

D6.2 Regional Action Plans

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Main Author	K. Veitners, A. Stepančuks, L. Ābele	
Contributing Partners:	LRF, AREI	
Reviewers:	Dr. Tapani Poykko (Advisory Board) Blagoja Mukanov (AG Futura) Patricia San Segundo (TRAGSA) Maria Eugenia Garcia de Garayo y Millán (TRAGSA) Armands Pužulis (AREI) Kristīne Rolle, Anita Seļicka (LRF)	
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Responsibility for the information and views set out in this publication lies entirely with the authors.

Every effort has been made to ensure that all statements and information contained herein are accurate, however, the PoliRural Project Partners accept no liability for any error or omission.

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List of Abbreviations

CAP – Common agriculture policy of the European Union

D - Deliverable

EU - European Union

ICT – information and communication technologies

KPI - Key Performance Indicator

LAG - Local action group

LQ - location quotient index

LTVRA – The Long-Term Vision for Rural Areas

M&E – monitoring and evaluation

NGOs – Non-Governmental organisations

RAP – Regional Action Plan

SDGs – Sustainable Development Goals

VPR - Vidzeme Planning Region

WP - Work Package

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Executive Summary

This deliverable is the second under the project Work Package 6, “Regional Rural Change - Pilot Phase 3”, whose goal is to contribute to rural change by introducing a mission-oriented approach geared towards rural regions' challenges. Work Package 6 implementation focuses on delivering change in pilot regions by generating bottom-up solutions and co-designing transformative policies, providing support to actors who produce it, and measuring the impact of this change. This deliverable summarises Regional Action Plans developed by pilot teams for transformative policies.

These deliverable aims are to summarise the Regional Action Plans developed by pilot regions and provides an overview of 12 draft Action Plans prepared by each pilot region.

The second chapter summarises the context and needs of pilot regions by outlining the issues of concern and context that create the basis for the regional visions and the purpose of the regional foresight process.

The third chapter provides information of policy challenges, intervention measures and KPIs that form the core of the Regional Action Plans. Policy challenges and measures are analysed and clustered by the four main strands of the Long-Term Vision for Rural Areas - **STRONGER** rural areas, **CONNECTED** rural areas, **RESILIENT** rural areas that foster well-being, and **PROSPEROUS** rural areas.

The fourth chapter reviews planned pilot contributions to EU key missions such as:

- Achieving a just transition to net-zero by 2050 (the Green Deal),
- Recovering from the pandemic and improving the resilience of the region,
- Implementing a new model of agriculture in Europe (post-carbon, CAP reform),
- Implementing a nature-based model of sustainability based on biodiversity.

The fourth chapter briefly outlines planned interventions and means for their implementation and compares them with choices made by other pilots.

Keywords

Action Plan, mission-oriented transformation, foresight, vision, challenges, measures, KPIs, key missions.

1 Introduction

In the context of the PoliRural project, Regional Action Plans (RAPs) are the main output of the Foresight process carried out by the twelve pilot regions¹. RAPs are co-designed and developed by pilot teams together with regional stakeholders and citizens in a mission-transformation process. RAPs are the central part of the Foresight “package” consisting of the regional Visions, Action Plans and Roadmaps for their implementation.

RAPs are developed under the PoliRural project Work Package 6 (WP6). The WP6 aims to contribute to rural change by introducing a mission-oriented approach to rural regions’ challenges. The WP6 comprises three tasks: 1) delivering change by generating bottom-up solutions and co-designing transformative policies, 2) supporting those who bring the difference, and 3) measuring the impact of this change.

RAPs represent the output of the first task and briefly introduce the regional context and purpose of the regional Foresight processes, present the regional vision, identified policy challenges, selected measures for their implementation, explain the logic of planned interventions and provide key performance indicators (KPIs) for measurement both at the level of policy challenges and of the interventions. RAPs also outline expected contribution to EU key missions and provide the first drafts of the Roadmaps including actions, sources of funding, responsibilities and timeline.

1.1 Purpose of the report

This report summarises the results of the mission-oriented approach implementation in the pilot regions. The report is based on an analysis of 12 Regional Action Plans prepared by each of the pilot regions and studies the results of the mission-oriented transformation processes. The purpose of the report is to summarise information provided in the RAPs on the context and needs of pilot regions, the purpose for the regional foresight process, regional visions, selected policy challenges, measures and KPIs, and expected contributions to the key EU missions.

1.2 Methodology

The results of the analysis in the report are structured following the main sections of the Regional Action provided by the 12 pilot teams. The report reflects the situation by the cut-off date of this report (April 1, 2022), presenting the results of the fourth version of the RAPs (all RAPs have undergone numerous iterations, in one case reaching even the 12th version).

¹PoliRural project involves the following pilot regions: Flanders (Belgium), Central Bohemia (Czech Republic), Häme (Finland), Central Greece, (Greece), Monaghan (Ireland), Galilee (Israel), Apulia (Italy), Vidzeme (Latvia), Gevgelija-Strumica (North Macedonia), Mazowieckie (Poland), Slovakia and Segóbriga (Spain). For more information on the pilot regions see <https://polirural.eu/pilots/>

Pilot teams are encouraged to continue their work on further elaboration and improvement of Regional Action Plans.

The report is prepared by Vidzeme Planning Region team. The report contains an aggregation of content from RAPs clustered around the four main strands of the Long-Term Vision for Rural Areas (sections on policy challenges, measures and KPIs) or the EU key missions with an aim for cross-pilot comparison. The results and conclusions of the report are structured around the following key questions based on the methodology for the elaboration of the RAPs:

- What purposes have pilot regions set for foresight processes?
- What visions have pilot regions formulated within the foresight process?
- What are the main policy challenges that pilot regions aim to influence, and how do they correspond to the main strands of the LTVRA?
- By what measures do pilot regions intend to facilitate the policy transformation processes?
- How are interventions planning to contribute to key missions of the EU at the national and regional levels?

1.3 Mission-oriented transformation process

The PoliRural project consortium has chosen the mission-oriented approach as the central concept for active contribution to changes in 12 rural regions. Mission-oriented initiatives, being bottom-up, bold, and ambitious, and cross-sector, cross-discipline, and cross-actor oriented², allow for the more active role of rural communities in addressing concrete societal or economic problems experienced by all stakeholders, including citizens³. Citizen and stakeholder engagement and involvement in regional Foresight processes was one of the central challenges faced by all pilot regions to reach the legitimacy and endorsement by the various stakeholders.

The implementation process of regional Foresight was organised in three main phases:

- 1) Preparation and Launch,
- 2) Co-Development of the Vision, Action Plan and Roadmap,
- 3) Handover, Implementation and Monitoring.

During the first two phases, which lasted more than a year and a half, the pilots carried out needs analysis setting the change agenda, carried out drivers' analysis and built visions in interactive and iterative processes involving regional actors. Elaboration of mission-oriented Action Plans commenced in September 2021, and this process was supported by methodological guidance and a review process guiding partners in the right direction. The first

² Mazzucato, M. (2018) Missions. Mission-oriented research & innovation in the European Union. A problem-solving approach to fuel innovation-led growth. Brussels: European Commission

³ European Commission (2018) Mission-oriented research and innovation: Inventory and characterisation of initiatives. Luxembourg: Publications Office of the European Union

draft Action Plan developments were discussed during 12 bilateral meetings in September-October 2021. During these informal meetings, the pilot teams got constructive feedback, brainstormed alternative development pathways, and solved most of their current obstacles. The second iteration of Action Plans was discussed during a Pilot Summit on December 1, 2021, where pilot cases were divided into groups based on their thematic similarities and discussed their progress and challenges with the Action Plan development process. Pilots could interact and co-create with other pilot teams with similar rural development expertise, showcase their work and progress and ask for help from partners who have overcome similar challenges.

The third iterations of RAPs were delivered by mid-December 2021 and were subject to *ex-ante* evaluation provided by each pilot. It was clear from the beginning that Action Plans without a coherent evaluation and monitoring framework are of limited use and benefit. They don't provide necessary detailed information on progress and the specific goals each Action Plan aims to achieve. That's why evaluation tasks were set up by the project to assess implementation metrics and their impact before the start of interventions (*ex-ante*), seven months after the start of interventions (*ex-durante*) and optionally after interventions have been finished (*ex-post*).

The results of *ex-ante* evaluations show that the clarity and coherence of draft interventions were satisfactory, with a description of required resources as the weakest point. The RAPs demonstrated an adequate, albeit not a very detailed explanation of how the RAPs will contribute to the EU key missions. The draft Action Plans provided a good ground for measuring future results and impacts of draft interventions; however, more attention to the quality of KPIs, monitoring and evaluation process, and roles of involved stakeholders was necessary. The *ex-ante* evaluation results show a very high level of stakeholder engagement in the foresight processes but comparatively lower stakeholder ownership of the results of this process and readiness to participate in the implementation of the RAPs. The *ex-ante* evaluation results also demonstrated apparent process effects and value in promoting dialogue between the teams and stakeholders, stimulating critical reflection and learning.

During the first months of 2022, the pilots continued their work on improving RAPs based on the results of the *ex-ante* evaluations, individualised coaching for pilot teams and training on the mission-oriented approach provided by project consortium members. The current report is based on the fourth iteration of Regional Action Plans delivered by pilot teams until April 2022.

1.4 Long Term Vision for Rural Areas

In June 2021, the European Commission adopted its long-term vision for rural areas outlining a strategy for making Europe's rural areas stronger, connected, resilient and prosperous by 2040. The long-term vision for the EU's rural areas (LTVRA) aims to build on the emerging opportunities of the EU's green and digital transitions and the lessons learnt from the COVID

19 pandemic, and by identifying means to improve rural quality of life, achieve balanced territorial development and stimulate economic growth in rural areas⁴.

The long-term vision for the EU's rural areas was shaped by gathering the views of rural communities and businesses via public consultations and stakeholder-led events. In addition, a dedicated foresight exercise conducted to identify key underlying factors of change (drivers) and develop scenarios illustrating the possible future of rural areas in 2040.

The long-term vision for the EU's rural areas is structured around the four complementary areas of action aiming for stronger, connected, resilient and prosperous rural areas by 2040.

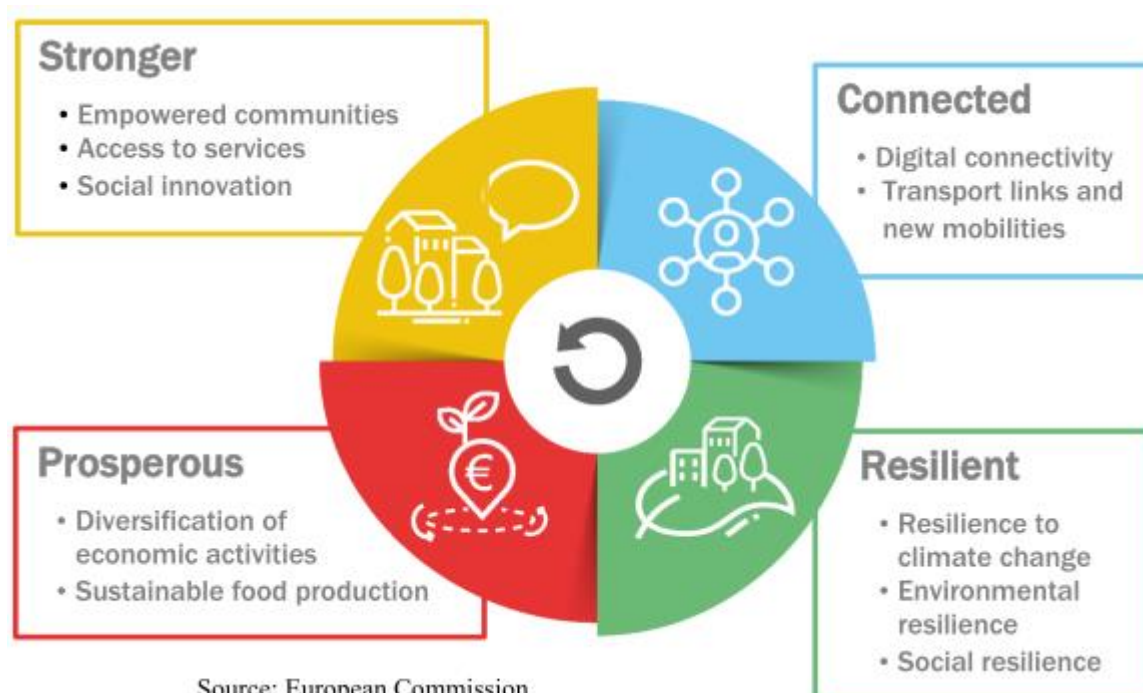


Figure 1. Main drivers shaping the future of rural areas for 2040 and the four complementary areas for action

In the current report, the four areas of action and their sub-themes are used to structure the policy challenges and measures selected by the PoliRural project pilot teams.

2 Context and needs

2.1 Purpose and process of regional foresight

Each partner team was asked to provide a short statement of purpose to give the reader of each Action Plan a better understanding of WHY this document was developed. In broader

⁴ COM 2021, A long-term Vision for the EU's Rural Areas - Towards stronger, connected, resilient and prosperous rural areas by 2040, Brussels, 30.6.2021

terms this could be expanded to the whole Foresight “package” consisting of the regional Visions, Action Plans and Roadmaps.

In this chapter, there was no specific structure for the authors of the RAP to follow, which is why the partners' responses varied in the depth and thematic aspects they tried to include in their explanations.

Three main types of “Statement of purpose” emerged after reviewing the latest RAPs versions. First, the current situation/ issue description. Some partners described current challenges their region faces: low population density, unemployment, limited ICT (Information and communications technology) enterprises, lack of digital skills, insufficient exploitation of modern technologies, the low influx of newcomers, and underdeveloped specific sectors. Given no additional explanation, the reader is expected to connect these issues with RAP development. In other words – RAP is to be perceived as a solution to challenges described by partners.

Second, process and task-oriented descriptions. The majority of partners fell into this category. In their statements of purpose, they describe RAP as part of some more elaborate process, something that has been already started before the PoliRural project. For example, extension services in agriculture or initiated by it, for instance, developing a common “Vision” to unite stakeholders to find solutions to the current problems in partners region. In some cases, as a ground for action are some tasks, such as research and analysis of existing policy instruments, prestudy before some significant long-term investments in ICT infrastructure, and the development of umbrella planning document. In these cases, readers can better understand the sequence of operations (RAP being part of them) and be assured that the RAP is not disconnected from other processes and tasks undertaken by partners.

Third and final, vision-based statements of purpose. This group is interconnected with the first one as it gives the reader a future vision of a specific region where all or some of the challenges are resolved. An example of such visions - sustainable regional development, improved rural attractiveness. Once again, the reader is expected to connect this vision and its achievement with development of RAP. This approach also duplicates a separate section of RAP titled Visions.

All three approaches are valid in their own right, and there isn't one correct way to present a statement of purpose. Still, in the circumstances of the PoliRural project, the second option would be more beneficial to a broader audience by providing a better understanding of where exactly these RAP fit in the overall picture of Rural development.

Overall, current statements of purpose provide a sense of motivation and reason behind such rigorous undertaking as RAP development. In all cases, the purpose is in one way, or another connected to the aim of improving some aspects of rural attractiveness, be it through social, economic, or environmental aspects or a combination of them. If Action Plan guidelines are

to be updated, it would be worth considering adding more specific descriptions and guidelines for what information partners need to provide in this section.

2.2 Regional visions

Out of the three elements making up the foresight package, Vision is the one which has been updated and improved the most. The current Vision section represents at least the fourth edition of the vision initially outlined in the PoliRural project.

According to D1.11 Regional Action Plan guidelines, a Vision is a time-bound statement that shows the desired state of a selected region some years or even decades down the line. In the PoliRural project objectives, the time horizon stretches to 2040. Partners, however, are free to select time milestones leading up to the year 2040 (2030 and 2035 would serve well for this purpose).

Input for the first outline of the Vision came from research each partner carried out with stakeholders organised as part of foresight activities such as deep dives.

While in the PoliRural project four thematic areas have been prioritised for more in-depth exploration: CAP reform, biodiversity, Green Deal and COVID-19; pilots were free to investigate other topics of interest, e.g., digitisation and trade. To make each Vision consistent with PoliRural's conceptual framework and account for things that make each region truly unique, partners were asked to pay special attention to aspects of rural attractiveness and attraction of newcomers to rural areas.

Time frame. Only 8 out of 12 partners included a specific time frame in their Vision statement. Of them, two chose the year 2027, 3 chose the year 2030, and 3 chose the year 2040 as the desired year when improvements, specified in RAP, should be achieved. Action Plans up to 2027 and 2030 can be classified as medium-term, while those up to 2040 can be classified as long-term plans. Usually, such differentiation in time frame indicates a distinction in scale of planned activities as there is limited time for significant investments and comprehensive interventions if comparing middle term and long-term Action Plans.

Thematic scope. Areas of improvement and indicators to be achieved that are outlined in Visions when divided by themes, align perfectly with groups of policy challenges described in Section 3 of this document as they should be. Visions are dominated by "Governance, collaboration, and society" and "Economy development and transition" theme, followed by "Agriculture and climate adaptation", "Depopulation & young people", and "Digitalisation infrastructure" in descending order by a number of mentions in the RAP Visions

Rural attractiveness. This aspect is hard to evaluate due to its multi-faceted nature. This term can mean a very different things for different people in different regions with diverse backgrounds. There is also an aspect of rural attractiveness in thematic subdivisions; for example, rural attractiveness from a business perspective may be quite different from attractiveness from potential newcomers' perspective. In the PoliRural project, it was

understood early on, and an intentional move away from a universal concept of “attractiveness” was made. It was more natural and valuable to encourage each team to develop its own regionally adapted concept of attractiveness that would help drive the change agenda implicit in and necessary to achieve the vision. The current collection of Visions demonstrates how the same concept has been interpreted differently and what specific ingredients each partner team have included in their version of Rural attractiveness.

The attraction of newcomers. Five out of twelve pilots have specifically mentioned newcomers (using this or other similar terms, for example, new entrants) in their Visions. While this does not mean that the other seven have no ambition to improve the region towards being more attractive for newcomers. It is essential to note that few have gone the extra step and, together with stakeholders, decided that it is a something that must be declared in Vision as one of the key aspects.

Summary. On a side note – the authors of this report understand that English is not the mother tongue of the RAP authors in most cases, which may theoretically affect the freedom and clarity of expression compared to equivalent documents produced in their mother tongue. Overall, Visions give a clear view of the impact partners aim to achieve up to their selected deadlines. However, it would be preferable if a time frame would be added to all Vision statements to give a clear understanding of either urgency or scale of initiatives. Thematic scope of Visions seems to be well balanced and in line with specific issues partners are facing and their ambitions to solve them. As the attraction of newcomers is a strong theme throughout the PoliRural project, more emphasis should concentrate on support for new entrants and them as part of the future Vision. In addition, length, and extent of Visions could be improved. A shorter, more concise Vision of the future (a few sentences with well-chosen words; not as short as a slogan) is more precise and more memorable for the reader. It is also of more significant benefit when used for communication and calls for action activities with the public or other stakeholders.

3 Challenges, measures and KPIs

3.1 Identified policy challenges

During the two-year-long foresight process in the 12 pilot regions, the pilot teams and various stakeholders have systematically examined multiple factors and drivers of change, undergone

several iterations, and identified policy challenges that are focal for developing their regions⁵. These challenges and corresponding measures form the core of the Regional Action Plans.

The following table provides a quick summary of the policy challenges identified by each of the 12 regional Foresight initiatives of the PoliRural project.

Table 1. Policy challenges selected by 12 pilots

Pilot region	Identified policy challenges
Apulia, Italy	<ol style="list-style-type: none"> 1. To promote the digitisation of the agricultural sector in the rural areas of Apulia by reinforcing the links with research and innovation and encouraging learning and professional training of existing and new farmers. 2. To assist the regional and local policymakers in defining appropriate lines operating more performing to implement EU and national strategic planning in Apulia through proactive advice and technical assistance, stimulating participatory decision-making processes.
Central Bohemia, Czech Republic	<ol style="list-style-type: none"> 1. Implementation of the SMART Concept as a key policy/tool of sustainable regional development, which helps to boost resilience, minimise intra-regional disparities, and support wellbeing. 2. Support using new technologies and innovative approaches (SMART Solutions), mainly through digitisation, concerning to the specific settlement structure of the Central Bohemian Region and the different needs of inhabitants in rural or metropolitan parts of the region, including boosting the attractiveness of the region for both current population and new entrants. 3. Support using innovative approaches based on collaboration according to the Quadruple Helix Model, with possible transition to Quintuple Helix Model, in the field of sustainable regional development.
Central Greece	<ol style="list-style-type: none"> 1. Low added value generated by the tourism sector in the region. 2. Poorly digitalised agriculture.
Flanders, Belgium	<ol style="list-style-type: none"> 1. Transition to more climate-resilient productive, and multi-functional rural landscapes in Flanders. 2. Enhance the usage of inclusive regulatory tools for land and water management in agriculture in Flanders by encouraging the implementation of new and existing land and water management tools for the agriculture sector.
Galilee, Israel	<ol style="list-style-type: none"> 1. Huge gaps regarding the deployment of communications infrastructure between the Galilee and other areas in Israel.
Gevgelija-Strumica, Republic of Northern Macedonia	<ol style="list-style-type: none"> 1. Supporting policies for the key stakeholder with a mediating role (rural extension) in the process of policy creation and execution. 2. Supporting policy for attracting the young population to return to rural areas.
Häme, Finland	<ol style="list-style-type: none"> 1. To support the establishment of new sustainable rural businesses and bolster

⁵ See PoliRural deliverables D4.2 Grassroot Needs & Factors of Rural Attractiveness; D4.5 Perceived Effectiveness of Rural Interventions, 12 Regions; D6.1 Ex-ante Intervention Case Study.

	<p>the growth and sustainable development of the existing ones.</p> <p>2. To deploy continuous and transparent monitoring (collect data, analyse data, improve, learn) and predictive (scenarios, simulation, optimisation, foresight) system for rural development ecosystem actors.</p>
Mazowieckie, Poland	<p>1. Development of entrepreneurship and new business models that respond to new challenges and influence the quality of life by addressing the key issues in the region, e.g., demand and need for public/health services (effect of ageing, demography structure) and responding to the COVID-19 effects in rural areas and small towns (by promoting the remote work, services).</p>
Monaghan, Ireland	<p>1. Limited access to adequately paid job opportunities for people living in rural Monaghan.</p> <p>2. Lack of viable opportunities to repurpose land or farm assets and change farming methods viably to meet the new model of EU agriculture.</p> <p>3. Inability to fully exploit the untapped potential of the rollout of broadband across rural County Monaghan for provision of services and employment.</p> <p>4. Low numbers of businesses realising the potential for business expansion and job creation in the rapidly expanding environmental products and services sector across Europe.</p>
Ségobriga, Spain	<p>1. Economic diversification through sustainable Tourism.</p> <p>2. Improve Vocational Training and Entrepreneurship Capacity.</p> <p>3. Business Development.</p>
Slovakia Region	<p>1. Paradigm shift to the sustainable and resilient food system.</p> <p>2. Diversification of the rural economy.</p> <p>3. Civic engagement.</p>
Vidzeme, Latvia	<p>1. Insufficient preconditions for rural SMEs to produce high-added-value products and services within the smart specialisation areas of the Vidzeme region.</p> <p>2. Insufficient civic participation and public involvement in promoting territorial development and implementation of local initiatives.</p>

The long-term vision for the EU's rural areas outlines four complementary areas of action and several sub-actions⁶. The following table provides an overview of them.

Table 2. LTVRA areas of action and sub-actions

1. Stronger rural areas	3. Resilient rural areas that foster well-being
Empowered local communities	Resilience to climate change
Access to services	Environmental resilience

⁶ COM 2021, A long-term Vision for the EU's Rural Areas - Towards stronger, connected, resilient and prosperous rural areas by 2040, Brussels, 30.6.2021

Social innovation	Social resilience
2. Connected rural areas	4. Prosperous rural areas
Digital connectivity and transition	Diversification of economic activities
Transport links and new mobilities	Sustainable food production

A review of 25 policy challenges identified by pilot regions demonstrates that almost half of the challenges (11) are attributable to a single strand of LTVRA areas of action. Fourteen challenges are related to more than one area of actions/sub-actions with one dominating (primary focus)⁷. The majority of challenges (11) are primarily associated with the 4th strand of LTVRA – “Prosperous rural areas” and specifically with the sub-action “Diversification of economic activities”. Twice fewer challenges are primarily related to the 1st strand ‘Stronger rural areas’ (7 challenges) and the 2nd strand “Connected rural areas” (4 challenges). The least number of challenges are related to the 3rd strand “Resilient rural areas that foster well-being”.

Strand 1 “Strong rural areas”

The pilot regions see **improved governance** of their regions as one of the most important results of the foresight process. In this regard, pilots consider the development of their Regional Action Plan as an instrument that helps strengthen relations among various agents, generate trust and stimulate joint working dynamics for dealing with the challenges of their regions, thus contributing to the strength of the rural area. Among identified governance and collaboration challenges are facilitation and implementation of innovative collaboration approaches in regional governance processes based on the SMART City Concept⁸ (Central Bohemia); deployment of a continuous and transparent monitoring (collect data, analyse data, improve, learn) and predictive (scenarios, simulation, optimization, foresight) system for rural development ecosystem actors (Häme); assistance to the regional and local policymakers through proactive advice and stimulating participatory decision-making processes (Apulia), supporting policies for the key stakeholder with a mediating role (rural extension) in the process of policy creation and execution (Gevgelija-Strumica); efforts in introducing a nationwide civic engagement mechanism embedded in the constitutional law as precondition for

⁷ When analysing contribution of challenges to the LTVRA areas of actions, the authors of the report distinguished between two categories: i) challenges that are fully concentrating on the LTVRA area of action (primary focus), and ii) challenges that have several complementary directions addressing certain elements of more than one LTVRA area of action and contribution to particular area is not focal (secondary focus)..

⁸ Maryška M., Doucek P., Nedomová L. Smart City Concept - Czech Republic Case. (2017) International Conference on Management and Industrial Engineering, Bucharest, Iss. 8.

further paradigm shift in rural development (Slovakia); facilitation of civic participation and public involvement in the territorial development planning and implementation (Vidzeme).

Several regions have recognised the importance and role of **governance** in the diversification of the regional economy by identifying challenges that simultaneously aim to bring prosperous (strand 4) and strong rural areas (strand 1). Here the central focus is on the currently low awareness among policymakers on the potential role and gains from the involvement of rural stakeholders. The capacity challenges they are now facing, resulting in insufficiently represented and poorly diversified policy for attracting the young population to rural areas (Gevgelija-Strumica). On the other hand, efforts in establishing a versatile and growing business ecosystem in combination with innovative monitoring and predictive system for rural development ecosystem actors are vital preconditions for bringing prosperity and wellbeing to the regions (Häme).

Strand 2 “Connected rural areas”

The main precondition for **digitalisation** and modernisation of agriculture, industry and services is the availability and coverage of high-quality broadband and **digital infrastructure** in rural areas. Two pilot regions (Monaghan, Galilee) have recognised the lack of high-quality broadband coverage and insufficient digital infrastructure as a shortcoming and reason for the inability to fully exploit the untapped potential for the provision of services and employment transformation processes in rural areas. The digital transition of the traditional economy and the use of new technologies and innovative approaches are seen as essential elements that may contribute to the prosperity of the rural areas (Central Greece, Apulia, Segobriga) and improve their governance (Central Bohemia).

The role of **digital connectivity and the transition** of the traditional economy is seen as an essential element that may contribute to the diversification of traditional sectors of the rural economy concerning the digitisation of the agricultural industry and digital capacity building in the rural areas of Puglia and economic diversification of the tourism sector and new business models development in Segobriga. These challenges correspond to both prosperous (strand 4) and connected rural areas (strand 2).

Strand 3 “Resilient rural areas”

The resilience of rural areas, ability to adapt to climate change, care for carbon footprint, biodiversity and protection of nature is the least represented among the challenges identified by the pilot regions. Two pilot regions (Flanders and Monaghan) have identified **agriculture sector transformations** as crucial for the development of their territory due to the realities of climate change these regions are facing. The necessity to adapt to sustainable and up to date practices to improve productivity, competitiveness and raise incomes, thus contributing to the attractiveness of rural areas. Among identified policy challenges are the transition to more climate-resilient productive, and multi-functional rural landscapes and usage of inclusive regulatory tools for land and water management in agriculture (Flanders), and low numbers

of businesses realising the potential for business expansion and job creation in the rapidly expanding environmental products and services sector across Europe (Monaghan).

Strand 4 “Prosperous rural areas”

The majority of the pilot regions identified challenges primarily targeted at the diversification of economic activities (Apulia, Central Greece, Gevgelija-Strumica, Häme, Mazowieckie, Monaghan Segobriga and Vidzeme) as crucial for the development of their regions. Limited access to adequately paid job opportunities for people living in rural areas and low added value generated by the traditional sectors of the economy (tourism, agriculture) are seen as central challenges in Monaghan and Central Greece. The necessity to diversify the traditional structure of the economy by developing new business models that respond to new challenges, strengthening the ability to monitor the demand for new services and improving vocational training and entrepreneurship capacity are recognised as central for stakeholders in Mazowieckie and Segobriga.

Focus on **sustainable food production** as one of the driving forces for diversification of economic activities is recognised by stakeholders from Monaghan and Vidzeme. Change of farming methods to meet the new model of EU agriculture is currently limited by a lack of opportunities to re-purpose land or farm assets and insufficient abilities for rural SMEs to produce high-added-value products and services.

Table 3. Division of policy challenges by 12 pilots in relation to LTVRA strands

	Stronger			Connected		Resilient			Prosperous	
	Empowered local communities	Access to services	Social innovation	Digital connectivity and	Transport links and new mobilities	Resilience to climate change	Environmental resilience	Social resilience	Diversification of economic	Sustainable food production
Apulia (Italy)										
Central Bohemia (Czech Republic)										
Central Greece (Greece)										
Flanders (Belgium)										
Galilee (Israel)										

Gevgelija-Strumica (North Macedonia)	Primary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Primary	Secondary
Häme (Finland)	Primary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Primary	Secondary
Mazowieckie (Poland)	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Primary	Secondary
Monaghan (Ireland)	Secondary	Secondary	Secondary	Primary	Secondary	Secondary	Primary	Secondary	Secondary	Primary	Primary
Segóbriga (Spain)	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Primary	Secondary
Slovakia	Primary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary
Vidzeme (Latvia)	Primary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Secondary	Primary	Secondary

primary focus  secondary focus 

3.2 Selected measures

The following table provides a quick summary of the transformative measures identified by each of the 12 regional Foresight initiatives of the PoliRural project.

Table 4. Transformative measures selected by 12 pilots

Pilot region	Selected transformative measures
Apulia, Italy	<ol style="list-style-type: none"> 1. The digitalisation of the agricultural sector incl. development of a network with HE organisations and companies for technological knowledge transfer; build up critical skills, entrepreneurial support and business models, training; refining ICT infrastructures; improve skills and instruments in favour of farms in rural areas; helping the policymakers to find EU and national funds. 2. Assistance to policymakers incl. creating a Strategic Plan up to 2030, involving stakeholders at the local and regional level, approving the Strategic Plan with the Apulia policymakers and local municipalities.
Central Bohemia, Czech Republic	<ol style="list-style-type: none"> 1. Strategic planning incl. preparation and approval of the Action Plan of the Development Strategy of the Central Bohemian Region for 2019 - 2024, up to 2030, with the incorporation of SMART Concept principles and principles and a list of preferred SMART Solutions to ensure sustainable development of the region; preparation and approval of the SMART Strategy on the level of the Central Bohemian Region as the updating/instead of the Development Strategy of the Central Bohemian Region for 2019 - 2024, up to 2030. 2. Supporting municipalities and microregions in the preparation of SMART Strategies or Development Strategies respected SMART Concept incl. preparation and implementation of the subsidy programme to support the preparation of SMART Strategies on the level of municipalities and microregions of the Central Bohemian Region; updating the RIS3 Strategy of the Central Bohemian Region. 3. Preparation of the Collaboration Strategy of the Central Bohemian Region according to the Quadruple Helix Model with possible transition to the Quintuple Helix Model, its approval, mobilisation of the collaborative community and platforms of stakeholders and support for active participation.
Central Greece	<ol style="list-style-type: none"> 1. Increase of added value generated by the tourism sector incl. improvement of marketing and visibility of regional sites and (alternative) tourism activities of added value incl. improvement of infrastructure and services, establishing partnerships among the policymakers, the national authorities, academic organisations and the industry; reduction of tourism-related CO2 emissions. 2. Digitalization of agriculture incl. facilitating synergies with HE organisations and ICT companies for knowledge transfer, improving ICT infrastructure and tool access; training programmes focused on ICT uptake for specified target groups; training programmes focusing on sustainable agricultural practices (circular economy, CAP reform requirements, role of digital transformation).
Flanders, Belgium	<ol style="list-style-type: none"> 1. Reduce greenhouse gas emissions from agriculture by investments that result in a reduction of greenhouse gas emissions incl. strategies for carbon conservation & sequestration like agri-environment-climate measures, eco-schemes, not-productive related measures, and a grassland monitoring tool development. 2. Promote the agri-environment-climate and eco-scheme measures that contribute

	to better land management/water management incl. monitoring of cover crops in winter in agriculture, monitoring irrigation/grasslands in agriculture, encouraging not-productive measures that contribute to soil carbon conservation & sequestration / a more sustainable water management in agriculture.
Galilee, Israel	1. Upgrading the Galilee digitalisation infrastructure incl. analysis of economic development, presenting government goals and recent trends of opening research and development centres, examining investment in communication infrastructure and different potential of internet Infrastructure, presenting Economic benchmark analysis to the Israeli government.
Gevgelija-Strumica, Republic of Northern Macedonia	1. Supporting policies for the key stakeholders with a mediating role (rural extension) in the process of policy creation and execution, and 2. Supporting policy for attracting the young population to return to rural areas. Multi-stakeholder workshop, the establishment of a temporary body for structural reforms, developing a specific Action Plan, a plan for technical development and a financial plan, the transformation of the temporary body to a formal monitoring body.
Häme, Finland	1. Support for establishment, growth and development of sustainable rural businesses , incl. studies and research; stakeholders' cooperation and networking, building business advisors' capacity, re-shaping entrepreneurship training concepts and business advisory services, addressing RDI funding, encouraging municipalities to be active in rural development, adopting new forms of work, and facilitating immigration. 2. Deploying a continuous and transparent monitoring and predictive (scenarios, simulation, optimisation, foresight) system for rural development ecosystem actors incl. framework for future monitoring, developing rural monitoring & predictive system and the platform, continuous data collection, analysis and visualisation, knowledge sharing, steering policy and business actions, and deploying Häme foresight academy.
Mazowieckie, Poland	1. Developing entrepreneurship and new business models for the future incl. regional update on key challenges and enablers, developing a programming strategy for entrepreneurship, including the local/regional strategies, and settling the policy measures based on strategic approaches.
Monaghan, Ireland	1. Promoting adequately paid job opportunities incl. innovation in Rural SME's programme to generate value-added products and services, Youth creativity and innovation in enterprise programme, digital skills/new technologies Entrepreneurs Academy Programme, targeted food and engineering business start-up programme, development of an 'innovative Services programme'. 2. Promoting change of farming methods , including research to identify viable alternative land and assets use, scoping and audit of redundant farm assets and buildings plus grant aid, capacity building and reskilling of farmer and farm workers on diversification, piloting new technologies to utilise intensive agricultural waste streams for biofuel, a guide and toolkit for alternative land use for grass-based/livestock-based agricultural area. 3. Promoting digital connectivity incl. digital Hubs operational guide and toolkit, upskilling of rural communities, scoping audit to identify potential private and community-based services, support the establishment of social enterprises/community businesses that primarily utilise new technologies and broadband, a grant programme to provide services through web-based platforms, schools competition to identify new opportunities through improved broadband provision.

	4. Promoting business expansion of environmental products and services incl. 'Entrepreneurs for the Environment' initiative, a support programme for businesses in the environmental services or products sectors, social Innovation Environmental Enterprise programme.
Ségobriga, Spain	<p>1. Economic revitalisation through sustainable tourism, incl. improving tourist offer from the perspective of environmental sustainability and digitisation, improving the image and promotion of the territory as a sustainable tourist destination.</p> <p>2. Improve the training of the population of the territory, incl. training to agents linked to tourism about the possibilities of digitisation and sustainability, Carbon Footprint, energy efficiency, and creation of a Tourism consortium.</p> <p>3. Business development and employment promotion incl. creation of a web of resources and services of the territory at the municipal level, business mentoring Services / Advice, support for Companies and Infrastructure linked to tourism.</p>
Slovakia Region	1. Communication, consultations and civic engagement related to elaborating the "Vision", drafting Action Plan, consulting with stakeholders for endorsement, advocacy for recognition of "Vision" by CSOs and NGOs, regional governments, the establishment of consultation mechanisms, and integration Vision into key policy documents.
Vidzeme, Latvia	<p>1. Strengthening rural SMEs for producing high-added value products and services incl. strengthening business cooperation, clusters and thematic networks, improving collaboration with the education sector, promoting networking of entrepreneurs and cooperation with research institutions, promoting the development of local products based on local resources, developing new types of business, promoting the involvement of young people in entrepreneurship.</p> <p>2. Strengthening civic participation and public involvement incl. increase the role of local communities in municipal and regional development planning, implementation and monitoring, support for newcomers relocation, strengthen cooperation between different sectors, awareness and capacity building of regional and local governments with rural communities, strengthen citizens' links with municipalities and participatory budgeting, social innovation and knowledge platform creation, supportive environment and support mechanisms for citizen engagement and community initiatives, promote voluntary initiatives, create community-led local development strategies and smart village strategies.</p>

Strand 1 "Strong rural areas"

Several groups emerge among the selected measures that contribute to the 1st strand of the LTVRA several groups emerge. First, measures that concentrate on **strengthening strategic planning** by developing strategic, policy or action documents. These measures incorporate innovative, sustainable principles (drafting strategic documents incorporating SMART concept principles – Central Bohemia), apply novel models for stakeholder involvement (preparing collaboration strategy using Quadruple Helix Model – Central Bohemia) or use a unique nationwide consulting and civic engagement process (elaboration of rural "Vision" and integrating it into key policy documents - Slovakia).

Second, measures that focus on providing targeted assistance to the policymakers or other stakeholders to improve the quality of the policy or its execution capacity, including the creation and facilitation of novel tools and approaches. These measures seek to provide support to municipalities and microregions in the preparation of SMART Strategies (Central Bohemia), assist policymakers with research and training in the strategic planning processes (Apulia), to create and running transparent monitoring and predictive system for rural development ecosystem actors (Häme), supporting the key stakeholders with a mediating role (rural extension) and specifically supporting policy for attracting the young population to return in rural areas (Gevgljija-Strumica)

Third, measures that focus on strengthening and empowering other stakeholders increase their role and engagement in planning, implementing, and monitoring policies, supporting their cooperation and capacity. These measures promote the establishment of a sustainable rural business ecosystem to stimulate the growth and development of sustainable rural businesses (Häme), increase the role of local communities, strengthen citizen links with regional and local governments, create platforms, tools and support mechanisms for community initiatives and citizen engagement (Vidzeme).

Strand 2 “Connected rural areas”

The measures contributing to the 2nd strand of the LTVRA focus on the **upgrade of digitalisation infrastructure**, capacities for **better use of broadband** and **digital transition** of traditional economies. Lack of high-quality broadband coverage and insufficient digital infrastructure is seen as the main challenge of rural Galilee, requiring initial analysis, economic calculations and advocacy work to secure approval and funding from policymakers (Galilee). Availability of broadband doesn't automatically result in its application; thus, measures involving upskilling of rural communities, targeted support for businesses, operational guides and toolkits are expected to improve the digital connectivity in rural areas (Monaghan). Traditional economy sectors like agriculture and tourism are poorly digitised. Measures facilitating synergies with high educational organisations and ICT companies to promote knowledge transfer, improve ICT infrastructure, provide training, entrepreneurial support, and new business models may bring the expected transformations in rural economies (Apulia, Central Greece).

Strand 3 “Resilient rural areas”

Pilot regions have selected just a few measures contributing to the 3rd strand of the LTVRA. Two measures are aimed at strengthening **environmental resilience** by promoting agri-environment-climate and eco-scheme measures that contribute to better land and water management (monitoring of cover crops irrigation and grasslands, encouraging soil carbon conservation & sequestration, and more sustainable water management related not-productive measures) (Flanders) and by providing targeted support for businesses that are in the environmental services or products sectors (Monaghan). One measure focuses on

resilience to climate change by encouraging various strategies and eco-schemes contributing to reducing greenhouse gas emissions in agriculture (Flanders).

Strand 4 “Prosperous rural areas”

Several groups emerge among the selected measures that contribute to the 4th strand of the LTVRA several groups emerge. First, measures that promote the **diversification of the rural economy** and higher incomes by supporting innovations and generation of value-added products and services (Monaghan) and increasing the added value of the traditional tourism sector by improved marketing, partnerships, and services (Central Greece).

Second, measures that focus on capacity building, skills and training both at the entrepreneur side and the worker side by developing new business models that are more responsive to new challenges (Mazowieckie) and by improved vocational training, entrepreneurship capacity and provision of business-oriented resources and services in the traditional sector of tourism (Segobriga).

Third, measures that aim at bringing more **sustainable food production** by strengthening business, academia and research collaboration, clustering and thematic networking, promoting local products and short food chains (Vidzeme), and promoting a change of traditional farming methods, promoting diversity, reskilling, piloting of new technologies and scoping for viable alternative land and assets use (Monaghan).

The majority of measures can be attributed to more than one strand, e.g., measures meant to contribute primarily to the diversification of the rural economy often include governance and capacity building related actions or actions related to the digitalisation transition.

Selected transformational measures indicate a possible correlation with the composition of the pilot team and the institutional form and role of pilot organisations. Each PoliRural project pilot team involves multiple actors representing three main stakeholder categories crucial to the project's success: public authority, rural community and expert organisations representing either research (universities, research institutions), technology or innovation enterprises. Expert organisations are leading 9 out of 12 PoliRural pilot teams (Flanders, Central Greece, Central Bohemia, Häme, Monaghan, Galilee, Gevgelija-Strumica, Slovakia, Segobriga), two teams are led by rural community organisations (Apulia and Mazowiecki) and one by a public authority (Vidzeme).

Updated versions of the RAPs indicate that the composition of teams, interactions within teams, and public authorities' involvement have directly influenced the selection of transformative measures, ambition, scale, and timeline of these measures. For example, with a university and a consultancy company at its core, the Finnish team has identified measures primarily based on these expert organisations' interaction with municipalities and business representatives (in providing support for the establishment of sustainable rural businesses ecosystem and providing systems for monitoring and prediction of development trends for these actors). The Irish pilot team, which is also led by an expert company but with close links

to the local development agency, has identified a broad and well-integrated set of measures that address various policy challenges, thus indicating a comparably larger institutional area of influence. In Slovakia, where the pilot team is led by a university and involves mostly non-governmental organisations covering the whole national territory, the central measure promotes a nationwide vision document using extensive public consultations as a primary intervention. In Latvia, where the pilot team is led by the regional authority and also involves a national-wide umbrella organisation of LAGs and an agri-economic research institute, selected measures cover comparatively broad areas related to the transformation of business models towards higher added value and sustainable food production, promotion of citizen engagement and social innovations.

The differences in pilot team composition, their institutional role, and power relationships with decision-making actors responsible for implementing identified policy measures may be crucial elements dictating the potential effects of each Regional Action Plan implementation.

3.3 Policy challenge KPIs

The following table briefly summarises the policy challenge level KPIs selected by each of the 12 regional pilots for measuring transformative changes at the policy level.

Table 5. Policy challenge level KPIs selected by 12 pilots

Pilot region	Policy challenge KPIs
Apulia, Italy	<p>Measure 1. The digitalisation of the agricultural sector <i>The selection of KPIs is in progress.</i></p> <p>Measure 2. Assistance to policymakers <i>The selection of KPIs is in progress.</i></p>
Central Bohemia, Czech Republic	<p>Measure 1. Strategic planning</p> <ul style="list-style-type: none"> - Areas that have regional development plans that correspond to the Smart Concept (SDGs indicator). - Fulfilment of Smart City objectives in the action plan and other strategic documents. - Number of strategic documents related to the SMART Concept in the Central Bohemian Region. <p>Measure 2. Supporting municipalities and microregions</p> <ul style="list-style-type: none"> - Increasing areas covered by methods and standards for technology development (SDGs indicator). - Maximise the use of ICT infrastructure and its sharing between municipalities. <p>Measure 3. Preparation of the Collaboration Strategy</p> <ul style="list-style-type: none"> - Proportion of Smart City strategies with a direct participation structure of civil society in urban planning (SDGs indicator).
Central Greece	<p>Measure 1. Increase of added value generated by the tourism sector</p> <ul style="list-style-type: none"> - Accommodation occupancy of tourism (percentage). - Income (euro) <p>Measure 2. Digitalisation of agriculture</p> <ul style="list-style-type: none"> - LQ (location quotient index) in agriculture, forestry and fishing.
Flanders, Belgium	<p>Measure 1. Reduce greenhouse gas emissions from agriculture</p>

	<ul style="list-style-type: none"> - Livestock units concerned in utilised agricultural areas under contract where investment concerning measures will be made. - Percentage of agriculture and forest land under measures (agri-environment - climate and eco-scheme) that contribute to soil carbon conservation. - Monitoring mechanism of grasslands. <p>Measure 2. Promote the agri-environment-climate and eco-scheme measures</p> <ul style="list-style-type: none"> - Percentage of agriculture and forest land under measures to improve water management (e.g., ecological status). - Percentage of agriculture and forest land under measures to improve soil management (i.e., soil health). - Monitoring water consumption in agriculture and irrigation (efficiency) (~risks of drought, flooding, soil erosion in agriculture). - Monitoring cover crops in winter (~soil water quality and soil quality).
Galilee, Israel	<p>Measure 1. Upgrading the Galilee digitalisation infrastructure</p> <ul style="list-style-type: none"> - Deployment of [fibre-optic etc.] infrastructure (No of households). - Deployment of 5G cellular antennas (various sizes) (no.) - No. of infrastructure users. - Funds allocated for 5G infrastructure establishment (establishment of array / yearly maintenance, upgrading, embedment) - Programme acceptance by 18 mayors. - Programme submission to the government
Gevgelija-Strumica, Republic of Northern Macedonia	<p>Measure 1. Supporting policies for the key stakeholders</p> <ul style="list-style-type: none"> - Allocated budget for National Agricultural Extension. - Number of recipients of advisory services. - Allocated budget for projects supporting linkages between education, research and extension. - Allocated budget for projects supporting farmers in implementing agri-environmental practices. - Number of trained advisors. <p>Measure 2. Supporting policy for attracting the young population</p> <ul style="list-style-type: none"> - Allocated budget for supporting economic operations of young population in rural areas. - Number of beneficiaries for financial support of economic operations of young population in rural areas. - Allocated budget for subsidies for the young population in rural areas with increased subsidies. - Number of beneficiaries (young farmers) with increased subsidies. - The level of consistency of current policies that enable a favourable environment for maintaining current and attracting new coming young population. - The level of policy awareness for the important role of the young population in the absorption of the Green Deal principles. - The level of technical and financial support for non-economical areas contributing to a higher quality of rural life.
Häme, Finland	<p>Measure 1. Support for establishment, growth and development of sustainable rural businesses</p> <ul style="list-style-type: none"> - Number of industrial / agriculture, forestry, fishery/service jobs. - Workforce as the ratio of WAP. <p>Measure 2. Deploying a continuous and transparent monitoring and predictive</p>

	<p>system for rural development ecosystem actors</p> <ul style="list-style-type: none"> - Monitoring system. - Prediction system (foresight, scenarios) - Number of users.
Mazowieckie, Poland	<p>Measure 1. Developing entrepreneurship and new business models for the future</p> <ul style="list-style-type: none"> - New businesses in the Mazowieckie Region. - New businesses (Pilot-municipality level). - Information centres in rural municipalities. - New advisory services in counties (“powiat” level).
Monaghan, Ireland	<p>Measure 1. Promoting adequately paid job opportunities</p> <ul style="list-style-type: none"> - % of graduates that continue to live in County Monaghan after leaving the third level. - Distance travelled to work. - Number of Food business startups/expansions that add value-added products to their product line. - Number of engineering startups and expansions that develop innovative new products. - Number of new digital technologies companies or existing companies diversifying into this sector in the county. - Number of new service businesses that locate in the county. <p>Measure 2. Promoting change in farming methods</p> <ul style="list-style-type: none"> - Number of farmers that have diversified land and/or buildings’ use from traditional grass-based agriculture. - % of current agricultural landmass transitioned from livestock-based production. - Volume of current agricultural waste streams reutilised for fuels or nutrient value products. <p>Measure 3. Promoting digital connectivity</p> <ul style="list-style-type: none"> - Number of businesses trading services or goods online. - % of the workforce in the county working for employers remotely. - Number of participants in ICT and Digital Based skills training within the county. - Number of social enterprises using new technologies and broadband as a vehicle to trade. <p>Measure 4. Promoting the business expansion of environmental products and services</p> <ul style="list-style-type: none"> - Number of jobs created and sustained in environmental business sectors in the county. - Number of new environmental products or services launched by businesses. - % of the county’s economy derived from the environmental business output. - Use of Social Innovation in new product/service development.
Ségobriga, Spain	<p>Measure 1. Economic revitalisation through sustainable tourism</p> <ul style="list-style-type: none"> - Number of visitors to the Segóbriga Site per year. - Number of overnight stays in rural tourism accommodation. - Average income per inhabitant. <p>Measure 2. Improve the training of the population of the territory</p> <ul style="list-style-type: none"> - Number of people with Middle or Higher Education <p>Measure 3. Business development and employment promotion</p> <ul style="list-style-type: none"> - Number of tourism companies. - Number of self-employed people in the territory. - Share of self-employed in the territory.

Slovakia Region	<p>Measure 1. Communication, consultations and civic engagement related to elaborating the “Vision”</p> <ul style="list-style-type: none"> - The idea of elaborating the “Vision” recognised by the Ministry of agriculture and rural development (MofARD). - Draft Action plan consulted with MofARD. - New draft of the Action plan presented to stakeholders for endorsement. - Zero draft of “Vision” publicly consulted jointly with MofARD. - First joint draft of “Vision” elaborated in cooperation with the MofARD. - First joint draft of “Vision” consulted with other relevant ministries. - “Vision” recognised by CSOs and NGOs. - “Vision” recognised by eight regional governments. - New draft coming from the inter-ministerial consultations elaborated. - Consultation mechanisms established, developed and functioning. - Vision integrated into key policy documents.
Vidzeme, Latvia	<p>Measure 1. Strengthening rural SMEs for producing high-added value products and services</p> <ul style="list-style-type: none"> - The share of high value-added products and services in the total GDP of the region. - Total value added of Vidzeme RIS3 areas (million EUR). - Proportion of innovative companies. - Number of economically active units of the market sector per 1000 population. - Number of startups (Newly established employer companies). - Value-added per employee / of average LV (%). - Salary after taxes against the national average. - Proportion of people with higher education. - Coverage of adult education. <p>Measure 2. Strengthening civic participation and public involvement</p> <ul style="list-style-type: none"> - Number of municipalities that have participatory budgets. - Number of received project ideas for participatory budget. - Percentage of people who participated in voting for participatory budget ideas. - Number of non-governmental organisations per 1000 population. - Administrative units with implemented communities/ NGO activities within the LEADER. - Number of smart villages. - Voter turnout in municipal elections. - Citizens' perception of the possibility of influencing policy.

In the RAPs, pilot regions have identified 94 various policy challenge level KPIs. The majority (62) are *lagging* indicators that indicate past performance and concentrate on measuring outcomes and impacts of transformational processes. One-third (32) are leading indicators measuring performance (at input, output and outcome level) necessary for future success. On average, there are approx. 4 KPIs per measure.

Strand 1 “Strong rural areas”

Several groups emerge among KPIs selected by pilot regions for measuring policy transformations brought by measures that contribute to the 1st strand of the LTVRA. For measuring changes related to strategic planning challenges, mostly leading indicators are

proposed that measure outcomes of the process, e.g., progress in the development of documents, a number of documents with updated content, and the reaction of stakeholders.

For measuring changes related to the quality of the policy and capacity building of the policymakers, mainly outcome-based KPIs are proposed. E.g., KPIs measuring allocated budget, the number of participants/ beneficiaries/ users, elaborated systems. These are combined with qualitative indicators measuring changes in awareness and level of policy consistency towards specific target groups (young population).

KPIs proposed for measuring changes related to citizen engagement and social innovations are impact-oriented measuring adoption of citizen engagement approaches (e.g., municipalities introducing participatory budget), their use (e.g. a number of users, % of participants), behaviour changes (voter turnout) or changes in citizen perception towards possibilities to influence policy.

Strand 2 “Connected rural areas”

KPIs selected for measuring changes brought by measures contributing to the 2nd strand of the LTVRA focus on the outputs of the digitalisation infrastructure upgrading process (number of deployed infrastructures, allocated funds, stakeholder approval). For measuring changes in digital connectivity and digital transition, impact-oriented KPIs are proposed focusing on use (of new technologies and broadband), change of business models (trading goods or services online), changed behaviour (ratio of remote workers) or change in the location quotient for traditional sectors of the economy.

Strand 3 “Resilient rural areas”

Pilots have selected both outcome and impact-oriented KPIs to measure changes at the policy challenge level related to environmental resilience. These include outcome-oriented KPIs that measure coverage of agriculture and forest land by measures improving soil and water management, ability to start monitoring water consumption and soil water quality, or KPIs measuring impact on business measuring number of new environmental products and services, created jobs and share of county economy derived from it.

For measuring changes related to resilience to climate change, outcome-oriented KPIs are proposed focusing on the spread of measures covering agriculture and forest land and livestock units and establishing a monitoring mechanism of grasslands.

Strand 4 “Prosperous rural areas”

Several groups emerge among the selected KPIs for measuring changes at the policy challenge level that contribute to the 4th strand of the LTVRA. Shifts in the diversification of rural economy and promotion of higher incomes are measured by the outcome and impact-oriented KPIs measuring changes in business activity (e.g. a number of new businesses or services), changes in business models (e.g. a number of diversifying digital technology companies), influence on the local inhabitants (e.g. graduates that stay, the ratio of people

with higher education, travel distance to work), or effect on business activity (e.g. a number of overnight stays, visitors, changes in income).

To measure changes related to promoting sustainable food production and its influence on the rural economy, impact-oriented KPIs are proposed to focus on benefits from added value gained by more competitive products, changes in the use of agricultural resources, and overall changes in education level economic activity among rural inhabitants. E.g., higher added value related KPIs are measuring changes at the level of company/employee, at the level of economy sectors (RIS3 areas) and the regional GDP level. KPIs related to changes in the use of agricultural resources concentrate on measuring changes in diversified land use, the ratio of transitioned agricultural landmass and the volume of reutilised waste streams.

KPIs selected by the pilot regions for measuring the effects of RAP implementation at the policy challenge level indicate a certain level of caution. Pilot teams have preferred to choose such KPIs that are within their sphere of influence and could be achieved using selected measures. Thus, a large part of KPIs is outcome-oriented. Such an approach may be attributed to pilot teams' institutional roles and power. Another factor is the limited availability of data at the regional/local level that can be used to measure the effects of interventions related to minimising carbon footprint, climate changes, governance processes, etc. KPI selection influences the estimated time of measures. Some pilots have preferred to choose output-oriented KPIs that measure the effects of the planned process rather than broader effects on the policy changes. This may be explained by the fact that all RAPs are well integrated into the overall development context of pilot regions. The RAPs reflect just a part of a broader development process.

4 Contribution to EU key missions

The twelve PoliRural pilots should demonstrate how their Action Plans contribute to high-level EU missions at the national and regional level like climate neutrality, the new model of agriculture, and healthy soil and food, also considering local and regional priorities.

This subsection aims to summarise statements of pilot teams on expected contribution to key EU missions and to assess their justification. The criterion to be analysed in this subsection:

- Planned measures respond to the challenges and needs of implementing high-level EU missions at the regional level, especially in rural areas.

Compliance with the above statement was rated with one point if the submission was distinctive and the evaluation team agreed with the statement, zero points if no compliance could be noted and 0,5 points if compliance was partial. Such simplified overlook should provide general information on the quality of statements describing each partner's

contributions to key EU missions. In addition, the authors prepared an overview of total efforts aimed at each of the key missions.

The four main EU missions that the PoliRural project has identified are:

- Achieve a JUST transition to NET-ZERO by 2050 (the Green Deal),
- RECOVER from the pandemic and improve the RESILIENCE of the regions,
- Implement a NEW MODEL of AGRICULTURE in Europe (post-carbon, CAP reform),
- Implement a nature-based model of sustainability based on BIODIVERSITY.

A breakdown of contributions is provided below, indicating how many of the 12 pilots chose specific key EU missions. Two additional columns show the number of Action Plans with well-described and partial contribution mechanics to provide additional insight.

Table 6. Contribution to key EU missions

Key EU mission	Number of RAP contributing towards the mission	Number of RAP able to describe how exactly they plan to be contributing toward the mission	Number of RAP with a partial description of their contribution towards the mission
Green Deal	10	7	3
Biodiversity	8	4	4
Recovery from COVID19, Resilience	9	5	4
CAP reform	9	4	5

We can also get a preview of the most and least targeted key EU missions from this breakdown. Of the four identified key missions of the EU (Green Deal, Biodiversity, Recovery from COVID19 and resilience, and CAP reform), the Green Deal is the most often mentioned and well-articulated, but the biodiversity is the least once. It's important to note that about half of (45% in all missions, 50% if the three least popular are counted) contributions are not well described, which should be improved.

That can be used as a basis for discussion on the balance of impact. In other words - is the focus put on CAP reform and recovery from the COVID19 pandemic enough?

In many cases, pilots, when describing their contribution to key EU missions, choose concise general statements, for example, "Action Plan will contribute to X mission" or "Action Plan is aligned with Y mission". Fewer pilots have detailed how activities they plan to implement could contribute to key EU missions. It's also important to note that many pilots have a very optimistic outlook on how their Action Plan will contribute to key EU missions. Only a few pilots have described it with little more precaution highlighting some risks or weak points in intervention between activities and key EU missions. Those who went a more detailed route describing contributions were also more likely to draw attention to the considerable difference in scale between key EU missions and interventions they are planning. That gave their assessment a more grounded feel and credibility.

For an outside reviewer who is not familiar with the goodwill and commitment of pilots, it may seem that, in many instances, alignment with key EU missions is just a declarative statement.

Overall, out of 12 RAPs, the contribution description was insufficient in four reports; it was of average quality in seven reports. Only one report has provided a thorough, high-quality description of this criterion. Out of 12 maximal points, the quality of this criteria is rated at 8 points.

While intervention logics describing links between inputs and the expected outputs are primarily evident in the Action Plans, information on resources (financial, human) required for transformative changes is mainly vague. The majority of Pilots understand the importance of key EU missions and are looking forward to contributing to them - this conviction comes from interaction with partners outside of RAP, for example, during Pilot Summit discussions on key EU missions and partner roles in achieving them. However, this conviction cannot be obtained from RAP alone, there is a lack of more detailed analysis and description of mechanics on how exactly partners plan to contribute towards these ambitious missions. Some may be due to a language barrier or an attempt to be brief and concise. Unfortunately, in some cases, it has to be assumed that partners do not see or understand their role in achieving the missions due to a lack of the necessary knowledge and/or ambition.

5 Conclusions

- The main **purpose** of RAPs is to define actionable solutions for tackling the identified challenges within the foresight process. At the same time, RAPs are considered an integral part of other processes and tasks already undertaken by pilot regions and are well integrated within these.
- Pilot regions during the foresight process have undergone several iterations in formulating their **Vision statements**. The time frame for identified Visions varies between 2027 and 2040, representing RAPs with medium-term and long-term perspectives. These differences should be considered if a cross-comparison of identified measures and interventions is intended. Vision statements closely correspond to identified challenges and measures, showing a good level of internal coherence. Visions represent a broad variance of pilot interpretations of rural attractiveness according to their specific regional context. Part of the pilot regions has specifically mentioned newcomers or new entrants in the Vision statements as a particular interest group.
- The majority of **challenges** identified by pilot regions are primarily related to the PROSPERITY of rural areas, particularly to the various reasons currently hindering the diversification of economic activities. Issues of governance, quality of policy planning and execution, and collaboration among stakeholders are the second most common group of challenges that are considered as main preconditions for STRONGER rural areas. The absence or low quality of digital infrastructure, limited skills and abilities to use advantages of good broadband, and poorly digitalised traditional sectors of the economy are central issues hindering pilot regions from becoming better CONNECTED rural areas. Pilot regions have identified just a few RESILIENCE-oriented challenges related to the ability to adapt to climate change, reducing the carbon footprint and nature protection.
- Selected **measures** correspond well to the identified challenges and have a good potential for bringing expected transformative changes. Governance-related measures focus on strengthening policy planning and execution capacity, providing targeted assistance, novel tools and approaches to policymakers or other stakeholders, and supporting and empowering citizen engagement and community initiatives. Connectivity-related measures concentrate on preparatory actions for upgrading digitalisation infrastructure, improving entrepreneurial capacities for better use of broadband and facilitating digital transition processes of traditional sectors of the economy (agriculture and tourism). Resilience-related measures aim to strengthen the environment and climate-friendly land and water management, promote environmental services and products, and encourage strategies to reduce greenhouse gas emissions in agriculture. Prosperity-related measures promote support for innovations and higher value-added products and services, the introduction of the new business models, the transformation of traditional economic sectors, capacity building, skills and training, and more sustainable food production.

- Among the **policy challenge level**, **KPIs** dominate indicators that measure outcomes and impacts of transformational processes. KPIs indicate a certain level of caution that may be attributed to the institutional roles and power of pilot teams, data availability at the regional/local scale, and the time frame of measures. KPIs demonstrate a strong correlation with the nature of selected measures, usually proposing a mix of outcome- or impact-oriented KPIs. E.g. for governance-related transformations, mostly outcome-oriented KPIs are chosen to measure outcomes of strategic planning or capacity building processes, but for social innovations related transformations, the KPIs focus on adopting innovative approaches, their use, changes in behaviour and perception. A similar mix is observable regarding measures contributing to connectivity, resilience and prosperity of rural regions.
- Of the four identified **key missions of the EU** (Green Deal, Biodiversity, Recovery from COVID19 and resilience, and CAP reform), the Green Deal is the most often mentioned and well-articulated, but the biodiversity is the least once. RAPs indicate a comparably lower focus on CAP reform and recovery from the COVID19 pandemic. The most widespread shortcomings are honest risk analysis and missing clear links connecting expected interventions and the key missions. Some attention here must be paid to the considerable difference in scale between key EU missions and planned interventions that would require further additions of the RAPs.

6 Next steps

By the cut-off date of this report (April 1, 2022), all pilots have developed at least a fourth version of their Regional Action Plans. Still, the RAPs are not finalised, and pilot teams continue their work on further elaboration and improvement of Regional Action Plans. The authors of this report believe that some further improvements in the RAPs would be necessary, in particular, a more explicit description of the M&E process, better-articulated alignment with key EU missions, and reconsidering some KPIs. The pilots continue their work, and the final versions of their Action Plans shall be ready by the summer of 2022.

According to the project design, in the summer, pilots will conduct the *ex-durante* evaluation of their RAPs. The main task of *ex-durante* evaluation is to measure the progress of the KPIs identified and based on the *ex-ante* baseline measurement, to compare the changes and their potential attribution to the PoliRural project. As the implementation of the plans will in most cases have just started, it can be expected that the *ex-durante* evaluation will have limited possibilities to make an accurate comparison of project impacts. Therefore, pilot teams will be able to use the *ex-durante* evaluation for testing and strengthening the M&E framework of their RAPs and assessing the work with stakeholders.

7 References

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8 Annex 1 Regional Action Plans of the 12 Pilots

Regional Action Plans of the 12 Pilots are available [here \(Google drive folder\)](#).