RECOMMENDATIONS FOR DEVELOPMENT OF FUTURE RURAL POLICIES

FIRST SET OF RECOMMENDATIONS FOR DEVELOPMENT OF FUTURE RURAL POLICIES

Project name	SHERPA: Sustainable Hub to Engage into Rural Policies with Actors
Project ID	862448
H2020 Type of funding scheme	CSA Coordination and Support Action
H2020 Call ID & Topic	RUR-01-2018-2019–D / Rural society-science-policy hub
Website	www.rural-interfaces.eu
Document Type	Deliverable
File Name	First set of recommendations for development of future rural policies
Status	Final
Dissemination level	Public
Authors	Miller, D Chartier, O., Salle, E., Zomer, B., Irvine, K., Schwarz, G.
Work Package Leader	Ecorys
Project Coordinator	Ecorys

Disclaimer: The content of this document does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s).

Table of contents

Acronyms

CLLD	Community-Led Local Development
COP	Convention of the Parties. The 'Parties' are the governments which have signed the UN Framework Convention of Climate Change (UNFCCC)
DG Agri	Directorate General Agriculture and Rural Development
EC	European Commission
EEA	European Environment Agency
EU	European Union
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
LEADER	Liaison Entre Actions de Développement de l'Économie Rurale
LTVRA	Long Term Vision for Rural Areas
MAP	Multi-Actor Platform
RAP	Rural Action Plan
SHERPA	Sustainable Hub to Engage into Rural Policies with Actors
UNFCCC	United Nations Framework Convention on Climate Change

Executive Summary

Recommendations from SHERPA for aims of policy, and key enablers, of a long-term vision for rural areas of Europe by 2040, have emerged from a structured process involving actors from across science, society and policy at EU, national and local levels. The SHERPA Multi-Actor Platforms developed a set of long-term visions for rural areas, at regional and national levels, and from the perspective of the EU level. The output was a high level vision of:

> *Rural areas that are characterised by opportunity, innovation, modernity, liveliness, resilience and equality, operating within sustainable and multi-functional environments.*

Within that overall vision, rural areas 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. 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.*

Three key requirements for realising characteristics of visions for rural areas are:

1. **Characteristic of vision - Enhanced smart rurality and digitalisation.**

Policy aim – Develop instruments that support the creation of jobs, products and services, and new ways of working.
Requirement - To facilitate a step change in capabilities of citizens and communities in rural areas, such that they are able to take full advantage of new and emerging digital technologies and concepts.

2. **Characteristic of vision - Empowered local actors and communities.**

Policy aim - Local actors and communities recognised as being instrumental to the formulation, design and implementation of policies for rural areas.
Requirement – Flexible funding schemes, tailored to the characteristics of different areas, that facilitate community and citizen participation and actions on-the-ground.

3. **Characteristic of vision - Enhanced multi-level and territorial governance.**

Policy aim – Co-constructed, relevant and effective future policies for rural areas.
Requirement – Forums constituted to formulate place-based and territorial approaches to tackling societal challenges and policy themes, with combinations of government across levels (local to European) and representatives of private and third sectors, focused on place-based and territorial approaches.

Analysis of those visions led to the identification of enablers for them to be realised for which policy measures and mechanisms are required: (i) Improving accessibility of infrastructure and basic services; (ii) Enhancing climate change and environmental services, policies and practices; (iii) Improving land use planning; (iv) Enhancing smart ruralities and digitalisation; (v) Empowering local actors and communities; (vi) Enhancing multi-level and territorial governance; (vii) Improving funding; (viii) Creating positive images and narratives; (ix) Improved availability and use of data and knowledge; (x) Shifting production and diversification of the rural economy; (xi) Boosting bio- and circular economies; (xii) Enhancing and developing policies and tools for attractiveness, quality of life and wellbeing; (xiii) Placing young people centre stage.

A key enabler of the vision overall is the creation, sharing and recognition, of positive images and narratives of rural areas. The impact sought is realisation across society as a whole of the attractiveness of rural areas as places for people to live, work and relax, where leading roles are taken in creating just and democratic green transitions (e.g. Denmark MAP), with stable social structures, and cultural and natural heritages that benefit everyone (e.g. Schleswig-Holstein MAP, Germany).

1. Introduction

1.1. Background

The aim of this Deliverable is to summarise mechanisms by which SHERPA contributed recommendations for European Union (EU) policies, specifically on the EU Long-Term Vision for Rural Areas (LTVRA) and associated actions. The focus on this policy area was agreed with the EU, reflecting its relevance to the remit of SHERPA, and the timeliness of the evolution of the policy in relation to the operationalising of the SHERPA processes. A copy of the SHERPA Position paper on this topic is provided as an Annex to this Deliverable.

The structures of SHERPA (i.e. Multi-Actor Platforms (MAPs) at EU and national or regional levels), and its programme of work, have been designed to engage with EU and national level representatives from policy teams, and organisations which inform policy development. The SHERPA approach of co-constructing Position Papers on themes relating to contemporary policy relevance, coupled with its engagement strategy, provides a two-way sharing of ideas and new knowledge, and body of information for consideration by policy teams at relevant levels of responsibility.

Based upon a review of the LTVRA and its documentation, a summary is provided of the topics to which recommendations from the SHERPA MAPs relate, or can be taken up in the Rural Action Plan, and contribute to debate about the contents of the Rural Pact. The work on the LTVRA is augmented by those areas that link to biodiversity and landscape features from the concomitant work of SHERPA (Mottershead *et al.,* 2021).

1.2. Long Term Vision for Rural Areas

In September 2019, the European Commission, aware of the challenges and opportunities faced by rural areas, announced the preparation of a Communication on a LTVRA (European Commission, 2021a). The Vision comes under the Commission's priority of 'A new push for European democracy'.

The LTVRA is coordinated by the Vice-President for Democracy and Demography Dubravka Šuica in close collaboration with the Commissioner for Agriculture Janusz Wojciechowski, and the Commissioner for Cohesion and Reforms Elisa Ferreira. The aim of the Vision is to put a spotlight on the specific needs of rural areas, and to encourage a debate on their future and the roles they have to play in European society (e.g. the provision of food, the protection of essential ecosystem services).

It has a goal to develop, via a collaborative and innovative process, a wide-ranging European vision for stronger, connected, resilient, and prosperous rural areas, as well as a comprehensive rural action plan that will actively help rural communities and businesses to reach their full potential by 2040. The collaborative and innovative process included opportunities for stakeholders, such as SHERPA, to contribute to the topic through, for example, the provision of feedback on the Roadmap on the LTVRA and the Open Public Consultation on the LTVRA.

1.3. SHERPA Process

The principal contributions from SHERPA were from the actors in the project's science-society-policy Multi-Actor Platforms (MAPs). These are the 20 Multi-Actor Platforms established in SHERPA which provide forums for the co-construction of ideas and recommendations on policy and research from a diverse base of stakeholders from science, society, and policy.

1.   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.

2.   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.

3.   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.

The MAPs collected and organised the views of their member stakeholders from which they developed visions and desired futures for 2040 for their rural areas. The MAPs focused on identifying local challenges, opportunities and create their vision for the development of their territory through to 2040.

The approach was to use desk research and quantitative data (e.g. development indicators, demography etc.), interviews with key informants, and the design, implementation, and analysis of online surveys (with more than 1,100 respondents across Europe). This process resulted in 17 MAP Discussion Papers and 18 MAP Position Papers, which contained the challenges and opportunities identified by the MAPs for the next 20 years in rural areas, as well as the visions for rural areas by 2040, and enablers necessary to achieve the desired future by 2040 for the MAP's rural areas. The MAP Position Papers were summarised and discussed in the SHERPA EU-level MAP, and synthesised into the SHERPA Position Paper (Chartier *et al.*, 2021a). The approach taken is summarised in Figure 1.

Figure 1. The Delphi process used by the MAPs in developing recommendations to the Long Term Vision for Rural Areas

A SHERPA Discussion Paper on the LTVRA was prepared (Feret *et al.*, 2020), the content of which was used as an input to the first step of the Delphi process by the MAPs. The SHERPA Discussion Paper provided a summary of identified key trends, and major opportunities, and challenges in European rural areas as published in technical publications and outputs from research projects. It focused on seven different topics of relevance to rural areas: demographic shift regarding depopulation, ageing and urbanisation, climate change and environmental services, change in production and diversification of the rural economy, infrastructure and basic services, the rise of digitalisation and smart ruralities, inequalities and well-being in rural areas, and land-use change and competition.

The SHERPA Discussion Paper (Feret *et al.*, 2020) was finalised and published in May 2020 and shared with the SHERPA MAPs. This was submitted to the Roadmap on LTVRA feedback session in early September 2020.

After completion of the first three steps of the Delphi process, the information was used by the MAPs in drafting Discussion Papers relevant to their areas and remits. Each MAP Discussion Paper contained a review of key trends found in the relevant MAP territory (or chosen thematic area), a review of main challenges and opportunities, a summary of existing foresight(s), and the results of the interviews with MAP participants, which focused on the desired future of the MAP territory (or chosen thematic area) in 2040, and the challenges and opportunities that they would face.

The contents of the MAP Discussion Papers were synthesised and used by the SHERPA partners (MAP Facilitators and Monitors) to provide an initial impression of the situation and visions of the MAPs, and to provide feedback and/or suggestions to the MAPs on how to proceed. The completion of the next three steps of the Delphi process resulted in Position Papers from each MAP. These Papers contained the challenges and opportunities identified by the MAPs for the next 20 years in rural areas, as well as the visions for rural areas by 2040, and enablers necessary to achieve the desired future by 2040 for the MAP's rural areas. The information from the MAP Position Papers was synthesised and used as inputs to meetings of the EU-level MAP. The EU-level MAP provided their feedback on the synthesis and added their perspective from an EU-level.

The combined information from the synthesis of the MAP Position Papers and the information provided by the EU-level MAP was analysed and further synthesised. From this analysis, the SHERPA Position Paper on the Long-Term Vision for the Rural Area was produced. The SHERPA Position Paper (Chartier *et al.*, 2021a) had the aim of contributing to the LTVRA by presenting key issues as identified by the 20 MAPs, as well as the EU-level MAP. The Paper contained the desired visions for 2040, the enabling factors to achieve those visions, the challenges to overcome and the opportunities to be seized as identified by the MAPs.

A Position Paper was also produced on the protection and enhancement of biodiversity through landscape features (Mottershead *et al.*, 2021). The process was similar to that for the LTVRA, followed by 3 MAPs, but with no online surveys carried out.

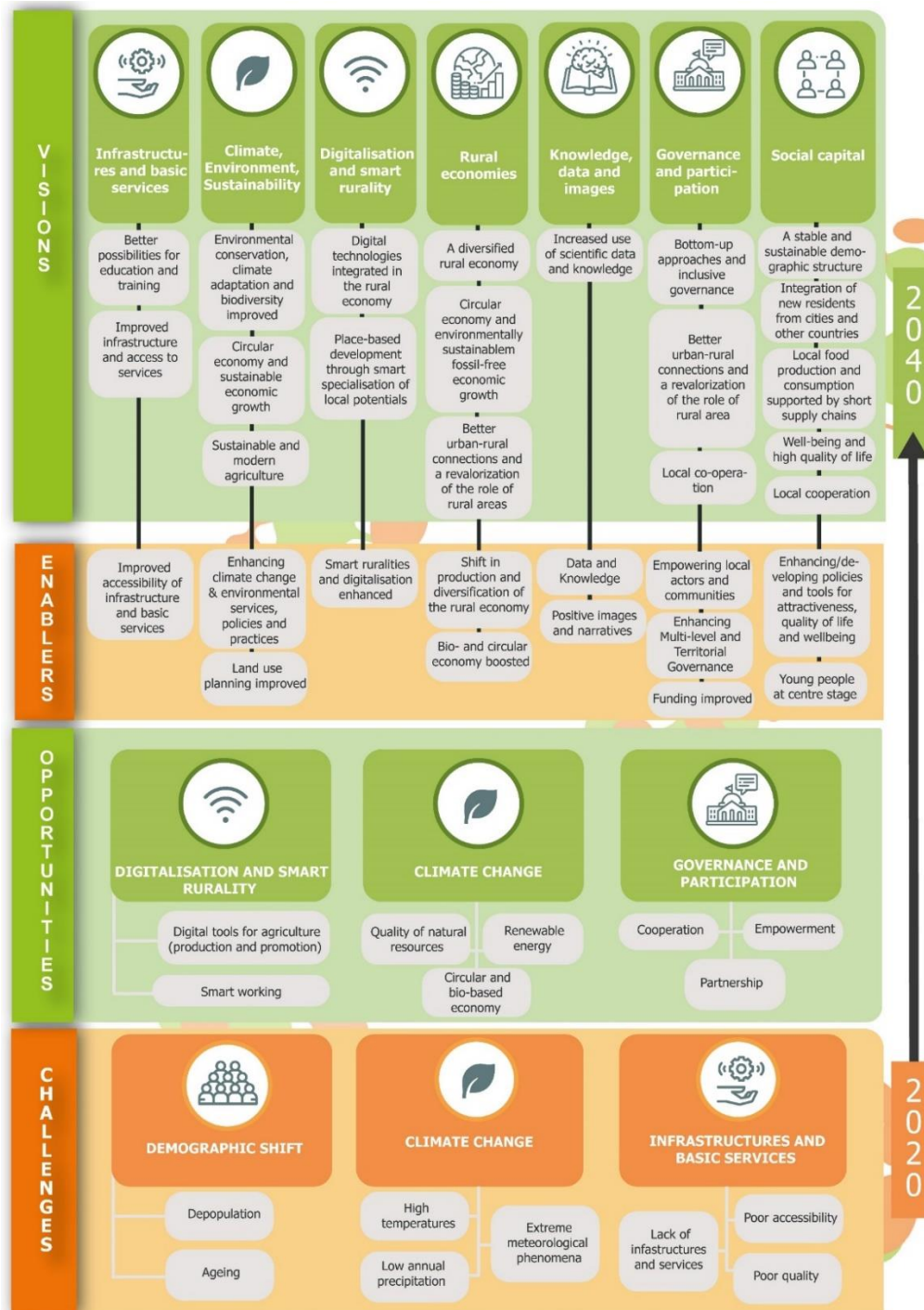## 2. Recommendations for Visions for Rural Areas by 2040

Recommendations for policy at EU, national, and regional levels were presented in the SHERPA Position Paper, published in February 2021 (Chartier *et al.,* 2021a). A key aim was to inform the preparation of the EU Long-Term Vision for Rural Areas. It reflects the synthesised and moderated position of the MAPs in SHERPA, and conveys the senses of spirit and hope for the positive development of rural areas through to 2040 expressed in the MAP Position Papers.

The overarching vision of the MAPs was identified as: "*In 2040, rural areas are attractive places for people to live and settle*". The SHERPA Position Paper (Chartier *et al.,* 2021a) sets out principles and instruments for achieving the overall vision, and how it can be realised at different territorial levels, respecting the diversity of rural Europe (biophysically and socio-economically), and following the principles of equality, innovation and environmental sustainability.

A graphical summary of the recommendations from the SHERPA MAPs is provided in Figure 2. It presents the headline visions (and their characteristics) identified by the 20 regional and national MAPs as well as the EU level MAP, enablers for their realisation, challenges to their realisation, and opportunities to be taken that are associated with the status of rural areas as of 2020/21.

Figure 2. Steps towards vision for rural areas by 2040: main outcomes of the Delphi implemented by the SHERPA MAPs (Chartier *et al.,* 2020a).

The overarching themes identified to make up the visions of the MAPs are basic services and infrastructure, climate, environment and sustainability, smart rurality and digitalisation, governance and participation, knowledge data, and images, rural economies, and social capital (Table 1). The themes identified comprise specific characteristics that are part of the local visions. The three most frequently identified characteristics are improved environmental conservation, climate adaptation and biodiversity, highly integrated digitalisation and digital technologies in rural economy, a diversified rural economy, and a stable and sustainable demographic structure.

Table 1. Shared characteristics of visions for European rural territories.

Overarching Themes of Visions	Characteristics of Themes in Visions for European Rural Areas
Basic services and infrastructure	Better possibilities for education and training
	Improved infrastructure, sustainable, innovative mobility models, and access to services
Climate, environment and sustainability	Environmental conservation, climate adaptation and biodiversity improved
	Agriculture is thriving, modern, and based on sustainable practices such as organic farming
	Circular economy and environmentally sustainable, fossil-free economic growth
Smart rurality and digitalisation	Digitalisation and digital technologies highly integrated in the rural economy
	Place-based development through smart specialisation of local potentials
Governance and participation	Better urban-rural connections and a revalorisation of the role of rural areas
	Bottom-up approaches and inclusive governance
	Local co-operation improved
Knowledge, data and images	Increased use of scientific data and knowledge
Rural economies	A diversified rural economy
	Better urban-rural connections and a revalorisation of the role of rural areas
	Circular economy and environmentally sustainable, fossil-free economic growth
Social capital	A stable and sustainable demographic structure
	Integration of "new rural residents" from cities and other countries
	Local co-operation improved
	Local food production and consumption supported by short supply chains
	Well-being and high quality of life

The SHERPA Position Paper on the vision for rural areas (Chartier *et al.*, 2021a) presents enablers identified by the MAPs as necessary to achieve their visions (Table 2). Many of these enablers are universal in nature, whilst others are context-specific and were considered to be processes or actions that would be necessary for achieving 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.

In total, the MAPs identified 13 enablers that are related to the overarching themes of the vision. The three enablers that were identified by the most MAPS are: enhancing smart rurality and digitalisation, empowering local actors and communities, and enhancing multi-level and territorial governance.

Table 2. Categories of enablers to achieve rural visions.

Overarching themes of visions	Enablers
Basic services and infrastructure	Improving accessibility of infrastructure and basic services
Climate, environment and sustainability	Enhancing climate change and environmental services, policies and practices
	Land use planning improved
Smart rurality and digitalisation	Enhancing smart ruralities and digitalisation
Governance and participation	Empowering local actors and communities
	Enhancing multi-level and territorial governance
	Funding improved
Knowledge, data and images	Positive images and narratives
	Data and knowledge
Rural economies	Shift in production and diversification of the rural economy
	Bio- and circular economy boosted
Social capital	Enhancing and developing policies and tools for attractiveness, quality of life and wellbeing
	Young people at centre stage

The SHERPA Position Paper (Chartier *et al*., 2021a) presents four key messages from the information provided by the MAPs:

1. 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;

2. Long-term visions of rural areas are characterised by opportunity, innovation, modernity, liveliness, resilience and equality, their sustainable and multi-functional environments;

3. There is a need for mechanisms that ensure that rural matters are addressed in a coordinated and coherent manner in all areas of policy;

4. Key enablers to achieve their vision are enhanced multi-level and territorial governance that empowers local actors and communities facilitated through flexible funding schemes that are relevant to the characteristics of different areas.

These messages informed the SHERPA recommendations as requirements for a LTVRA, and identification of research priorities to accompany the implementation of such a vision (Chartier *et al*., 2021b; SHERPA D7.2). The key messages were conveyed in a series of contributions to engagement with the EC and wider stakeholders in the period during which the LTVRA was being developed, through the public consultations and to inform the analytical work (European Commission, 2021b).

3. Contributions to Evolution of the Long-Term Vision for Rural Areas

3.1. Consultations

The portfolio of Discussion and Position Papers developed through the SHERPA process were used to design contributions to the formal steps of the EU in developing the Long-term Vision for Rural Areas. In July 2020, the European Commission published its Roadmap to the LTVRA (European Commission, 2020b). The publication of the Roadmap provided information on the context for the Vision, the problems the initiative aims to tackle, the basis for EU intervention, and what and how the Long-term Vision for Rural Areas aims to achieve results.

The opportunity was taken to contribute a response to the formal consultation on the Roadmap to the LTVRA (which closed on 9th September 2020). Information was synthesised from Discussion Papers of the regional MAPs (e.g. the characteristics of a desirable future for local rural areas), and submitted together with the SHERPA Discussion Paper (Feret *et al.*, 2020).

The high level message submitted from SHERPA was that the LTVRA should 'acknowledge that rural areas can be something else and should be something else than urban areas' and it highlighted various points that the MAPs considered of the utmost importance, such as demographic shifts, climate change, digitisation of services, change the perception of rural areas, the need for policy support to build a sustainable rural future together, and tackling social and geographical inequalities.'

Box 1. Extract from the submission by SHERPA to consultation on the Roadmap LTVRA.

Discussions within the MAPs confirmed the significance of:

1. The predominant trend of demographic shift. Depopulation, especially in intermediate and remote areas, and population ageing, have been identified as the main demographic challenges currently faced by European rural areas;

2. Climate change, through greater frequency of extreme meteorological phenomena such as higher temperatures (leading to drought and forest fires) and lower annual precipitation, which affects activities carried out in rural areas (e.g. agriculture, forestry and fishing);

3. The evolution of the digitisation of services and the use of new technologies, but noting that access to broadband remains uneven across territories.

The full consultation on the LTVRA was published by the European Commission, for responses by 30 November 2020. Submissions were also made to that consultation by partners conveying the headline messages developed by individual MAPs (e.g. Rural Scotland, UK; River Dee Catchment, UK).
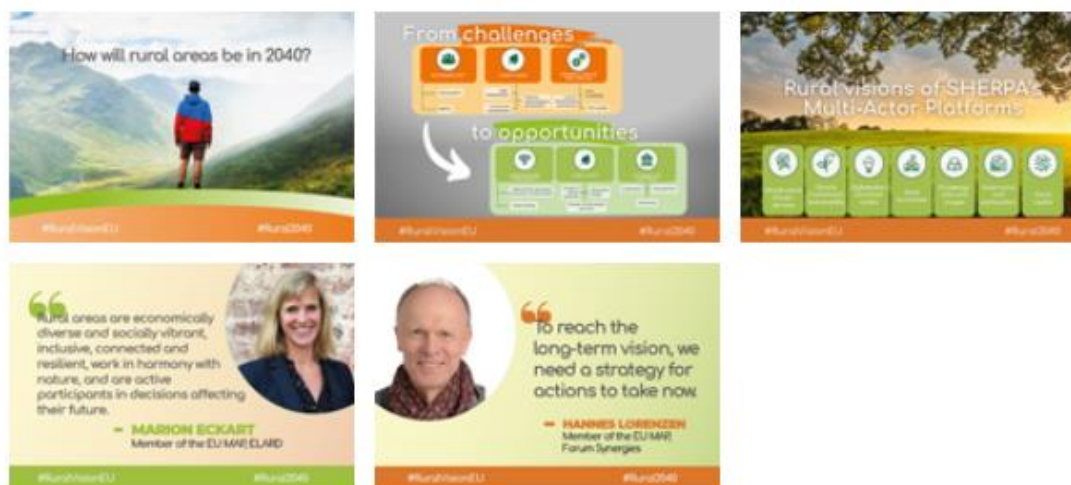
3.2. Rural Vision Week

SHERPA participated in the Rural Vision Week, 'Imaging the future of Europe's rural areas', from 22 March 2021 to 26 March 2021, organised by the European Network for Rural Development (ENRD) Thematic Group on the Long Term Vision for Rural Areas. The Rural Vision Week was designed to share information between stakeholders, contributing to the preparation of the vision.

It comprised presentations from the European Commission, its agencies and stakeholder groups, workshops and 'fringe' events. The 'Our Rural Marketplace' included online 'stands' of a selection of H2020 projects, National Rural Networks, and other initiatives relevant to the aims of the LTVRA. SHERPA (Figure 3) was selected to provide one of the nine stands of H2020 projects.

Figure 3. Presentation of evidence and visions of rural areas in SHERPA Marketstall at Rural Vision Week

The content of the stand was selected to provide means of communicating the findings of SHERPA relevant to the discussion about the LTVRA, comprising: i) a video in which members of the multi-actor platforms summarised the messages of SHERPA in relation to participation in the development of policy; ii) a description of the project; iii) a collection of photographs and videos relating to issues facing rural areas; iv) links to the SHERPA Position Paper on visions for rural areas (Chartier *et al.*, 2021a), SHERPA Conference 2021 Highlights focusing on the visions for rural areas, the SHERPA overview of a sample of existing foresight and scenario studies carried out at EU and global levels, the deliverable on Methods for Setting-Up MAPs (Slätmo *et al.*, 2021; D5.1); and v) relevant weblinks (e.g. to the SHERPA website).

SHERPA was also invited to contribute to one of the series of workshops, the topic of which was 'People, policy, practice – proofing and implementing a new rural reality' (24 March 2021). The Workshop focused on effective means to improve the design of rural policies and consisted of an Introduction, four parallel break-out sessions and a feedback session for wrapping-up the workshop. SHERPA contributed an 'elevator speech' in the break-out session focusing on 'rural intelligence', and in the debate that followed. The elevator speech of SHERPA focused on two key issues: 'rural intelligence is not only about data, it is also about people'; and that 'data should be available at the level of rural communities'.

The Project Coordinator and Project Manager attended as 'SHERPA Ambassadors', as per the requirements of the Marketplace, available at set times| for one-to-one meetings to discuss the content and relevance of project findings to the remit and planned approach of the Vision.

3.3. Third Annual Deliberative Democracy Festival

The EC placed significant importance on mechanisms that enabled a breadth of inputs from public and stakeholders to the types of issues which should be addressed in the LTVRA. To facilitate those inputs, a stakeholder engagement toolkit, with guidance on its operation, was developed by DG AGRI. Amongst mechanisms used for its promotion was a dedicated session at the 3rd Citizen Engagement and Deliberative Democracy Festival: "Welcome to our rural! Citizen engagement in developing a long term vision for rural areas", presented by Ms Peppiette, DG AGRI (10 December 2020).

A video of key messages (Figure 4) relating to futures for rural areas, from members of the SHERPA EU and regional level MAPs, was selected for supporting the session of DG AGRI. This provided one set of examples of the value and outcomes of bringing together multiple perspectives through participatory research to the process of developing public policy in general. The video materials have also been deployed in presentations to policy teams at national and regional levels to share insights to one approach being taken by the European Commission, and the specific contributions to developing the LTVRA.

Figure 4a. Testimony of role of participatory research; Hannes Lorenzen, Forum Synergies

Figure 4b. Testimony of role of the Multi-Actor Approach; Alexia Rouby, EC DG Agri, member of EU-level Multi-Actor Platform

4. EU Long Term Vision for Rural Areas to 2040

4.1. European Union Communication on the LTVRA

The Communication on the Long-Term Vision for Rural Areas up to 2040 was published by the European Commission on 30 June 2021 (European Commission, 2021a). It was based on foresight exercises, background research and analysis of data relating to rural areas, and consultations with citizens and other rural actors. It recognises the challenges and concerns (e.g. shrinking and aging population, lack of connectivity, absence of diverse employment opportunities) of rural areas, and aims to address these by using the most promising opportunities in rural areas (e.g. the EU's green and digital transitions, lessons learnt from the COVID 19 pandemic, potential for economic growth). The Vision proposed a **Rural Pact** and a **Rural Action Plan** which are to be key elements of making rural areas stronger, connected, resilient and prosperous:

- **Rural Pact:** The Pact aims to engage actors from multiple governance levels to support the goals of the Vision, facilitate cohesion in the area of the economy, society, and territory, and participate in the common aspirations of rural communities. The process for the Rural Pact was launched on 20th December 2021, after which there has been an invitation for submission of ideas, to which SHEPRA MAPs have contributed from their Position Papers. Such contributions form inputs to a Rural Pact Conference which is scheduled for June 2022.

- **Rural Action Plan:** The Action Plan, set out with the LTVRA, aims to stimulate sustainable, cohesive and integrated rural development via various EU policies (e.g. the Common Agricultural Policy and the Cohesion Policy) that will jointly support turning the Vision into a reality.

The Vision highlights four specific themes under which action will be taken, supported by flagship initiatives:

- **Stronger:** Rural areas should be home to empowered and vibrant local communities, involving a broad range of stakeholders and networks as well as all levels of governance, is key to developing tailor-made, place-based and integrated policy solutions and investments;

- **Connected:** Maintaining or improving public transport services and connections, as well as deepening digital infrastructures, are essential to ensure better-connected EU rural areas;

- **Resilient**: Preserving natural resources, restoration of landscapes (including cultural), greening of farming activities and shortening supply chains to make rural areas more resilient to climate change, natural hazards and economic crises;

- **Prosperous:** Diversifying economic activities to new sectors with positive effects on employment, and improving the value added of farming and agri-food activities.

Broadly, the themes under which actions will be designed and taken are consistent with the visions of the SHERPA MAPs, of rural areas characterised by opportunity, innovation, modernity, liveliness, resilience and equality, providing sustainable and multi-functional environments. Such consistency suggests that, collectively, the evidence garnered and communicated by the SHERPA MAPs has been in line with the wider evidence gathered in developing the LTVRA.

4.2. SHERPA MAPs Recommended Research Agendas

Achieving the policy aims of the LTVRA, and associated initiatives, will require gaps in knowledge to be filled. The SHERPA process identified 7 thematic areas as most important for the future of rural areas. For visions of the SHERPA MAPs is presented for each thematic area, and the enablers for achieving the associated visions. Achieving the visions in each thematic area led to the identification of requirements for further research and evidence, grouped under eight headings:

- Planning coherent, equitable, multi-functional land uses;

- Creating conditions and facilitating the generation of wealth by rural communities;
- Well-being economies of rural areas;
- Relationships between changes in consumer behaviours towards foods and diets and characteristics of rural areas;
- Supporting the sustainability of digitalisation;
- Systems approaches to Integrated Pest Management with Land Management;
- One Health approach to developing strategies for antimicrobial stewardship;
- Observation, monitoring and reporting.

These research requirements are set out in more detail in the SHERPA recommendations for future research agendas (Chartier *et al.*, 2021b). They reflect topics and weaknesses in the current evidence base for which new knowledge is expected to be required for delivery to the Rural Action Plan of the LTVRA, and are in line with strategic research needs identified by the EU in the orientations of the Horizon Europe programme (European Commission, 2021a), candidate topics of the European Partnerships (DG Research and Innovation, 2020), and prospective recommendations for research of Horizon Europe Missions (European Commission, 2021a).

Some of the research gaps are recognised in the LTVRA documentation, such as the initiative of Research and Innovation for rural communities, which are also supported by research in Horizon Europe, including innovations by local communities. Other LTVRA initiatives would benefit from new knowledge generated as outputs from these areas of research, such as the Rural Action Plan proposal to *Develop a study on land use linked to sustainable farming*, to which the identified research agenda of *Planning coherent, equitable, multi-functional land uses* would have direct relevance.

A mapping of the research agendas onto the action areas of the EU Long Term Vision for Rural Areas (European Commission, 2021b) is reproduced below (Table 3), from Chartier *et al.* (2021b).

Table 3. Mapping topics of SHERPA research agenda onto the action areas of the EU Long Term Vision for Rural Areas (European Commission, 2021b).

Rural Action Plan – Areas of Action				
Research Topics	**Stronger rural areas**	**Connected rural areas**	**More resilient rural areas that foster well-being**	**Prosperous rural areas**
Planning coherent, equitable, multi-functional land uses	X	X	X	X
Creating conditions and facilitating the generation of wealth by rural communities	X		X	X
Well-being economies of rural areas	X		X	
Relationships between changes in consumer behaviours towards foods and diets and characteristics of rural areas		X	X	X

Supporting the sustainability of digitalisation	X	X	X	X
Systems approaches to Integrated Pest Management with Land Management			X	X
One Health approach to developing strategies for antimicrobial stewardship			X	X
Observation, monitoring and reporting	X	X	X	X

Research outputs from these topics would contribute across the four Areas of Action of the Rural Action Plan. Implemented as Innovation Actions or equivalent would help facilitate delivery on-the-ground, albeit small in number, but enabling development of exemplars of actions (e.g. Start up Village Forum, described as contributing to boosting research and innovation in rural communities and helping to build a more innovative entrepreneurship to attract young and talented people).

4.3. Alignment of SHERPA Recommendations and LTVRA

4.3.1. Research Evidence Informing the LTVRA Working Documents

The Communication was accompanied by Staff Working Documents (e.g. European Commission, 2021c) which set out relevant policies that invest in and support activities in rural areas (e.g. Common Agricultural Policy, Regional, Cohesion and Social policies), and those that have remits that intersect rural areas (e.g. energy, transport, connectivity, employment, environment and climate). New public policies adopted or progressed in the development and implementation of the LTVRA are those under employment, social affairs and inclusion (e.g. European Pillar of Social Rights), and delivery to the Green Deal (e.g. Farm to Fork Strategy, and Biodiversity Strategy for 2030).
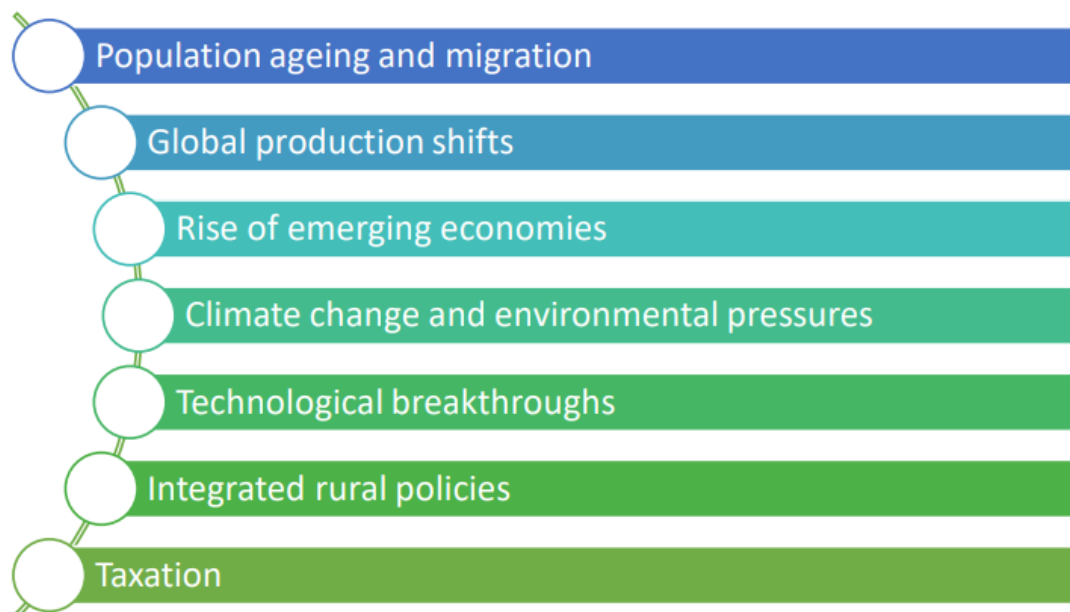
The evidence base for the LTVRA draws on findings and recommendations of several research and innovation projects funded under the Horizon 2020 Programme. The domains and focus of these projects are noted as informing on topics such as generational renewal in rural areas (RURALIZATION and POLIRURAL), long term socio-economic impacts of digital transformations (DESIRA), cultural heritage (RURITAGE), land-sea interactions (COASTAL), small farms (SALSA), spatial justice (IMAJINE).

SHERPA is noted as providing findings of relevance that include '*an overview of previous foresight analyses, a discussion paper summarising trends and a position paper synthesising the work of 21 multi-actor platforms (MAPs) in 20 countries.*' The Staff Working Documents draws on both the SHERPA Discussion Paper (Feret et al., 2020) and Position Paper (Chartier et al., 2021a) on the Long-Term Vision for Rural Areas, and the SHERPA working document on the overview of existing foresight and scenario studies carried out at EU and global levels. For example, it cites the most important trends for rural areas as identified by Brunori et al., (2020), summarised in Féret et al. (2020) (Figure 5).

Figure 5. Most important trends for rural areas, European Commission (2021c; Figure 11) citing SHERPA reporting by Brunori *et al.*, (2020) and Féret *et al.* (2020).

Source: Sherpa

The characteristics of rural areas in the desired visions for 2040, derived from evidence from SHERPA MAPs, are set out in Chartier *et al.* (2021a), together with the enablers of achieving those visions, and opportunities and challenges for their realisation. The European Commission (2021c; page 185) draws on elements of the SHERPA reporting, in particular noting:

1. Characteristics of a desirable future for rural areas by 2040 comprise:
   - Rural areas are digitalised and smart;
   - Rural economies are diverse, well-connected, valued and circular;
   - Climate, environment and biodiversity are nurtured;
   - Rural communities are well-connected through improved infrastructure and services;
   - Social capital is strong through stable demographic structures;
   - People are involved in the governance of their territory, thanks to inclusive governance, better rural-urban connections and a revalorisation of the role of rural areas;
   - Knowledge and data empower a better understanding and positive image of rural areas.

2. Key enabling factors for realising those desirable characteristics of rural areas are:
   - Empowering local actors and communities (referenced by 18 of 20 MAPs);
   - Enhancing multi-level and territorial governance (18 of 20 MAPs);
   - Enhancing smart ruralities and digitalisation (16 of 20 MAPs);
   - Data and knowledge (12 of 20 MAPs);
   - Shift in production and diversification of the rural economy (11 of 20 MAPs);
   - More accessible infrastructure and basic services (9 of 20 MAPs);
   - Better climate change and environmental services policies and practices (9 of 20 MAPs).

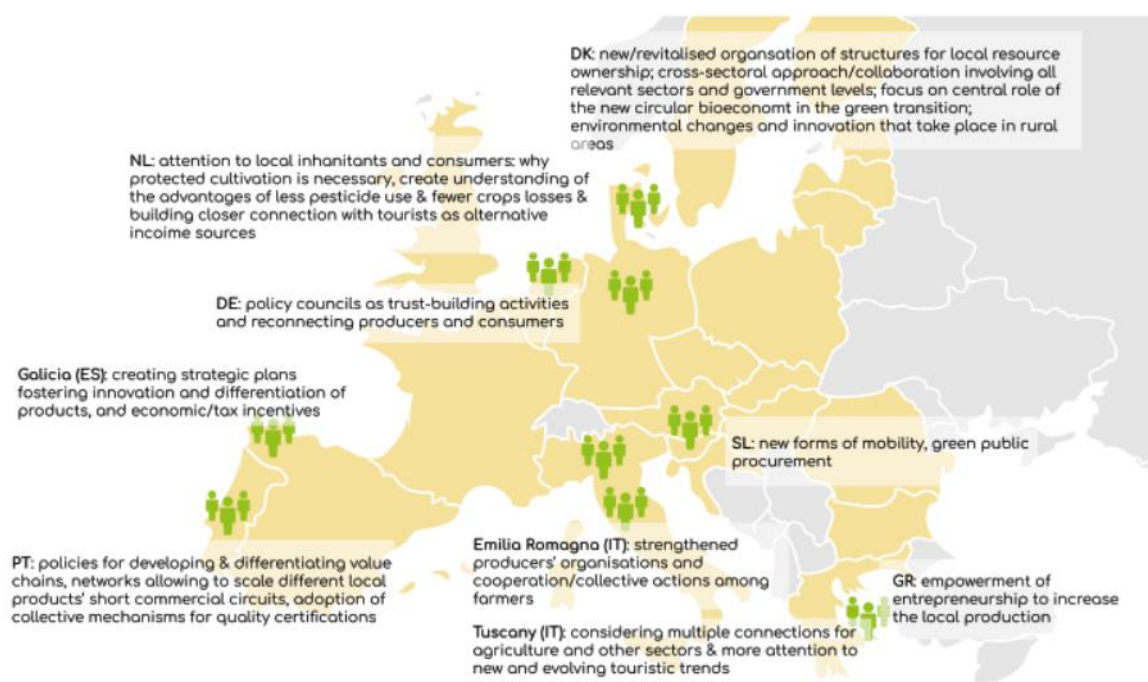3. Inhibiting factors to realising those characteristics include (page 164):

- Lack of access to digital infrastructure for the rural population and actors in the rural economy is a limiting factor to digitalisation in rural areas;

- Lack of access to, and quality, of public and private services are inhibiting factors for rural areas, such as education, healthcare, banking or retail all of which are important socio-economic elements contributing to quality of life.

Together with the research from other EU funded projects, there are clear cross-references between findings from SHERPA provided identifiable inputs to the evidence base for the development of the LTVRA.

4.3.2. Mapping SHERPA Enablers and Characteristics onto LTVRA

The enablers of the characteristics and visions for rural areas form recommendations for action, defined by SHERPA as processes or acts that facilitate the development towards a desired goal. An example of enablers of one characteristic of the desired visions of rural areas, that of a diversified rural economy, is presented in Figure 6, as identified by a sample of the SHERPA MAPs.

Figure 6. Enablers of a diversified rural economy, derived from a sample of the SHERPA MAPs (Chartier *et al.,* 2021a).

To gain an insight to elements of the basis for the LTVRA and its associated initiatives, informed by SHERPA, a comparison was made between the proposed Rural Action Plan (European Commission, 2021d), the EU Communication, and the 9 flagship initiatives and 21 complementing actions, with the enablers and visions expressed in the SHERPA Discussion and Position Papers, synthesised into the SHERPA Position Paper (Annex; Chartier *et al.,* 2021a). The aim was to identify which topics on which the MAPs had recommendations for action were also reflected in the LTVRA Rural Action Plan or other plans, actions which were not highlighted by SHERPA, and any apparent gaps in the Rural Action Plan. Characteristics of SHERPA visions and enablers are mapped onto the individual actions of the Rural Action Plan in Tables 4 to 7, and its implementation (Table 8).

Table 4. Overview of correspondence between the EU Rural Action Plan and the SHERPA Discussion and Position Papers, and recommendations for research agendas: Stronger Rural Areas.

EU Rural Action Plan	Characteristics of Visions	Enablers (E), Opportunities (O), Research (R)
Stronger Rural Areas		
Flagship: Set-up a rural revitalisation platform	• Local cooperation improved	• Empowering local actors and communities (E) • Funding improved (E) • Creating conditions and facilitating the generation of wealth by rural communities (R)
Flagship: Research and innovation for rural communities	• Increased use of scientific data and knowledge	• Data and knowledge (E) • Observation, monitoring and reporting (R)
Enhanced networking for LEADER/CLLD and Smart Villages	• Local cooperation improved • Bottom-up approaches and inclusive governance • Place-based development through smart specialisation of local potentials	• Enhancing smart ruralities and digitalisation (E) • Empowering local actors and communities (E) • Governance and participation (cooperation, empowerment and partnership) (O) • Creating conditions and facilitating the generation of wealth by rural communities (R)
Develop a study on land use linked to sustainable farming	• Agriculture is thriving, modern, and based on sustainable practices such as organic farming • Local food production and consumption supported by short supply chains	• Land use planning improved (E) • Enhancing climate change and environmental services, policies and practices (E) • Planning coherent, equitable, multi-functional land uses (R) • Relationships between changes in consumer behaviours towards foods and diets and characteristics of rural areas (R)
Support education, training, youth, sport and volunteering activities in rural areas	• Better possibilities for education and training	• Young people at centre stage (E)

Recommendations from SHERPA MAPs identified several enablers that deliver to each of the elements of the Rural Action Plan with an intended outcome of stronger rural areas (Table 4).

Key characteristics of the SHERPA visions that lead to stronger rural areas are ones of improved local cooperation, bottom-up approaches and inclusive governance, and place-based development. An overarching enabler for realising those characteristics is that of Empowering local actors and communities, and the creation of structures that enable collaboration (e.g. a need to "... organise ourselves better in the rural areas

and collaborate...", in the creation of procedural and economic support mechanisms; Denmark MAP). Such an enabler requires to be accompanied by research into how to create conditions compatible with the generation of wealth by rural communities. Similarly, the LEADER/CLLD approach should be strengthened, and its roles in rural development increased (e.g. SVARUN MAP, Slovenia). Mechanisms within the Rural Action Plan of a rural revitalisation platform and enhancing the networking within LEADER/CLLD and Smart Villages offer prospects of facilitating important enablers of realising visions of rural areas (e.g. Bulgaria MAP).

Reflected in the visions is the needs for improved pathways to creating impacts from research, including co-construction of solutions to challenges facing rural areas. Those should bring the processes of research and the tailoring of its outputs towards the needs of rural areas (e.g. relating to natural and human resources, and social, technical and product innovation). This is consistent with the aims of destinations in Horizon Europe, two of the five Missions (adaptation to climate change including societal transformation, and Soil Deal for Europe on transition towards healthy soils), and to a lesser extent that of healthy oceans, seas coastal and inland waters. It is also consistent with the characteristics of visions of thriving land based businesses of agriculture, forestry, and including those based on rural waters (e.g. aquaculture and fishing) (e.g. Emilia-Romagna MAP, Italy).

The co-design of research, and cross-linking of findings (e.g. through the flagship of Research and Innovation for rural communities), can stimulate new jobs such as innovation hubs linked to investment in natural capital (e.g. consistent with the green transition), including in the means of monitoring and reporting of responses of environmental characteristics (e.g. outcomes of nature-based solutions) (e.g. Galicia MAP, Spain; Provence Alpes Côte D´Azur Region MAP, France). Over the longer term, support for education and training aids build the capabilities for a skilled population in rural areas (e.g. Denmark MAP), and make rural areas more appealing for professionals to move to rural areas with career prospects for all the family (e.g. Bulgaria MAP; UK MAPs).

A key recommendation is to facilitate ways that improve provision of resources for young people, career pathways, and inclusion in formulating visions and opportunities (e.g. Provence Alpes Côte D´Azur Region MAP, France). As noted by the Suomi MAP, Finland, younger and future generations ...

> "think differently about work, the environment, community, etc., they no longer see these from the perspective of traditional industrial society".

Table 5. Overview of correspondence between the EU Rural Action Plan and the SHERPA Discussion and Position Papers, and recommendations for research agendas: Connected Rural Areas.

EU Rural Action Plan	Characteristics of Visions	Enablers (E), Opportunities (O), Research (R)
Connected Rural Areas		
Flagship: Develop rural mobility through (1) support to rural municipalities in identifying best practices (2) Multimodal digital mobility services	• Improved infrastructure, sustainable, innovative mobility models, and access to services	• Enhancing smart ruralities and digitalisation (E) • Creating conditions and facilitating the generation of wealth by rural communities (R)
Flagship: Rural Digital Futures	• Digitalisation and digital technologies highly integrated in the rural economy	• Enhancing smart ruralities and digitalisation (E) • Funding improved (E)

		• Creating conditions and facilitating the generation of wealth by rural communities (R) • Supporting the sustainability of digitalisation (R)
Support the roll-out of broadband in rural areas	• Digitalisation and digital technologies highly integrated in the rural economy	• Enhancing smart ruralities and digitalisation (E)
Continue promoting the digitalisation of the agricultural sector through capacity building (including in digital skills), research and innovation, and demonstration including in the fields of Internet of Things, robotics and automation, big data management and use	• Digitalisation and digital technologies highly integrated in the rural economy	• Enhancing smart ruralities and digitalisation (E) • Supporting the sustainability of digitalisation (R)
Highlight urban-rural linkages in the new EU Urban Mobility Framework	• Better urban-rural connections and a revalorisation of the role of rural areas	• Enhancing service provision and well-being through improved linkages between rural and urban areas and better delivery of cross-border services (O)
Improve accessibility of rural areas through the Drone Strategy 2.0	• No reference by SHERPA	• Self-driving machinery and the use of drones (O; Netherlands MAP)

For achieving the aims of the LTVRA of connected rural areas (Table 5), rural areas require to be well-connected internally, and between rural and urban areas, and to markets and steps in supply chains further afield. Such connectivity requires to be physical, digital, and social.

A systems perspective on mobility can encourage the generation of different types of renewable energy for use in different aspects of transport operation (e.g. wind energy for generating hydrogen, in turn used as fuel for buses, farm equipment, and private cars). In some rural areas, improving the infrastructure of public transport is critical to their ongoing viability (e.g. marine transport, South Aegean MAP, Greece). Improved connectivity is consistent with aims of improved food and environmental security, shortening supply chains, and co-benefits of promoting territorial foods and healthy diets (e.g. Provence Alpes Côte D´Azur Region MAP, France; Emilia-Romagna MAP, Italy; Lithuania MAP; Rural Transylvania MAP, Romania), and reducing GHGs through sustainable transport (bicycle, electric vehicles; South Aegean MAP, Greece; Denmark MAP), and favouring the development of softer modes of transport and inter-modality (Suomi MAP, Finland). Improved infrastructure in rural areas to enable the uptake and operation of electric vehicles for domestic use also provides opportunities for testing and operationalising autonomous vehicles for commercial uses, particularly for long distance road transport between nodes in supply chains.

High quality, robust, digital infrastructure is increasingly needed as a basic right, as with other utilities (e.g. water, waste, energy), which creates favourable conditions for business development, and more flexible working arrangements (e.g. tele-work) (Schleswig-Holstein MAP, Germany; Rural Transylvania MAP, Romania). The COVID-19 pandemic has triggered, or accelerated, the rate of digitalisation in rural areas, with evidence from the MAPs pointing to examples of new ways of working (e.g. SVARUN MAP, Slovenia) the provision of digital services (e.g. health care; River Dee Catchment and Rural Scotland MAPs, UK), and on-line wholesale and retail operations. To have the greatest impacts the technical developments of digitalisation have to be accompanied by enhancing human capital in the use of data and tools (e.g. development of digital literacy solutions adjusted to territorial circumstances (e.g. Rural Centro MAP, Portugal). Enhanced human capital can also build on technical opportunities for facilitating citizen science, and roles of citizens n environmental observation. This is in line with the expectations of open data and science (e.g. EU Open Science Policy).

Elements of smart ruralities are emerging which needs further supported (financially, skill development), and guided by exemplars of success. Such examples offer the prospects of peer-to-peer learning which has proven successful in the agriculture sector (e.g. H2020 PLAID), and which continue to be relevant in the digitalisation of agricultural practices and farming systems (e.g. AKIS MAP; Hungary), and of sustainable rural development more widely (Rural Transylvania MAP, Romania).

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 two flagship initiatives planned for driving connectivity of rural areas (i.e. developing rural mobility, and rural digital futures) appear to provide contexts for facilitating enablers such as enhancing smart ruralities, and can have participating roles in co-designing research into understanding what is needed to support the sustainability of digitalisation.

Table 6. Overview of correspondence between the EU Rural Action Plan and the SHERPA Discussion and Position Papers, and recommendations for research agendas: Resilient Rural Areas.

EU Rural Action Plan	Characteristics of Visions	Enablers (E), Opportunities (O), Research (R)
Resilient Rural Areas		
Flagship: Support rural municipalities in energy transition and fighting climate change	• Circular economy and environmentally sustainable, fossil-free economic growth	• Bio- and circular economy boosted (E) • Funding improved (E) • Planning coherent, equitable, multi-functional land uses (R) • Empowerment as part of processes of social innovation to enhancing societal well-being (O; River Dee Catchment and Rural Scotland MAPs, UK)
Flagship: Climate action in peatland through carbon farming	• Environmental conservation, climate adaptation and biodiversity improved • Increased use of scientific data and knowledge	• Funding improved (E) • Enhancing climate change and environmental services, policies and practices (E) • Data and knowledge (E) • Planning coherent, equitable, multi-functional land uses (R)
Flagship: Proposed EU Mission on soil health and food	• Local food production and consumption supported by short supply chains	• Shift in production and diversification of the rural economy (E)

Flagship: Social resilience and Women in rural areas	• Well-being and high quality of life • Rural areas as attractive places to live for all generations, for men and women (e.g. Aragón MAP, Spain)	• Increasing the role of rural women by helping them overcome traditional gender roles (O) • Funding improved (E)
Analyse spatial mobility in demographically declining areas in Europe	• A stable and sustainable demographic structure	• No reference by SHERPA
Prepare a study on the working conditions of agricultural seasonal workers	• No reference by SHERPA	• Housing for seasonal labour (O; Netherlands MAP)
Address the inclusion and integration of people with a migrant background in rural areas	• Integration of "new rural residents" from cities and other countries • Migrants will populate rural areas and will be fully integrated into society (Tuscany MAP, Italy)	• Successful integration of immigrants in marginalised rural areas (O; River Dee Catchment and Rural Scotland MAPs, UK) • Recognition of connected socio-cultural diversity (E; Tuscany MAP, Italy)
Ensure equal opportunities to children in rural areas	• Better possibilities for education and training	• Young people at centre stage (E)
Address the needs of people with disabilities in rural areas	• Rural areas characterised by opportunity, innovation, modernity, liveliness, resilience and equality	• Empowerment as part of processes of social innovation to enhancing societal well-being (O; River Dee Catchment and Rural Scotland MAPs, UK)

An aim of the LTVRA of resilient rural areas (Table 6) reflect their exposure to biophysical and socio-economic pressures, and the transitions required to respond to policies relating to climate change, biodiversity, and human rights. Evidence from SHERPA MAPs recognises those pressures, and the difficulties that ensue. However, they also reflect a history of adaptability in response to such pressures, and identification of opportunities.

> *"Rural areas can be part of the solutions for tackling climate change through investment in natural capital (e.g. stewardship of carbon rich soils, peatland, afforestation)"* (River Dee Catchment and Rural Scotland MAPs, UK).

The vision of improved environmental conservation, climate adaptation and biodiversity is also reflected in the SHERPA Position Paper on, rural policies to protect and enhance biodiversity through landscape features (Mottershead *et al.*, 2021). They note that the development of suitable policy interventions is impeded by insufficient monitoring of both the existence of landscape features and the impact on them of current measures. That gap is reflected in the link suggested with the increased use of scientific data and knowledge, and the associated enabler.

Rural areas are at the forefront of tackling challenges created by climate change**.** For example, the increased frequency of extreme meteorological events, such as higher temperatures lead to droughts and wildfires (e.g. Galicia MAP, Spain), and precipitation and snowmelt leading to flood events (e.g. River Dee Catchment

and Rural Scotland MAPs, UK). Consequences include degradation of infrastructure (e.g. transport routes), and prospective loss of business sectors (e.g. horticulture, Netherlands MAP).

The proposed flagships of supporting municipalities with the energy transition and climate change, and that on peatlands and carbon farming provide focus on two key aspects for improving the resilience of rural areas (e.g. the vision of the VENUS MAP, Czechia, of a system of functional advice centres to realise energy savings and increase the share of renewable energy sources in the countryside). Within their remit, they should support the enablers of identifying, understanding and incentivising multi-functional land uses (e.g. nature-based solutions; renewable energy integrated into systems of land management; Mazowieckie MAP, Poland), and the development of human and social capital to plan for and manage disaster responses as well as adapt rural land systems to deliver multiple benefits (e.g. knowledge, leadership skills and ability to cooperate; SVARUN MAP, Slovenia).

The development of a bioeconomy and circular economy and environmentally sustainable, fossil-free economic growth are characteristics of the SHERPA visions of rural areas (e.g. AKIS MAP; Hungary). Opportunities need to be created and 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 (e.g. designing products that use renewable resources, and developing supply chains that retain value within local rural areas; Lithuania MAP). Benefits of extensive supplies of agricultural bioproducts offer new opportunities for small family farms (Rural Transylvania MAP, Romania), as well as larger agri-businesses.

> "The green transition and within that the bioeconomy provides potential for regional development, as the bioresources, whether at land or at sea, are widely distributed in rural and remote areas where alternative sources of livelihood are usually scarce." (Denmark MAP).

An important element in the green transition is the uptake of renewable energy, necessary as an element of achieving policy commitments to reducing GHG emissions, reiterated at COP26, and as a valuable element in diversifying rural economies and empowering communities (e.g. River Dee Catchment and Rural Scotland MAPs, UK). However, it is also recognised that some uses of land for provision of renewable energy can have adverse impacts (e.g. use of land for growing crops for biofuels; wind turbines impacting on landscapes) or the exporting of benefits from rural to urban areas without due recompense (e.g. Aragón MAP, Spain), and creating or accentuating inequalities.

The transitions to renewable sources of energy, and away from fossil fuels, have to be just (Scottish Government, 2021). The European Council recommended policy tools and actions to make a Just Transition a reality in the EU, including measures designed to realise the social potential of the green transition and covered policy areas of employment, skills, social and distributional aspects of the green transition, as envisaged in the EU Green Deal (European Commission, 2019). Community involvement in renewable energy development can contribute to achieving policy targets, and create wider social and economic benefit (Chartier *et al.*, 2021a). The mechanisms of the flagship on energy transitions should enable a focus on the how to translate opportunities of human, social and natural capital of rural areas into areas that are consistent with the visions of resilience, prosperity and equal. It should also be capable of, or be informed by, the development of indicators that inform the process of achieving regional, national and European goals in carbon neutrality, renewable energy systems and consumption (e.g. VENUS MAP, Czechia).

Changing demographic profiles of rural areas create challenges (e.g. Bulgaria MAP), such as placing strains on the provision of public services, (e.g. health and social care for the elderly; childcare for young families) (H2020 SIMRA; River Dee Catchment and Rural Scotland MAPs, UK). Negative demographic processes can threaten continuation of the viability of rural areas through a reduced proportion of an economically active population, loss of local values and traditions, notably in farming (e.g. Lithuania MAP).

H2020 IMAJINE explain the nexus between inequality and migration, linking migration between sending and receiving countries to inequalities in wages, opportunities and lifestyles. The pressures associated with

migration for the incoming and receiving populations require recognition, understanding and tackling (e.g. the integration of new residents and seasonal workers; SVARUN MAP, Slovenia), with an overarching aim of benefiting all people and places. This can opportunities of new and innovative business models which newcomers can bring to an area (e.g. Lithuania MAP).

Migration as a consequence of conflict in Ukraine in 2022 is a new cause of pressures on rural areas of Europe. Early trends are of migrants being primarily women and children. This source of migration is one new factor to which the flagship on Social resilience and Women in rural areas will have direct and immediate relevance.

Over the longer term structural issues of imbalances of the employment and roles of women in rural areas (e.g. decision-making), are key areas to be tackled (e.g. Galicia MAP, Spain), such as encouraging entrepreneurship amongst women (e.g. South Aegean MAP, Greece). Measures which permit a work-life balance are prioritised, and social actors consider this to be especially important for the ongoing viability of farms. As such it forms one of the characteristics of some of the visions of rural areas of, A rural with public services which permit work-life balance and gender equality (e.g. Galicia MAP, Spain), and places characterised by their human and societal well-being and high quality of life (e.g. Bulgaria MAP; AKIS MAP; Hungary).

Table 7. Overview of correspondence between the EU Rural Action Plan and the SHERPA Discussion and Position Papers, and recommendations for research agendas: Prosperous Rural Areas.

EU Rural Action Plan	Characteristics of Visions	Enablers (E), Opportunities (O), Research (R)
Prosperous Rural Areas		
Flagship: Entrepreneurship and the social economy in rural areas	• Place-based development through smart specialisation of local potentials • Social and business environments encouraging development of human capital, identifying entrepreneurs and people with motivation and social drive, and is active in succession planning (River Dee Catchment and Rural Scotland MAPs, UK)	• Supporting economic diversification, entrepreneurship, innovation and creativity (O) • Empowering local actors and communities (E) • Funding improved (E) • Shift in production and diversification of the rural economy (E) • Creating conditions and facilitating the generation of wealth by rural communities (R) • Well-being economies of rural areas (R)
Continue encouraging Member States to increase education, training and employment opportunities for young people in rural and remote areas under the reinforced Youth Guarantee and the European Education Area	• Better possibilities for education and training	• Young people at centre stage (E) • Creating conditions and facilitating the generation of wealth by rural communities (R)

Promote the development of a sustainable bioeconomy, including in the framework of the EU Forest Strategy and in the carbon-farming initiative	• Environmental conservation, climate adaptation and biodiversity improved • Circular economy and environmentally sustainable, fossil-free economic growth	• Land use planning improved (E) • Bio- and circular economy boosted (E) • Enhancing climate change and environmental services, policies and practices (E) • Planning coherent, equitable, multi-functional land uses (R)
Highlight the role of Producer Organisations (POs) in rural development and strengthen producers group of geographical indications	• Local food production and consumption supported by short supply chains	• Shift in production and diversification of the rural economy (E)

A vision of prosperous rural areas by 2040 (Table 7) is a key outcome expected by actors of all types contributing to the SHERPA MAPs. It is an outcome that is itself enabled by improvements in the resilience, connectivity, and strength of rural areas. It builds on the confidence and capabilities that can emerge from enablers such as empowerment of local actors, increased human and social capital, new information with which to plan and act, coherent plans for the uses of natural resources (e.g. land, water), and equalities of opportunity and social protection.

The sustainable use of natural resources is fundamental to the prosperity of rural areas. They are the source of raw materials for food (e.g. crops) and construction (e.g. timber), and critical requirements for life (e.g. water, biodiversity). They are also the areas with the principal stores of carbon (e.g. soil, biomass), and thus where practices of managing land have significant consequences for all areas (rural and urban), and beyond individual localities (i.e. habitats of international significance). In turn, the management of such areas are increasingly important sources of income in diversified rural economies such as food agri-, food and cultural tourism (e.g. Schleswig-Holstein MAP, Germany; Emilia-Romagna MAP, Italy), experiential tourism (Tuscany MAP, Italy), and new economic opportunities (e.g. finance based on natural capital).

However, an apparent gap in the portfolio of actions which contribute to prosperous rural areas is recognition and support for creative arts and activities (e.g. literature, music, dance, painting, design). The identity of rural areas is reflected in their cultural heritage, and in turn their social and economic prosperity.

> *"A rural vision reflects the desire for attractive places to live, work and visit that have a stable social structure with an active cultural life and sufficient infrastructure with regional services"* (Schleswig-Holstein MAP, Germany).

One challenge, and set of opportunities, relates to the secure the supply of sufficient, nutritious food at affordable prices. Farmers and other actors in food systems and supply and value chains have extensive knowledge (formal and informal) and skills in producing food and its added value. That skill base needs to continue to evolve to ensure the capabilities available for advancing and operating in new farm and food systems such as agroecology (e.g. Schwarz *et al.*, 2021; H2020 UNISECO, H2020 LIFT). The transition to agroecological farming systems will improve multiple functions of land and landscapes for the sustainable management of natural resources (soil, water, habitats; e.g. Mazowieckie MAP, Poland) and ensuring long-term production of food (e.g. Rural Centro Region MAP, Portugal).

Societal expectations and policy directions are of transitions to agroecological and organic farming systems and practices with associated reductions in fertiliser inputs (e.g. AKIS MAP; Hungary; Mazowieckie MAP, Poland; South Aegean MAP, Greece). Such a transition includes environmental, human and social dimensions (e.g. enhancing biodiversity, ensuring human rights). This transition is knowledge intensive, with requirements for new skills and approaches (i.e. technical, social; e.g. Schleswig-Holstein MAP, Germany) (e.g. AKIS MAP; Hungary; Lithuania MAP). Highlighting the role of producer organisations, proposed in the

Rural Action Plan, should contribute to delivering a vision of Local food production and consumption supported by short supply chains (e.g. South Aegean MAP, Greece), and building links been producers and local inhabitants and consumers (e.g. Netherlands MAP).

The ongoing viability of businesses managing those natural resources, and responding to emerging opportunities, will rely on the heritage in rural areas of innovation at all levels (micro-, small and medium enterprises, and large businesses) and types (social, process, products). Encouraging, facilitating and supporting innovation amongst new generations, in new social and economic contexts, and understanding and managing risk (e.g. financial, human, biophysical) will be significant in realising the vision of prosperity (e.g. Aragón MAP, Spain; Suomi MAP, Finland; Provence Alpes Côte D´Azur Region MAP, France).

Place-based approaches offer the potential for creating conditions conducive to encouraging the prosperity of rural areas, tailored to capitalising on particular strengths, attuned to weaknesses and enabling of support. Such place-based approaches need to create cohesion between common themes that cross different sectors (e.g. Suomi MAP, Finland; Tuscany MAP, Italy).

The remit and mechanisms implemented by the flagship on Entrepreneurship and the social economy in rural areas will be very significant in translating the enables of characteristics of prosperous rural areas into reality.

Table 8. Overview of correspondence between the EU Rural Action Plan and the SHERPA Discussion and Position Papers, and recommendations for research agendas: Implementation of Rural Action Plan and Governance.

EU Rural Action Plan	Characteristics of Visions	Enablers (E), Opportunities (O), Research Agenda (R)
Implementation of Rural Action Plan and Governance		
Apply rural proofing notably to the Commission's major legislative proposals which affect rural areas	• No reference by SHERPA	• Viewing policies through a 'rural lens' (E)
Set-up a Rural Observatory to bring together all data collected by the Commission on rural areas, including official statistics	• Increased use of scientific data and knowledge	• Data and knowledge (E) • Observation, monitoring and reporting (R)
Enhance availability of statistics on rural areas through: **(1) making available new detailed data collected in the framework of 2021 round of population and housing censuses in the EU disseminated via the 2021 Census Statistical Atlas (2) further increasing availability and quality of official statistics on rural areas by modernising the legal framework for demographic statistics (3) developing Pan-European geospatial datasets (4) mainstreaming degree of urbanisation**	• Increased use of scientific data and knowledge	• Data and knowledge (E) • Observation, monitoring and reporting (R)

Work on the definition of functional rural areas	• Increased use of scientific data and knowledge	• Data and knowledge (E)
Propose a Rural Pact to national, regional and local authorities committing to address the specific needs of rural areas	• No reference by SHERPA	• Governance and participation (cooperation, empowerment and partnership) (O)

Implementation of the Rural Action Plan (Table 8) proposes several key elements that build the knowledge base about rural areas, increasing the use of data already with means of collection, and enhancing their utility by targeted analysis (e.g. defining functional rural areas), and facilitating the management of, and access to, data through a rural observatory. It can be expected to be an enabler of approach to achieving rural visions in different areas of Europe (e.g. impacts of climate change of activities in territories; Rural Centro Region MAP, Portugal).

The design and operation of the Rural Observatory should be complementary to other sources of data, such as the EU Copernicus Earth observation programme, and not complicate the 'data and information landscapes' of Europe. This is in line with aims of open science and open data as well as providing a focus on the provision of data that informs understanding and planning of rural areas (e.g. Provence Alpes Côte D´Azur Region MAP, France) and accentuate this trend and allow innovation in the creation of new online services (e.g. Aragón MAP, Spain; River Dee Catchment and Rural Scotland MAPs, UK). As such it can contribute to the democratisation of data which in turn could improve empowerment of citizens and communities through citizen science, and could provide scope for areas being 'digital laboratories' (e.g. Provence Alpes Côte D´Azur Region MAP, France).

The data within the remit of the observatory should include those which are qualitative as well as those which are quantitative. For example, facilitating and encouraging citizens or actors in rural areas to contribute narratives about living or working in rural areas, challenges faced, and successes achieved offers the potential for developing rich insights and positive images of rural areas, a key enabler identified by SHERPA MAPs.

> "Attractiveness is further enhanced when there is a positive narrative of rural areas in the public debate and as there is a widespread recognition of the valuable contributions rural areas have for the present and future economy, prosperity, and welfare of the Danish society." (Denmark MAP).

The proposal to rural proof major policies that could affect rural areas is echoed in the synthesis of SHEPRA MAPs in which Chartier *et al*. (2021a) reflect on the lack of a 'rural lens' for viewing policies. They note that 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'.

A key overarching enabler identified by SHERPA is of enhanced multi-level and territorial governance that empowers local actors and communities, facilitated through flexible funding schemes relevant to the characteristics of different areas. Underpinning this are positive attitudes towards cooperation (e.g. knowledge) and shared responsibilities for sustainable use of resources (e.g. Galicia MAP, Spain; Rural Centro Region MAP, Portugal; SVARUN MAP, Slovenia). A step towards such governance and empowerment may emerge from the processes of engagement to shares ideas to inform content of a Rural Pact involving national, regional and local authorities. The Rural Pact Conference is scheduled to take place in June 2022.

SHERPA will seek to contribute inputs to the Rural Pact Conference, reflecting the SHERPA Position Paper on, rural policies to protect and enhance biodiversity through landscape features (Mottershead *et al.*, 2021), that "Scientists, practitioners and citizens should be better involved in policy design and the MAPs have shown good potential as a tool to achieve this. Their role should be to provide inputs to a policy process in which national and local authorities have primacy."

5. SHERPA Ongoing Dialogue on LTVRA

The Long-Term Vision for Rural Areas continues to be a topic of the SHERPA process. In 2021/22, a third of the regional MAPs (6) are working on a foresight exercise which is a continuation of the work they carried out for the SHERPA contributions to the EU LTVRA. These MAPs are focusing on the goals and targets necessary for their region to achieve their desired future, and identifying the pathways (e.g. milestones initiatives, key actions and activities) to be followed in order to bring about planned change. The approach is using the four scenarios that describe possible alternative futures for rural areas in the EU developed by the Joint Research Centre (JRC), which were based upon the results from the foresight study on the future of EU rural areas 2040 (Bock and Krzysztofowicz, 2021). This exercise will provide a set of recommendations for the geographic regions of these MAP's, presenting an understanding of the status quo of the region, and actions required to be taken to achieve the desired future.

The other SHERPA topics are linked to particular elements of the LTVRA. These are on climate change and environmental sustainability, and change in production and diversification of the rural economy. The outputs from the round of engagement by the MAPs will be used in further activities of engaging with EU, national and local policy teams (e.g. Regional Land Use Partnerships; River Dee Catchment and Rural Scotland MAPs, UK).

Opportunities have been sought to facilitate or contribute to debate on the roles of rural areas in tackling issues at the core of the LTVRA, or provide materials for use by those developing or delivering public policy. Examples are:

1. European Rural Parliament Mid-Term Session, 27th October 2021. An invited plenary presentation from DG Agri on 'Insights from research and innovation on future trends' drew on findings from EU funded project, one of which was SHERPA. The characteristics of desirable futures for rural areas, developed by the MAPs, formed part of that presentation (Figure 7a), together with the headline vision (Chartier *et al.*, 2021a).
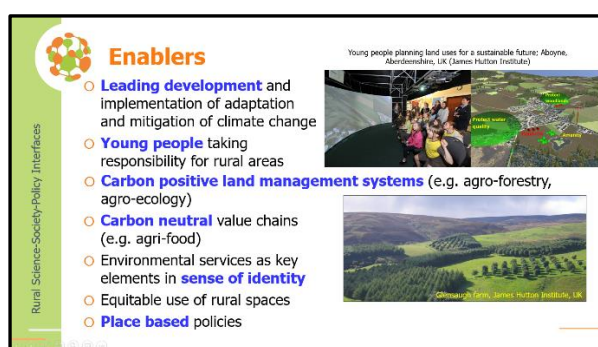
   A second invited plenary presentation, on 'Climate change - rural impacts, local action and policy' was contributed by SHERPA, highlighting key findings from the project topic of 2021 of climate change and environmental sustainability (Figure 7). Included within that were examples of highlight enablers for rural areas to tackle climate change, derived from SHERPA MAPs.

   Each set of findings form part of the mapping of recommendations from SHERPA and its MAPs onto the LTVRA Rural Action Plan.

Figure 8a. Presentation of DG Agri of contributions example visions of rural areas, drawn from SHERPA MAPs

Figure 8b. Extract from SHERPA presentation, summarising enablers of LTVRA as identified by the SHERAP MAPs

UN Climate Change Conference, Convention of the Parties 26 (COP26), Glasgow, UK, from 31 October to 13 November 2021 (Figure 9). SHERPA hosted an online Panel and Q&A session involving

policy teams from the EU, national governments, and public agencies, as well as civil society and research. The aim was to enable discussion of the findings of SHERPA MAPs on a key policy subject of the climate change, and the international and EU policy targets of just transitions to net zero GHG emissions.

As above, outputs from the online engagement forum, and the messages from the MAPs, for part of the mapping of recommendations for policy onto the LTVRA Rural Action Plan.

Figure 9a. SHERPA video with messages from the MAPs on tackling climate change, launched at COP26, 10 November 2021.

Figure 9b. SHERPA Online Panel Q&A session, Green Zone, COP26, 10 November 2021

Further pathways will be identified for sharing findings as they relate to policy associated with the LTVRA, with advice sought from the relevant policy officers in DG Agri on how and when they may be of most value (e.g. public inputs to the Conference on the Future of Europe through Share your Ideas; the Rural Pact Conference; 4th Public Participation and Deliberative Democracy Festival).

6. Conclusions

Recommendations from SHERPA for aims of policy, and key enablers, of a long -term vision for rural areas of Europe, by 2040, have emerged from a structured process involving actors from across science, society and policy at EU, national and local levels. The process developed a high level vision of

> *Rural areas that are characterised by opportunity, innovation, modernity, liveliness, resilience and equality, operating within sustainable and multi-functional environments.*

Within that overall vision, rural areas 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. 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.*

The rural areas of Europe have some common and some specific characteristics of desired visions, reflecting local circumstances, and recognise path dependencies linked to their physical, social and economic contexts.

To achieve that vision, mechanisms are required to ensure that rural matters are addressed in a coordinated and coherent manner in all areas of policy. 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. Three key requirements for realising the characteristics of visions for rural areas were identified for support by policy:

1. **Characteristic of vision - Enhanced smart rurality and digitalisation**.

Policy aim – Develop instruments that support the creation of jobs, products and services, and new ways of working.
Requirement - To facilitate a step change in capabilities of citizens and communities in rural areas, such that they are able to take full advantage of new and emerging digital technologies and concepts.

2. **Characteristic of vision - Empowered local actors and communities.**

Policy aim - Local actors and communities recognised as being instrumental to the formulation, design and implementation of policies for rural areas.
Requirement – Flexible funding schemes, tailored to the characteristics of different areas, that facilitate community and citizen participation and actions on-the-ground.

3. **Characteristic of vision - Enhanced multi-level and territorial governance.**

Policy aim – Co-constructed, relevant and effective future policies for rural areas.
Requirement – Forums constituted to formulate place-based and territorial approaches to tackling societal challenges and policy themes, with combinations of government across levels (local to European) and representatives of private and third sectors, focused on place-based and territorial approaches.

Engagement between SHERPA and the policy teams developing the EU Long-Term Vision for Rural Areas provided them with early sight of societal based visions for rural areas, supporting evidence of needs for their realisation (e.g. scientific, technical, social, financial). SHERPA contributed the high level visions and characteristics of visions for rural areas, and evidence in support of the enablers required to realise the visions, to the process of development of the LTVRA (European Commission, 2021a). This was accompanied by a recommendation that the LTVRA to set 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.

Since publication of the LTVRA, policy initiatives have progressed which are designed to deliver on congruent commitments. Notable amongst those are the emergence from the COP26 of new, or reiteration of existing, commitments to the tackling of climate change. These are reflected in the Rural Action Plan and elements of the Rural Pact.

Other recommendations from the SHERPA papers on the LTVRA, and those to follow, should have relevance to policies with related or intersecting remits. An example is the Fit for 55 package of measures in the EU plan for a green transition (i.e. committing to cutting emissions by at least 55% by 2030). These include the targets of updating the Land Use Land Use Change and Forestry regulation, and updating the Renewable Energy Directive, and of the Energy Efficiency Directive. To all of those, the LTVRA has a direct link, as have one or more of the enablers identified by the SHERPA MAPs.

Since publication of the LTVRA, conflict in Ukraine has triggered new pressures on rural areas. These have refocused attention on energy, food and environmental security, and debates over priorities over the short and long term, and new trade-offs required. The natural and human resources of rural areas have a considerable contribution to make to all aspects of these securities, and inevitably are at the forefront of territorial security. That latter is not reflected directly in the visions, or recommendations of enablers.

Tracking the implementation of the Rural Action Plan is important in retaining credibility and trust in the LTRVA. It is also important to be adaptable to changing circumstances, notably the uncertainties of impacts of conflict in Ukraine on rural areas of the rest of Europe, and implications of changes in the rate and nature of actions taken to achieve net zero by 2050.

Close engagement will continue with the European Rural Parliament through their representation on the SHERPA EU level MAP with two of its members. This engagement helps connect SHERPA with the plan of the EU of using the European Rural Parliament as "forums of exchange on the implementation of the Vision" (European Commission, 2021a). These form part of the SHERPA strategy for engaging with policy teams at EU and national levels as the Rural Action Plan is implemented, and the conversations of the Rural Pact and the Rural Pact Conference progress through 2022.

An overall conclusion from the SHERPA MAPs is the need to encourage a narrative about rural areas which is positive, and combat negative narratives. Creating positive narratives around the potential and success of rural areas should be part of a strategy for changing mindsets within and about rural areas (e.g. South Aegean MAP, Greece), and reinventing the sense of belonging to rural areas (Provence Alpes Côte D´Azur Region MAP, France). The impact sought is realisation across society as a whole of the attractiveness of rural areas as places for people to live, work and relax, where leading roles are taken in creating just and democratic green transitions (e.g. Denmark MAP), with stable social structures, and cultural and natural heritages that benefit everyone (e.g. Schleswig-Holstein MAP, Germany).
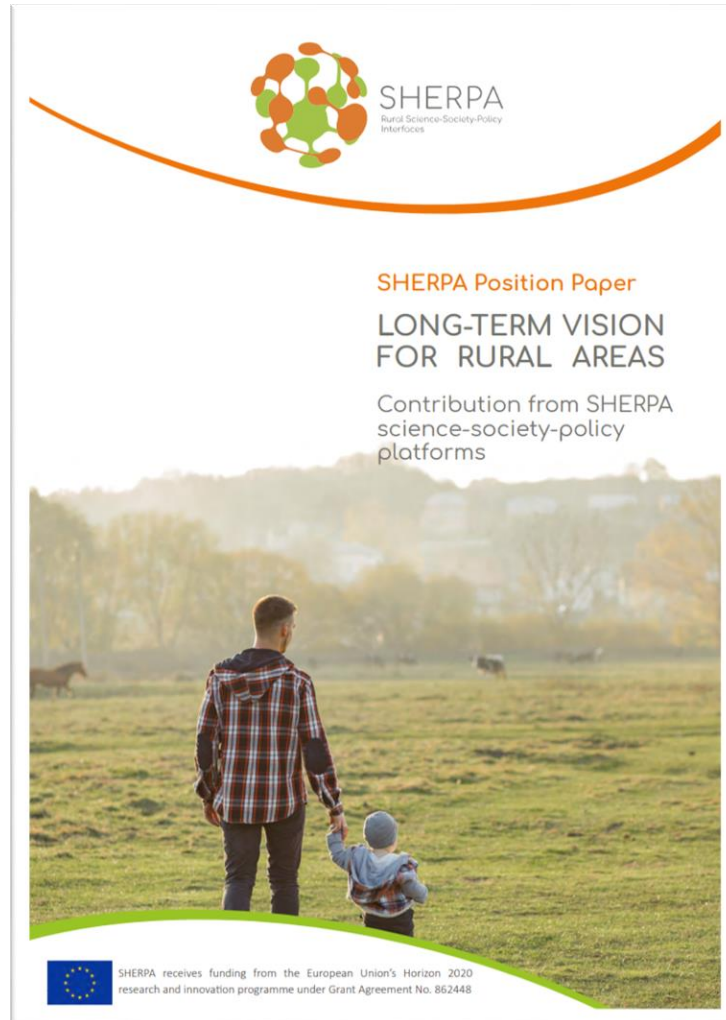
7. Acknowledgements

8. References

Bock, A.K. and Krzysztofowicz, M. (2021). Scenarios for EU Rural Areas 2040. Contribution to European Commission's long-term vision for rural areas, EUR 30755 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-39407-5, doi:10.2760/29388, JRC125368. https://publications.jrc.ec.europa.eu/repository/handle/JRC125368

Brunori, G., Mazzocchi, G., Miller. D.R., Salle, E. and Chartier, O. (2020). Overview of a sample of existing foresight and scenario studies carried out at EU and global levels. Sustainable Hub to Engage into Rural Policies with Actors (SHERPA), pp34.

Chartier, O., Salle, E., Irvine, K.N., Kull, M., Miller, D.R., Nieto, E., Vestergård, L.O., Potters, J., Slätmo, E., Zomer, B. anfd Iadecola, F. (2021a) Long-term vision for rural areas: Contribution from SHERPA science-society-policy platforms. Position Paper, Sustainable Hub to Engage into Rural Policies with Actors (SHERPA),, pp35.

Chartier, O., Miller, D.R., Panoutsopoulos, H., Espejo García, B., Schwarz, G., Irvine, K.N, Iadecola, F., Bertolozzi, D. and Al-Ajlani, H. (2021b). First set of recommendations for future research agendas, D7.2. Sustainable Hub to Engage into Rural Policies with Actors (SHERPA), pp41. https://doi.org/10.5281/zenodo.5766308

European Commission (2019) The European Green Deal, COM(2019) 640 final, Brussels.

European Commission (2020a). Roadmap Long-term vision for rural areas. European Commission, pp2. https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12525-Rural-development-long-term-vision-for-rural-areas_en

European Commission (2021a). Long-term vision for rural areas – Building the future of rural areas together. https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy/long-term-vision-rural-areas_en

European Commission (2021b). Commission Staff Working Document, Accompanying the Communication on A long-term Vision for the EU's Rural Areas - Towards stronger, connected, resilient and prosperous rural areas by 2040, Part 1. European Commission, pp46.

European Commission (2021c). Commission Staff Working Document, Accompanying the Communication on A long-term Vision for the EU's Rural Areas - Towards stronger, connected, resilient and prosperous rural areas by 2040, Part 3. European Commission, pp82.

European Commission (2021d). Annex to the Communication on a Long-Term Vision for the EU's Rural Areas – towards stronger, connected, resilient and prosperous rural areas by 2040. https://ec.europa.eu/info/sites/default/files/strategy/strategy_documents/documents/ltvra-c2021-345-annex_en.pdf

Féret, S., Berchoux, T., Réquier, M., Chartier, O., Kiss-Galfalvi, T., Martino, G., Brunori, G., Viaggi, D., Miller, D.R., Maréchal, A. and Crehan, P. (2020). Long-term vision for rural areas: Contribution from 20 Science-Society-Policy Platform. Discussion Paper Sustainable Hub to Engage into Rural Policies with Actors (SHERPA), pp20.

Mottershead, D., Miller, D., Martino, G., Chartier, O. and Santos, P., Targetti, S., Rac, I. and Erjavec, E. (2021). Rural Policies to protect and enhance biodiversity through landscape features. SHERPA Position Paper, pp10.

Schwarz, G., Vanni, F. and Miller, D. (2021). The role of transdisciplinary research in the transformation of food systems. *Agricultural and Food Economics*, 9(35). https://doi.org/10.1186/s40100-021-00207-2

Scottish Government (2021). Just Transition A Fairer, Greener Scotland Scottish Government response to the report of the Just Transition Commission. Scottish Government, pp48.

Slätmo, E., Oliveira e Costa, S., Qvist Eliasen, S., Miller, D., Piter, L., Kull, M. and Potters, J. (2021). Methods for setting-up of MAPs, D5.1. Sustainable Hub to Engage into Rural Policies with Actors (SHERPA), pp31.

9. Annex SHERPA Position Paper on Long Term Visions for Rural Areas

SHERPA Position Paper

SHERPA
Rural Science-Society-Policy
Interfaces

www.rural-interfaces.eu