

Supplementary Materials

Table S1. EU-Project reports.

EU-Project Reports	No. of Trend- Observations	Year (Source)
Possible European Territorial Futures. Final Report; Executive Summary.	69	2018
A Territorial Reference Framework for Europe.	53	2019
RUSELDA - Rural Sustainable Development for local Decision makers.	24	2018
Study on Employment, Growth and Innovation in Rural Areas (SEGIRA).	24	2010
FARMPATH - Farming Transitions: Pathways Towards Regional Sustainability of Agriculture in Europe. Final Report Summary.	16	2014
Evaluation of the impact of the CAP on generational renewal, local development and jobs in rural areas.	15	2019
PLUREL. Peri-Urbanisation in Europe: Towards European Policies to Sustain Urban-Rural Futures.	15	2011
NEWBIE. New Entrant network.	14	2018
EDORA: European Development Opportunities for Rural Areas. Applied Research 2013/1/2.	14	2011
Cohesion Policy for rural areas after 2013. A rationale derived from the EDORA project (European Development Opportunities in Rural Areas) – ESPON 2013 Project 2013/1/2.	13	2011
ROBUST. Interactions and dependencies between rural, peri-urban and urban areas and contemporary governance approaches.	12	2018
ENDURE foresight study. European Crop Protection in 2030.	12	2010
Smart-AKIS Policy Gaps and Briefs.	11	2018
PURR Potentials of Rural Regions. Final Report.	11	2012
RuralJobs.	11	2010
ESPON ESCAPE European Shrinking Rural Areas. Challenges, Actions and Perspectives for Territorial Governance.	10	2019
SIMRA. Social Innovation in Marginalised Rural Areas.	10	2019
TRUSTEE - Towards Rural Synergies and Trade-offs between Economic development and Ecosystem services. Final report.	10	2017
AgriSPIN D1.3: Synthesis report on selected and documented innovation cases for Cross Visits.	10	2016
BRIDGES - Territories with Geographical Specificities. Balanced Regional Development in areas with Geographic Specificities.	9	2018
Valorising European Research for Innovation in Agriculture and Forestry. FINAL REPORT – VALERIE: access to knowledge for innovation in agriculture and forestry.	9	2017
Europe's new farmers. Innovative ways to enter farming and access land.	8	2018
Shrinking rural regions in Europe. Towards smart and innovative approaches to regional development challenges in depopulating rural regions.	8	2017

THE HNV LINK ATLAS. Crossed perspectives on 10 learning areas - Understanding the field of play for High Nature Value innovation projects.	8	2017
Access to land: Learning Plattform. Learning towards Access to Land. Project Summary.	7	2019
PLAID Peer-to-Peer Learning: Accessing innovation through demonstration. Final Dissemination Report.	7	2019
RURINNO. Rural Social Enterprises: Experiences from the field: An experimental report created by practitioners, for practitioners, in the field of social enterprise.	7	2018
TRANSMANGO. Final Report Summary.	7	2018
FEAL multifunctional Farming for the sustainability of European Agricultural Landscapes. Situationsbericht zur Beziehung zwischen nachhaltigen / multifunktionalen Landwirtschaftspraktiken und europäischen Agrarlandschaften.	7	2017
The Volante Roadmap. Towards Sustainable Land Resource Management in Europe.	7	2015
LIVERUR. Living Lab Research concept in rural Areas.	6	2019
SALSA. Small Farms, Small Food Businesses and Sustainable Food Security.	6	2019
PEGASUS - Public Ecosystem Goods and Services from land management – Unlocking the Synergies. Working Together to Build a Successful Initiative - THE PEGASUS TOOLKIT.	6	2018
The Geography of New Employment Dynamics in Europe. Executive Summary.	6	2017
Pilot project - Exchange programmes for young farmers. Executive Summary.	6	2015
RURAGRI. Facing sustainability: new relationships between rural areas and agriculture in Europe.	6	2014
RURBAN. Rural-Urban Partnerships. An Integrated Approach to Economic Development: OECD.	6	2013
RUMORE. Rural-Urban Partnerships Motivating Regional Economies.	5	2019
AGRIFORVALOR. Bringing added value to agriculture and forest sectors by closing the research and innovation divide.	5	2018
Young farmers in the EU – structural and economic characteristics (EU Agricultural and Farm Economics Briefs, 15).	5	2017
EIP-AGRI Focus Group - New entrants into farming: lessons to foster innovation and entrepreneurship. FINAL REPORT.	5	2016
SIESTA Spatial Indicators for a 'Europe 2020 Strategy' Territorial Analysis.	5	2013
DERREG. Developing Europe's Rural Regions in the Era of Globalisation: An Interpretative Model for Better Anticipating and Responding to Challenges for Regional Development in an Evolving International Context.	5	2011
RUFUS. Rural Future Networks.	5	2011
ORGANICDATANETWORK - Data network for better European organic market information. Final Report Summary.	4	2014
MIGRARE – Impacts of refugee flows to territorial development in Europe. Final Report.	3	2019

RELOCAL. Resituating the Local in Cohesion and Territorial Development.	3	2019
AGFORWARD PROJECT FINAL REPORT.	3	2018
INNOGROW. Regional policies for innovation driven competitiveness and growth of rural SMEs.	3	2017
The future of food and agriculture. Trends and challenges.	3	2017
COFARM. Zusammenfassender Bericht.	3	2016
Suburb Food. FINAL REPORT WP6 - AN EXPLORATION OF MULTI-FUNCTIONALITY IN URBAN FOOD INITIATIVES.	3	2015
Rubizmo. Replicable business models for modern rural economies.	2	2019
IMAJINE. Integrative Mechanisms for Addressing Spatial Justice and Territorial Inequalities in Europe.	2	2017
Farm-Success. training farmers for sustainable succession processes.	2	2016
TURAS - Transitioning towards Urban Resilience and Sustainability. PROJECT FINAL REPORT.	2	2016
PUREFOOD. Urban, peri-urban and regional food dynamics: toward an integrated and territorial approach to food.	2	2014
PRIMA. Prototypical Policy Impacts on Multifunctional Activities in rural municipalities.	2	2012
AFINET. Agroforestry Innovation Networks.	1	2019
LIASON: Better Rural Innovation: Linking Actors, Instruments and Policies through Networks. D6.1: Discussion Paper 'Challenges Innovation Actors are Facing, and the Related Research and Innovation Needs'.	1	2019
YUTRENDS – Youth unemployment: Territorial trends and regional resilience.	1	2019
Small and Medium-Sized Enterprises in European Regions and Cities. Final Report.	1	2018
SCENAR 2030. Pathways for the European agriculture and food sector beyond 2020.	1	2017
MULTAGRI. Policy Brief 02/2016: Impact of the CAP's environmental policy instruments on farm structures, agricultural incomes and public goods.	1	2016
TENLAW - Tenancy Law and Housing Policy in Multi-level Europe. Final Report Summary.	1	2016
IAREG. Intangible Assets and Regional Economic Growth.	1	2010
The Use of Conservation Easements in the European Union. Report to NABU Federal Association.	0	2018
DIVERCITIES - Governing Urban Diversity: Creating Social Cohesion, Social Mobility and Economic Performance in Today's Hyperdiversified Cities. Final Report Summary.	0	2017
CHANCE2SUSTAIN. Urban Chances: City growth and the sustainability challenge; Comparing fast growing cities in growing economies.	0	2014
SPARD. Spatial Analysis of Rural Development Measures.	0	2013
RUDI. Assessing the impact of rural development policies.	0	2010

Table S2. Content summary of all trends and drivers sorted by topics.

Trends and Drivers that Touches all Systems (120)			
Trend (Type/Number of Observations)	Main Drivers	General Developments	Chances
Unequal development and inequality (Megatrend / 40)	Economy: globalization Economy: market liberalization Regional development: rural decline	Growing disparities within the EU Increasing inequality between urban and rural areas in all domains (economically, politically and social) Higher unemployment rates in rural areas (especially in remote rural areas) Lower educational level of the rural population (especially in remote rural areas)	The debate about inequalities is getting more and more present, which could lead to more redistribution policies in the nation states and the EU Often rural areas do not scoop out their whole potential that opens the opportunity for place-based strategies to increase the socio-economic environment New forms of lifestyle and digitalization could help to make rural areas more attractive if physical and digital accessibility increases in those affected areas
The decline of rural services and accessibility (Megatrend / 21)	Rural services: decline or poor status of public services and infrastructures Policy: rural and regional policies + decline or poor status of public services and infrastructures Regional development: community cooperation and development + rural decline	Decreasing quality of accessibility Decreasing quality of infrastructure: Growing mismatch between the supply and demand of SGI Shift away from a “welfare state” ethos towards market-based supply that leads to a reduction of SGI’s like education, health, or social services Proximity to urban areas appears to be an important factor for rural areas Increasing public debts	Proximity to urban areas appears to be an important factor for rural areas, so those rural areas close to cities might use urban-rural networks Remote rural areas are forced to use factors besides proximity to be successful, but therefore potentials in sustainable landscapes, tourism, and attractive environment have to be harvested and used and digital infrastructure has to be provided on a high level The debate around EU-Cohesion policies can lead to more focus on the development of remote rural areas
Rural decline (Megatrend / 19)	Economy: globalization Economy: market liberalization Demographics: demographic change	Population declines and aging lead to rural shrinkage (especially in remote rural areas in Eastern Europe) Loss of quality of life, due to loss of social and cultural capital Loss of employment opportunities in rural areas Current welfare policies do not stop the current downward spiral in remote rural areas	Establishing new forms of economies that adapt to the demographic change (e.g., silver economy or health tourism) Using the shift in the political debate from neoliberal topics towards a more sustainable welfare policy to strengthen socioeconomic structure of remote rural areas
Climate change (Megatrend / 17)	Economy: industrialization Economy: increase in consumption Economy: fossil economy Mobility and traffic: increasing traffic and mobility	The trend can be described as a megatrend that effect more or less all different kind of countries, areas and domains in the whole world Higher average temperature and increasing environmental risks Reduction of biodiversity and agricultural land	Rural areas play a major role regarding the reduction of CO-2 emissions, which could be used to enforce a Realization-process towards a divers and sustainable economy Environmental policies that can be expected in the future within the EU can lead to many opportunities in rural spaces regarding sustainable agriculture and the production of sustainable energy A possible promotion of short supply-chains might strengthen local economies Rural areas can profit from climate-orientated subsidies
Exploitation of development potential	Economy: globalization	Core challenges in rural areas: social cohesion, competitiveness, sustainability and food security	Activities such as sustainable organic agriculture or short value chains, community tourism and

(Trend / 13)	Governance: lack of effective governance strategies Values: ecological and social awareness Technology: technological development	Lack of human, technological and financial capital in many rural areas Not enough potential for social engagement in rural areas	social inclusion aim to support the sustainable socio-entrepreneurial potential of local young people Similar opportunities in Europe: opportunities for fostering social innovation and change, act as a backdrop for engaged local people, offering available venues that provide physical and metaphorical space for trying out novel solutions, without the immediate pressures of commercial viability
Globalization (Megatrend / 10)	Economy: globalization Economy: market liberalization	Market Liberalization, with disadvantages (completion) and advantages (Expanding export markets) for rural areas Internationalization of Agriculture as a consequence of "open" rural economies Current developments could lead to more or less global trade (free-trade vs. protectionism) Current trends are leading to a polarization of land functions in Europe, a greening of marginal agricultural land, and a displacement of food production to other regions in the world	Access to the global market for agricultural products or other products from rural areas Potential immigration from other regions to stop population decline in rural areas

Trends and Drivers in Agriculture and Farming (113)

Trend (Type/Number of Observations)	Main Drivers	General Developments	Chances
Specific agro-economic developments (Trend / 28)	Economy: globalization Economy: market liberalization	Rising competitiveness, although agricultural production is characterized by low competitiveness Global Food markets with global commodity chains Problems of generational renewal of farms, due to societal developments and economic pressure on agricultural production	Technological developments can make the agricultural sector more efficient and competitive New forms of succession in farming as opportunity for the agricultural sector New models of partnership in farming (e.g., joint ventures and land partnerships)
Young farmers and new entrants (Trend / 25)	Governance: new modes and lack of effectiveness Rising educational levels, skills and competences Drivers in Economy, Farms and Values	Only few young farmers / lacks of generational renewal in agriculture High barriers for new entrants in farming (e.g., high start-up costs, lack of financial support, lack of access to land)	Young farmers more often have the highest professional level of education New forms of support for young farmers and new entrants arise from civil societies (e.g., community-supported agriculture, integration of social enterprises into farming, shared farming) Young farmers and new entrants have a different view on agricultural production, which can help to renew the sector towards a more sustainable production
New types of farming (Trend / 12)	Economy: globalization Economy: market liberalization Values: ecological and social awareness	Changes in agricultural production and practices (more professional networks, precision farming, etc.) Rural agricultural economies often are structured by small enterprises Lack of access to educational and technological innovations for farmers	Innovations in farming (e.g., precision farming, professional forms of organization, combination with other domains) New forms of farming, that integrate new forms of lifestyle, technological innovations and social engagement, could make it more attractive to work in the agricultural sector
Changing patterns of the employment in rural areas and the agricultural sector (Trend / 11)	Regional development: rural decline Technology: automation, robotization	General shrinkage of labor force in the primary sector, mainly because agriculture is getting more economically efficient and technologized Lack of skilled human capital and qualified labor force in rural areas	The rising number of immigrants and outside commuters might fill the gap of rural labor force

	Governance: conflicts and governance failures Economy: market liberalization		
Agroecology, Bio and Forest ecology (Trend / 9)	Energy: growing energy demand Drivers in Economy, Environment and Values	Increase of sustainable forms in the primary sector (agriculture and forestry) Increasing use of biomass to produce energy Land competition between forest coverage and agriculture	New forms of innovations that combine the primary sector with the use and production of biomass can be seen as economic chance for rural areas
Farm size (Trend / 9)	Economy: globalization Demographics: demographic change	Decline in the number of farms: land concentration, agricultural holdings are increasing in size Increasing number of large scaled commercialized and industrialized farms with heavy workload	New forms of labor in the agricultural sector besides owning or managing a farm
Aging and decrease of farm population (Trend / 8)	Economy: globalization Demographics: demographic change	The farming population ages and decrease (31 % of the farmers are older than 65 years, in 10 years more than half of the farming population in the EU retires) Decline of family-farms and rising competition for land Risky economic environment for famers in general (fluctuating prices, dependency on subsidies, increase of extreme weather events)	The large numbers of retiring farmers can clear the way for a new young generation of famers that initiates a renewal towards a more sustainable agricultural sector in general
Diversification and specialization of farms (Trend / 7)	Economy: empowerment of services Economic drivers	Shift away from primary production towards a New Rural Economy Combination of farming with non-agricultural activities, the production of renewable energy and biodiversity conservation Diversification of farm income	A diversified agricultural sector in combination with more sustainability can benefit from new environmental policies that can be expected in the future Farmers with diver's economic activities helps smaller enterprises to sustain and strengthen the rural economy
Farmland prices (Trend / 4)	Resource scarcity: scarcity of natural resources Economy: globalization Economy: market liberalization	High land prices, partly due to a lack of sufficient regulation of land concentration/speculation Prices for land are very high, driven by high demand from investors, hobby farmers and existing farmers' intent on achieving economies of scale, and intensified by side-effects of tax and environmental legislation Land competition is overlaid and intensified by increasing land prices	The negative developments in the land market might raise the pressure on policy makers to protect existing agricultural land structures or ensure small sustainable enterprises to be able to compete in the market

Trends and Drivers in Economy and Technology (86)

Trend (Type/Number of Observations)	Main Drivers	General Developments	Chances
Diversification of the rural economy (Megatrend / 14)	Economy: globalization Economy: empowerment of services Economy: market liberalization Technology: digitalization	Structural change of the rural economy that leads to a more diverse sectoral structure of the economy in rural areas Growing secondary and tertiary sectors in rural areas The influence of agriculture in rural areas has declined while the importance of other activities (social innovations, tourism, transport, and increasingly, energy policy) has increased.	Using the socio-economic change to strengthen the economy in rural areas Using opportunities that lay in consumption countryside and energy production to depend less on the agricultural sector, which is often still the case in remote rural areas in the EU

Innovations and knowledge economy (Trend / 12)	Domain Economy Domain Science, education and knowledge Domain Farms Domain Technology	Rural areas have a deficit of knowledge, skill and technological development Technological disruption in all services New markets are rising, more innovation takes place and which leads to more competitiveness	Declining rural areas can use education and innovation to stop or reverse negative developments, but therefore economic actors have to be present Some rural areas might develop clustered markets for innovative mixes
Manifestations of new technologies (Trend / 12)	Technology: digitalization Technology: technological development Economy: globalization Technology: automation, robotization	4th industrial revolution (product design, use of big data, artificial intelligence, machine learning, internet of things) Automation, Digitalization and Robotization Lack of digitalization in agriculture	Using new types of farming that result from automation, digitalization and robotization (e.g., precision farming) to evolve a highly effective sustainable farming Using digitalization to enforce immigration in rural areas, because of the rising potential of remote work and digital jobs
Digital economy (Trend / 11)	Technology: digitalization Technology: technological development	Digitalization has many effects on rural development in general New opportunities for agricultural production as well as selling food directly via e-commerce	E-Learning as a growing opportunity to decrease the number of early school leavers and raise educational level Rural areas with a high level of digital accessibility can be very attractive for remote workers Digital solutions can increase the service level in remote rural areas (e.g., service to people, provision of medical services via video conferences)
Economic growth and market effects (Trend / 11)	Economy: globalization Economy: market liberalization	The landscape for development finance is changing (growing influence of real estate markets) Global economic growth while the growth of the developed economies in the EU slows down Recent impacts of the global economic crisis on rural industry and employment Decoupling between growth and jobs (for economic growth, high employment rates are not necessary anymore)	GDP grows faster in rural than in non-rural areas Effective coordination and distribution between supply and consume of food can be a key in future Using new economies and markets to develop rural areas
Interdependency and interregional networks (Trend / 11)	Economy: globalization Technology: digitalization	Territoriality will be disrupted by the increasing relevance of networks of relations overpassing borders Growing interdependencies between places that lead to an increasing 'connexity' of rural economies Economic sectors as well as urban and rural areas grow together	Borderless local cooperation's are a chance for remote rural areas to grow independently from the next urban center Increasing mixture in cultural dynamics between rural and urban sites might help to make rural areas more attractive for urban dwellers
Resource competition (Trend / 9)	Economy: globalization Environment: environmental degradation, pollution and risks Economy: market liberalization Environment: climate change	Growing demand on resources leads to a growing competition for natural resources Water and food scarcity will also impact Europe Lack of space for rural entrepreneurs	New types of rural economies that function in a more resource-conserving way can lead to a rural regeneration on the basis of sustainability

New forms of economies as chances for rural spaces (Trend / 6)	Technology: digitalization Values: ecological awareness	New forms of economies (e.g., sharing economy or silver economy) The increasing role of perceptions and soft factors Diverse working models: part-time and self-employment, home working	New forms of lifestyles arise that might lead to immigration in rural areas New forms of remote work models might lead to immigration in rural areas New forms of economy make rural areas more attractive or might lead to new economic opportunities
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Trends and Drivers Regarding Policy and Socio-Economic Developments in Rural Areas (71)

Trend (Type/Number of Observations)	Main Drivers	General Developments	Chances
Future Challenges for governance and policy in the EU (Trend / 16)	Governance: protectionist or anti-based policies and actions Regional development: regional inequality and disparity Policy: new geopolitics, rising East Settlement system: urbanization + Economy: globalization	Changing geo-economic and geo-political landscape (the economic influence of the EU decreases while the economic influence of the Asian countries increases) Social and political fragmentation and political instability Conflicts are on the rise again on every geographic level (global policy, resource competition, land use, etc.) Growing preferences in anti-globalization, Eurosceptics and anti-establishment votes	Due to the anti-EU votes in rural areas, EU-policy could focus more on remote rural areas to support cohesion to stabilize the EU politically The rising global conflicts could enforce the countries in the EU to restructure their economy and supply chains towards more independence from countries outside Europe, what could help to create jobs in rural areas, especially in the manufacturing sector
Policy incidence and effectiveness (Trend / 16)	Governance: new governance modes and models Policy: Common Agricultural Policy (CAP) Farms: farming traditions Policy: European integration vs. Disintegration	Weak influence of CAP, because of the strong influence of international markets Ineffective EU Programs (complex requirement regarding CAP promotion, only support of existing farmers, access to land for new farmers is difficult, slow reactions of the EU) Rising attendance of policies on sustainability	Some of the targeted measures of the CAP are helpful for generational renewal in agriculture The rising attendance on sustainability provides the opportunity for rural innovations It is clear that new policy approaches are necessary, which leads to discussion of new solution in rural areas
Socioeconomic developments in agricultural rural societies (Trend / 16)	Values: ecological awareness Lifestyle: diversification of lifestyles Diver's structure of drivers from several domains	Rising relevance of agro-tourism with several positive and negative side-effects (increase of relevance of sustainable farming, advantages for regions with potentials in cultural heritage, dependence of some rural regions from agriculture, etc.) Increasing land fragmentation and decentralization Bad influence of current economic developments on rural areas (land-abandonment, degradation, increasing artificial land use, pollution, social marginalization, etc.) Increase of demonstration activities of the farming population	Economic potential of sustainable and agro-tourism as economic chance for rural areas Increasing awareness of the rural population towards changing socioeconomic conditions in rural areas
Regional and local strategies (Trend / 9)	Economy: localism, local paradigm Economy: globalization domain Policy and Governance	Processes of "glocalisation" can be observed (think global act local) Increasing role of local and regional arrangements Shift from national to local governance	Agriculture policy goes towards more societal challenges (e.g., ecological topics, public goods, sustainability, rural) Arising new local surviving strategies help rural economies (e.g., regional brands, tourism, organic farming, renaturation) Local strategies empower local individuals what can help to work against rural decline

Social innovations and capital (Trend / 9)	Values: social awareness Policy: local policy and issues of the participation society domain Policy and Governance	Social innovations are increasingly important in rural development and agricultural initiatives Increasing social initiatives and innovative networks in rural areas need more local policy support and social capital Social enterprises suffer from a lack of education in marginalized rural areas Rural areas getting more important for wealthy retired households	If social capital and local policymakers can be mobilized, social innovation can have a relevant impact on a rural regeneration Education initiatives in rural areas could help to create social capital for development purpose Economic potential of wealthy retired households for rural areas
Regulation and subsidies (Trend / 5)	Policy: Common Agricultural Policy (CAP) Governance: new governance modes and models Economy: neoliberalism	Less EU-funding, possible reduction of agricultural subsidies through a more open world economy Strong dependence of the rural economy to the regulatory framework Subsidies has bad influence on Cooperative structure	The high relevance of the EU-subsidies can be seen as a chance to change rural economies through political engagement A change in policy could help rural economies to be more independent from the regulatory framework

Trends and Drivers Regarding Demography, Settlement System and Migration (61)

Trend (Type/Number of Observations)	Main Drivers	General Developments	Chances
Migration patterns (Megatrend / 20)	Lifestyle: liberal lifestyle Mobility and traffic: increasing traffic and mobility Regional development: rural decline	Selective job-related out-migration from rural to urban regions particularly of younger and well-educated workers There is a potential of Immigrants for rural areas in the EU, but they can hardly profit from it, because immigrants prefer urban areas as well as a lack of acceptance of the rural inhabitants East / West division in the EU: mostly rural areas in western European Countries profit from migration flows from urban to rural areas	Rural regions could profit from immigration in the EU, if those areas produce more incentives Rural regions, which are affected from population decline, could function as role models for a shrinking and more sustainable economy, which is more resilient against environmental issues
Concentration and Urbanization (Megatrend / 14)	Economy: globalization Economy: market liberalization Lifestyle: diversification of lifestyles Technology: digitalization	Urbanization and growing metropolitan areas as one megatrend that effects every area Increasing concentration of population and economic activities	In the EU there is already a high level of urbanization reached, so this trend might stop or oppose in the future in favor to rural areas Cities are getting more and more dense and expensive, which could make rural areas more attractive on the long run, because the quality of life in cities decline
Increasing urban sprawl and urban-rural continuum (Megatrend / 14)	Economy: globalization Settlement system: urbanization Settlement system: urban sprawl, suburbanization, decentralization	Increasing urban sprawl and suburbanization Multi-Locality and changing housing preferences Blurring borders between urban, intermediate and rural areas	Especially rural areas close to cities and metropolitan areas might profit demographically and economically from urban sprawl Increasing urban sprawl might lead to a reorientation towards rural spaces of specific lifestyle groups
Aging population (Megatrend / 13)	Demographics: demographic change Economy: globalization	Increasing life expectancy Global aging society that leads to aging population in all areas Demographic change	Establishing new forms of economies that adapt to the demographic change (e.g., silver economy or health tourism) Rural regions, which are affected from population and economic decline that found solutions to maintain good functionality, could function as role models for a shrinking and more sustainable economy, which is more resilient against environmental issues

Trends and Drivers Regarding Environment, Sustainability and Resilience (53)

Trend (Type/Number of Observations)	Main Drivers	General Developments	Chances
Sustainability transition and Resilience (Megatrend / 17)	Values: ecological awareness Environment: climate change environmental degradation, pollution and risks	Rising importance of resilience, due to climate change and environmental problems Increasing relevance of sustainability in rural areas (e.g., water and nutrient management, farming at landscape scale, soil management in livestock production, cereal cultivation) Rising demand on sustainable methods on food production and services for the local market	The transition towards increased sustainability in agriculture are important for government, NGOs and research institutions, what can help to evolve a sustainable rural regeneration Sustainable water and nutrient management and the rising significance of green technology are potentials for rural economies to grow Circular bio-economy will be an opportunity for rural areas
Shift towards a sustainable and renewable economy (Megatrend / 15)	Values: ecological awareness Environment: climate change Policy: agro-environmental and environmental policies	Shift towards renewable energy and products (increasing share of renewable energy) Peak of everything (Fossil economy) Transition towards a circular economy Decarbonization of industrial activities	Circular economy as one main issue for agro-food businesses in Europe New market for the production of biofuels and renewable energy in rural areas Increasing ecological awareness and slow growth lifestyles can push rural areas socio-economically
(Agro-) Environmental conservation (Trend / 12)	Values: ecological awareness Values: social awareness Environment: climate change Environment: environmental degradation, pollution and risks	Increasing of environmental issues and public awareness regarding to agricultural holdings Consumer's awareness of food production processes is increasing, as well as their concern about diets and food choices Conservation of the environment and natural resources are getting more and more part of Agronomics	Manifestation of environmental policies due to agricultural policies Regions with rural tourism have potential for environmental conservation The increase of ecological awareness has the potential to increase the value of agricultural products, therefore the income of farmers and the rural inhabitants might increase as well
(Awareness on) Increasing environmental impacts (Trend / 9)	Values: ecological awareness Values: social awareness Economy: globalization Environment: environmental degradation, pollution and risks	Natural environment and ecosystems are under increasing stress Loss of biodiversity, as well as habitat destruction Ecological status of surface water depends on the land use	An increasing awareness of the negative social, cultural, economic, health and environmental side effects of spatially extended (and in particular global) food chains has emerged A trend of concepts can be observed that allows animals to act in their natural behavior Sustainable engagement might be chance for some rural areas to get more attractive and depend less on the primary sector

Trends and Drivers Regarding the Food System (41)

Trend (Type/Number of Observations)	Main Drivers	General Developments	Chances
Regional and local food (Trend / 22)	Values: ecological awareness Values: social awareness Lifestyle: diversification of lifestyles	Growing number of small-scale producers on the local level Increasing regional marketing of food production Shorter value chains between producer and consumer Growing organic food production Rising importance of Alternative Food Networks (AAFNs)	Short food supply chains are important for the success of new entrants' businesses because of the opportunity to establish on-farm shops, farmers' markets, box schemes, and online food assemblies, but also use short chains to supply local cafés and restaurants Local and regional distribution networks of agricultural products can help to attract new entrants

into farming, because larger profit margins can be expected

Sustainable and lifestyle (Trend / 13)	food	Values: ecological awareness Values: social awareness Lifestyle: diversification of lifestyles Health: changing health-related trends	Increasing societal demands for local organic food and biodiversity friendly agriculture Growing consumer demand for healthy food Increasing use of the countryside as a space of consumption Increasing awareness and responsibility of consumers about their food and more stringent environmental regulations → Sustainable food (supply chains) are a growing market	Rural areas where a sustainable lifestyle can be provided could benefit from the immigration of specific lifestyle groups The growing market for sustainable food has the potential to increase profit margins for agricultural products Consumption countryside's have the potential to harvest the increasing sector of sustainable tourism
Food demand and security (Trend / 6)	Economy: globalization Economy: market liberalization	Increase global food production Food losses and waste Unsafe food remains a major cause of disease and death Dependency on China in terms of food production supply chains	Governance for food and nutrition security ('Good governance' has given way to more pragmatic, problem-driven decision-making) Potential for local food production chains if governance would enforce the shift from global to regional or local supply chains	