



GRANULAR

REPORT ON THE RURAL PROOFING OF SELECTED RURAL POLICIES

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Table of Contents

1. Executive summary	4
2. Introduction.....	5
3. GRANULAR approach to rural proofing	6
4. Implementation of Rural Proofing.....	8
4.1. Step 1 – Identification of the policy or initiative.....	8
4.2. Step 2 – Summary of the policy or initiative	9
4.3. Step 3 – Assessment of impact	10
4.3.1. Assessment based on the typologies developed in Step 2	11
4.3.2. Qualitative Classification of Impact Types.....	12
4.3.3. Quantitative Impact Ratings from Multi-Actor Labs	14
4.3.4. Assessment of direct versus indirect impacts	18
4.3.5. Analysis of Distributional Effects Across Population Groups	19
4.3.5.1. Geographic or spatial inequalities	19
4.3.5.2. Assessment of actors.....	20
4.4. Step 4 - Data availability (indicators)	22
5. Discussion.....	24
6. Conclusions and next steps	26
7. Acknowledgements	27
8. References	28
8.1. Rural Proofing Exercise Initiatives.....	28
9. Annex I. Multi-Actor Lab Fiches	30
10. Annex II. Results of the Rural Proofing Exercise	39

List of Figures

Figure 1. Overview of the GRANULAR rural proof methodology (Martino et al., 2024).....	7
Figure 2. Overview of questions to be answered as per each pillar (source: Martino et al., 2024).	10
Figure 3. Average polarity of initiatives with respect to their binding or non-binding status.....	16
Figure 4. Average magnitude of initiatives with respect to their binding or non-binding status.	16
Figure 5. Average polarity of initiatives with respect to their implementation stage.....	17
Figure 6. Average magnitude of initiatives with respect to their implementation stage.	17
Figure 7. Frequency distribution of actor types identified in the rural proofing assessments.	21

List of Tables

Table 1. Summary of topics subjected to rural proofing by the Multi-Actor Labs.....	9
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List of Text Boxes

Box 1. Testing the GRANULAR Rural proofing Framework in a Cross-Visit Setting	7
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List of Acronyms

BRIA	Business and Regulatory Impact Assessment
EU	European Union
GRANULAR	Giving Rural Actors Novel data and re-Useable tools to Lead public Action in Rural areas
LL	Living Lab (Multi-Actor Lab involved in co-designing, testing and validating GRANULAR work)
LTVRA	Long Term Vision for Rural Areas
MAL	Multi-Actor Lab (entity bringing together actors from science, policy and civil society)
NGO	Non-government organisation
OECD	Organisation for Economic Co-operation and Development
RL	Replication Lab (Multi-Actor Lab assessing how to replicate the tools and methods of the project in other countries)
RUSTIK	Rural Sustainability Transitions through Integration of Knowledge for improved policy processes
UK	United Kingdom
UKRI	United Kingdom Research and Innovation
UNIPi	University of Pisa

Executive summary

The European Commission Communication on the Long-term Vision for Rural Areas (LTVRA) (European Commission, 2024) and its new Vision for Agriculture and Food (European Commission, 2025) identify rural proofing, alongside territorial impact assessments, as means of tailoring rural policies to avoid unintended adverse impacts on rural areas, and between different types and places within rural areas.

The objective of this deliverable (D5.2) is to provide an overview of the rural proofing assessments undertaken by the GRANULAR Multi-Actor Labs ([GRANULAR \(ruralgranular.eu\)](https://ruralgranular.eu)) of self-selected policies or initiatives relevant to their territories. The deliverable includes annexes of a set of narratives of the rural proofing of selected policies and initiatives by the Multi-Actor Labs, and a set of fiches comprising one page per rural proofing assessment. It is supported by the knowledge accounts of the compiled assessments in MS Excel from the Labs.

The rural proofing approach uses the framework developed in GRANULAR, linking rural proofing and the GRANULAR rural compass (Oostindie et al., 2024), guidelines to which are provided in Martino et al. (2024). It adopts a participatory strategy which has been adapted in the context of operation of each territory.

A total of eight Multi-Actor Labs (3 Living Labs, 5 Replication Labs) from seven countries, (i.e. Finland, Greece, Italy (2x), Lithuania, the Netherlands, Poland, and the United Kingdom (Scotland)) undertook the exercise, following a multi-Lab assessment in a cross-visit in Region Occitanie, France, February 2025. The assessments of each of the policies has provided empirical evidence and insights to the impacts in rural areas in relation to the elements of the GRANULAR framework. The outputs include identification of whether expected impacts are in line with the aims of the policy, or if there are unintended adverse consequences, conflicts, trade-offs or a lack of coherence and consistency, within or between areas.

Analysis was undertaken at the level of the policy or initiative, covered a qualitative classification of types of impacts, quantitative assessments of impacts, distributional effects across population groups, direct and indirect impacts, including spatial inequalities, and the actors affected or involved. Evidence from the assessments show the importance of capturing information on direct improvements and indirect, systemic, and potentially unintended effects, which are essential for holistic rural policy design, in line with guidance from Defra (2022).

The analysis is at multiple levels comprising the initiative as a whole, and of the individual elements of the framework (i.e. action areas/pillars of the Long Term Vision for Rural Areas and Rural Compass). For example, in the Prosperous Rural Areas area of action, assessments of policies and initiatives predominantly identified economic development and cultural identity, with a strong use of the "Increase" category (8 entries, 36.4%). The rural proofing assessments under the Stronger Rural Areas area of action was characterised by a dominance of Enable or Facilitate impacts (9 entries, 40.9%), particularly centred around youth engagement and community development. Overall, analysis of impact types shows a strong positive framing of the initiatives across the four LTVRA pillars which suggests a prevailing orientation toward growth, improvement and inclusion in how Multi-Actor Labs interpreted and described impacts.

Quantitative assessments of the direction (polarity, i.e. positive vs negative impact) and strength (magnitude, i.e. low vs high impact) of assessed impacts of the policy or initiative on rural areas were conducted. The results show strong internal coherence between how initiatives were described qualitatively and assessed quantitatively. Generally, binding initiatives were associated with higher average magnitude scores compared to those which are non-binding, and implemented initiatives received higher polarity ratings than those still in planning or consultation phases.

Most initiatives operate across multiple layers, producing immediate outputs whilst also simultaneously contributing to broader, longer-term systemic transformations and reflecting the multi-dimensional nature of rural areas and of the policy measures, as documented in the fiches in Annex I (Rouby and Ptak-Bufkens, 2022). The direct dimension of initiatives was highlighted, particularly in domains such as circular economy and tourism development, where interventions were expected to produce immediate and measurable benefits.

Consideration of the distributional effects across population groups shows a high level of reference (75 citations) to geographic or spatial inequalities, reflecting differences in location, accessibility or existing infrastructure (physical, natural and social capital). The conclusion is that more remote or infrastructurally disadvantaged areas were less likely to benefit from an initiative, or would benefit differently than more connected or central areas. The types of actors most affected by initiatives are those who are local inhabitants, seasonal dwellers, and visitors.

The assessments of selected policies and initiatives provide empirical evidence of the needs of indicators, showing that well-targeted indicators were identified for rural proofing elements which are conceptually clear, backed by standard data sources. For most assessments extensive sets of indicators were identified, and the geographic level at which they already operate or could be applied. The types of indicators cited reflect the initiative under scrutiny more than the broader monitoring of the rural proofing elements. The Multi-Actor Labs reported a lack of clear indicators for some elements, such as Research and innovation, and sourced guides for indicators of relevance such as the EU Bioeconomy Monitoring System (https://knowledge4policy.ec.europa.eu/visualisation/eu-bioeconomy-monitoring-system-dashboards_en) for which local equivalents were sourced (e.g. employment in primary sectors, Rural Scotland UK Living Lab under Sustainable bioeconomy, including forestry in the framework of the EU Forest Strategy and the carbon farming initiative).

The framework proves effective across different types of initiatives — binding or non-binding, and proactive or incidental in their rural focus — although it appears to yield deeper, more detailed insights for binding and proactively rural initiatives and broader, directional findings for non-binding or incidentally rural cases. However, that may also be a reflection of the initiatives selected and constitutions and remits of the Labs. Further development of the process will be informed by the feedback and experiences of the Multi-Actor Labs to be taken into account in its future application within GRANULAR and potential wider adoption. Learning from testing will include refining the rural proofing framework template informed by the approach of individual Labs to produce final assessments, and any modifications made to the means of reporting.

Further analysis of the results of the rural proofing process will inform recommendations for tailoring rural policies (Deliverable D5.3) at multiple levels (European, national and local) principally from governments and the public sector, but also recognising the relevance of private sector policies and initiatives.

Findings and the rural proofing process also provide materials for knowledge exchange with actors in policy and practice which included a webinar organised by the Rural Pact (June 2025), bilateral calls with EU DG AGRI (June 2025), and proposed for events of the European Rural Parliament (October 2025) and the EU Week of Regions and Cities (October 2025).

1. Introduction

The European Commission Communication on the Long-term Vision for Rural Areas (LTVRA) notes that: “As part of the Better Regulation Agenda, a rural proofing mechanism will be put in place, notably to assess the anticipated impact of major EU legislative initiatives on rural area [...]. The Commission also invites Member States to consider implementing the rural proofing principle at the national, regional and local level.” (European Commission, 2024).

The EU Vision for Agriculture and Food (European Union, 2025) notes the need to provide conditions for a future-proofed sector which plays a role in the transition to a low-carbon economy and that the rural proofing principle, including territorial impact assessments, will be further operationalised and sufficiently resourced at EU level.

National policies are also being informed by rural considerations are taken into account, through rural proofing, such as England and Scotland, UK (Defra, 2024).

In GRANULAR, a rural proofing framework has been designed and tested in the project’s set of Multi-Actor Labs (Living Labs - [GRANULAR \(ruralgranular.eu\)](https://ruralgranular.eu)) with a view to developing tailored rural policies. The objective of this deliverable (D5.2) is to provide an overview of the rural proofing assessments undertaken by the Multi-Actor Labs of self-selected policies or initiatives relevant to their areas of interest.

It reports on the outputs from use of rural proofing in the GRANULAR Multi-Actor Labs. These provide bottom-up reviews of the potential impacts of policies and initiatives on their rural areas, negative or positive, and evidence of characteristics required of policies such that they create positive effects on rural areas. An aim of the analysis of each of the policies is evidence and insights as to whether, in relation to the elements of the GRANULAR framework, the impacts in rural areas are in line with the aims of the policy, or if there are unintended adverse consequences or a lack of coherence and consistency, within or between areas (Martino et al., 2024, GRANULAR D5.1).

The deliverable sets out the GRANULAR approach to rural proofing in Section 2. The rural proofing assessments are analysed and described in Section 3 following the four steps of the GRANULAR framework. The assessments are articulated under the four action areas (or Pillars) of the European LTVRA (European Commission, 2024a), summarised in Annex I (Multi-Actor Labs Fiches) and Annex II (Results of the rural proofing exercise). Findings are discussed (Section 4) and summarised with next steps (Section 5).

2. GRANULAR approach to rural proofing

The GRANULAR framework for rural proofing was set out in Deliverable D5.1 (Martino et al., 2024). It follows a checklist approach (Delgado-Viñas et al., 2022) which provides a screening tool to help identify whether a policy or initiative has a different impact in different rural areas, recognising that rural areas are not homogenous in nature (e.g. Hall and Gibson, 2016; Mantino et al., 2023). Implementation of the approach adopts a participatory strategy which has been adapted in the context of operation of each Lab within their territory.

The approach is underpinned by a rural proofing Framework which is based upon the integration of the GRANULAR Rural Compass (Oostindie et al., 2023) and its functionalities and components with the actions and activities of the LTVRA Action Plan (European Commission, 2024a). The Framework has been developed by critically assessing their respective aspects, seeking complementarities and checking for overlaps. The value of integrating these tools is a means of addressing various aspects of rurality, with insights to elements such as demographic trends, access to services, cultural heritage, tourism, commuting and migration, environmental performance, ecosystem services, natural capital, and economic diversification.

The elements of the checklist are grouped under the headings of the four pillars, or action areas, of the Long Term Vision for Rural Areas: Stronger, Connected, Prosperous and Resilient. The building blocks of the LTVRA are included under their relevant pillar, and elements drawn from the GRANULAR Rural Compass are allocated to the pillar of most relevance. This approach enables the rural proofing narratives to be articulated with respect to the framework of the LTVRA.

The Framework guides the user through different facets of “rurality” and takes into account the four pillars of the LTVRA, thus orientating and providing policy direction, from the policy planning, design, adoption, implementation, evaluation and revision, and through to its monitoring. As such, the approach also aligns with the EU Better Regulation Toolkit (European Commission, 2023).

The tool has been compiled in MS Excel, containing rural proofing steps. The steps provide information on the policy or initiative and: i) a high level assessment of whether it may have impacts (positive or negative) on rural areas; ii) a summary of the policy or initiative; iii) the responses to the proofing questions. The output of the guidelines is an overall assessment of the policy or initiative. This comprises a narrative summary, descriptions of the types of impacts, quantitative and qualitative estimates of the magnitude of such impacts (positive or negative), and narratives of means of mitigation.

An overview of the GRANULAR rural proofing methodology is illustrated in Figure 1 (Martino et al., 2024). The approach is split into two main phases and four steps as follows:

- **Step 1 – Identification of the policy or initiative:** During this initial step, Living Labs all select an appropriate initiative / policy / legislation for rural proofing. Notably, not all initiatives / policies are for rural proofing (or at least not at all governance levels), so it is important to critically assess initiatives / policies / legislations that are to be tested for their suitability before proceeding to subsequent steps.
- **Step 2 – A summary of the policy or initiative:** In this second step, Living Labs dive deep in the selected policy or initiative, carefully summarising its key components. In fact, to undertake a complete and thorough rural proofing, all those involved in its assessment should to become familiar with the content of the initiative / policy, such as its objective, activities, main actors and mechanisms.
- **Step 3 – Assessment of impacts:** As last and main step of the standard rural proofing, Living Labs shall consider whether, potentially, the elements of the GRANULAR rural proofing Framework could be effected (positively or negatively) by the implementation of the chosen initiative / policy / legislation in the relevant rural area.
- **Step 4 – Identification of statistics and indicators:** As part of the “extended rural proofing”, step 4 aims at identifying relevant indicators should that could be used to analyse the effects highlighted in Step 3. As part of this step, the data required for the indicator should also be identified, from where and how it is available, and how it should be interpreted.

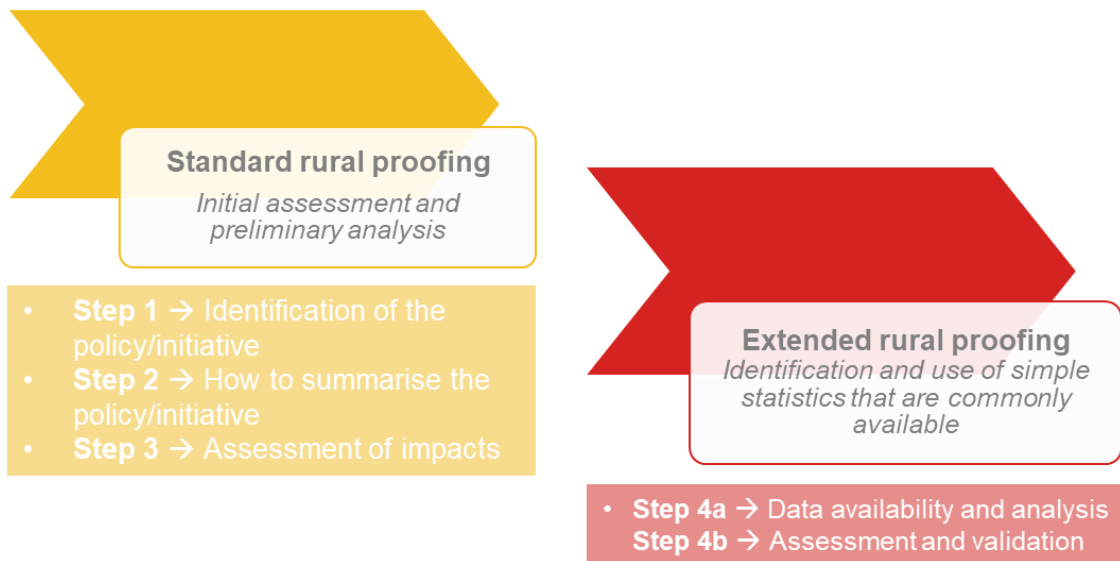


Figure 1. Overview of the GRANULAR rural proof methodology (Martino et al., 2024)

Introductions to the rural proofing process were undertaken through 2024. Guidelines were circulated and a webinar run for the Living Labs in preparation for the test phase (26 March 2024). The methodology and framework were presented to all Work Packages leaders for validation (3 May 2024). A presentation was made to the Replication Labs at the briefing event at University of Pisa, Italy (28 June 2024).

Deliverable 5.1 (published August 2024) comprises guidelines on rural proofing, and a background to their development. These guidelines were circulated for the launch of the rural proofing on 27 September 2024, with a webinar explaining the approach. Documentation was circulated on 3rd October 2024, with subsequent engagement through the GRANULAR Executive Board and the Multi-Actor Labs team of Work Package 6 to answer questions on the process and any issues which had arisen within the Labs.

The methodology and framework were also tested during the Cross Visit organised by the French Living Lab (Pyrénées Méditerranée) in March 2025, during which representatives from 4 Living Labs tested the framework on one of the initiatives covered by the cross visit, i.e. a car-pooling initiative set up by the Occitanie Region. This experience yielded useful insights on the potential of the tool, as well as highlighting how the same initiative could impact different areas in very different ways, as elaborated in the textbox below.

Box 1. Testing the GRANULAR Rural proofing Framework in a Cross-Visit Setting

The GRANULAR rural proofing framework was tested in a workshop setting during a cross-visit to the **Pays Pyrénées Méditerranée Living Lab (France)**. Unlike the typical process in which a **living lab tests a locally relevant initiative**, this exercise took place in a simplified, collective setting involving **participants from four different Living Labs across Europe**. All participants assessed the same policy initiative—a **carpooling strategy implemented by the Région Occitanie in France** using the rural proofing framework. The initiative is not specific to the participants' home territories and thus the focus was **not on tangible local effects**, but rather on **testing the framework itself** and reflecting on how a similar initiative **might affect their own rural contexts**. Participants were divided into four groups, each tasked with exploring one of the building blocks from the framework



Prosperous Rural Areas: Participants noted that the carpooling strategy could positively contribute to rural diversification and the social economy, particularly by encouraging tourism and improving mobility to rural areas. These effects were considered **direct and positive**, with most ratings receiving scores represented by two or three green dots. While not all elements under this pillar were assessed as being affected, the perceived benefits focused on improved connectivity and opportunity, especially when interpreted in light of local development or tourism strategies.

Stronger Rural Areas: This group identified several dimensions for which the initiative could contribute positively, such as improved access to services and cultural amenities, enhanced mobility options, and greater inclusion of vulnerable groups. Participants highlighted **direct positive impacts** on service access and youth inclusion, although the effect was considered conditional on infrastructure, human resources, and funding. Some elements, particularly those related to rural governance and depopulation, were not considered relevant to this specific initiative.

Resilient Rural Areas: The group identified positive effects mainly in terms of social inclusion and targeted communication, especially for **marginalised groups such as migrants, women, and minorities**. While most environmental and climate-related components were assessed as **not being applicable**, participants rated the relevant social inclusion elements as **directly and positively affected**, noting that the impact would vary depending upon local needs, communication practices, and types of rural areas.

Connected Rural Areas: The group identified **transport and mobility** as the most directly affected element, given that the initiative explicitly targets shared mobility. They noted that its success would depend upon **existing infrastructure and connectivity between rural and urban areas**, with the risk that more remote rural areas could be left behind. Commuting and migration dynamics were also discussed, with participants considering carpooling particularly relevant for addressing **mobility exclusion and accessibility in peri-urban contexts**. While technical and digital components were not seen as directly relevant, the overall impact of the initiative in this domain was rated as positive.

3. Implementation of Rural Proofing

The Multi-Actor Labs are central to implementation of the rural proofing methodology. They bring together actors in science, policy, practice and civic society to provide bottom-up perspectives in their review of policies or initiatives. Their members provide place and context-specific knowledge.

The Multi-Actor Labs were provided with an opportunity to participate in the rural proofing exercise, reviewing options of policies or initiatives to subject to rural proofing. A summary follows of the rural proofing of policies and initiatives by the GRANULAR Multi-Actor Labs. A total of eight Labs (3 Living Labs, 5 Replication Labs) from seven countries (i.e. Finland, Greece, Italy (2x), Lithuania, the Netherlands, Poland, and the United Kingdom (Scotland)) undertook the exercise. Details are provided in Annexes I and II, entailing a summary of findings that are discussed in the following sub-sections.

3.1. Step 1 – Identification of the policy or initiative

During this initial step, Living Labs shall select an appropriate initiative / policy / legislation for rural proofing. Notably, not all initiatives / policies are suitable for rural proofing, or at least not at all governance levels. As such, it is important to critically assess initiatives that are to be tested for their suitability before proceeding to subsequent steps. Following the implementation of the rural proofing in 8 Multi-Actor Labs, a wide range of initiatives has been selected to undergo the rural proofing exercise.

The policies or initiatives analysed cover a range of types of geography (e.g. Finland Island Policy), specific regions (e.g. Ignalina region, Lithuania), or nations (e.g. Lithuania, The Netherlands). Topics reviewed were thematic (e.g. Environment Strategy, Rural Scotland; waste disposal, Val di Cecina; housing policy, P10; and residence or work permits, Greece), with one on State aid in competition policy (U. Pisa and Pro Loco Massa Antica), and one on encouraging economic revitalisation (West Pomerania, Poland).

Overall, the set of 8 rural proofing exercises, and the test in March 2025 during the cross-visit, provide a basis for considering generic issues such as types of impacts and the extent to which they are positive or negative on or within rural areas, and who and how to involve stakeholders in rural proofing processes. They provide different topics with which to gain insights to the relevance of different types of indicators for tracking impacts according to the elements of the GRANULAR rural proofing framework (see Section 3.3), and learning about the types of gaps which may be filled by the novel datasets and indicators being developed in Work Packages 3 and 4 and sources of data of relevance (McCallum et al., 2023).

3.2. Step 2 – Summary of the policy or initiative

The aim of Step 2 is to scrutinise the initiative and address key questions relating to "who does what, and how?". The output provides a concise summary of the type of initiative being reviewed, what it is about, and how the initiative functioning (provided in Annex I).

Building on the information provided by Multi-Actor Lab on the reviewed initiative, a categorisation was developed using four key dimensions, as set out below:

- **Rural Relevance:** Distinguishing between initiatives that proactively targeted rural areas (5 initiatives, i.e. PL, NL, UK, FI, IT 2), and those where impacts on rural areas were not central to the broader policy objectives not targeting rural areas (3 initiatives, i.e. IT 1, EL, LT).
- **Stage of Implementation:** Differentiating between initiatives that were fully rolled out (5 initiatives, i.e. IT 1, FI, EL, IT 2, UK), partially implemented (PL), or still in the planning or consultation phases (2 initiatives, i.e. NL, LT).
- **Scale:** Identifying whether initiatives were deployed at national (5 initiatives, i.e. NL, UK, IT 1, FI, EL) or regional levels (3 initiatives, i.e. PL, LT, IT 2).
- **Nature of the Initiative:** Considering whether the initiatives were binding, i.e. have a legal or mandatory nature (6 initiatives, i.e. NL, UK, IT 1, FI, EL, IT 2) or non-binding, i.e. strategic, consultative or voluntary, (3 initiatives, i.e. PL, FI, LT).

The headings of the policies or initiatives reviewed in the rural proofing are summarised in Table 1.

Table 1. Summary of topics subjected to rural proofing by the Multi-Actor Labs.

Country	Multi-Actor Labs	Policy or Initiative Reviewed	Categorisation
Finland	Finland	▪ Finland Island Policy ▪ National Archipelago Programme 2024-2027	Proactive rural targeting; Completed; National; Binding (Archipelago Island Act) & Non-binding (National Archipelago Programme 2024-2027) ¹ .
Greece	Greece	Residence and/or Working Permit for Citizens of Third Countries with a National Entry Visa	Incidental rural impact; Completed; National; Binding.
Italy 1	Distretto Rurale Val di Cecina	Provisions on Municipal Fiscal Federalism	Incidental total impact; Completed; National; Binding.
Italy 2	UNIPi	Recognition of livestock farms for predation damage caused by wolves (canis lupus)	Proactive rural targeting; Completed; Regional; Binding.
Lithuania	Lithuania	Assessment and practical implementation of Universal Design (UD) principles to improve the accessibility and efficiency of public services in Ignalina region	Incidental rural impact; Under consultation; Regional; Non-binding.

¹ In the Finnish case, the analysed initiative includes two levels of implementation: a binding Act and a non-binding National Archipelago Programme 2024-2027).

The Netherlands	P10	National Housing Policy	Proactive rural targeting; Under consultation; Multi-level; Binding.
Poland	West Pomerania	Increasing the potential of rural entrepreneurship and economic revitalisation through the development of short food supply chains and support for innovation in rural areas ▪ Development Strategy of the West Pomeranian Voivodeship until 2030 ▪ Rural Development Policy and Agriculture of the West Pomeranian Voivodeship	Proactive rural targeting; Under consultation; Regional; Non-binding.
United Kingdom	Rural Scotland, UK	Environment Strategy for Scotland	Proactive rural targeting; Completed; Multi-level; Binding.

3.3. Step 3 – Assessment of impact

In Step 3, the rural proofing framework guides an assessment of the potential effects of the policy or initiative organised around the four LTVRA action areas (Stronger Rural Areas, Connected Rural Areas, Resilient Rural Areas, and Prosperous Rural Areas). The elements of the framework combine these action areas and their components with the GRANULAR Rural Diversity Compass ([Oostindie et al., 2023](#)). The assessments are undertaken with a set of questions which comprise responses of qualitative and quantitative responses. Figure 2 provides an overview of the questions to be answered for each action area.

An aim of the assessments is to identify whether expected impacts are in line with the aims of the policy, or if there are unintended adverse consequences, conflicts, trade-offs or a lack of coherence and consistency, within or between areas.

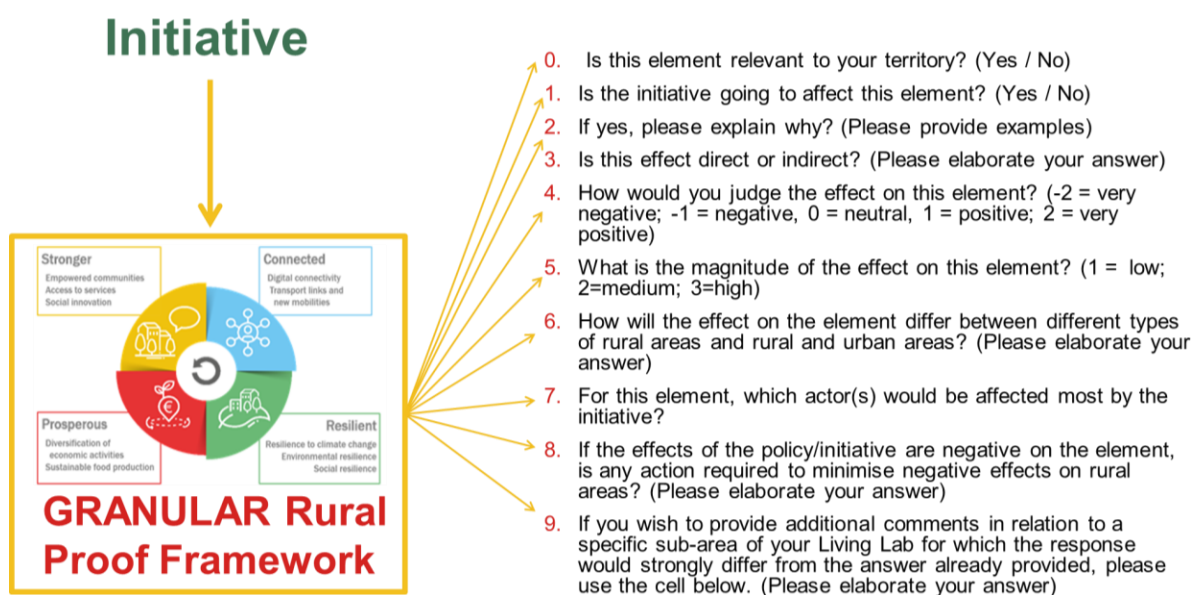


Figure 2. Overview of questions to be answered as per each pillar (source: Martino et al., 2024).

The set of spreadsheet and narratives of the rural proofing assessments by the Multi-Actor Labs provide empirical data for analysis to identify characteristics of policies or initiatives. These represent knowledge accounts which can subsequently guide the development of policies tailored to rural areas, in Deliverable D5.3, and scope for replication in different contexts.

The principal patterns identified in the reported impacts, based on the framing of impacts (types) and the numerical judgement (effect ratings) provided by the Living Labs are summarized in the following sub-sections, drawing from the detailed assessments in the knowledge account framework spreadsheets and the narratives and fiches reported in Annexes I and II.

3.3.1. Assessment based on the typologies developed in Step 2

As a first assessment of the rural proofing exercise, the typologies introduced in Step 2 were used to guide methodological evaluation of the completed Rural Proofing Spreadsheets. Two complementary analyses were then performed:

- **Richness Level of Completion Analysis:** Each Lab's completion of Step 3 (assessment tables) was evaluated along two dimensions:
- **Coverage:** The number of framework elements for which any impact was reported;
- **Depth:** The average number of detailed responses (framework spreadsheet Columns E to L) provided per engaged framework element. Notably, this distinction recognises that not all initiatives were expected to affect all elements of the rural proofing equally, with some more targeted or thematic.
- **Qualitative Challenges and Uncertainty Scan:** Narrative responses for direct/indirect effects, cross group differences, and actors impacted were scanned for expressions of uncertainty, difficulty, or vagueness. Key indicators included terms such as "depends," "uncertain," "not clear," "may vary," "could be," and similar qualifiers suggesting challenges in confidently applying the rural proofing framework.

A review of qualitative uncertainty offers a particular perspective to the analysis. During the analysis, it was revealed that expressions of doubt or conditionality in the rural proofing text appeared predominantly in initiatives that were:

- not rural-targeted;
- still in the planning phase;
- non-binding in character;
- aimed at highly systemic or complex domains such as migration management (Greece Replication Lab), ecosystem services (Unipi Italy Replication Lab), or broad economic diversification (West Pomerania, Poland Replication Lab).

For those policies and initiatives which are already in operational stages and have proactive rural targeting, fewer uncertainties were expressed, and more confident judgments were provided regarding directness, group impacts, and pathways of effect.

Analysis of completed rural proofing exercises also reveals that when a policy explicitly targets rural areas, the proofing process tends to reinforce and elaborate on the impacts already laid out in the original text. In these cases, the aims of the policy act as a clear roadmap: proofing drills down into local data, matches objectives to specific communities, and fleshes out practical steps for achieving those goals. This is illustrated by the exercises carried out on the Dutch National Housing Policy and Scotland's Environment Strategy. Both reviews summarise their host documents and add finer detail about how village demographics, service access and environmental targets might play out in practice, enriching the conversation with place-based insights.

At the same time, initiatives with a pre-defined rural impact also run the risk of limiting the analysis to repeating the ideas outlined in the analysed policy. For instance, the Finnish Island Policy review is exhaustive in its coverage of legislative provisions yet rarely ventures beyond them. By repeatedly framing its discussion with phrases such as "According to the Island Development Act" or "According to the Programme," the analysis confines itself to the policy's own language. As a result, it offers few original critiques or alternative approaches, and misses the opportunity to challenge assumptions or propose genuinely new measures.

By contrast, rural proofing of initiatives without any explicit rural focus can uncover insights that would otherwise go unnoticed. The assessment of Greece's digital-nomad visa law shows how an ostensibly urban-oriented policy might reshape life in remote communities, for better or worse. Rather than echoing the law's text, this proofing exercise highlights both the potential advantages, such as rejuvenating aging demographic profiles of villages, and the risks, including pressure on local housing markets or uneven service provision. Importantly, it also suggests targeted remedies, for example recommending incentives for housing renovations or integration-focused regulatory measures. In this way, proofing plays a vital, critical role for neutral policies, exposing hidden effects and urging modest but meaningful adjustments.

The findings from Step 2 reveal a clear distinction in how rural proofing is applied: initiatives that come with an operational mandate or an explicit rural focus undergo a significantly more detailed and precise review, drilling into specific outcomes, data layers, and monitoring frameworks. In contrast, early-stage or incidental initiatives receive a broader, high-level assessment that maps out possible directions of rural impact without the same level of granularity.

This interpretation is supported by typology-based analysis: initiatives that are proactively rural, binding, and either partially or fully implemented received average coverage scores between 23.5 and 26 elements, with depth ranging from 4.1 to 6.0 detailed responses per element.

In contrast, initiatives that were non-binding, incidental, or at the planning stage demonstrated far lower coverage (5 to 15 elements) and only moderate depth. The lowest performing case, an incidental implemented initiative, averaged just 5 covered elements, despite a relatively high depth score (7.6).

These typologies are also used for the assessment of impacts presented in section 3.3.2 (Qualitative Classification of Impact Types).

3.3.2. Qualitative Classification of Impact Types

At the core of the assessment conducted in Step 3, Multi-Actor Labs were asked to reflect on how the policy of their choice affected various elements of the GRANULAR Rural Proofing Framework, which is structured around four main building blocks: Stronger, Resilient, Prosperous, and Connected rural areas.

To analyse the outputs of the exercise, textual descriptions of the impacts were processed using keyword-based pattern recognition to identify the type of change being described.

The following impact type categories were used:

- **Increase:** increase, enhance, boost, improve, strengthen
- **Enable / Facilitate:** enable, support, promote, encourage, allow
- **Decrease / Reduce:** decrease, reduce, mitigate, minimise
- **Restrict / Limit:** restrict, hinder, prevent, exclude
- **Transform / Shift:** transform, change, convert, restructure
- **Preserve / Protect:** preserve, maintain, safeguard, conserve

Each impact description was scanned for these keywords and assigned to the first matching category. If no clear match was found, it was labelled as "other" to account for more complex or indirect effects.

Following analysis of the compiled knowledge account spreadsheets, the qualitative classification revealed that the most frequently occurring impact types were:

- **Enable / Facilitate** (29, 35%)
- **Increase / Enhance** (27, 32.5%)

These terms were frequently used across many framework elements to describe how the policies or initiatives being reviewed supported access to services, improved infrastructure, created opportunities for participation, or enhanced the attractiveness of rural areas.

By contrast, very few impacts were labelled as:

- **Restrict / Limit** (2, 2.4%)

- **Transform / Shift** (3, 3.6%)
- **Decrease / Reduce** (0, 0.0%)

The use of a strong positive framing suggests a prevailing orientation toward growth, improvement and inclusion in how Multi-Actor Labs interpreted and described impacts. It may also reflect the nature of the initiatives selected which included public programmes or interventions designed to support rural development (e.g. National Housing Policy, Island Development Act, Rural Tourism Support).

In line with an aim of the GRANULAR rural proofing, the impacts have been summarised by the four areas of action (or Pillars) of the European Union Long Term Vision for Rural Areas.

i) Connected Rural Areas

Under Connected Rural Areas, the initiatives have been assessed as frequently generating a range of positive impacts, with particular emphasis on enhancing infrastructure and enabling digital connectivity. In several cases, the Labs highlighted how initiatives supported new mobility systems and access to digital services. For example, the Finnish Replication Lab notes that: *"The policy will have an impact on the development of mobility systems, creating opportunities for inclusive planning."*

Digital innovation was also seen as a growing force by the Finland Replication Lab: *"Digital skills and services are vital in rural areas and initiatives are increasing their reach."*

However, the "Other" category was used frequently in this area of action (11 out of 22 entries, 50%), suggesting a more indirect and systemic understanding of impact. Rather than immediate outputs, many impacts describe broader shifts in migration, commuting, and spatial patterns, as highlighted by the Greek Replication Lab: *"The presence of digital nomads will drive rural area demand and, indirectly, shape migration flows."* and *"Accessibility is linked to commuting. Smoother flows could increase attractiveness."*

An example of a Restrict / Limit impact identified, pointing to possible unintended consequences of national housing policy was provided by the Finnish Replication Lab, which stated that *"Ongoing rural proofing initiatives of national housing policy may indirectly limit migration into certain rural zones through zoning constraints."*

ii) Prosperous Rural Areas

In the Prosperous Rural Areas area of action, assessments of policies and initiatives predominantly identified economic development and cultural identity, with a strong use of the "Increase" category (8 entries, 36.4%).

Economic and social revitalisation through tourism and heritage promotion emerged as a theme, for example: *"This initiative will increase the economic and social value of cultural spaces."* -Lithuanian Replication Lab).

Nevertheless, many impacts in this block were also categorised as "Other" (7 entries, 31.8%) indicating a strategic or long-term view of prosperity rather than immediate gains. For example: *"Tourism linked to local history and authenticity can become a resource for economic activation."* and *"Enhancing pride of place among younger generations through local storytelling."* - Polish Replication Lab.

Finally, One Transform / Shift impact was reported by the Dutch Living Lab, suggesting possible negative side-effects of economic transition: *"Shift from agricultural focus to service economy may marginalize traditional rural jobs."* - Dutch Living Lab.

iii) Stronger Rural Areas

The Stronger Rural Areas area of action was characterised by a dominance of Enable / Facilitate impacts, (9 entries, 40.9%), particularly centred around youth engagement and community development. Several references are made to aspects of policies or initiatives that opened new opportunities for participation for younger generations:

"The policy enabled intergenerational volunteering and new roles for young people in community governance." (Rural Scotland UK Living Lab)

The "Other" category included visions of long-term revitalisation, in which housing, community life, and participation evolved over time rather than through direct interventions:

"Rural revitalisation may be perceived as an outcome of housing development and social participation." (U. Pisa/Pro Loco Massa Antica Italy Replication Lab)

No strongly negative impacts were identified in this action area, suggesting alignment between initiatives and social empowerment objectives.

iv) Resilient Rural Areas

Resilient Rural Areas were mainly associated with environmental sustainability goals, with impacts often categorised under “Increase” (8 entries, 19.5%) and “Enable” (6 entries, 14.6%). Initiatives promoting sustainable practices and stakeholder partnerships were highlighted, e.g. *“Initiatives encourage sustainable agricultural practices and stakeholder partnerships.”* - Finnish Replication Lab.

However, many entries in this block also came under the “Other” category (17 entries, 41.5%), reflecting impacts at the level of strategic policy alignment or vision-building rather than immediate environmental actions, for example what stated by the Finnish Replication Lab: *“An expected outcome is ‘Our thriving, sustainable blue economy.’ and ‘Circular practices identified but no direct implementation linked to the initiative.’”*

Interestingly, impacts labelled as “Decrease / Reduce” were also identified in a positive context, such as efforts to mitigate emissions: *“Aims to reduce CO₂ emissions in peatland areas via carbon farming.”* (Finland Replication Lab).

In conclusion, across all the four building blocks, a predominance of positive framing was observed, particularly through the use of “Enable” (34.9%) and “Increase” (32.5%) categories. The “Other” category was also used (24.1%) revealing impacts that were systemic, strategic, or evolutionary, such as new infrastructure enabling broader shifts, or policies aligning with long-term visions rather than producing immediate outputs, for example:

“Reducing agri-environmental problems, amongst other goals, is broadly outlined in strategy but not linked to clear implementation channels.” and “Closely related to earlier mentioned distinctions, the initiative affects rural circularity frameworks, yet no direct change is traceable to the specific action.” (P10 Netherlands Living Lab)

The identification of a few negative or rather transformative impacts, especially around housing constraints, economic sector shifts, and environmental trade-offs, further underscores the value of qualitative nuance, for example: *“Yes, the initiative could affect land use linked to sustainable framing — for instance by limiting options for farming in protected zones.”* (UNIFI Italy Living Lab).

These observations provide evidence that rural proofing exercises benefit from capturing direct improvements and indirect, systemic, and potentially unintended effects, which are essential for truly holistic rural policy design.

3.3.3. Quantitative Impact Ratings from Multi-Actor Labs

In each individual Living Lab worksheet, two structured questions were included to capture both the polarity and magnitude of the observed impacts, i.e.:

- *“How would you judge the effect on this element? (-2 = very negative; -1 = negative; 0 = neutral; 2 = positive; 3 = very positive)”*

This rating captured the direction of the effect (positive or negative), hereby referred as “polarity”.

- *“What is the magnitude of the effect on this element?”*

This rating captured the strength or intensity of the effect, regardless of its direction. To ensure comparability across Living Labs, textual descriptions provided in Step 3 were processed using a keyword-based classification into impact categories (e.g., Increase, Enable, Decrease, Restrict, Transform, Preserve, and Other). Numerical ratings from the polarity and magnitude were systematically extracted, and only valid numeric entries were included; non-numeric or missing responses were filtered out to maintain data quality. Ratings were then aggregated per framework element to calculate the:

- Number of ratings,
- Average polarity score,
- Average magnitude score,
- Minimum and maximum values.

Following aggregation, the numerical ratings were compared with the labels of the qualitative impact type labels. This cross-check allowed for a comprehensive **consistency assessment** between the way impacts were described textually, judged in terms of their positivity, and perceived in terms of their strength.

Elements that were described primarily with "Increase" or "Enable" keywords tended to have high average polarity scores, typically between 2.0 and 2.7, confirming a strong positive perception of their effects. For example, the element "Access to Public and Private Services" showed an average polarity rating of 2.5, reflecting narratives of enabling greater access to services. Similarly, Cultural Attractiveness and Heritage received an average polarity score of 2.3 across Living Labs, aligning with the frequent use of "Increase" framings tied to enhancing local identity and community pride. Framework elements such as "Commuting and Migration" and "Circularity" also maintained positive average polarity scores around 2.0, corresponding with narratives around enabling mobility and promoting sustainable innovation.

This cross-analysis of the scoring of impacts of the Multi-Actor Labs, combining the polarity ratings and the magnitude ratings), revealing **a strong internal coherence between how initiatives were qualitatively described (see section 3.3.2) and numerically judged.**

The use of both polarity and magnitude ratings added an important dimension to the analysis, revealing not only whether initiatives were viewed favourably, and the significance of their expected impacts. By comparing the polarity and magnitude ratings for each framework element, it was possible to verify that most policies and initiatives reviewed exhibited aligned evaluations: where impacts were judged positively (high polarity), they were also rated as having significant strength (high magnitude), and vice versa.

Examination of the magnitude and polarity ratings also showed that initiatives described and judged as strongly positive also tended to be perceived as having moderate to high impact magnitudes. Elements such as "Access to Services" and "Cultural Heritage" scored positively in polarity and were judged to have substantial effects (average magnitude ratings also above 2.0). This suggests that the Labs viewed these initiatives as beneficial and as significant in their potential to drive rural transformation. For example: *"According to the Assessment of the Need to Update the Island Development Act, availability of services has increased in remote rural areas."*→ Rural Revitalisation, Finnish Replication Lab on the Rural Revitalisation component (*Polarity: 3.0, Magnitude: 3.0*). A few elements exhibited lower magnitude scores despite high polarity ratings, suggesting that while the initiatives were seen as positive, the scale of their immediate impact was perceived as moderate rather than transformative. For example, *"Digital nomads might bring diverse skills and knowledge to rural communities, contributing to local development."*→ *Education, training, youth, sport and volunteering*, Greek Replication Lab– *Polarity: 2.0, Magnitude: 1.0 – Enable / Facilitate*.

Similarly, initiatives framed with negative impact types (such as Restrict, Decrease, or Transform) were extremely rare in both the qualitative and quantitative assessments.

Overall, the consistency across qualitative impact types, polarity ratings, and magnitude scores strengthens confidence in the robustness of the GRANULAR Rural Proofing Framework. It suggests that the Multi-Actor Labs exercised internal coherence in their evaluations, distinguishing between positive orientation and effective strength of impacts.

This analysis is nuanced using the typology-based breakdown, as presented in Step 2, and cross-linking it with the average polarity scores. As illustrated in Figure 3 initiatives that were legally binding tended to receive higher average polarity ratings than those of a non-binding nature. This suggests that the more formal and enforceable the initiative, the more confidently and positively it was evaluated in terms of its expected rural impact. The stronger evaluations may stem from clearer implementation mechanisms and more direct links to observable change, reinforcing earlier conclusions about the relationship between policy structure and perceived impact strength. For example, the Finnish Island Policy, a binding national initiative, consistently received high polarity scores across multiple framework elements.

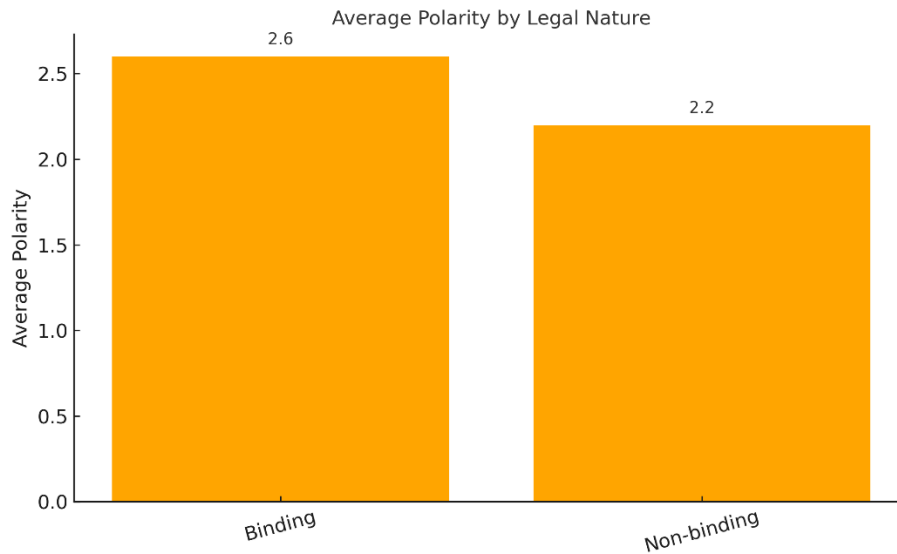


Figure 3. Average polarity of initiatives with respect to their binding or non-binding status.

The perceived intensity of impact, captured by magnitude ratings, also varies by the binding nature of the initiatives, as illustrated in Figure 4. The bar chart shows that binding initiatives were generally associated with higher average magnitude scores compared to those which are non-binding. The result suggests that stakeholders considered such initiatives more positively and more impactful in practical terms. The results indicate that the clarity of legal standing and enforceability contribute to more confident and stronger assessments of rural effects.

For example, the initiative selected by the West Pomerania Poland Replication Lab, a binding regional strategy, received a magnitude score of 3.0 in relation the element " Cultural Attractiveness and Heritage" (*"The strategy clearly enhances cultural capital and promotes territorial branding for rural communities"* – West Pomerania Poland Replication Lab).

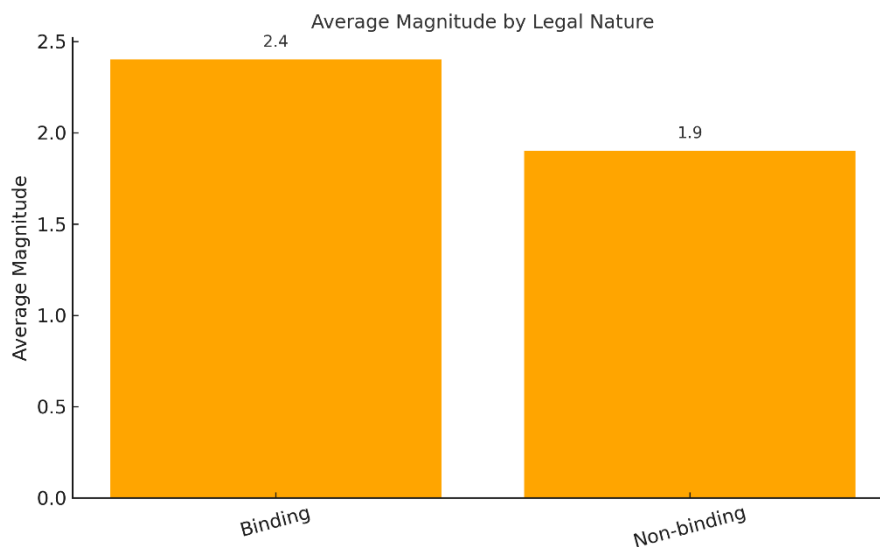


Figure 4. Average magnitude of initiatives with respect to their binding or non-binding status.

The average polarity ratings across initiatives at different implementation stages is illustrated in Figure 5. The results indicate that fully implemented initiatives consistently received higher polarity ratings than those still in planning or consultation. This supports the earlier observation that stakeholders were more confident about evaluating tangible outcomes rather than projected or strategic intentions. Partially implemented initiatives occupy a middle ground, confirming a positive relationship between implementation progress and evaluation certainty.

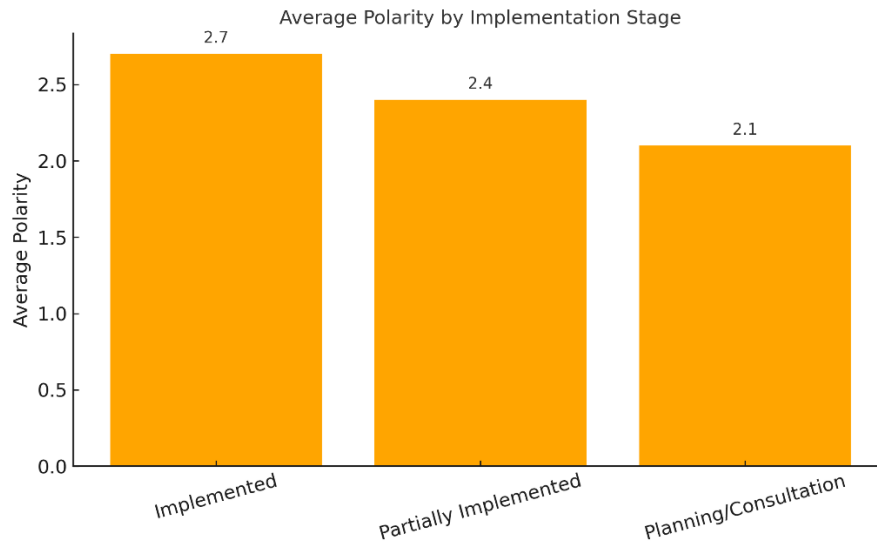


Figure 5. Average polarity of initiatives with respect to their implementation stage.

The magnitude ratings were scored higher in terms of magnitude for initiatives at more advanced stages of implementation (Figure 6), suggesting that Labs perceived them as more tangible and more consequential. Planned initiatives received lower magnitude ratings, reflecting caution in assessing effects that had not yet materialised. These results underline the importance of implementation maturity as a factor shaping how initiatives are understood in rural proofing exercises.

For example, the assessment of the National Housing Policy in the Netherlands, a non-binding and evolving initiative, received mixed evaluations with lower magnitude scores: “The impacts on land use and affordability are yet to be clarified and may vary by region.” → Land Use and Spatial Planning, P10 Netherlands Living Lab – Polarity: 2.0, Magnitude: 1.3.

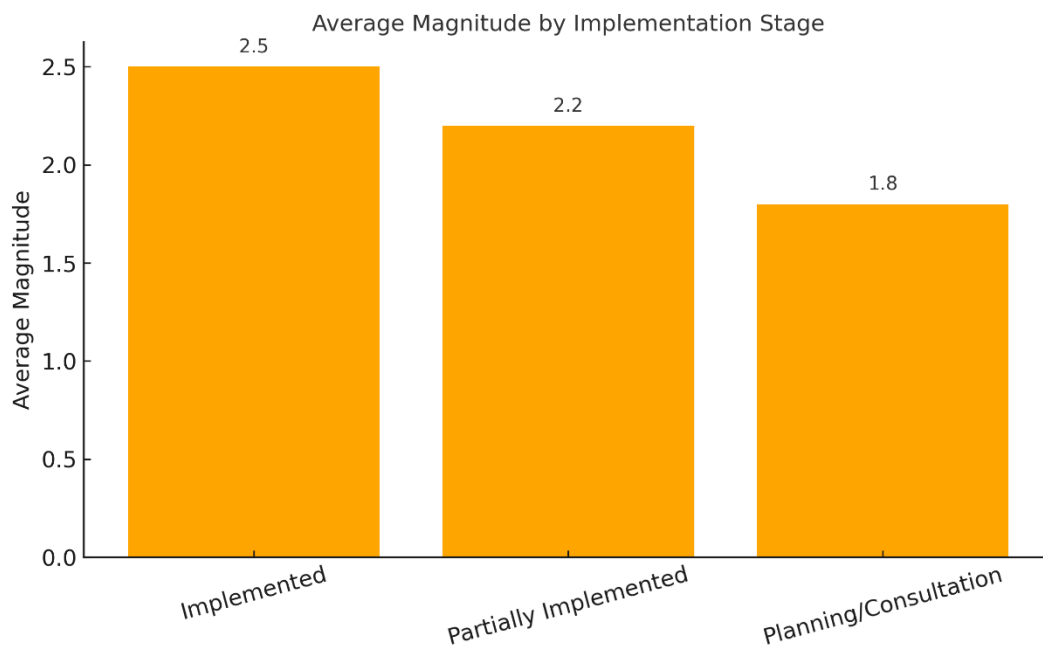


Figure 6. Average magnitude of initiatives with respect to their implementation stage.

Ultimately, that initiatives that were directed at rural areas, binding in nature, and partially implemented tended to generate more complete, detailed, and confident evaluations. Conversely, initiatives which are still at an early stage or of non-binding character, corresponded to the few cases where internal inconsistencies or uncertainties appeared.

The high degree of internal alignment between qualitative descriptions and quantitative assessments reinforces the methodological soundness of the rural proofing tool and the findings on the conditions under which it is most effectively applied.

3.3.4. Assessment of direct versus indirect impacts

In addition to describing the types of impacts, Multi-Actor Labs were asked to assess whether the effects of their initiatives were primarily direct, indirect, or a combination of both.

This information was extracted from Column F of the Rural Proofing worksheets. Responses were categorised into:

- Direct – immediate, tangible impacts,
- Indirect – broader, systemic effects,
- Both / Mixed – simultaneous direct and indirect impacts,
- Other / Unclear – ambiguous or conditional answers

The analysis showed the modal response regarding impacts was of both direct and indirect dimensions. This suggests that, generally, Multi-Actor Labs perceived their initiatives as operating across multiple layers, producing immediate outputs whilst also simultaneously contributing to broader, longer-term systemic transformations. In some cases, the direct dimension of the initiatives was clearly highlighted, particularly in domains such as circular economy and tourism development, where interventions were expected to produce immediate and measurable benefits. An example of this is in statements which point to a direct, tangible effect, such as: *"Promoting the year-round development of rural tourism offers concrete local benefits"* - Finnish Replication Lab and *"Following the initiative, one municipality there are plans to renovate rural schools."* - Lithuania Replication Lab.

Indirect impacts were less commonly identified in isolation but appeared prominently within complex change pathways. Initiatives involving migration patterns, digital infrastructure, or cultural revitalisation often emphasised influence over time rather than short-term outputs. Interpretation of some responses illustrate how many initiatives straddle both immediate and systemic outcomes, for example: *"The effect observed is indirect. The Strategy and related instruments will have a long-term impact on cultural identity and participation."* – Rural Scotland UK Living Lab on the component *Cultural Attractiveness and Heritage*.

A small number of responses were classified as "Other" or "Unclear," usually where Labs indicated that the directness or indirectness of impacts would depend on how the initiative was implemented or evolved over time. For example, the Finland Replication Lab highlighted that "the consultation of stakeholders is an immediate result (direct), but broader policy acceptance is indirect" – Finland Replication Lab on the component "Participatory Processes and Democracy").

Findings on the directness of effects reinforce and complement the earlier analyses of impact types and numerical ratings. Initiatives that had been classified qualitatively as having Increase or Enable impacts often described direct outputs, such as enhanced access to services or improved infrastructure. For example: *"According to the Assessment of the Need to Update the Island Development Act, availability of services has increased in remote rural areas."* – Finland Replication Lab, on the component *Rural Revitalisation*.

Enablers of longer-term systemic changes are also indicated, reflecting the mixed direct/ indirect effects captured in this analysis.

The frequency of use of the "Other" impact type category, with which Multi-Actor Labs described broader strategic or systemic changes, which aligns well with the finding that many impacts were indirect or mixed. This confirms that rural initiatives are often designed to produce immediate results and to shift deeper systems and relationships within rural territories.

The numerical ratings provided by the Labs, showing consistently high average scores (typically between 2.0 and 2.7), suggest that even when initiatives were perceived as creating mainly indirect effects, they were still judged very positively. There were no substantial contradictions between the framing of impacts as indirect or systemic and the perception of their value. This indicates that the Multi-Actor Labs recognise and appreciate the layered and gradual nature of rural change.

The analysis of the directness of effects highlights a key characteristic of initiatives with a rural focus or emphasis: they are multi-level in nature, producing short-term tangible results while simultaneously setting in motion broader,

systemic transformations. This layered understanding of impact is critical when designing, implementing, and evaluating rural policies. It confirms that the assessment of just one variable alone (e.g. effect versus indirect effects) may not be sufficient to capture the full value of rural-proofed initiatives, and that rural development must be understood as a dynamic and evolving process.

3.3.5. Analysis of Distributional Effects Across Population Groups

3.3.5.1. Geographic or spatial inequalities

In addition to identifying the nature and strength of policy impacts, the Multi-Actor Labs were asked to reflect on whether these effects differed across groups or territories. This allows differential effects to be highlighted across population groups or places, that is whether certain populations or places were more likely to benefit or be left out.

Responses were analysed qualitatively and grouped into key categories of distributional inequality, including:

- Geographic / Spatial (e.g., rural versus urban, core versus periphery, island versus mainland),
- Demographic (e.g., youth, elderly),
- Access to services (e.g., availability of transport, healthcare, or education),
- Other / Unspecified, for responses where no clear differentiation was expressed or the answer was too unclear to classify.

The modal response of the combined cells in the rural proofing framework (75 mentions) is reference to geographic or spatial inequalities. These entries emphasised how rural initiatives may produce uneven outcomes depending on location, accessibility, or infrastructure, reinforcing the need for characterising the diversity within rural territories. Multi-Actor Labs frequently noted that more remote or infrastructurally disadvantaged areas were either less likely to benefit or would benefit differently than more connected or central areas. Examples included differences in policy reach between island communities and mainland villages, or between urban-adjacent and deeply rural territories (*“Especially rural areas closer to major urban centres could benefit more strongly.”* – P10 Netherlands Living Lab).

Only a small number of responses (e.g. *“Proximity of micro- and small businesses to national and international innovation infrastructures may benefit younger entrepreneurs more.”* – Rural Scotland UK Living Lab) directly referenced demographic or infrastructure-related differences. In isolated cases, the assessments of the Labs indicate that younger people might experience different impacts than older residents, or that access to services might vary depending on local mobility or digital infrastructure (*“The wellbeing services counties are a new level of administration, and access may vary depending on location and population density.”* – Finland Replication Lab).

Limited references were made to other important axes of inequality, such as gender, income level, or minority group status (e.g. *“The effects will be similar because the function of circularity applies universally regardless of location.”* – West Pomerania, Poland Replication Lab). This may reflect the nature of the initiatives chosen (which may not have been directly targeted at those factors), or a gap in the current rural proofing methodology's ability to foreground such considerations.

The responses confirm that spatial differentiation remains the dominant lens through which the Multi-Actor Labs interpret inequality in rural policy impact. Geography, especially distance, isolation, and access, is perceived as the primary variable shaping how benefits are distributed.

The analysis also reveals an under-recognition of social and demographic diversity. Issues such as gender, age, income disparity, and cultural inclusion are only minimally discussed. An example of an exception is the Rural Scotland UK Living Lab's response under the theme of Entrepreneurship and Social Economy, where the Lab explicitly highlighted that proximity to innovation infrastructures could differentially benefit younger entrepreneurs. This response stood out because it recognised age as a factor in impact distribution (a dimension rarely addressed elsewhere) and because it linked territorial and demographic inequalities in a nuanced way, suggesting that access to opportunity depends both on who you are and where you are. further reflecting the multi-dimensional nature of rural areas (Rouby and Ptak-Bufkens, 2022). This response suggests there is an opportunity to refine and strengthen the rural proofing approach by embedding more prompts or tools that help stakeholders reflect on where effects happen, to whom, and in what ways they differ across social groups.

To deepen the analysis, the rural proofing framework elements most frequently associated with rural–urban or intra-rural differences were examined. For these elements, the corresponding impact narratives were reviewed to identify

recurring themes, underlying assumptions, or mechanisms contributing to differentiated outcomes. The narrative of the impacts often provide sufficient detail to infer key characteristics of the initiatives under review, such as their reliance on infrastructure, delivery mechanisms, or local implementation capacity.

The analysis revealed that initiatives dependent on infrastructure or services, such as those targeting access to public services, rural revitalisation, or participatory governance, were frequently described as producing uneven outcomes. For example, one Lab noted that *“the effects of achieving the Outcomes on public services could vary substantially depending on population density and distance to urban centres”* – Rural Scotland UK Living Lab. Another highlighted that *“the types and extent of rural revitalisation may differ between more connected and remote areas due to capacity for local development”* – Rural Scotland UK Living Lab .

Similarly, initiatives aimed at participatory processes and democratic inclusion were interpreted differently depending on local governance maturity and institutional resources, as reflected in responses such as *“Public organisations in the Ignalina region are using participation tools, but their availability varies by municipality”* – Lithuanian Replication Lab.

These examples suggest that **initiatives which require coordination, infrastructure, or local implementation capacity are more likely to produce geographically differentiated effects**, especially in territories where institutional or physical access is uneven. Therefore, the perception of inequality is often not about the policy intention itself, but about the local readiness to deliver or benefit from the intervention. Ultimately, ensuring that rural proofing is place-sensitive and equity-sensitive will be essential to making rural policies more inclusive and just.

3.3.5.2. Assessment of actors

The Multi-Actor Labs were asked to indicate which actor groups would be most affected by the initiatives under review (GRANULAR framework spreadsheet Column J). Responses were extracted, standardised into broader actor categories, and counted across all framework elements to identify general patterns.

The actor categories used for analysis included:

- Residents (local, seasonal, free-time)
- Businesses / Entrepreneurs
- Public Authorities / Municipalities
- Youth
- Elderly / Seniors
- Farmers / Agricultural Actors
- Tourism Sector
- Civil Society / NGOs
- Other / Unspecified groups.

The figure below illustrates the distribution of actor mentions across all Multi-Actor Lab assessments, highlighting which groups were most frequently identified as affected by the initiatives under review.

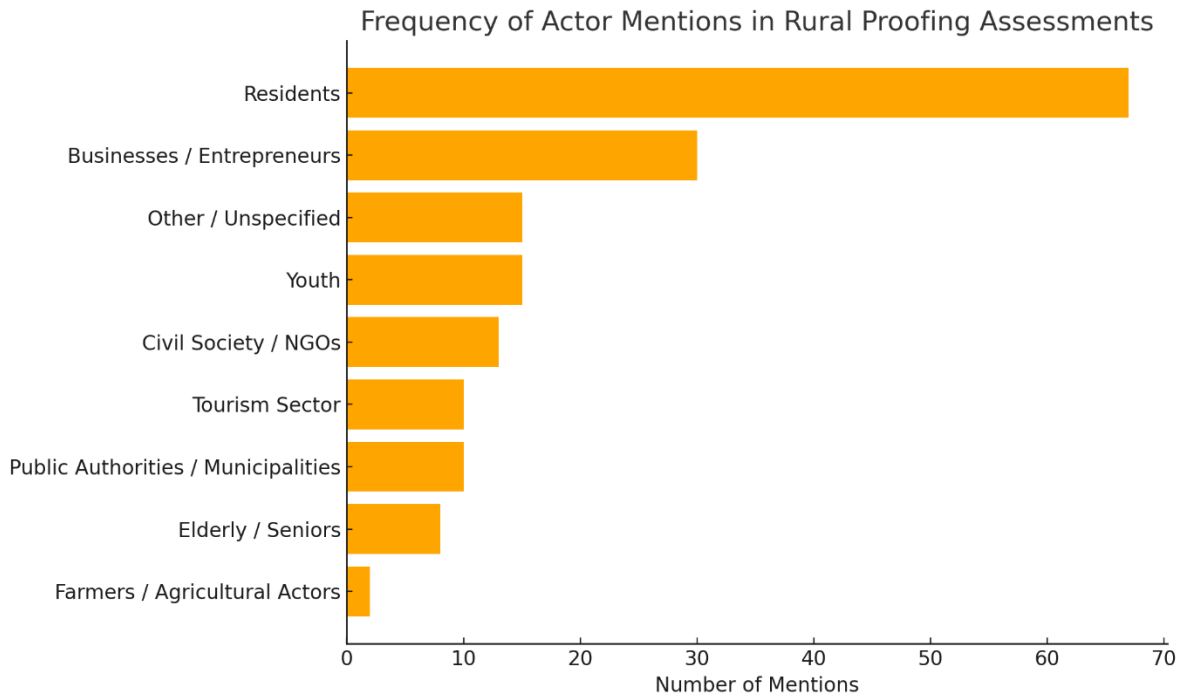


Figure 7. Frequency distribution of actor types identified in the rural proofing assessments.

The analysis shows that residents, including local inhabitants, seasonal dwellers, and free-time residents and visitors, were the most frequently cited group impacted by policies or initiatives. Residents were mentioned in 67 cells in the rural proofing framework, highlighting the interpretation of Multi-Actor Labs of the effects of policies and initiatives that directly affect community life, accessibility, and service provision in rural areas.

Civil society organisations and NGOs are also cited frequently, with 13 references. This suggests that several of the policies and initiatives were expected to empower community groups, associations, and other non-governmental actors, confirming the participatory and grassroots orientation of many rural policies.

Youth were referenced 15 times, reflecting elements of policies and initiatives which provide intergenerational renewal, education, and rural attractiveness for younger generations. However, references of elderly or senior populations were less frequent (8 mentions) and do not emerge strongly as a distinct category in this analysis. Where mentioned, they were typically listed alongside other demographic groups, rather than being the primary target of the policy or intervention. For example, the Lithuania Replication Lab, in the context of cultural attractiveness and heritage, noted that the initiative would affect “*young people, families with young children and elderly people*” – Lithuania Replication Lab. Similarly, in relation to tourism development, the same Lab observed that “*members of rural community, inhabitants of areas where cultural heritage and tourism are being developed, including elderly people, impacted by the initiative*” – Lithuania Replication Lab). These examples suggest that while older residents were recognised as potential beneficiaries, their specific needs or differentiated experiences were not systematically addressed.

Businesses and entrepreneurs were cited 30 times, but where present, they were typically associated with initiatives around tourism, local economic development, or innovation, such as:

“The policy/initiative regarding this element will directly impact local digital entrepreneurs and the digital services industry.” – West Pomerania, Poland Replication Lab).

Interestingly, public authorities and municipalities were relatively infrequently referenced as direct actors (10 cases), although their role as enablers or supporters may have been implied indirectly through other responses. A small number of responses (15 cases) fell into the Other / Unspecified category, typically due to vague descriptions or very broad actor lists.

3.4. Step 4 - Data availability (indicators)

In Step 4a of the rural proofing process, Living Labs were asked to provide indicators that could help monitor the effects of a selected policy or initiative on specific components of the GRANULAR Rural Proofing Framework. Each Living Lab responded individually, often guided by the context and relevance of the initiative they had chosen to assess.

The data collected was processed in multiple phases:

- **Consolidation** – All indicators provided were compiled and organised per framework element.
- **Cleaning** – A filtering process was applied to retain only those entries that clearly represent actual or proxy indicators (i.e., measurable, quantifiable variables or data points). Broader goals or abstract terms such as “rural revitalisation” or “social cohesion” were excluded unless they were directly tied to a measurable indicator.
- **Structuring** – The indicators were organised in a long-form table, allowing future tagging by availability, relevance, or source.

Many of the indicators provided by the Multi-Actor Labs exist are directly applicable (e.g. Natural Capital Assets Index, Rural Scotland UK Living Lab under *natural capital stocks*), and others are of potential relevance and use in relation to tracking impacts of policies or initiatives in relation not the framework elements (e.g. lists and numbers of monuments and artistic events, West Pomerania Poland Replication Lab under *Cultural attractiveness and heritage*).

A key aspect emerged during this process is that the selection of indicators was often influenced by the specific policy or initiative chosen by each Lab. Rather than offering a purely theoretical or generic set of indicators for a given framework element, many Labs proposed indicators that were contextualised through the lens of, or specific to their, their selected initiative (e.g. [Environment Strategy Initial Monitoring Dashboard](#), Rural Scotland UK Living Lab). For example, the Greece Replication Lab focused on a policy for digital nomads, which led to indicator suggestions centred on migration, remote work infrastructure, and local service use, reflecting the nature of the policy as much as the framework component itself.

The experiences gained from assessments and identification of indicators highlights a methodological complexity: It becomes difficult to fully disentangle the component (e.g., “rural revitalisation”) from the policy’s specific angle when interpreting the relevance of the suggested indicators. In this sense, the indicator list can be seen as reflecting a dual lens of both the structural element being assessed and the type of intervention being analysed. This is not a limitation per se, but might represent an insight to the issue. As such, future indicator selection frameworks may benefit from considering how policy typologies influence the indicators needed to assess impact on rural areas.

A summary of observations on indicators identified and used notes the following points.

Variation in indicator specificity

The level of specific and technical details of indicators or data series reported varied across the Multi-Actor Labs. Some types of indicators identified were quantifiable data (e.g., “frequency of public transport services”, and “commuting time”, P10 Netherlands Living Lab under *Connected rural areas*), while others are qualitative or would require post-processing (e.g., “rural revitalisation” and “civic participation”, P10 Netherlands Living Lab under *Resilient rural areas*).

The approach to identifying indicators differed between Labs which may reflect the topic chosen, the availability of existing indicators or data, or the interests and knowledge of the Labs themselves. For example, Rural Scotland UK Living Lab cites several existing indicators which are published by the Scottish Government for monitoring progress towards achieving the aims of the Scottish Environment Strategy and some new indicators developed within the Living Lab (e.g. renewable energy sites in reporting units of multiple deprivation), and national metrics identified to be relevant to monitoring elements of initiative of short food supply chains for increasing rural entrepreneurship and economic revitalisation (West Pomerania Poland Replication Lab)..

Indicator selection

Where the rural proofing framework element was conceptually clear and backed by standard data sources, Labs tended to suggest well-targeted indicators. For example, components “Access to services” and “Digital futures – Technical” featured indicators such as broadband coverage, service access distance, and internet speed. This was

also true for cases where data of formally identified indicators already existed and were used by a relevant authority (e.g. P10 Netherlands Living Lab under *Social resilience and women in rural areas*).

The identification of existing indicators which map well onto aspects of the policy or initiative, and elements of the rural proofing framework, suggests that the Labs are well equipped with members who are knowledgeable of the topics assessed and supporting evidence. Such a knowledge base may be less complete for rural proofing policies or initiatives which are outwith their institutional or personal remits and backgrounds, for example an EU level initiative assessed at Lab level. The membership of science, policy and practice should provide a good basis for handling such tasks.

Guides to fill gaps in suitable indicators

For those elements of the rural proofing framework which were interpreted as being more abstract or less familiar concepts, there are gaps in the types of indicators identified. External sources of indicators were sourced to guide choices of indicators which align with elements in the framework. For example, the EU Bioeconomy Monitoring System (https://knowledge4policy.ec.europa.eu/visualisation/eu-bioeconomy-monitoring-system-dashboards_en) provides guidance on indicators of relevance, for which local equivalents of which were sourced (e.g. employment in primary sectors, Rural Scotland UK Living Lab under *Sustainable bioeconomy, including forestry in the framework of the EU Forest Strategy and the carbon farming initiative*).

Other elements such as “Research and innovation” often lacked clear indicators, which could reflect unfamiliarity or limited alignment between the component and the policies chosen.

Overlap between rural proofing framework elements

Some indicators were identified as relevant to more than one element of the rural proofing framework. For example, indicators such as “broadband access” or “energy efficiency” were cited across elements such as Access to public and private services (including basic services) under Stronger rural areas, and Rural digital futures – Technical under Connected rural areas (P10 Netherlands Living Lab). This recognises the interdependence of elements in the framework as well as the mapping of indicators which may have been developed for one purpose being used to inform assessments for new or closely related purposes.

Social and demographic indicators

Metrics such as population structure, employment, and educational attainment were the most frequently referenced which reflects their ready availability through the regular population censuses in all countries and wide applicability of demographic information to a range of topics. Numerous examples of demographic indicators are provided in the assessments by the Lab, predominantly under elements within Stronger rural areas, but also noted in narratives, such as under Resilient rural areas (e.g. Lithuania Replication Lab).

Policy influence on indicator framing

Suggestions of indicators of relevance were shaped by the policy being analysed. The Labs proposed indicators that were more reflective of the initiative under scrutiny than the component itself, but the former provides informed guides of indicators of relevance for the latter. An emerging conclusion is the importance of considering policy type as a variable in indicator development and analysis.

Consistency across Labs

Some indicators may not be suitable or operationally feasible in the contexts of all the Labs. This may reflect a lack of underlying data, or that available data are not at relevant levels of spatial or temporal detail. It may also reflect investment in specific indicators in one area which for which there is no direct equivalent in other areas (e.g. [Natural Capital Asset Index](#), Rural Scotland UK Living Lab). Work in GRANULAR Work Packages 3 ([Novel open data sources for rural areas](#)) and 4 ([Development of tools and indicators to characterise rural diversity](#)) is expected to provide new information, available with consistency across most Labs, which may address aspects of the issue. Further consideration is required on the implications for heterogeneity across Labs on the rural proofing of policies at European and national levels.

A further stage in analysis of the rural proofing is to map the indicators identified and those being developed within the GRANULAR Work Packages responsible for developing new data and tools to identify where newly developed indicators could fill gaps in the indicator sets and add value to rural proofing assessments.

4. Discussion

The rural proofing exercises undertaken by the eight Multi-Actor Labs provide insights to the policies and initiatives under review, and to the process of rural proofing as implemented in GRANULAR. Results from the assessments have enabled observations to be made about the nature of the positive or negative impacts and their magnitude, with narratives which articulate the assessments with respect to the four action areas, or pillars, of the LTVRA (Annexes 1 and 2). The findings have been reviewed in a process of learning lessons on what factors to consider when tailoring policies to rural areas such that the potential for inequalities can be identified and mitigating actions taken, or scope for replication in different contexts.

Diversity of Policies: Each Lab selected a policy or initiative to be assessed which was of relevance to their area. The topics and types of content cover a range of scope, objectives, and policy maturity. That limits the comparability of impacts across territories. They include some which are sectoral in nature (e.g. Compensation for livestock farms for predation damages caused by wolves, Unipi Italy Replication Lab), cross-cutting at national or regional levels (e.g. Scottish Environment Strategy, Rural Scotland UK Living Lab) and regulatory (e.g. Residence and/or working permits in Greece, Greece Replication Lab).

The level of detail of outputs shows that the process can enable assessments for each of the LTVRA pillars of relevance to the policy or initiative and collectively for the types of rural areas within the competency of the Lab. The detailed evidence provided in the framework need not cover all of the LTVRA pillars, reflecting the topic chosen. For example, evidence for the assessment of the [Recognition of livestock farms for predation damage caused by wolves \(canis lupus\)](#) (Unipi Italy Replication Lab) is predominantly for four of the elements under Resilient rural areas and one element under Prosperous rural areas. Similarly, evidence for the [Residence and/or Working Permit for Citizens of Third Countries with a National Entry Visa](#) (Greece Replication Lab) is 7 of 8 elements of the Stronger rural areas pillar, and all 4 of the elements of the Connect rural areas pillar, but only 2 of 10 elements of Resilient rural areas and 2 of 5 elements in Prosperous rural areas. Where appropriate, these Labs interpreted the evidence and articulated its implications for other pillars within their narratives.

By comparison, the policies which are broader in remit, whether or not they are binding or are targeted at particular types of geography, have been assessed as having relevance to a high proportion of elements across all four LTVRA pillars, such as the Scottish Environment Strategy (Rural Scotland UK Living Lab) covering 26 of 27 elements, and the Finnish Island Policy (Finland Replication Lab) covering 22 of the 27 elements.

Territorial Contexts: The exercise was designed to give each Living Lab flexibility in choosing a policy or initiative relevant to their remits and jurisdiction. The geographic level of coverage of the assessments ranged across regional (e.g. Unipi Italy Replication Lab) and national levels (e.g. Greece Replication Lab), with several being multi-level (e.g. P10 Netherlands Living Lab; Rural Scotland UK Living Lab).

Regarding the geographic or governance level at which the analysis should be carried out, the Finland Replication Lab observed that undertaking rural proofing at a local level may prove more difficult than at higher levels due to the specific knowledge and expertise needed (e.g. relating to data analysis, knowledge of from where to source data). This observation could be one of the factors why the lack of rural proofing for local initiatives is observed in the submitted exercises.

The geographic definition of jurisdiction of an initiative may constrain eligibility for positive impacts. For example, the Tourist Tax assessed by the Distretto Rurale Val di Cecina Italy Living Lab refers only to territories classified as touristic. Therefore, those which are not classified as tourist areas are not eligible for this initiative creating or accentuating differences between rural areas, such as financial resources with which to invest in tourist facilities and thus the potential to increase the offerings for tourists. A similar differentiation in the potential for positive impacts in some rural areas compared to others is reported in Poland in relation to tourism infrastructure (West Pomeranian Poland Replication Lab).

Preliminary analysis of the rural proofing does not address the diversity of rural areas covered by the Labs. Further rural proofing exercises within GRANULAR will provide greater coverage of different types of initiatives and scales by the same set of territories. As well as the assessments of initiatives, more examples may provide insights to whether there is similarity in thinking within Labs and familiarity with different types of indicators or evidence. However, the design in GRANULAR Work Package 6 of the Labs has provided units which have the human capital to make informed assessments, with evidence where available, with which to alert designers of policy or initiatives (in the public and private sectors) of strengths and weaknesses of the approach within the territories to which they are directed.

Positive Selection Bias: There is positive bias in the types of initiatives selected, with many of the policies selected for rural proofing designed to enable or support rural areas. Five had some elements of proactive targeting of rural areas, and three had incidental rural targeting (Val di Cecina Italy Living Lab; Greece Replication Lab; Lithuania Replication Lab). The basis of this phase of rural proofing was to empower the Labs to make the decisions over which policy or initiative to assess, which would be relevant to their interest and area, and about which they would be in a position to comment. However, the Finland Replication Lab notes that “more in-depth analysis requires a combination of local knowledge, substantive knowledge, and knowledge about existing databases and sources”

Rural and Local Contexts: Some of the effects highlighted by the Labs may be specifically rural in nature or reflect territorial challenges more generally. For example, in some cases, the impacts described may pertain to local contexts that also include urban or peri-urban characteristics (e.g. Rural Scotland UK Living Lab, under Energy transition for rural communities and climate action, and Land use linked to sustainable farming, both for Resilient rural areas), which can make it more challenging to isolate rural-specific effects.

Such ‘blurring’ of rural and local contexts is more likely in some national or regional policies, and less likely in local policies or initiatives. The need to understand distinctions and interactions between local and rural contexts is more evident in policies and initiatives which are multi-level in nature, consistent with observations of other authors (e.g. Gaugitsch et al., 2022). For example, the Scottish Environment Strategy aims to “help ensure that local economies and communities in rural areas thrive” (Rural Scotland Living Lab).

Subjectivity in Judgement: The interpretation of types of qualitative impacts and the numerical effect ratings is subjective, as per Gaugitsch et al. (2022). This applies to how respondents perceived impact as well as how keywords mapped onto action types. A topic for further consideration and discussion with the Labs is the extent to which quantitative measures have been, or can be used in the assessments of impacts, informed by the indicator data available and identified in Step 4, or proposed in other work streams of GRANULAR (e.g. Quality of life and wellbeing, Work Package 4).

Evidence from the assessments show some policies are combinations of direct and indirect impacts. Some impacts are all indirect, such as the Provisions on Municipal Fiscal Federalism, Val di Cecina Italy Replication Lab, or predominantly indirect, such as the Scottish Environment Strategy, Rural Scotland UK Living Lab. By comparison, all of the elements assessed for the Assessment and practical implementation of Universal Design (UD) principles to improve the accessibility and efficiency of public services in Ignalina region, Lithuania Replication Lab are direct impacts. The distinctions merit calibrating to ensure shared understanding of the nature of direct and indirect impacts. Related further investigation is required on the types of indicators have been identified for direct compared to indirect impacts.

The rural proofing assessments of initiatives reveal different types of negative impacts which may arise within rural areas. For example the assessment of the Digital Nomads scheme in the Greece Replication Lab (under *Resilient Rural Areas*) notes the risk of uneven regional development, in which only regions attracting digital nomads will benefit and other rural areas might be left behind if they lack the resources or incentives to invest in the required digital infrastructure and transport services.

The assessments identified potential unintended adverse consequences on rural areas of policies and initiatives, and the possibility of differences on their magnitude between different areas. An example is where an initiative may be drawn by the attractiveness of rural areas (e.g. for home working, higher quality lifestyles which embrace sustainability), generating positive impacts such as enhancing the local talent pool, support human capital development, but with dependencies upon local infrastructure, or infrastructure links between rural and urban areas. For example:

“... if local infrastructure fails to keep pace with increased demand, it could strain public services, inflate housing costs, and trigger social tensions” Greece Replication Lab under Connected Rural Areas.

At the same time, analyses of initiatives with pre-defined rural focus have been noticed to leave the potential negative impacts of the initiatives outside the scope of the exercise. Analysis of further rounds of rural proofing exercises would be beneficial to establishing if this tendency comes from the types of initiatives chosen for the analysis (i.e. proactive rural targeting or incidental rural impact), or if the framework itself should be adjusted to enable a more comprehensive exploration of potential 'side-effects' of policies.

Regarding the rural proofing process, its operationalisation has generated interest amongst the Multi-Actor Labs in contributing to the formalised assessments of policies and initiatives. There is a willingness to gain experience with the concept of rural proofing, noting that it is being sought by the European Union, such as in the Rural Pact and

Vision for Agriculture and Food, empowering communities of place and interest to contribute to the policy cycles, both ex-ante and post-ante. For example, *“Rural proofing might also be one small contribution to overcoming democratic deficit by introducing a participatory element in policy making cycle and the inclusion of diverse views”* Finland Replication Lab; and *“Housing policy becomes rural-proof when villagers are given the tools to build their own future”* P10 Netherlands Living Lab.

The assessments undertaken by the Multi-Actor Labs show how the rural proofing process can be undertaken. However, if rural proofing is not in the remit of a Lab, or its members, then there is a risk that appraisals may not be feasible due to availability of human and financial resources. If rural proofing is taken up as a formal part of process (as with Island proofing in Scotland, UK) then questions will need to be addressed on who has the remit to be involved, and with what resources. Associated is the need for sufficient time to be allocated to the process, including its position in the lifetime of preparation for a new policy or initiative, or at clearly scheduled times for their subsequent evaluation.

Feedback on the process is being used to refine the GRANULAR rural proofing process, and to reflect on how it applies in different types of jurisdictions and geographic scales and contexts. In a further phase, all of the Multi-Actor Labs will be offered the opportunity to assess the same policy, allowing some analysis of how rural diversity shapes the types and magnitude of potential impacts of policies and initiatives.

Learning from the process of rural proofing, and from the contents of the assessments will inform recommendations for characteristics of tailoring rural policies and their better design and implementation (Bryce, 2024).

5. Conclusions and next steps

The operationalisation of the rural proofing process undertaken by the Multi-Actor Labs has provided bottom-up evidence which demonstrates how the approach can be used for eliciting assessments of potential positive and negative impacts of policies and initiatives between rural and urban areas, and within different types of rural areas. Generally, such evidence is place-based or territorial, from multiple perspectives of policy, science and civil society.

The combination of qualitative and quantitative aspects of the rural proofing process (Step 3) enable the capturing of insights to potential impacts of a policy or initiative which are informed by place-based or thematic knowledge. Such knowledge and the logic of its use mean that the assessments may be supported by numerical data in the form of indicators where data are available and relevant. Data captured in the rural proofing framework template provides indications of whether potential positive impacts are in line with the aims of the policy, or if there are unintended adverse consequences such as a lack of coherence and consistency, within or between areas, and trade-offs between types of impacts.

For example, *“the presence of digital nomads in rural areas may accelerate the digitisation process in rural areas”, however, their “short-term presence, coupled with the need for rapid infrastructure development, can strain local natural resources. Increased demand for water, energy, and waste management may negatively affect environmental sustainability.”* (Greece Replication Lab).

Where available, interpretation of specified indicators of relevance provided alerts to potential pressures and negative impacts (e.g. indicators from data series used in the [Scottish Environment Strategy Initial Monitoring Framework](#)). Otherwise, the assessments can be used as a basis for developing hypotheses of types of impacts which can be the subject of subsequent testing and verification, in a similar manner to the development of [Business and Regulatory Impact Assessments](#) (BRIA) (e.g. as used by the Scottish Parliament).

All eight policies or initiatives were assessed to be rural proof, but with alerts to factors which may have negative impacts, or different types and magnitudes of impacts between rural areas. In particular, initiatives were likely to have positive direct or indirect impacts on areas with relevant human, social or natural capital and infrastructure, but indirect negative impacts in areas where such resources are not present. This points to prospective widening of existing geographic or spatial inequalities within rural areas and their communities, the identification of which could be an important consideration when designing policies. For example, in the assessment of *Residence and/or working permit for citizens of third countries with a national entry visa* in Greece, the conclusion was that the initiative could be considered to be rural proofed if “it is implemented with careful planning and appropriate regulation to ensure balanced integration with local communities” (Greece Replication Lab).

Feedback from participating authorities included positive responses to the structured approach complementing existing processes. For example, the Finnish ministry involved, concluding that the exercise was useful for them to

assess the new archipelago programme and the Act in more detail and their effects on island and rural areas (Finland Replication Lab).

A conclusion emerging from the analysis of indicators (Step 4) is the importance of considering policy type as a variable in indicator development and analysis. In the next step of analysis, indicators identified in Step 4 of the rural proofing will be mapped against those being developed and analysed in Work Packages 3 (e.g. Stringer rural areas, accessibility of public and private services, identified in Finland, Netherlands, Poland and UK Labs) and 4 (e.g. Stronger rural areas, demographic trends, linking to Work Package 4 Quality of life and wellbeing), and in turn inform the design of policies tailored for rural areas.

The development of the rural proofing process will be further informed by the collective experiences from the Multi-Actor Labs. The nature of the responses using the framework of the Long Term Vision for Rural Areas and the Rural Compass will be taken into account in its future application within GRANULAR.

The underlying data of the rural proofing assessments are compiled into knowledge accounts in the form of MS Excel spreadsheets from the Labs. These provide a means of sharing information back to the participants in the workshops held by the Labs, or in further textual analysis. The deliverable includes annexes of a set of narratives of the rural proofing of selected policies and initiatives by the Multi-Actor Labs, and a set of fiches comprising one page per rural proofing assessment. These will be prepared for dissemination in the public domain.

Following-on the self-selected initiatives by the Multi-Actor Labs, and the exercise at the cross-lab visit in south-west France, there will be an opportunity for Labs to undertake a rural proofing exercise on a policy with shared relevance across Europe. Analysis of the combined results of the rural proofing processes, and engagement within the Multi-Actor Labs and with DG AGRI will inform recommendations for tailored future rural policies, to be reported in GRANULAR Deliverable D5.3.

The rural proofing process and findings provide materials for use in knowledge exchange events with actors in policy and practice. These include contributing to the webinar series of the Rural Pact (June 2025), EU DG AGRI (June 2025) and proposed for events of the European Rural Parliament (October 2025) and the EU Week of Regions and Cities (October 2025).

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7. References

- Bryce, B. (2024). Rural Proofing: Lessons from OECD countries and potential application to health, OECD Regional Development Papers, No. 73, OECD Publishing, Paris, <https://doi.org/10.1787/4011899a-en>.
- Defra (2022). Rural proofing: Practical guidance to consider the outcomes of policies in rural areas, November 2022, Department of Environment, Food and Rural Affairs, United Kingdom Government, pp19.
- Defra (2024). Delivering rural opportunity: third report on rural proofing, 18 March 2024, Department of Environment, Food and Rural Affairs, United Kingdom Government.
- Delgado-Viñas, C. and Gómez-Moreno, M.L. (2022). The interaction between urban and rural areas: An updated paradigmatic, methodological and bibliographic review. *Land*, 11(8), 1298.
- European Commission (2023). 'Better regulation' Toolbox – July 2023 edition, https://commission.europa.eu/document/download/9c8d2189-8abd-4f29-84e9-abc843cc68e0_en?filename=BR%20toolbox%20-%20Jul%202023%20-%20FINAL.pdf
- European Commission (2024). The long-term vision for the EU's rural areas: key achievements and ways forward. Report From the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, pp17. <https://op.europa.eu/en/publication-detail/-/publication/0463e1b8-ec1f-11ee-8e14-01aa75ed71a1/language-en/format-PDF/source-search>
- European Commission (2025). Communication From The Commission to The European Parliament, The Council, The European Economic and Social Committee and The Committee of The Regions on A Vision for Agriculture and Food, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52025DC0075>
- Gaugitsch, R., Messinger, I., Neugebauer, W., Schuh, B., Toptsidou, M. and Böhme, K. (2022). Rural proofing – a foresight framework for resilient rural communities. European Committee of the Regions, pp87.
- Hall, H. and Gibson, R. (2016). Rural Proofing in Canada: An Examination of the Rural Secretariat and the Rural Lens. Universities of Waterloo and Guelph, August 2016, pp22.
- McCallum, I., Hoffer, M., Laso Bayas, J. C., Kull, M., Vihinen, H., Ysebaert, R., Marianne, G., Giraud, T., Viry, M., Lambert, N., Voepel, H., Steele, J., Sorichetta, A., Tapia, C., Cuadrado, A., Miller, D., Hopkins, J., Farinelli, V., Ulman, M., Simek P., Motyckova V., Panoutsopoulos H., Chitos A., Fournarakos A., Zafiraki P. and Berchoux, T. (2023). Screening rural data sources, D3.1, GRANULAR. pp18. <https://doi.org/10.5281/zenodo.10807438>
- Northern Ireland Assembly (2009). Rural Proofing and the Rural Champion, Research and Library Services, Northern Ireland Assembly, pp13.
- Mantino, F., Forcina, B., Vironen, H., Fonseca, L. and Kahila, P. (2023). Review of rural proofing instruments and experiences in European and non-European countries, Rural Sustainability Transitions through Integration of Knowledge for improved policy processes (RUSTIK), Deliverable D1.3, pp43.
- Martino, G. Miller, D., Chartier, O., Vilcu, R., Fao, E. and Zomer, B. (2024). Guidelines for the Rural Proofing of Transition Policies in Europe, D5.1, Giving Rural Actors Novel data and re-Useable tools to Lead public Action in Rural areas (GRANULAR), pp115.
- Oostindie H., Bock B. and Wiskerke, H. (2023). Prototype Rural Diversity Compass, Deliverable D2.2, Giving Rural Actors Novel data and re-Useable tools to Lead public Action in Rural areas (GRANULAR), pp42.
- Rouby, A. and Ptak-Bufkens, K. (2022), New approaches to rural proofing EU legislation following EU's rural vision. Presentation at Rural proofing for health, OECD Rural development conference, 28 September 2022.
- Scottish Government (2024). Business and Regulatory Impact Assessment Toolkit, Scottish Government, pp50.

7.1. Rural Proofing Exercise Initiatives

- Scottish Government (2020). The Environment Strategy for Scotland: vision and outcomes. <https://www.gov.scot/publications/environment-strategy-scotland-vision-outcomes/documents/>

Gazzetta Ufficiale della Repubblica Italiana (2011). Decreto Legislativo 4 marzo 2011, n. 23 Disposizioni in materia di federalismo Fiscale Municipale. (11G0066) (GU Serie Generale n.67 del 23-03-2011). <https://www.gazzettaufficiale.it/eli/id/2011/03/23/011G0066/sq>

Urząd Marszałkowski Województwa Zachodniopomorskiego. (2020). Strategia rozwoju Województwa Zachodniopomorskiego 2030. https://eregion.wzp.pl/sites/default/files/srwz_2030.pdf

Urząd Marszałkowski Województwa Zachodniopomorskiego. (n.d.). Polityka rozwoju obszarów wiejskich w Województwie Zachodniopomorskim. http://www.eregion.wzp.pl/sites/default/files/polityka_obszarow_wiejskich_ost.pdf

Hellenic Republic. (2023, April 1). Code of Immigration (Law No. 5038/2023), Article 68. Government Gazette of the Hellenic Republic. <https://migration.gov.gr/wp-content/uploads/2023/04/%CE%9A%CF%8E%CE%B4%CE%B9%CE%BA%CE%B1%CF%82-%CE%9C%CE%B5%CF%84%CE%B1%CE%BD%CE%AC%CF%83%CF%84%CE%B5%CF%85%CF%83%CE%B7%CF%82.pdf>

Ministry of Economic Affairs and Employment of Finland. (n.d.). Rural and island policy. <https://tem.fi/en/rural-and-island-policy>

Ministry of Agriculture and Forestry of Finland. (2024). Archipelago as a national treasure: National Archipelago Programme 2024–2027 (Publications of the Ministry of Agriculture and Forestry 2025:1). <https://julkaisut.valtioneuvosto.fi/handle/10024/166032>

Regione Toscana. (2023, June 29). Decreto dirigenziale n. 14378 del 29/06/2023: Bando di attuazione dell'intervento "Riconoscimento alle aziende zootecniche dei danni da predazione provocati dal lupo (Canis lupus)". https://www301.regione.toscana.it/bancadati/atti/Contenuto.xml?id=5378870&nomeFile=Decreto_n.14378_del_29-06-2023

Institute of Economics and Rural Development. (2025, April 10). GRANULAR Project in Ignalina Region: Universal Design for Inclusive Rural Development. <https://www.ekvi.lt/en/news/granular-project-in-ignalina-region-universal-design-for-inclusive-rural-development>

Government of the Netherlands. (n.d.). Housing. <https://www.government.nl/topics/housing>

8. Annex I. Multi-Actor Lab Fiches

NAME OF THE REPLICATION LAB: Finland

COUNTRY/REGION: Finland

TITLE OF THE INITIATIVE: Finnish Island Policy

“The programme aims to ensure the right of islanders to a healthy environment and to influence decisions concerning their living environment”

Initiative ID

Level of initiative

Multi-level

The Archipelago Act and the Programme are adopted at the national level, while the implementation is carried out regionally.

Stage of the initiative

Planning stage/Implemented

The Archipelago Act is currently under revision, while the National Archipelago Programme 2024–2027, published in 2024, is currently under implementation.

Rural Relevance

Proactive rural targeting

Finland's Island Policy is expressly designed to address the specific circumstances of island municipalities, particularly in remote areas.

Nature of the initiative

Binding/Non-binding

The Archipelago Act is a binding legal framework, while the National Archipelago Programme is a strategic guidance document, recommending priorities, outcome targets and monitoring mechanisms.

Summary of main impacts



Stronger Rural Areas

The Finnish Island Policy is deeply rooted in strengthening participatory governance and local democracy. The Island Development Act supports a long-standing tradition of regional balance by empowering communities, particularly through initiatives like LEADER and CLLD. The programme actively promotes local experimentation and the co-creation of innovative service models. It addresses demographic challenges by recognising the rise of seasonal residency and promoting services tailored to multi-residence patterns.



Prosperous Rural Areas

The programme views a vibrant, diverse economy as being key to archipelago vitality. It promotes multidisciplinary entrepreneurship, especially in areas of fishing, tourism, and food production. Networking between local entrepreneurs and youth is supported, with scholarships helping young people establish services and businesses. Although support for the bioeconomy and producer organisations is less explicit, the focus on primary production, innovation, and local value chains underscores an effort to strengthen economic opportunities.



Connected Rural Areas

Digital and physical accessibility are central priorities in the Finnish Island Development Act. The programme treats digital connectivity as equally vital as physical access, enabling remote work and service delivery. Strategic objectives include improving infrastructure, such as road and cycling routes, as well as introducing flexible mobility options that cater to seasonal population shifts. Notably, efforts also focus on enhancing digital skills and human capital within the community, which is essential for supporting location-independent lifestyles.



Resilient Rural Areas

Environmental and climate resilience are strongly emphasised. The archipelago is seen as a testing ground for sustainable solutions, including renewable energy and circular economy practices. Local experimentation is encouraged to reduce environmental footprints and promote climate adaptation. Legal frameworks embedded in the Island Development Act stress the protection of natural landscapes and fundamental environmental rights. Social inclusion is another priority, with specific recognition of equality and social security.

**NAME OF THE REPLICATION LAB:** Greece**COUNTRY/REGION:** Greece, Crete**TITLE OF THE INITIATIVE:** Residence and/or working permit for citizens of third countries with a national entry visa

“The presence of digital nomads in rural areas may accelerate the digitisation process in rural areas”

Initiative ID

Level of initiative

National

It is a national-level initiative, enacted by the Hellenic Parliament (Law 5038/2023) and overseen by the Ministry of Migration and Asylum.

Stage of the initiative

Implemented

Since its adoption on 1 April 2023, the visa scheme has become operational.

Rural Relevance

Incidental rural targeting

The initiative does not specifically target rural areas, solely focusing on eligibility, application procedures and supporting documents for non-EU remote workers in order to establish the Digital Nomad Visa framework.

Nature of the initiative

Binding

The national legislation is binding, and compliance is mandatory under the Immigration Code.

Summary of main impacts



Stronger Rural Areas

Although the initiative does not specifically target rural areas, it attracts digital nomads to Greece, which can be seen as a first step to revitalise such areas. Their presence can rejuvenate local economies by increasing demand for housing, co-working spaces, and services, while also introducing new technologies and global perspectives. However, the temporary nature of their stays and potential cultural gaps could create tensions with residents.



Prosperous Rural Areas

Digital nomads bring with them entrepreneurial mindsets, potentially stimulating local economies. They can contribute to diversified income streams, help local businesses expand into new markets, and support the development of new services such as remote work hubs. These effects are particularly significant in communities where traditional employment is limited, offering new paths for prosperity.



Connected Rural Areas

Digital nomads inherently depend on strong digital infrastructure, prompting necessary investments in broadband, smart services, and transport networks. This, in turn, improves accessibility for all rural residents. To maximise positive outcomes, rural-proofing should inform targeted investments in infrastructure, inclusive digital upskilling for residents, and policies that encourage integration between digital nomads and local communities. This ensures that rural areas become more connected and more resilient and sustainable in the long term.



Resilient Rural Areas

Although the initiative is not directly focused on environmental policy, digital nomads often seek ecologically responsible lifestyles, supporting conservation, green infrastructure, and sustainable practices. Their preferences may encourage the adoption of renewable energy and eco-friendly policies by local authorities. Digital nomads may also engage in or initiate environmentally friendly behaviours, contributing to climate action and local resilience.



NAME OF THE LIVING LAB: Distretto Rurale Val di Cecina

COUNTRY/REGION: Italy

TITLE OF THE INITIATIVE: Provisions on Municipal Fiscal Federalism

"The economic revenue can be invested in improving infrastructure and services, and thus, the quality of life in rural areas, creating job opportunities and stimulating growth"

Initiative ID

Level of initiative

Multi-level

Implementation, though enacted as a national legislative decree, is entirely run at the local level. The tourist tax is collected by private accommodation facilities and remitted to the local treasury.

Rural Relevance

Incidental rural targeting

The initiative does not make explicit reference to rural areas.

Stage of the initiative

Under implementation

The decree was published on 23 March 2011 and has been in force since its entry into effect on 1 January 2024, update for Art. 4). Since then several Italian municipalities adopted the "stay tax".

Nature of the initiative

Binding

As a legislative decree, the initiative is binding, thus, municipalities that choose to adopt the tax must comply with its provisions.

Summary of main impacts



Stronger Rural Areas

The tourist tax policy offers substantial potential for rural revitalisation by enabling municipalities to reinvest the revenue generated into essential local services and infrastructure. This can strengthen the quality of rural communities and enhance their attractiveness. By funding training initiatives and job opportunities, it also encourages youth engagement and economic revitalisation. Revenue can support cultural and environmental assets by contributing to sustainable tourism.



Prosperous Rural Areas

The policy supports diversified rural economies by directing resources into local cultural and tourism-related events. These activities offer platforms for local businesses, artisans, and food producers to showcase their work, creating economic spillovers in the hospitality and cultural sectors. Although there is no specific attention to entrepreneurship, bioeconomy, or producer organisations, the core of the initiative facilitates economic uplift by boosting tourism-linked revenue streams.



Connected Rural Areas

Although digital aspects were not specifically addressed, the policy has a notable effect on physical connectivity. Revenues from the tourist tax can be allocated to upgrade rural mobility infrastructure, such as unpaved roads or small-scale transport services, enhancing access for both residents and visitors. These improvements are essential for fostering inclusion, supporting the tourism economy, and reducing rural isolation.



Resilient Rural Areas

There is no explicit alignment of the tourist tax policy with climate adaptation, land use, or environmental resilience pillars in the information provided. As such, the connection to elements like circularity, ecosystem services, or carbon farming remains indirect. These themes could represent a future opportunity for enhancement, linking tax-funded tourism growth with environmental sustainability goals and reinforcing long-term rural resilience.

**NAME OF THE REPLICATION LAB:** Italy Unipi**COUNTRY/REGION:** Italy**TITLE OF THE INITIATIVE:** Compensation for livestock farms for predation damages caused by wolves

“Investing where identity and community meet each other, transforms rural places into vibrant and self-sustaining territories”

Initiative ID

Level of initiative

Regional

This is a regional-level initiative issued by the Region of Tuscany via Directive No. 13473 of 13 June 2024, under the Agriculture & Rural Development Directorate (ARTEA).

Rural Relevance

Proactive rural targeting

The initiative explicitly targets rural livestock farms in Tuscany suffering losses from wolf (*Canis lupus*) predation. It provides compensation to small, medium and micro- enterprises engaged in certain livestock activities and with the condition to adopt at least one preventive measure.

Stage of the initiative

Under implementation

The decree entered into force on 20 June 2024. During its implementation stage, applications are actively being processed, with annual reporting and disbursements underway.

Nature of the initiative

Binding

As a Regional Directive, the measure is binding for both authorities and eligible farms. However, the participation of farms is voluntary, making the support conditional rather than mandatory for all livestock enterprises.

Summary of main impacts



Stronger Rural Areas

The initiative strengthens rural areas by protecting livestock farming from predation, helping maintain traditional practices essential to rural identity and livelihoods. Compensation and prevention measures support local economic stability and intergenerational continuity in farming. This contributes to rural revitalisation by enabling farmers to remain active in more marginal territories and sustain culturally significant land uses.



Prosperous Rural Areas

By reducing financial risks from predation, the initiative helps stabilise core rural sectors and prevent income loss. This strengthens the economic base of livestock farming and creates indirect opportunities in related services (e.g. fencing, dog training). It supports rural prosperity by enabling farmers to reinvest, diversify, and remain economically active in vulnerable areas.



Connected Rural Areas

While not directly aimed at connectivity, the initiative reinforces the case for service accessibility in remote areas. The requirement for veterinary inspections, digital applications, and administrative follow-up implies a need for functional support systems. By helping farmers remain in sparsely populated zones, it can indirectly support infrastructure and service needs in less connected rural communities.



Resilient Rural Areas

This is the initiative's strongest area of impact. It supports environmental resilience by promoting coexistence between farming and protected species through prevention measures like fencing and guard dogs. These practices reduce pressure on biodiversity, preserve natural capital, and maintain ecosystem services, especially in areas reliant on wild grazing. The initiative aligns with climate-sensitive and low-impact land use strategies.

**NAME OF THE REPLICATION LAB:** Lithuania**COUNTRY/REGION:** Lithuania**TITLE OF THE INITIATIVE:** Assessment and practical implementation of Universal Design (UD) principles to improve the accessibility and efficiency of public services in Ignalina region

“We are not just laying cables or building ramps—we are connecting people to opportunities”

Initiative ID

Level of initiative

Local

This is a local-level initiative driven by the Ignalina District Local Action Group in Lithuania.

Rural Relevance

Proactive rural targeting

The initiative does not explicitly refer to rural terms. It aims at ensuring that all public services and infrastructure are universally accessible, which inherently targets those rural areas that risk being left behind.

Stage of the initiative

Planning stage

The initiative is currently undergoing consultations before the final adoption.

Nature of the initiative

Non-Binding

The initiative is non-binding but it produces guidance and tailored policy recommendations for local and national bodies.

Summary of main impacts



Stronger Rural Areas

The application of Universal Design (UD) principles in the Ignalina district has enabled public services to become more inclusive and responsive to community needs. Residents contribute through informal conversations and structured feedback, reflecting a tightly knit local culture. The initiative addresses aging and depopulation by tailoring services like mobile libraries, youth engagement tools, and support for people with disabilities. By making both cultural and service infrastructure more accessible, the initiative strengthens social cohesion and liveability.



Prosperous Rural Areas

Through improved access to education, training, and public infrastructure, the initiative enables broader community involvement in local development and economic activity. By removing barriers, it empowers youth, entrepreneurs, and service users to engage more fully in Ignalina's future. While not directly targeting the economy, the inclusive service environment is essential for fostering rural vitality.



Connected Rural Areas

UD implementation is transforming Ignalina's approach to mobility and digital connectivity, ensuring that improvements in transport and online access benefit all residents, regardless of age or ability. The initiative fosters inclusive transport planning and promotes digital inclusion, particularly for citizens with limited mobility. It builds the foundations for resilient digital communities by addressing both infrastructure and digital skills.



Resilient Rural Areas

Although not focused on the environment, the initiative advances social resilience by adapting services to demographic realities and ensuring equal access for vulnerable populations. By improving care, education, and everyday accessibility, it helps reduce social isolation and supports independent living. Women, the elderly, and people with disabilities benefit from more equitable participation in public life.

NAME OF THE LIVING LAB: Netherlands P10

COUNTRY/REGION: The Netherlands

TITLE OF THE INITIATIVE: National Housing Policy

"Housing policy becomes rural-proof when villagers are given the tools to build their own future"

Initiative ID

Level of initiative

Multi-level

Responsibility is shared across three levels: 1) the national government sets overall housing needs and policy frameworks; 2) provincial administrations negotiate specific regional targets through Region Deals; and 3) municipalities finalise quotas and issue permits to builders and social-housing cooperatives.

Stage of the initiative

Planning stage

The initiative is undergoing current consultations, together with public hearings and Region Deal negotiations, alongside dedicated workshops to integrate insights on rural-urban housing dynamics.

Rural Relevance

Proactive rural targeting

Dutch housing policy has historically prioritised urban centres, but since 2009, a modicum of rural-targeted expansion was introduced. This was done by piloting of "Red for Green" schemes, which allow conditional rural building rights in exchange for environmental enhancements.

Nature of the initiative

Non-binding

While national targets and provincial quotas carry political weight, rural-specific instruments like "Red for Green" and New Rural Estates are voluntary.

Summary of main impacts



Stronger Rural Areas

The decentralised nature of the Netherlands' housing policy allows rural municipalities to tailor housing strategies to local needs, including through mechanisms such as Collective Private Commissioning (CPC). These empower communities to plan and build housing suited to younger and elderly residents, bolstering demographic sustainability and participatory planning.



Prosperous Rural Areas

Affordable housing is identified as a key driver of rural economic diversification, youth retention, and multifunctional land use. Rural residential options support entrepreneurship and enable work-life combinations, while farm women and labour migrants also emerge as key actors in shaping inclusive and sustainable rural economies.



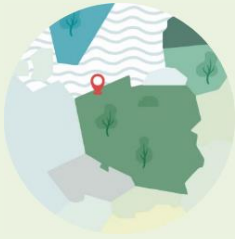
Connected Rural Areas

Although digital infrastructure is managed in a separate policy domain, rural revitalisation efforts depend strongly on broadband connectivity and accessible transport. Improved rail links and recognition of digital literacy needs, especially among youth, highlight how housing policy intersects with mobility and connectivity.



Resilient Rural Areas

Housing-linked initiatives such as Red for Green and carbon farming pilots are integrating climate goals with land use planning. They promote multifunctional landscapes and renewable housing materials, while tackling challenges like farm succession and rural energy efficiency. These align housing with broader goals of climate resilience and environmental restoration.



NAME OF THE LIVING LAB: Poland West Pomerania

COUNTRY/REGION: Poland

TITLE OF THE INITIATIVE: West Pomeranian Voivodeship Rural Development Policy and Development Strategy until 2030

“Strong communities grow where people feel they belong and have a say”

Initiative ID

Level of initiative

Regional

The set of initiatives is implemented at the regional level by the authorities of the West Pomeranian Voivodeship.

Rural Relevance

Proactive rural targeting

The set of initiatives aim to comprehensively improve the quality of life of residents and increase the potential development of the West Pomeranian Voivodeship, with a particular emphasis on revitalising rural areas through targeted investments and sustainable growth initiatives.

Stage of the initiative

Under implementation

Currently, both initiatives are in the implementation stage, with activities and investments underway but not yet completed.

Nature of the initiative

Non-binding

While the initiatives are not legally binding, they are strategic planning documents that play a crucial role in shaping regional development and guiding the use of public and EU funds.

Summary of main impacts



Stronger Rural Areas

The initiative empowers local communities by addressing development gaps, encouraging inter-municipal cooperation, and fostering inclusion of marginalised groups through participatory governance and social capital building. Efforts focus on ownership, trust, innovation and collaboration, strengthening the local fabric of rural life



Prosperous Rural Areas

By investing in short food supply chains, green products, and local entrepreneurship, the initiative boosts rural economies, employment, and innovation. Support for SMEs, producers organisations, and the bioeconomic sector builds a diversified and resilient rural economy



Connected Rural Areas

Improved digital and physical connectivity are central to this initiative, tackling digital exclusion with infrastructure and skills training while enhancing rural mobility through integrated transport solutions. These elements are critical to equitable access and revitalisation.



Resilient Rural Areas

The policy supports energy transition and land-use adaptation in harmony with the region's strong organic farming base and natural capital. It promotes a bioeconomy, green growth, and sustainable tourism while aiming to counteract soil degradation and resource over-exploitation.

**NAME OF THE LIVING LAB:** Rural Scotland**COUNTRY/REGION:** United Kingdom**TITLE OF THE INITIATIVE:** Environment Strategy for Scotland

"From healthy soils to clean air, resilience grows where nature thrives"

Initiative ID

Level of initiative

Multi-level

The initiative is multi-level, characterised by a governance model which allows region-specific adaptation of policies under the national framework.

Stage of the initiative

Under implementation

After the official publication in 2020, the Strategy is currently in the implementation stage, with detailed outcome pathways being developed and an initial monitoring framework in place as of January 2025.

Rural Relevance

Proactive rural targeting

The initiative explicitly commits "to help ensure that local economies and communities in rural areas thrive," embedding rural considerations throughout its vision and outcomes framework.

Nature of the initiative

Non-binding

The initiative is non-binding, nonetheless, it sets guiding principles, outcome targets and recommended approaches. The document itself is advisory, framing subsequent legislation and regulation.

Summary of main impacts



Stronger Rural Areas

The Strategy empowers rural communities through place-based planning tools such as Local Development Plans, which promote participatory processes in land use decisions and sustainability goals. These mechanisms encourage local ownership in shaping rural futures, blending environmental stewardship with social inclusion.



Prosperous Rural Areas

The Strategy envisions rural areas as drivers of a sustainable economy, advancing the bioeconomy, circular innovation, and small business growth. It promotes green jobs, value-added natural products, and producer group support to foster diversified and thriving local economies.



Connected Rural Areas

Although not specifically focused on infrastructure, the Strategy emphasises skills development, digital platforms for reuse and recycling, and smart transport planning, particularly in rural and remote settings. Digital tools and low-carbon mobility are seen as key enablers of inclusion and environmental justice.



Resilient Rural Areas

Central to the Strategy is the restoration and protection of natural assets such as soils, peatlands, and biodiversity, alongside reducing emissions from agriculture. Scotland's role in the global climate agenda is clear, as the Strategy commits to nature-based solutions and resource circularity.

9. Annex II. Results of the Rural Proofing Exercise

1 Finland Replication Lab

Finnish Island Policy

The Finnish Island Policy's 2 elements: Archipelago / island Act and National Archipelago Programme 2024–2027. Island policy is based on the law on promoting the development of islands, the institutional cornerstone of island development and internationally unique. The aim was to pay particular attention to the special conditions of archipelago and island municipalities. The state and municipalities must take measures to safeguard the permanent settlement of the archipelago. This is to be achieved by creating adequate opportunities for the population to earn a living, move around and access basic services, and to protect the landscape and nature of the archipelago from environmental damage.

The ongoing update of the law shall improve the capacity of the island policy to influence and implement the Archipelago Programme. The new Programme for 2024-27 was published in November 2024. The publisher of the Archipelago Programme is the Ministry of Agriculture and Forestry, the authors are The Island Committee, MDI Consulting, and Spatia - Centre for Regional Research. In terms of type, this initiative is a regulation and a strategy (national programme). It is a national-level initiative. It is already adopted. Broadly speaking, the initiative deals with promoting the vitality and sustainable development of different archipelago areas/ islands in the country and based on a definition of different types of areas.

The new programme has four strategic objectives: i) archipelago is physically and digitally accessible, ii) services are ensured, iii) a diverse environment for practising economic activities and iv) nature & environment of the archipelago are doing well. The revised island act shall consider major changes in the operating environment, such as the increase in the number of seasonal residents and the rising trend of multilocal living. It shall improve access to services, transport and mobility in islands and coastal and water areas. Comprehensive security is seen as part of the strategic objectives. The main actors concerned by the initiative are residents and free-time residents of islands and coastal and water areas. The initiative focuses on various sectors and takes a rather broad or holistic view. Associations and CSO organisations, municipalities and other service providers (public & private), transportation and accessibility, entrepreneurship (e.g. fishing, agriculture, food production, and tourism), environment (e.g. waste and water management, ensuring biodiversity, climate change, sustainable tourism). There are explicit references to "rural" in the body of the initiative. The programme authors stress that islands must be mentioned as target areas alongside rural and urban areas. The project activities of the Leader groups and the EAFRD targeting island regions are at the heart of island policy, and their visibility as a policy activity should be increased. Development work in the archipelago is based on sensitivity to local conditions. The initiative is linked to a fund or financial instrument. In terms of funding, a holistic view of Regional Development is envisaged, and the integration of island policy into the programmes of the Structural Funds, the EAFRD, the Marine and Fisheries Fund and the Local Leaders Action Groups requires visibility and timely involvement of island policy in the preparation of the programmes. The initiative sets out general rules that will be operationalised at the local level. Local development of islands requires setting development objectives, selection of concrete development sites and implementing of development actions to address them. Local programmes shall provide a systematic and long-term approach to place-sensitive island development and shall proceed in 4 stages:

- Identify the current situation and the starting point for development;
- Select areas for development (exploiting strengths and/or removing weaknesses and bottlenecks);
- Draw up an action plan/list of measures to address the selected areas for improvement;
- Implement the measures, e.g. through project funding.

To obtain project funding, a project plan and a responsible implementing organisation are required. Project funding is available from a variety of sources. EU regional and structural policy and EU agricultural and rural funding instruments are the most important in terms of scale.

- Theme 1 - Physically and digitally accessible archipelago: Functional & reliable telecommunications & telephone connections, functioning island transport, improvements to the lower road network.

- Theme 2 - Island services are secured: accessible services for the island populations (e.g. early childhood education, health and elderly care), testing new services telehealth, remote education, and online public services.
- Theme 3 - Diversified environment for economic activity: accessing funding channels & networking, year-round tourism, good conditions for fisheries.
- Theme 4 - Archipelago nature and environment: improved awareness related to the protection of islands and river basins, innovations in waste and water management, improved oil spill response capacity.

The initiative makes reference to indicators from another initiative.

1.1. Stronger Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Stronger Rural Areas pillar.

Table A1: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Stronger Rural Areas pillar.

Positive effects	Negative effects
Stronger Participatory Governance: ▪ The policy enhances stakeholder consultation and engagement through participatory processes, ensuring that local communities have a say in decision-making. ▪ Encourages CLLD, strengthening local governance structures. Support for Rural Revitalisation & Economic Development: ▪ Aims to sustain permanent settlement and improve economic viability in the archipelago by enhancing employment opportunities and service accessibility. ▪ Supports tourism, cultural heritage, and year-round economic activity, boosting rural businesses. Improved Access to Services & Infrastructure: ▪ Aims at expanding funding for wellbeing services in designated archipelago regions, ensuring better healthcare, mobility, and essential services for residents. ▪ Encourages innovative service solutions like drone-based medicine delivery and floating health centres. Adaptation to Demographic Trends: ▪ Recognises the importance of seasonal residents and multi-residence trends, integrating them into service planning and funding decisions.	Possible unequal impact across rural areas: ▪ The effectiveness of the policy may vary based on geographic and demographic differences, with some rural areas benefiting more than others (e.g., designated archipelago wellbeing counties receive targeted funding). ▪ Limited local-level capacity to assess or measure the full impact of policies across different rural regions. This requires good collaboration across governance scales & sectors. Challenges in Service Delivery & Infrastructure: ▪ Seasonal fluctuations in population may strain local services, making it difficult to provide year-round accessibility and affordability. Yet the policy tries to outbalance this.

- Provides incentives for young people through scholarships and business opportunities, potentially mitigating rural youth outmigration.

Encourages Innovation & Sustainability:

- Supports experimentation in service delivery, including digital solutions and sustainability-focused initiatives.
- Promotes environmental preservation alongside economic development to ensure balanced growth in rural areas.

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Stronger Rural Areas.

Box A1: Considerations regarding the policy/initiative 'rural-proof' with respect to the Stronger Rural Areas pillar.

The policy / law is geared to strengthen local governance through participatory decision-making, ensures targeted support for rural economic development and services, and promotes innovative, sustainable solutions tailored to the unique demographic and geographic challenges of diverse rural communities, particularly in archipelago areas.

1.2. Resilient Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Resilient Rural Areas pillar.

Table A2: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Resilient Rural Areas pillar.

Positive effects	Negative effects
Energy Independence & Security ▪ Offshore wind farms and renewable energy projects strengthen energy self-sufficiency in island and rural regions, reducing dependence on fossil fuel imports. Economic Growth & Local Business Opportunities ▪ The expansion of offshore wind farms creates business opportunities, jobs, and investment potential for local entrepreneurs and rural communities. Climate & Environmental Benefits ▪ Supports EU climate goals by reducing greenhouse gas emissions, improving biodiversity through peatland restoration, and promoting sustainable land use. Social Inclusion & Territorial Cohesion	Land Use Conflicts & Environmental Trade-offs ▪ Large-scale renewable energy projects and peatland restoration might limit agricultural and forestry activities, leading to competition over land use. Local Resistance & Social Acceptance ▪ Offshore wind farms and other energy projects can face opposition due to their impact on landscapes, tourism, and local livelihoods. Implementation Costs & Regulation ▪ Transitioning to renewable energy and sustainable land use requires significant financial investment and coordination across multiple governance levels. Uneven Regional Impacts ▪ The benefits of energy transition and environmental policies may be concentrated in

- Encourages participation of women, minorities, and vulnerable groups in rural economic activities, fostering greater social resilience. Infrastructure & Service Development - Investment in rural energy transition and land-use planning can improve infrastructure, services, and digital connectivity in remote areas.	certain regions, leaving some rural areas with fewer direct gains.
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The following box shows whether the policy/initiative is considered ‘rural-proof’ with respect to the pillar of Resilient Rural Areas.

Box A2: Considerations regarding the policy/initiative ‘rural-proof’ with respect to the Resilient Rural Areas pillar.

The policy / law is geared to enhance energy independence, economic opportunities, and infrastructure in rural communities and particularly archipelago and islands contexts while fostering social inclusion and environmental sustainability, ensuring that communities living in these areas benefit from the transition to renewable energy.

1.3. Connected Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Connected Rural Areas pillar.

Table A3: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Connected Rural Areas pillar.

Positive effects	Negative effects
Digital Inclusion & Remote Work Opportunities - Expanding high-speed broadband, 5G, and digital innovation hubs helps bridge the rural-urban digital divide. - Enables location-independent work, benefiting freelancers, entrepreneurs, and businesses. - Encourages new service models, such as telehealth, online education, and e-governance. Strengthened Rural Communities & Digital Skills - Focuses on "human capital" by improving digital skills, supporting local entrepreneurship, and boosting digital literacy. - Enhances social connectivity through digital solutions, making rural living more attractive for young professionals and remote workers. Improved Transport & Mobility - Investment in multi-modal mobility solutions (e.g., e-mobility, cycling paths, and water transport) strengthens urban-rural linkages.	Unequal Access & Digital Gaps - Potential challenges in reaching all rural areas equally—some remote communities may struggle with weak digital infrastructure. Seasonal Pressure on Services & Transport - Increased remote work and second-home ownership may strain local infrastructure and services, particularly in high-tourism rural areas. Dependence on Centralised Policies & Funding - Strong reliance on national and EU funding mechanisms could limit local flexibility in implementing digital and transport solutions.

- Ensures affordable transport services for rural residents, improving access to essential services (e.g., healthcare, education, and jobs). - Enhances commuting infrastructure, reducing isolation and improving regional economic activity. Rural Revitalisation Through Migration & Accessibility - Better transport and digital infrastructure make rural areas more attractive for new residents and seasonal dwellers. - Supports flexible commuting options, benefiting both permanent and part-time rural residents.	
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The following box shows whether the policy/initiative is considered ‘rural-proof’ with respect to the pillar of Connected Rural Areas.

Box A3: Considerations regarding the policy/initiative ‘rural-proof’ with respect to the Connected Rural Areas pillar.

The policy / law aims at strengthening rural, archipelago and islands communities by improving digital connectivity and transport infrastructure, making remote living and working more accessible and attractive. It also empowers rural residents with enhanced digital skills and mobility options, promoting local entrepreneurship and regional economic growth.

1.4. Prosperous Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Prosperous Rural Areas pillar.

Table A4: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Prosperous Rural Areas pillar.

Positive effects	Negative effects
Diversified economies - The Island Development Act promotes economic diversification by supporting multiple sectors (e.g., fishing, agriculture, food production, tourism). - Multidisciplinary entrepreneurship is encouraged, leveraging local resources for year-round economic activity. - The programme recognises the unique needs of islands, which is an important step toward targeted rural support. Entrepreneurship and social economy - The programme promotes networking and cooperation between local entrepreneurs, which	No negative effects were identified. - Yet, direct support for the social economy is not a key focus. Neither are measures that explicitly support the rural bioeconomy in terms of sustainable land and forest management practices and investments through the EU Forest Strategy. - Also strengthening specific producer organisations is not in focus, whilst promoting economic diversification by supporting multiple sectors (e.g., fishing, agriculture, food production, tourism) is one of the key focus areas in terms of the Prosperous Pillar.

can strengthen local business ecosystems and encourage knowledge exchange.

- It indirectly supports conditions for primary production, ensuring rural business sustainability.

Increasing employment opportunities for young people

- The Island Springboard Scholarship helps young people launch businesses and connect with local entrepreneurs through mentoring and training.
- This initiative encourages youth retention in rural and remote areas.

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Prosperous Rural Areas.

Box A4: Considerations regarding the policy/initiative 'rural-proof' with respect to the Prosperous Rural Areas pillar

Overall, the programme and law, and in connection, set out to provide strong support for economic diversification, entrepreneurship, and youth employment. Whilst explicit support for social economy models, producer organisations, and rural bioeconomy development in the sense of how the question in the tool is framed - is limited, targeted areas might benefit from broader business networking and primary production support.

1.5. Final Assessment

In addition to what was said above on the Prosperous Rural Areas pillar, the law and programme align well with the Stronger Pillar, positively impacting participatory processes, rural revitalisation, access to services, and tourism also supporting economic activity and innovation. Overall, the initiative is well-aligned with rural proofing principles and could further benefit from stronger strategic focus on cultural identity and year-round tourism development / tourism infrastructure.

The initiative aligns well with the Connected Rural Areas pillar, particularly in terms of digital connectivity, infrastructure, and mobility. The focus on digitalisation as a key enabler for remote work and service provision holds the promise to strengthens rural accessibility, both physically and digitally.

2. Greece Replication Lab

Residence and/or working permit for citizens of third countries with a national entry visa

The title of the initiative is "Residence and/or working permit for citizens of third countries with a national entry visa". The author of the initiative is the Hellenic Government. In terms of type, this initiative is a legal text which is part of the Immigration Code: Law No. 5038, Article No. 68 of 1 April 2023. It is a national level initiative. It is already adopted.

Broadly speaking, the initiative deals with the procedures and conditions for digital nomads with citizenship from non-EU countries to obtain a residence and/or working permit for themselves and their families, initially for a 12-month period in Greece, which can be renewed for a period of 2 additional years. The objective of the initiative is to set out the conditions and requirements for non-EU country citizens who are digital nomads to reside and work legally in Greece and to be accompanied by their family if required. The main actors concerned by the initiative are digital nomads who are non-EU country citizens. In the context of the Law, digital nomads

are defined as self-employed, freelancers or employees who may provide their work within the framework of a work contract or the provision of services or work remotely, using Information and Communication Technologies (ICT), to employers or clients outside Greece. The initiative concerns all employment sectors where working remotely using ICT is an option.

There are no explicit references to "rural" in the body of the initiative. It is not linked to a fund or financial instrument. The initiative sets out a series of conditions and obligations that need to be implemented during operations (i.e. it requires for monitoring, data collection, testing protocols, etc). The national Digital Nomad Visa is granted to the interested party after applying in person or by e-mail or registered letter to the competent Greek consular authority, which is obliged to respond within ten (10) days of the relevant request of the interested party and to complete the visa granting procedure in a "one-stop shop for the interested party".

As a Type-D Visa, the Greek Digital Nomad Visa requires the following supporting documents to be included in the application:

- Declaration Letter: A formal statement declaring that the applicant intends to use their national entry visa for remote work and will not engage in any employment or freelance services for a Greek-based employer;
- Proof of Employment, which could be proven by: an open-ended contract of employment or independent services or proof of employment with an employer, natural or legal person, who is established outside the Greek Territory, or in case of a fixed-term contract, with a remaining duration covering the period of the granted national visa, or an open-ended contract of employment or independent services or, in the case of a fixed-term employment contract, with a remaining duration covering the period of validity of the granted visa, in case the third-country national is self-employed with more than one employer established outside Greece or information on the applicant's status in the company, as well as information on the trade name, registered office, field of activity, and corporate purpose of the company in case the applicant is self-employed in their own company, which is outside the Greek Territory;
- Proof of Sufficient Funds: Evidence that the applicant has sufficient resources at a stable income level to cover their living expenses during their stay in the country, without burdening the national social welfare system.

The amount of sufficient resources is set at 3.500 EUR per month, proof of which is by: i) by the contract of employment or independent services or employment certificate, in the case of employment or independent services, or ii) by a bank account statement. If sufficient resources come from employment or independent services, the above minimum amount refers to net income after payment of the required taxes in the country of employment. The above amount is increased by twenty percent (20%) for the spouse or partner and by fifteen percent (15%) for each child. Greek Digital Nomad Fee: The application fee is €75.

General supporting documents: A fully completed and signed application form for a long-stay national visa, accompanied by a recent, colour photograph of the applicant, which shall comply with the relevant ICAO-defined specifications; Passport or other travel document recognised by the competent Greek authorities which meets the following criteria: (a) it shall be valid for at least three months from the date of intended departure from the territory of the Member States of the Schengen enhanced cooperation, or, in the case of more visits, after the last scheduled date of departure from the territory of the Member States, however, in justified cases of urgency, this obligation may be waived; (b) it shall contain at least two blank pages, (c) it has been issued within the previous decade. A certificate of criminal record from the foreign authorities certifying the applicant's criminal record in their country of residence; A medical certificate from a recognised state or private body, showing that the applicant does not suffer from a disease capable of posing a risk to public health in accordance with the international data of the World Health Organisation (WHO) and the EU acquis, as well as other infectious, contagious or parasitic diseases, which require measures to protect public health. Travel insurance, with a period of validity equal to the visa issued, as a minimum, which covers the costs that may arise in the event of repatriation for medical reasons, for emergency medical care and/or emergency hospital care. In the case of digital nomads residing in villages / rural areas: increased economic activity which can

support the establishment of new employment opportunities for locals, i.e. provision of various services; economic activity all year round and not only in the touristic period; establishment of better digital networks and infrastructure, overall improvement of transport, healthcare and education; negative impacts: in touristic areas finding housing is already a huge problem for seasonal workers. In case of digital nomads residing in cities / non-rural areas: the housing problems will be increased, especially in touristic towns/cities like Chania and Rethymno, and prices will increase making it less affordable for locals. The initiative does not entail indicators.

2.1. Stronger Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Stronger Rural Areas pillar.

Table A5: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Stronger Rural Areas pillar.

Positive effects	Negative effects
Digital nomads can bring fresh perspectives to local decision-making, promoting inclusive and innovative community engagement. By contributing to participatory governance and sharing new ideas, they can play an active role in shaping local development. Encouraging their involvement in community activities can strengthen social cohesion, build mutual understanding, and even inspire local residents. This engagement may also help attract new permanent settlers and enhance the overall appeal of the rural community.	The dynamic presence of digital nomads can sometimes lead to tensions with local communities and cultural misunderstandings. Their short-term stays may contribute to unsustainable social and economic environments. A significant influx of digital nomads may also come at the expense of the local population, potentially undermining local traditions, culture, and identity.

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Stronger Rural Areas.

Box A5: Considerations regarding the policy/initiative 'rural-proof' with respect to the Stronger Rural Areas pillar.

The Digital Nomads initiative can influence rural areas both positively and negatively within the context of the Stronger Rural Areas pillar. On the positive side, it has the potential to promote participatory policymaking, encourage the use of digital tools, boost local economies, attract new talent, and support demographic revitalisation—particularly in regions facing population decline. However, challenges must also be acknowledged. The arrival of digital nomads may lead to social tensions, cultural shifts, and increased pressure on housing, public services, and infrastructure—especially in communities not fully prepared for rapid change. To ensure a balanced and sustainable approach, it is essential to adopt a rural-proofed policy design. This includes continuous monitoring and evaluation, inclusive stakeholder engagement, and mechanisms to ensure that local voices are heard. A clear regulatory framework is also necessary to manage potential conflicts, guarantee fair access to resources, and protect the social, cultural, and economic fabric of rural communities while integrating new residents effectively.

2.2. Resilient Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Resilient Rural Areas pillar.

Table A6: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Resilient Rural Areas pillar.

Positive effects	Negative effects
Many digital nomads are drawn to rural areas for a lifestyle that embraces sustainability. They may actively support and encourage local conservation initiatives, promote eco-friendly businesses, and adopt environmentally conscious practices in daily life.	The short-term presence of digital nomads, combined with the need to rapidly improve infrastructure, may place added pressure on local natural resources. Increased demand for water, energy, and waste management can impact the environment and sustainability efforts, especially in areas that are not equipped to handle such growth. If rural areas lack the capacity to meet the growing demand for housing, services, and resources due to an influx of digital nomads, it could strain local infrastructure. This may lead to rising costs for housing and essential services, potentially causing social tensions between newcomers and the local population.

The following box shows whether the policy/initiative is considered ‘rural-proof’ with respect to the pillar of Stronger Rural Areas.

Box A6: Considerations regarding the policy/initiative ‘rural-proof’ with respect to the Resilient Rural Areas pillar.

While many digital nomads are attracted to rural areas for a sustainable lifestyle and may support local conservation and eco-friendly businesses, their short-term presence, coupled with the need for rapid infrastructure development, can strain local natural resources. Increased demand for water, energy, and waste management may negatively affect environmental sustainability. Additionally, if rural areas cannot meet the growing demand for housing and services, it could place pressure on infrastructure, raise costs, and create social tensions between digital nomads and local residents.

2.3. Connected Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Connected Rural Areas pillar.

Table A7: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Connected Rural Areas pillar.

Positive effects	Negative effects
The presence of digital nomads is driving significant improvements in connectivity for rural areas. To attract and retain these remote workers, many regions are investing in high-speed internet, digital infrastructure, and public transportation, making rural communities more accessible, appealing, and future-ready. This momentum is accelerating the adoption of innovations such as smart farming, digital healthcare, and e-governance, which enhance both virtual and physical connections within these areas. Increased connectivity also attracts public and private investment in advanced technologies, boosting the competitiveness of rural regions and supporting long-term digital transformation. Beyond infrastructure, digital nomads contribute to the local ecosystem by fostering digital skills, entrepreneurship, and job creation. Their collaborative mindset and diverse expertise help strengthen local businesses, promote knowledge-sharing, and introduce new ways of thinking—further empowering rural communities to thrive in the digital age.	Digital Divide Risks: While digital connectivity can close the gap between rural and urban areas, it may inadvertently widen the divide if some areas lack the infrastructure or capacity to integrate these technologies. This could lead to exclusion in more remote or underdeveloped regions. Uneven Regional Development: The focus on attracting digital nomads could lead to an imbalance in development, where only regions attracting digital nomads will benefit. Other rural areas might be left behind if they lack the resources or incentives to invest in the required digital infrastructure and transport services. Dependency on Digital Nomads: The push to attract and support the digital nomads may result in an over-reliance on external, transient populations rather than in attracting more permanent residence. This could potentially lead to socio-economic instability if these populations leave or fail to integrate into the local community, potentially limiting long-term development.

The following box shows whether the policy/initiative is considered ‘rural-proof’ with respect to the pillar of Connected Rural Areas.

Box A7: Considerations regarding the policy/initiative ‘rural-proof’ with respect to the Connected Rural Areas pillar.

The Digital Nomads initiative aligns with the goals of the "Connected Rural Areas" pillar, as it has the potential to enhance digital connectivity, infrastructure, and digital skills across rural regions. By attracting remote workers, the initiative can stimulate economic growth, generate employment opportunities, encourage return migration, and contribute to the revitalisation of rural communities. However, from a policy perspective, it is important to ensure that these benefits are equitably distributed. Without careful planning, the initiative may inadvertently widen the digital divide—favouring already semi-connected areas over those most in need. There is also a risk of creating over-dependence on a transient population, which may not always contribute to long-term community development. Additionally, if local infrastructure fails to keep pace with increased demand, it could strain public services, inflate housing costs, and trigger social tensions. To maximise positive outcomes, rural-proofing should involve targeted investments in infrastructure, inclusive digital upskilling for residents, and policies that encourage integration between digital nomads and local communities. This ensures that rural areas not only become more connected, but also more resilient and sustainable in the long term.

2.4. Prosperous Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Prosperous Rural Areas pillar.

Table A8: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Prosperous Rural Areas pillar.

Positive effects	Negative effects
Digital nomads can bring fresh skills, innovative business models, and entrepreneurial energy for more prosperous rural communities. Their presence can support the creation of new businesses and help existing ones expand into new markets, seize emerging opportunities, and adopt modern practices. They contribute to the local economy by increasing demand for goods and services, which strengthens small business ecosystems and encourages the development of new enterprises. By promoting and consuming local food, crafts, and cultural experiences, digital nomads provide a valuable boost to local producers and artisans. Moreover, the influx of educated and skilled individuals enhances the local talent pool, contributing to human capital development. Their influence also fosters modernisation, as communities adopt digital tools, remote work practices, and a culture of innovation—helping rural areas stay competitive and forward-looking.	Although digital nomads can contribute to more prosperous rural areas, their status as temporary travellers rather than permanent residents may lead to the development of new businesses, services, or products that are not sustainable in the long term—particularly if the local population is not prepared or able to support them independently.

The following box shows whether the policy/initiative is considered ‘rural-proof’ with respect to the pillar of Prosperous Rural Areas.

Box A8: Considerations regarding the policy/initiative ‘rural-proof’ with respect to the Prosperous Rural Areas pillar.

Digital nomads can positively impact prosperous rural communities by bringing fresh skills, innovative business models, and entrepreneurial energy. Their presence supports the creation of new businesses, helps existing ones expand into new markets, and drives the adoption of modern practices. This contributes to the local economy by increasing demand for goods and services, boosting small business ecosystems, and encouraging the development of new enterprises. On the positive side, digital nomads enhance the local talent pool, support human capital development, and encourage modernisation by promoting digital tools and remote work practices. This helps rural communities stay competitive and forward-looking, fostering long-term prosperity.

However, potential negative effects should also be considered, such as the risk of over-dependence on transient populations or pressures on local infrastructure and resources.

2.5. Final assessment

Taking into account the four pillars of the Long-Term Vision for Rural Areas—Stronger, Connected, Resilient, and Prosperous Rural Areas—the Digital Nomads initiative could be considered broadly rural-proof, provided it is implemented with careful planning and appropriate regulation to ensure balanced integration with local communities.

The initiative holds significant potential to drive economic growth, counter demographic decline, and enhance innovation, particularly through entrepreneurship, digital infrastructure development, and the promotion of sustainable lifestyles. It can support rural revitalisation, attract new residents, and inspire younger generations through knowledge-sharing and skills development. Moreover, digital nomads could contribute to increasing demand for public and private services, motivating improvements in healthcare, education, and transport. However, certain risks and limitations must be addressed, and differences in impact, reflecting the unique characteristics of each rural community, should be carefully considered. These include rising housing prices, potential shortages, and

infrastructure strain, particularly in rural areas already facing tourism pressures. Without adequate regulation and long-term integration strategies, there is a risk of displacing locals, causing overcrowding, and undermining community cohesion.

3. Italy Living Lab “Distretto Rurale Val di Cecina”

Legislative Decree No. 23 of March 14, 2011 Provisions on municipal tax federalism (Art. 4)¹

The author of the initiative is the Italian Government, and the initiative provides a tax that is applied regionally on tourists staying in accommodations (hotels, bed & breakfasts, etc.).

The public sector (municipalities) is responsible for the management, enforcement and collection of the tax. However, it requires close cooperation between the public sector (municipalities) and the private sector (accommodation facilities). The legal basis for the tourist tax in Tuscany is Regional Law No. 42/2010, with specific municipal regulations that may vary in each municipality.

Each municipality can establish the amount of the tax, the duration of the taxable stay, exemptions (such as children under a certain age), and payment methods.

It is a national-level initiative. It is already adopted. Broadly speaking, the initiative deals with the introduction of local tax paid by persons staying in accommodation facilities in places classified as tourist areas or art cities. The objectives of the initiatives are to support local municipalities, finance tourism interventions, including those to support accommodation facilities, as well as maintenance, use and recovery of local cultural and environmental assets, as well as the related local public services.

The main actors concerned by the initiative are: local authorities (municipalities and regional administrations); tourists; tourist operators and accommodation facilities (hotels, bed & breakfast, campsites); local businesses (benefiting from investments financed by the tax income); tourism organisations. The main sectors concerned by the initiative are tourism, infrastructure, commercial and public. There are no explicit references to "rural" in the body of the initiative.

The initiative is not linked to a fund or financial instrument. The initiative establishes general rules that will be operational at the local level. Local authorities have the ability to determine whether or not to apply it, the amount, the categories of tourists subject to payment, any exemptions, and the mode of collection, depending on the needs of the area. The initiative requires tourists to pay a tax for each night they stay overnight. The tax is collected by accommodation facilities (hotels, bed and breakfasts, etc.), which are obliged to pay it to the municipality. The amount may vary depending on the location, the category of the facility, and the tourist season. The tourist tax could have different impacts on rural communities.

In terms of positive impacts, it could generate additional revenue for improving local infrastructure and tourism services and protecting cultural heritage and the environment; it could generate more sustainable tourism and strengthening rural communities. Negatives: if too high, it could reduce tourist inflow, penalising small local entities. Considering that the initiative refers only to territories classified as tourist, rural areas that are neither tourist areas are not eligible for this initiative. Therefore, they cannot benefit from the indirect positive effects of the initiative, such as the upgrading of infrastructure financed with the funds raised.

The initiative does not entail indicators.

¹ The title of the initiative in Italian is *LEGISLATIVO 14 marzo 2011, n. 23 Disposizioni in materia di federalismo Fiscale Municipale (Art. 4)* - <https://www.gazzettaufficiale.it/eli/id/2011/03/23/011G0066/sg>.

3.1. Stronger Rural Areas

Taking into account all the elements of the **Stronger** Rural Areas pillar included in the GRANULAR rural proofing framework, please summarise the effects of the policy/initiative, both positive and negative, that the initiative has or will have on rural areas in your territory.

The following table summarises the positive/negative effects of the initiative tested, in relation to the Stronger Rural Areas pillar.

Table A9: Summary of the positive/negative effects of the policy/initiative tested, in relation to in the Stronger Rural Areas pillar.

Positive effects	Negative effects
The tourist tax can play a key role in the revitalisation of rural areas as the economic revenue collected can be invested in the improvement of infrastructure and services, improving the general quality of life in rural areas. It also strengthens the local economy by funding training programmes for young people e.g., enabling them to engage in tourism-related activities. This can create job opportunities and stimulate growth, making rural destinations more attractive. The funds raised can support the preservation and enhancement of cultural and environmental resources, strengthening cultural attractiveness and heritage. Other consequences could be better tourism management and the promotion of responsible tourism, ensuring long-term benefits for both local communities and tourists.	The tourist tax initiative presents significant challenges. In some cases, destinations may exaggerate their attractiveness, encouraging unsustainable forms of tourism that put pressure on local resources and the environment. Moreover, the owners of the accommodation facilities become mere debt collectors, with risks towards the state. To ensure fairness and efficiency, a common model may be needed to standardise its application across different municipalities, balancing economic benefits with sustainability.

The following table summarises the positive/negative effects of the initiative tested, in relation to the Stronger Rural Areas pillar.

Box A9: Considerations regarding the policy/initiative 'rural-proof' with respect to the Stronger Rural Areas pillar

The tourist tax initiative can be considered 'rural-proof' in relation to the pillar 'Stronger Rural Areas'. The funds generated by the tax can strengthen infrastructure, services and job opportunities, thus improving the quality of life in rural areas. Furthermore, by supporting local cultural and environmental resources, it can strengthen the attractiveness of these areas, encouraging more sustainable tourism. However, careful management is fundamental to ensure a balance between economic growth and environmental sustainability and to protect accommodation owners in their role as tax collectors.

3.2. Resilient Rural Areas

No feedback was provided in regard to the **Resilient** Rural Areas pillar.

3.3. Connected Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Connected Rural Areas pillar.

Table A 10: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Connected Rural Areas pillar.

Positive effects	Negative effects
The tourist tax can play a key role in improving rural mobility by financing infrastructure improvements, such as unpaved country roads and local transport services. Investing in mobility facilitates access to the most marginalised areas, benefiting both residents and tourists and supporting local businesses and economic activities.	

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Connected Rural Areas.

Box A10: Considerations regarding the policy/initiative 'rural-proof' with respect to the Connected Rural Areas pillar.

The tourism tax initiative is "rural-proof" in terms of improving connectivity. In fact, the tourist tax can contribute to the Connected Rural Areas pillar by financing mobility improvements, such as improving unpaved country roads and enhancing local transport services. These investments make remote areas more accessible, benefiting both residents and tourists. By improving connectivity, the initiative helps to integrate rural areas into economic and social networks, ensuring that these regions can participate in and benefit from tourism. No negative effects have been highlighted.

3.4. Prosperous Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Prosperous Rural Areas pillar.

Table A11: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Prosperous Rural Areas pillar.

Positive effects	Negative effects
The tourist tax can support the diversification of tourism-related economic activities by financing initiatives such as food and wine events. These activities improve the visitor experience and create new opportunities for local producers and businesses, strengthening the rural economy.	

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Prosperous Rural Areas.

Box A11: Considerations regarding the policy/initiative 'rural-proof' with respect to the Prosperous Rural Areas pillar.

The tourist tax can influence the Prosperous Rural Areas pillar by supporting the diversification of tourism-related economic activities. These activities not only improve the visitor experience but also create new opportunities for local producers and businesses, helping to strengthen the rural economy. No negative effects have been highlighted.

3.5. Final assessment

Considering the four pillars of the Long-Term Vision for Rural Areas, the tourist tax initiative can be considered overall “rural-proof”, with some attentions. It has the potential to increase economic vitality by financing infrastructure improvements (e.g. rural mobility) and diversifying tourism-related activities, such as food and wine events, which can improve local economies and promote sustainable tourism. In addition, it can support cultural preservation and help maintain local heritage.

However, risks include exaggerating attractiveness, leading to unsustainable tourism, and creating imbalances between municipalities. Furthermore, making accommodation providers tax collectors could lead to economic risks and inefficiencies.

The living lab was not very familiar with the pillars of the LTVRA, but the activity nevertheless provided an important opportunity for discussion and debate on a crucial issue for the area. Despite this constrain, a constructive dialogue emerged that allowed for the exploration of both the positive and critical aspects of the initiative. This process stimulated in-depth reflection on the challenges and potential of the local tax. Fundamental the use of a Miro board tool, that helped to simplify the activity and make it clearer and more understandable to Living Lab.

4. Italy Replication Lab

Recognition to livestock farms for predation damages caused by wolves²

The author of the initiative is Region of Tuscany. In terms of type, this initiative is a public initiative of the "Sector for wildlife and hunting activities, marine fishing, and relations with local fishing action groups (FLAGs). Inland water fishing" of the Region of Tuscany. It primarily falls within the agriculture and environmental conservation sector.

This initiative reflects a policy decision aimed at supporting local farmers and preserving biodiversity by mitigating the economic impact of wildlife predation. It involves the implementation of a regional strategy to balance agricultural interests with wildlife conservation efforts. The directive serves as a regulatory framework that outlines the eligibility criteria, application procedures, and compensation calculations for affected livestock owners.

It is a local-level initiative. It is already adopted. Broadly speaking, the initiative recognises the possibility for small, medium, and micro enterprises engaged in livestock farming for economic purposes — including professional agricultural entrepreneurs with livestock farms for sheep, goats, cattle, buffalo, pigs, horses, and donkeys operating in the Tuscan territory — to apply for reimbursement from the Region for animals killed by wild predators belonging to protected species.

The objective of the initiatives is to provide assistance for direct damages (reimbursement of the market value of the predated animal) and for indirect damages, understood as veterinary costs related to the treatment of animals injured but surviving the predation. The main actors concerned by the initiative are small, medium, and micro enterprises engaged in livestock farming for economic purposes. The main sectors concerned by the initiative are agriculture.

There are explicit references to "rural" in the body of the initiative. Reference: "Given the Regional Law of January 24, 2006, No. 1, "Regulation of Regional Interventions in Agriculture and Rural Development," and its subsequent amendments, which governs the Region's intervention in the agricultural and livestock sectors with the aim of contributing to the consolidation, growth, and diversification of the regional productive base and employment levels within a framework of sustainable rural development"

The initiative is linked to a fund or financial instrument. Payment is issued by ARTEA Eligible to apply are agricultural enterprises (SMEs active in primary agricultural production) with livestock farming located within the regional territory that have suffered predation damage caused by wolves (*Canis lupus*), certified by a veterinarian from the ASL (Azienda Sanitaria Locale - Local Environmental Health Unit), resulting in the death or severe injury (leading to death) of one or more farmed animals. Eligibility is contingent upon the implementation of at least one prevention

² The title of the initiative is Italian is Riconoscimento alle aziende zootecniche dei danni da predazione provocati dal lupo (*canis lupus*)-Decreto Dirigenziale Regione Toscana n. 13473 del 13/06/2024.

measure (e.g., guardian dogs and/or protective fencing). Within 24 hours of the incident or its discovery, livestock owners must report the predatory event to the ASL veterinarian. The veterinarian certifies the damage and confirms the causal link between the harm and the predator's behaviour. Beneficiaries are eligible for assistance only if they have implemented at least one preventive measure established by Italian authorities, such as protective fencing, safe shelters, or the use of guard dogs.

Within 24 hours of the veterinary certification, breeders must inform the Regional Agricultural Offices, providing photographic documentation of the preventive measures in place. The competent local offices will conduct on-site inspections of the farm. Applications must include a veterinary certificate specifying: the farm details, date and location of the predatory event, Number and type of deceased livestock, number and type of severely injured livestock destined for euthanasia, confirmation that the deaths or injuries resulted from a predatory attack.

As in previous years, applications must be submitted online through the ARTEA (the Tuscan Regional Agency for Agricultural Payments) portal³ within 60 days of the predatory event.

Applications for assistance must be submitted by March 31 of the year following the predatory event to the Regional Agricultural Offices. These offices will assess eligibility, quantify the damage, and create a ranking of eligible applications. The ranking will then be submitted to the Wildlife Management Sector for approval. The contribution will be granted and disbursed by ARTEA. Aid is conditional on the competent authority's verification of a direct causal link between the damage and the predator's behaviour. Compensation is paid directly to the affected farm, with 100% coverage for direct costs and 80% for indirect costs.

Compensation for direct and indirect losses reduces the financial burden on farmers, enabling them to recover from losses without severe economic setbacks. The focus on prevention may encourage investments in infrastructure such as fencing, which could mitigate future predation risks. Encouraging coexistence through preventive measures helps balance livestock farming with predator conservation efforts, thereby reducing conflicts with protected species like wolves. The initiative does not entail indicators.

4.1. Stronger Rural Areas

No feedback was provided in regard to the **Stronger** Rural Areas pillar.

4.2. Resilient Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Resilient Rural Areas pillar.

³ <https://www.artea.toscana.it/default.asp>

Table A12: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Resilient Rural Areas pillar.

Positive effects	Negative effects
The initiative could affect <i>land use</i> linked to sustainable farming by encouraging practices that align with conservation and biodiversity goals; and <i>greening farming</i> activities and agri-environmental performances by mitigating the risks associated with wild grazing. In addition, the initiative could support in a positive way other two dimensions such as Ecosystem service provision and natural capital stocks.	

The following box shows whether the policy/initiative is considered ‘rural-proof’ with respect to the pillar of Resilient Rural Areas.

Box A12: Considerations regarding the policy/initiative ‘rural-proof’ with respect to the Resilient Rural Areas pillar.

In theory, the initiative could have a positive effect, but it is not easy to monitor this kind of “policy action” which is especially true in the field of “breeding” sector. The persistence of traditional sheep-breeding practices could be an advantage but at the same time be a risk in terms of mistrust of institutions. A further issue related to the “proof of policy”, is the availability of data. This could be a problem because at the public level (per farms, municipality, etc) data are not available on ecosystem services, natural capital and biodiversity, especially regarding the number of wild animals. Reports which are available at national and regional level are based on estimations.

CREA (RICA database) and ARTEA collect data on PSR measures (the Rural development plan) adopted by farmers and farms reports on wolf attacks. This information could be useful but are not directly public.

Another important element is the characteristic of the initiative. It is relatively new and this it is not possible to locate indicators and monitoring activities from the Tuscany Region.

4.3. Connected Rural Areas

No feedback was provided in regard to the **Connected** Rural Areas pillar.

4.4. Prosperous Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Prosperous Rural Areas pillar.

Table A13: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Prosperous Rural Areas pillar.

Positive effects	Negative effects
The initiative could affect <i>diversified economies</i> in rural areas by indirectly supporting <i>economic resilience</i> through the protection of agricultural livelihoods. Additionally, the focus on preventive measures, like guard dogs and fencing, could create <i>demand for related industries</i> , including fencing contractors, dog breeders, and trainers.	

The following box shows whether the policy/initiative is considered ‘rural-proof’ with respect to the pillar of Prosperous Rural Areas.

Box A13: Considerations regarding the policy/initiative ‘rural-proof’ with respect to the Prosperous Rural Areas pillar

This type of measure is important in all rural areas where the coexistence between wild animals and farming activities is challenging. In terms of “rural proof” it is crucial to highlight that the Public Authorities responsible for designing and implementing the measure did not appear to establish public/transparent monitoring criteria which are “open to the public”.

As a result, suggestions are provided of potential sources of data of relevance for monitoring, whilst noting that some sources are often not directly accessible. The measure is very recent and therefore there is no “simple” public information such as the number of people who have benefited from the measure.

4.5. Final assessment

The used procedure did not involve the Replication Lab, but rather the research team worked directly on a policy that is considered important on the ground. Involving the territory in such methodologies was considered problematic with their time limited by budget.

The involvement of the territory is a challenge in two ways:

- basic difficulties in involving the population,
- especially on the wolf issues (that it is a very conflictual topic).

Given that the chosen initiative is new, the reflection is that:

- No monitoring criteria are publicly established.
- The data that could be used can come from different entities and in addition, is public but not directly consultable.

These two main points directly affected the Rural Proof exercise. At the same time, it may be useful to “reverse” its use. That is, authorities could use the methodology to establish monitoring criteria and share data and at the same time, “participatory evaluation” of the action with the support of the four dimensions of the LTVRA.

The four pillars could be useful to convey an initiative and its potential benefits more easily. Despite LTVRA origin, it is based on public consultation and so on, the Rural Vision is often not known locally.

5. Lithuania Replication Lab

Assessment and practical implementation of Universal Design (UD) principles to improve the accessibility and efficiency of public services in Ignalina region

The author of the initiative is a Local Action Group from the Ignalina's district in Lithuania. In terms of type, this initiative is a public sector action.

It is a local level initiative. It is undergoing consultation. Broadly speaking, the initiative deals with the challenges posed by a rapidly aging population and the persistent social exclusion of various marginalized groups. Ensuring accessible and inclusive public and essential services, as well as infrastructure, has become a core priority for sustainable regional development. Therefore, adopting a Universal Design (UD) approach is essential to ensuring that all public services and infrastructure within Ignalina's district are accessible to everyone.

The objectives of the initiatives are to enhance public service accessibility for all residents, including visitors, and to promote overall well-being in rural areas. The main actors concerned by the initiative are representatives from the Local Action Group and key public institutions such as the Ignalina District Cultural Centre, Regional Museum, Sports and Entertainment Centre, Public Library, Tourism Information Centre, the Aukštaitija National Park and Labanoras Regional Park Directorate (Visitor Centre in Palūšė), and Ignalina District Bus Station. Other interested parties, such as local community members and representatives from other public or private sectors institutions are also potential stakeholders in the initiative.

The main sectors concerned by the initiative are local governance and community development, culture and heritage, tourism and recreation, public services and infrastructure, and sports and entertainment. There are no explicit references to "rural" in the body of the initiative. The initiative is linked to a fund or financial instrument. The implementation of Universal Design principles within Ignalina District is primarily funded through municipal resources, supplemented by support from various national and EU-based projects, as well as funds from relevant ministries.

The initiatives define guiding principles and strategic directions for future endeavours. Practices of initiative - practical implementation of Universal Design (UD) principles to improve the accessibility and efficiency of public services in Ignalina region - differs a lot. Research results have demonstrated that 28 % of organizations are advanced by applying the principles of universal design in their organizations. 44 % percent identified that they are applying these principles partly, and 28 % - didn't have this practice and/or are at the beginners stage.

Recently, public organizations of Ignalina region have been focusing mostly to apply universal design principles in the information environment. Some organisations are developing or updating their websites, which will present information according to the principles of universal design: simple and clear menus, comprehensible content, accessibility of non-textual elements (descriptions of photos and graphics, subtitles, etc.), and the ability to read text in sign language. Previously the biggest focus was to the adaptation of the physical infrastructure. The main motivation for these requirements is the existing legislation for the implementation of the UD principles. In some organisations, the implementation of the UD principles has been encouraged by participation in international projects where one of the requirements is to make services accessible to all residents, particularly individuals with diverse needs, such as the elderly and people with disabilities.

The initiative - assessment and practical implementation of Universal Design (UD) principles to improve the accessibility and efficiency of public services in Ignalina region – will have positive social and economic impact on rural communities in Ignalina region.

Social impact: initiative is aiming to adapt public services to an aging population, enhance service accessibility for all residents, and promote overall well-being in rural areas. In addition, this initiative will allow the Lab to address the urgent need for service adaptation and expansion. By enhancing public service networks using Universal Design (UD) principles, rural communities remain sustainable, resilient, and capable of meeting the evolving needs of all residents, particularly individuals with diverse needs, such as the elderly and people with disabilities.

Economic impact: infrastructure of services and goods in Ignalina region with adopted Universal Design (UD) principles are more convenient and attractive for both residents and tourists by promoting inclusive services that leave no one behind. One of the biggest challenges in Ignalina region – very intensive depopulation and thus public

organizations within the region aim to find the way how to increase number of tourist as they can generate more income for the region. Initiative by the Lithuanian Replication Lab address key social and economic challenges, advancing service networks, accessibility, and rural growth throughout the region. The initiative does not entail indicators.

5.1. Stronger Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Stronger Rural Areas pillar.

Table A14: Summary of the positive/negative effects of the policy/initiative tested, in relation to in the Stronger Rural Areas pillar.

Positive effects	Negative effects
Our initiative focuses on assessing and implementing universal design principles to improve service accessibility for all. Within the Stronger Rural Areas pillar, we emphasise all elements, such as Participatory processes and democracy, Rural revitalisation, Research and innovation, Access to public and private services (including basic services), Cultural attractiveness and heritage Tourism (including infrastructure and creative tourism), and Education, training, youth, sport and volunteering in rural areas. We believe that assessing and implementing universal design principles for accessible services will strengthen rural communities by enhancing service access, fostering social innovation, improving spatial planning, and encouraging youth engagement. Public organisations in Ignalina are actively applying Universal Design (UD) principles to improve service accessibility, engaging communities through staff and resident proposals, informal conversations, and participatory processes. Young people and elderly residents play a key role by volunteering, while Ignalina LAG fosters regional democracy and engagement. Given the region's ageing population, ensuring accessible services and infrastructure is a priority. Libraries and public institutions offer transport services for the elderly, encourage youth participation, and implement inclusive initiatives. Strengthening UD principles fosters knowledge exchange, community training, and practical applications for improving services. The initiative also impacts rural tourism, ensuring cultural and natural heritage sites are accessible to all visitors, including those with disabilities. Successful cases highlight inclusive events and guided tours tailored for diverse needs. Additionally, education, training, and sports accessibility will be enhanced, promoting youth engagement and volunteering. The initiative's direct and indirect effects extend across public services, tourism, and community development, reinforcing social resilience and economic growth in rural areas.	

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Stronger Rural Areas.

Box A14: Considerations regarding the policy/initiative 'rural-proof' with respect to the Stronger Rural Areas pillar

Yes, this initiative can be considered 'rural-proof' with respect to the Stronger Rural Areas pillar. It directly strengthens rural communities by enhancing service accessibility, social inclusion, and economic opportunities.

By applying Universal Design (UD) principles, the initiative improves public services for all, particularly vulnerable groups, ensuring education, transport, and cultural services are accessible and inclusive. This fosters community resilience, making Ignalina more attractive for both residents and visitors.

The initiative also promotes youth engagement, volunteering, and participatory decision-making, reinforcing local democracy and social cohesion. Moreover, its impact on rural tourism infrastructure supports economic growth by making cultural and recreational sites accessible to a wider audience.

Ultimately, by addressing the aging population, service gaps, and inclusivity, the initiative enhances the region's attractiveness and sustainability, contributing to long-term rural vitality and stronger rural communities.

5.2. Resilient Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Resilient Rural Areas pillar.

Table A15: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Resilient Rural Areas pillar.

Positive effects	Negative effects
The initiative focuses on assessing and implementing universal design principles to improve service accessibility for all. Within the Resilient Rural Areas pillar, we put a particular emphasis on social resilience and the role of women in rural areas. In the Ignalina District, the availability, accessibility, and affordability of quality education and care services for children, elderly, and persons with disabilities or persons in vulnerable situations are crucial for their well-being and development. Ensuring that these services are both accessible and affordable can significantly enhance residents' quality of life, foster social inclusion, and support sustainable community development. This initiative aims to contribute to these goals by promoting more inclusive and resilient rural services. Other aspects were deemed not relevant in this context.	

The following box shows whether the policy/initiative is considered ‘rural-proof’ with respect to the pillar of Resilient Rural Areas.

Box A15. Considerations regarding the policy/initiative ‘rural-proof’ with respect to the Resilient Rural Areas pillar

Yes, this initiative can be considered “rural-proof” in relation to the Resilient Rural Areas pillar, as it directly enhances social resilience by improving the accessibility and affordability of essential services for vulnerable residents in Ignalina region.

By applying universal design principles, the initiative ensures that education and care services for children, elderly, and persons with disabilities are more inclusive, thereby strengthening community well-being and social cohesion. The specific focus on women in rural areas further aligns with the pillar’s objectives by addressing gender-related challenges in service accessibility.

While other aspects of resilience were not prioritized, the initiative effectively targets key social challenges, supporting sustainable community development and reinforcing rural resilience.

5.3. Connected Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Connected Rural Areas pillar.

Table A16: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Connected Rural Areas pillar.

Positive effects	Negative effects
The initiative focuses on assessing and implementing universal design principles to improve service accessibility for all. Within the Connected Rural Areas pillar, a particular emphasis is placed upon the elements of Rural digital futures (human capital and community) and Transport and mobility. Digital skills and services are essential for improving public services, fostering economic growth and social inclusion in rural areas. Implementing universal design principles supports this by enhancing digital accessibility. Public organisations are adapting digital tools like large screens, audiobooks, and user-friendly websites, while community members receive digital skills training. However, progress remains slow and fragmented, underscoring the need for more coordinated efforts to ensure inclusive digital transformation. Whereas, enhancing transport infrastructure and mobility is essential in rural areas. By applying Universal Design principles, this initiative aims to create more inclusive and efficient public transport solutions. Discussions with Ignalina’s bus operator revealed direct impacts, including a new bus stop near the hospital to improve access for elderly residents and patients. Additionally, in response to tourist demand, a new bus route to Palūšė will soon be introduced, further enhancing connectivity.	

Based on this, do you consider the initiative ‘rural-proof’ with respect to the pillar of **Connected Rural Areas**? Please elaborate on your response.

Box A16: Considerations regarding the policy/initiative ‘rural-proof’ with respect to the Connected Rural Areas pillar

This initiative can be considered “rural-proof” concerning the Connected Rural Areas pillar, as it directly addresses key challenges related to transport and digital connectivity in rural communities.

By applying Universal Design (UD) principles, the initiative improves public service accessibility, ensuring that transport and digital infrastructure reflect to diverse user needs, including elderly residents, persons with disabilities, and tourists. The adjustment of bus routes in response to local demands demonstrates a responsive and inclusive approach to mobility challenges. Additionally, efforts to enhance digital accessibility – such as improved websites and digital training – strengthen rural connectivity.

However, while these steps contribute significantly, challenges remain, particularly the slow and fragmented adoption of digital tools. To be fully “rural-proof,” the initiative could benefit from a more systematic and coordinated approach to scaling up inclusive digital and transport solutions across the region.

5.4. Prosperous Rural Areas

No feedback was provided in regard to the **Prosperous Rural Areas** pillar.

5.5. Final assessment

Yes, the initiative can be considered ‘rural-proof’ overall, as it aligns with the key objectives of the Long-Term Vision for Rural Areas across all four pillars: Resilient Rural Areas, Connected Rural Areas, Stronger Rural Areas, and Prosperous Rural Areas. By integrating Universal Design (UD) principles, the initiative enhances service accessibility, promotes social inclusion, strengthens rural infrastructure, and fosters economic and community development. It directly contributes to resilience by addressing demographic challenges and ensuring inclusive services, while also improving connectivity through adapted transport and digital solutions. Furthermore, it supports economic growth by making rural areas more attractive for residents, businesses, and tourists, and strengthens community engagement by encouraging participatory governance and volunteerism.

Assessing the initiative through the four-pillar framework provided a structured and comprehensive way to evaluate its impact. This approach was appropriate and meaningful for the Replication Lab, as it allowed for a deeper understanding of how different aspects of rural development interconnect. The familiarity with each pillar varied, with some, like Resilient Rural Areas, being more immediately relevant due to demographic challenges, while others, such as Connected Rural Areas, required further reflection on digital and transport infrastructure needs. The process of aligning the initiative with these pillars highlighted key strengths and areas for potential improvement, ultimately supporting a more holistic and strategic approach to rural development.

6. Netherlands Living Lab “P10”

National Housing Policy

As a multi-level governance challenge, national housing policy is characterised by a specific distribution of responsibilities between national, provincial and municipal administrations. The national government defines the need for new housing and defines priority locations for different types of housing. In negotiations with the provincial government, the number of houses to be built is further specified at the municipal level. At the end, municipalities negotiate with the builders.

In regard to social housing, housing cooperatives are important players. It is recognised that EU's Soil Health Directive may impact on future national housing policy choices and room for manoeuvre, especially regarding its soil sealing component, although in ways still subject of debate and discussion and in need for further operationalisation.

Dutch housing policy has a long spatial planning tradition based on strict and rigid spatial delineations between rural and urban areas and a strong focus of housing stock expansion opportunities in urban centres and /or their direct vicinity. Consequently, rural areas did and do face rather restrictive extra housing stock opportunities, which is especially for peripheral rural areas facing demographic shrinking dynamics or threats. Together with a strongly market-led national housing policy, this has accumulated in the last decade into a growing shortage of affordable housing in urban as well as rural areas.

As recently estimated, the Netherlands faces a shortage of more than 400.000 houses in the period till 2030, which is increasingly profiled as a profound housing crisis. It is a national-level initiative. It is undergoing consultation. By addressing the residential functionality of both urban and rural areas, national housing policy plays a key role in Dutch rural-urban interaction patterns and dynamics.

The place-specificity of these interaction patterns, also in relation to other rural functionalities and their major drivers as theorised and characterised in GRANULAR's Rural Diversity Compass, makes housing policy a highly relevant policy domain for rural proofing efforts. Overall, Dutch housing policy may be summarised as follows: the provisioning of attractive, affordable and sustainable housing facilities that meet social group-specific housing wishes, needs and opportunities. Recently, this objective has been translated into setting concrete extra housing stock targets for provincial administrations through so-called 'Region Deals, including targets for different price categories and rental versus ownership-based housing stocks. Public, private, as well as civil actors, with a growing policy attention to rethink national, primarily market-led housing provisioning through more active public policy interventions.

There are explicit references to "rural" in the body of the initiative. Restricted rural housing policies are, amongst others, motivated by making references to beneficial settings for agricultural modernisation opportunities, preservation of nature, biodiversity and rural eco-system services, preservation of open space, rural landscapes and cultural attractiveness and - more generally- national, regional and rural demographic foresights. National housing crises, together with changing insights in mid- and longer-term demographic foresights, also for rural areas, as well as persistent agri-environmental challenges, are important explanatory factors for the current renewed policy debate around the role of residential functionality in rural dynamics. Different types of pressures on (conditional) extra rural housing opportunities can be witnessed that may be characterised as housing-related rural proofing efforts.

The initiative is linked to a fund or financial instrument. Dutch housing policy knows all kinds of subsidy frameworks to the benefit of specific social groups, social housing corporations, project developers, municipalities and regions⁴. However, none of these subsidy programs are explicitly addresses rural areas. Yet, rural areas do have the opportunity to enlarge their housing stocks by applying additional funding and financial instruments based on spatial planning interventions. For instance, provincial and municipal administrations may apply so-called Red for Green constructions and New Rural Estates with the objective to generate financial resources for agri-environmental measures and nature development through the provisioning of (conditional) additional residential building permissions for farmers and other land owners in rural areas. The initiative sets out a series of conditions and obligations that need to be implemented during operations (i.e. it requires for monitoring, data collection, testing protocols, etc). Rural proofing of national housing policy has been approached in relation to rural and wider wellbeing concerns.

As illustrated in detail by step 3 of this rural proofing methodology, this has been partly done by making references to already existing policy instruments that may be perceived as outcomes of earlier rural proofing attempts of national housing policy. Together with the outcomes of a rural roofing Workshop for P10 representatives, as organised during its winter session meeting at 4 December 2024, with a participation of more than 40 P10 representatives, this aims to provide anticipated deeper insight in P10's ideas and opinions around: 1) rural housing concerns and needs; 2) earlier housing-related rural proofing efforts and 3) needs for and nature of additional rural proofing efforts and activity.

Outcomes of Dutch wider wellbeing assessments at municipal level point at relatively high wellbeing performances of rural municipalities in the direct vicinity of urban centres in Dutch core-regions: a positive outcome of a long tradition of restrictive rural housing policies based on the preservation of rural distinctiveness and a broadly appreciated balancing of rural functionalities. The same outcomes of wider wellbeing assessments learn that peripheral rural areas do have significantly lower wellbeing performances, going along with additional claims on housing-related rural proofing efforts that might contribute positively to their overall rural wellbeing performances. The initiative has its own set of indicators.

⁴ <https://www.volkshuisvestingnederland.nl/subsidies-en-regelingen>.

6.1. Results of the rural proofing exercise

By acknowledging the differentiating impacts of national housing policy on Dutch rural areas and by focussing on concrete expressions of housing-related rural proofing instruments, generic and single LTVRA pillar- oriented assessment is less fruitful or potentially even impossible. If needed, further substantiation and specification could occur for some of the policy refinements and adaptations as summarised in the table below. Moreover, based on the Living Lab findings it may be further argued that single policy domain rural proofing at micro-policy making level might be difficult to align with their representatives' key interests in the intersection between policy domains in different terms as (in-)coherence, (in-)consistency, barriers, contradictions, synergies, etc.

The following table summarises the positive/negative effects of the initiative tested using the rural proofing method.

Table A17: Summary of the positive/negative effects of the policy/initiative tested using the rural proofing method.

Positive effects	Negative effects
Dutch national housing policy positively impacted rural areas in the proximity of urban centres, as it constrained urban expansion and, hence, urbanisation of rural areas. Its positive impact is also reflected in the good and higher well-being performances of these rural areas in comparison to adjacent urban centres. The same national housing policy may have negatively impacted more peripheral rural areas, for instance by restricted opportunities for young rural adults to find a house of their own (see column on negative effects). Starting from this shared conviction that national housing policy's impacts on rural areas might differentiate significantly, we decided to concentrate our rural proofing ambitions on exploring adaptations of national housing policy that address <u>specific</u> rural policy concerns and challenges. In doing so, we looked into already existing housing policy adaptations as presented in the table below and understood as a set of initiatives that offer a certain potential for micro-level rural proofing.	More generally national housing policy continues to show little responsiveness to rural housing needs, including the interrelations between housing policy with other relevant rural policy domains (e.g. welfare, care, basic services, etc.) It resulted in, amongst others, relatively poor wellbeing performances of more peripheral rural regions, going along with rather persistent tendencies of a downward spiral in these rural areas, including relatively poor economic performances. See the table below for an impression of housing- related rural proofing initiatives discussed among P10 members, that might contribute to alleviate rural policy concerns in Dutch more peripheral regions.

Table A18: Main Related Rural Proofing Initiatives in the Netherlands.

Related Rural Proofing Initiatives	Key Features
Red for Green	Extra rural housing opportunities by transforming livestock farms, especially those in the vicinity of nature areas into (multiple) residential building block, in that way reducing agri-environmental pressures on nearby nature areas and simultaneously providing
New Rural Estates	Opportunity to get building permission in rural areas under the condition to co-creation of public accessible nature areas and positive contributions to rural's spatial (Architectural) Qualities. Again, especially attracting interests among stopping farmers
Farm-Yard Splitting	Extra Rural Housing Opportunities by transforming redundant farm buildings into residential space, which provides stopping farmers with

	alternative (post-retirement) financial and income support and/or business models
Extra Regulatory Space / Financial Support for Small Scale /Collective Housing Projects	Opportunities to better align with village-based self-reliance capacity and to proactively respond to village-specific housing demands, wishes, possibilities, etc.
Extra Policy Space for Senior housing in small villages /hamlets	Better opportunities to keep elderly generations in small villages, to build on village-based reliance capacity and to stimulate internal moving opportunities in that way also indirectly enhancing residential opportunities for younger generations
Less Strict Delineation Between Residential and Recreational Housing Categories	Better Opportunities to Respond to Rapidly Increasing Demand For Temporal Housing and to counterbalance the current often semi-legal and little transparent residential statuses of temporal residences at recreational parks, going along with different types of social problems and conflicts
More residential opportunities for labour migrants in rural areas / at farms	Better control of / opportunities to reside temporal labour migrants in socially acceptable ways and to mitigate current rural-urban tensions in that respect (i.e. externalizing temporal labour migrant housing problems to nearby urban centres)
Spatial Justice-based distribution of (Temporal) Residences for Asylum Seekers /Refugees	Better opportunities to counterbalance policy tendency to concentrate (first and temporal) housing opportunities in (peripheral) rural areas, frequently through relatively large-scale facilities, frequently also causing rural resistance and /or undermining village-based social cohesion

6.2. Final assessment

Based on a workshop for P10 representatives, the principal rural proofing findings are summarised as follows:

- P10 representatives associate housing-related rural proofing concerns predominantly with a loss of rural vitality.
- Although private house ownership might dominate rural areas, decades of loss of national interest in social housing policy certainly negatively impacted on housing availability and affordability in rural areas.
 - The absence of sufficient and attractive opportunities for rural elderly to relocate to senior- friendly residences, including local care domiciles, impedes rural housing ‘throughput’ and reduces -especially- younger generations prospects to find a residential place in own villages or their vicinity.
- The Inflow of relatively wealthy rural newcomers have adverse effects on younger generations' affordability and accessibility of rural housing.
- Limited municipal administrative capacity, partly also due to disproportional high administrative costs, are key limitations for municipalities to realise relatively small-scale rural housing initiatives as presented in the foregoing table.;
- Differences in municipal land positions and agricultural land use characteristics make that extra rural housing opportunities vary significantly in terms of financial and regulatory opportunities.

- Agricultural land use characteristics critically impact the opportunity for more rural housing in rural's 'outer areas' (non-built areas outside villages) based on rural functionality rebalances efforts as the red for green constructions as described in the Table above
 - A better acknowledgement of and alignment with village-led self-governance capacity is considered key for substantial rural proofing progress, although there is also concern about potential 'volunteer-burnout'.
- Provincial administrative rural housing support does differ significantly, e.g. for a national cessation scheme for livestock locations.
- Length of and delays in administrative licensing procedures remain a topic of broadly shared municipal discontent.
- Some participants are in favour of (further) land policy interventions to improve rural (and wider) housing affordability, but it remains a controversial topic.

These principal workshop outcomes were associated with following suggestions for (further) housing-related rural proofing progress:

- Rethink actual rural housing policy responsibility distribution to the benefit of decision-making power at the level of municipalities and rural communities (i.e. give extra policy space for rural proofing by rural dwellers themselves)
- Embrace the societal benefits of relatively small-scale rural communities, including their strongly present traditions of residential working combinations.
- Take basic services concerns more explicitly, directly and convincingly into account in rural housing policy making.
- Mitigate and correct rural demographic disbalances through active housing policy, with a especial eye on the housing demands of elder and younger generations, including younger rural returnees.
- Provide extra policy space for temporal rural housing licenses, e.g. to care for family members
- Embrace rural self-reliance and self-governance capacity as key drivers of more community-led rural housing initiatives but do not over-demand rural resilience in that respect.
- Continue with conditional extra housing opportunities in rural 'outer areas' based on rural functionality (re-) integration gains but do so with extra attention to housing affordability as done so far.
- Minimise prevailing administrative burdens and disincentives for smaller-scale housing projects as dominant in rural settings.

7. Poland Living Lab “West Pomerania”

The West Pomeranian Voivodeship Rural Development Policy and the Development Strategy until 2030

The title of the initiative is increasing the potential of rural entrepreneurship and economic revitalization through the development of short food supply chains and support for innovation in rural areas.

The author of the initiative is local government. In terms of type, this initiative is a public sector initiative. It refers to activities focusing on creating conditions for the development of rural areas, including short food supply chains and supporting innovation in the agri-food sector, taking into account the directional activities and objectives specified in

the Development Strategy of the West Pomeranian Voivodeship until 2030⁵ and the Rural Development Policy and Agriculture of the West Pomeranian Voivodeship⁶. An initiative managed by regional authorities.

The initiative is being implemented and the rural analysis aims to assess its actual impact after implementation. Broadly speaking, the initiative deals with "The West Pomeranian Voivodeship Rural Development Policy" and the "West Pomeranian Voivodeship Development Strategy until 2030" aim to comprehensively improve the quality of life of residents and increase the development potential of the West Pomeranian Voivodeship, with particular emphasis on rural areas.

These initiatives cover a wide range of activities, from infrastructure investments to social activation, and are implemented through cooperation between various entities. The objectives of the initiatives of the initiative is to create a more sustainable and competitive region, in which all residents have equal opportunities for development and improvement of the quality of life, especially in rural areas.

The main assumptions and goals of the initiative are:

- Strengthening territorial and social cohesion; Development of functional areas; Improving infrastructure; Increasing access to public services; Increasing access to public services, including in the agricultural and processing sectors;
- Activation of local communities;
- Development with respect for the natural environment and resources of the region; Development of smart specialisations;
- Using the potential of the region.

Specific objectives refer to: reducing development disparities between urban and rural areas and counteracting social and economic exclusion, strengthening cooperation between municipalities and using the potential of each area, investing in technical and social infrastructure, ensuring equal access to high-quality public services in rural areas, promoting the development of local entrepreneurship, strengthening social capital, strengthening the position of the region through the development of its smart specializations, such as maritime economy, tourism and large-scale agriculture, using the natural and spatial resources of the region, including its coastal location.

The main actors concerned by the initiative are farmers, agricultural processors.

The main sectors concerned by the initiative are agriculture, food processing, food distribution rural policy [Doc. Rural Development Policy of the West Pomeranian Voivodeship, p. 3]; rural population [Doc. Rural Development Policy of the West Pomeranian Voivodeship, p. 5]; rural communes [Doc. Rural Development Policy of the West Pomeranian Voivodeship, p. 8]; rural settlement network, rural community, village [Doc. Development Strategy of the West Pomeranian Voivodeship] Rural policy "is not identical with activities aimed at developing agricultural production, economic structures and institutional undertakings.

Rural population "status resulting from the formal place of residence. Residents of rural areas are mostly burdened with the historical legacy of remoteness and insufficient access to development centres, low quality infrastructure, poor access to public services and participation in social problems (poverty, unemployment, weakening and disappearance of family and social ties)". Rural communes "due to historical conditions and the nationalized model of land management, rural communes in Western Pomerania have limited potential in terms of shaping and maintaining relationships and the flow of people, capital and goods.

A large number of areas after state farms in rural communes constitutes a specific problem of the region, generating an accumulation of social, economic and spatial problems. The rural settlement network is presented as an element of the settlement structure, characterised by a specific spatial layout and functional connections with urban centers. Rural community - this term is used to describe the inhabitants of rural areas and their social and economic activity. Village - a word used in the context of describing rural localities where social problems accumulate, as well as in relation to the development of rural areas.

The Development Strategy of the West Pomeranian Voivodeship is linked to various financial instruments, including funds under the CAP, funds from the provincial budget, European funds, and the state budget. The development

⁵ https://eregion.wzp.pl/sites/default/files/srwz_2030.pdf,

⁶ http://www.eregion.wzp.pl/sites/default/files/polityka_obszarow_wiejskich_ost.pdf.

policy of rural areas and agriculture in the West Pomeranian Voivodeship is strongly linked to various funds and financial instruments, both at the European Union level and at the national and regional levels. This includes EU funds, national and regional funds, and CAP mechanisms. The aim is an integrated approach to the development of rural areas, taking into account their specificity and potential.

Strategy of the West Pomeranian Voivodeship - financing mechanism: Budget of the West Pomeranian Voivodeship: The Strategy is a superior document to the annual budget of the voivodeship and the Multiannual Financial Forecast (MFF). European Structural and Investment Funds, they consist of funds from: the Regional Operational Programme of the Zachodniopomorskie Voivodeship 2014-2020, the Rural Development Programme for 2014-2020, European Territorial Cooperation programmes, including in particular funds made available under the Interreg V-A Cooperation Programme Germany/Mecklenburg-Vorpommern/Brandenburg-Poland, programmes implemented at the national level: Infrastructure and Environment Operational Programme 2014-2020, Knowledge Education Development Operational Programme 2014-2020, Smart Growth Operational Programme 2014-2020, Digital Poland Operational Programme 2014-2020. West Pomeranian Development Fund: This fund has PLN 430 million at its disposal, which is allocated to projects implemented by enterprises and local government units as part of repayable financing. State budget: Funds from the state budget are directed at implementing the SRWZ objectives using the territorial contract mechanism. [Doc. Development strategy of the West Pomeranian Voivodeship until 2030, 2. 69]. Rural and agricultural development policy of the West Pomeranian Voivodeship - financing mechanism: Financial funds and instruments: European Agricultural Fund for Rural Development (EAFRD), Rural Development Programme (PROW) - these funds are used for investments in local infrastructure, such as roads, water supply, sewage system, cultural facilities, as well as for supporting entrepreneurship and protection of local heritage, Regional Operational Programme of the West Pomeranian Voivodeship (RPO WZ) - as part of this programme, a Special Inclusion Zone (SSW) was also established, covering mainly rural areas with deficits, to which a specially designed financial intervention was directed; Budget of the West Pomeranian Voivodeship - the voivodeship budget finances tasks of a voivodeship nature in the scope of the modernisation of rural areas; Budgets of local government units (JST), National and international financial institution funds: The document mentions repayable and non-repayable loans from the European Investment Bank (EIB) and the World Bank; Private funds within the framework of public-private partnership; Other financial mechanisms and instruments: Local Government Contracts - they are used to support the development of the Special Inclusion Zone, mainly in the economic dimension through projects implemented in the functional connections between the city and the surrounding rural areas, Direct payments, LEADER Initiative - this initiative supports the entrepreneurship of rural residents, investments in tourist and recreational infrastructure, as well as the preservation of local heritage.

The Development Strategy of the West Pomeranian Voivodeship (SRWZ) does not directly introduce new regulations, acts, ordinances or guidelines in the sense of creating new legal acts. Its main objective is to set development directions and define priorities for the voivodeship, not to establish law.

The SRWZ has a significant impact on shaping regional policy and may result in the introduction of new regulations within other programming documents and legal acts.

With regard to rural areas, the strategy operates on several key levels, taking into account the specific challenges and potential of these areas. Mechanisms of the strategy's operation in relation to rural areas: Strengthening the role of urban centres: Development processes in villages take place within functional areas, determined by the impact of dominant urban centres; Integration of activities within functional areas: Activities undertaken within these areas are aimed at strengthening cooperation between rural and urban communes, as well as other entities; Urban-rural cooperation: The strategy promotes effective urban-rural partnership; Activation of local potentials: the strategy focuses on extracting and incorporating internal financial resources and other potentials that are accumulated in the local and regional dimension into development processes; Sustainable development: the strategy aims to ensure sustainable development of rural areas.

The aim is to rationally use the resources of rural areas, taking into account their specificity; Improvement of infrastructure: the strategy envisages the development of regional communication systems that will ensure the connection of rural areas with urban centres; Access to public services: the strategy aims to ensure equal access to high-quality public services also in rural areas; Support for entrepreneurship: the strategy supports the development of local entrepreneurship in rural areas. The strategy encourages innovative solutions, including the development of non-agricultural activities. The importance of developing services and tourism as alternative sources of income in rural areas is emphasized; Development of civil society: the strategy supports the development of civil society, which is the foundation of cooperation and integration. This is aimed at increasing social awareness and active participation of residents in local development; Intervention in problem areas, such as Special Exclusion Zones, where adverse

phenomena accumulate. In practice, these activities are implemented through specific programs and projects that are implemented at the local and regional level. The strategy serves as a basis for planning and coordinating activities aimed at improving the quality of life of rural residents, strengthening their economy and increasing their competitiveness. The document Rural Development Policy of the West Pomeranian Voivodeship does not directly introduce new regulations, acts, regulations or guidelines in the sense of creating new legal acts. It is rather a strategic document that defines the framework and directions of the activities of the regional government for the development of rural areas. Its aim is to coordinate and direct the intervention of various entities in the region. It serves as a basis for planning and implementing specific activities and projects based on existing legal acts and available financial instruments.

Mechanisms of the strategy in relation to rural areas: Focus on functional areas: The policy assumes that the development of rural areas is possible only with the leading role of the urban centre; Urban-rural cooperation: A key element of the policy is cooperation between rural and urban communes within functional areas; Strengthening local potential: The policy aims to use the potential of local communities through their activation and involvement in development processes; Access to public services: The policy aims to ensure equal access to high-quality public services in rural areas, including education, health and administrative services; Entrepreneurship support: The policy supports the development of entrepreneurship in rural areas, including agriculture, tourism, processing and other sectors of the economy; Infrastructure development: Investment in infrastructure, including roads, public transport and internet access are key to improving the accessibility and integration of rural areas; Special Inclusion Zone (SIZ): The policy provides special support for problem areas within the SIZ, covering municipalities with demographic, infrastructural and economic deficits; Monitoring and evaluation: The policy uses monitoring and evaluation instruments, and a platform for aggregating and sharing data in the form of the e-Region portal. The mechanism of the SRWZ in relation to rural areas is based on an integrated approach that combines the development of cities and villages, cooperation between various entities, activation of local potentials and investments in infrastructure and services. The strategy aims to strengthen the position of rural areas in the region and ensure their sustainable development. The mechanism of the Rural Development Policy is based on cooperation, coordination, use of local potential, financial support and investments in infrastructure and services, as well as taking into account the specificity of rural areas and their connections with urban centres. The mechanism of the Rural Development Policy is based on cooperation, coordination, use of local potential, financial support and investments in infrastructure and services, as well as taking into account the specificity of rural areas and their connections with urban centres. The Rural Development Policy of the West Pomeranian Voivodeship is based on an integrated approach that takes into account the specificity of these areas, assumes the strengthening of the competences of local governments and the development of civil society in order to increase the involvement of residents in development processes. The initiative can have a variety of impacts on different types of communities and rural areas. 1. Areas with a strong agricultural sector: Positive impact: In regions where agriculture is already well developed, the initiative can further increase the competitiveness of local food producers. Support in marketing, logistics and innovation can help them expand into new markets and increase their income. Negative impact: If the initiative does not take into account the specifics of agricultural production in a given region (e.g. dominance of monocultures, lack of infrastructure), it can lead to deepening existing problems, such as environmental degradation or exclusion of smaller producers. 2. Areas with demographic problems: Positive impact: In regions with depopulation and an aging population, the initiative can be a chance for economic recovery and the creation of new jobs for young people. The development of entrepreneurship in the agri-food sector can stop the process of depopulation and attract new residents. Negative impact: If the initiative does not take into account the specifics of the local labor market (e.g. lack of qualified employees, low purchasing power of consumers), it may prove ineffective. It is necessary to adapt activities to the needs and possibilities of the local community. 3. Areas with high tourism potential: Positive impact: In regions where tourism plays an important role, the initiative may be an opportunity to develop agritourism and promote local food products among tourists. Cooperation between food producers and tourism entities can bring benefits to both parties. Negative impact: If the initiative does not take into account the specifics of the local tourism market (e.g. seasonality, tourist preferences), it may prove ineffective. It is necessary to adapt activities to the needs and expectations of tourists.

The initiative refers to specific statistical indicators that cover different areas, such as: Society and demography (population, number of non-governmental organizations, number of unemployed), Economy and entrepreneurship (number of economic entities operating in the agri-food sector, including organic and local food producers, sales volume at local markets and fairs, number of farms with direct sales and agricultural retail), Partnership and social capital (disposable income of households, employment rate). These indicators are measurable and based on statistical data. These data come from different public sources, such as the Central Statistical Office, the Local Data Bank and Eurostat, which ensures comparability with other strategies and territories. The indicators refer to rural

areas in the region. The data necessary for monitoring the indicators are publicly available. There are data sources for the indicators. It is a statistical and regional database. Data are available at local, regional and national level.

7.1. Stronger Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Stronger Rural Areas pillar.

Table A19: Summary of the positive/negative effects of the policy/initiative tested, in relation to in the Stronger Rural Areas pillar.

Positive effects	Negative effects
Participatory processes and democracy: The initiative aims to strengthen the sense of responsibility and agency among residents through their active involvement in decision-making processes. It is expected that the inclusion of diverse social groups will contribute to the creation of more representative communities. Revitalisation of rural areas: The initiative aims to improve the economic, social and environmental resilience of rural areas. The planned actions aim to increase territorial cohesion by integrating bottom-up and top-down strategies, which should result in better meeting local needs. Demographic trends: The initiative aims to positively influence demographic trends through actions aimed at counteracting the negative effects of urbanisation, globalisation, digitalisation and climate change in rural areas. Research and Innovation: The initiative aims to support the development of innovations by and for rural communities, as well as training and knowledge exchange to accelerate their implementation. Collaboration between academia, policy makers and rural communities is envisaged. Access to public and private services: The initiative aims to improve the accessibility and affordability of key public services such as healthcare, education and transport in rural areas, with special attention paid to vulnerable groups. This is to ensure equal access to these services regardless of location and socio-economic status. Cultural attractiveness and heritage: The initiative aims to strengthen tourism in rural areas by promoting their unique cultural and natural assets. Synergies are assumed between rural and urban areas, where the cultural wealth of the countryside enriches the urban offer. Tourism (including infrastructure and creative tourism): Similar to cultural attractiveness, the initiative aims to support the development of tourism and recreational infrastructure in rural areas, taking into	Participatory processes and democracy: Urban residents may be more likely to understand participatory processes due to their higher level of education. This implies that engaging rural residents may be more difficult and require additional efforts, and failure to do so could limit the positive effects of the initiative. Revitalisation of rural areas: There are major challenges to integration in regions with specific histories, such as those dominated by state farms or dispersed development. If the initiative does not take into account these complexities, the revitalisation process may be more difficult and less effective in some areas. Demographic trends: The problem of depopulation of rural areas is a long-term process and difficult to reverse. Despite the initiative's actions, there is no guarantee of an immediate change in these negative trends, which may be seen as a limitation of the initiative's effectiveness in this area. Research and Innovation: There is a lack of data on research and innovation at the level of rural areas (only regional NUTS 2 data available). Lack of data may make it difficult to monitor and assess the effectiveness of the initiative in supporting innovation in rural areas. Access to public and private services: The impact of the initiative may be smaller in regions that are not covered by territorial cohesion programmes. This may lead to an uneven distribution of benefits and potentially deepen existing disparities. Cultural attractiveness and heritage: The number of cultural events is highly variable and depends on the organisers, sponsors and participants, which means that the initiative may have a limited impact on permanently increasing the cultural attractiveness in this area. Tourism (including infrastructure and creative tourism): As with access to services, the impact may be smaller in regions with outdated infrastructure. Unsatisfactory tourism infrastructure may limit the positive effects of the initiative in terms of tourism development. Education, training, youth, sports and volunteering in rural areas: The effects of the initiative will be different between rural and urban areas due to the better

account the growing importance of creative tourism and engaging cultural experiences.

Education, training, youth, sports and volunteering in rural areas: The initiative aims to **create and strengthen opportunities for education, training and sports in rural areas**, activating youth and volunteering. One of the goals is to **counteract various forms of social exclusion**, including access to education, and to **systematically equalise opportunities between rural and urban areas**.

initial access to education in cities. Despite efforts to level the playing field, achieving full equality may be a long process, and disparities may still exist in the short term.

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Stronger Rural Areas.

Box A17: Considerations regarding the policy/initiative ‘rural-proof’ with respect to the Stronger Rural Areas pillar

The policy/initiative demonstrates some rural resilience characteristics in relation to the “Stronger Rural Areas” pillar and its individual components, but does not fully achieve rural resilience. The initiative seeks to strengthen rural people’s sense of agency through their engagement. This is a key aspect of strengthening resilience, as it recognises the specificities of building social capital and local democracy in rural areas. However, as noted, differences in educational levels between urban and rural residents can pose a challenge to full and equitable engagement. Actions undertaken within the initiative should include dedicated methods and resources supporting the participation of rural residents, taking into account their specific needs and barriers. The initiative recognises the need to improve the resilience of rural areas and aims at territorial cohesion. This is a positive step towards increasing the resilience of rural areas. However, the recognition of the historical conditions and complexity of integration processes in specific types of rural areas (e.g. former state farms) suggests that more detailed and flexible revitalisation approaches are needed, adapted to these unique contexts. The initiative identifies negative demographic trends as a significant problem and intends to strengthen demographic potential. This demonstrates an understanding of the key challenge for rural areas. However, the recognition that depopulation processes are long-term and difficult to reverse indicates that the initiative’s capacity to strengthen rural resilience is limited. Effectively counteracting these trends requires more comprehensive and long-term strategies that go beyond the current initiative. The initiative aims to support innovation in rural areas and cooperation between different actors. This is an important element in building rural resilience by increasing the development potential of these areas. The lack of data specific to rural areas at a level lower than regional (NUTS 2) makes it difficult to monitor and assess the actual impact of the initiative on innovation in these areas. It is therefore necessary to ensure access to more detailed data or develop methods for collecting them. The initiative focuses on improving the accessibility and affordability of services for rural residents, including vulnerable groups. This is fundamental to strengthening the resilience of rural areas, providing equal opportunities for their inhabitants. However, the potentially lower impact in regions not covered by cohesion programmes suggests that this resilience may be uneven across territories. To address this, the initiative could provide mechanisms for equal opportunities and dedicated support for areas with greater deficits in access to services. The initiative aims to strengthen tourism by promoting the cultural and natural assets of rural areas. This is important for building the economic resilience of rural areas. However, the dependence of mass events on external factors indicates the need to diversify promotional activities and invest in sustainable elements of cultural and heritage attractiveness to increase the long-term resilience of the tourism sector. As with cultural attractiveness, the initiative aims to develop tourism infrastructure. However, limitations related to outdated infrastructure in some regions constitute a barrier to strengthening resilience in rural areas. The initiative emphasizes creating and strengthening educational opportunities and activating rural youth and striving to equalize opportunities between rural and urban areas. This is important for the long-term social and economic resilience of rural areas. However, existing disparities suggest that achieving resilience and equity will require systematic and long-term actions, taking into account the specific educational and development needs of rural youth.

In summary, the initiative demonstrates an understanding of many of the key challenges facing rural areas under the Stronger Rural Areas pillar and proposes actions to strengthen them. However, potential constraints related to differences in social capital, historical conditions, negative demographic trends, lack of data at local level and existing disparities in access to services and infrastructure suggest that rural resilience is not yet complete. Further clarification and adaptation of actions to specific rural contexts, as well as a long-term commitment to addressing deep-rooted demographic and infrastructure challenges, will be key to increasing this resilience.

7.2. Resilient Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Resilient Rural Areas pillar.

Table A20: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Resilient Rural Areas pillar.

Positive effects	Negative effects
Energy transformation of rural communities and climate action: The initiative aims to strengthen the economy using the natural potential, especially rural areas, including renewable energy resources (wind, biomass). The actions include the development of non-agglomeration areas and the provision of integrated and efficient infrastructure, which will contribute to the energy transformation of rural areas. Land use related to sustainable agriculture: The initiative aims to strengthen the economy using the natural potential of the region. Support will be provided to areas considered important for sustainable development, while revitalising the regional economy and restructuring problem areas. Greening of agricultural activities and environmental efficiency of agriculture: Actions are planned to increase the attractiveness and coherence of the offer of organic products and to build a strong position and synergy of their producers. Social inclusion - migrants, people with disabilities, minorities (e.g. seasonal workers), LGBTQ+: The aim is to provide all residents of the region, regardless of place of residence, gender, age, financial situation or beliefs and religion, with opportunities and chances for development. Social resilience and women in rural areas: The initiative aims to create solutions and conditions for the full individual and collective development of residents, free from manifestations of intolerance and discrimination and with the economic valorisation of all types of social roles and statuses (in particular women, people entering working age, seniors, people with disabilities). Providing ecosystem services: The aim of the initiative is to combine blue and green functions, ensuring a high quality of life for residents. Natural capital resources: Using the wealth of natural resources of the region, with due care for their protection, can contribute to a more comprehensive spatial and functional development. It is important to better use the tourist and natural potential of the region and effectively support the development of renewable energy sources. Circular Economy: The initiative aims to implement the principles of sustainable development, maintaining the balance of nature and respecting environmental resources.	Energy transition is often associated with high upfront costs of investing in renewable energy infrastructure and potential delays in project implementation. Differences in natural potential between rural areas (e.g. availability of wind, biomass) can lead to uneven benefits from this transition. Land use linked to sustainable framing: The initiative aims to counteract the negative effects of agricultural industrialisation and uncoordinated land-use change. However, resistance from traditional agricultural sectors or difficulties in coordinating different land-use interests (agriculture, forestry, nature conservation, urbanisation) can be a challenge. Implementing sustainable agricultural practices may also require significant changes to existing farming methods, which may be met with reluctance or lack of knowledge among farmers. Greening of agricultural activities and environmental efficiency of agriculture: Although the greening of agriculture is perceived positively, the source points to high production costs and high labour input as constraints on the development of this sector. If the initiative does not provide adequate financial and substantive support for farmers switching to organic methods, the positive effects may be limited. In addition, volatility of demand for organic products and market uncertainty may pose a risk to the sustainability of organic farms. Ecosystem services provision: Growing demand for ecosystem services creates opportunities, but competition between different forms of land use (e.g. intensive agriculture vs. nature conservation) can lead to conflicts. Natural capital stocks: The potential of the region's natural resources must be used with due care for environmental protection. Uncontrolled exploitation can lead to environmental degradation and loss of biodiversity, destroying long-term benefits.

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Resilient Rural Areas.

Box A18: Considerations regarding the policy/initiative 'rural-proof' with respect to the Resilient Rural Areas pillar.

Based on the analysis of the individual elements of the 'Resilient Rural Areas' pillar, it can be concluded that the policy/initiative shows some rural resilience features, however there are also areas that raise concerns or require special attention. The initiative actively seeks to use the natural potential of rural areas for renewable energy, which is crucial for the sustainable development of these areas. The focus on the development of non-agglomeration areas and effective infrastructure is a response to specific rural needs. The initiative diagnoses the negative effects of agricultural industrialisation and uncoordinated changes in land use in rural areas and intends to support sustainable agriculture and the revitalisation of problem areas, which demonstrates understanding of the specificity of rural areas. The observation of great interest in organic farming in the region and the planning of activities to strengthen this sector indicate adaptation to existing trends and the potential of rural areas.

Paying attention to the need to include all rural residents, especially those at risk of exclusion, is important for ensuring social cohesion in the countryside. Striving for the full development of rural residents and economic appreciation of different social roles responds to the needs of building strong and resilient rural communities. Considering the growing demand for organic and natural food and a clean environment and linking the mission of the region with blue and green functions reflects the unique assets of rural areas. Recognising the wealth of natural resources in rural areas as their specificity and potential and planning their better use with consideration for protection shows understanding of the rural character. Introducing the principles of sustainable development and the circular economy is important for the long-term environmental and economic resilience of rural areas. Elements indicating potential gaps in the initiative for actions to increase resilience in rural areas. Climate action in peatlands through carbon farming, is a specific issue relevant for many rural areas, but is not included in the initiative in the territory. This is a significant gap in the context of climate resilience in rural areas.

There is a lack of detailed information on specific actions adapted to different types of soils and agricultural practices in rural areas. The constraints indicated on the development of greening of agricultural activities and environmental efficiency of agriculture (i.e. high costs, lack of association, insufficient processing base) may make it difficult to achieve the initiative's objectives in rural areas. The fact that indicators of organic farming are not derived from the regional strategy may weaken the sustainability of the initiative's effects.

The emphasis on the greater scale of exclusion in rural areas outside agglomerations suggests that the initiative will have to be particularly intensive and adapted to the specific challenges of these areas in order to effectively combat exclusion.

The initiative does not have sufficiently specific mechanisms to effectively use this potential for the benefit of rural areas. In summary, the policy/initiative demonstrates some rural resilience by taking into account the specificity of rural areas in a number of areas, such as the use of natural potential, support for organic farming and the pursuit of social inclusion. However, the lack of consideration of climate action in peatlands and potential barriers to the development of greening of agriculture and addressing exclusion in remote rural areas pose challenges. In order to fully consider this initiative as rural resilience in the context of the Resilient Rural Areas pillar, it is necessary to clarify actions in areas of concern and ensure that the implementation of the objectives takes into account the diversity of conditions in different types of rural areas.

7.3. Connected Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Connected Rural Areas pillar.

Table A21: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Connected Rural Areas pillar.

Positive effects	Negative effects
Digital future of rural areas - technical: The initiative aims to counteract digital exclusion by improving telecommunications infrastructure. This effect will be particularly important for young and active people who willingly and widely use digital services in all areas of life, including professional and business. Digital Future of Rural Areas - Human Capital and Community: The initiative aims to combat digital exclusion not only by providing adequate telecommunications infrastructure, but also through social inclusion and development opportunities for residents. This is particularly important for the elderly and unemployed, who have been identified as having insufficient ICT skills Transport and mobility: The initiative will contribute to improving the spatial mobility of rural residents by building and renovating roads and other transport connections. This will benefit all residents, especially those commuting to work or school every day. An efficient transport system will enable passenger and freight transport and will increase communication accessibility (both external and intra-regional). The development of transport infrastructure will also contribute to the activation of rural areas, including counteracting spatial exclusion. Commuting and migration: The initiative plans activities aimed at strengthening demographic potential and family functions by striving to ensure an adequate quality of life and eliminating social inequalities.	Digital future of rural areas - technical: In terms of telecommunications infrastructure, the initiative may encounter high costs related to the need to complete the infrastructure in peripheral areas, which is due to low population density. This may lead to uneven development of digitalisation and the persistence of differences between rural and urban areas and between different types of rural areas. Digital Future of Rural Areas - Human Capital and Community: Not all rural residents, especially the elderly, may be interested in or have the opportunity to take advantage of the development opportunities offered by digitalisation. This can lead to a deepening digital exclusion of some residents, despite the improvement of infrastructure. Areas inhabited mainly by the elderly may have greater difficulties in adapting to the dynamic digitalisation of life. Transport and mobility: The development of transport infrastructure largely depends on the decisions and financial capabilities of local governments, which may result in an uneven pace and scope of changes in different regions. Peripheral rural areas require significant support in improving transport infrastructure, where even basic road connections often require intervention. On the other hand, suburban areas, which are an extension of urban transport space, are already in a better situation. This may lead to maintaining or deepening disproportions in communication accessibility between different types of rural areas.

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Connected Rural Areas.

Box A19: Considerations regarding the policy/initiative 'rural-proof' with respect to the Connected Rural Areas pillar.

Based on the analysis of the potential impacts of the initiative under the "Connected Rural Areas" pillar and its individual components, it can be concluded that the initiative shows certain features that indicate taking into account the specificity of rural areas and strengthening their resilience. The initiative directly identifies the problem of digital exclusion, which is particularly acute in rural areas due to the poorer telecommunications infrastructure and lower digital competences of some residents. Actions aimed at improving infrastructure and social inclusion are a step in the right direction. The initiative focuses on improving transport infrastructure, which is key to increasing access to services, employment and social contacts in rural areas, where distances are greater and public transport is often limited. Actions aimed at improving the quality of life and eliminating social inequalities can help to stop the outflow of people from rural areas and make them more attractive to live in. There are also significant challenges and potential shortcomings that could undermine the impact of the initiative on rural resilience, including:

- Infrastructure costs in peripheral areas:** The high costs of building and upgrading telecommunications and transport infrastructure in sparsely populated rural areas can be a significant barrier to achieving the initiative's objectives and lead to widening disparities between different types of rural areas.
- Diverse interests and capabilities of residents:** Not all rural residents, especially older people, may be able or willing to use new technologies and digital development opportunities. The initiative must take into account the diversity of needs and capabilities of residents and not rely solely on digital solutions.
- Dependence on local governments:** The success of a transport initiative is highly dependent on the commitment and financial capacity of local governments, which can lead to uneven progress across regions.
- Long-term demographic trends:** Reversing negative demographic trends in rural areas is a complex and long-term process that requires actions that go beyond the scope of this single initiative. The initiative may not be sufficient to solve the problem on its own.
- Differences between rural and urban areas:** There are significant differences between rural and urban areas in terms of digital development and access to services. The initiative must take into account these differences and be adapted to the specific needs and conditions of rural areas, rather than adopting one-size-fits-all solutions.

In conclusion, while the "Connected Rural Areas" initiative addresses key challenges facing rural areas in terms of digitalisation, transport and demography, it does not fully ensure rural resilience. There is a risk that financial barriers, social diversity and long-term demographic trends may limit its effectiveness. In order to increase the impact of the initiative on increasing rural resilience, it is necessary to take into account in more detail the specific conditions of different types of rural areas, provide adequate financial support, actively engage local communities and local governments and integrate with wider regional and national development strategies.

7.4. Prosperous Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Prosperous Rural Areas pillar.

Table A22: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Prosperous Rural Areas pillar.

Positive effects	Negative effects
In the Diversified Economies initiative, it aims to support the ongoing transformation of rural areas by diversifying their economies across agriculture, industry and services. Emphasis is placed on shortening local food supply chains, which can increase their efficiency and accessibility. It also encourages the creation of local hubs where diverse offerings can be presented and fresh food can be sold directly to consumers. These activities aim to strengthen local economies, promote sustainable practices and build community engagement. In relation to Entrepreneurship and Social Economy, the initiative promotes the revitalisation of rural areas through cooperation and knowledge exchange within	In the context of Diversified economies: Diversification may be more difficult to implement in more remote, less populated and peripheral rural areas. These areas often have limited access to resources, including innovative ideas, which may make their development less dynamic. Therefore, there is a risk of widening the gap between rural areas located close to urban centres and peripheral areas. In relation to Entrepreneurship and the social economy: Entrepreneurial processes are expected to be stronger near urban areas due to better access to markets and knowledge centres such as universities. This may mean fewer opportunities for entrepreneurship development in more remote rural areas.

the EU Single Market. Planned activities include the **development of small and medium-sized enterprises, promoting social economy business models, strengthening local supply chains** by improving local producers' interfaces and creating food hubs. The initiative also aims to **support innovation through education of future entrepreneurs**. An example is a new local production company in Białogard, which enables the processing of raw materials for sale in local shops and restaurants

In the area of **Increasing employment opportunities for young people, including in agriculture**, strategic documents at national and regional levels give priority to job creation, both in rural and urban areas. The initiative aims to **meet the needs of young people in rural and remote areas**, with a special focus on jobs and related opportunities

In the context of the **Sustainable Bioeconomy, including forestry in the framework of the EU Forest Strategy and the Carbon Farming Initiative**, the initiative aims to **promote sustainable land and forest management and investments** in line with the EU Forest Strategy. This aims to **create jobs, support forest restoration, help farmers adapt to climate change and protect forest crops from adverse weather conditions**. Common Agricultural Policy (CAP) instruments will finance innovation in the rural bioeconomy, create new employment opportunities, protect biodiversity and enhance ecosystem services. In the region, due to its significant forest cover and timber resources, forestry is an important economic sector and the initiative aims to implement **sustainable practices** and support the sector's links with the science base

In the scope of **Strengthening Producer Organisations in Rural Development**, the initiative aims to **strengthen the social fabric of rural areas by building a sense of belonging and increasing social capital and trust in communities** through the efforts of producer organisations. These organisations can contribute to **raising the standard of living in rural areas** by securing jobs and livelihoods, both directly and indirectly through rural products and supply chains. It is also planned to **support institutional forms of inter-sectoral cooperation, including producer groups, support the processing sector and attract investors, and create institutional conditions for increasing non-agricultural investments in areas with low competitiveness of agriculture**.

In the case of **Sustainable Bioeconomy, including forestry**: The effects of this element will be strongest in peripheral areas, where forests predominate, and weaker near cities. This may mean that the benefits of this initiative are unevenly distributed, with more urbanised areas experiencing a smaller direct impact. Additionally, achieving the goals of a sustainable bioeconomy may require restrictions on existing forestry or agricultural activities, potentially negatively affecting some entrepreneurs or local communities if appropriate support and transformation mechanisms are not provided.

In the area of **Strengthening producer organisations**: The impact will be stronger and broader in rural areas, especially typical agricultural areas, and weaker in urban areas, covering only local producers involved in these organisations. This can be seen as a limitation in the scope of benefits for urban areas. In addition, the establishment and effective functioning of producer organisations may encounter difficulties related to the lack of a tradition of cooperation, competition between producers or lack of appropriate organisational and financial support.

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Prosperous Rural Areas.

Box A20: Considerations regarding the policy/initiative 'rural-proof' with respect to the Prosperous Rural Areas pillar

Based on the analysis of the potential positive and negative impacts of the initiative in the context of the "Prosperous Rural Areas" pillar, it can be concluded that the policy/initiative shows some elements of building resilience in rural areas, but is not entirely free from potential challenges and inequalities. The initiative seems to recognise that diversification is easier near urban centres, suggesting some understanding of the diversity of rural conditions. The initiative focuses on areas that are important for rural development, such as creating jobs for young people, supporting a bioeconomy based on natural resources, and strengthening cooperation between producers, which is a key element in building rural prosperity.

The emphasis on shortening local food supply chains and creating local sales centers appears to be well suited to the needs and potential of many rural areas, strengthening local economies and social bonds. Actions to develop SMEs, promote the social economy and support innovation are key to generating growth and creating new opportunities in rural areas. However, there are aspects that indicate potential gaps in full rural resilience. As noted, the diversification of economies and development of entrepreneurship may be more difficult in more remote and peripheral areas. Therefore, the initiative must include mechanisms to equalise opportunities and specific support for these areas to avoid deepening existing disparities. Although the initiative aims to increase youth employment, it is unclear to what extent it addresses the deep-rooted problem of depopulation and migration of young people to cities. Improving employment opportunities alone may not be enough to stop these negative trends if other issues related to quality of life, access to services and social infrastructure are not addressed. The focus on bioeconomy and forestry may bring greater benefits to forested areas, meaning that other types of rural areas may be less directly affected. It is important to ensure that the initiative also supports other sectors and forms of rural economic activity. Effectively strengthening POs takes time, trust and organisational support. In rural areas with lower social capital or no tradition of cooperation, building strong organisations may be difficult and require additional resources and strategies.

In summary, the policy/initiative under the "Prosperous Rural Areas" pillar has the potential to positively impact rural areas by promoting economic diversification, entrepreneurship and the use of local resources. However, to be fully considered as rural-resilient, it is necessary to take into account the specific challenges and diversity of individual rural areas and provide mechanisms to counteract deepening disparities and negative demographic trends. Particular attention should be paid to supporting peripheral areas, addressing the causes of depopulation and promoting a wide range of economic activities in rural areas.

7.5. Final assessment

Taking into account the four pillars (Stronger Rural Areas, Resilient Rural Areas, Connected Rural Areas, Prosperous Rural Areas), it is difficult to clearly state whether the initiative is generally fully rural-proof, however, the analysis of the individual pillars allows for the formulation of certain conclusions.

The initiative seems to have strong links with the "Stronger Rural Areas" pillar. Its aim is to empower local communities by building a sense of ownership and agency among residents. It aims to reduce the development gap between urban and rural areas, promoting equality and social inclusion. It also emphasises the importance of cooperation between municipalities and strengthening social capital by building networks of trust and commitment. Elements such as initiatives funded under the CAP, such as the LEADER and CLLD approaches, and Smart Villages initiatives also fit into this pillar. The initiative aims to provide access to services that facilitate social innovation, spatial planning and youth engagement. In the context of the pillar "Resilient Rural Areas", the initiative also addresses some key issues. Its strategic objectives refer to the energy transformation and strengthening the economy using the natural potential, especially in rural areas. The activities include the development of non-urbanized areas and the provision of integrated and efficient infrastructure for the energy transformation of rural areas.

The initiative also takes into account issues related to rational land management, noting the negative impact of the industrialization of agriculture and uncontrolled land use change. Organic farming is also promoted, in which the region is a leader in the country. In addition, the initiative aims to socially include all residents of the region, regardless of their place of residence, origin or financial situation, and to support women in entrepreneurship and the reconciliation of professional and private life. It also emphasizes the growing demand for organic and natural food and areas with a clean environment, which is in line with the idea of environmental resilience. The "Connected

Rural Areas” pillar is clearly included in the initiative. The actions aim to improve the digitalization of rural areas, including combating digital exclusion by providing appropriate telecommunications infrastructure. Areas with deficits in digital infrastructure and services are diagnosed. The initiative also focuses on improving transport infrastructure, including the construction and renovation of roads and other transport connections, which is to increase the spatial mobility of rural residents. Attention is drawn to the need to provide integrated and efficient transport infrastructure to handle passenger and freight traffic. The initiative strongly emphasizes the transformation of rural areas by diversifying their economies in the agricultural, industrial and service sectors. The importance of shortening local food supply chains and creating local centres where fresh food can be sold directly to consumers is emphasized. Actions for the revitalization of rural areas are promoted through cooperation and knowledge exchange, the development of small and medium-sized enterprises, supporting the social economy and strengthening local supply chains. The initiative aims to increase employment opportunities for young people in rural areas and promotes a sustainable bioeconomy, including forestry. It also supports the strengthening of producer organisations in rural development.

In summary, the initiative seems to be broadly aimed at strengthening rural resilience by taking action across all four pillars. It focuses on strengthening communities, building environmental and social resilience, improving digital and transport connectivity, and economic diversification. Aspects related to strengthening the social and economic development of rural areas are particularly strongly emphasised. However, it should be remembered that the effectiveness and ultimate “resilience” of the initiative will depend on how it is implemented, how it takes into account the specificities of different types of rural areas, and how it is monitored and adapted over time.

Strategic documents (related to the initiative) provide feedback on the four pillars of the long-term vision of rural areas, although with varying levels of detail and directness. Strategic documents, describing actions aimed at empowering local communities, promoting participation, cooperation between municipalities, and strengthening social capital, provide feedback by indicating the direct and indirect impact of these actions. They cite the CAP-funded LEADER/CLLD and Smart Villages initiatives as an example. In the context of monitoring the effects, the availability of quantitative data on the participation of residents in public consultations and activities related to the social economy at the local and regional NUTS 2 level was indicated, which is a form of feedback on social involvement. In relation to the resilience of rural areas, strategic documents provide information on activities related to energy transformation, rational land management, organic agriculture and social inclusion. Feedback takes the form of a description of the direct and indirect effects of the planned activities. For example, in the area of organic agriculture, an increase in the number and area of certified organic farms has been noted in the years 2008-2014 and since 2019, which is feedback on the development of this sector to date. Similarly, there is a growing demand for organic food. In terms of rural connectivity, strategic documents focus on improving digitalization and transport infrastructure. The feedback includes statements about the direct impact of the actions on the availability of telecommunications and transport infrastructure. The systematic increase in access to infrastructure networks and the density of public rural roads in the region is emphasized, which provides quantitative feedback on progress in this area. In the context of rural prosperity, strategic documents describe the drive to diversify rural economies, support entrepreneurship and the social economy, increase youth employment, promote the bioeconomy and strengthen producer organisations. The feedback is often in the form of expected direct and indirect impacts on the economy and society. An example is the diversification of economic entities in rural areas, with a decrease in the number of entities in agriculture and an increase in industry and services, which provides historical feedback on economic trends.

In general, feedback in strategic documents often focuses on describing planned actions and expected outcomes in the context of the four pillars. In some cases, such as in the areas of organic farming or infrastructure, quantitative data are also available, which provide a more concrete form of feedback on trends and progress to date. However, it should be noted that the level of detail in the feedback varies depending on the thematic area. Not all elements have an equally rich set of indicators and assessments of outcomes. Furthermore, most feedback concerns planned or existing actions, rather than a systematic assessment of their long-term impact on rural resilience in the way proposed by extended rural proofing (steps 4a and 4b). Nevertheless, strategic documents provide a valuable source of information on intentions and progress towards achieving the goals related to the long-term vision for rural areas, and references to the four pillars provide a structured view of these actions.

8. United Kingdom Living Lab “Rural Scotland”

Environment Strategy for Scotland⁷

The author of the initiative is the Scottish Government. In terms of type, this initiative is a public strategy. It is already adopted. It is a national level initiative. Broadly speaking, the initiative creates an overarching framework for Scotland’s existing environmental strategies and plans, including the Climate Change Plan. The objectives of the initiatives are to provide a strategic approach to environmental policy which brings together the Environment Strategy and future arrangements for environmental principles, governance and monitoring into a single, integrated framework. This framework will aim to support a public policy objective to maintain or exceed EU environmental standards. The main actors concerned by the initiative are public agencies, businesses, NGOs and citizens. The main sectors concerned by the initiative are across all aspects of production, consumption and environmental management, including human behaviours. There are explicit references to “rural” in the body of the initiative. There is minimal reference to ‘rural’ within the main body of the strategy. It refers to helping “to ensure that local economies and communities in rural areas thrive.” However, various references to nature and environment imply rural through types of land uses or minimising impacts. The initiative is not linked to a fund or financial instrument. The initiatives define guiding principles and strategic directions for future endeavours.

The overall aim is to reduce the use of natural resources, waste and increase re-use. Aims are that: i) a thriving, sustainable economy conserves and grows natural assets; ii) a healthy environment supports a fairer, healthier, more inclusive society; iii) the Scottish population are responsible global citizens with a sustainable international footprint. The initiative makes reference to indicators from another initiative.

8.1. Stronger Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Stronger Rural Areas pillar.

Table A23: Summary of the positive/negative effects of the policy/initiative tested, in relation to in the Stronger Rural Areas pillar.

Positive effects	Negative effects
The Strategy sets an aim of creating business and investment opportunities and new, high quality jobs across Scotland, and contributing to a thriving, sustainable economy which conserves and grows natural assets. It provides policy support for initiatives which use existing or new participatory processes involving local communities taking responsibility for bidding for funds or developing social innovations, with no distinction in eligibility between rural and urban areas. It encourages a nature positive economy, which includes roles for social innovation and community-led initiatives, such as taking responsibilities for managing natural capital (e.g. peatland restoration), strengthening local food production, supporting agricultural innovation, promoting sustainable and healthy diets, and educating food waste. These topics provide opportunities for enhancing the economic, social and environmental vitality of rural areas. As such,	Differences in developing participatory approaches may be experienced within and between rural areas depending upon funding criteria and in the availability of human and social capital. Accessibility to different types of natural capital varies across rural Scotland, which will restrict or influence actions for achieving intended outcomes, and the adaptability of supply chains to take advantage of emerging opportunities. Inward migration and attracting migrants from outwith Scotland in response to new opportunities may create pressures on local housing supply, facilities and services, which will be experienced differently across Scotland. Changing the attractiveness of places for investments may influence the types of incoming residents and in some parts of Scotland, second homes may be bought for children to relocate to take advantage of educational opportunities. Overtourism can create negative environmental and social effects, triggering interest in mitigation actions

⁷ <https://www.gov.scot/publications/environment-strategy-scotland-vision-outcomes/documents/>

it may stimulate greater levels of citizen participation and initiatives (e.g. through CLLD).

Successful rural revitalisation may alter the population profiles and lead to retention or inward migration of population, including migration from outwith Scotland. Alongside economic development, population demographic profiles are evolving, reflecting socio-economic changes.

Improvements in infrastructure (e.g. upgrades to A83 trunk road at "Rest and be Thankful") within and between rural areas should be expected to benefit rural citizens. Such improvements would help to deliver a healthy environment which supports a fairer, healthier, more inclusive society. This would also facilitate sustainable access to sites for tourism of which rural areas have considerable strengths (e.g. cultural assets from Neolithic times onwards, several with international status).

The potential, barriers and enablers of economic and social development require to be understood, and the differences which exist between rural areas. Funding for research and innovation to inform the development of new products and processes, evolution of social innovations, and understanding of needs for training and skills is increasingly including mechanisms of particular benefit to micro- and small businesses (e.g. EU Cascade funding).

New skills and products will create opportunities for trade, business and social innovations such as those leading to volunteering on environment related initiatives, e.g. Clean-Up Scotland initiative of Keep Scotland Beautiful). Such skills and knowledge are also requirements for realising changes in citizen and visitor behaviours, and identifying and taking opportunities of new types of businesses. The development of education outlets as a focus for certain types of courses increases the profile of an education or research provider may have secondary impacts on an area such as creating more demands for services.

such as visitor levies and restrictions on venues for camping and overnight stays, and the provision of facilities such as bins and public conveniences. Access to services by residents in rural areas may require more travel time, or travel on routes with low levels of resilience to extreme events. Similarly, hotspots of visitor activity could lead to demands for facilities and services creating stresses in specific areas and adverse impacts on existing residents.

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Stronger Rural Areas.

Box A21: Considerations regarding the policy/initiative 'rural-proof' with respect to the Stronger Rural Areas pillar.

The Environment Strategy is likely to have indirect, positive effects on aspects of characteristics of stronger rural areas. They are at the forefront of opportunities offered for developing a nature-positive economy with aims that are for economic, environmental and social wellbeing.

The Strategy provides policy support for participatory processes and democracy which are part of processes for directing or managing funding. Investments in research and innovation directed towards tackling social challenges, and those specific to rural areas, offers scope for new forms of participation by micro- and small businesses. Aspects of innovation could enhance services from the public, private and voluntary sectors. Enhancing the skills and human capital of rural residents, and providing focal points for wider education and training in skills necessary for green jobs can contribute to rural revitalisation. Successful rural revitalisation may alter the population profiles and lead to the retention or inward migration of population, including different types of migrants from outwith Scotland (e.g. refugees, retirees), and returnees of residents who left for education and employment.

However, the development of opportunities may vary within and between rural areas, and between rural and urban areas. This will reflect accessibility to different types of natural capital across Scotland, and current distribution of human and social capital which is important in stimulating local action by citizens and businesses.

Success in the promotion of attractions for cultural tourism and heritage is creating pressures on local places and people due to overtourism. However, some areas need to develop tourism, currently struggling to attract visitors away from central Scotland or the highlands and thus overtourism is not a highlighted issue. Similarly, changes in the attractiveness of places for investments may influence the types of incoming residents and in some parts of Scotland, with second homes bought for children to relocate to take advantage of educational opportunities which may have adverse impacts on the composition of some rural areas.

8.2. Resilient Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Resilient Rural Areas pillar.

Table A24: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Resilient Rural Areas pillar.

Positive effects	Negative effects
The Strategy recognises the need for tackling climate change and the roles of renewable energy and heat, and building design. Renewable energy and heating form parts of the public strategies towards decarbonising energy provision, both receiving support for community-led initiatives. It advocates the restoration of peatlands, and its Monitoring Framework includes tracking the development of nature-based solutions, greenhouse gas emissions, and reporting through natural capital accounts. However, opportunities for restoration differ geographically according to the original resource and its current status, and scope for land manager, NGO or community initiatives vary between rural areas, and in the scale of restoration that has been undertaken or is possible.	The generation of renewable energy is almost exclusively from rural areas such as onshore wind, biomass, solar farms, hydro, inshore wind, anaerobic digestion. The geographic distribution of potential sources of energy production varies between rural areas, with some more suitable in places than others, and some potentially precluded because of cumulative impacts of existing developments. This leads to differences in prospective uptake of opportunities between rural areas, across Scotland. Unequal distribution of generation is also created by patterns of land ownership, differences in human and social capital, and connectivity to the electricity grid. Large-scale developments of renewable energy (onshore and offshore), and planning for carbon capture and storage) require upgrading or new high voltage power lines, most of which are through rural

The Strategy identifies opportunities and challenges faced in achieving sustainable lifestyles and businesses. It also recognises the need to make the best use of productive land by reducing emissions from agriculture while producing high quality food and protecting nature.

The Scottish Government agriculture policy and vision has promoted agri-environment measures and transitions to agroecological farming systems. The types of system vary between rural areas, under different regulatory frameworks (e.g. crofting), and governance arrangements. Specific measures are guided by place, local systems and relevant ecosystem services, and diversity in uptake influenced by human and social capital, and means of learning.

Accompanying the Strategy is an Initial Monitoring Framework, supported by an Equality Evidence Index (<http://www.equalityevidence.scot/>), for example tracking differential means of access by women.

Natural capital is a key asset of rural areas, with geographic differences in stocks reflecting the distribution of natural resources and of implications of policies, the value of which is reflected in the Natural Capital Accounts.

areas, and the siting of comparatively new technology battery storage facilities, in peri-urban and rural areas. Such infrastructure is creating pressures on rural residents and communities. Poorly sites or designed developments are more likely to adversely affect rural residents.

Environmental assessments would be required to identify any issues that may arise due to peatland restoration or carbon farming, with any mitigation measures likely to be site specific (e.g. flood mitigation and drainage).

Some opportunities will disproportionately arise in rural areas, but so will adverse impacts of poor land management practices. Transitions to sustainability of land uses requires to be throughout the supply and value chains, e.g. sourcing inputs, transport, site management, retail, and re-use and recycling of materials. The siting of facilities (e.g. waste, recycling processing) has been in rural or peri-urban sites with disproportionately adverse impacts (e.g. smell, views, transport noise), and mitigation measures handled by the planning system.

Access to nature as a source of multiple ecosystem services will compete with demands to use land for other purposes. Some areas will be the focus of particular types of land uses with high expectations for delivering ecosystem services (e.g. forestry, water management), triggering negative responses from some residents and businesses. Negative impacts may also experienced by minority groups, such as barriers to engaging in active travel due to safety concerns or not learning to ride a bike due to cultural or accessibility reasons.

Adverse impacts may also accrue to natural capital (e.g. due to pressures of multiple uses) where there is a lack of capabilities, or perceptions of values of changes which are seen as positive by some stakeholders and negative by others (e.g. rewilding). Those industries which are most dependent on natural capital are entirely or primarily located in rural areas.

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Resilient Rural Areas.

Box A22: Considerations regarding the policy/initiative 'rural-proof' with respect to the Resilient Rural Areas pillar.

The Environment Strategy is likely to have some direct and indirect, positive effects on aspects of the resilience of rural areas. It provides policy support for tackling climate change and losses of biodiversity. The Strategy Initial Monitoring Framework reports on indicators for tracking the development of nature-based solutions, greenhouse gas emissions, and reporting through natural capital accounts.

Links to other strategies point to support for energy transitions of rural communities and climate action. The strategy recognises the roles of community-led renewable energy developments, peatland restoration, woodland diversification, and agri-environment schemes which encourage greening farming activities and carbon management. Such initiatives promote sustainability in the planning and management of land uses, and consideration of circularity and development of bioeconomic activities.

However, opportunities for generating renewable energy vary across rural Scotland reflecting the suitability of biophysical characteristics, cumulative impacts, human and social capital, and access to land and water (i.e. land tenure). Upcoming issues are suitability for maintaining facilities, such as economic, social and environmental contexts for returbining wind turbine developments.

Transitions to sustainability of land uses have implications throughout the supply and value chains, e.g. sourcing inputs, transport, site management, retail, and re-use and recycling of materials. The siting of facilities (e.g. waste, recycling processing) has been in rural or peri-urban sites with disproportionately adverse impacts (e.g. smell, views, transport noise). Mitigation measures are left to being handled by the planning system.

Investments in natural capital and the delivery of ecosystem services may lead to pressures and adverse impacts on the physical environment, and social and economic characteristics of some rural areas compared to others. Trends interpreted from indicators used in the Monitoring Framework should provide alerts to objectives of such pressures and negative impacts (e.g. on the ecosystems listed under the [Nature objective](#) of the Strategy, notably those of marine environments, and the indicators on economy, notably [Natural Capital Asset Index](#)).

The Strategy is supported by the Equality Evidence Index which provides insights to social inclusion and gender issues. The Strategy outcomes include 'Our healthy environment supports a fairer, healthier, more inclusive society' but it does not have explicit reference to support for women, or women's initiatives, in rural areas.

No consideration is evident in relevant elements of the Strategy of human health and wellbeing under social resilience or social inclusion (e.g. support for protecting and enhancing mental health). Such themes would be relevant to reference (e.g. stresses and illness caused by exposure to pressures on ecosystems).

8.3. Connected Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Connected Rural Areas pillar.

Table A25: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Connected Rural Areas pillar.

Positive effects	Negative effects
A requirement for achieving the outcomes of the Strategy is the development of new skills and products that will create opportunities for trade. These include digital skills and entrepreneurship, and digital portals and Apps to guide re-use and recycling. As such, the Strategy provides some policy support for tackling the disadvantage in many rural areas of weak levels of digital connectivity which then may adversely impact on the scope for developing digital solutions and attracting or enhancing associated human capital. The Strategy and related instruments also recognise the importance of sustainable and smart transport and how that contributes to achieving aims of sustainability. It provides additional policy support rural connectivity of public transport, and could lead to smart timetable design to improve connectivity by public transport within rural areas, and between rural and urban areas. It could encourage further community-led initiatives such as community taxis.	Although significant adverse effects in rural areas are not anticipated, success in related strategies could increase their attractiveness for tourists, with consequential stresses created on transport infrastructure in rural areas including public transport. Pressures on road traffic and infrastructure are potential effects of reversing demographic trends and increases in commuting. Mitigation measures are not the responsibility of the Strategy, but it provides a framework within which monitoring and reporting would be expected (e.g. of potential implications of deterioration in quality of life of people who live or work in rural places which suffer adverse impacts). Such measures could include a visitor levy, to accompany investment in public transport nodes and smart transport timetabling. The support for education and training in digital skills can be expected to increase flows of communication between teachers and learners, and learners and learners. However, no consideration is given to means of informal communication within communities, which is also an important factor which can influence demographic change and knowledge of resources (e.g. advice on housing, knowledge of renewable energy potential). However, the term 'digital' is not explicitly stated in the Objectives. Digital tools and infrastructure forms elements of underlying Knowledge Accounts (e.g. reference to Scotland's Environment Web). Digital contributions to pathways to achieving the objectives may be included in the final Strategy.

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Connected Rural Areas.

Box A23: Considerations regarding the policy/initiative 'rural-proof' with respect to the Connected Rural Areas pillar.

The Environment Strategy is likely to have indirect, generally positive effects on some aspects of connectivity.

It is not expected to have an effect on technical aspects of developing rural digital futures. However, it should will have positive effects on rural digital futures in relation to human capital and communities. In particular, the development of new digital skills and capabilities may enable development of new tools (e.g. Apps) to inform approaches to re-use and recycling, waste reduction and developing a circular bioeconomy.

The Strategy provides policy support for tackling disadvantage of rural areas of weak digital connectivity with consequences of adverse impacts on the development of digital solutions and increasing human capital. However, some weaknesses in skills and qualifications are not related to digital solutions (e.g. a reported lack of qualified bus drivers living in National Parks). Digital connectivity is not explicitly referenced in the Vision or any of the Objectives. However, aspects are referenced in underlying Knowledge Accounts.

The development of a local skillbase, or national capacity building through a locally based education facility, provides formal means of education and training, and communication flows. However, no consideration is given to informal connectedness and information flows which are important in developing social capital and connectivity in rural areas (e.g. through friends groups, social media).

The Strategy supports policies which should increase attention directed towards transport and mobility, in particular sustainable and smart transport (e.g. smart timetable design to improve connectivity by public transport within rural areas, and between rural and urban areas; community taxis), and tackling weaknesses in physical infrastructure. However, it does not provide direct financial resources for such investments.

As noted in relation to other headings, success in achieving aims of the Strategy is expected to increase the attractiveness of rural areas for tourism, with consequential stresses created on transport infrastructure in rural areas including public transport. This could also impact on the volume and patterns of commuting and migration (e.g. increased road traffic, pressure on scheduling and attending appointments, adverse impacts on health and well-being). A policy response may include levies which could be directed towards investment in public transport nodes and smart transport timetabling.

Box 13 - Considerations regarding the policy/initiative 'rural-proof' with respect to the Connected Rural Areas pillar

8.4. Prosperous Rural Areas

The following table summarises the positive/negative effects of the initiative tested, in relation to the Prosperous Rural Areas pillar.

Table A26: Summary of the positive/negative effects of the policy/initiative tested, in relation to the Prosperous Rural Areas pillar.

Positive effects	Negative effects
The Strategy seeks to embed circular resources and practices throughout the economy and society, with specific reference made to natural resources such as soil, plants and animals. It identifies the need for business support services and knowledge exchange to develop human capital, including creating jobs and taking opportunities of carbon-neutral, circular solutions, with funds directed to align with the aims of the Strategy (e.g. from the EU-funded Circular Economy Investment Fund). Initiatives for training in green skills, encouraging new entrants into farming, and supporting young entrepreneurs include the Farm Advisory Service New Entrants to Farming Programme, and the Circular Economy Challenge for school pupils. The creation of new enterprises in a circular bioeconomy, and in farming and forestry systems, if supported by a skills development programme, should increase opportunities for young people in rural areas. Such scope will vary between rural areas reflecting the presence of natural resources, and suitable supply and value chains. The proximity of micro- and small businesses to natural resources (e.g. wood, plants) for use in development of bioeconomy products may encourage and reward entrepreneurship and the building of a social economy. Components of the Environment Strategy contribute to aspects of raw materials, processes, and the marketing of food and drink products protected by DPOs and themes of producer organisations, all based in rural areas.	The range of availability of natural, human, social and financial capital in the private and community sectors may result in rural areas that are 'have' and 'have nots', thus revitalising the economies in some areas and leaving others performing poorly by comparison. Social capital may be limited in some sectors or geographic areas, inhibiting the development of collaborative initiatives, such as producer organisations, which can enhance prosperity.

The following box shows whether the policy/initiative is considered 'rural-proof' with respect to the pillar of Prosperous Rural Areas.

Box A24: Considerations regarding the policy/initiative 'rural-proof' with respect to the Prosperous Rural Areas pillar.

The Environment Strategy is likely to have indirect, positive effects on some aspects of prosperity of rural areas. In particular, it emphasises the embedding of circular resources and practices throughout the economy and society. Such an approach could increase the prospects of the formation of new products and services by micro- and small businesses, and encourage knowledge exchange to develop human capital. Successful uptake of new and emerging opportunities could increasingly diversify the economies of some rural areas.

Positive feedback on demand for skills and knowledge could be synergistic with the provision of training in green skills relevant to a circular bioeconomy, encouraging new entrants into farming, and supporting young entrepreneurs (e.g. by education and training providers in rural areas). The proximity of such businesses to natural resources (e.g. wood, plants) and local availability of skills, particularly amongst young people, may encourage and reward entrepreneurship, including community-led initiatives and the building of a social economy.

However uneven distribution around rural Scotland of types of natural resources (e.g. peatland, land suitable for woodland expansion) and human and social capital may result in rural areas that are 'have' and 'have nots', thus revitalising the economies in some areas and leaving others performing poorly by comparison. Similarly, the level of social capital required for social innovation may be limited in some sectors or geographic areas, inhibiting development of collaborative initiatives, such as producer organisations and marketing food and drink products based in rural areas.

8.5. Final assessment

Taking into account the four pillars assessed above, do you consider the initiative 'rural-proof' *overall*? Please elaborate on your response. Please include a comment on how you found providing feedback with reference to the four pillars of the Long Term Vision for Rural Areas. For example, did you find this approach appropriate and meaningful for your Living or Replication Lab? What is the understanding and familiarity of the Lab of each of the pillar

