



# GRANULAR

## Practice Abstracts

### Batch 1

### D6.3

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## D6.3 Practice Abstracts – Batch 1

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## 1. Executive Summary

This document presents the second version (October 2024) of the first batch of the Set of Practice Abstracts, aiming to share innovative solutions with practitioners in rural areas, assembled by the Living Labs within the GRANULAR project. GRANULAR Living Labs are Multi-Actor laboratories that bring together actors from science, policy and civil society to co-construct and co-test innovative data collection methods and indicators to support current local policy decisions. In total, seven Living Labs are involved in the project (France, Italy, Sweden, Poland, Spain, the Netherlands, and the United Kingdom).

The Living Labs cover various themes, such as improving mobility flows and demand, monitoring visitors' uses of natural areas, and evaluating the impact of drought on biodiversity. The project also aims to upgrade the skills of local players in observation tools, support local population empowerment, and awareness of data. The Living Labs provide an environment for collecting data in a real-world setting, which can be analysed to gain insights into user behaviour and preferences. Overall, the Living Labs will provide practical recommendations with added value and benefit to end-users, using the generated knowledge and implementing the expected results.

## 2. Introduction

The GRANULAR project aims are to **identify, develop and deliver novel data and reusable tools to support public action in European rural areas** (“Better data for better rural policies”).

The Living Labs are part of the Multi-actor Labs, which are collaborative and participatory methods using a multi-actor approach that enable actors to identify needs relevant to their territory, co-design and test methods and tools, validate data and indicators, and ensure their replicability.

Representing a diversity of structure, geographical situations, local policy initiatives, data gaps, and cross-cutting issues in rural areas, seven Living Labs have been engaged in the GRANULAR project (France, Italy, Spain, the Netherlands, Poland, Sweden, and the United Kingdom). They have been established to develop practical recommendations with added value and benefit to end-users, co-creating relevant and validated knowledge with a diversity of local rural actors in order to equip policymakers and rural communities with the data and tools needed for better decision-making.

The Living Labs are unique in their approach, organisation, and management. They have been established with local authorities, development associations, universities, and other relevant stakeholders. These stakeholders will work together to identify the main challenges rural areas face and develop solutions to address these challenges. The Living Labs have also identified thematic priorities to guide their activities. These thematic priorities have been determined based on the specific needs of each territory.

This document presents the set of Practice Abstracts from seven Living Labs (France, Italy, Spain, the Netherlands, Poland, Sweden, and the United Kingdom) within the GRANULAR project, each structured in four main parts:

- About the Living Lab;
- Thematic Priority(-ies);
- Objectives;
- Data to be collected.

The Set of Practice Abstracts is a synthesis of take-away messages and good practices derived from the activities of the Living Labs regarding the use of novel data methods to guide policy that are expected to be achieved under the project and disseminated to practitioners in rural areas.

### 3. Methodology

#### 3.1 What is the GRANULAR Practice Abstract?

The GRANULAR Practice Abstract synthesises smart, innovative solutions developed under the project and disseminates them to practitioners in rural areas (rural communities, rural practitioners, policymakers, researchers, businesses, NGOs, etc.). A total target number of 23 practice abstracts is foreseen for the project.

#### 3.2 Content of Practice Abstract

In the GRANULAR project, the Practice Abstract contains two parts:

**Summary to be submitted to EIP–AGRI** for broad dissemination to practitioners on expected outcomes from the Living Lab, interesting for practitioners relevant to the project, i.e. rural communities, rural practitioners, policymakers, researchers, businesses, NGOs, etc., containing:

- Main expected results/outcomes of the activity
- Main practical recommendations, i.e. what is the main added value/benefit/opportunities to the end-user if the generated knowledge is implemented? How can the practitioner make use of the results? To what issues/to whom do these recommendations apply?

**“Extended” Practice Abstract for knowledge transfer** under the project

##### About the Living Lab

Description of the Living Lab, containing:

- its coverage (on a national level (NUTS1), regional level (NUTS2) and, if relevant, on a local level (NUTS3)) and organisation managing the Living Lab (name of the organisation and its type (territorial authority, regional authority, local development association, university, etc.));
- information, whether it is a newly established or an existing platform;
- information on what shapes the area, the main challenges the area faces, etc.

##### Thematic Priority(-ies)

The thematic priorities were identified by the Living Labs and listed according to the Prototype of Rural Compass and the four principle rural functionalities (residential, productive, environmental and recreational) (Table 1).

Dimension	Priority	FR	IT	ES	NL	PL	SW	UK
Residential	Demographic change	X		X				X
	Public services			X			X	
	Commuting	X						
	Rural wellbeing				X			
Recreational	Recreational flows	X	X					
Environmental	Natural capital assets		X					X

	Land use system					X		
	Climate change			X				X
Productive	Food systemic features		X			X		

Tab. 1: Thematic priorities (Source: Living Labs Action Plans)

### Objectives

Each Living Lab described the objectives under identified thematic priority(-ies). If possible, they were formulated in three bullet points and structured around the following:

- Vision (what are the long-term goals/aspirations for the future),
- Principal actors and typology (who are/will be the actors employed and how these actors are engaged/are going to be involved in the activities of the Living Lab; policy and administrative level),
- Strategy and future activities (what activities will the Living Lab implement with the collaboration of other partners).

### Data to be collected

The thematic scope of data was described, considering the following:

- Data needed;
- Data to be collected by the Living Lab;
- Data source;
- Tools and methods to be used.

If necessary, potential data gaps were included.

## 4. Living Labs

According to the methodology adopted, this section contains structured and standardised descriptions of the activities undertaken by the seven Living Labs. This documents the progress made in setting up and organising these entities. It also provides an overview of the challenges the region faces, the assumptions behind their operation and the plans for data acquisition, as set out in the project.

### 4.1 France

#### Pays Pyrénées Méditerranée (Local development association)

### Summary

The Living Lab in France aims to enhance mobility flows and develop targeted transport alternatives to individual cars, monitor the use of natural areas to minimize impacts on biodiversity, and assess the impact of drought. It encourages the use of existing data, offers workshops to improve local stakeholders' data processing skills, and promotes public awareness of data through activities such as a quiz. For instance, we implement workshops gathering data producers and users such as the French and the Catalan Institutes for Statistics (INSEE & IDESCAT) and local municipalities, communities, journalists or economic chambers to better know and use existing data. The GRANULAR project facilitates interaction among European local communities and research labs, enabling stakeholders to refine public policies and private initiatives. The

observation methodology involves web scraping, mobile phone data, and qualitative surveys of volunteer residents. The goal is to critique data collection methods and ensure reproducibility in other rural areas of the European Union and the British Isles. By objectifying trends, rural stakeholders can enhance the credibility of their projects and collaborate with regional, national, and European partners. The Living Lab supports municipalities and communities in creating a common mobility service work plan with the Occitanie Region. Involving practitioners in the co-design of monitoring tools will strengthen their capacity to make data-driven decisions. Lastly, the development of access and display tools will facilitate the transformation of collected data into contributions to decision-making.

## About the Living Lab

The Living Lab area covers 58 municipalities in the South of France (Occitanie Region, Languedoc-Roussillon, Pyrénées-Orientales) and is managed by Pays Pyrénées Méditerranée, the association for local development. The association already exists and was managing a LEADER Local Action Group, but the data-oriented Living Lab is being created throughout the GRANULAR project. Born from the meeting of the Pyrenean mountains and the Mediterranean Sea, the region presents a wide range of contrasting landscapes crossed by the Tech coastal river, 60% covered by forest. All communities share a common Catalan culture and a 120 km frontier with South Catalunya in Spain. The area is one of the two passages to connect the Iberian Peninsula to the rest of Europe. The energy production in the area covers only 19% of its energy needs. Despite a high dependence on oil products, which raises questions given its GHG emissions and cost variations, photovoltaic panels and wood are already widely used. Displacements and mobilities, relying mainly on cars and motorised means of transport, are the first emissions domain in the Pays Pyrénées Méditerranée area - more than 4 to 5 trips are made by car to go to work. The area presents issues of access to day-to-day services such as bakeries, grocery shops, pharmacies, or petrol stations. Tourism (seaside, thermal, outdoor activities) and agriculture (viticulture, arboriculture, breeding) are two pillars of the local economy. Numerous jobs are seasonal and unevenly distributed over the area. Even if the agricultural economic sector can rely on numerous quality products (PDO wine, world-known beers, fruits, cheeses, etc.) and 20% of the agricultural areas are growing organic products, the sector is vulnerable because depending on water resources. The inhabitants of the Pays Pyrénées Méditerranée area are highly sensitive to natural risks, which are increasingly becoming important because of climate change, mainly floods and fire risks. The decreases in precipitations and the increase in temperatures threaten water resources to be shared between inhabitants, farmers and tourism professionals.

## Thematic Priorities

- ◆ Demographic change
- ◆ Commuting
- ◆ Recreational flows

## Objectives

- Given that displacement is the primary source of energy consumption in the area, handling displacements and accentuating the shift to alternative modes of transport that are less dependent on fossil fuels are environmental, social and economic challenges for this rural, tourist and cross-border region. Local municipalities, communities and regions, as mobility local authorities, but also tourism and social actors who know and advise specific publics, associations and involved citizens, specific hubs for generating travel (schools, touristic sites, etc.), national expert technical institutions (CEREMA) are invited to take part to this objective. The strategy will combine active and passive methods to collect data about mobility practices throughout the year and better understand the modal choices. Expected outputs are a shared understanding and monitoring tools of mobility flows, combining passive and active methods on a population sample.
- The local wellbeing and promotion of the area are heavily reliant on natural spaces and landscapes. Local public and private stakeholders such as municipalities, regional authorities, outdoor activities



companies and associations or natural reserves are involved in developing both sports practices and biodiversity preservation and awareness. The natural areas concerned are numerous and diverse, such as the mountains, the forests, the beaches and the sea. However, frequentation of certain areas can threaten biodiversity if not anticipated and regulated. The strategy to collect data will be based on gathering existing data, such as path meters and mobility flows monitored within the previous priority theme, combined with remote sensing tools to discuss local knowledge of biodiversity hotspots and subject to the impact of over-use and misuse.

- The area is suffering from drought, implying issues with water resources management. Several studies have been launched locally to monitor and collectively anticipate the evolution of resources. The GRANULAR project will contribute to expanding these collective monitoring tools by observing the impacts of drought on biodiversity, particularly in the mountain and forest areas, and agriculture production. Catchment area unions, natural reserves, local and regional authorities and forest owners take part in these reflections, which already impact everyday life. To collect data, GRANULAR will build on remote sensing and comparison with local existing data and field experience to contribute to the debate on a current and pressing issue, allowing acting with pace.

### Data to be collected

- The location of the trip-generating centre/mobility flows, origin and destination, number of travellers throughout the day/year, means of transport, and factors of choice.
- The level/intensity of attendance of places in natural areas, natural areas' hotspots and sensitive places, impacts of over-use or misuse of places in natural areas.
- The level/intensity of the drought in various natural and agricultural areas' sectors, natural areas' hotspots and sensitive places, impacts of over-use or misuse of places in natural areas.

## 4.2 Italy

### Distretto Rurale e Biologico della Val di Cecina (Local development association)

#### Summary

Within the GRANULAR project, the Living Lab in Italy aims to develop datasets to improve multifunctionality in agricultural enterprises and qualify the tourist offer. Second, the involvement of the local stakeholders in the area's governance and the definition of valuable datasets should be improved. In this regard, the living lab has first-hand experience of the positive interactions between local actors and governance during meetings to discuss, e.g. priorities or actions. Third is developing knowledge and tools for public bodies and local administrations to improve the effectiveness of local governance actions. With the activities of our Living Lab, we want to gain a better knowledge of territorial dynamics (economic, social, environmental), which will be helpful for public administrations to identify better the priorities of the territory and the most effective actions to address them, i.e. knowing whether it is better to build a dam or whether to increase the infiltration capacity of water into the ground, or whether to invest in a local market or in purchasing local agricultural products in local canteens. They will be useful for agricultural companies, which, by better knowing the territorial economic context in which they operate (supply chains), will be able to direct their production to where it is most interesting and try to fill the infrastructural gaps. The recommendation will also benefit local tourist operators, who will be more effective in developing interesting tourist offers to best promote their territory and fill existing gaps with the local authorities in order to have tourism flows better distributed in time and space.

#### About the Living Lab

The Living Lab of Val di Cecina is situated in Italy, in the Tuscany region, and its territory includes part of the provinces of Pisa and Livorno. It is managed by the Rural District of Val di Cecina, founded in 2019, by the action of 12 municipalities, 1 union of municipalities, 3 agricultural trade associations, 2 trade associations, and other commercial partners. Now, it has grown up with new partners. There are two main types of territory, i.e., the internal areas (hilly and wooded, with small farms and lower tourist presence) and the coastal area (plain, with large agricultural companies and heavy presence of tourism). Between these two areas, there are

strong connections: historical and cultural, economic (raw material, agricultural production) and infrastructural. The region is characterised by a decline in agricultural activities, particularly in livestock farming, but there is an increase in sustainable agri-food practices. The region is facing hydro-geological problems. There is a lack of local mobility services (especially in the internal areas), logistics services for agri-food processing and adequate fast connectivity services (for innovative activities).

## Thematic Priorities

- ◆ Recreational flows
- ◆ Natural capital assets
- ◆ Food systemic features

## Objectives

### Recreational flows

- Our objectives are encouraging tourism in the area and its better distribution (in terms of time and space), promoting greater valorisation of the cultural and environmental heritage spread throughout the territory and limiting the (negative) economic and environmental impacts of tourism.
- The main actors are public authorities (Ambito Turistico Costa degli Etruschi (public agency on tourism) and municipalities), researchers (Consorzio Polo Tecnologico Magona and the University of Pisa), farmhouses, trade associations, accommodation, restaurateurs, tour operator, sport tourism associations and tourists.
- The initial activities are focused on improving knowledge of the phenomena that concern this priority, using questionnaires, interviews and collection of data already available. Meetings will be organised to involve the various stakeholders.

### Natural capital assets

- We want to enhance the management of water resources for agricultural use, environmental objectives, and potable water resources.
- The main actors are public authorities (ASA spa (water service company), municipalities and surface water management consortia), researchers (Consorzio Polo Tecnologico Magona and University of Pisa), farms and trade associations.
- The initial activities are focused on improving knowledge of the phenomena that concern this priority, using questionnaires, interviews and collection of data already available. Meetings will be organised to involve the various stakeholders.

### Food systemic features

- Our long-term aspiration is to encourage the socioeconomic and environmental sustainability of the area and enhance the wellbeing and healthcare of the community.
- The main actors are public authorities (municipalities and public bodies with collective canteen), researchers (Consorzio Polo Tecnologico Magona and University of Pisa), local farms, trade associations, grocery stores and restaurateurs.
- The initial activities are focused on improving knowledge of the phenomena that concern this priority, using questionnaires, interviews and collection of data already available. Meetings will be organised to involve the various stakeholders.

## Data to be collected

In this first phase of the work, it is not yet clear which data are missing, which need improvement and which are already available. Through public and sectoral meetings, surveys and interviews, the first part of the work will have to clarify the cognitive framework relating to the identified priorities. Subsequently, the missing and most valuable data for achieving the set objectives will be identified, and the best tools to obtain them will be identified together with the project partnership.

### 4.3 Spain

#### RIO International Observatory of Rural Research (Research organisation)

##### Summary

In the GRANULAR project, the Living Lab in Spain aims to collect and analyse new data related to hyperlongevity, e-governance, and fires. Through interviews and collaborations with local companies, the needs of elderly people in the province will be analysed. Cartographic materials will be produced to analyse the distribution of hyper-long-term people and compare it with the services offered. This global map will be contrasted with cartographic data of telecare programs for hyper-long-term people. Additionally, the project will analyse how ageing, culture, and education relate to forest fires through interviews and collaborations with members of the Living Lab. The first recommendation is to explore the different activities already carried out or in progress by the Living Lab's local partners. Many of these actions can provide valuable information and data, and replicable methodologies for other territories or Living Labs can be developed. The second recommendation is to diversify the Living Lab's composition to gain different perspectives and create interesting synergies. We believe creating an environment of trust between our partners is very important. In this sense, both the relationship and the setting of our own events are very important (small spaces, small groups, stages at the same height, etc).

##### About the Living Lab

Our Living Lab is a joint initiative of the provincial administration and the university to develop new creative processes and development initiatives for the province of Ourense. In 2019, at the Ourense Rural Summit, more than 130 people from universities, companies and associations came together to co-design projects to promote the SDGs from the rural areas. The Living Lab in Spain, managed by the University of Vigo, is located in Ourense, the only landlocked province in the Galicia region, northwest of Spain, at the border of Portugal. Industries in Ourense province include poultry processing companies, chemical manufacturers, milk producers, wine producers, olive oil producers, water bottling companies, and clothing manufacturers. Although not a major tourist centre, thermal tourism contributes somewhat to the economy.

There is a significant cultural and literary heritage, but it is distributed and very unknown. In recent years, the industry linked to aerogeneration and aeronautics has grown. Being predominantly rural, Ourense has the lowest birth-rate of any Spanish province. The mountainous terrain and isolation have kept the province economically challenged and encouraged much emigration to the rest of Spain, Europe and America. This inland province of Galicia and North of Portugal have been excluded from the historical focus of development. Currently, it suffers from the classic problems of many European rural areas: depopulation, ageing, lack of a strong business sector, lack of economic innovation, etc. Ourense has a low population density and the number of inhabitants is decreasing rapidly. This explains one of the main trends of the territory from different perspectives. At the same time, it has one of the highest life expectancies in Europe and Spain. This element has serious consequences for the territory: from an economic point of view, it is clear that ageing causes a lack of economic innovation, although it represents an unexplored business opportunity; it is also causing environmental challenges; there is too little population to manage a large part of the territory. In addition, a third of the province's population is concentrated in the capital city, leaving the territory with little management and extensive social and environmental challenges.

##### Thematic Priorities

- ◆ Demographic change
- ◆ Public services
- ◆ Climate change

## Objectives

### Demographic change

- Our vision is to provide better knowledge of the differential factors of the province about ageing. The objective is to analyse and create data related to the most ageing population of the province. With this data, we will analyse the relationship between the location of services and needs within a rural-urban context.
- We are mainly working with public administrations, associations of older people and companies that have existing data. One of our main partners is a film production company with an extensive database of interviews with older people that have never been published or analysed.
- We will analyse the location of services and the distribution of hyperlinks and analyse the interviews.

### Public services

- The objective is to determine which e-governance processes work in the province and how they are oriented towards the elderly.
- We will work with local and provincial administration, medical services and other associations.
- We will analyse the digital platforms and the data of the elderly-oriented telecare programme (the most extensive digital process in the province).

### Climate change

- We aim to determine the relationship between forest fires, education, culture and ageing.
- We will work with schools, local mayors, older people and other fire-related institutions.
- We will interview key actors in the education, forestry and ageing sectors.

## Data to be collected

The Living Lab will focus on obtaining qualitative and quantitative data on the different topics to be analysed. The objective is not only to know the situation but also to understand its causes and to activate the social actors in the territory. On the other hand, the topics selected in our Living Lab are strongly connected, which will be reflected in the methodology and the data analysis. For example, one of the leading causes of fire is the ageing of the population, which leads to the abandonment of the countryside and the loss of ownership of rural plots. Likewise, the most advanced e-governance in the province revolves around citizen services oriented towards older citizens, which makes it necessary to relate hyper-longevity to e-governance. Specifically, in the data analysis on ageing, we will develop mixed research. On the one hand, we will combine statistical data related to the socio-economic and territorial data of the province with information on the location of hyper-aged people. This information will be contrasted with semi-structured interviews with people over 85 and 100 years old. This information will be counterbalanced with information from e-governance procedures targeting older people to generate a general mental and physical map. Qualitative fire research will be added, which will be carried out through semi-structured interviews with older and younger people.

## 4.4 The Netherlands

### P10 (Network of 32 municipalities)

#### Summary

Within the GRANULAR project, the Living Lab in the Netherlands has focused on research on the accessibility of basic services in rural areas. So far, we have gathered the quantitative data and also interviewed civil servants of three municipalities and village representatives within these three municipalities. The first insight we have discovered is that the quantitative data on the accessibility of basic services does not always match the perspective of the village representative and civil servants. Doing qualitative research gives us, therefore, a broader perspective on the accessibility of basic services and also the importance of villages in rural areas. Also essential for the liveability of the villages is to have a meeting place in the village itself, for example, a community building (kultuurhus) or a local pub. We also have more insight into the complex relationship between basic services and resilience/quality of life/self-reliance of small centres in rural areas. Better insights into these relationships require the integration of data material from different backgrounds, from different policy fields and different scale levels. Municipal basic services policy seems to rely more on direct contact with representatives of small centres in addition to the use of CBS (data) material. There are also clear differences in basic services issues between P10 municipalities due to, for example, differences in size and the number of small centres, acceptance of dependence and use of basic services near larger centres and/or small centres or the orientations to larger centres outside their own municipal boundaries.

#### About the Living Lab

The P10 is an existing partnership (since 2009) of 32 rural municipalities across the Netherlands. By collaborating, these municipalities share knowledge and work together around national rural interests and the creation of preconditions that enable the maintenance, reproduction and strengthening of rural areas in terms of liveability, attractiveness, resilience, sustainability (agriculture, nature and energy) and that explicitly recognise the specificity of contemporary rural wellbeing needs as well as actual and potential rural wellbeing contributions.

#### Thematic Priority

- ♦ Rural wellbeing

#### Objectives

- Our vision is to provide better insight into the accessibility of essential services in rural areas and what is needed to keep villages in rural areas liveable. We also want to improve the representation of “the rural voice” in the (national) wellbeing assessment methods. In doing so, we aim to support the development of rural/regional development policies.
- The main actors are, for now, the 32 municipalities of the P10 and the research institutes (like the Wageningen University & Research and Netherlands Environmental Assessment Agency). For the research on essential services, local communities will also be involved through interviews.
- Our future activities will mainly focus on research on the accessibility of essential services in rural areas and what is needed to keep villages in rural areas liveable. We will do this by interviewing three municipalities and their inhabitants. We will use the data in our national database to start the interview process. After this research, we will start working on our research goals for broader wellbeing.

#### Data to be collected

We aim to collect data on the interrelations between rural wellbeing needs and the accessibility and availability of essential services. We did this with a step-by-step approach.

First, we did an inventory of available statistical material around essential services in three P10 municipalities. Secondly, we did an interview with municipal representatives on the themes formulated in our research design. Thirdly, we did additional interviews with village representatives to check/add to the findings. We are now starting on the last step, where we will do a feedback/exchange of findings with the P10, including the translation into the importance of additional data collection on a micro level (village level) and its meaning for policy on basic facilities. For a better rural voice on the broader wellbeing method in the Netherlands, we will try to find the blind spots and extra indicators specifically for rural areas (i.e., nature and green environment and social aspects) and how rural areas contribute to wellbeing in urban areas.

## 4.5 Poland

Koszalin University of Technology (Research organisation)

### Summary

The Living Lab in Poland conducts action research to understand the challenges faced by food producers and the interventions they undertake. This involves collaborative problem-solving activities and data-driven research, using mixed methods to delve into tacit knowledge – knowledge that is personal, often experiential and context-dependent rather than explicit and standardised. A mixed-methods approach combines a semi-structured questionnaire study, an in-depth interview, and participatory observations. In-depth interviews with agricultural producers will allow us to accurately describe and analyse the studied phenomenon in terms of learning about the ways of thinking, experiencing, habits, motivations, value systems, or dominant attitudes of food producers. The questionnaire will enable us to collect quantitative data on the socio-economic conditions of food producers, land use, agricultural productivity, and adaptation strategies. Discussion in focus groups and interviews with key stakeholders will enable building a common position on the needs of food producers and indicating ways to solve key problems in this area. The data obtained are primarily intended to provide knowledge for improving policy, professional practice, and actions taken to build the resilience of food producers. The conclusions drawn based on the conducted research will have an added value in formulating opinions and recommendations for all institutions at the regional, national, and EU levels interested in creating appropriate conditions enabling the implementation of appropriate measures to improve the economic situation of food producers.

### About the Living Lab

The Living Lab West Pomerania covers the area of the West Pomeranian Voivodeship, which lies in the northwestern part of Poland along the Baltic Sea coast and borders Germany to the west. The Living Lab was created based on the Multi-Actor Platform Zachodniopomorskie created as part of the SHERPA project. An important role in the Living Lab is played by a group of researchers from the Koszalin University of Technology, who are responsible for collecting data and opinions from other Living Lab members and systematising them.

The West Pomeranian Voivodeship is the fifth-largest region in Poland in terms of size and eleventh in terms of population. Rural areas occupy 94% of the region's area. The region is the national leader in terms of the share of ecological agricultural land in the area (12.3%). Rural areas of the region are subject to deagrarization. Due to the decline in employment in agriculture, labour resources are transferred to nonagricultural functions.

Land resources, agricultural productivity, and agrarian structure allow for obtaining large quantities of agricultural products, which require management and possible processing. An additional obstacle for rural entrepreneurs includes the small size of local markets and limited access to necessary services, such as financial services. These areas face a significant challenge in building resilience to climate change, natural threats, and financial crises, where creating reinforced, connected, and vivid communities is relevant to general wellbeing.



## Thematic Priorities

- ◆ Food systemic features
- ◆ Land use system

## Objectives

- We want to identify challenges and opportunities for strengthening and consolidating short food supply chains in the region and practices in adapting food production and distribution channels to consumer expectations. Our vision is to change the national and EU legislation to support strengthening short supply chains.
- The main actors are the research community, policymakers, farmers, non-agricultural businesses, NGOs, and civil society.
- Our future activities will involve the rural community in creating effective solutions regarding short supply chains and land use change. We will identify the measures to increase the competitiveness of agricultural farms and food producers and develop evidence-based recommendations for decision-makers at regional and national levels.

## Data to be collected

We need data on determinants of the functioning and development of short food supply chains. We will collect the statistics of farms and food producers in the region, review national and EU policies on short supply chains and collect examples of good practices in the region as well as data on the structure of marketplaces in the region, trends and innovations in short supply chains, level of development of smart services on farms in the region. The data source will be the Central Statistical Office in Poland (especially the Local Data Bank), the General Veterinary Inspectorate, the Farm Accountancy Data Network and survey data. Tools and methods to be used are desk research and survey research. Potential data gaps include analysis of the activities of food producers and data on phenomena and trends observed on the market, e.g. number of sales days, sales value, sales efficiency and effectiveness.

## 4.6 Sweden

### Regions of North Sweden (Regional authority)

## Summary

The activities in the Living Lab in Sweden focus on a better understanding of rural areas' diversity, i.e., how the green transition impacts rural areas, and how we can create a policy that can tackle the combination of depopulation, significant green investments, and regional hubs of growth within the region. Most political initiatives taken to equalise the gap between the centre and periphery do not capture the complexity and instead become compensatory and eventually consolidate the existing differences between urban and rural areas because all places are different. A territorial perspective is necessary for policy development to be successful and to support accurate efforts to promote rural development in our time. Relations between cities and rural areas must be highlighted from different perspectives to promote sustainable regional development. Regarding continued investment in sustainable urban development, it is important to emphasise the importance of cities, especially in the sparse northern regions. North Sweden is interested in looking at indicators that can strengthen diversification and provide a better understanding of rural areas. To make rural areas ready to adapt to changes, it is crucial to understand how different trends impact rural areas and how they respond to change to develop a better framework that explains their capacity to respond to the green transition. Through close cooperation with the EU institutions, support measures can be adapted to these specific challenges. Active participation in the GRANULAR project also provides tools for the region to create a better understanding of essential investments being made in northern Sweden regarding green transition.

## About the Living Lab

The Living Lab in Sweden covers four regions at NUTS3 (Västernorrland, Jämtland-Härjedalen, Norrbotten and Västerbotten) and two at NUTS2 (Upper Norrland and Middle Norrland) level and is managed by Region Västerbotten (regional authority). Within the existing platform North Sweden European Forum, a political network focusing on EU policy, the initiative for the first Living Lab was born. Our Living Lab is in the northernmost part of Europe, which is also part of the highly interesting European Arctic, with sizeable raw material resources, a strong position in the climate area and an innovative ecosystem. At the same time, the region has specific challenges due to long distances, sparse population and a harsh climate. This gives particular challenges and vulnerabilities, such as small critical mass and an economy based on natural resources sensitive to economic fluctuations. The global market mechanisms affecting Europe's regions become particularly noticeable in North Sweden's spatial planning. At the same time, North Sweden has significant opportunities and an important economic and geopolitical role due to natural resources such as minerals and wood, renewable energy, technological advances, and innovative ecosystems. There is also a growing market in international tourism that is once again oriented around natural and cultural assets, which is also an essential source of creativity and entrepreneurship. Some of Sweden's most significant and spectacular investments in climate-smart and sustainable new technology are currently taking place in North Sweden when the industry transitions to renewable energy from being fossil-dependent. Rural areas are facing significant changes to address this unique growth opportunity as this requires investments from business, community planning, advanced skills, etc., and there are challenges for the sparse community to do this planning due to a lack of capacity.

## Thematic Priority

- ◆ Public services
- ◆ Demographic change

## Objectives

- Our vision is to improve the attractiveness of living in rural areas and make North Sweden the frontrunner in the green transition. Regarding the former, the rural area is not “investment ready” due to market failures. For example, the market value of newly built houses is lower than the costs in rural areas, i.e. there will be lock-in effects where new establishments are covering a high cost and risk and are prevented from expanding. This hinders much-needed population growth (or prevents depopulation) and investments in jobs, schools, or health. Regarding the latter, we want to find out how to generate the long-term value of the green transition without imposing on nature. This can generate attractive jobs and build healthy societies in rural areas.
- The Living Lab will gather policy advisers at the regional and political levels and relevant stakeholders such as leader areas, NGOs, and municipalities.
- Our future activities will concern knowledge exchange and learning about how other rural areas tackle changes. We need to understand the bottleneck in the markets and the gaps to know how to create attractive societies in rural areas with long distances and a small population and how to measure soft values like life quality and social progress.

## Data to be collected

We aim to collect data that help us understand the transformation readiness, i.e., the capacity for change. We need another level of socioeconomic analysis that understands sparsely populated rural areas. We need better tools to measure innovativeness in rural areas. We need better data at NUTS3 and local levels to measure rural development. Therefore, we want to organise stakeholder dialogues, interviews and surveys.



- We will work with local and regional administration and other associations.
- We will analyse the development traps presented in the 9th Cohesion Report at the local level
- We will gather data from key actors in the municipality related to resilience to the green transformation

## 4.7 United Kingdom

James Hutton Institute (Research organisation)

### Summary

The principal use of rural proofing of public, private and civil society initiatives is to test, through a rural lens, the alignment of objectives, interventions and measures of policies for tackling the issue or challenge they aim to address. The main outcome is the coherence of policies across sectors and territories in rural Scotland. Those policies cover public, private and civil society actors, reflecting the influence of each on rural communities, land and the governance of resources. Experiences of members of the Living Lab with statutory requirements of island and equality proofing provide familiarity with the concept and purpose. These include awareness of the limitations of open consultation questions and uncertainty about using the information collected. From initial deliberations, recommendations are to learn from requirements of statutory proofing, notably the Island Communities Impact Assessment process, which recognises the importance of benchmarking against fairness, integration, inclusiveness and the wording of the policy proposed. To these principles, the Living Lab recommends that transparency and accessibility should be added. The Living Lab recommends that rural proofing should be used early in the design of policy and interventions and as evidence in subsequent stages of public consultations and deliberations, including ex-ante assessments of potential impacts and ex-post when considering evidence that emerged subsequent to implementation of the policy. The Lab also recommends that the approach should use information available in the public domain and understood by non-experts whilst recognising that aspects of assessments will require particular scientific, practice or place-specific knowledge.

### About the Living Lab

The Living Lab covers rural Scotland. The focus is on the area defined by the Scottish Government Urban Rural Classification 2022 of Accessible Small Towns, Remote Small Towns Settlements, Accessible Rural Areas, and Remote Rural Areas. Across these areas, there are structural disadvantages such as challenges to accessing services (e.g., medical and administrative services), low frequency of public transport, and limitations on types of economic activities. These types of challenges increase the exposure of residents to risks to their wellbeing (e.g. mental health) and the sustainability of rural areas as a place to live and work. Pressures on natural and cultural resources include climate change (e.g. flooding, landslides) and changes in land use (e.g. woodland expansion, renewable energy), with debates about associated implications for communities, landscapes, and links to land reform and economic diversification. The Living Lab is facilitated by the James Hutton Institute. It has been formed for the GRANULAR project, building on Multi-Actor Platforms and networks of organisations and individuals participating in previous EU-funded projects (e.g. SHERPA, UNISECO).

### Thematic Priorities

- ◆ Demographic change
- ◆ Natural capital assets
- ◆ Climate change

## Objectives

- The goal of the Living Lab is to contribute to the testing and operation of a process of rural proofing of policies, public and private, as they affect rural areas. The approach takes account of the requirements and experiences of the real-world settings of the members and organisations represented in the Living Lab. It will identify different perspectives on rural/rurality and rural diversity. Those insights will inform the analysis of the changing spatial distribution of assets supporting a wellbeing economy, foundational activities and association with multiple outcomes. In turn, it is anticipated that this will inform the identification of place-specific development pathways and achievable development outcomes, thus informing positive change.
- Principal actors in the Living Lab are individuals in public agencies, the private sector (land management, micro-business and SMEs), civil society (health and wellbeing), NGOs (remits for environmental, cultural and historical assets), and researchers (deriving or using rural spatial data). Remits of member organisations are Scotland-wide and regional, with most participants participating as individuals, not representing their organisations to avoid conflicting with positions, reporting, and clearance of outputs.
- The Living Lab will develop a commentary on rurality in rural Scotland through the lens of the rural compass. That will inform the process of operationalising rural proofing of public and private sector policies. It is anticipated that testing this process will be alongside other GRANULAR Living Labs, providing comparisons across socio-economic, cultural and geographic contexts. The rural compass (D2.2) will inform work on rural proofing (WP5). Materials will be provided to members of the Living Lab to share opinions on their suitability in the context of rural Scotland. Feedback will be provided to development teams to enable refinement and subsequent use of selected policies.

## Data to be collected

The Living Lab will review preliminary findings from new data collection forms in rural Scotland. The expectation is that sharing analysis will provide early insights into the new types of information which may become available. Within the GRANULAR project, sources of such data are planned to be those originating from crowdsourcing, web-scraping and earth observation (WP3) and indicators for characterising rural diversity such as socio-economic resilience, social cohesion and vulnerability, wellbeing, and rural attractiveness (WP4). It is expected that other data will be required to undertake the rural proofing of public and private sector policies (WP5) aligned with those used with the rural compass (WP2).

Particular interests will be:

- analysis of data relating to islands and remote areas reflecting their high priority to public policy, and work of the project team in the National Islands Plan Survey (2022-2023) and running the survey for 2023-2024;
- an updated version of the Socio-Economic Performance Index, which includes thematic indicators of the Scottish Government's strategic objectives of wealthier/fairer, healthier, safer/stronger, and smarter, which are estimated and mapped at the data zone level;
- an economy diversification metric for rural Scotland.

## 5. Conclusion

This deliverable presents the first batch of the Set of Practice Abstracts. The Living Labs, established under the GRANULAR project in France, Italy, Spain, the Netherlands, Poland, Sweden, and the United Kingdom, work towards developing smart and innovative solutions for rural areas. Each Living Lab has identified specific objectives and thematic priorities to guide its activities, which have been determined based on the specific needs of each Living Lab.

In France, the Living Lab aims to improve mobility flows and demand to develop targeted transport solutions alternatives to self-car, then objectify and monitor visitors and local people's uses of natural areas to improve their reception and handle impacts on biodiversity and finally, evaluate the impact of drought on biodiversity. In Italy, the Living Lab focuses on developing datasets to improve multifunctionality in agricultural enterprises and qualify the tourist offer, enhancing the involvement of the local stakeholders in the local governance and developing knowledge and tools for public bodies and local administrations to improve the effectiveness of local governance actions. In Spain, the Living Lab focuses, based on the collected data, on providing better knowledge of the differential factors of the province about ageing, finding out which e-governance processes work in the province and how they are oriented towards older people and finding out the relationship between forest fires, education, culture and ageing. In the Netherlands, the Living Lab aims to provide better insight into the accessibility of basic services in rural areas and what is needed to keep villages in rural areas liveable. In Poland, the Living Lab focuses on challenges and opportunities for strengthening and consolidating short food supply chains in the region and practices in adapting food production and distribution channels to consumer expectations. In Sweden, the Living Lab aims to understand better the diversity of the rural areas, i.e. how the green transition impacts the rural area and how we can create a policy that can tackle the combination of depopulation, significant green investments and regional growth hubs within the region. In the United Kingdom, the Living Lab aims to contribute to the testing and operation of a process of rural proofing of policies, public and private, as they affect rural areas.

Through their activities, the Living Labs collect data in a real-world setting, which can be analysed to gain insights into user behaviour and preferences. The generated knowledge will provide practical recommendations with added value and benefit to end-users. The Living Labs aim to upgrade the skills of local players in observation tools, support local population empowerment, and raise awareness of data. Overall, the GRANULAR project has established a network of Living Labs that work together to address the main challenges rural areas face and develop solutions to manage them.

## 6. Acknowledgement

This Set of Practice Abstracts under the GRANULAR project has been prepared by ERDN with inputs from the facilitators of the seven Living Labs in France, Italy, Spain, the Netherlands, Poland, Sweden, and the United Kingdom. Thanks are due to the members of the Living Labs for their contributions to the setting up phase and inputs to the content of this document.

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