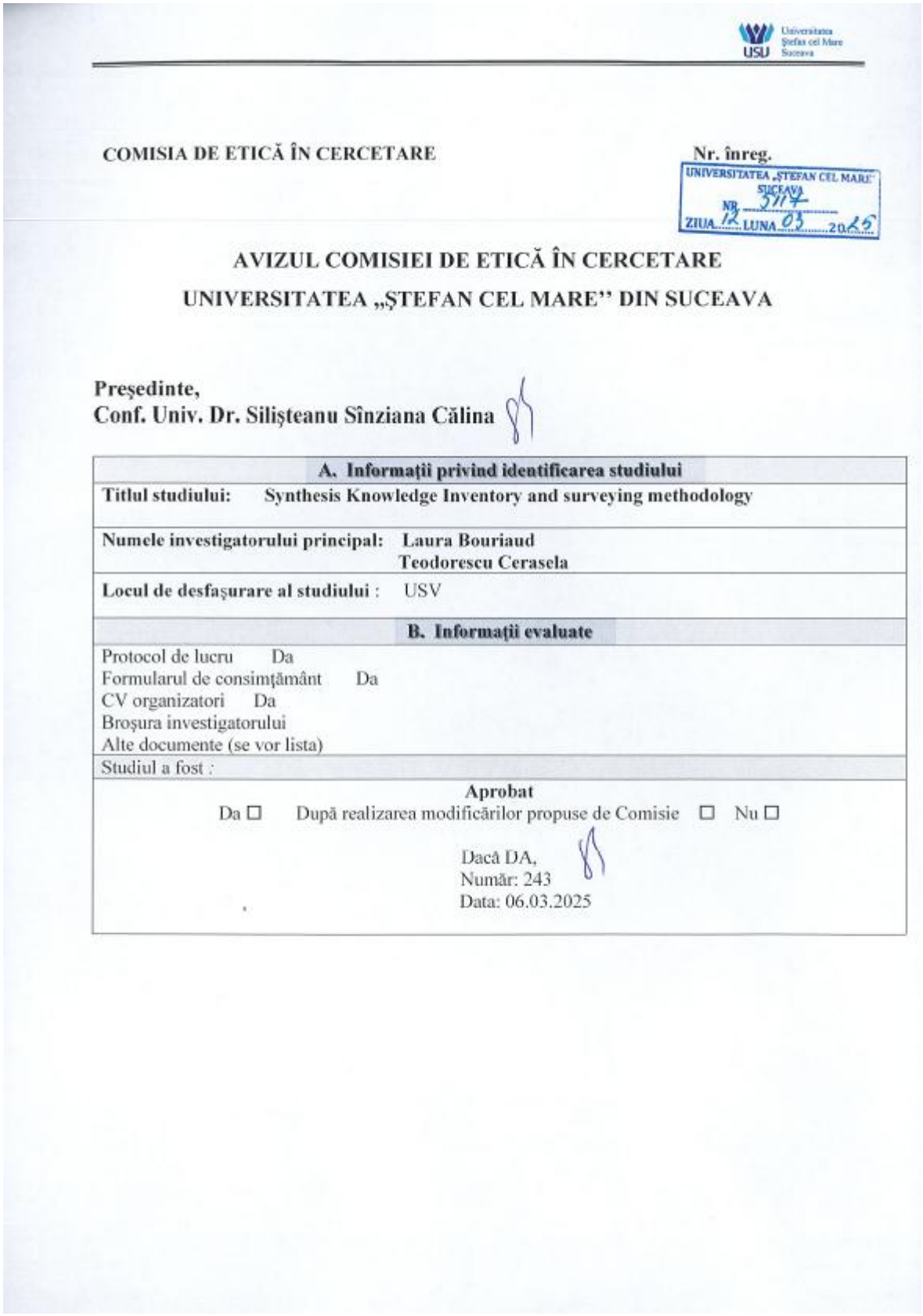
Turnhout, E., Stuiver, M., Klostermann, J., Harms, B., & Leeuwis, C. (2013). New roles of science in society: Different repertoires of knowledge brokering. Science and Public Policy, 40(3), 354–365. https://doi.org/10.1093/scipol/scs114

Wentworth, J., & Alison, J. (2016). Rewilding and ecosystem services. Parlimentary Office of Science and Technology. http://researchbriefings. parliament. uk/ResearchBriefing/Summary/POST-PN-0537# fullreport Accessed on June, *25*, 2019.

Yanow, D. (2007). Qualitative-Interpretive Methods in Policy Research. In F. Fischer, G. Miller, & M. S. Sidney (Eds), Handbook of public policy analysis: Theory, politics, and methods (pp. 405–416). CRC/Taylor & Francis.

Funded by the European Union

Appendix 1: Ethical clearance



Universitatea Ştefan cel Mare Suceava
USV

COMISIA DE ETICĂ ÎN CERCETARE

Nr. înreg.
UNIVERSITATEA „ŞTEFAN CEL MARE" SUCEAVA
NR. 5117
ZIUA 12 LUNA 03 2025

AVIZUL COMISIEI DE ETICĂ ÎN CERCETARE

UNIVERSITATEA „ŞTEFAN CEL MARE" DIN SUCEAVA

Preşedinte,
Conf. Univ. Dr. Silişteanu Sînziana Călina

A. Informaţii privind identificarea studiului	
Titlul studiului:	**Synthesis Knowledge Inventory and surveying methodology**
Numele investigatorului principal:	**Laura Bouriaud** **Teodorescu Cerasela**
Locul de desfaşurare al studiului :	USV
B. Informaţii evaluate	
Protocol de lucru Da Formularul de consimţământ Da CV organizatori Da Broşura investigatorului Alte documente (se vor lista)	
Studiul a fost :	
Aprobat Da ☐ După realizarea modificărilor propuse de Comisie ☐ Nu ☐ Dacă DA, Număr: 243 Data: 06.03.2025	

Funded by the European Union

Appendix 2. Wording of the questions shared by the wildE team – Survey 1

These are the questions from the wildE survey which were shared with the WILDCARD team for producing this deliverable.

1. What is your gender?

□ Male

□ Female

□ Other

2. How old are you?

__

3. Please state your postal code.

_____

4. Please indicate which annual income category your household belongs to (total household income per year after taxes in 2024).

□ < € 3,000

□ € 3,001 – 6,000

□ € 6,001 – 9,000

□ € 9,001 – 12,000

□ € 12,001 – 15,000

□ € 15,001 – 20,000

□ € 20,001 – 25,000

□ € 25,001 – 30,000

□ € 30,001 – 35,000

□ € 35,001 – 40,000

□ € 40,001 – 50,000

□ € 50,001 – 60,000

□ € 60,001 – 70,000

□ € 70,001 – 80,000

□ > € 80,000

□ Prefer not to say

[Please note that country appropriate equivalent currency brackets will be put in place where a country does not use Euros.]

5. What is your highest level of education?

□ No formal education

□ Primary education (or elementary education)

□ Secondary education (or high school education)

□ Post-secondary, not university

□ University bachelor degree

□ Advanced university degree (Master's or Doctoral degree)

11. What effect do you believe these changes would have for nature conservation, and for reducing climate change and its impacts, **in {Respondent's country}**?

	1 - Very negative effect	2	3	4 - Neutral	5	6	7 - Very positive effect		Don't know
Making landscapes easier for wildlife to move through									
Nature conservation	☐	☐	☐	☐	☐	☐	☐		☐
Reducing climate change and its impacts	☐	☐	☐	☐	☐	☐	☐		☐
Reducing the influence that humans have on nature									
Nature conservation	☐	☐	☐	☐	☐	☐	☐		☐
Reducing climate change and its impacts	☐	☐	☐	☐	☐	☐	☐		☐
Restoring natural processes and dynamics									
Nature conservation	☐	☐	☐	☐	☐	☐	☐		☐
Reducing climate change and its impacts	☐	☐	☐	☐	☐	☐	☐		☐

12. In some parts of Europe, farmland is being abandoned as rural populations decline or farming becomes less profitable in some areas. If they are left unmanaged, these areas often turn into shrublands or forests.

Imagine that more farmland in your country was abandoned and left unmanaged. Do you believe this would have an overall positive or negative effect for the issues listed below?

	1 - Very negative effect	2	3	4 - Neutral	5	6	7 - Very positive effect		Don't know
Nature and wildlife	☐	☐	☐	☐	☐	☐	☐		☐
Rural culture and ways of life	☐	☐	☐	☐	☐	☐	☐		☐
Rural economies	☐	☐	☐	☐	☐	☐	☐		☐
The beauty of the landscape	☐	☐	☐	☐	☐	☐	☐		☐
Risk to people or their property (e.g., from events such as wildfires or floods)	☐	☐	☐	☐	☐	☐	☐		☐
Food security	☐	☐	☐	☐	☐	☐	☐		☐
Reducing climate change and its impacts	☐	☐	☐	☐	☐	☐	☐		☐

18. Imagine that more forest was allowed to develop freely, without management, in the landscape that you have in mind. Do you believe this would have an overall positive or negative effect for the issues listed below?

	1 - Very negative effect	2	3	4 - Neutral	5	6	7 - Very positive effect		Don't know
Nature and wildlife	☐	☐	☐	☐	☐	☐	☐		☐
Rural culture and ways of life	☐	☐	☐	☐	☐	☐	☐		☐
Rural economies	☐	☐	☐	☐	☐	☐	☐		☐
The beauty of the landscape	☐	☐	☐	☐	☐	☐	☐		☐
Risk to people or their property (e.g., from events such as wildfires or floods)	☐	☐	☐	☐	☐	☐	☐		☐
Food security	☐	☐	☐	☐	☐	☐	☐		☐
Reducing climate change and its impacts	☐	☐	☐	☐	☐	☐	☐		☐

Funded by the European Union

Appendix 3: Wording of the questionnaire for national policy stakeholders (Survey 2.1.)

1. Consent (Compulsory to continue to the survey)

This survey aims at studying the perceptions of different rewilding options among different policy stakeholders in 10 different European countries (Spain, Italy, France, Belgium, The Netherlands, Germany, Czech Republic, Romania,Bulgaria and Switzerland).
Rewilding refers to reinstating natural processes that would have occurred in the absence of human activity.
This study is part of the WILDCARD project, which has been funded by the European Commission. It is led by the European Forest Institute, with collaboration of the Prospex Institute and the University of Suceava.
This survey is supported by SurveyMonkey. You may consult the SurveyMonkey Privacy Notice under this link.

Consent
By continuing to the survey, you consent to participating in this research and to the use of your personal data as described below.

Further information:
Your participation is entirely voluntary and by clicking the link above you will consent to take part. You may refuse to take part in the research or exit the survey at any time without penalty or without needing to give a reason. You are free to decline to answer any particular question you do not wish to answer for any reason.

Your responses will be anonymized. No identifying information will be collected and any personal data gathered will be handled according to applicable law and EFI privacy policy regulations. The data will be stored on European Forest Institute's OneDrive in the folder dedicated to the Wildcard project, to which only project members and selected collaborating researchers have access. All data collected in this research will be stored according to the Data Management Plan of WILDCARD. These will be analysed alongside other responses from European policy stakeholders to produce aggregate results which may be used for project deliverables and scientific publications. These outputs will not contain any identifying information. If you initially decide to participate but change your mind later, you are free to withdraw by sending an email to the research team at carmen.rodriguez@efi.int . You do not have to provide us with reasons for the termination of your participation. When you withdraw from the study, information provided will be destroyed. If your data has already been analysed, the results will be used but the source of the data will not be retrievable.

There are no direct personal benefits of participation in this study. However, by participating, you will contribute to analysing how different rewilding options across Europe may contribute to climate change mitigation and adaptation and/or biodiversity conservation goals.

If you have questions at any time about the study or the procedures, you may contact the principal investigator, Dr. Carmen Rodríguez via email at carmen.rodriguez@efi.int. If you have ethical concerns in relation to this research, you may contact the Senat of Suceava University: secretariat.senat@usm.ro If you have any kind of visual impairment (vision impairment, vision disability) and you cannot properly access the survey, please contact us at carmen.rodriguez@efi.int, to find a suitable alternative.

WILDCARD is a project funded by the European Commission.

Funded by the European Union

1. Please indicate the year of your birth
2. Please indicate your gender
    - Female
    - Male
    - Other
    - Prefer not to disclose

3. Please indicate if you work in any of the following sectors or have worked in them in past. Please select all that apply.
    - Forestry
    - Agriculture
    - Nature conservation
    - Wildlife management
    - Wildfire
    - Rural development
    - Water management
    - Climate change mitigation
    - Climate change adaptation
    - Other (please specify)

4. Which one of the below categories best describes your current job?
    - National level policymaker and/or authority
    - Regional level policymaker and/or authority
    - Scientific community/academia
    - Business and/or investors
    - NGO or interest group
    - Other: [please specify]

5. How would you describe the area where you live?
    - Urban or predominantly urban
    - Rural or predominantly rural
    - Intermediate

6. How would you describe the area where you primarily work?

If you primarily work in an office, please answer in regard to your office, if you primarily do field office, please answer in regard to where you primarily do field work, if you primarily work from home, please answer in regard to your home office.

- Urban or predominantly urban
- Rural or predominantly rural
- Intermediate

7. Imagine that more of the existing forest was allowed to develop freely, without any management, in [your country]. Do you believe this would have an overall positive or negative effect for the issues listed below?

	Very negative effects	Negative effects	Somewhat negative effects	Neutral	Somewhat positive effects	Positive effects	Very positive effects	I don't know
Nature and wildlife								
Commercial forestry								

Funded by the European Union

Rural culture and ways of life								
Rural economies								
The beauty of the landscape								
Risk to people or property (e.g., wildfires, floods)								
Food security								
Reducing climate change and its impacts								

8. In the case that you see a strong negative effect with any of the topics listed, please explain them in more detail here (optional)

9. In the case that you see a strong positive effect with any of the topics listed, please explain them in more detail here (optional)

10. Imagine that a policy supporting the free development of forests without management was established in [your country]. Do you think this policy would be aligned* or misaligned with national level polices in [your country] related to the following topics?

* *Policies are aligned when policy goals can be achieved simultaneously*

	Strongly misaligned	Misaligned	Somewhat misaligned	Neutral	Somewhat aligned	Aligned	Strongly aligned	I don't know
Forestry								
Agriculture								
Nature conservation								
Wildlife management								
Rural development								
Wildfire								
Water management								
Climate change mitigation								
Climate change adaptation								

11. If you selected “1 – Strongly misaligned” or “2 – Misaligned” for any of the topics listed, please explain this in more detail here (optional)

Funded by the European Union

12. If you selected “7 – Strongly aligned” or “6 – Aligned” for any of the topics listed, please explain this in more detail here (optional)
13. If you think that such a policy already exists, please describe it here (optional)
14. In some parts of Europe, farmland is being abandoned as rural populations decline or farming becomes less profitable in some areas. If they are left unmanaged, these areas often turn into shrublands or forests. Imagine that more farmland in [your country] was abandoned and left unmanaged. Do you believe this would have an overall positive or negative effect for the issues listed below?

**[Show same matrix as in Question #7]*

15. In the case that you see a strong negative effect with any of the topics listed, please explain them in more detail here (optional)
16. In the case that you see a strong positive effect with any of the topics listed, please explain them in more detail here (optional)
17. Imagine that a policy supporting the natural development of forest vegetation without human intervention on abandoned farmland in Spain was established. Do you think this would be aligned* or misaligned with national level policies in Spain related to the following topics?

* *Policies are aligned when policy goals can be achieved simultaneously*
***IShow same matrix as in Question #10]*

18. If you selected “1 – Strongly misaligned” or “2 – Misaligned” for any of the topics listed, please explain this in more detail here (optional)
19. If you selected “7 – Strongly aligned” or “6 – Aligned” for any of the topics listed, please explain this in more detail here (optional)
20. If you think that such a policy already exists, please describe it here (optional)
21. The EU Biodiversity Strategy for 2030 set the target to protect 30% of EU land and 30% of EU sea by 2030. The strategy further specifies that one third of these areas should be strictly protected, representing 10% of EU land and sea. Do you think that the EU Biodiversity Strategy target to strictly protect 10% of EU land by 2030 is aligned* or misaligned with national level policies in [your country] related to the following topics?

* *Policies are aligned when policy goals can be achieved simultaneously*
***[Show same matrix as in Question #10]*
**** This question is not included for Switzerland*

22. If you selected “1 – Strongly misaligned” or “2 – Misaligned” for any of the topics listed, please explain this in more detail here (optional)
23. If you selected “7 – Strongly aligned” or “6 – Aligned” for any of the topics listed, please explain this in more detail here (optional)
24. In 2024, the EU Nature Restoration Regulation came into effect with its legally binding targets to restore 20% of EU land by 2030 and all ecosystems in need by 2050. Do you think that the EU Nature Restoration Regulation targets are aligned*or misaligned with national level policies in Spain related to the following topics?

Funded by the European Union

** Policies are aligned when policy goals can be achieved simultaneously*
***[Show same matrix as in Question #10]*
**** This question is not included for Switzerland*

25. If you selected “1 – Strongly misaligned” or “2 – Misaligned” for any of the topics listed, please explain this in more detail here (optional)

26. If you selected “7 – Strongly aligned” or “6 – Aligned” for any of the topics listed, please explain this in more detail here (optional)

27. Please use this space to add any additional comments that you would like to share in relation to the topic (optional)

28. If you are interested in staying in touch regarding the results of this study and other project activities, please provide your e-mail (optional)

Note: Question #10 was rewritten for the countries which had specific policies supporting proforestation strategies to some extent

Funded by the European Union

Appendix 4: Selection of EU and National Policies for the vertical and horizontal coherence assessment

Selection of EU policies for assessment of vertical coherence

Law and policy issue area	Link to rewilding (proforestation and/or natural afforestation)
EU forest and nature conservation	
EU Nature Restoration Regulation	Legally binding targets on restoration include 20% of EU land and sea by 2030 and all ecosystems in need of restoration by 2050. **On proforestation and land abandonment**: restoration measure example (15) Enhance the development of old-growth native forests and mature stands, for example, by abandonment of harvesting or by active management which favours development of autoregulatory functions and appropriate resilience **AND** (23) Allow ecosystems to develop their own natural dynamics for example by abandoning harvesting and promoting naturalness and wilder ness
EU Biodiversity Strategy for 2030	Sets the target to protect 30% of EU land, 10% of which should be strictly protected **(strict protection of forests or abandoned agricultural lands** could be considered proforestation or rewilding)
EU Forest Strategy for 2030	Includes measures for strengthening forest protection and restoration (not very specific, no reference specifically to proforestation or land abandonment)
Birds and Habitats Directive	Key instruments to meet biodiversity conservation and restoration objectives and establishment and management of Natura 2000
Natura 2000	Main protected area instrument in the EU, includes strict reserves but also managed areas.
European Parliament Resolution on Wilderness in Europe (2009)	Calls on the European Commission to: Develop a clear definition of wilderness, map existing wilderness areas in Europe, develop an EU Wilderness Strategy, stimulate the development of new wilderness areas through restoration, and promote the values of wilderness together with NGOs and local communities
Guidelines Wilderness in Natura 2000 (2013, follow-up of the 2009 of the Parliament Resolution)	Guidelines on the management of Natura 2000 where the objective of management is to preserve wilderness qualities and consequently the chosen management method is non-intervention or set aside and to present the current knowledge on the benefits of such an objective.
EU agricultural and rural development	
Common Agricultural Policy (CAP)	Increasing forest areas has been favoured by European and national policies for a long time through subsidized active forest restoration under the Common Agriculture Policy (CAP) (Frei et al., 2024)
Climate	
EU Climate Law	Part of the European Green Deal to address climate change and biodiversity loss through improving the quantity and quality of forests for the EU and MS to reach climate neutrality by 2050

Funded by the European Union

In order to select the EU policies used for the vertical policy trade-offs, numerous European policies were reviewed to assess their relationship between the inherent policy goals and rewilding (see table below): Ultimately, two EU policies were chosen for the vertical policy trade-off section: (1) the EU Biodiversity Strategy for 2030 target to strictly protect 10% of EU land by 2030 and (2) the EU Nature Restoration Regulation (NRR) legally binding target to restore 20% of EU land by 2030 and all ecosystems in need by 2050. We selected these two due to their relevance for proforestation and/or natural rewilding, as well as for being well-known, quantifiable targets that can be easily assessed by policy stakeholders.

The EU Biodiversity Strategy defines strictly protected areas as "*fully and legally protected areas designated to conserve and/or restore the integrity of biodiversity-rich natural areas with their underlying ecological structure and supporting natural environmental processes. Natural processes are therefore left essentially undisturbed from human pressures and threats to the area's overall ecological structure and functioning, independently of whether those pressures and threats are located inside or outside the strictly protected area*" (European Commission, 2022). Under this definition, this policy target is relevant for proforestation, as it would allow forests to develop naturally without management or other interventions.

The Nature Restoration Regulation contains a legally binding target to restore 20% of EU land by 2030 and all ecosystems in need by 2050 is relevant both for proforestation and rewilding of abandoned agricultural land. While the law does not specify which types of restoration measures need to be implemented, it gives examples including (1) enhance the development of old-growth native forests and mature stands, for example, by abandonment of harvesting or by active management which favours development of autoregulatory functions and appropriate resilience and (2) Allow ecosystems to develop their own natural dynamics for example by abandoning harvesting and promoting naturalness and wilderness. These examples are relevant for proforestation and rewilding of abandoned agricultural land. It was not possible to include more direct questions on policy trade-offs related to rewilding on abandoned agricultural land as this has been largely ignored by EU policies (Frei et al., 2024)

Selection of national level policies for assessment of horizontal coherence

To develop questions on horizontal coherence that capture how policy stakeholders perceive trade-offs between rewilding-related goals and other national policy sectors, we first needed a solid understanding of each country's policy landscape. This required extensive research on the dominant rewilding-related policy targets in all ten national contexts.

For this purpose, a wide range of publicly available policies for all ten countries were searched online, compared and sorted according to their relevance. In this process, several policy targets were identified for each country. These were largely orientated towards proforestation. No policies were identified on natural rewilding of abandoned agricultural land, and therefore this question was framed hypothetically. In a next step, a pre-selection of these proforestation related policy targets was shared with the project partners by e-mail to ensure the actual relevance of these targets for the respective national context. Their feedback led to the concretisation of the policy objectives and was instrumental in the final formulation of the questions on horizontal policy coherence (questions 8 and 11).

Specifically, policy stakeholders from the following sectors were considered: forestry, nature conservation, rural development, wildfire, water management, wildlife management, climate change mitigation, or climate change adaptation. Justification of the selection is provided in

Funded by the European Union

Country	Proforestation goal
Belgium	Increase strictly protected areas to 5% in Wallonia by 2030 (Natural reserves of Wallonia)
Bulgaria	Increase the elements of the National Ecological Network in regions with the lowest proportion of protected areas and sites and linking it to the European Ecological Network through cross-border cooperation for the protection of natural values (Bulgarian Strategic Plan for Forest Sector Development (2014-2023)
Czechia	Continue to increase the proportion of forests left to develop spontaneously with the aim of gradually creating a representative system that will be systematically monitored. This system will be established mainly within the network of national parks and nature reserves (National Forestry Programme II)
Italy	No relievant policy found
Germany	Natural forest development in at least 5% of Germany's forest areas or 10% of publicly owned forest area (Nationale Strategie zur Biologischen Vielfalt 2030)
The Netherlands	No relevant policy found
Romania	Strictly protect 10% of forests by 2030, in line with the EU Biodiversity Strategy (SCHIȚA STRATEGIEI NAȚIONALE PENTRU PĂDURI 2030 (Draft))
Switzerland	Increase the proportion of forest reserves in Switzerland from 7.3 % of the forest area to 10 % by 2030. Target size: At least 15 large forest reserves (> 500 ha).(Waldpolitik: Ziele und Massnahmen 2021–2024)
France	Increase the percentage of territory under strict protection. Including 10% of national terrestrial and marine territory by 2030 with 5% of the Mediterranean coast by 2025 and 10% of public forests (National Biodiversity Strategy 2030)
Spain	New areas of strict protection will be identified and, where appropriate, designated, or a review of the protection regime will be promoted in some of the existing protected areas, in order to contribute to the objective of strict protection of 10% of the EU surface, both on land and in the marine environment, by 2030. (Plan Estratégico Estatal del Patrimonio Natural y de la Biodiversidad a 2030)

Funded by the European Union

Appendix 5: Codebook for the open-ended questions related to national level policy stakeholder survey

Codebook perceptions

Code System	Frequency
Code System	358
Additional comments	0
Prioritisation of other polices (+) (+)	6
Implentation of EU policies	4
Need for ecosystem restoration in sectoral policies	2
Prerequisites for rewilding to work (+)	4
Context dependency	8
Trade-offs	5
Rewilding objectives (what rewilding should/should not be)	21
Comments on survey design/questions	13
General negative	4
Interesting quote	2
Question not clear/disagree with question formulation	2
Context dependent	21
Other	1
POS: Driver of change	1
POS: No unexpected consequences	1
POS: More ecosystem services	11
POS: Increased research opportunities	2
NEG: Requires a lot of education	2
FS	0
?	2
NEG: less land available for agriculture -> intensive agriculture	4
NEG: Less land available for agriculture = threat to food security (+) (+)	8
POS: General	1
POS: Increased food resource capacity	2
RP	0
NEG: hydrological instability	2
POS: Reduce risk of wildfires (+)	4
NEG: General	1
NEG: Unsafe forests (+)	4
NEG: Increased wolf populations	1
NEG: Increased wildfire risk	20
RC	0
POS: Better quality of life	1
NEG: loss of culture and identity tied to agriculture	4
NEG: Loss of local tradition of forest management	2
POS: General	2
NEG: loss of ecosystem services (+) (+)	7
NEG: Increased depopulation	8
RE:	0
POS: Nature tourism opportunities	3
POS: Natural dynamics support agroforestry and pastoral products	1
POS: general	2
NEG: Loss of agricultural rural economies	7
NEG: Loss of forest-based rural economies	14
CF	0
?	1
POS: More (productive) forests/better timber harvesting	3
NEG: Increased pressure on managed forests (+)	3
NEG: Natural disasters cannot be mitigated	5
NEG: Reduced forestry operations (less income and jobs)	15
NEG: Increased dependence on carbon-based resources	4

Funded by the European Union

BL	0
POS: Wild/natural forests are beautiful	13
POS: General	4
NEG: Homogenisation of landscapes (+)	13
CC	0
POS: General	3
POS: Increased forest resilience/adaptation	5
POS: Increased climate change adaptation/mitgation	13
NEG: Decreased forest resilience/adaptation	9
NEG: Decreased CC adaptation/mitigation	7
NW	0
POS: Development of forest landscapes	2
POS: General	7
POS: More biodiversity (+)	28
NEG: Loss of biodiversity (+)	13

Codebook Policy Alignment

Code System	Frequency
Code System	341
Land abandonment policy	1
Policies to ensure that areas are managed according to their intended purpose (BG)	1
Non-management in military areas (CZ)	1
WIlderness fund and climate wilderness fund (DE)	1
Former polices to support development of fallow land (DE)	1
Need for ecosystem restoration policies	2
Natura 2000	1
SFR is already happening without policies to support it, policies to address it (ES, FR, IT, RO, SCH) (+) (+) (+)	7
No, to the best of their knowledge	1
SFR part of some PA management approaches (FR)	1
Policy for new forest land (but not necessarily protected) (ROM)	1
10% forest reserve policy (SWISS)	2
Question unclear (+)	16
Effects unknown	2
Policy referred to is outdated	2
Context dependent	33
General alignment	26
General misalign	19
Other	1
Too early to know	2
MIS: no policies in place to implement NRR (BG)	1
MIS: Loss of cultural heritage	1
MIS: Restoring ecosystems not possiblen in CC	1
MIS: Human impacts are too significant for rewilding to work (NE)	1
ALI: ?	1
MIS: active management needed for recreation and tourism, soil services	1
Check again	2
Rural development	0
ALI: Rewilding creates opportunities for ecotourism	2
MIS: Other (+)	4
MIS: Active management of landscapes needed for rural development/economy (+)	10
Agriculture	0
ALI: More biodiversity improves agriculture	3
MIS: Current agricultural policy is harmful to biodiversity	3
MIS: Other	2
MIS: Increase of forests puts pressure on agriculture	14
Food security	0
MIS: SFR -> loss of productive land -> food insecurity	1
ALI: Forests protect wildlife and plants, which is essential for food	1

Funded by the European Union

Water management	0
ALI: Natural rewilding -> improve soil quality -> Reduce floods)	5
MIS: General/other	3
MIS: More forest fires -> less water availability (+)	3
Wildife management	0
MIS: Other	2
MIS: Active management needed to control ungulates	4
ALI: Natural forests beneficial for wildlife management (+)	4
Nature conservation	2
ALI: General (Freely developing/protected forests overlap with objectives of nature conservation (+)	12
ALI: Natural/protected forests increase biodiversity	22
MIS: Loss of biodiversity assocatied with managed landscapes (+)	17
Forestry	0
MIS: Other	2
MIS: No management -> no timber production	10
ALI: General/Other (+) (+) (+)	4
ALI: Natural/protected/restored forests more biodiverse -> increase health of forest	5
Climate change mitigation	0
ALI: Natural/protected/afforestation store more carbon (+)	13
MIS: Natural/protected/afforestation forests -> reduced carbon storage (+)	10
Climate change adaptation	0
ALI: Establishing more (protected) forests supports society CC adaptation	5
ALI: Forests with natural dynamics more adapted to CC	11
MIS: Active management needed for CC adaptation	6
Fire management	0
MIS: Active management needed to prevent/manage forest fires	32

Funded by the European Union

Appendix 6: Interview guideline for EU policy stakeholders – Semi-structured interviews

Main questions

General understanding of rewilding

1. Rewilding means many different things to policymakers and policy stakeholders. What does rewilding mean to you?
   If not addressed, ask explicitly:
   a. Is there a difference to you between rewilding and restoration?
   b. What is the role of humans in rewilding?
   c. Do you think rewilding is a relevant conservation approach?
2. How is your professional work related to rewilding? *Please describe briefly.*

Rewilding and EU policymaking

3. When looking at the EU policy level, how has rewilding been taken up in the formal and informal policy processes?
   a. What are important policy initiatives related to rewilding?
   b. How has the concept of rewilding evolved in comparison to that of restoration?
4. Where do you see potential for rewilding to contribute to existing EU policy objectives?
   If not mentioned, ask specifically:
   a. Regarding biodiversity, such as in the EU Biodiversity Strategy?
   b. Regarding restoration, such as in the EU Nature Restoration Regulation?
   c. Regarding climate change mitigation, such as in LULUCF?
   d. Regarding climate change adaptation, such as in the EU Adaptation Strategy?
   e. Regarding forest management, such as in the EU Forest strategy?
5. Do you see conflicts between rewilding and existing EU policy objectives?
6. From your view, what should be done politically about rewilding today at the EU policy level?

If not mentioned specifically:
   a. Is action needed related to finances and budget for rewilding?
7. Who do you think is responsible for taking these actions?

Implementation

8. What do you see as the main challenges when implementing rewilding in practice?

Rewilding in the forest

The Wildcard project focuses on rewilding specifically in forests.

9. Where do you see a potential for rewilding in forests across Europe?
   If not mentioned specifically:
   a. Which forest landscapes should be prioritized, if any?
   b. Do you see a potential for rewilding on abandoned land?

Final question

10. Is there anything connected to rewilding at the EU policy level, which you consider important and which we have not touched upon during the interview?

Funded by the European Union

Appendix 7: Coding the EU policy stakeholders semi-structured interviews

Extract of the MAXQDA code system with the main themes and sub-themes for the analysis of the results as presented in chapter 4.2.

Personal link to rewilding
Private/other
Professional
Rewilding concept
Management approaches
(9 Sub-subcodes)
Semantic debates
(7 Sub-subcodes)
Rewilding in EU policymaking
(10 Subcodes)
Potential of rewilding in relation to EU policies
Adaptation Strategy
Biodiversity Strategy
Bioeconomy Strategy
CAP
Forest Strategy
Green Deal
LULUCF
Marine Strategy Framework Directive
Nature Directives
Nature Restoration Law
Nitrates Directive
Renewable Energy Directive
Soil Strategy
Water Framework Directive
Other
Conflicts between rewilding and EU policies
Other
Adaptation Strategy
Biodiversity Stragegy
Bioeconomy Strategy
CAP
Forest Strategy
Green Deal
LULUCF
Nature Directives
NRL
Renewable Energy Directive
Water Framework Directive
Legislation around reintroduction
[National policies]
Required actions and changes
Other non-rewilding related actions
No specific action needed
Legal and Regulatory actions
(5 Sub-subcodes)
Governance processes, including participation
(9 Sub-subcode)
Financing and Economic policy actions
(6 Sub-subcodes)
Implementation challenges

Funded by the European Union

(10 subcodes)
Potential for rewilding in forests
Proforestation
Management/Planning
(7 Sub-subcodes)
Forest landscapes
(6 Sub-subcodes)
Land abandonment
(2 Sub-subcodes)

Funded by the European Union

Appendix 8: Wording of the semi-structured interview applied to the local level stakeholders

Local stakeholder's perceptions and acceptability of rewilding, Region:_____

1. Demographic data

Q1.1. Year of your birth:	Q1.2. Gender: F/ M/ Other/ prefer not to disclose
Q1.3. The highest level of education completed: ☐ Less than primary education or no education ☐ Primary education ☐ Lower secondary education ☐ Upper secondary education ☐ Vocational education ☐ Bachelor's degree or equivalent ☐ Master's degree or equivalent ☐ Doctoral degree or equivalent	Q1.4. Stakeholder group: ☐ Landowners & Farmers agriculture ☐ Forest managers & local forest administration ☐ Representatives of local governments ☐ Local NGOs ☐ Managers of natural protected areas ☐ Local representative in rural development ☐ Local representative in wildlife management
Q1.5. How would you describe the area where you live? ☐ Urban or predominantly urban ☐ Rural or predominantly rural ☐ Intermediate	Q1.6: Land ownership in the area: ☐ yes ☐ no ☐ prefer not to disclose

2. General questions

Q2.1. How well-known is the concept of rewilding in your region?

☐ 1-not know at all ☐ 2-rather not known ☐ 3-somehow familiar ☐ 4-known in to a certain degree ☐ 5-well-known

Q2.2. What is your own relationship with landscape and nature from your region, considering the statements listed below:

In the area I live,	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	I don't know
1….I like to take my time looking at details in a landscape	☐	☐	☐	☐	☐	☐
2….I like to take my time to visit wild-like areas	☐	☐	☐	☐	☐	☐
3….I prefer to see landscapes with few or no traces of human activity	☐	☐	☐	☐	☐	☐
4….I like dense vegetation along the roads in this area	☐	☐	☐	☐	☐	☐
5…I like the green meadows on the farms in this area	☐	☐	☐	☐	☐	☐
6…Dense forests make the landscapes in this area more attractive	☐	☐	☐	☐	☐	☐
7…Dense forests limit access to places I would like to visit	☐	☐	☐	☐	☐	☐
8…Active farms make this area interesting	☐	☐	☐	☐	☐	☐

Q2.3.1. Would you say that the area with natural landscape in the region is:

☐ too small ☐ about right ☐ too large ☐ I don' know

Q2.3.2 How natural would you say the region where you live is?

☐ Not natural at all ☐ Slightly natural ☐ Neither unnatural nor natural ☐ Moderately natural ☐ Very natural ☐ I don' know

Q2.3.3. How satisfied are you with the current level of wilderness in your region?

☐ I would prefer a lot less wilderness; ☐ I would prefer less wilderness; ☐ about right; ☐ I would prefer more wilderness; ☐ I would prefer a lot more wilderness; ☐ I don' know

Q2.4.1. What can you tell us about the process of land abandonment that is occurring/has occurred in the region?

Funded by the European Union

Q2.4.2. What can you tell us about the process of forest management abandonment that is occurring/has occurred in the region?

Q.2.5. To what extent do you agree with the following statements about the potential return of wild animal species?

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	I don't know
1. It is desirable because they have the right to be here	☐	☐	☐	☐	☐	☐
2. We should protect more land to allow all species to come back	☐	☐	☐	☐	☐	☐
3. The presence of wild animal species is compatible with our future society and economy	☐	☐	☐	☐	☐	☐
4. It is desirable as long as they cause no economic or other (e.g. psychophysical) harm	☐	☐	☐	☐	☐	☐
5. It is desirable as long as they stay restricted in protected areas or nature reserves	☐	☐	☐	☐	☐	☐
6. It would not matter/make much of a difference to me	☐	☐	☐	☐	☐	☐

3. Questions about personal beliefs and perceptions on abandonment of land and forest management

Q3.1. What do you think about allowing forests to develop without human intervention?

Q3.2. Would you say that the area of unmanaged forests in your region is:
☐ too small ☐ about right ☐ too large ☐ I don't know

Q3.3. Imagine that in **your region more of the existing forest was allowed to develop freely, without any management**. Do you believe this would have an overall positive or negative effect for the issues listed below?

	1 - Very negative effect	2 - Negative effect	3 - Somewhat negative effect	4 - Neutral	5 - Somewhat positive effect	6 - Positive effect	7 - Very positive effect	I don't know
Nature and wildlife	☐	☐	☐	☐	☐	☐	☐	☐
Rural culture and ways of life	☐	☐	☐	☐	☐	☐	☐	☐
Commercial forestry	☐	☐	☐	☐	☐	☐	☐	☐
The beauty of the landscape	☐	☐	☐	☐	☐	☐	☐	☐
Risk to people or their property (e.g., from wildfires or falling branches)	☐	☐	☐	☐	☐	☐	☐	☐
Reducing climate change and its impacts	☐	☐	☐	☐	☐	☐	☐	☐

Q3.3.1. In the case that you see a strong negative effect with any of the topics listed, please explain them in more detail here (optional)
Q3.3.2. In the case that you see a strong positive effect with any of the topics listed, please explain them in more detail here (optional)

Q3.4. What do you think about the abandonment of agricultural land (such as former pastures and arable land) in your region?

Q3.5. Would you say that the area of abandoned land in your region is:
☐ too small ☐ about right ☐ too large ☐ I don't know

Q3.6. Imagine that **more farmland from your region was abandoned and left unmanaged**. Do you believe this would have an overall positive or negative effect for the issues listed below?

	1 - Very negative effect	2 - Negative effect	3 - Somewhat negative effect	4 - Neutral	5 - Somewhat positive effect	6 - Positive effect	7 - Very positive effect	I don't know
Nature and wildlife	☐	☐	☐	☐	☐	☐	☐	☐
Rural culture and ways of life	☐	☐	☐	☐	☐	☐	☐	☐
Commercial forestry	☐	☐	☐	☐	☐	☐	☐	☐
Rural economy	☐	☐	☐	☐	☐	☐	☐	☐
The beauty of the landscape	☐	☐	☐	☐	☐	☐	☐	☐
Risk to people or their property (e.g., from wildfires or falling branches)	☐	☐	☐	☐	☐	☐	☐	☐
Reducing climate change and its impacts	☐	☐	☐	☐	☐	☐	☐	☐
Food security	☐	☐	☐	☐	☐	☐	☐	☐

Q3.6.1. In the case that you see a strong negative effect with any of the topics listed, please explain them in more detail here (optional)

Q3.6.2. In the case that you see a strong positive effect with any of the topics listed, please explain them in more detail here (optional)

4. Questions about personal beliefs and attitudes on rewilding

Q4.1. What would be your reaction if the following natural processes occurred spontaneously in **your region**?

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	I don't know
1. Spontaneous return of shrubs and forest vegetation on abandoned agricultural land	☐	☐	☐	☐	☐	☐
2. Natural development of existing forests without any management	☐	☐	☐	☐	☐	☐
3. Spontaneous return of large herbivores (moose, auroch or auroch-like species, etc)	☐	☐	☐	☐	☐	☐
4. Spontaneous return of large predators (wolf, lynx, bear)	☐	☐	☐	☐	☐	☐
5. The restoration of original ecosystems as a natural process with limited human intervention	☐	☐	☐	☐	☐	☐

Q4.2.1. Are there any animal wild species that retuned spontaneously in your region? ☐ I do not know ☐ No ☐ Yes.

Q4.2.2. If yes, which one? .....

Q4.2.3. What is your feeling about the return of these species?

(please name species)	fear	Joy	interest	anger	I am not sure
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

Q4.2.4. For the species you have mentioned above, which measures would be acceptable for managing the **population size**?

Species	Measures	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	I don't know
Species 1:	Hunting	☐	☐	☐	☐	☐	☐
	Maintaining species in zoos/captivity	☐	☐	☐	☐	☐	☐
	Fencing them in specific areas	☐	☐	☐	☐	☐	☐

Funded by the European Union

	Let them roam freely	☐	☐	☐	☐	☐	☐
	Roam freely but very closely monitored	☐	☐	☐	☐	☐	☐
	Increasing their legal protection status	☐	☐	☐	☐	☐	☐

5. Questions on social acceptability and policy measures in favour of wildlife: herbivore species

Q5.1. Imagine that the number of large herbivore species (such as moose, auroch or auroch-like species) increased in the region you live, or that they returned to the landscape if they are not currently present. Do you believe this would have an overall positive or negative effect for the issues listed below?

	1 - Very negative effect	2 - Negative effect	3 - Somewhat negative effect	4 - Neutral	5 - Somewhat positive effect	6 - Positive effect	7 - Very positive effect	I don't know
Nature and wildlife	☐	☐	☐	☐	☐	☐	☐	☐
How enjoyable it is to visit the landscape	☐	☐	☐	☐	☐	☐	☐	☐
Livestock farming	☐	☐	☐	☐	☐	☐	☐	☐
Local tourism	☐	☐	☐	☐	☐	☐	☐	☐
People's safety and wellbeing in the landscape	☐	☐	☐	☐	☐	☐	☐	☐

Q5.2. If managed appropriately, the financial impact of the presence of large herbivory mammals can be reduced to acceptable levels. How far do you agree with this sentence?

☐ strongly disagree ☐ somewhat disagree ☐ neither agree nor disagree ☐ somewhat agree ☐ strongly agree ☐ I do not know

Q5.3. To cope with the presence of large herbivory mammals, is there a need for **new** policy interventions supporting the coexistence with human activities? ☐ I do not know ☐ No ☐ Yes.

Q5.4. *If you answered 'Yes,' please indicate how much you agree with each of the following statements by selecting the appropriate option:*

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	I don't know
...compensation against damages	☐	☐	☐	☐	☐	☐
...insurance for livestock and crops	☐	☐	☐	☐	☐	☐
...payment/incentives/tax reduction for recording presence (PES style)	☐	☐	☐	☐	☐	☐
...payment/incentives for preventive measures	☐	☐	☐	☐	☐	☐
… funding to build protective measures (fences, etc.)	☐	☐	☐	☐	☐	☐
...economic incentives to offset the loss of income	☐	☐	☐	☐	☐	☐
… training on how to cope with large mammals	☐	☐	☐	☐	☐	☐
…no need for further incentives	☐	☐	☐	☐	☐	☐

6. Questions on social acceptability and policy measures in favour of wildlife: predatory species

Q6.1. Imagine that the number of large predatory mammals (such as lynx or wolves) increased in the region you live, or that they returned to the landscape if they are not currently present. Do you believe this would have an overall positive or negative effect for the issues listed below?

	1 - Very negative effect	2 - Negative effect	3 - Somewhat negative effect	4 - Neutral	5 - Somewhat positive effect	6 - Positive effect	7 - Very positive effect	I don't know

Nature and wildlife	☐	☐	☐	☐	☐	☐	☐	☐
How enjoyable it is to visit the landscape	☐	☐	☐	☐	☐	☐	☐	☐
Livestock farming	☐	☐	☐	☐	☐	☐	☐	☐
Local tourism	☐	☐	☐	☐	☐	☐	☐	☐
People's safety and wellbeing in the landscape	☐	☐	☐	☐	☐	☐	☐	☐

Q6.2. If managed appropriately, the financial impact of the presence of large predatory mammals can be reduced to acceptable levels. How far do you agree with this sentence?

☐ Strongly Disagree ☐ Somewhat Disagree ☐ Neither Agree nor Disagree ☐ Somewhat agree ☐ Strongly agree ☐ I do not know

Q6.3. To cope with the presence of large predatory mammals, is there a need for **new** policy interventions supporting the coexistence with human activities? ☐ I do not know ☐ No ☐ Yes.

Q6.4. *If you answered 'Yes,' please indicate how much you agree with each of the following statements by selecting the appropriate option:*

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	I don't know
...compensation against damages	☐	☐	☐	☐	☐	☐
...insurance for livestock and crops	☐	☐	☐	☐	☐	☐
...payment/incentives/tax reduction for recording presence (PES style)	☐	☐	☐	☐	☐	☐
...payment/incentives for preventive measures	☐	☐	☐	☐	☐	☐
… funding to build protective measures (fences, etc.)	☐	☐	☐	☐	☐	☐
...economic incentives to offset the loss of income	☐	☐	☐	☐	☐	☐
… training on how to cope with large mammals	☐	☐	☐	☐	☐	☐
…no need for further incentives	☐	☐	☐	☐	☐	☐

7. Take-away message about factor of social acceptability in favour of proforestation on the area

Q7.1. Which are the main opportunities and threats that people around you perceive about proforestation (letting forests develop freely, without forest management)?

Q7.2. Which are the main opportunities and threats that people around you perceive about natural vegetations developed on abandoned agricultural lands?

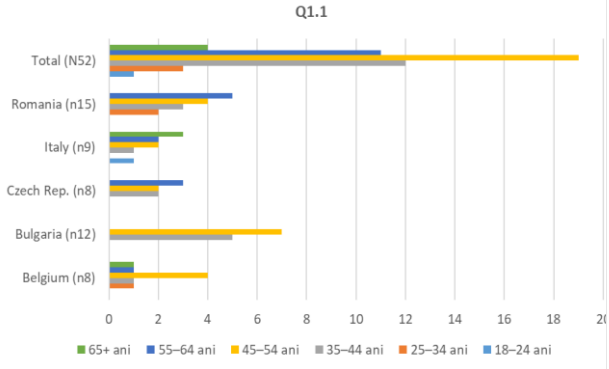
Q7.3. In your opinion, do you think that there are local measures that have to be implemented to lower the level of rewilding-perceived threats in the region?

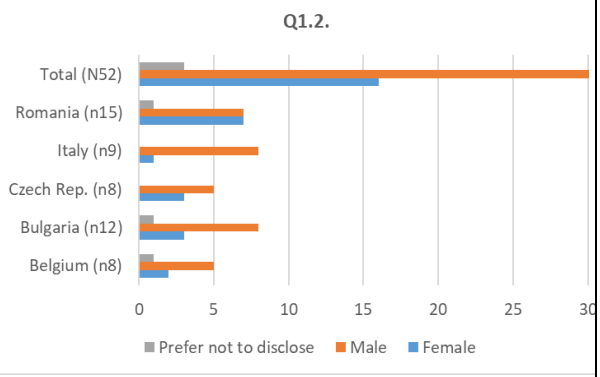
Funded by the European Union

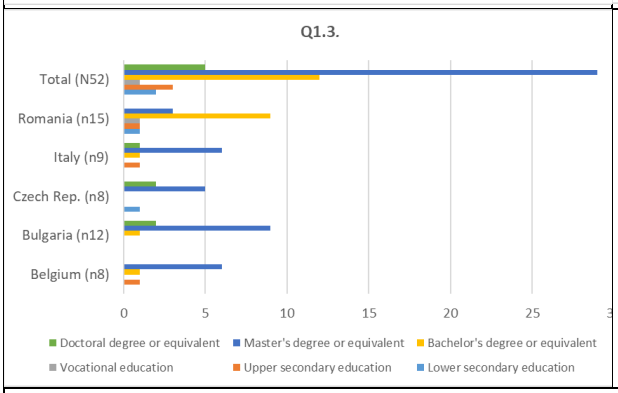
Appendix 9: Background results from closed questions in survey 3 – local level stakeholders' perspective

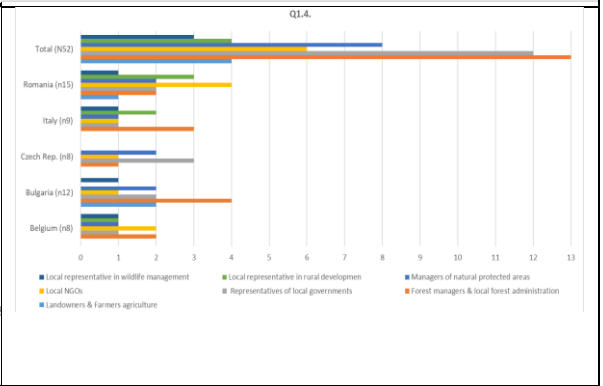
1. Demographic data

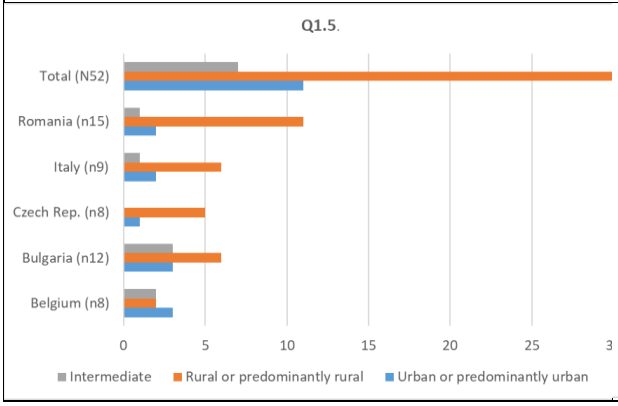
Q1.1. Year of your birth:	Q1.2. Gender: F/ M/ Other/ prefer not to disclose
Q1.3. The highest level of education completed: Less than primary education or no education Primary education Lower secondary education Upper secondary education Vocational education Bachelor's degree or equivalent Master's degree or equivalent Doctoral degree or equivalent	Q1.4. Stakeholder group: ☐ Landowners & Farmers agriculture ☐ Forest managers & local forest administration ☐ Representatives of local governments ☐ Local NGOs ☐ Managers of natural protected areas ☐ Local representative in rural development ☐ Local representative in wildlife management
Q1.5. How would you describe the area where you live? ☐ Urban or predominantly urban ☐ Rural or predominantly rural ☐ Intermediate	Q1.6: Land ownership in the area: ☐ yes ☐ no ☐ prefer not to disclose

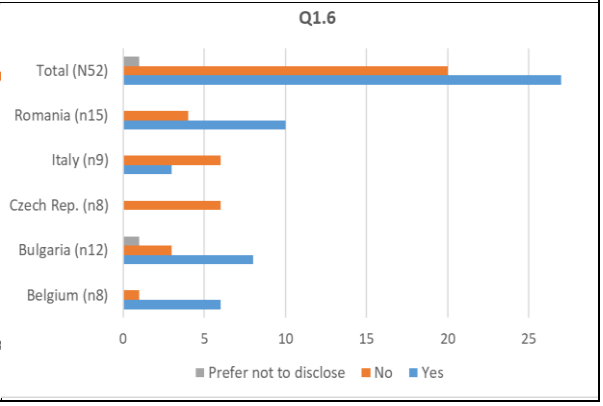










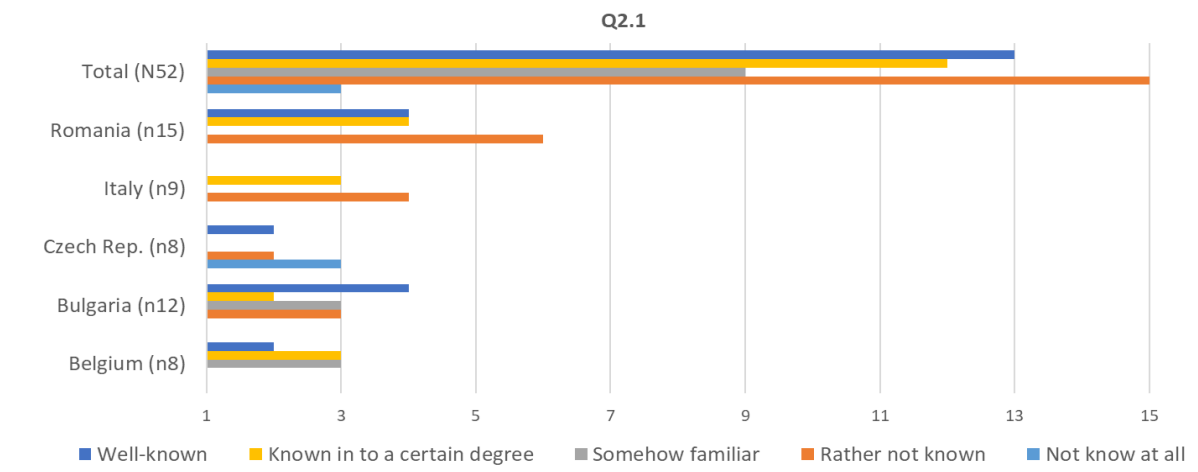


Funded by the European Union

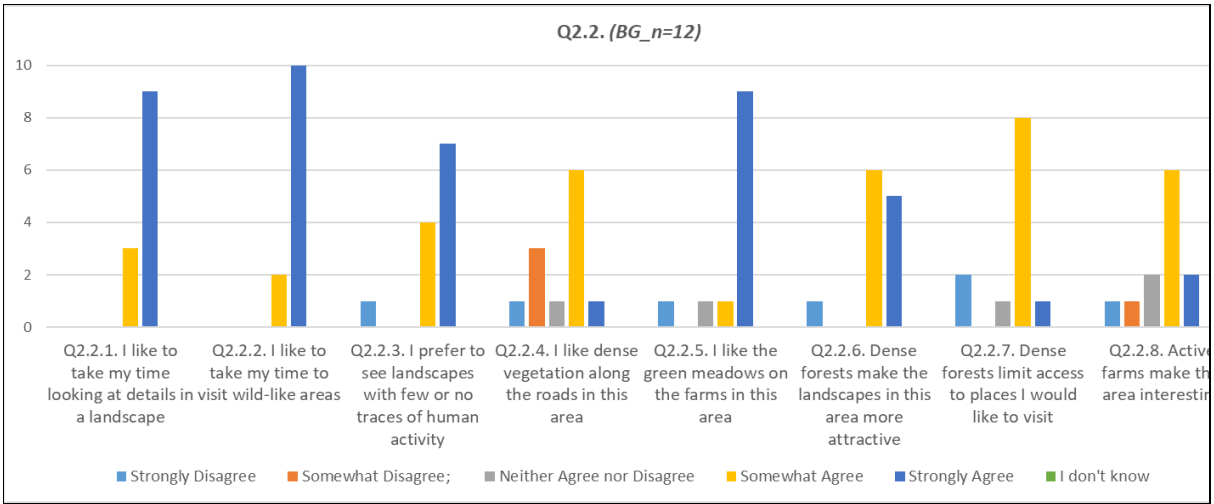
2. General questions

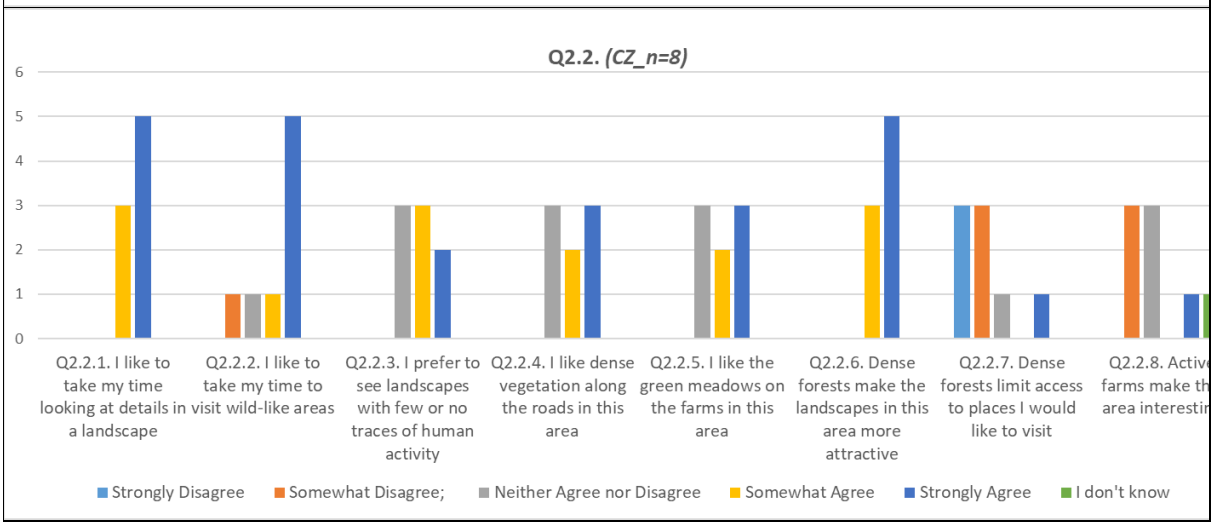
Q2.1. How well-known is the concept of rewilding in your region?

☐ not know at all ☐ rather not known ☐ somehow familiar ☐ known in to a certain degree ☐ well-known

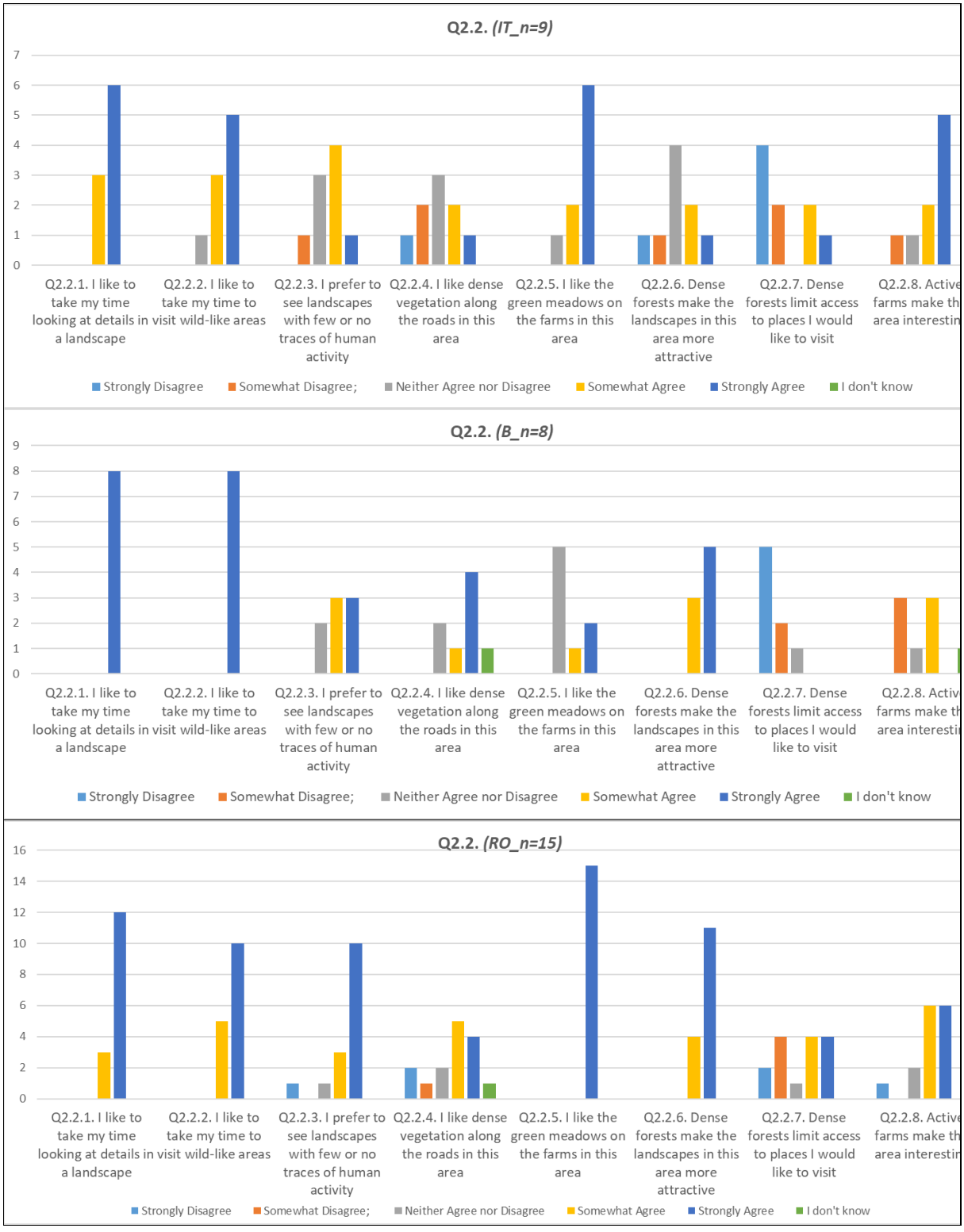


Q2.2. What is your own relationship with landscape and nature from your region, considering the statements listed below:

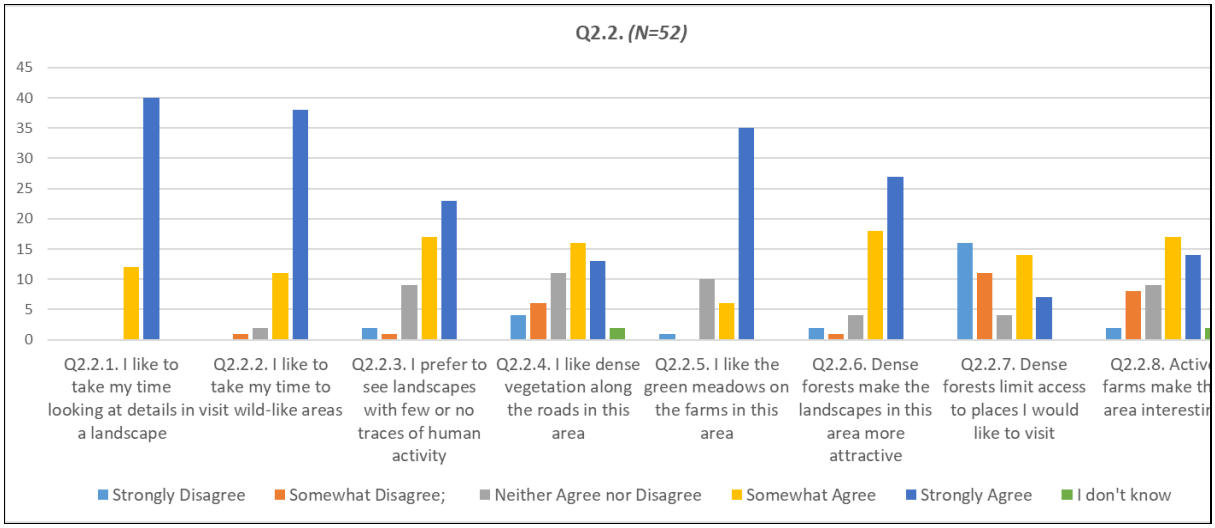




Funded by the European Union

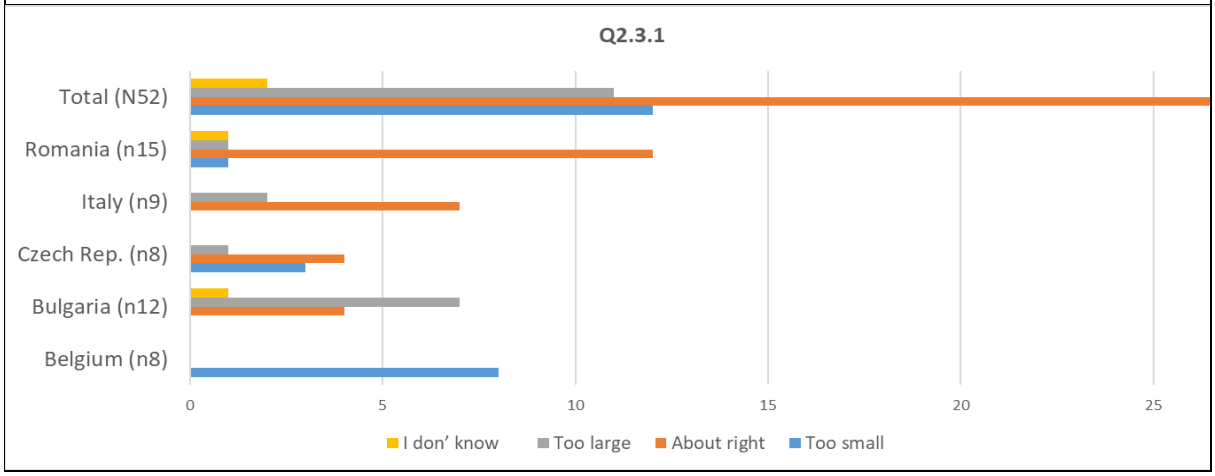


Funded by the European Union



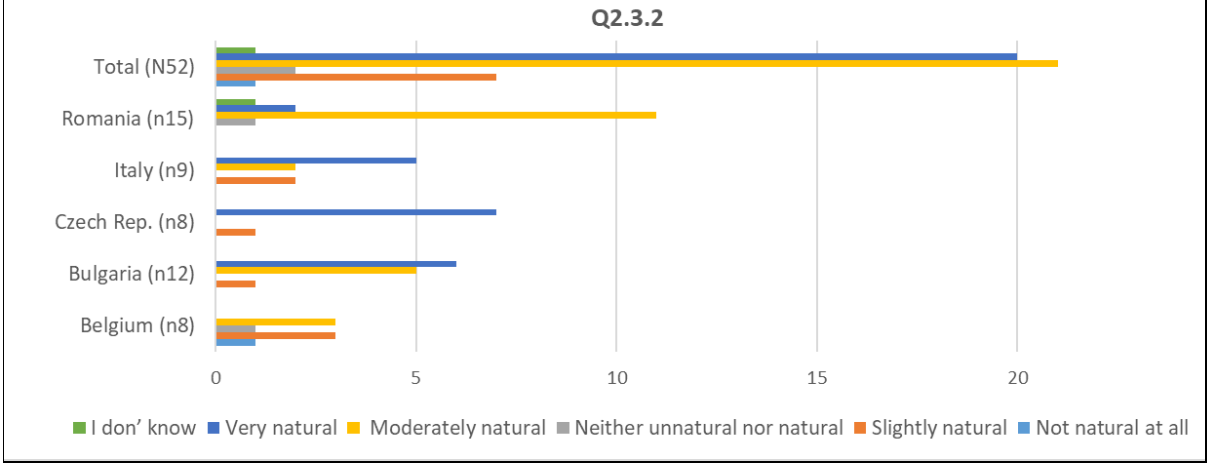
Q2.3.1. Would you say that the area with natural landscape in the region is:

☐ too small ☐ about right ☐ too large ☐ I don' know



Q2.3.2 How natural would you say the region where you live is?

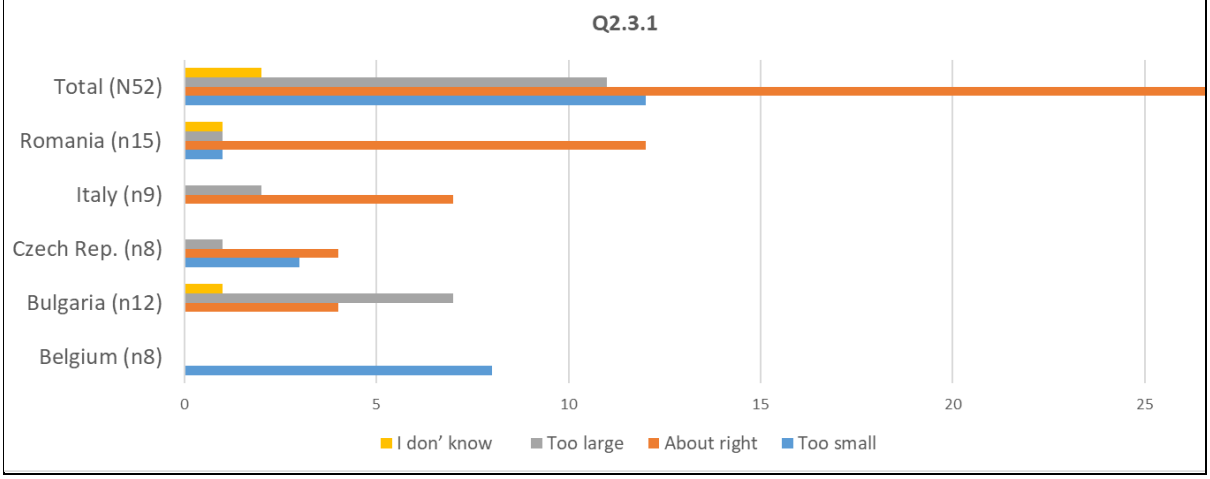
☐ Not natural at all ☐ Slightly natural ☐ Neither unnatural nor natural ☐ Moderately natural ☐ Very natural ☐ I don' know



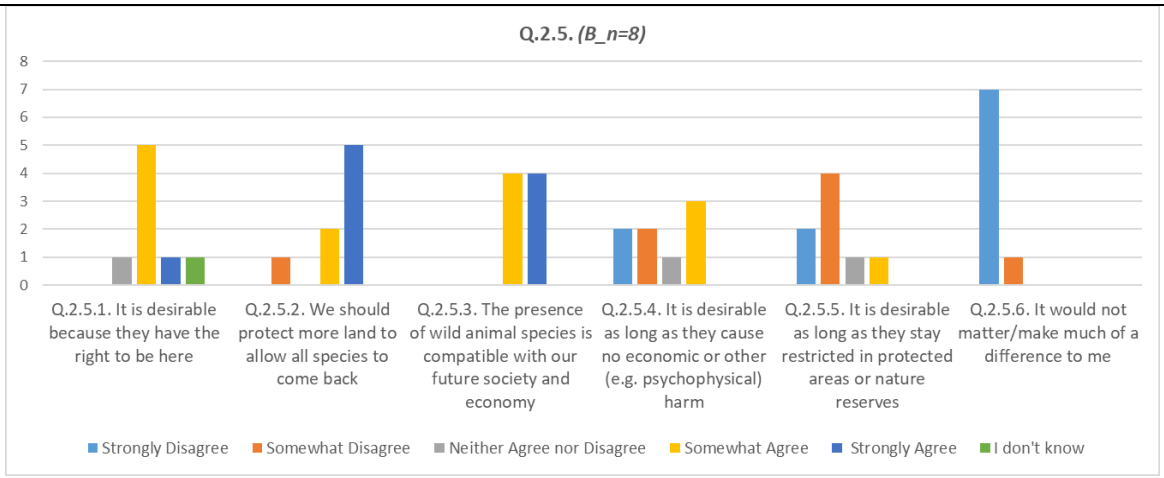
Funded by the European Union

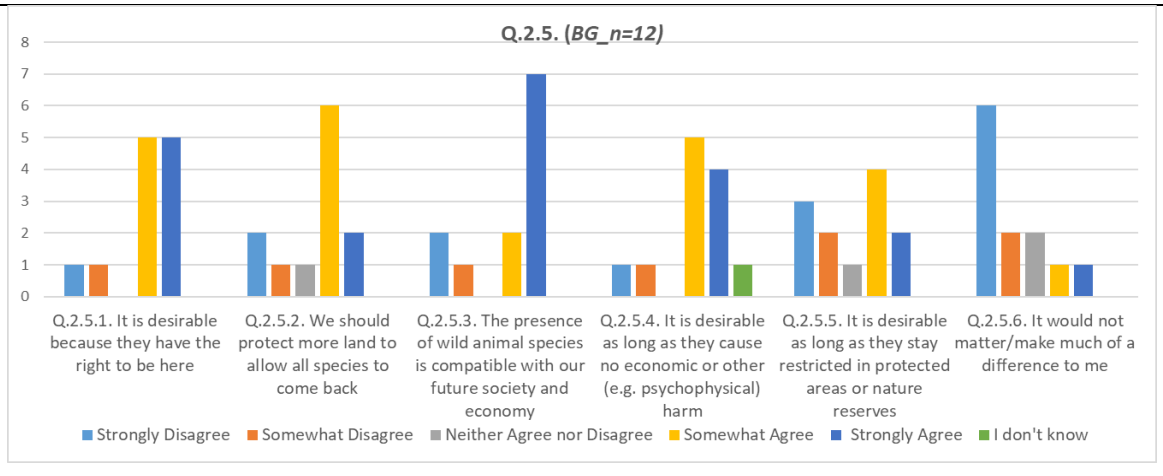
Q2.3.3. How satisfied are you with the current level of wilderness in your region?

☐ I would prefer a lot less wilderness; ☐ I would prefer less wilderness; ☐ about right; ☐ I would prefer more wilderness; ☐ I would prefer a lot more wilderness; ☐ I don' know

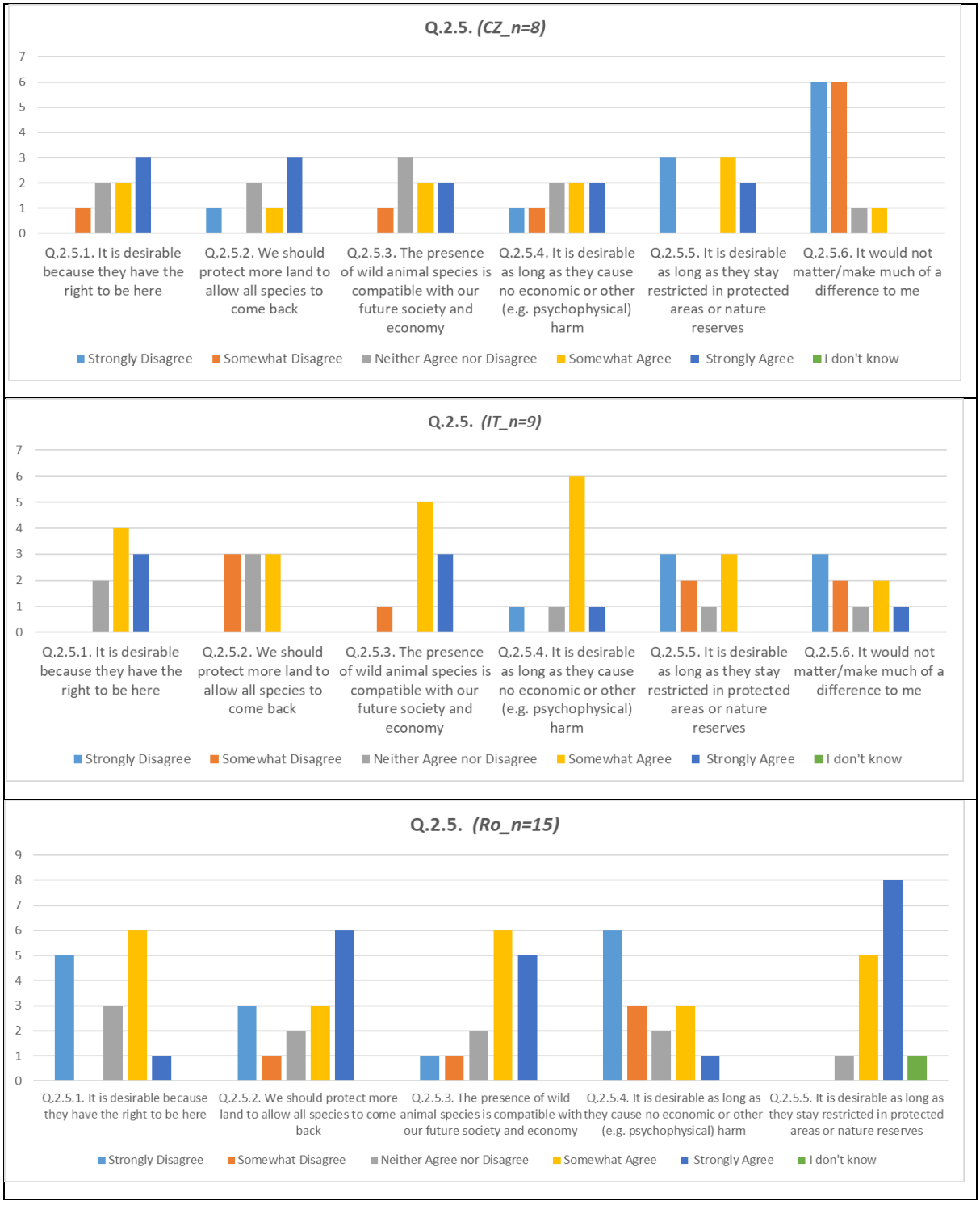


Q.2.5. To what extent do you agree with the following statements about the potential return of wild animal species?

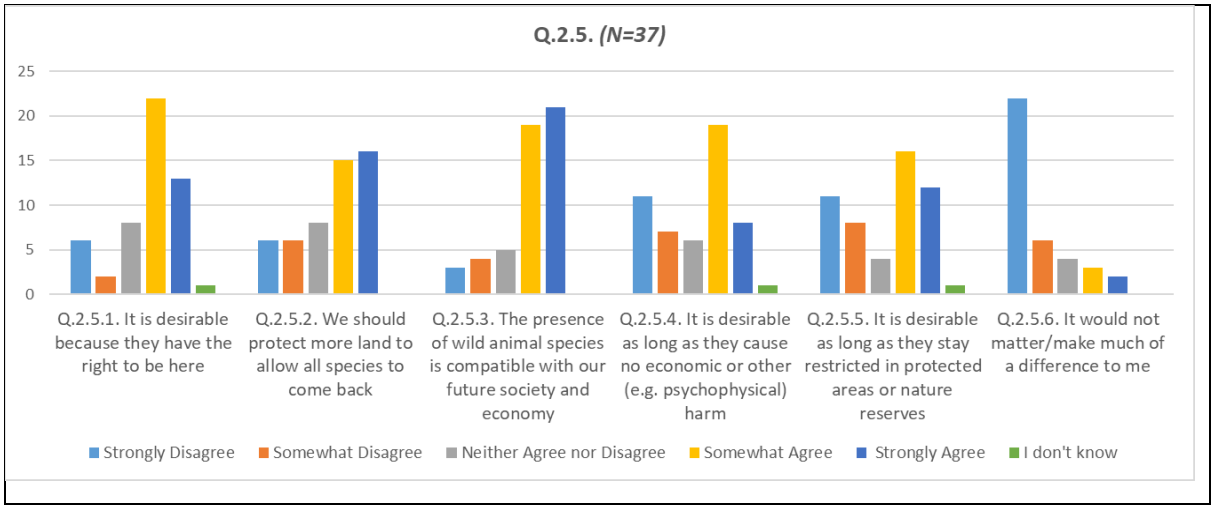




Funded by the European Union

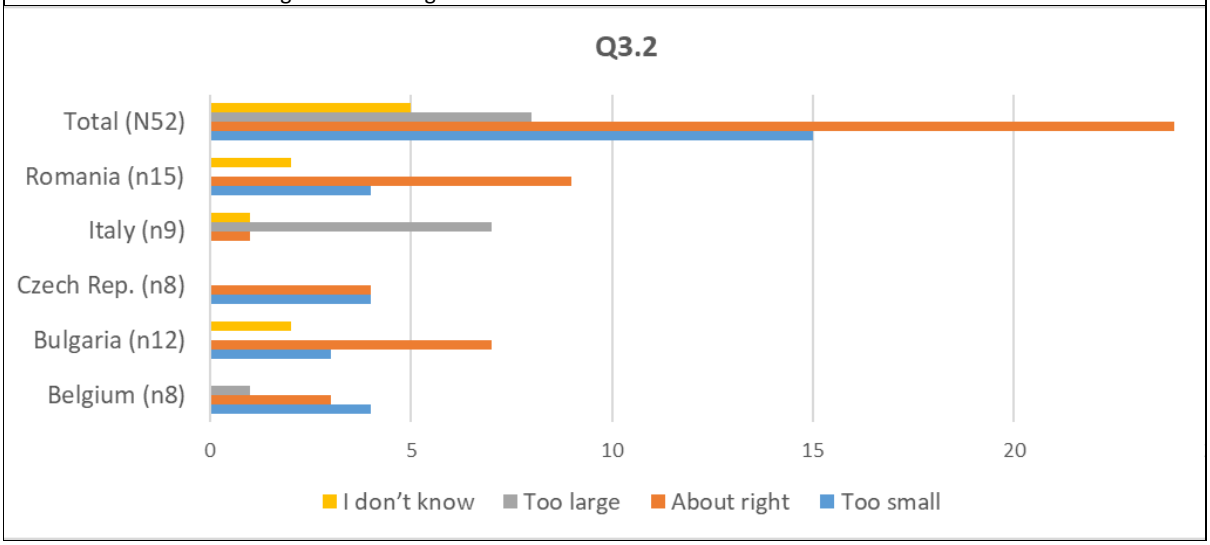


Funded by the European Union

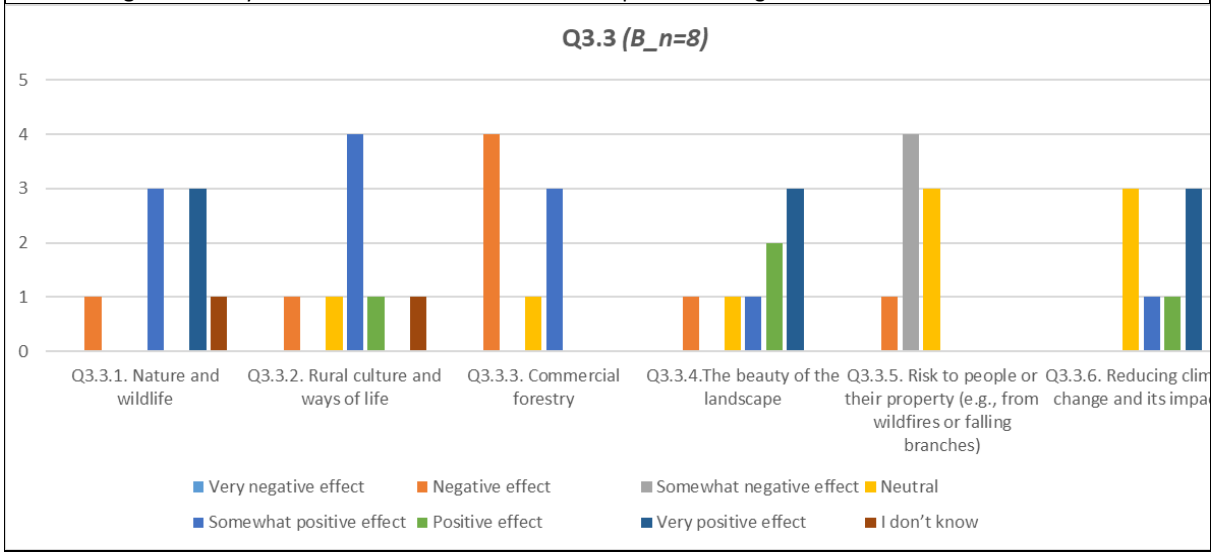


3. Questions about personal beliefs and perceptions on abandonment of land and forest management

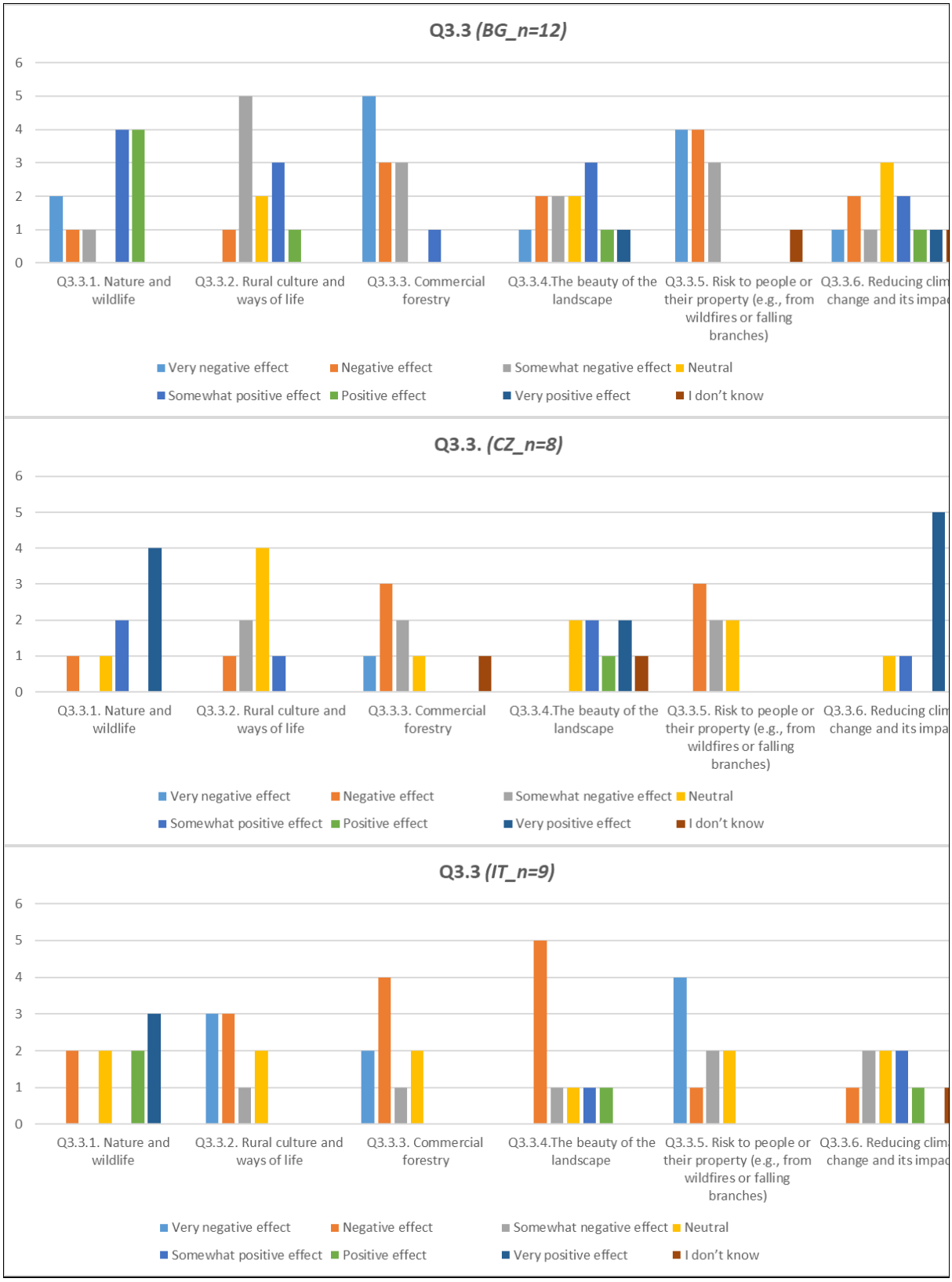
Q3.2. Would you say that the area of unmanaged forests in your region is:
☐ too small ☐ about right ☐ too large ☐ I don't know



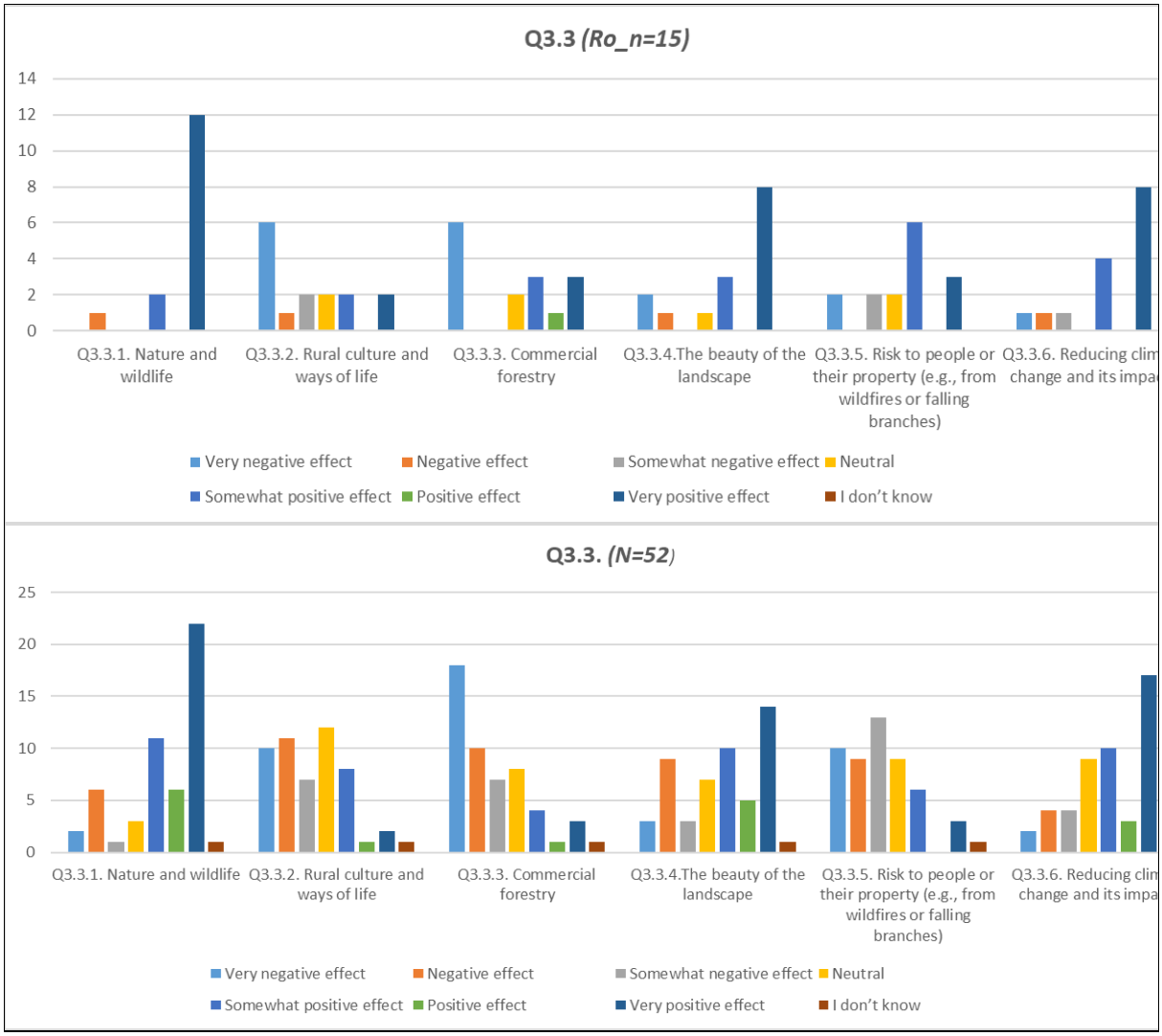
Q3.3. Imagine that in **your region more of the existing forest was allowed to develop freely, without any management**. Do you believe this would have an overall positive or negative effect for the issues listed below?



Funded by the European Union

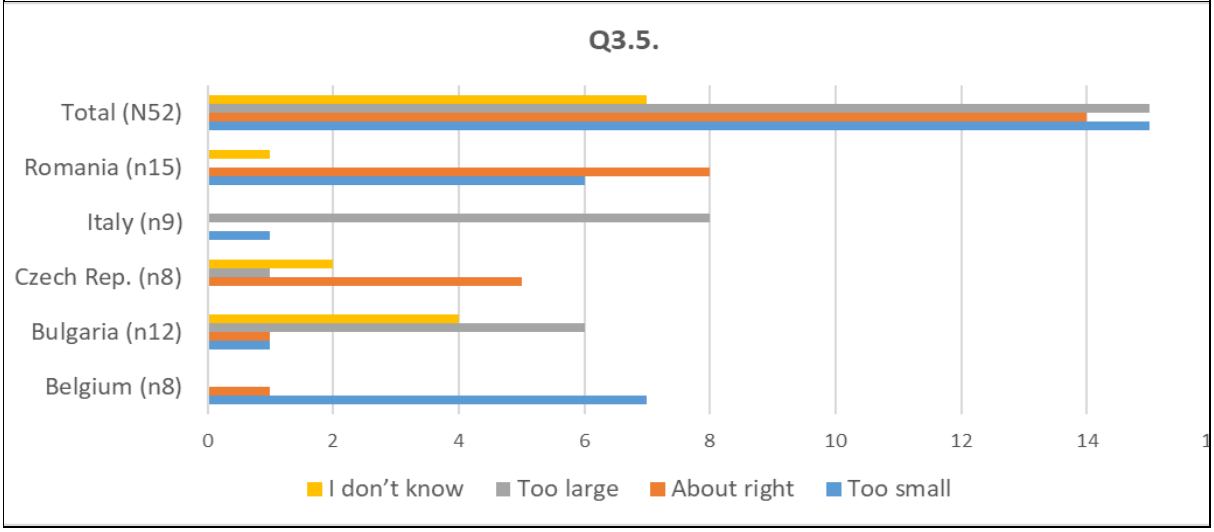


Funded by the European Union



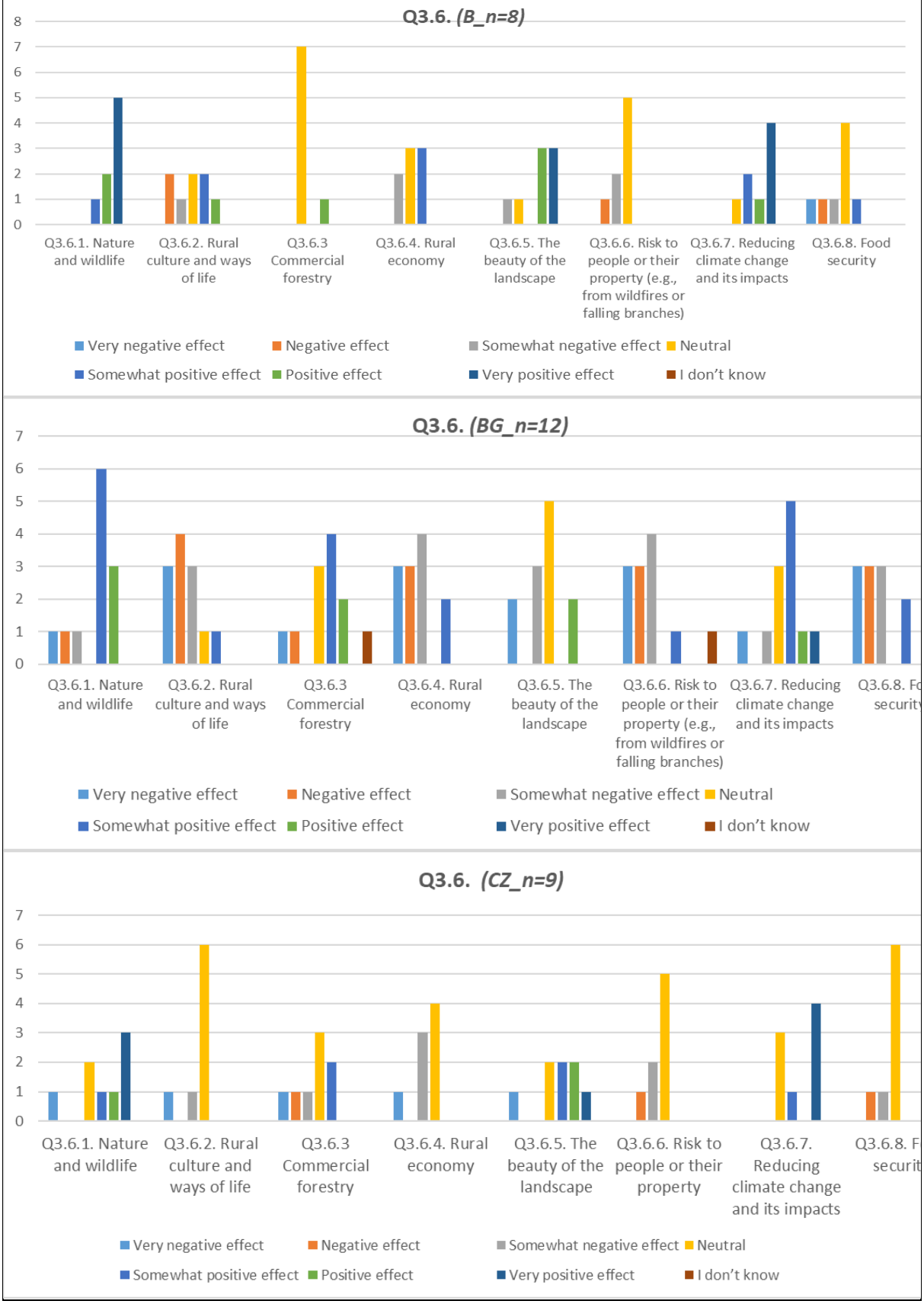
Q3.5. Would you say that the area of abandoned land in your region is:

☐ too small ☐ about right ☐ too large ☐ I don't know

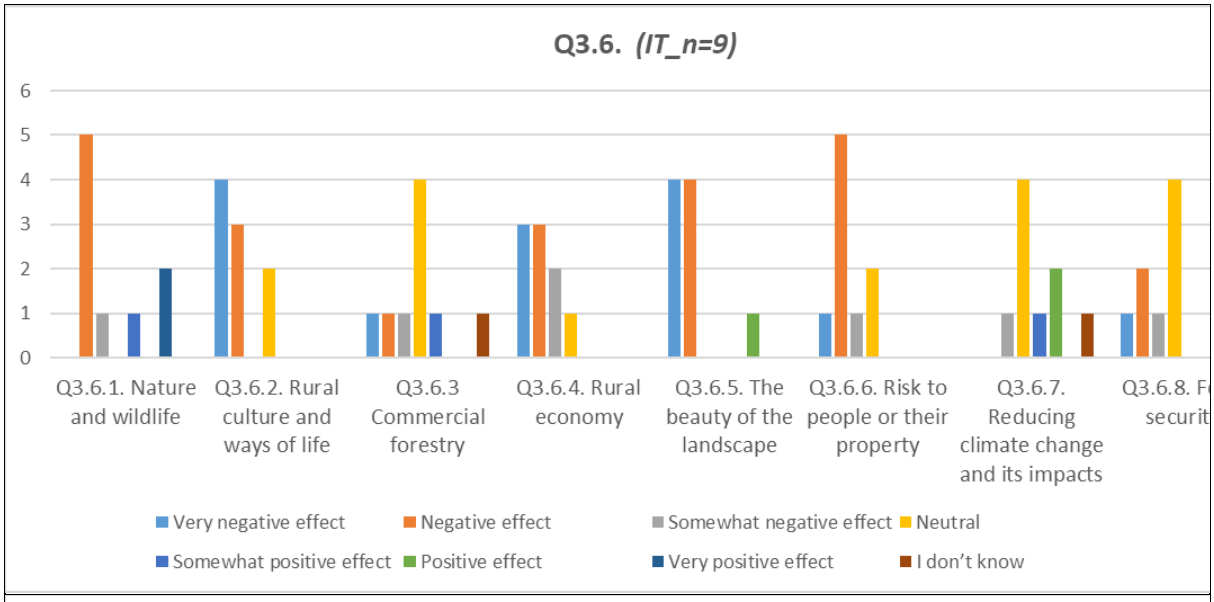


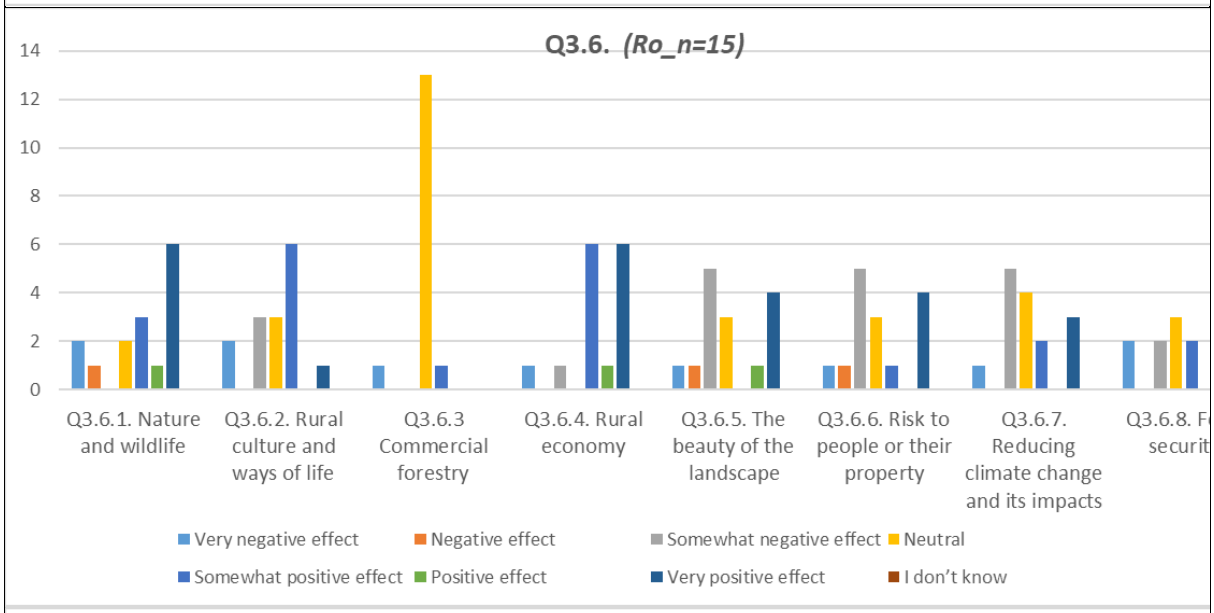
Funded by the European Union

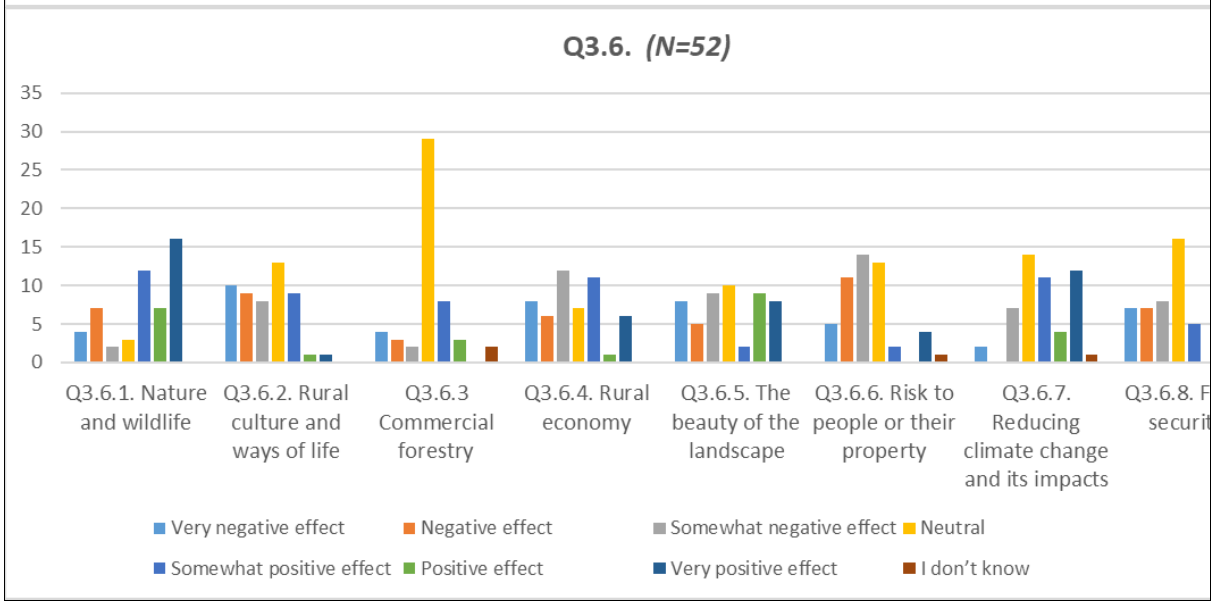
Q3.6. Imagine that more farmland from your region was abandoned and left unmanaged.
Do you believe this would have an overall positive or negative effect for the issues listed below?



Funded by the European Union

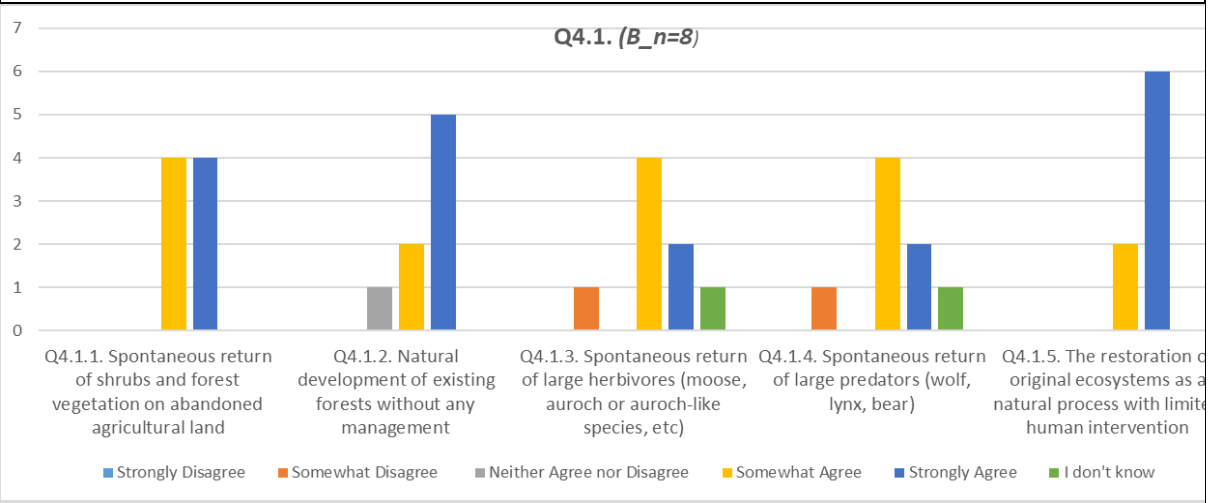


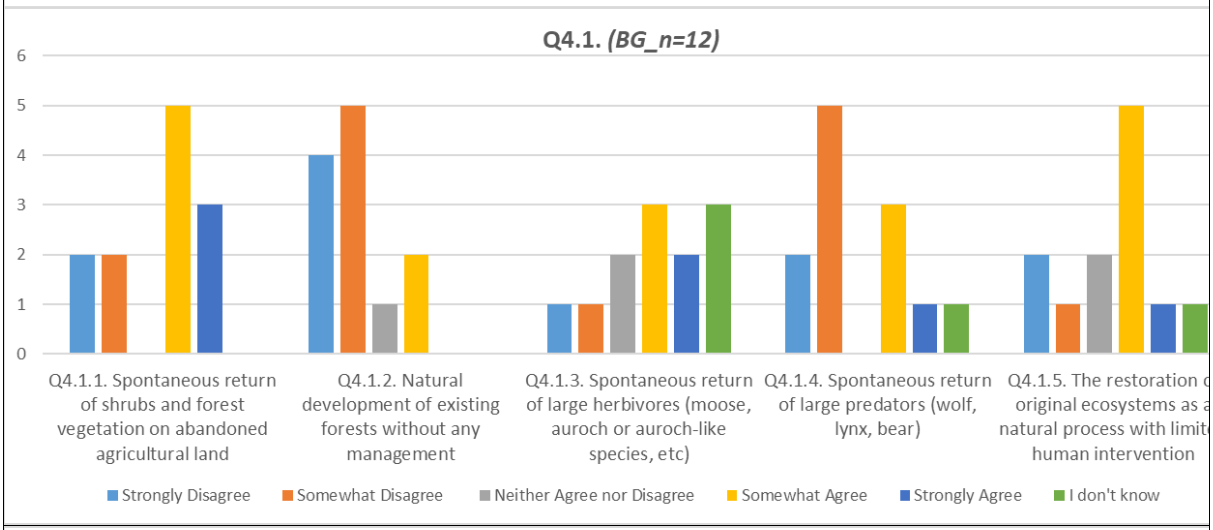


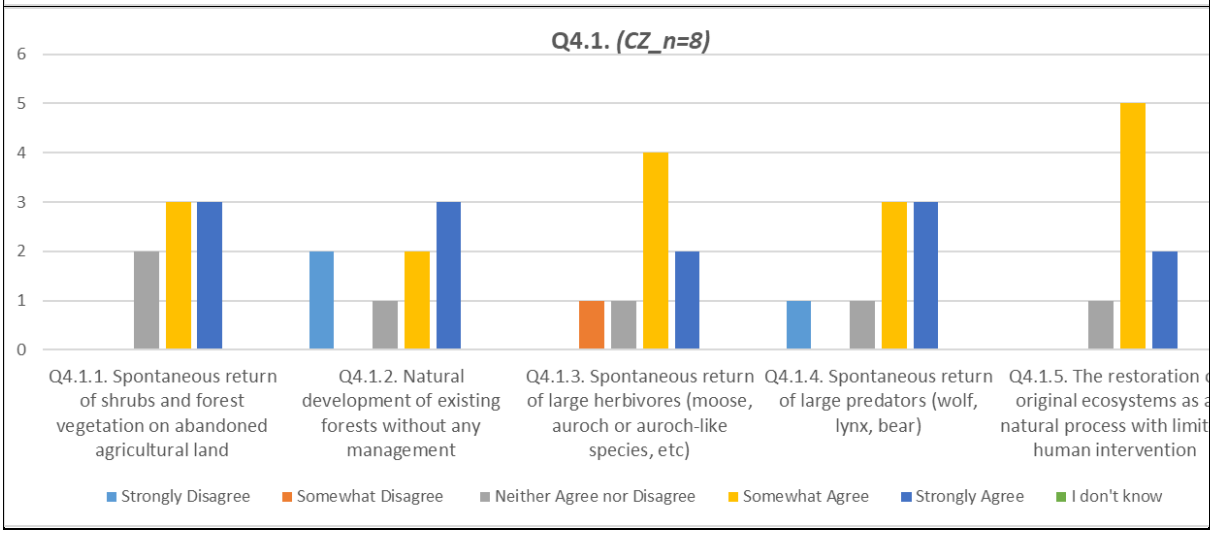


4. Questions about personal beliefs and attitudes on rewilding

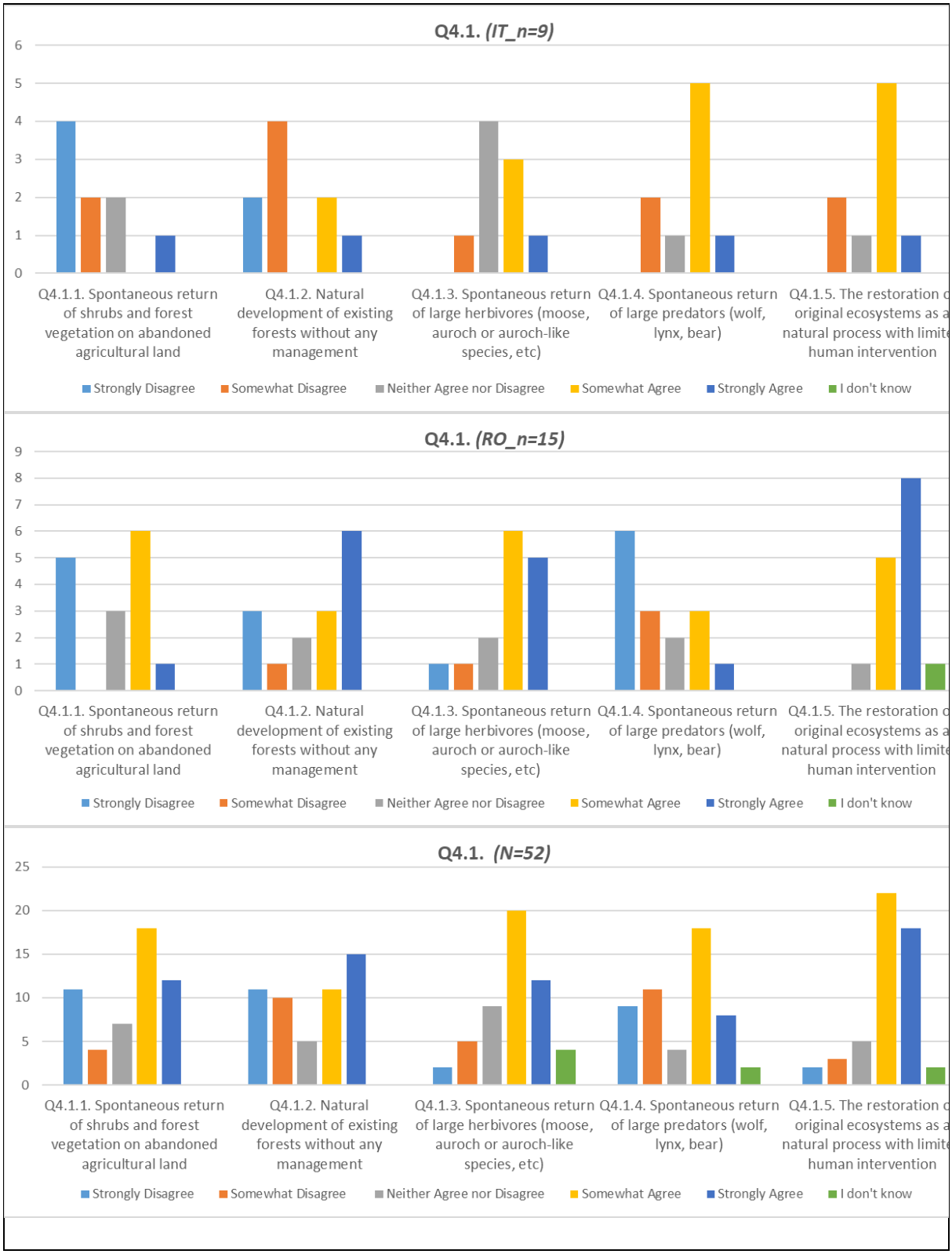
Q4.1. What would be your reaction if the following natural processes occurred spontaneously in your region?





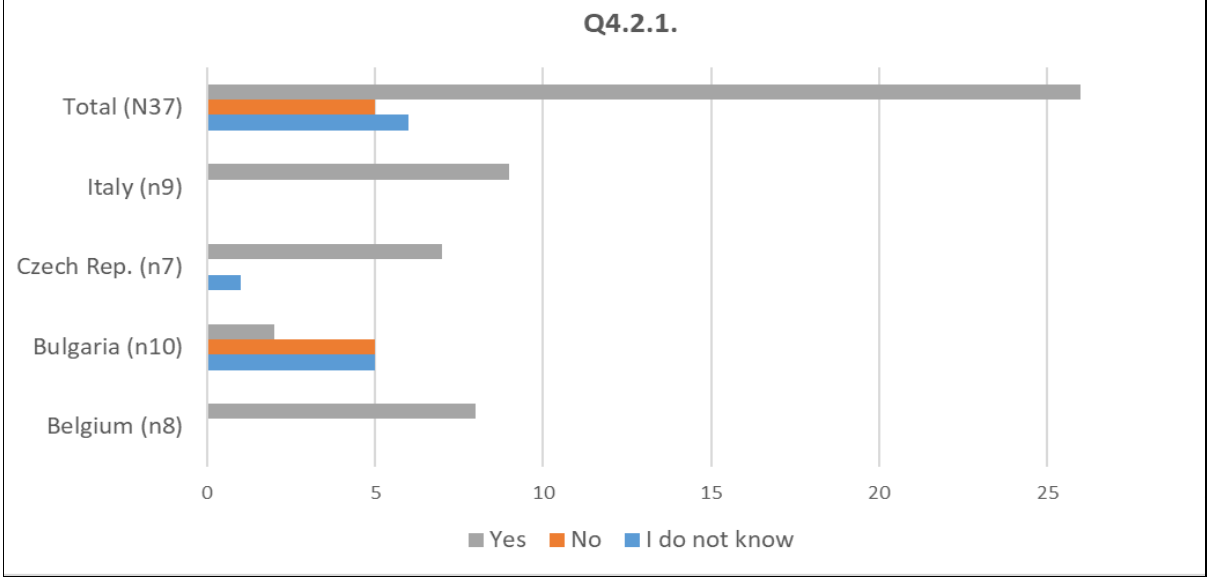


Funded by the European Union

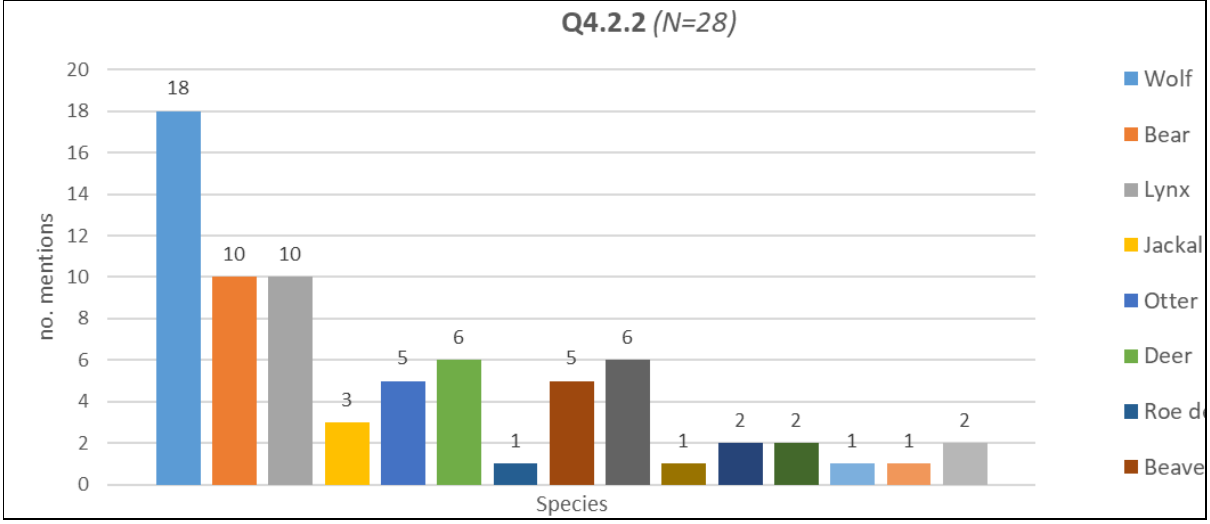


Funded by the European Union

Q4.2.1. Are there any animal wild species that retuned spontaneously in your region? ☐ I do not know ☐ No ☐ Yes.



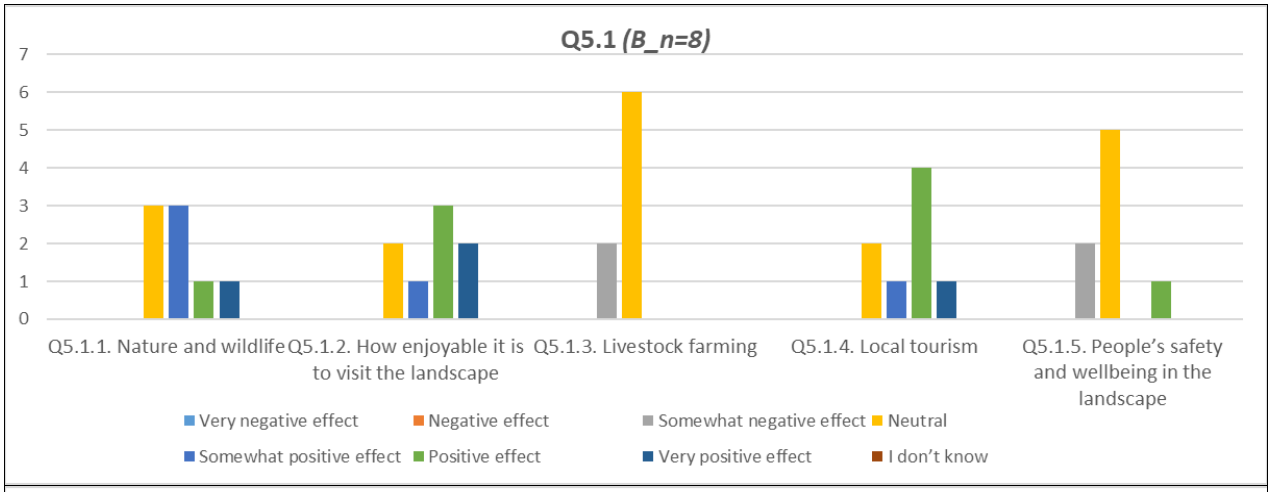
Q4.2.2. If yes, which one? .....

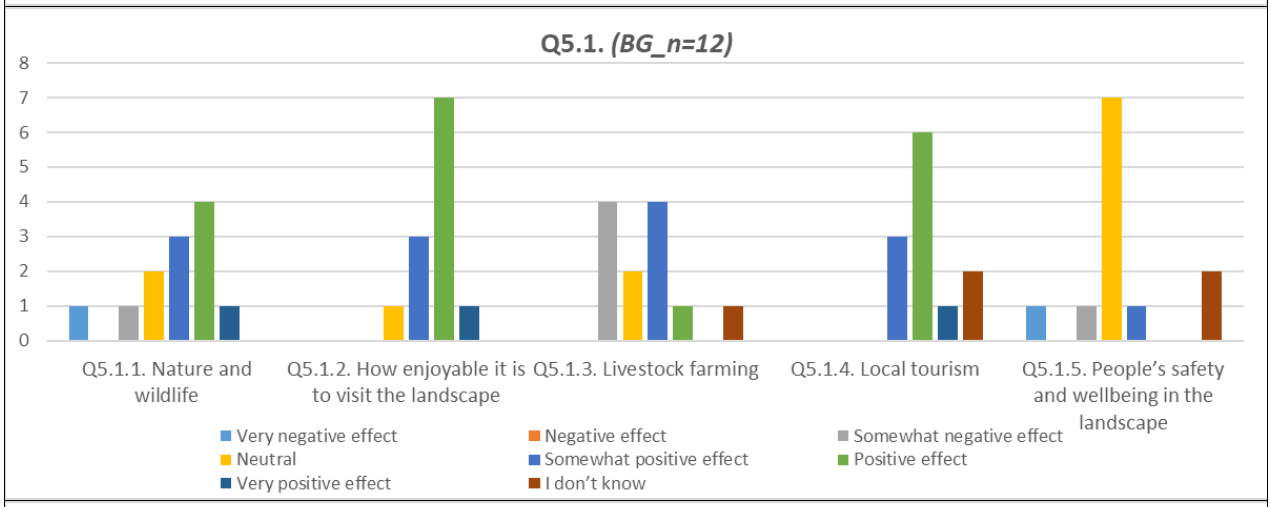


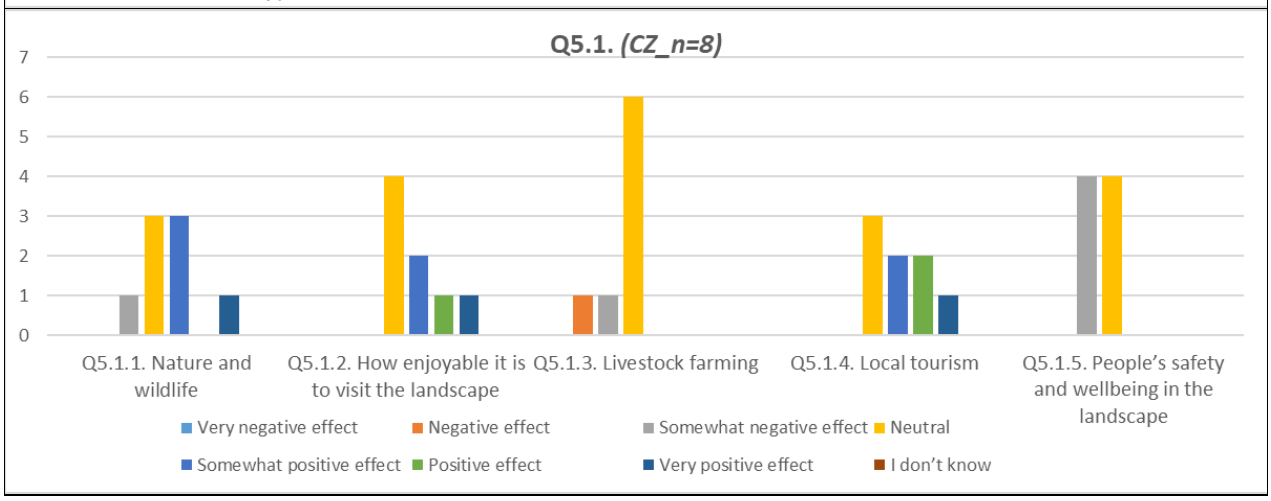
5. Questions on social acceptability and policy measures in favour of wildlife: herbivore species

Q5.1. Imagine that the number of large herbivore species (such as moose, auroch or auroch-like species) increased in the region you live, or that they returned to the landscape if they are not currently present. Do you believe this would have an overall positive or negative effect for the issues listed below?

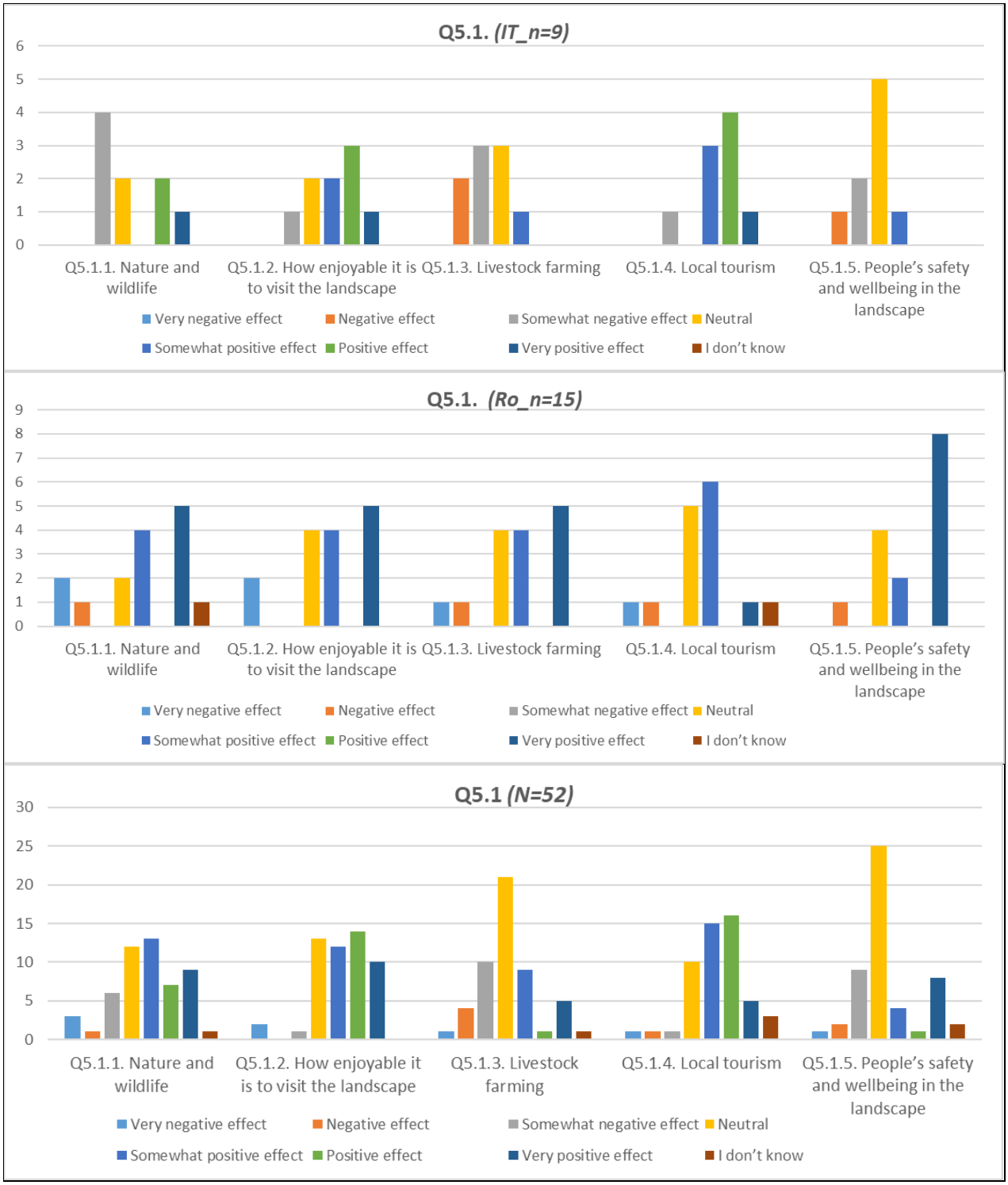
Funded by the European Union







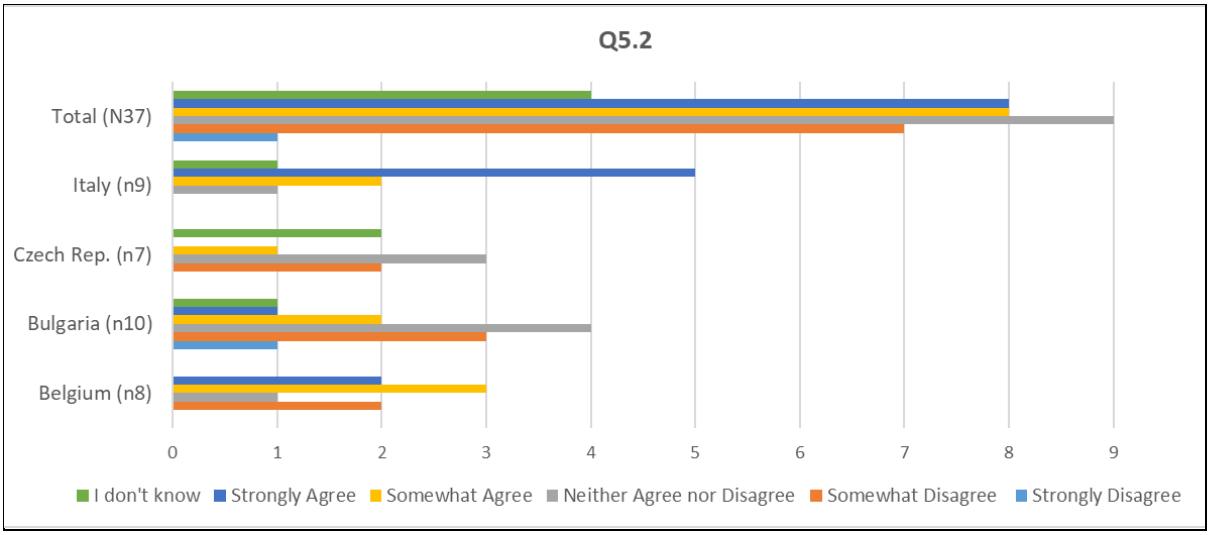
Funded by the European Union



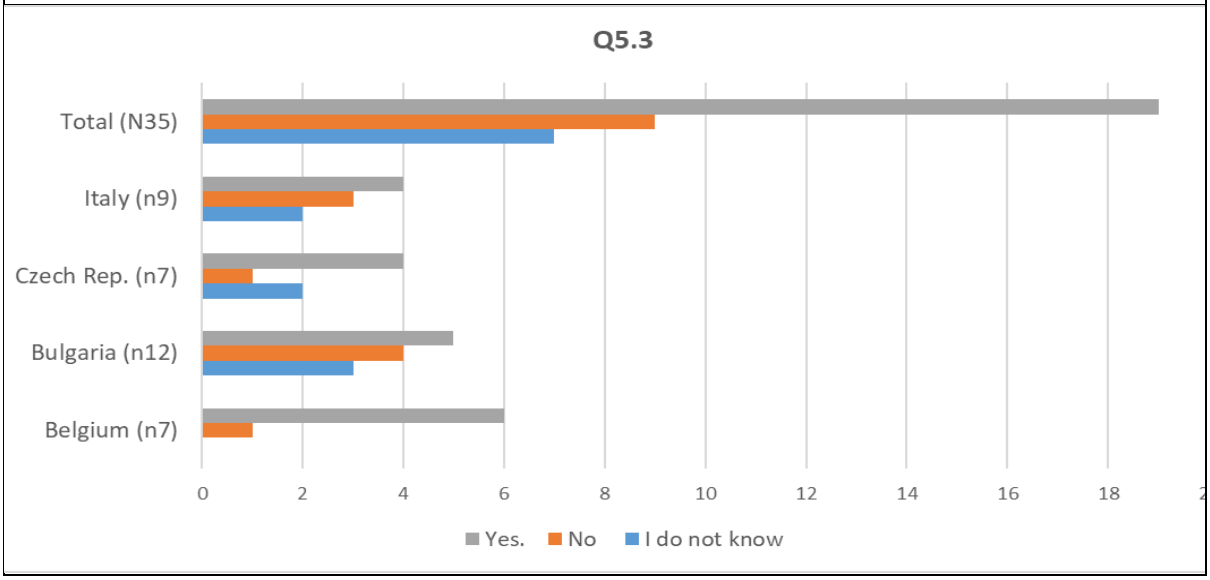
Q5.2. If managed appropriately, the financial impact of the presence of large herbivory mammals can be reduced to acceptable levels. How far do you agree with this sentence?

☐ strongly disagree ☐ somewhat disagree ☐ neither agree nor disagree ☐ somewhat agree ☐ strongly agree ☐ I do not know

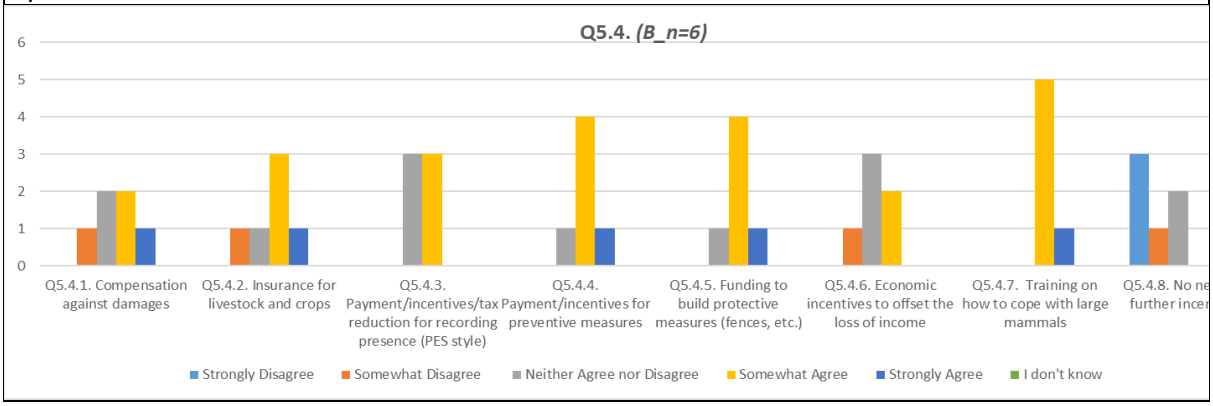
Funded by the European Union



Q5.3. To cope with the presence of large herbivory mammals, is there a need for new policy interventions supporting the coexistence with human activities? ☐ I do not know ☐ No ☐ Yes.



Q5.4. If you answered 'Yes,' please indicate how much you agree with each of the following statements by selecting the appropriate option:

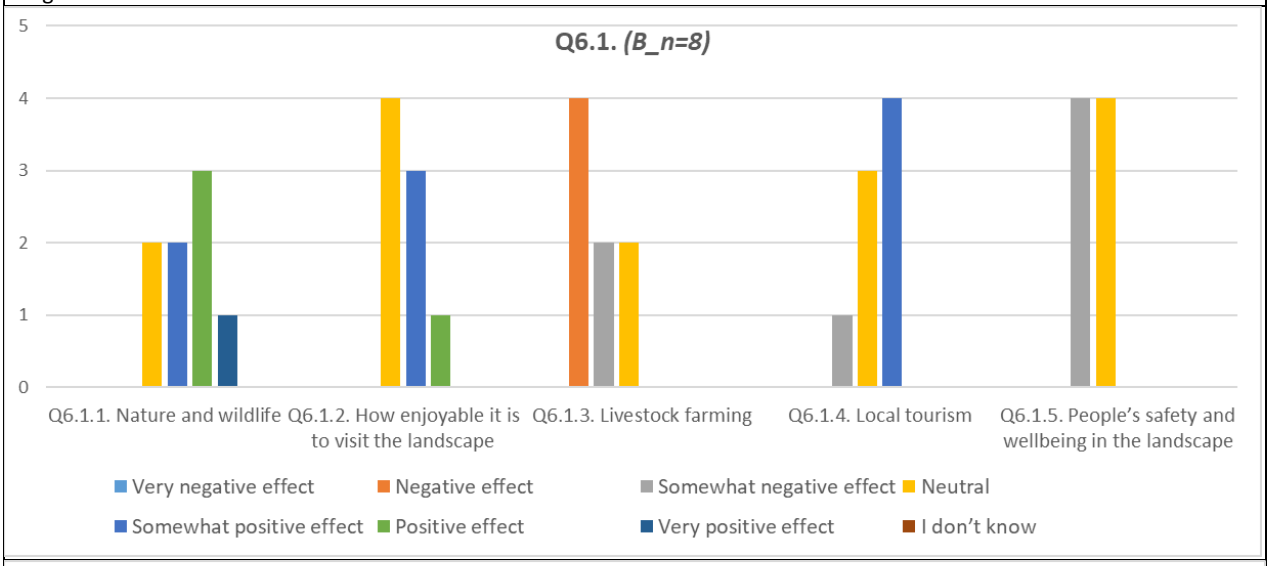


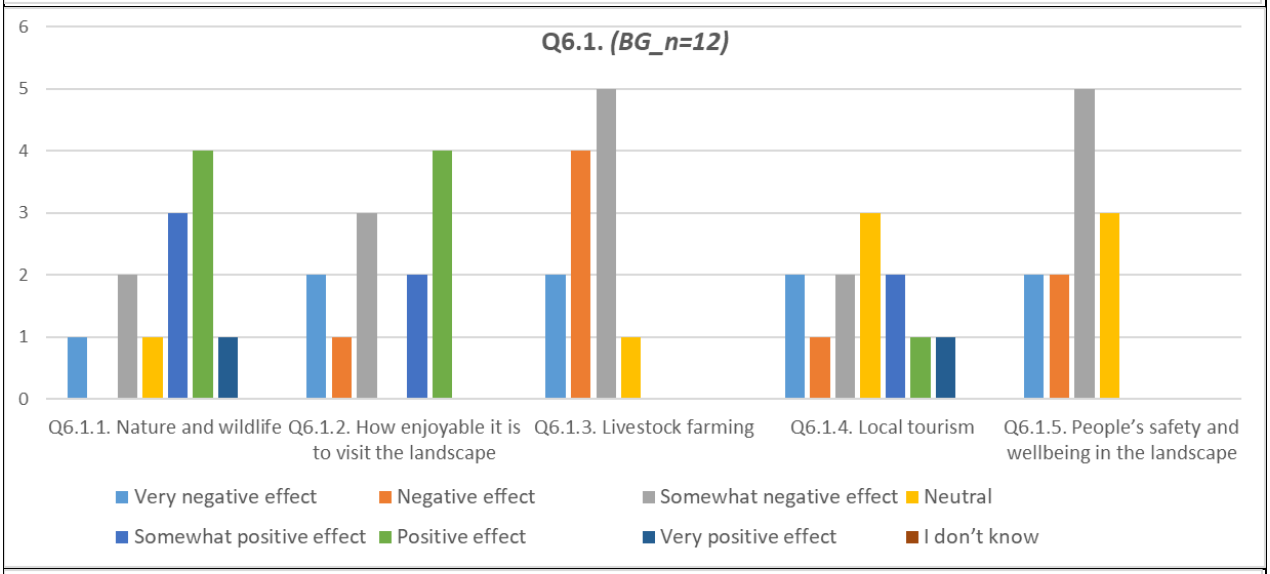
Funded by the European Union

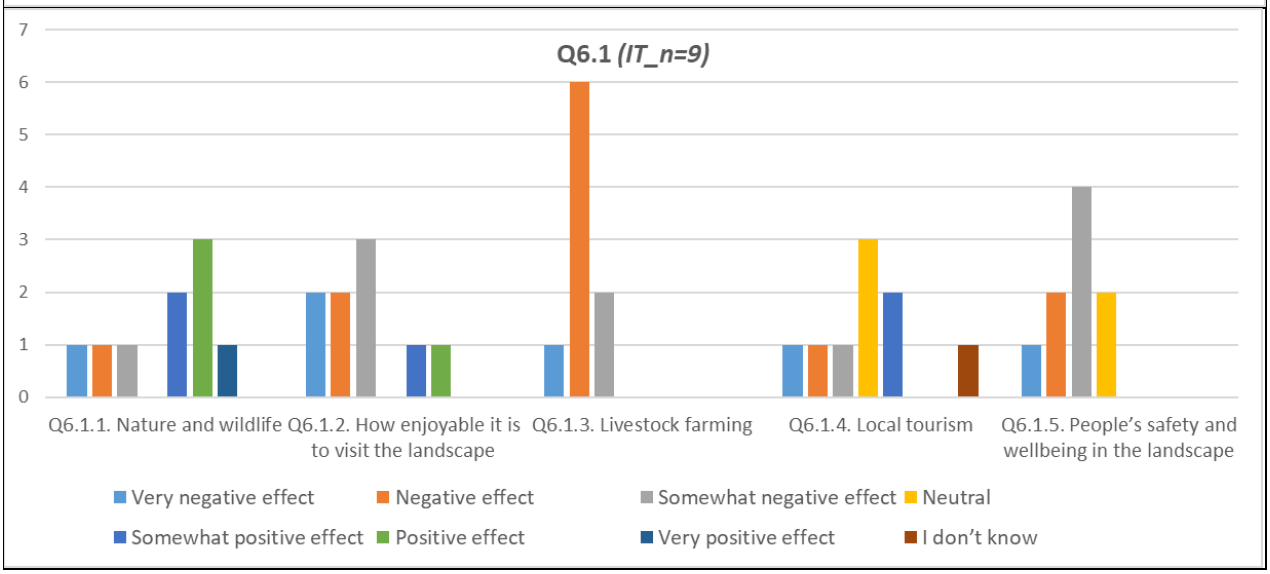
6. Questions on social acceptability and policy measures in favour of wildlife: predatory species

Funded by the European Union

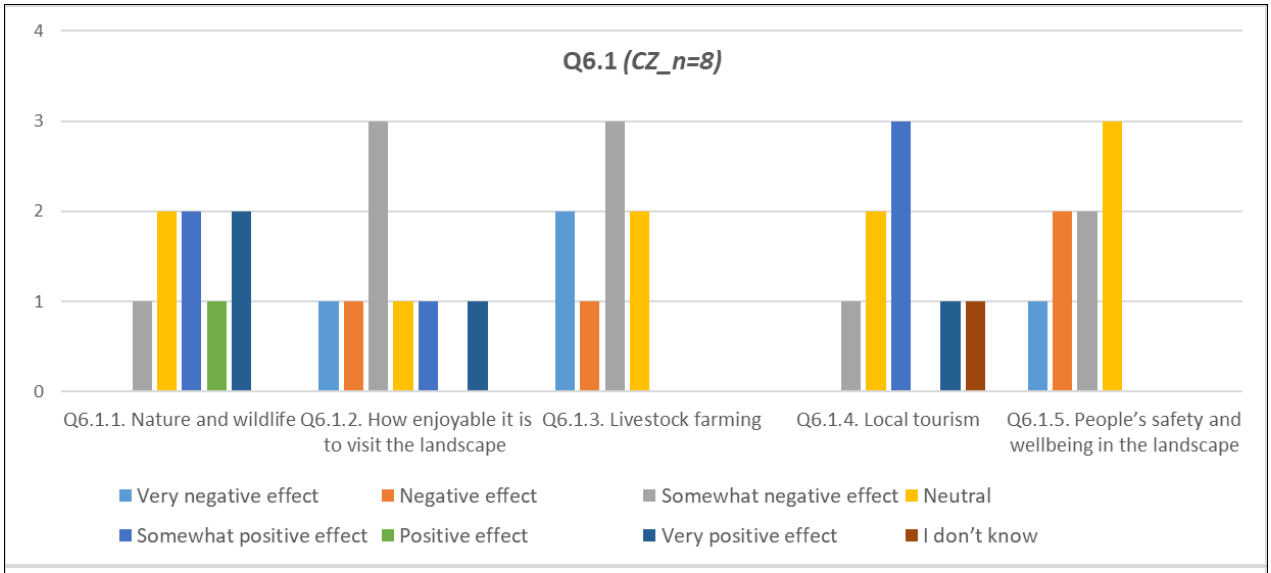
Q6.1. Imagine that the number of large predatory mammals (such as lynx or wolves) increased in the region you live, or that they returned to the landscape if they are not currently present. Do you believe this would have an overall positive or negative effect for the issues listed below?

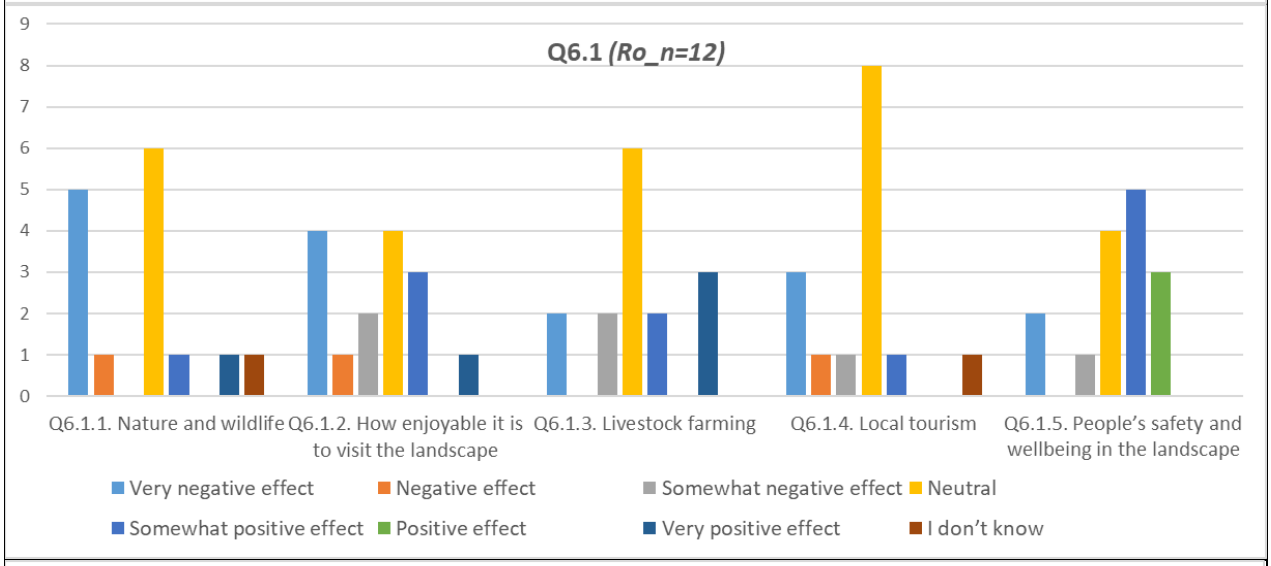


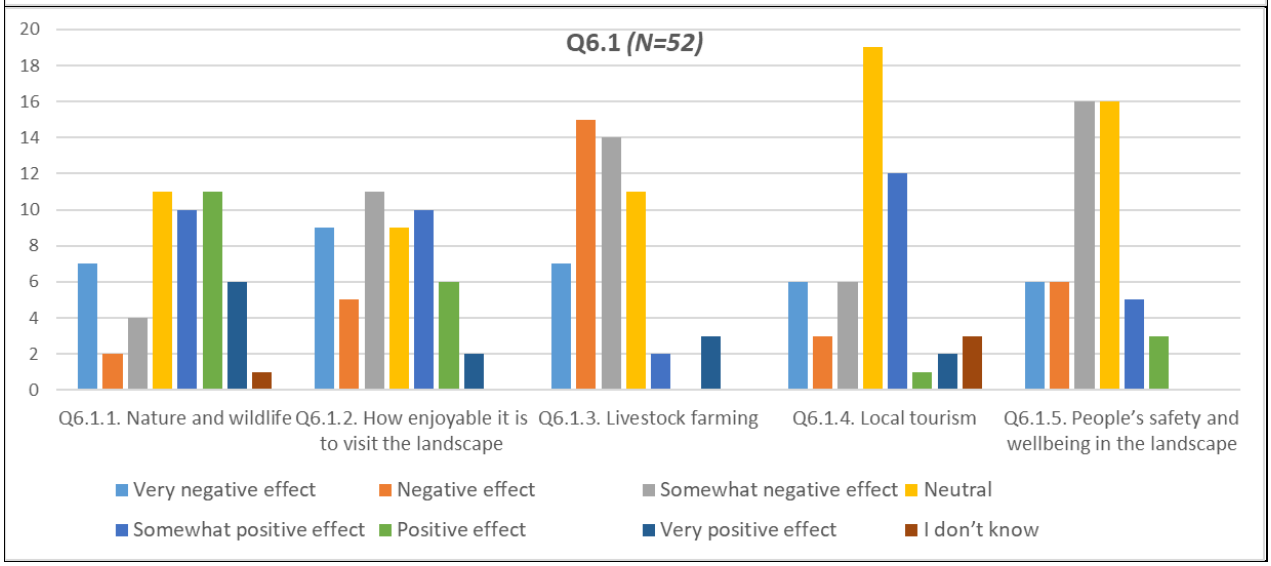




Funded by the European Union

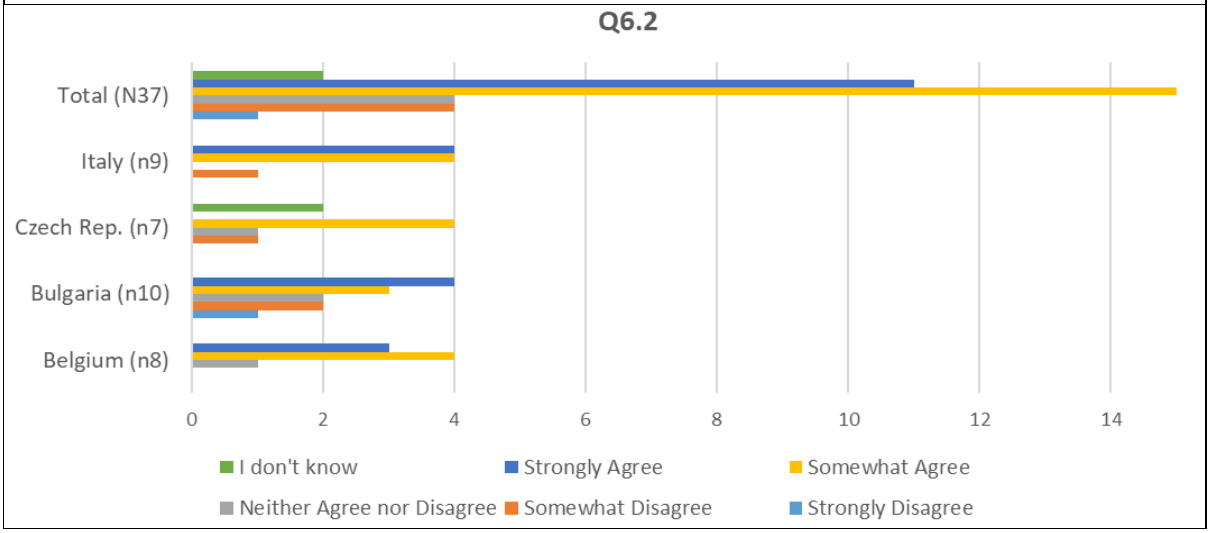




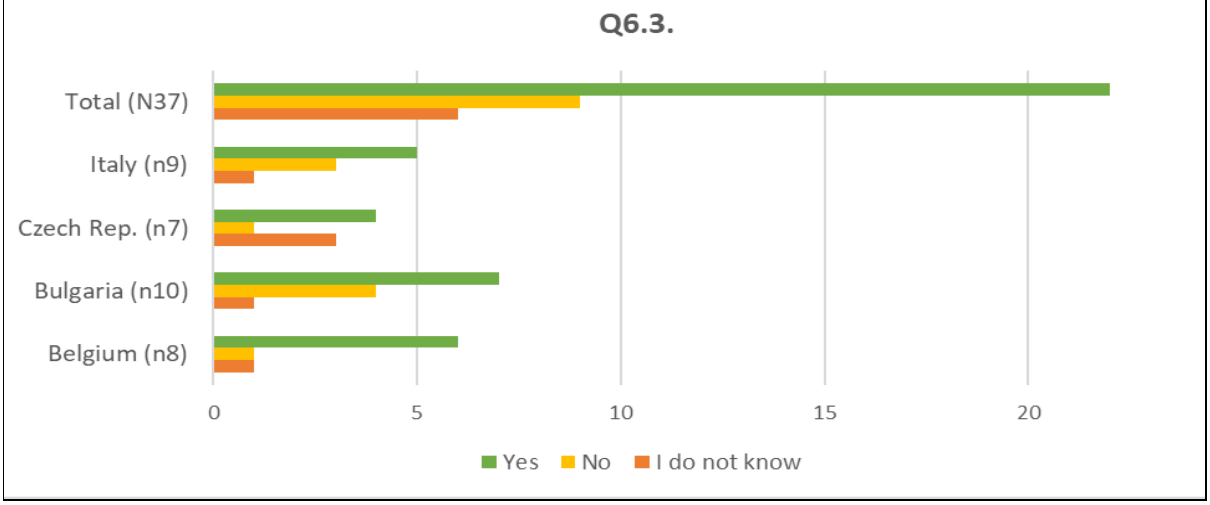


Funded by the European Union

Q6.2. If managed appropriately, the financial impact of the presence of large predatory mammals can be reduced to acceptable levels. How far do you agree with this sentence?
☐ Strongly Disagree ☐ Somewhat Disagree ☐ Neither Agree nor Disagree ☐ Somewhat agree ☐ Strongly agree ☐ I do not know

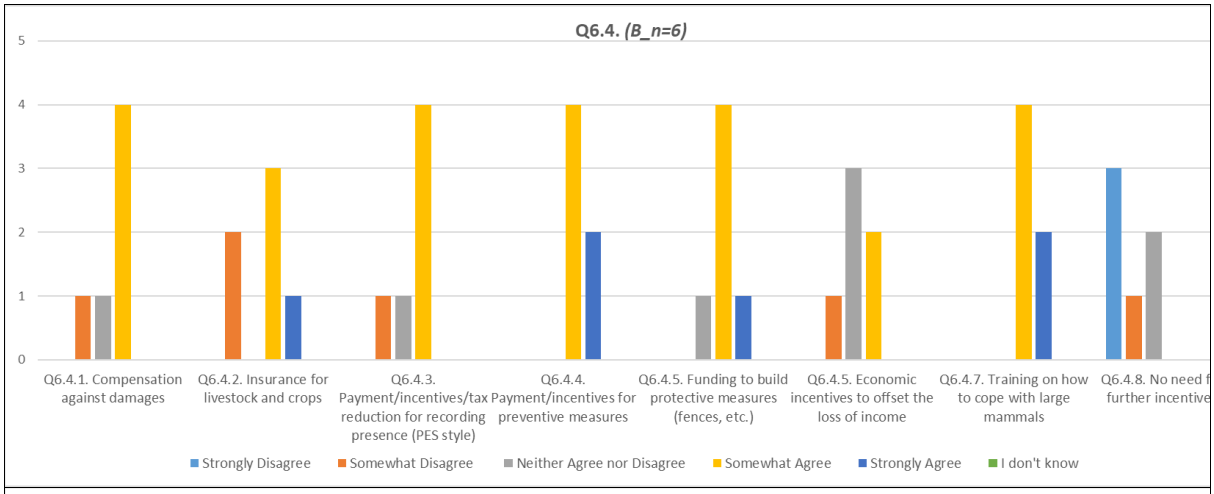


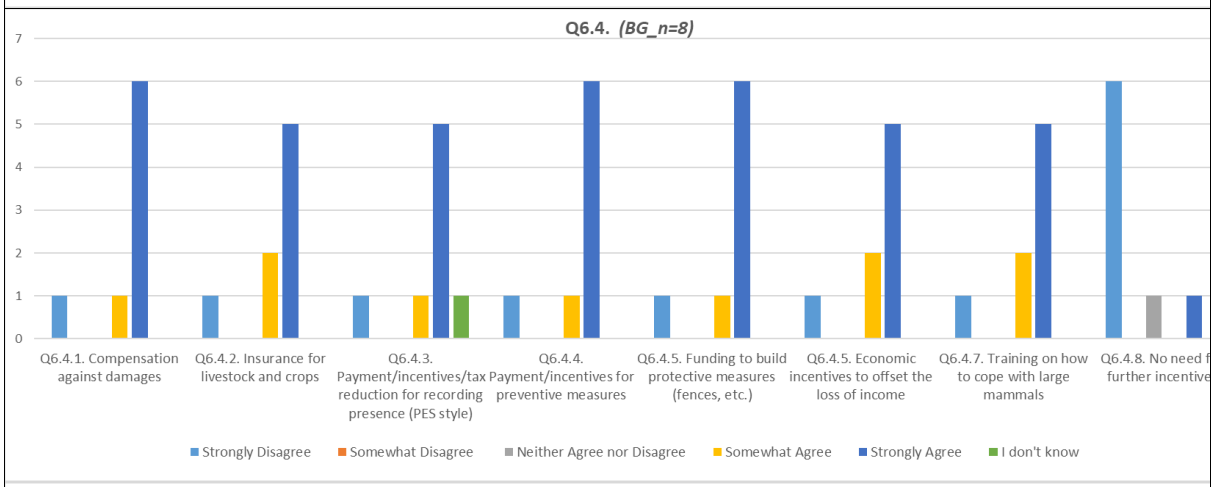
Q6.3. To cope with the presence of large predatory mammals, is there a need for new policy interventions supporting the coexistence with human activities? ☐ I do not know ☐ No ☐ Yes.

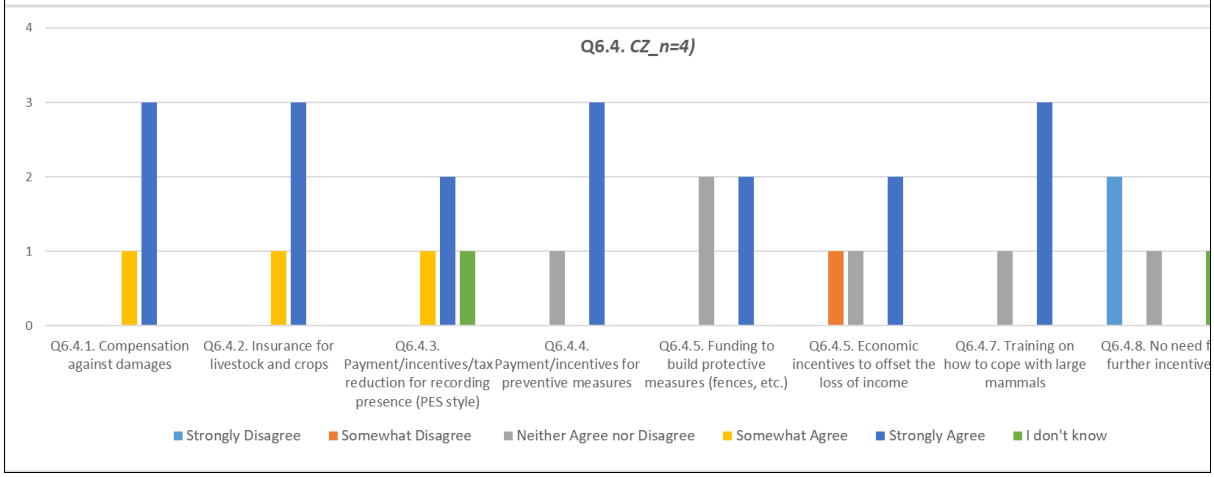


Q6.4. ***If you answered 'Yes,' please indicate how much you agree with each of the following statements by selecting the appropriate option:***

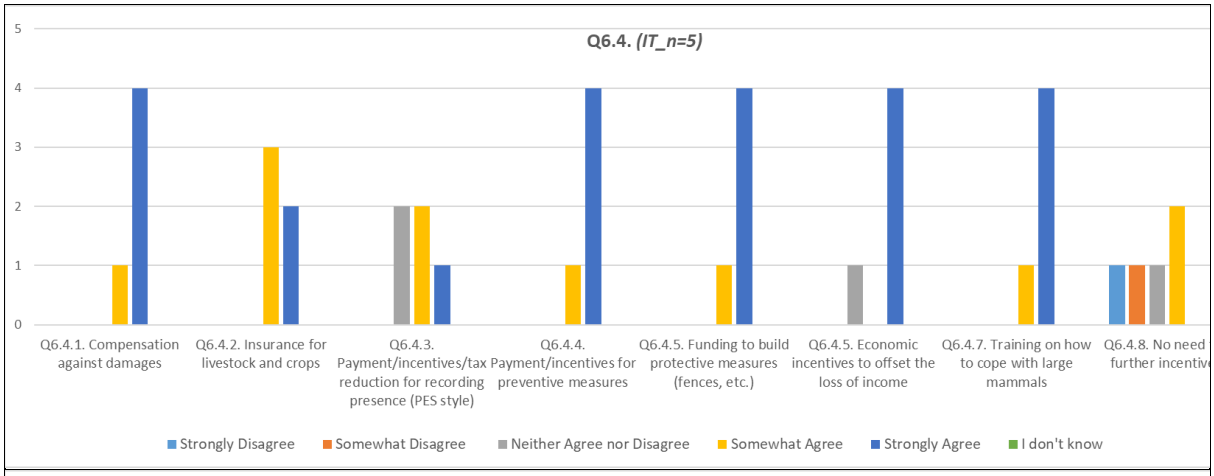
Funded by the European Union

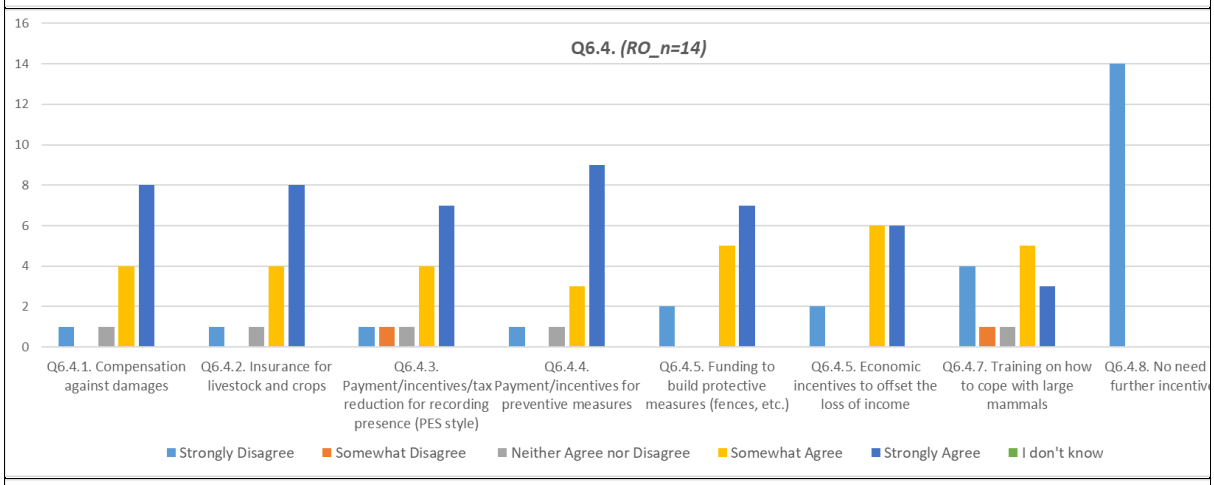


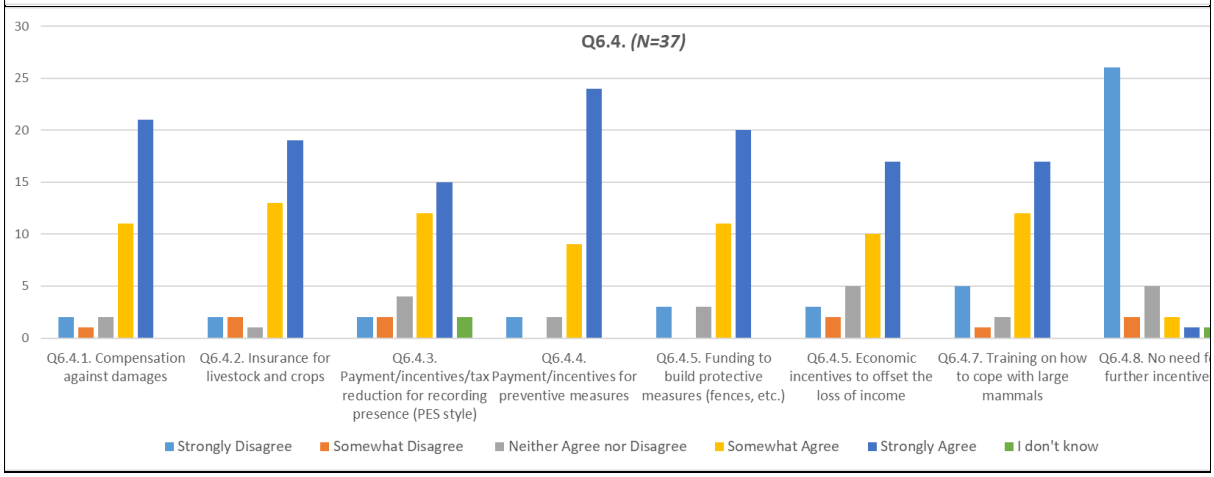




Funded by the European Union







Funded by the European Union

Appendix 10: Coding of the open-ended questions in survey 3 – local level stakeholders' perspective

Deductive categories	Inductive (case specific) categories
Causes of agricultural land abandonment (q2.4.1.)	Historical & political
	Economic factors
	Demographics/climate
Current situation of agricultural land abandonment (q2.4.1.)	Traditional management/Grazing
	Creation of natural ecosystems
	Abandonment in PLA areas
	Reverse rewilding process
Perception on the abandonment of agricultural land (q3.4.)	In line with NP/Nature conservation objectives
	High probability of expansion
	Acceptance/logical.
Perceived opportunities about natural vegetations developed on abandoned agricultural lands (q7.2)	Increased biodiversity/species diversity
	Nature protection/abandonment of unprofitable farming
	Landscape retention: Increased landscape retention.
	Tourism development: opportunities for tourism.
	Increased biodiversity/species diversity
Perceived threats about natural vegetations developed on abandoned agricultural lands (q7.2)	Economic/subsidy loss
	Wildlife conflict
	High security risk (fire/drought)
	Deterioration of landscape permeability
	Food security
Causes of forest management abandonment (q2.4.2)	Post-WWII context
	NP establishment & goal
	Political interference
	Expansion targets
Perception on allowing forests to develop without human interventions (q2.4.2/q3.1)	Strong support/agreement
	Opposition to uncontrolled expansion
	Differences/conflict between "foresters" and naturalists
Strong positive effects of forest management abandonment (q3.3.1)	Increased biodiversity
	Positive effects
	Carbon sink/climate change mitigation
	Increased landscape retention
	Aesthetic
Strong negative effects of forest management abandonment (q3.3.2)	Aesthetics/not beneficial to anyone
	Negative effect on commercial forestry
	"Nothing Left to Abandon"
Perceived opportunities about proforestation (q7.1)	Tourism/new attraction
	Nature conservation
	Economic/financial compensation
	Climate change mitigation

Funded by the European Union

	Change in perception
Perceived threats about proforestation (q7.1)	Bark beetle gradation
	Fire risks: concerns about fire, and security risk.
	Economic/financial loss
	Aesthetics/landscape conflict
	Access restrictions
	Wildlife conflict:
	Negative sentiment from local population