SHERPA
Rural Science-Society-Policy Interfaces

SHERPA Position Paper

LONG-TERM VISION FOR RURAL AREAS

Contribution from SHERPA science-society-policy platforms

SHERPA receives funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 862448

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Citation: Chartier, O., Salle, E., Irvine, K., Kull, M., Miller, D., Nieto, E., Vestergård, L.O., Potters, J. and Slätmo, E., Zomer, B., Iadecola, F. (2021). Long-Term Vision for Rural Areas: Contribution from SHERPA science-society-policy platforms. SHERPA Position Paper. DOI: 10.5281/zenodo.4557440

This Position Paper has been informed by the inputs from participants in the 21 Multi-Actor Platforms from across Europe and at the EU-level. Thanks are due to all of the contributors to the workshops and interviews (approximately 250 people), and to the 1 100 respondents to the online surveys, for their time and high level of engagement in developing the long-term visions for rural areas of Europe.

Paper finalised in February 2021

Sustainable Hub to Engage into Rural Policies with Actors (SHERPA) is a four-year project (2019-2023) with 17 partners funded by the Horizon 2020 programme. It aims to gather knowledge thatcontributes to the formulation of recommendations for future policies relevant to EU ruralareas, by creating a science-society-policy interface which provides a hub for knowledge andpolicy. Find out more on our website:

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Headline messages

In September 2019, the new European Commission (2019 – 2024) announced the preparation of a Long-Term Vision for Rural Areas, to be coordinated by the Commissioner for Democracy and Demography, Dubravka Šuica, with the Commissioner for Agriculture and Rural Development, Janusz Wojciechowski, and the Commissioner for Cohesion and Reforms, Elisa Ferreira. The aim is to stimulate a debate on the future of rural areas and the roles they have to play in European society.

This SHERPA Position Paper aims at contributing to the debate on the Long-Term Vision for Rural Areas by presenting the key issues identified by the 20 regional and national SHERPA Multi-Actor Platforms (MAPs), and by the EU-level MAP. The MAPs identified their desired visions for 2040, the enabling factors to achieve those visions, the challenges to overcome and the opportunities to be seized. They were informed by public data relating to the environmental, social and economic characteristics of rural areas, and scientific papers and reports from past and ongoing research.

The MAPs concluded that rural areas of Europe are attractive in their own right and, as a consequence of the high quality of life available, many such areas are appealing places to live, work and visit. They made a strong call for mechanisms to ensure that rural matters are addressed in a coordinated and coherent manner in all areas of policy. Their long-term vision is of rural areas that are characterised by opportunity, innovation, modernity, liveliness, resilience and equality, their sustainable and multi-functional environments. Key enablers to achieving their vision are enhanced multi-level and territorial governance that empowers local actors and communities, facilitated through flexible funding schemes relevant to the characteristics of different areas.

The EU Long-Term Vision for Rural Areas is encouraged to reflect these characteristics, setting out the principles and instruments for achieving the vision overall, and its realisation at different territorial levels, respecting the diversity of rural Europe (biophysically and socio-economically), and following the principles of equality, innovation and environmental sustainability.

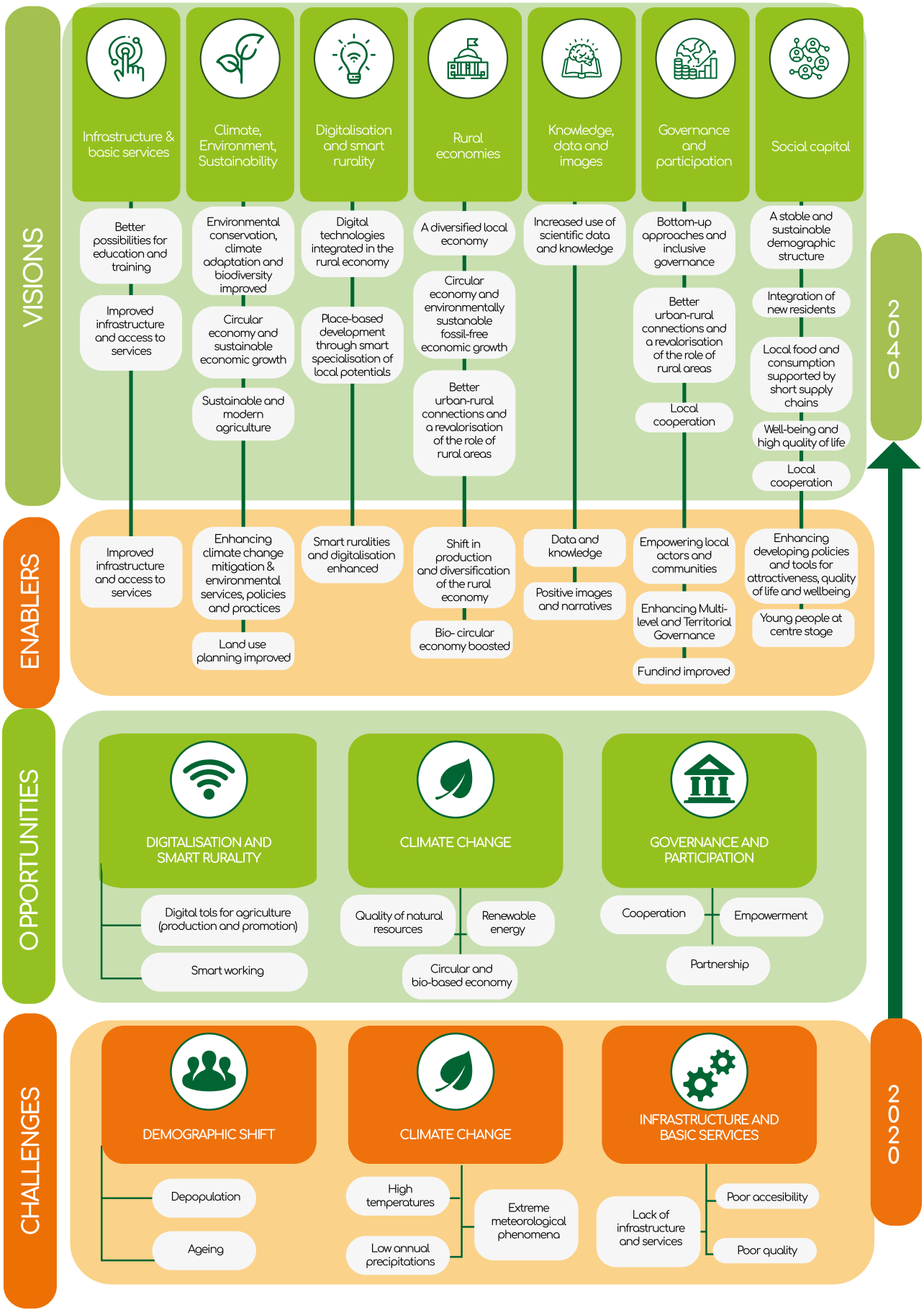
The participating communities of science, society and policy contributed complementary knowledge and insights to the debates about the visions for rural areas by 2040, with perspectives from 17 countries, and at an EU level.

Outcome of the Delphi process from 21 MAPs

The SHERPA MAPs have been exploring their visions and desired futures by 2040 for their rural areas, and the opportunities, challenges and enablers for achieving those visions. Their work comprised desk research and the use of quantitative data (e.g. development indicators, demography etc.), interviews with key informants, and the design, implementation and analysis of online surveys (more than 1 100 respondents across Europe by 17 November 2020). An overview of the process is shown in Figure 1.

Location of the 21 SHERPA Multi-Actor Platforms

Figure 1. Main outcomes of the Delphi implemented by the SHERPA MAPs



Challenges and opportunities in the next 20 years

As a starting point, SHERPA MAPs were asked to reflect on the challenges and opportunities that rural territories would face through to 2040. A significant majority of the MAPs confirmed **demographic change** as one of the predominant challenges for their areas. Depopulation, especially in intermediate and remote areas, and population ageing were identified as the main demographic challenges currently faced by European rural areas. The Bulgarian MAP in particular identified problems with demography as a major challenge to be faced. The French MAP identified the same challenge, highlighting that the acceleration of peri-urbanisation is reflected in the rapid and widespread expansion of built areas and impermeable surfaces to the detriment of natural spaces and agricultural land.

A second major challenge confirmed by the MAPs is that of **climate change**. The greater frequency of extreme meteorological phenomena such as higher temperatures (leading to drought and forest fires) and lower annual precipitation, affect activities carried out in rural areas (e.g. agriculture, forestry and fishing). In some areas, climate change is perceived as threatening entire sectors of activity (e.g. fruit sector in the Netherlands).

The third major challenge confirmed by the MAPs is the lack or poor quality of **infrastructure and basic services**. For example, the Romanian MAP reports that poor levels of accessibility and a deficit in the provision of basic services such as healthcare, education, cultural activities, and setting of enterprises makes peripheral rural areas less attractive for people to live, and in which to invest capital.

The majority of the MAPs identified the rise of **digitalisation** and smart ruralities as one of the most valuable opportunities. Digitalisation is seen as an important instrument to develop rural territories in various ways. As stated by the Danish MAP, the digital transition can help with service provision, job creation, and the development of new digital products. The Slovenian MAP highlighted how digitalisation can support the creation of new ways of working. This was also observed by the Hungarian MAP, which specifically identified robotisation in agriculture as an opportunity for rural territories that flows from the increase in digitalisation.

Numerous MAPs identified contributions to tackling climate change and the provision of environmental services as a further area of opportunity, despite climate change also being reported as a challenge. For example, the Greek MAP refers to the opportunities of exploiting renewable energy sources, and that investments in environmental protection should focus on the construction of units that can process its by-products or waste (i.e. a circular economy). The Spanish MAP, focusing on the Aragon region, identified the sustainable management of natural resources as providing an opportunity for its region.

The MAPs also identified opportunities for the rural territories in relation to **governance and public participation**. For example, the French MAP sees an opportunity in the development of an adapted territorial approach and cooperation between territories. This is also referenced by the Greek MAP, which saw opportunities arising from a shift towards region-based empowerment. Associated with governance is the subject of trust, which was included as an opportunity by both the Italian MAP for the Tuscany region and the Finnish MAP. The latter added that trust is an important element of a policy system which enables good quality partnerships whilst also recognising the strengths of civil society. In addition to these opportunities, the Czech MAP said that the time periods served by an elected body are insufficiently long for the realisation of a vision. For example, they identified benefits and opportunities which could arise from the development of forms of commitment between outgoing and incoming local councils.

DEMOGRAPHIC SHIFT

CLIMATE CHANGE AND ECOSYSTEM SERVICES

INFRASTRUCTURE AND BASIC SERVICES

DIGITALISATION

GOVERNANCE

Visions and enablers to reach a desired future for European rural areas towards 2040

The MAP Position Papers conveyed senses of spirit and hope for the positive development of rural areas over the next 20 years. There is a multitude of interconnected visions for a desired future for Europe's rural areas by 2040. From these visions, a similar and overarching goal can be identified: In 2040, rural areas are attractive places for people to live and settle.

The main visions shared across the MAPs (Table 1, in *grey and italic*) relate to the use of digital technologies and solutions, a diversified rural economy with a strong local industry, trade, cultural sector etc., a stable demographic structure, environmental conservation and biodiversity. The agricultural sector is thriving, modern and based on sustainable practices. Table 1 presents the overarching themes of the visions for Europe's rural areas, specific characteristics of the themes, and the frequency to which the characteristics are referenced to in the visions of the MAPs[1].

Table 1. Shared characteristics of visions for European rural territories by 2040 (the three leading characteristics of themes identified by the MAPs are in bold and italics)

Overarching themes of visions	Characteristics of themes in visions for European rural areas	No. of MAPs
Basic services and infrastructure	Better possibilities for education and training	8
	Improved infrastructure, sustainable, innovative mobility models, and access to services	11
Climate, environment and sustainability	*Environmental conservation, climate adaptation and biodiversity improved*	12
	Agriculture is thriving, modern, and based on sustainable practices such as organic farming	9
	Circular economy and environmentally sustainable, fossil-free economic growth	8
Smart rurality and Digitalisation	*Digitalisation and digital technologies highly integrated in the rural economy*	16
	Place-based development through smart specialisation of local potentials	5
Governance and public participation	Better urban-rural connections and a revalorisation of the role of rural areas	7
	Bottom-up approaches and inclusive governance	7
	Local co-operation improved	4
Knowledge, data and images	Increased use of scientific data and knowledge	2
Rural economies	*A diversified rural economy*	13
	Better urban-rural connections and a revalorisation of the role of rural areas	7
	Circular economy and environmentally sustainable, fossil-free economic growth	8

1 The overarching themes are presented in alphabetical order since we do not want to impose any hierarchy. Furthermore, some characteristics of themes occur more than once as they relate to different overarching themes.

Overarching themes of visions	Characteristics of themes in visions for European rural areas	No. of MAPs
Social capital	*A stable and sustainable demographic structure*	12
	Integration of "new rural residents" from cities and other countries	6
	Local co-operation improved	4
	Local food production and consumption supported by short supply chains	9
	Well-being and high quality of life	9

MAP Position Papers are full of imaginative ideas on how to reach a desirable future for Europe's rural areas by 2040, and provide a very rich picture of different enablers[2] to reach these visions.

Many of the enablers are universal in nature, whilst others are context-specific and were discussed as necessary processes or actions to be taken to achieve a vision within distinct regional and national settings. The universal enablers could be modified and customized for use in different locations and, arguably and ideally, they can be promoted at a supranational level (i.e. by the EU). As highlighted by a member of the Finnish MAP, "*it needs a bundle of different mechanisms, approaches and probably also a 'change of mentality' to enable the vision*."

Table 2 structures and summarises the enablers by categories. It shows the overarching themes for the visions from Table 1, the enablers connected to the vision and, in relation to the latter, how many MAPs reflected on related issues in their Position Papers. In the final steps of the Delphi process, the MAPs discussed enablers to achieving their visions. The top 3 enabler categories are 'empowering local actors and communities', 'enhancing multi-level and territorial governance' and 'enhancing smart ruralities and digitalisation' (in *grey and italic*). These are all categories where Community Led Local Development (CLLD) can be the enabler at a local level.

2 Enablers can be defined as processes or acts that facilitate the development towards a desired goal. Our definition is based on that in the Cambridge English dictionary defining an enabler as "something or someone that makes it possible for a particular thing to happen or be done". Furthermore, and important for this section, the Cambridge Dictionary reminds us that something can be an enabler but is not necessarily the solution. Furthermore, enablers identified often combine several dimensions. Enablers can also be seen as removing obstacles and challenges as well as propelling identified opportunities in relation to the trends discussed above

Table 2. Enabler categories to achieve rural visions and frequency of discussion in the MAPs (the three leading enablers are in bold and italics)

Overarching themes of visions	Enablers	No. of MAPs
Basic services and infrastructure	Improving accessibility of infrastructure and basic services	9
Climate, environment and sustainability	Enhancing climate change and environmental services, policies and practices	9
	Land use planning improved	6
Smart rurality and digitalisation	*Enhancing smart ruralities and digitalisation*	16
Governance and public participation	*Empowering local actors and communities*	18
	Enhancing multi-level and territorial governance	18
	Funding improved	11
Knowledge, data and images	Positive images and narratives	5
	Data and knowledge	12
Rural economies	Shift in production and diversification of the rural economy	11
	Bio- and circular economy boosted	3
Social capital	Enhancing and developing policies and tools for attractiveness, quality of life and wellbeing	7
	Young people at centre stage	4

Smart ruralities and digitalisation

The most frequently identified characteristic of the visions for rural areas by 2040 related to **smart ruralities and digitalisation** (Table 1), and one of the most prominent enablers. Digitalisation is considered a means to reduce the differences between urban and rural areas. The Tuscany MAP (Italy) envisages that in 2040 "*rural areas will seize the opportunity of digitalisation as a wide array of tools to answer residents and businesses' needs, following the framework of the Smart Villages.*" The MAP for the Spanish region of Aragon envisages their rural area as having 'adapted to all benefits offered from digitalisation'.

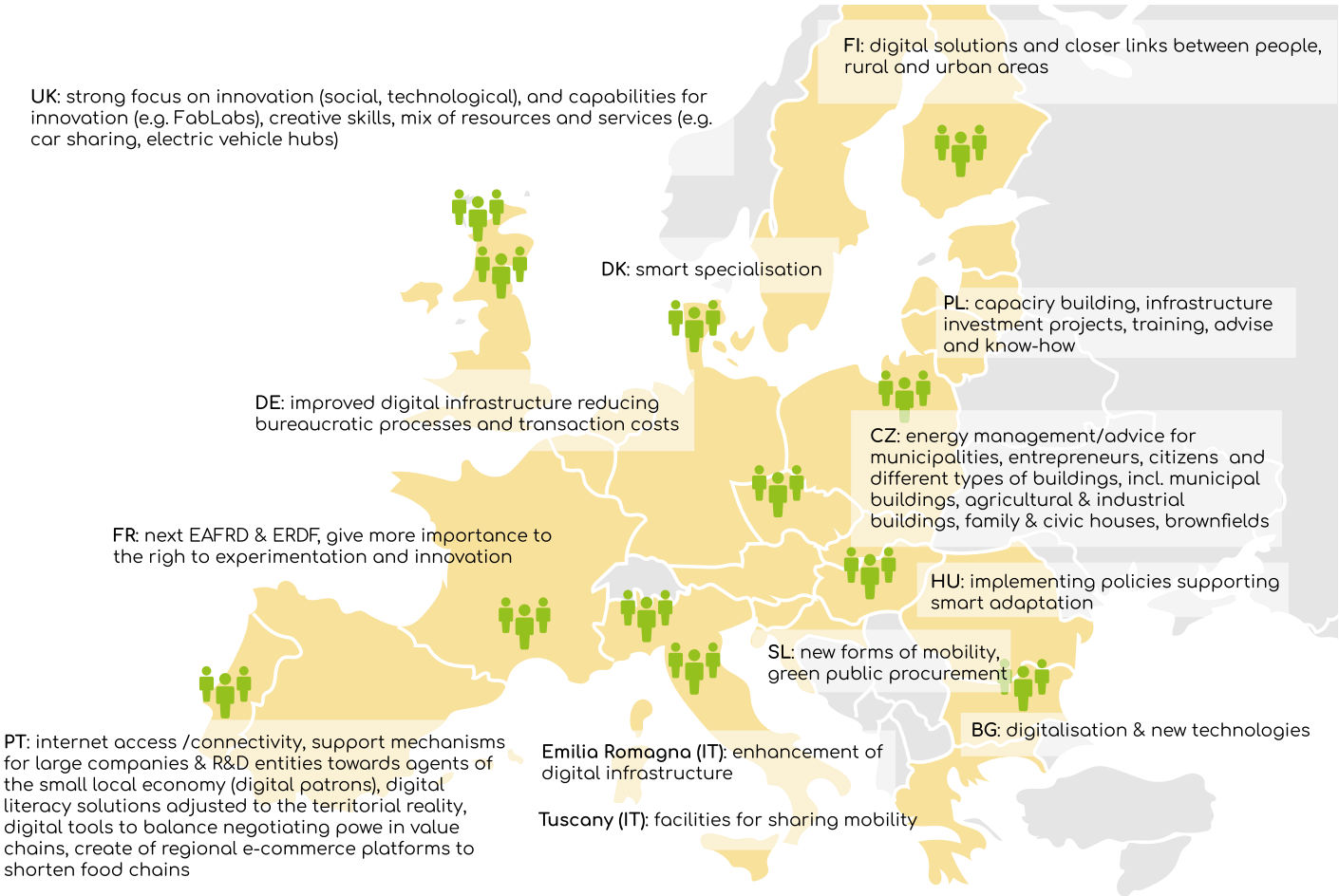
The MAPs identified a range of enablers for achieving the characteristic of the vision of smart ruralities and enhancing digitalisation (Figure 2). Most MAPs identified the fundamental requirement of ensuring high quality internet access and digital connectivity (e.g. Portuguese and Polish MAPs). Physical digital infrastructure is essential for economic development and for education and capacity building of the rural population at every stage of their lives (Polish MAP), and can be exploited for the design and implementation of systems that can make processes more efficient, reduce bureaucracy, and associated transaction costs (German MAP). It enables the creation of mechanisms by which large companies and Research and Development entities can support agents of the small local economy (e.g. digital patrons), the development of digital literacy solutions tuned to the needs of local territories, digital tools to balance negotiating power in value chains, and regional e-commerce platforms to shorten food chains (Portuguese MAP).

> ***"Rural areas will seize the opportunity of digitalisation as a wide array of tools to answer residents and businesses' needs, following the framework of the Smart Villages.***

To develop smart ruralities there is a need for enablers supporting innovation (social, technological), development of capabilities for facilitating innovation (e.g. FabLabs), creative skills, and stimulating and implementing the provision of resources and services (e.g. car sharing, electric vehicle hubs) (UK MAPs), adoption of new technologies (Bulgarian MAP), and energy management and advice for different types of rural actors (Czech MAP).

These may require new policies for smart adaptation (Hungarian MAP), and adjustments of EAFRD and ERDF policies (French MAP).

Figure 2. Enablers of smart ruralities and enhanced digitalisation



Empowered local rural communities

The most frequently identified characteristics of the visions for rural areas by 2040 related to **governance and public participation** (Table 2). In their visions for rural areas many MAPs stressed that by 2040 there will be an increased focus on local level interest and actions. By then there will be greater involvement of local, rural citizens in the governance of their own territories through inclusive, bottom-up approaches. The Greek MAP emphasized that by 2040 it will be common-place that local population will have opportunities to express their needs and opinions, and the MAP of the Galician region of Spain talks of an 'empowered rural population who are involved in the governance of their territories'. The Finnish MAP stressed that policies will be based on bottom-up approaches, and the UK MAPs envisage administrative responsibilities and decision-making that is redistributed away from main cities and urban areas alongside 'a rebalancing of authority and responsibility that empowers local communities.'

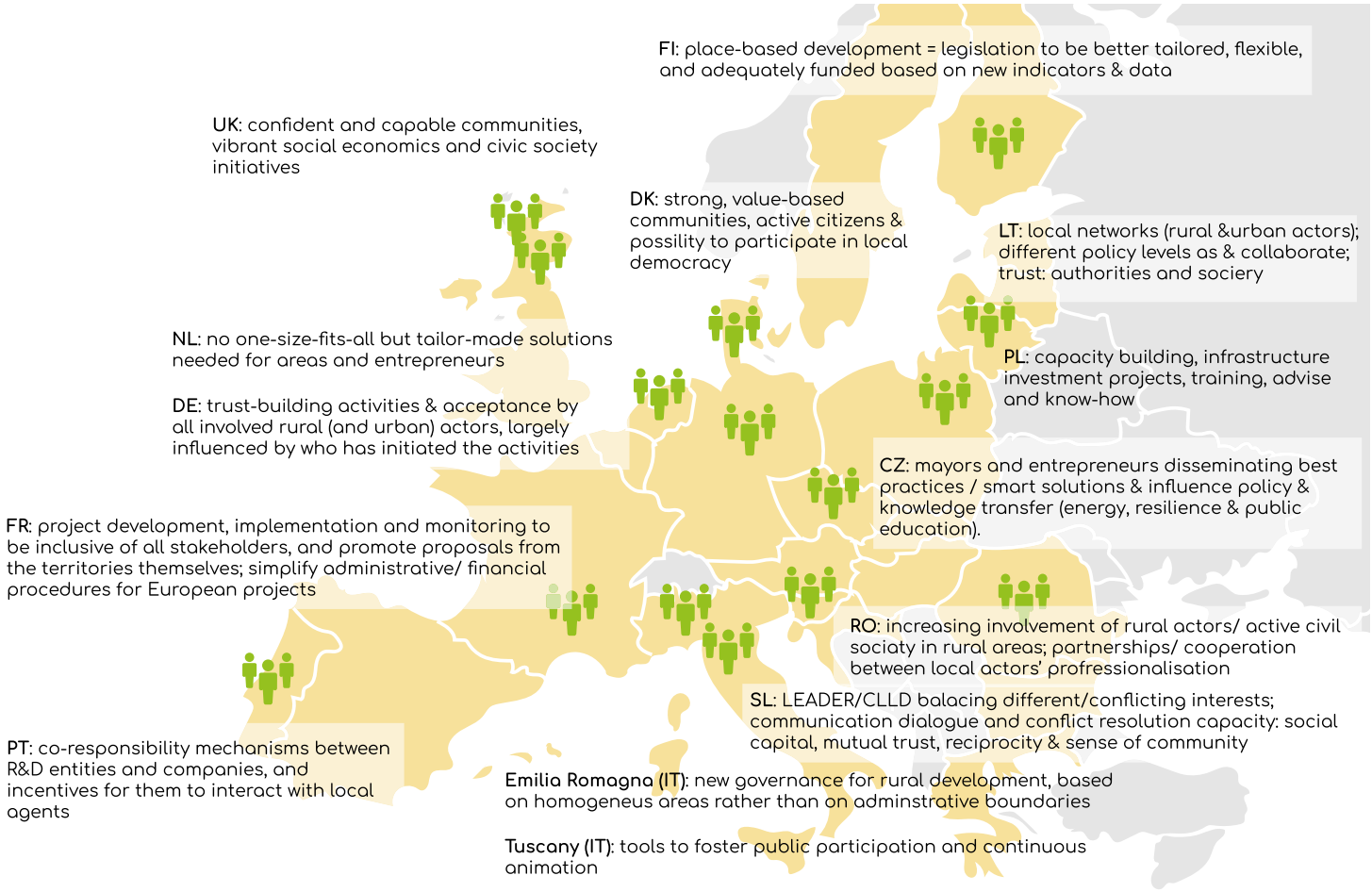
The overall enablers identified for achieving this characteristic of the vision were of **empowering local actors and communities**, and **enhancing multi-level and territorial governance** (synthesised from evidence from the MAPs, summarised in Figure 3). A key overall message was of the importance of approaches and solutions that are tailor-made to the characteristics and circumstances of particular areas, and not a one-size-fits all approach (Netherlands MAP).

Empowering local communities and enhanced governance requires structures that provide opportunities for their active participation (Danish MAP), and an active civil society and networks (Romanian MAP, Lithuanian MAP); and tools that can aid the fostering of public participation (Tuscany MAP, Italy). Such empowerment can be a valuable element of regulations that promote and implement common development strategies (Polish MAP), and in turn leads to the inclusive development, implementation and monitoring of projects (French MAP). A key element to such participation is the design of activities that build trust and acceptance by all actors involved in rural (and urban) areas (German MAP).

Effective collaboration is a further key aspect of effective territorial governance. Significant benefits can be gained by joint initiatives between the public and private sectors designed to enable knowledge exchange and education (e.g. in relation to transition to renewable energy and enhancing community resilience, Czech MAP), and effective mechanisms for co-responsibility between Research and Development entities and companies, and incentives for them to interact with local agents (Portuguese MAP).

The realisation of many of these enablers can benefit from lessons learnt from the approaches of LEADER/CLLD in balancing differences or conflicts, and the importance of developing local capacity for conflict management (Slovenian MAP).

Figure 3. Enablers of empowering local actors and communities, multi-level and territorial governance



A diversified rural economy

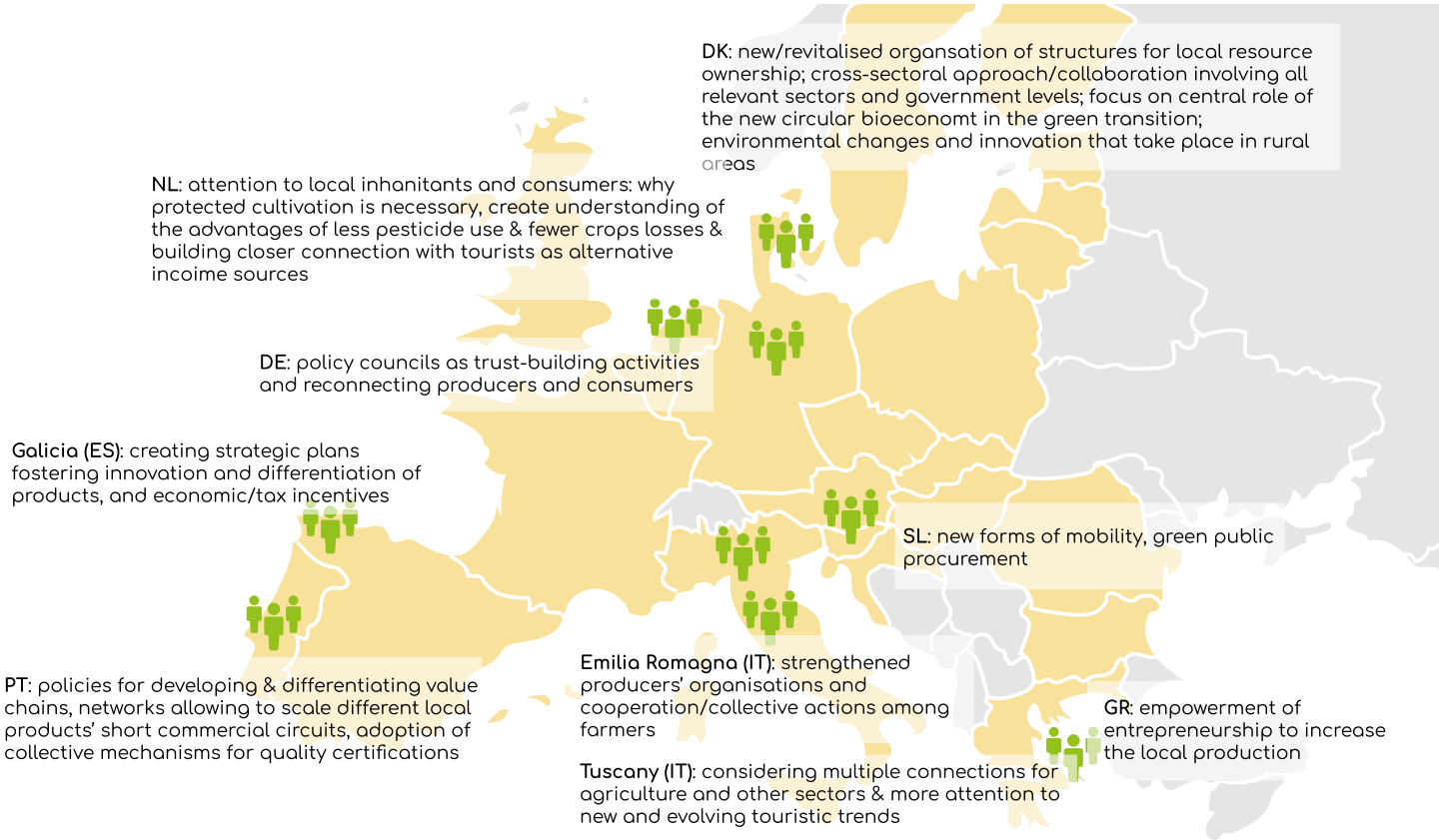
The second most common theme which emerged in visions of the MAPs is of the **diversification of rural economies**. In 2040 the rural economy will be diversified, with non-agricultural activities adding to the sustainability of rural areas. Examples of such diversification included sustainable tourism, discussed by the MAPs in Slovenia and Tuscany (Italy), and closer ties to the knowledge economy emphasized by the MAPs in Hungary and Finland. Diversified farming activities, including family-run farms with various forms of alternative production, marketing and income were identified by the German MAP.

Enablers for the diversification of rural economies, identified by MAPs, are summarised in Figure 4. Overall, it is notable that the economies of rural areas are not all dominated by the agriculture sector, although that is the source of raw materials for key products and land uses. Interlinkages between sectors are very significant for employment and economic activities (e.g. evolving interests of agri-tourism, Tuscany MAP, Italy; Netherlands MAP). Greater attention should also be paid to natural processes and support for biodiversity as part of the development of niche and large-scale production (Danish MAP).

A strategic level planning is required that fosters innovation and economic incentives (e.g. through taxation) (Galician MAP, Spain), and the encouragement and facilitation of entrepreneurship to increase local production (Greek MAP). Such strategies should support the development of regionally differentiated products and associated value chains, within and related to rural areas (e.g. Portuguese MAP, Galician MAP, Spain). Approaches are also required that increase the level of local economic transactions, and the development of human capital such as knowledge and competences for enhancing quality schemes and the traceability of agricultural products (Slovenian MAP; Portuguese MAP).

Several enablers relate to the overall requirement for measures that support cooperation and sharing (e.g. Slovenian MAP), collective actions amongst farmers (Emilia Romagna MAP, Italy; Portuguese MAP; UK MAP); strengthened producer organisations (Greek MAP); and sharing and integration of good business practices (Slovenian MAP). Investment is required in trust-building activities and reconnecting producers and consumers, for which policy councils are one option (German MAP), and more generally to build links been producers and local inhabitants and consumers (Netherlands MAP).

Figure 4. Enablers of a diversified rural economy



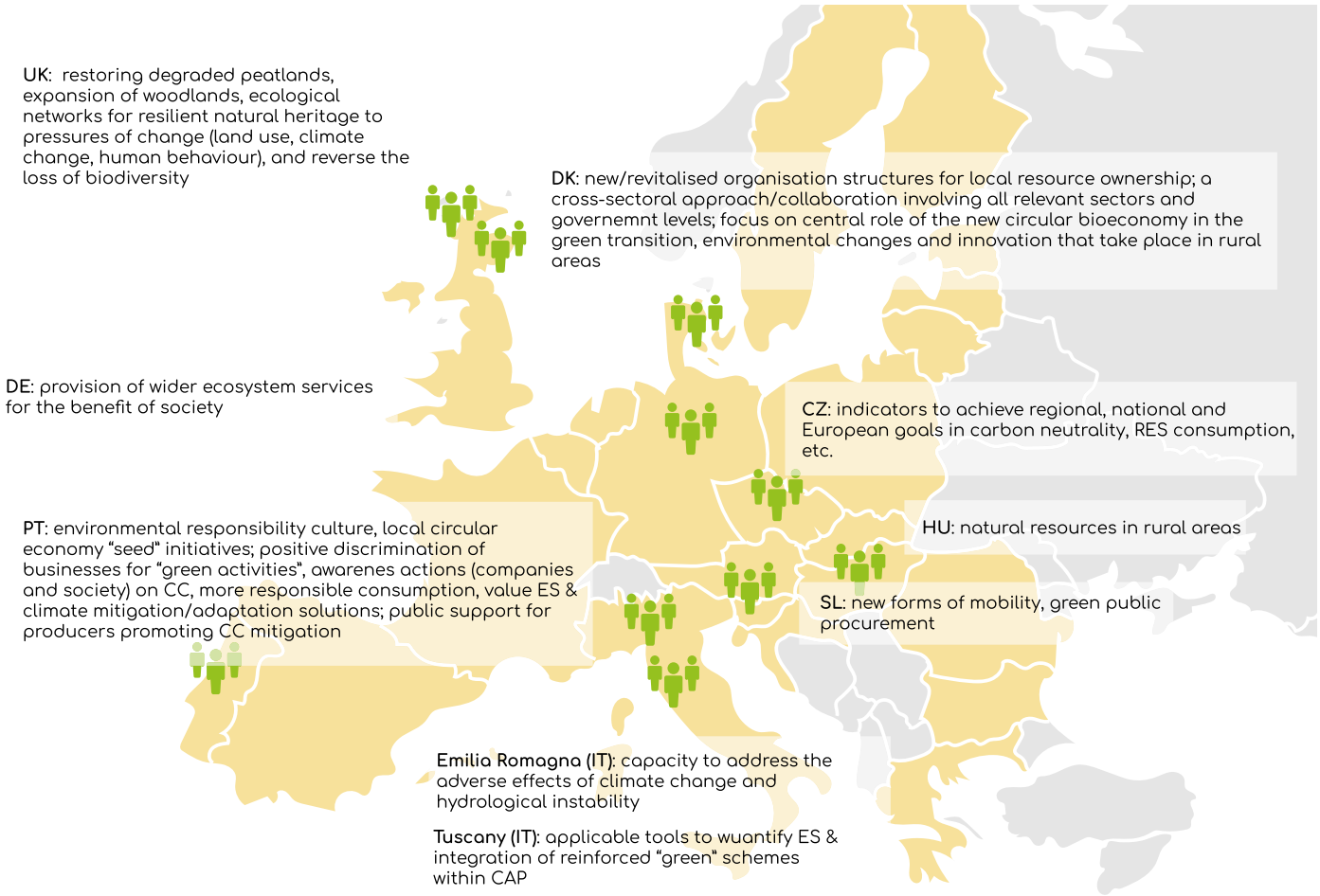
Green transition and environmentally sustainable management of rural areas

Several visions that have characteristics of a **green transition** and environmentally sustainable management of rural areas have been brought together under the overarching theme of "Climate, Environment and Sustainability". These visions address climate adaptation, biodiversity, a circular and bio-based economy, and sustainable agricultural practices. They envisage changed practices in the utilisation and approach to managing natural resources, with some of these changed practices bringing unique opportunities to both the rural economy and to the well-being of rural inhabitants. The Greek MAP emphasizes that, by 2040, growth and development are achieved through the sustainable exploitation of natural resources. Similarly, the Polish MAP refers to the protection afforded to natural resources, especially water and forests, and the associated protection of biodiversity and landscapes. The circular and bio-based economy is envisaged as boosting rural areas in Finland and Romania. In the latter, small family farms will be making more efficient use of their abundance of agricultural by-products.

Enablers which relate to climate change, environment, and exploiting the potential of the circular economy are presented in Figure 5. The Hungarian and Danish MAPs highlighted the importance of opportunities offered by natural resources as an essential strength of rural areas. The latter also stressed the need for new and revitalised organisational structures that enable the local ownership of resources, and the need for cross-sectoral approaches and collaboration that involves all relevant sectors and levels of government. The Czech MAP stressed the importance of indicators that inform the process of achieving regional, national and European goals in carbon neutrality, renewable energy systems, consumption etc., and the Tuscan MAP (Italy) stressed the need for tools to quantify ecosystem services and the integration of reinforced "green" schemes within a reformed Common Agricultural Policy. The Portuguese MAP identified several as vital enablers to achieve the vision for 2040. These included:

- the promotion of a culture of environmental responsibility;
- local "seed" initiatives of a circular economy (e.g. municipalities as champions of "Green Policy");
- positive discrimination in favour of businesses working on "green activities";
- actions to raise awareness of companies and society regarding climate change, more responsible consumption;
- valuing ecosystem services and approaches to climate mitigation and adaptation;
- providing public support for producers whose investments promote climate change mitigation, directly or indirectly (e.g. sustainable agricultural practices, cleaning of land and forests, extensive animal production systems, agroforestry systems).

Figure 5. Climate change, environment and using the potential of the bio-based circular economy



Integration of 'new rural residents' and positive rurality

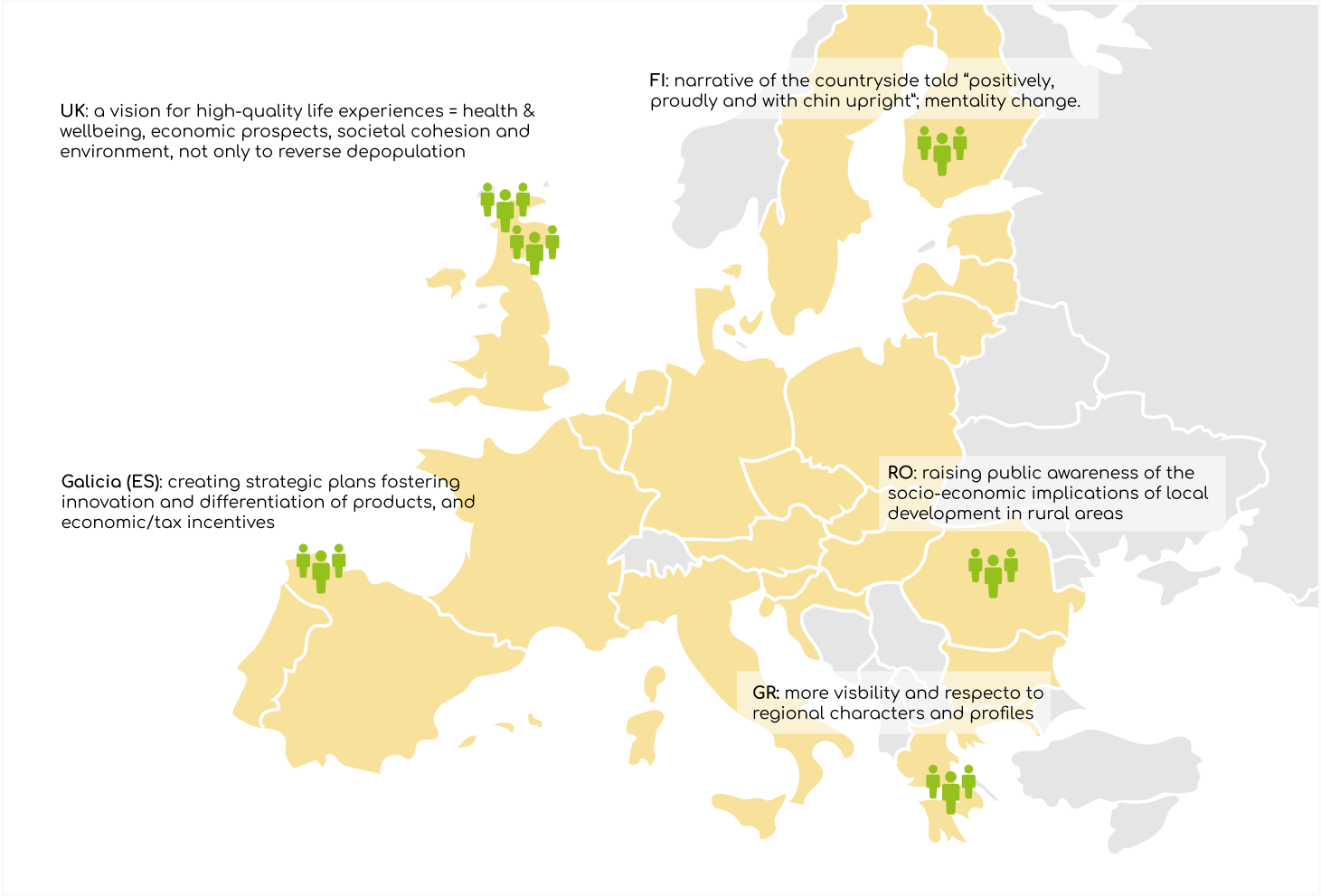
The integration of **new residents** into local communities in rural areas was discussed by a few MAPs. The Tuscany regional MAP (Italy) pointed to the importance of integrating migrants, and the importance of their role in populating the countryside: "*Migrants will populate rural areas and will be fully integrated into society.*" The integration of new residents and seasonal workers is also emphasized by the French and Slovenian MAPs, whilst the Lithuanian MAP points to the new innovative business models which newcomers can bring to an area.

This vision provides a positive perspective on the role of migrants in the European countryside, learning lessons from the refugee crisis of 2015, and recognising the prospects of an increase in migration driven by climate change. It would form part of a positive image and narrative for rural areas for people seeking to move to rural areas of Europe.

> ***"Migrants will populate rural areas and will be fully integrated into society.***

Examples of key enablers are presented in Figure 6. Notable amongst those are: giving higher visibility to the diversity of rural issues (Greek MAP); increasing public awareness of the socio-economic implications of local development in rural areas (Romanian MAP); increasing media coverage of important or innovative developments in rural area (Danish MAP); having pride in relating positive narratives of rural areas (Finnish MAP).

Figure 6. Positive images and narratives



Several MAPs had a common vision of a general societal revalorisation of rural areas. The French and UK MAPs envisage the perception of rural areas as a positive one. The latter also adds that rural areas will not be only considered the hinterlands of urban areas. The Spanish regional MAP of Aragon hopes for a revalorisation of the role of rural areas by society as a whole. Central to the vision of the Danish MAP is "*a widespread understanding of the valuable contributions rural areas have for the economy, prosperity and welfare of Denmark.*"

In conclusion, MAPs envisage rural areas in 2040 to be attractive places for people to live and settle, where their attractiveness is interlinked with the realisation of a multitude of rural visions.

> ***"A widespread understanding of the valuable contributions rural areas have for the economy, prosperity and welfare of Denmark is central to our vision.***

Contribution from the SHERPA EU MAP

The EU-level MAP met on two occasions to discuss the Long-Term Vision for Rural Areas, informed by the outcomes of the Delphi process. During the first meeting, members of the EU-level MAP reflected on the trends, challenges, opportunities, and desirable future identified by the other MAPs. During the second meeting, members revisited the vision and discussed the enabling factors. The third meeting was aimed at validating the contribution from the EU-level MAP.

Desired future for 2040: an EU-level perspective

In 2040, the vital importance that rural areas make to society for the sustainability and cohesion of Europe is recognised and valued. Rural areas are economically and socially vibrant, creative and innovative. They are characterised by a diversified economy and high standards of education, health and wellbeing, having planned for and responded to demographic trends over preceding decades.

Europe-wide, rural communities are valued and governed equally, with strategies based on their individual assets, challenges and opportunities. They are inclusive, connected and resilient. Rural communities respect and celebrate the cultural and territorial diversity of each other, and provide equal opportunities and a high quality of life to all. Their power to decide on their future is equal to that of people not living in rural areas. This is facilitated by means of governance that foster active and informed engagement of rural citizens in decision-making, cooperation between decision-making levels, and tailoring decisions to account for place-specific conditions.

Rural communities work in harmony with nature to produce, nurture and manage private and public goods and services in a sustainable, climate-positive way for the benefit of society as a whole. They are active participants in decisions affecting their future, responding to opportunities offered by new forms of governance and mechanisms for its implementation (e.g. web-platforms and applications).

Enabling the vision: an EU-level perspective

Recognition of rural areas as being vital for society as a whole

To achieve recognition of their vital importance to society as a whole, the narrative about rural areas needs to change. This requires work to assess and promote the distinctive beneficial contributions they make to society, alongside a positive political discourse. It also requires addressing prejudices conveyed by language used in reference to rural areas compared to that referencing other areas.

Equal access to opportunities and decision-making power

Support is required for bottom-up approaches that increase the power of rural communities to decide on their future, alongside increased attention to the needs of rural communities in top-down policy making. More attention should be paid to how rural areas are represented in, and addressed by, institutional structures at different levels. Specific policy tools should be used, for example rural proofing (mainstreaming current Territorial Impact Assessments tools and methodologies) to ensure that, at European and national levels, specific realities of rural areas are taken into account as well as in the planning of targeted support. Lessons can be learnt from the Community Led Local Development (CLLD) approach, which has proven to work well in enhancing the narrative and capacity at the local level to take decisions and act.

High quality of life

Strategies are needed that provide basic infrastructure and services (particularly for education and health), integrated across sectors, and tailor-made to local circumstances. A one-size-fits-all approach will not lead to a high quality of life for all rural communities across Europe. There is a need to recognise the diversity of European rural areas, and reconfigure governance structures so as to empower rural communities (e.g. learning from the CLLD).

Enablers identified for achieving this characteristic of the vision were:

- setting EU-wide minimum standards for service provision within and for rural areas, the achievement of which should be met through tailor-made approaches;
- creating incentives to support the long-term relocation of employment (e.g. teleworking, establishment of public entities in rural areas);
- protecting and enhancing cultural heritage, and its development as part of vibrant economic activities of rural areas;
- enhancing service provision and well-being through improved linkages between rural urban areas and better delivery of cross-border services.

Creation of economic opportunities and employment

Members of the EU-level MAP identified digital infrastructure, the provision of high quality public services, and multi-level governance (such as CLLD) as key enablers for the creation of new economic opportunities and employment.

Essential for the creation of economic opportunities is an underpinning infrastructure of public services within rural areas, not just accessible from them. Examples of such enablers are affordable housing, high-quality education and training, childcare and health services. This is accompanied by enhanced cooperation with nearby towns and cities, and networking within and beyond country borders (inter-regional and transnational cooperation). In combination, these can be catalysts for attracting inward migration and retaining young people and families in rural areas, and the long-term development of a balanced and sustainable demographic profile of the population.

Opportunities should be taken to develop and benefit from new sectors of employment, notably in the emerging circular and bio-economies, promoting shorter supply chains that are local and fair, and supporting economic diversification, entrepreneurship, innovation and creativity. Inspiration of new types of opportunities, and knowledge to aid in their uptake and implementation, can be gained from sharing of experiences and learning between communities, across Europe.

In harmony with nature and the sustainable stewardship of natural resources

Appropriate policy frameworks were considered a main enabler to ensure a balance between the preservation of natural capital and the sustainable management of natural resources. They should include measures that promote economic sectors that are green and sustainable, create local value (e.g. renewable energy, healthy and nutritious food), and support local value chains (e.g. CLLD, public procurement). Legal and regulatory frameworks should make it possible for local communities to retain value from these economic developments and reinvest them in improving local infrastructure and services (e.g. community energy systems), and reward them for safeguarding natural resources for the benefit of society as a whole (e.g. carbon rich soils, woodlands, wetlands).

The EU MAP position has been developed based on oral and written comments of its members. Participation is in their personal capacity as experts. Some members are representatives of organisations, alternates to which are permitted, noted in the reference to their organisation.

Concluding remarks

The high level of interest and engagement shown by the MAPs regarding the contribution of SHERPA to the Long-Term Vision for Rural Areas is a sign of recognition by the three communities of science, society and policy of the shared benefits of collaborative working. Their collective thinking provides opportunities for democratising and co-constructing public policies, and strengthening or rebuilding trust between public administrations and citizens.

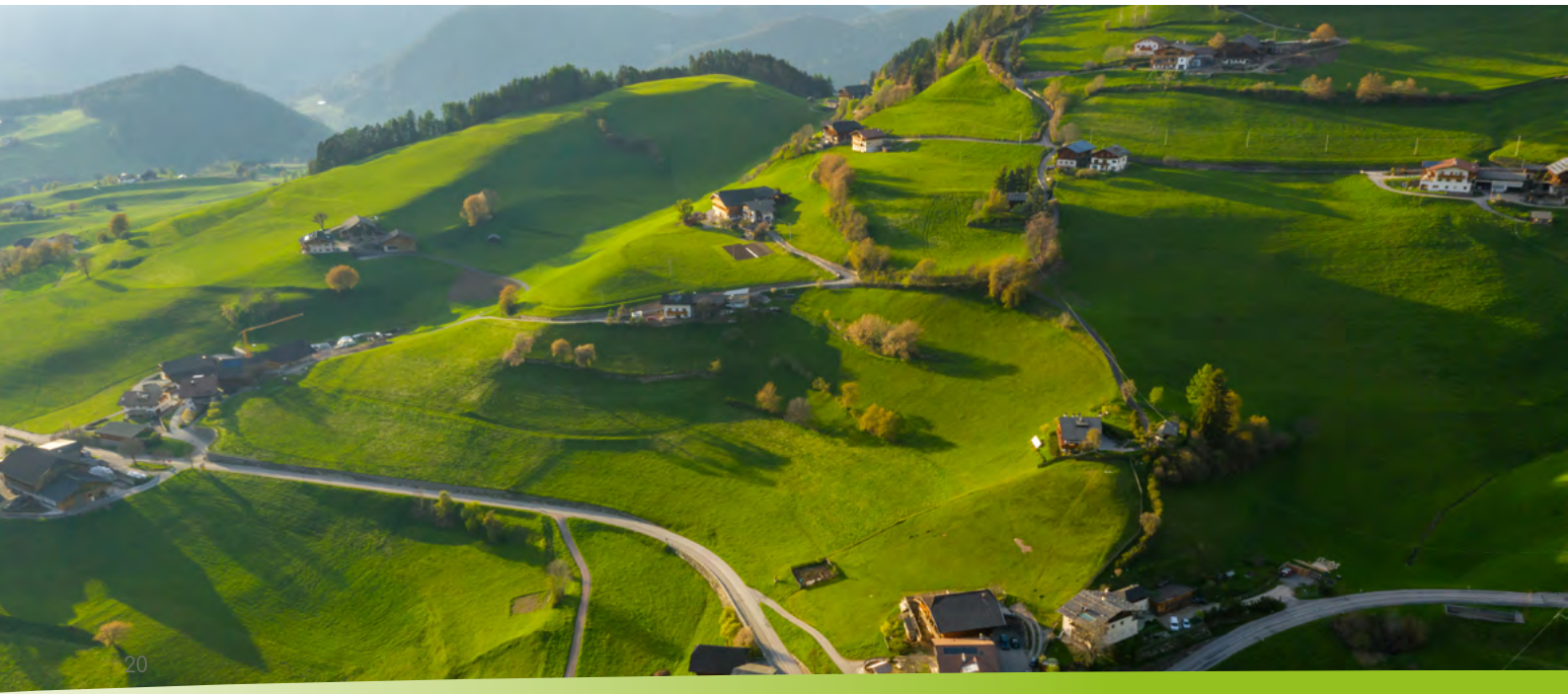
The challenges and opportunities identified for the future of rural areas cover a range of thematic domains, many of which are not tackled by traditional rural policies. Several such domains are within the responsibilities of government departments or public agencies which do not view their policies through a specifically 'rural lens'. These domains include the provision of basic services (education, health, mobility), digitalisation, innovation and culture. In due course, they may be expanded by sectors which emerge as a consequence of the COVID-19 crisis. By engaging more than 1 100 individuals from across the EU in visioning the future of their territories, the Multi-Actor Platforms made a strong call for mechanisms that ensure rural matters are addressed in a coordinated and coherent manner in all areas of policy.

Three headline enablers of achieving the characteristics of long-term visions for rural areas are:

- **Enhancing smart rurality and digitalisation.** Facilitating a step change in capabilities of citizens and communities in rural areas, enabled to take full advantage of new and emerging digital technologies and concepts, would be key instruments in the development of rural communities, supporting the creation of jobs, products and services, and new ways of working.

- **Empowering local actors and communities.** Local actors and communities should be recognised as being instrumental to the formulation, design and implementation of policies for rural areas. Participation and actions should be facilitated through flexible funding schemes that are relevant to the characteristics of different areas.

- **Enhancing multi-level and territorial governance.** A well-designed and facilitated combination of government across levels (local to European) and policy themes, with representatives of private and third sectors, focused on place-based and territorial approaches, would provide a powerful approach to co-constructing relevant and effective future policies for rural areas.



The SHERPA MAPs, distributed across the EU, have provided 'safe space' (or independent think tanks) where citizens-science and policy actors engaged to co-identify key trends, co-analyse local knowledge, and co-design recommendations to feed future policies and actions.

The MAPs concluded that by working together, their three constituent communities were able to contribute achieving visions for long-term visions for rural areas of Europe, tailored according to local circumstances:

- **Science provides an evidence base of opportunities and threats relevant to rural areas and has a role in connecting innovation with rural needs.** It informs societal debates about pathways to visions of rural areas through the provision of knowledge, information and building of capacities.

- **Society articulates the ambitions of communities, their concerns and the difficulties to be overcome**. It provides practice-based knowledge and awareness of the values of rural areas, and the challenges they face.

- **Policy provides leadership for the creation of visions for the rural areas of Europe, tailored to be relevant at different levels of governance.** Through both politics and policy, it sets the principles and instruments that guide and enable the visions to be achieved.

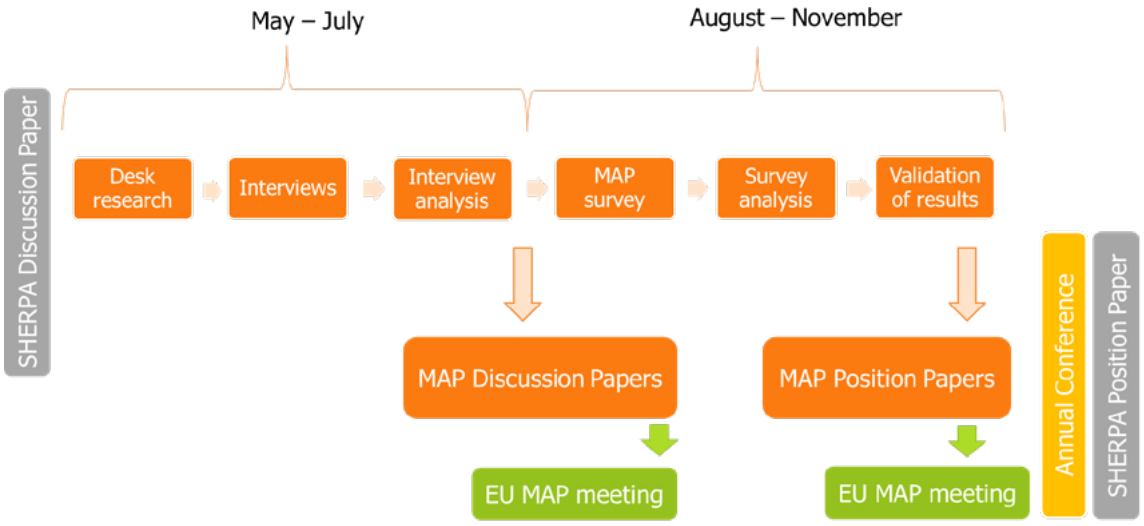
In summary, the Long-Term Vision for Rural Areas should address the specific characteristics of rural areas through enabling the active participation of a wide range of stakeholders in the design of adaptive, place-based and inclusive policies in ways that respect equalities, innovation and environmental sustainability.

Annex I: Background information on the Delphi process

In the SHERPA project, 20 Multi-Actor Platforms (MAPs), composed of stakeholders from science, society and policy, have been established (approximately 20 members per MAP). They have prepared a contribution to the Long-Term Vision for Rural Areas. An initial activity of these platforms was to identify local challenges and opportunities in order to create their vision for the development of their territory through to 2040. The work of the MAPs was informed by a SHERPA Discussion Paper which provided a summary of opportunities and challenges identified in recent scientific and technical publications and outputs from research projects. The MAPs also looked into trends and foresights for their region or country.

From May to November 2020, the MAPs organised debates and exchanges of knowledge, following a 6-step Delphi method[3]. The members of the MAPs reflected on the question 'What is your vision for your rural territory by 2040?', and documented their discussions in MAP Position Papers. Those papers have been summarised to inform discussion in the SHERPA EU MAP, the equivalent of a MAP taking perspectives at an EU level.

Figure 7 Delphi process implemented by SHERPA MAPs in 2020



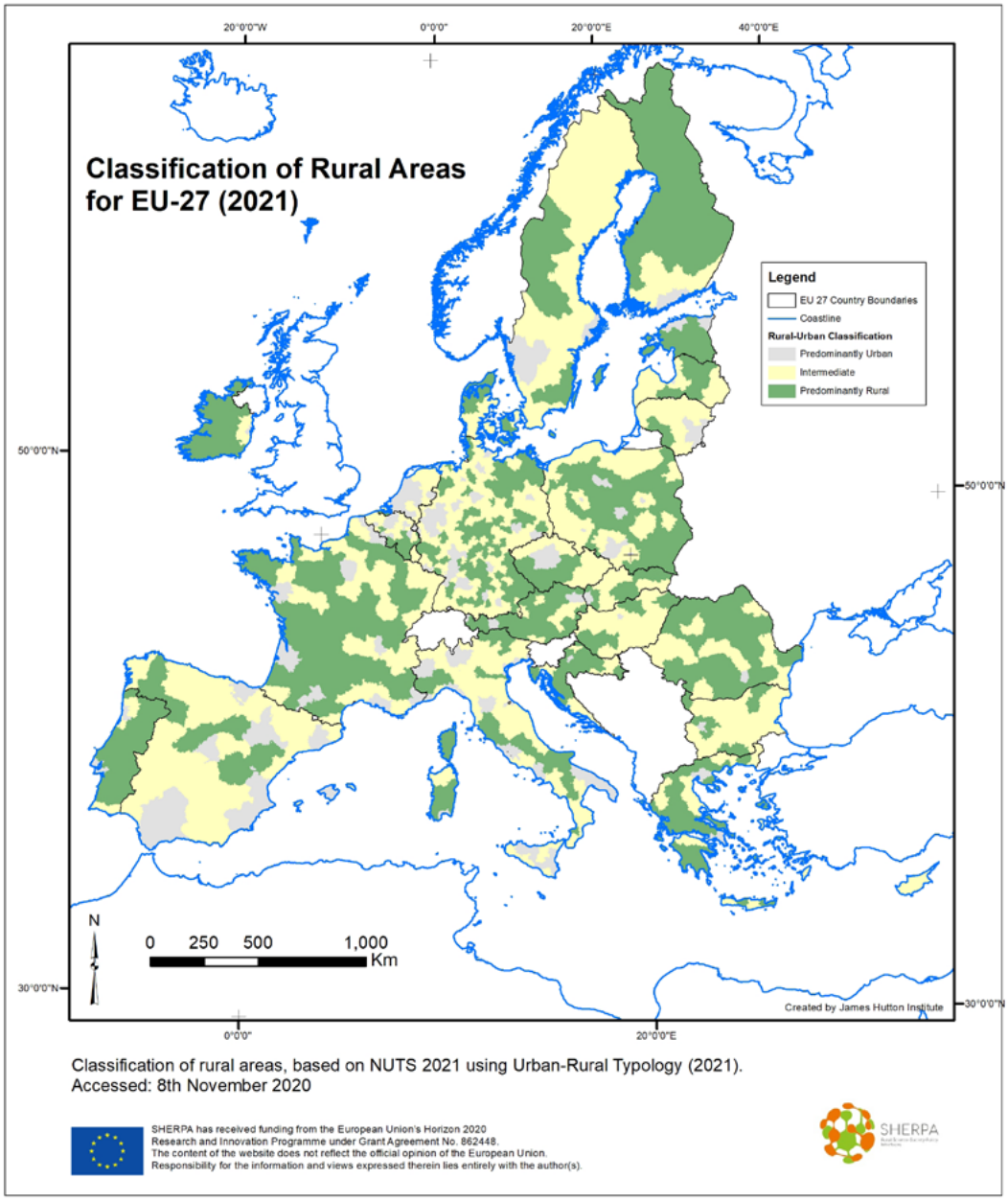
The work of the SHERPA MAPs was carried out under the challenging circumstances associated with the COVID-19 pandemic, which had practical consequences on their way of operation. Nevertheless, all platforms succeeded in holding discussions and drafting papers to contribute to the debate on the Long-Term Vision for Rural Areas.

3 The Delphi technique aims at predicting and exploring "alternative future images, possibilities, their probabilities of occurrence, and their desirability by tapping the expertise of respondents" (e.g. Rikkonen et al., 2019; Linstone and Turoff 2002). In line with Rikkonen et al., 2019, "iteration of future views is undertaken in several rounds, and feedback is given from previous survey and/or interview rounds."

Annex II: Main scientific evidence

The area of the EU-27 is classified as being 45.5% Predominantly Rural (1,907k km2), and 44.3% Intermediate (1,858k km2) (Figure 8). As measured by this classification, Predominantly Rural areas are distributed across the European Union, dominating the geographic area of some countries (e.g. Finland, Ireland, Portugal, Estonia), but not represented in others (e.g. Cyprus, Malta, The Netherlands). Areas classified as Intermediate also include residents and businesses located in areas that would be characterised as rural.

Figure 8. Classification of European Union 27 by rural – urban classification typology (using NUTS 2021).



A special Eurobarometer survey of Europeans, Agriculture and the CAP was run in summer 2020 (European Commission, 2020b) the results of which suggested a very strong recognition of the importance of agriculture and rural areas to the future of the EU. Of the responses (total = 27 237), 56% said that, in the EU, agriculture and rural areas are important to its future, and 39% that it was fairly important.

Figure 9. Rating of the current status of rural areas in EU-27 countries (Special Eurobarometer 504, Question 18) (European Commission, 2020b).

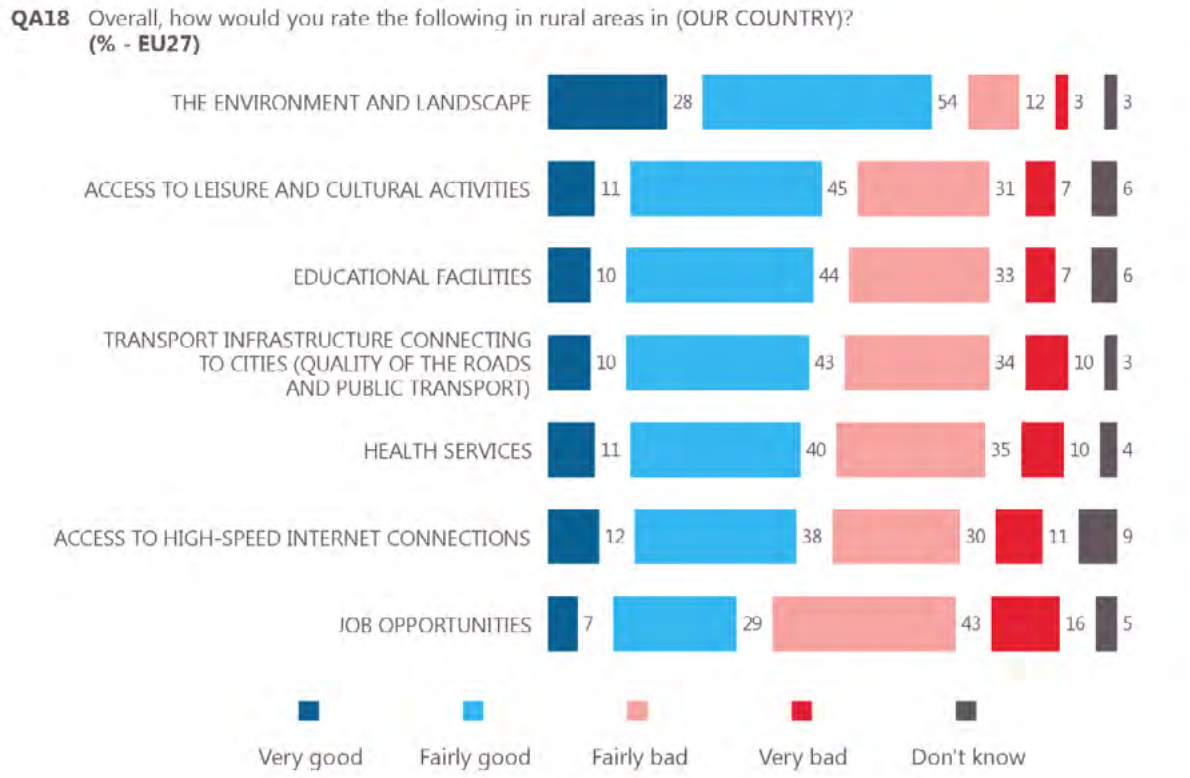
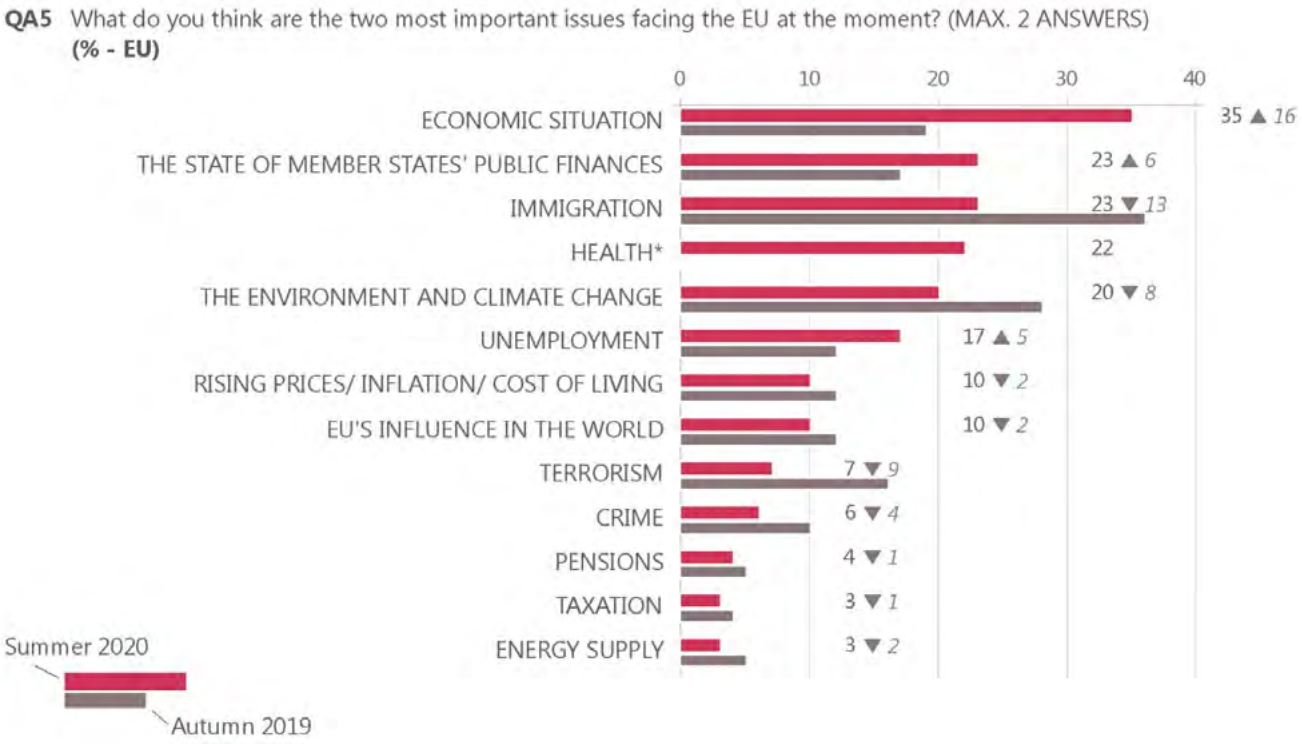


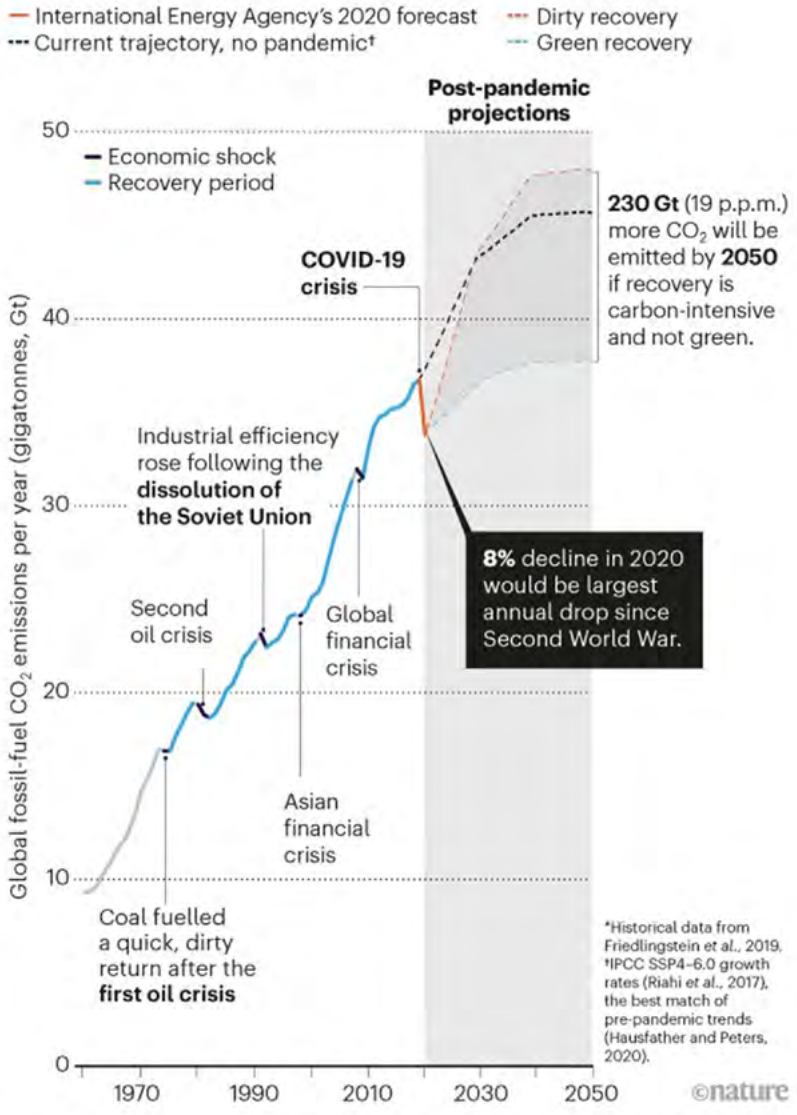
Figure 10. Rating of the most important issues currently facing the EU (European Commission, 2020c).



Rating topics for rural areas of their own country, 82% of respondents (27 237) considered the environment and landscape of rural areas as 'good', and 15% as 'bad', whereas the job opportunities in rural areas were only rated as 'good' by 36% compared with 'bad' by 59% (Figure 9). The Eurobarometer also identified a group of topics relating to rural areas for which ratings imply high levels of dissatisfaction. These topics and their ratings were: Access to leisure and cultural activities (56% good, 38% bad), Educational facilities (54% good, 40% bad), Transport infrastructure (53% good, 44% bad), Health services (51% good, 45% bad) and Access to high speed internet (50% good, 41% bad). One can assume that a vision for rural areas by 2040 would address all these issues.

The consequences of the COVID-19 pandemic are reflected in the findings of the standard Eurobarometer conducted in summer 2020 (Figure 10; European Commission, 2020c), responses in which scored the economic situation as the most important issue (35%), up from 19% (3rd most important) in 2019. By comparison, the topic of environment and climate change reduced from 28% to 20% (5th most important). In 2019, immigration was rated the most important issue (38%), but that dropped to 23% in 2020.

Figure 11. Fossil fuel CO2 emissions, and projects to 2050, annotated by global crises since 1970 (Source: Hanna *et al.*, 2020).



Sources: P. Friedlingstein *et al. Earth Syst. Sci. Data* **11**, 1783–1838 (2019)/K. Riahi *et al. Glob. Environ. Change* **42**, 153–168 (2017)/Z. Hausfather & G. Peters *Nature* **577**, 618–620 (2020). analysis by R. Hanna *et al.*

Social pressures for recovery from COVID-19 have a strong emphasis on addressing the economic circumstances that will have emerged. Account requires to be taken of the options that a recovery can secure over the short and longer terms. There is a history of 'locking-in' fossil fuels to recoveries from economic crises. Analysis by Hepburn *et al.* (2020; Figure 11) shows that a global recovery from COVID-19 which follows a 'historically green or dirty pathway' compared to green pathway 'amounts to a difference of 230 GtCO2 entering the atmosphere by 2050'. They describe such a recovery as creating approximately 'twice the potential impact of the shock alone'. Hepburn *et al.* (2020) argue that there is evidence to show that significant investment in decarbonisation could 'bend down the emissions curve'.

Rural areas have considerable potential to offer in tackling economic challenges, but commensurate with an economy that is less dependent upon carbon. Examples of realising such potential are through suitable land management practices (Smith *et al.*, 2019; H2020 CIRCASA), taking advantage of digitalisation for business and services (Rijswijk, 2020; H2020 DESIRA), generation of renewable energy (Slee, 2020; H2020 SIMRA), and social innovation (e.g. of forests, Nijnik *et al.*, 2019; H2020 SIMRA).

Carbon intensive rural industries (agriculture, mining, energy, water management) are often essential parts of local economies in rural areas, with a low number of alternative employment opportunities. So a pathway to decarbonise the economy by phasing out activities in these sectors would threaten livelihoods of inhabitants of rural areas (OECD, 2019). However, significant scope is offered from business models that deliver in a circular economy, examples of which are being studied in-depth in the H2020 project LIVERUR, in support of businesses and project initiatives in rural areas.

Rural areas have always been the locations of exploiting sources of energy, whether renewable (e.g. hydro-electricity; biofuels), or fossil fuels (e.g. coal). The transition to renewable energy is an example of how rural areas can contribute to delivering ambitious international commitments to tackling climate change, whilst also providing economic and social returns, albeit sometimes with trade-offs (e.g. landscape quality; Roth *et al.* 2018, COST Action RELY). Pathways towards increased generation of renewable energy in Europe provide new opportunities for existing and new businesses (e.g. community enterprises), exploiting a portfolio of technologies in different areas of Europe (Miller, 2018; COST Action RELY). Community involvement in renewable energy development can contribute to achieving those targets and wider social and economic benefits. Hewitt *et al.* (2019; H2020 SIMRA) report on the roles and potential of social innovation to deliver community-led renewable energy developments in rural areas, and Slee (2020; H2020 SIMRA) explains the importance of appropriate institutional arrangements on social, economic and environmental outcomes, including new and diversified sources income for rural communities. The development of community-led renewables also reflects, or can lead to, economic and social benefits of community empowerment.

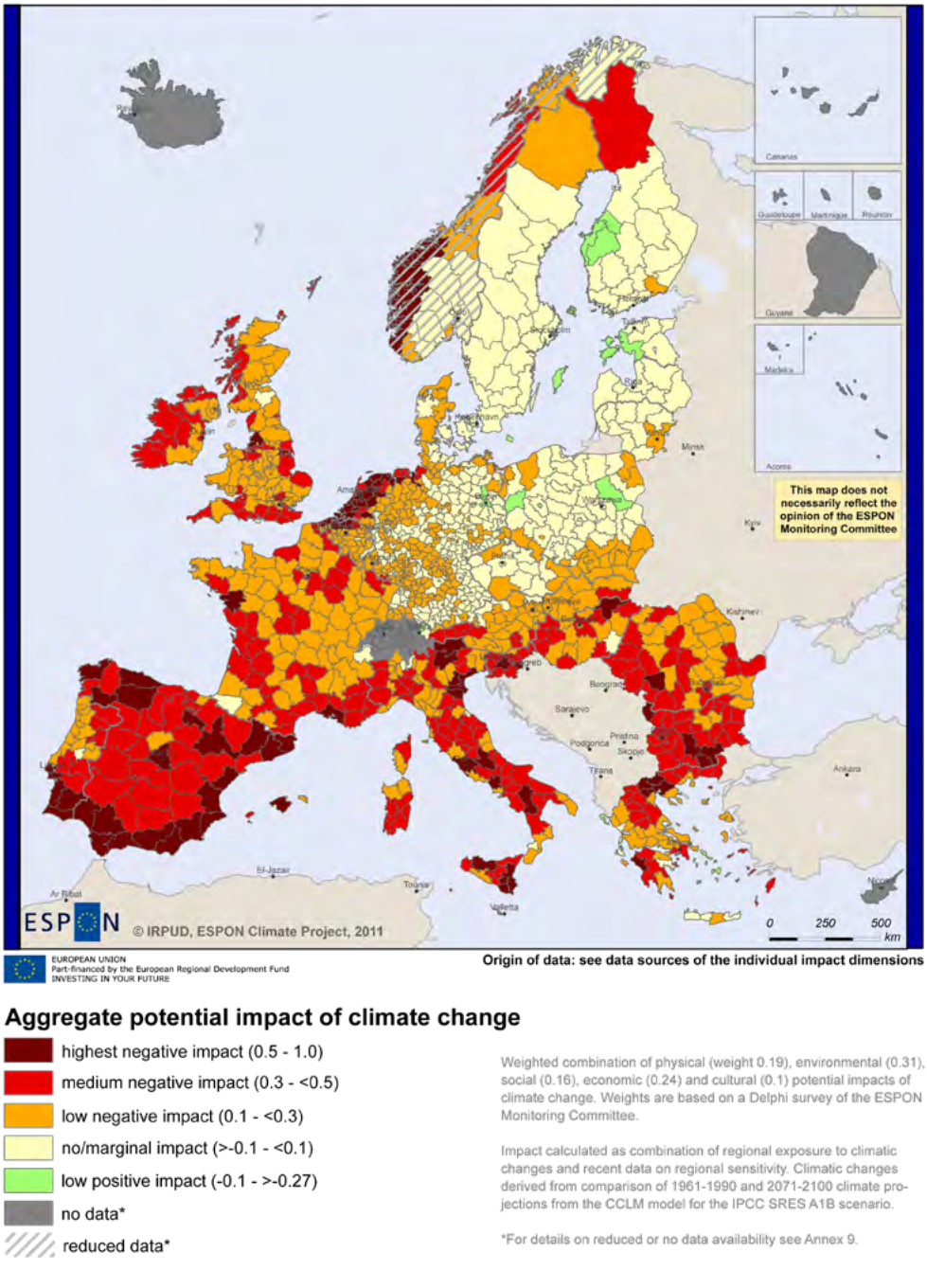
Rural areas in Europe are already experiencing the effects of climate change on the agriculture, forestry, fishing and mining sectors as a consequence of increasing frequency and intensity of extreme weather events (OECD, 2019). Alpine areas and Southern Europe are particularly exposed to soil erosion by water and by climate change impacts (Figure 12; ESPON, 2012). In agriculture, EU Member States with temperate and polar climates are likely to see an increase in yields, whereas those in mid-latitudes would experience the opposite effect (Ferreira, 2019).

Rural areas are also the site of some of the key environmental goods and services that can help mitigate the impacts of, or adapt to, climate change, providing new opportunities for development. As conditions change, so competition for land is likely to arise due to different perspectives and knowledge of what can be undertaken where, and of the types of benefits that may be realised. From a review of 40 practices, Smith *et al.* (2019; H2020 CIRCASA) explain what land management practices can co-deliver food security, climate change mitigation and adaptation, and combat land degradation and desertification, and where competition may arise. Landert *et al.* (2019; H2020 UNISECO), from analysis of 6 case studies across Europe, demonstrate how transitions to agro-ecological farming systems can increase the provision of public goods (e.g. biodiversity, climate stabilisation, soil quality). Such co-benefits from land may require trade-offs, and public support. The Eurobarometer (European Commission, 2020c)

reported 69% of respondents agreeing with the statement 'EU farmers need to change the way they work in order to fight climate change even if that means that EU agriculture will be less competitive'.

Of the total population of the EU-27, 21% live in areas defined as Predominantly Rural, compared to 39% in Intermediate areas and 40% in Predominantly Urban areas (European Commission, 2020a). Population change creates challenges for sustaining services in rural areas. A smaller population of working age reduces the local availability of skills, lowers the tax base, and increases dependency on migration, and the external provision of services and funding (e.g. central government, EU) for local infrastructure and services (OECD, 2019). As implied by findings from the Eurobarometer, access to high speed internet needs to be improved. This would be a key enabler of the greater deployment of digital solutions to the provision of services (e.g. health care, education and training, retail) and businesses (H2020 DESIRA).

Figure 12. Aggregate potential impact of climate change in the EU28.



Ulceluse *et al.* (2018; H2020 IMAJINE) explain the 'nexus between inequality and migration', linking migration between sending and receiving countries to inequalities in wages, opportunities and lifestyles. This is a reminder of the local social and economic infrastructure which requires to be in place to both capitalise on the opportunities and tackle challenges of integration. One example of an approach to the successful integration of immigrants in marginalised rural areas is an initiative of the Norwegian Trekking Associations (DNT) (Gorriz-Mifsud *et al.*, 2020; H2020 SIMRA), contributing to the development of social capital and connectivity with traditional activities of the new home country.

Changing demographic profiles of rural areas also places strains on the provision of public services, (e.g. health and social care for the elderly; childcare for young families). Such pressures can be a trigger for reconfigurations of governance, and social innovations by which the provision of some services is community-led, such as on-farm provision of child-care which is also empowering women farmers (Gramm *et al.*, 2020; H2020 SIMRA).

Figure 13. Change in population living in rural areas at NUTS3 level between 2015 and 2030, as a percentage of the 2015 total (Source: Perpiña Castillo *et al.*, 2018).

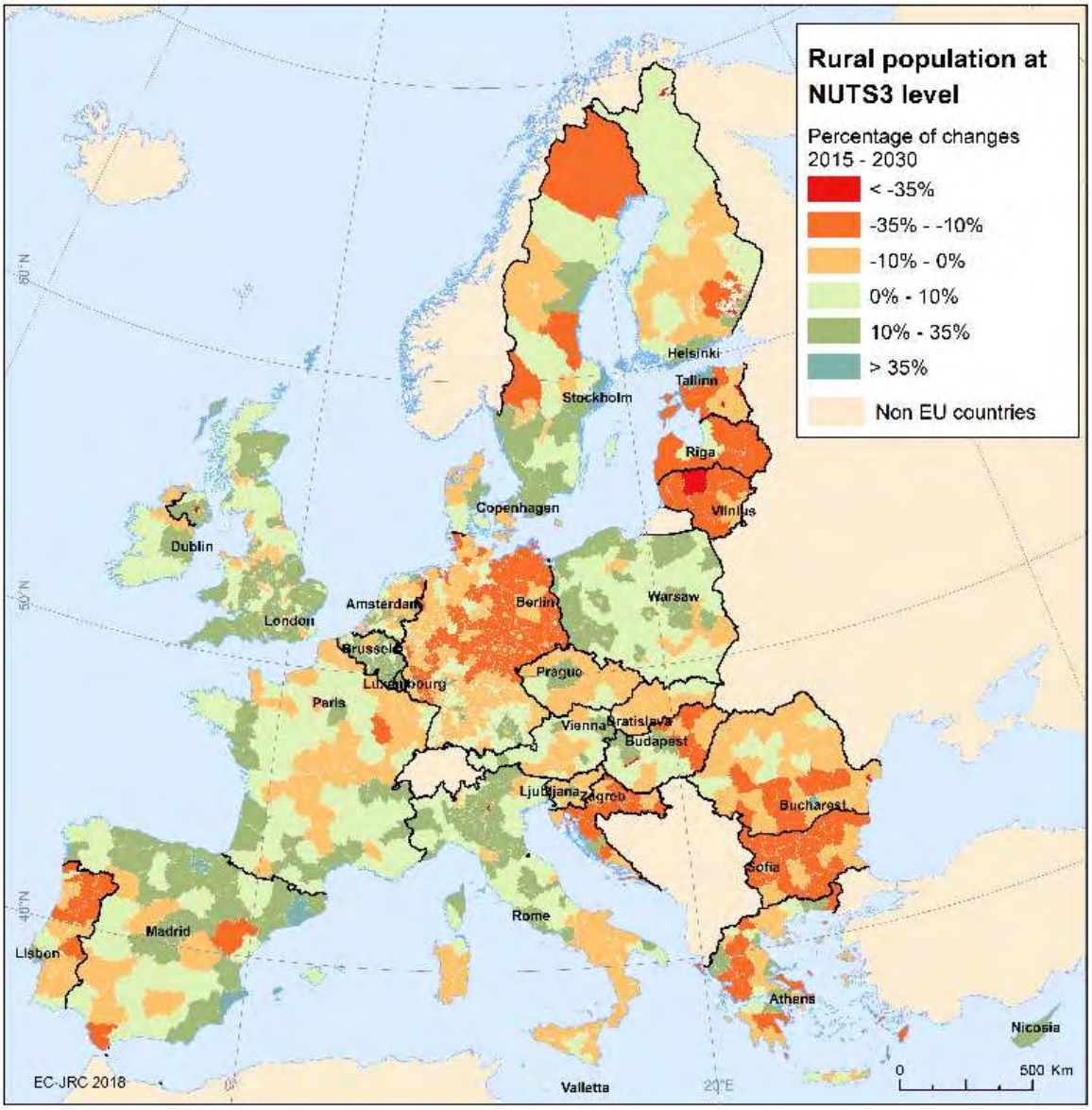
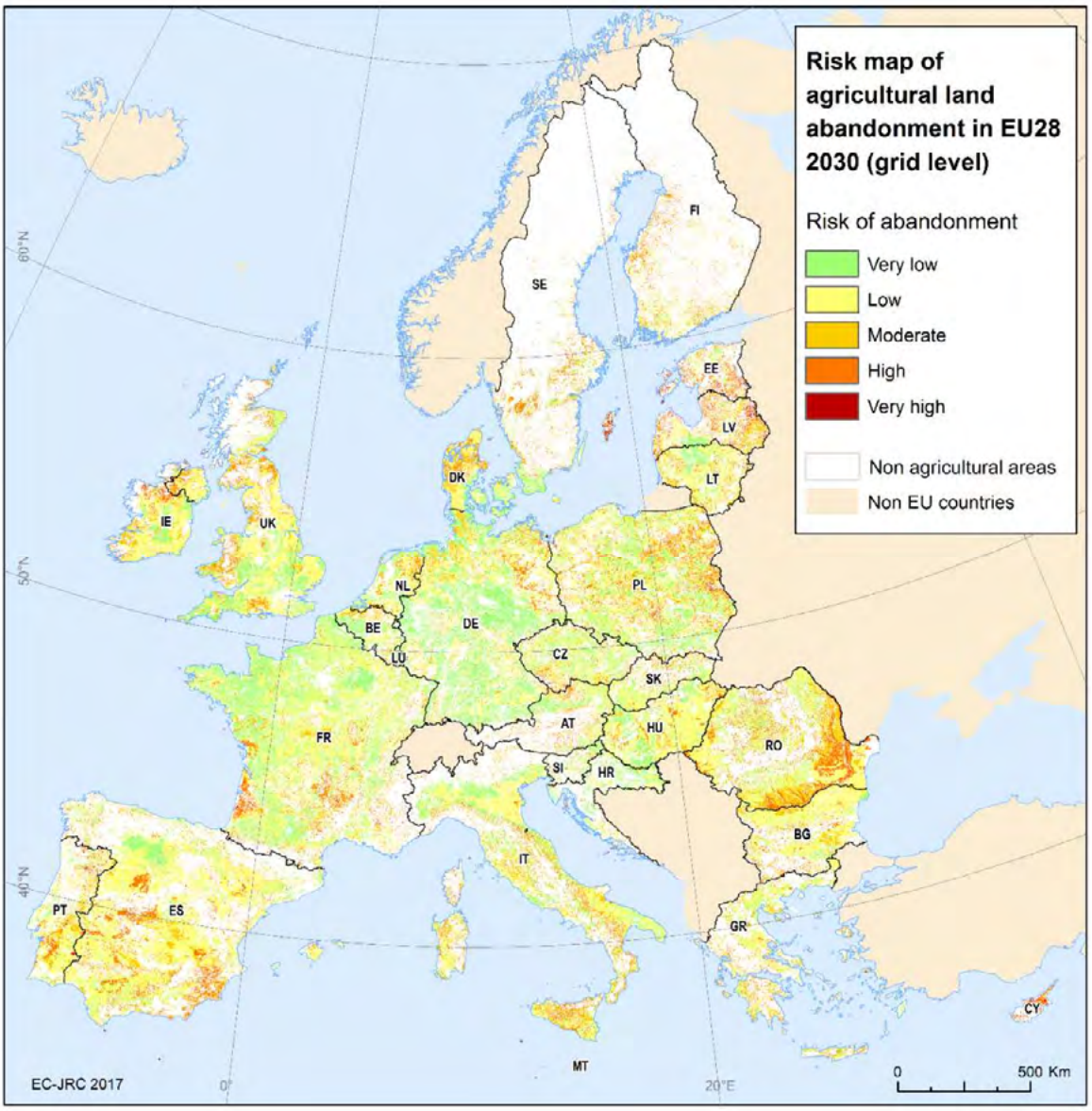
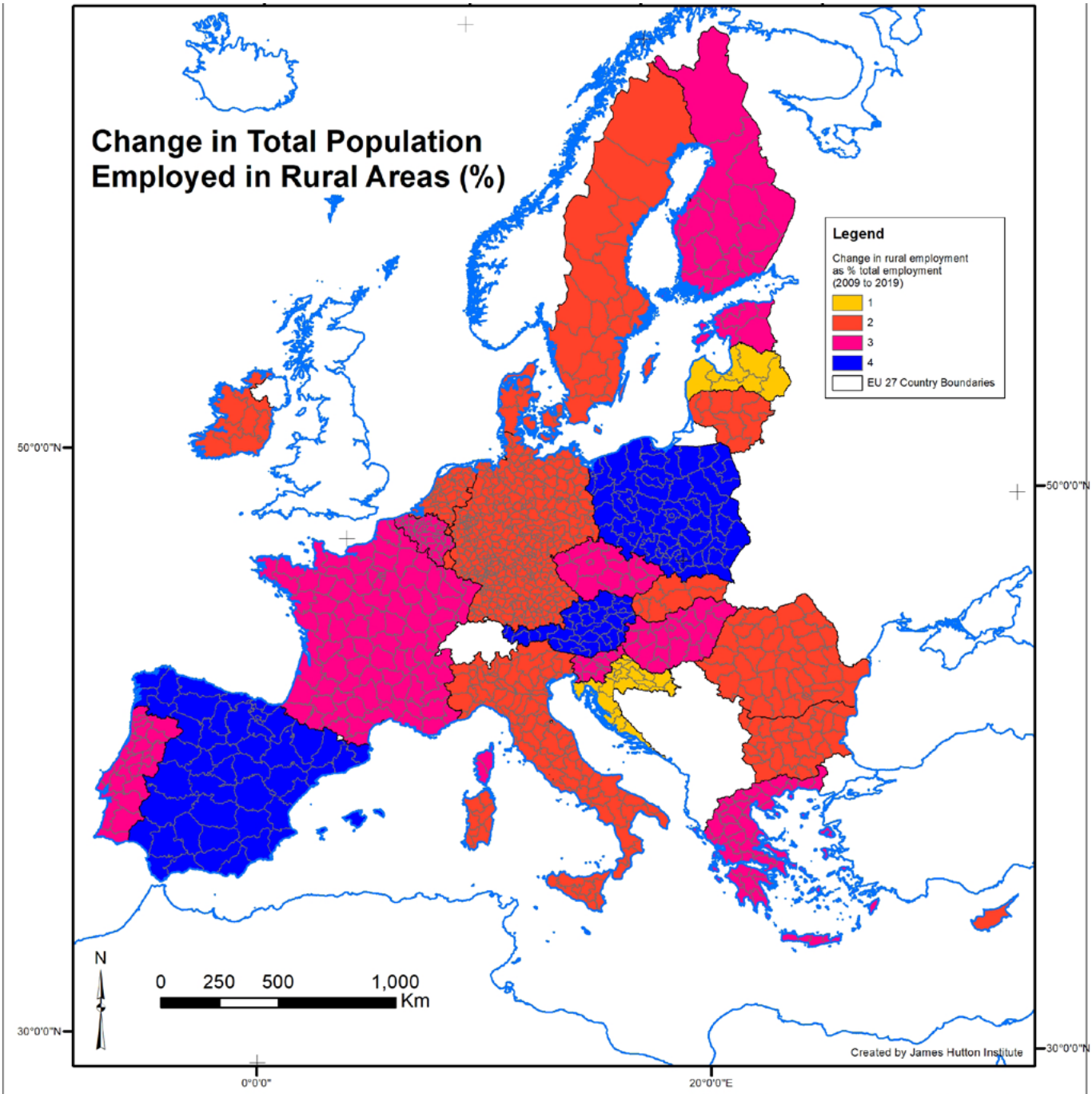


Figure 14. Estimated potential risk of agricultural land abandonment in 2030 at grid level (100 m resolution) in the EU-28 (Source: Perpiña Castillo *et al.*, 2018).



Since the economic crisis of 2008/09, across the EU-27 countries, between 2009 and 2019 there has been an increase in the proportion of total employment (full-time) which is in rural areas of 6.4% (Figure 15). The figure differs between countries, with increases in most countries, greatest in Poland (23.6%) and Austria (17.1%), and small reductions in Latvia (-3.1%) and Croatia (-2.3%) (Figure 15). However, since 2016 there is an indication of a slight reduction in total employment, and of employment in rural areas as a proportion of total population, for the EU-27 (Figure 16). The change in the proportion of employment towards rural areas, combined with the reported increased difficulty in obtaining jobs (Figure 16), could indicate increased migration into rural areas with an associated increase in competition for jobs available jobs. However, no evidence was found to provide a clear explanation.

Figure 15. Change in employment in rural areas as a proportion of total employment for EU-27, by country.



Change in population employed in rural aresa as a percentage of total employment in European Union 27 countries. imeseries 2009 to 2019.S ource of data: Eurostat, Population by sex, age, citizenship, labour status and degree of urbanisation (lfst_r_pgauwsn). Accessed: 8th November 2020

SHERPA has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 862448.
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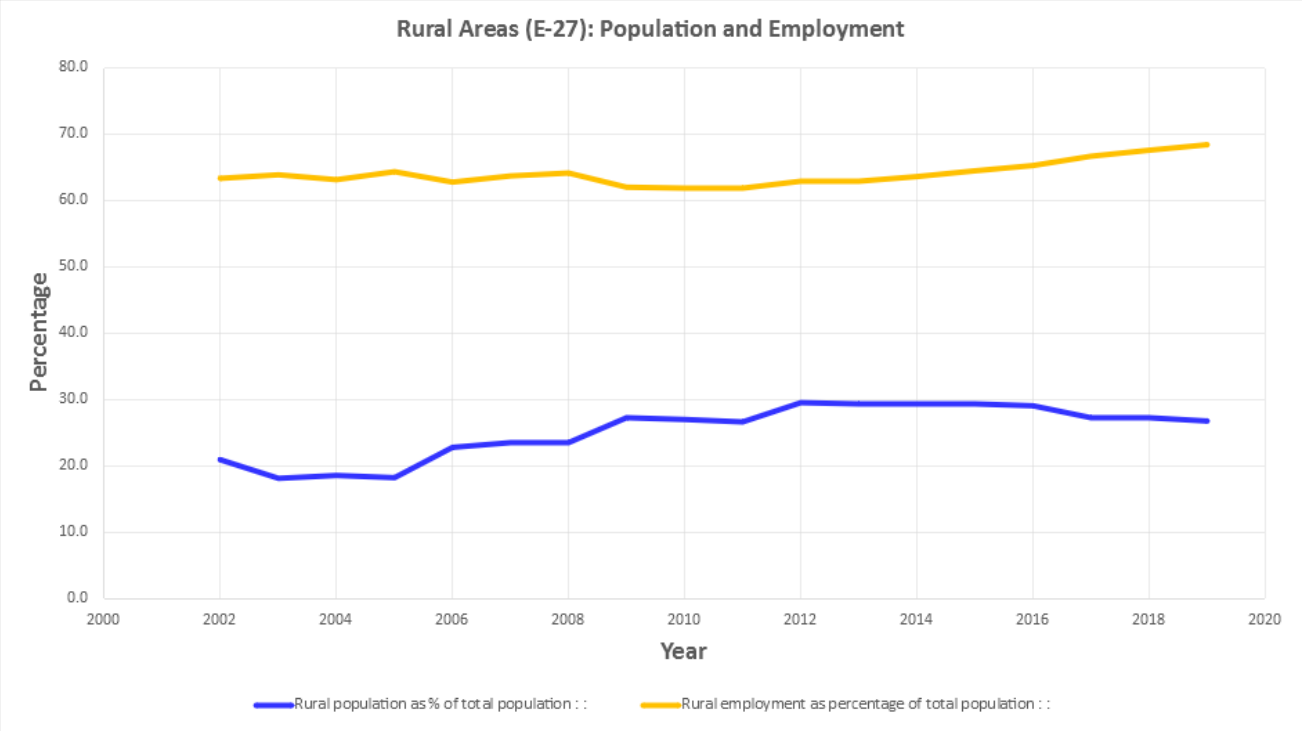
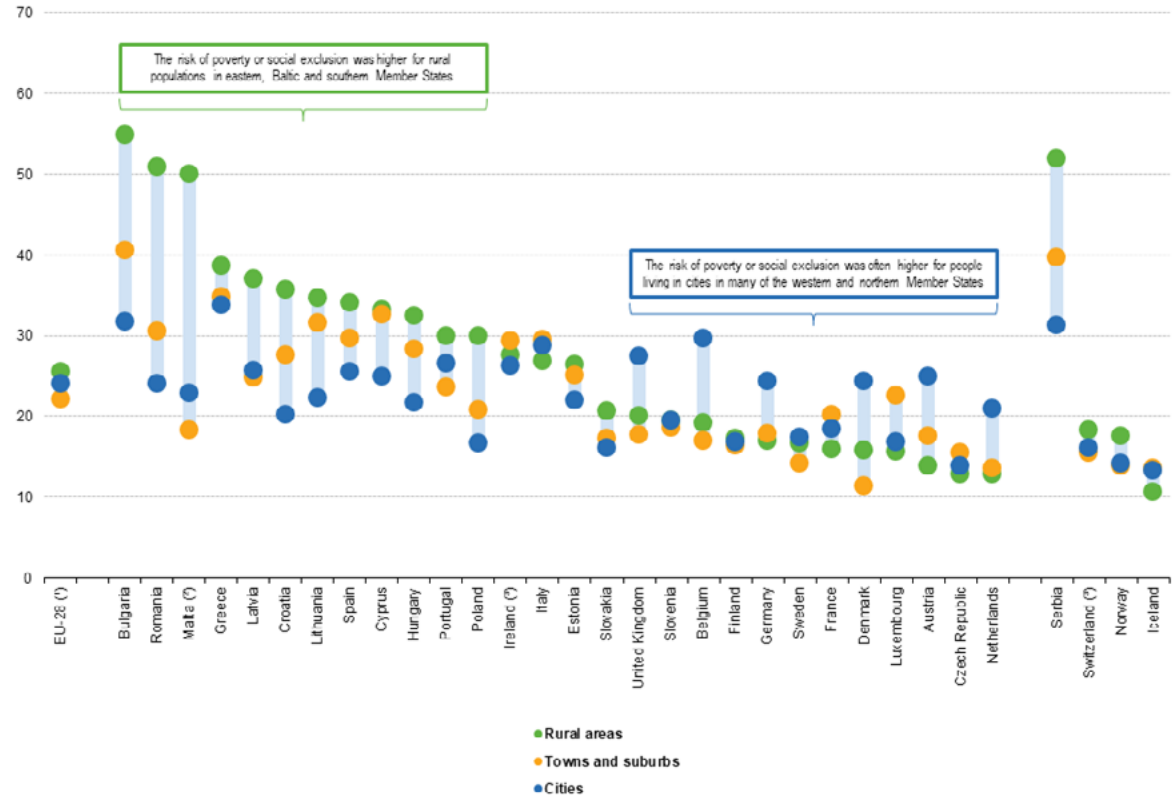
Figure 16. Change in total employment, and employment in rural areas as a proportion of total population, for EU-27, 2009 to 2019.



Growing demands from urban populations for access to nature can contribute to the development of new opportunities in rural areas, such as tourism driven ecosystem services (H2020 RUBIZMO project). Åberg *et al.* (2020; H2020 RURITAGE) describe how cultural heritage can be used as a means of regeneration of rural areas, noting the high significance of intangible heritage (e.g. social practices, arts) as well as tangible (e.g. build and natural heritage features). However, over-reliance on factors such as tourism and innovation can have a negative impact on the resilience of rural areas, whereas the impact of employment in agriculture was positive (Hennebry, 2019; H2020 RURACTION).

One of the indicators used by the European Union in tracking progress towards achieving the UN Sustainable Development Goals 2030, is of the number of people at risk of poverty or social exclusion. This indicator is taken to be the number of people in at least one of the categories of (monetary) poverty, severely materially deprived, or living in a household with very low work intensity. In 2017, in the EU-28, approximately 118.8 million people were in one of the three categories, and 9.2 million people in all three. Analysis of the risk of poverty of social exclusion by rural-urban classification, by country (in 2017; Figure 17), shows the highest proportions of the population at risk of poverty or social exclusion is, broadly, south eastern and southern Europe (e.g. Bulgaria, Romania, Greece, Croatia, Serbia and Malta), and the Baltic States (Latvia, Lithuania). The countries with the lowest proportions of the population at risk of poverty or social exclusion are in northern or north-western Europe where this risk if lower in rural areas than for the populations in urban and intermediate areas (e.g. UK, Germany, The Netherlands, Denmark, Belgium).

Figure 17. Share of people at risk of poverty or social exclusion, classified by rural-urban typology 2015 (%) (Source: Eurostat, 2018).



Note: ranked on rural areas.
(1) Rural areas: estimate.
(2) Rural areas: low reliability.
(3) 2014.
Source: Eurostat (online data code: ilc_peps13)

Tackling the problems that can arise for human health and well-being due to poverty and social exclusion poses a challenge for identifying suitable pathways towards a vision for rural areas. However, by successfully addressing that challenge delivers on the EU priorities of an economy that works for people, and supporting the European social market economy so as allowing economies to grow and to reduce poverty and inequality. This Priority is supported by the Principles of the European Pillar of Social Rights, and its elements of equal opportunities and access to the labour market, fair working conditions, and social protection and inclusion.

Empowering communities to tackle challenges facing societies in rural areas can lead to a reconfiguration of social practices, which may be through the adoption of forms of governance which are new to one area, but well tested in others. Examples of such empowerment as part of processes of social innovation show what can be achieved in enhancing societal well-being in relation to combatting climate change, environmental management, and the provision of services (e.g. Slee and Mosdale, 2020; H2020 SIMRA).

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SHERPA receives funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 862448