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Interfaces

A VISION FOR RURAL AREAS

MAP Discussion Paper

LONG-TERM VISION FOR RURAL AREAS: CONTRIBUTION FROM 20 SCIENCE- SOCIETY-POLICY PLATFORMS

MAP DISCUSSION PAPER

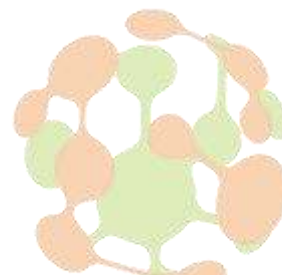
EMILIA-ROMAGNA MAP

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1. Introduction

The Emilia-Romagna MAP covers the whole NUTS2 region of Emilia-Romagna that is located in the North-East of Italy. The University of Bologna is facilitating the activities of the MAP that was created on a pre-existing network of collaborations with local stakeholders. Rural areas of Emilia-Romagna are very heterogeneous, ranging from hilly-mountainous areas featuring extensification and land abandonment, to a plain area characterized by farm concentration. Given such heterogeneity, an inductive and participatory approach was adopted to identify the most urgent themes for rural areas of Emilia-Romagna for the next 20 years. To do so, a preliminary desk research was conducted to provide an overview of the main trends, opportunities and challenges that characterize the whole rural territory of Emilia-Romagna (section 2). Furthermore, interviews with key actors representing different societal groups and geographical areas of the region were conducted to acquire their opinions on the most urgent themes for rural areas (section 3). Interviews reported the following challenges/opportunities as particularly relevant in the future: depopulation and ageing, the enhancement of digitalization, a better land management to reduce the risks related to hydrogeological instability, the valorisation of the services and products that rural areas can provide in the adaption to climate change, improving the governance of Rural Development Programs.

Keywords: *demographic change, rural economy, digitalization, land management, adaptation, Rural development programs.*

2. Results from desk research

2.1. Review of key trends

According to the new Urban-rural typology proposed by Eurostat¹, most of the provinces of the Emilia-Romagna are classified as intermediate (between 20% and 50% of the total population living in rural areas). Two provinces are identified as predominantly rural (more than 50% of the total population living in rural areas), and only one as predominantly urban (less than 20% of the total population living in rural areas) (Table1).

Table 1 The provinces of the Emilia-Romagna according to the new Eurostat Urban-rural typology

Province	Typology
Piacenza	predominantly rural
Parma	intermediate
Reggio Emilia	intermediate
Modena	intermediate
Bologna	intermediate
Ferrara	predominantly rural
Ravenna	intermediate
Forlì-Cesena	intermediate
Rimini	predominantly urban

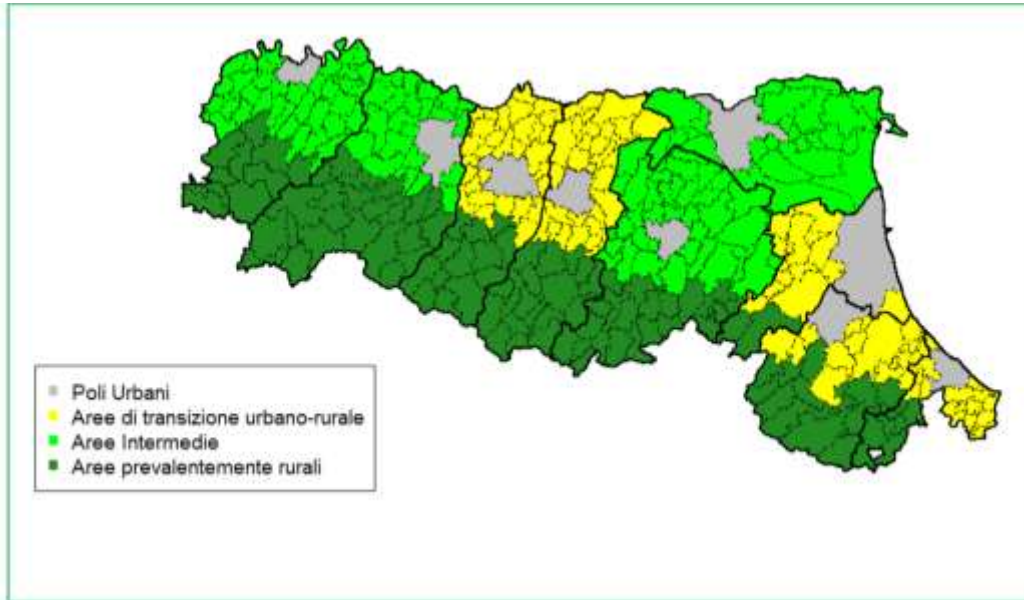
Source: Eurostat

¹ https://ec.europa.eu/eurostat/statistics-explained/index.php/Archive:Urban-rural_typology#Dedicated_section



This new typology, however, is still not able to catch the heterogeneity that characterizes each province of Emilia-Romagna. A better description, instead, is provided by a study conducted at municipality level that identifies four territorial typologies (Figure 1): urban areas (grey), urban-rural transitional areas (yellow), intermediate rural areas (green), predominantly rural areas (dark green) (Regione Emilia-Romagna e Agriconsulting, 2013). As shown by Figure 1, most of the provinces of the region are composed of both more accessible rural areas located in the plain and remote rural areas in the Apennines.

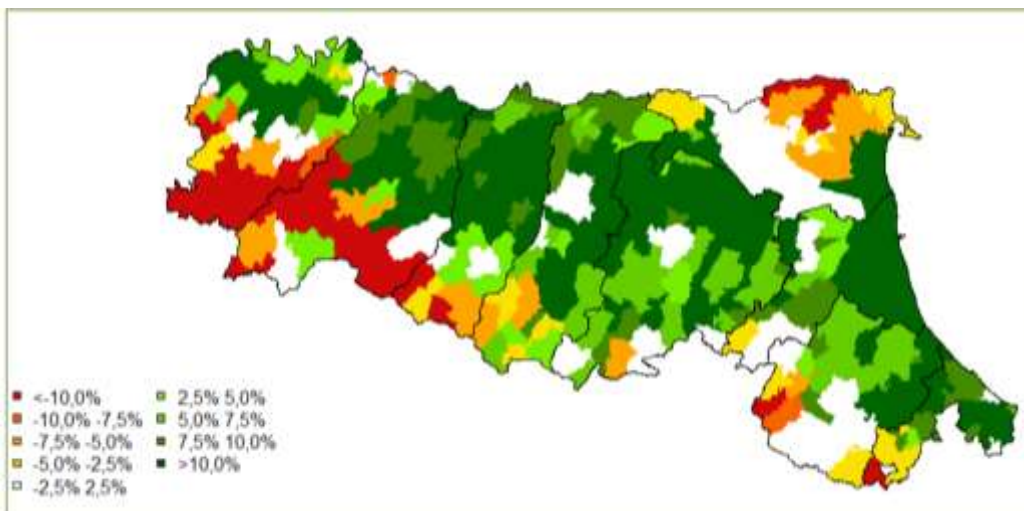
Figure 1 Typologies of rural areas of the Emilia-Romagna region



Source: Regione Emilia-Romagna e Agriconsulting, 2013

Of course, this diversity has great implications in terms of different development across rural areas. First of all, demographic change displays differently across rural typologies: depopulation significantly affects predominantly rural areas particularly in the Apennines of the provinces of Piacenza and Parma and in the plain area of Ferrara, while transitional urban-rural and intermediate areas reported an increase in resident population between 2001 and 2011 (Figure 2).

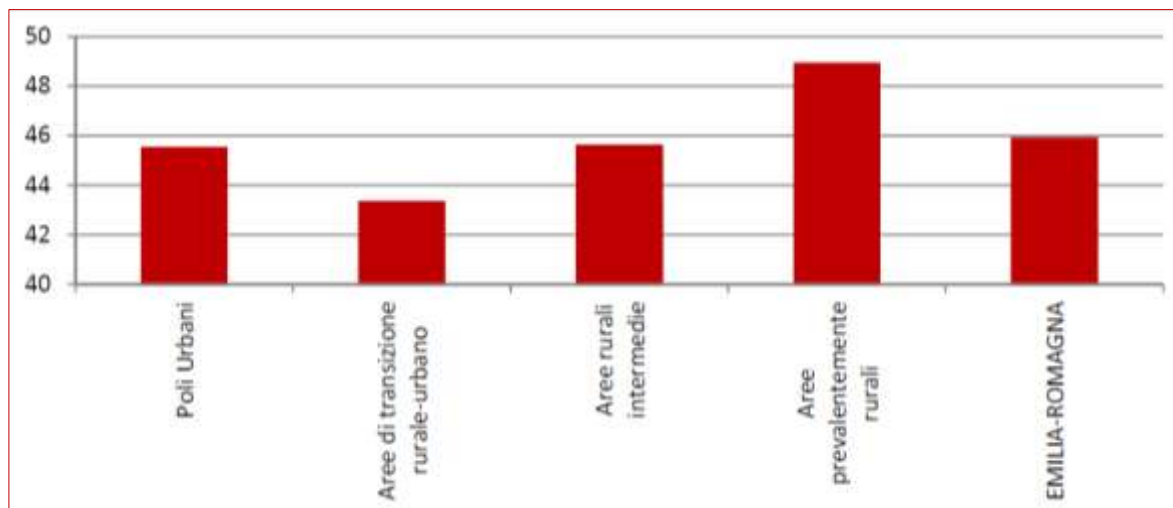
Figure 2 Change in resident population (2001-2011)



Source: Regione Emilia-Romagna e Agriconsulting, 2013

Likewise, the average age of population is higher in predominantly rural areas (Figure 3), with the highest values in the Apennines of the provinces of Piacenza (57,67 years) and Parma (50,31 years), while much younger is the population in urban-rural transitional areas (Regione Emilia-Romagna e Agriconsulting, 2013). Similarly, the old-age dependency ratio² is much higher in predominantly rural areas compared to, for instance, urban-rural transition areas (Table 2).

Figure 3 Average age of population per urban-rural typologies



Source: Regione Emilia-Romagna e Agriconsulting, 2013

Table 2 Old-age dependency ratio – average values per Rural/urban typology (year 2012)

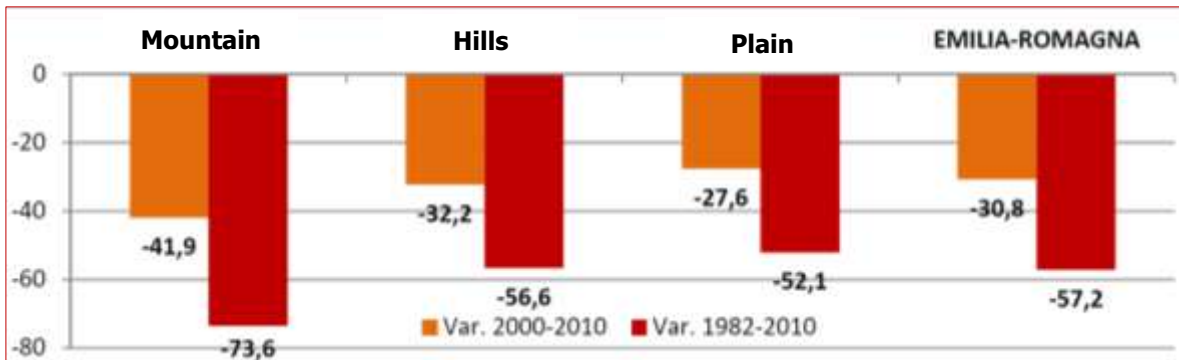
Rural/urban typology	Old-age dependency ratio
Urban areas	36,57
Rural-urban transition areas	30,86
Intermediate rural areas	36,82
Predominantly rural areas	50,01

Source: adapted from Regione Emilia-Romagna e Agriconsulting, 2013

In Emilia-Romagna, as in the rest of Italy, the agricultural sector has suffered from a contraction over the last decades that has been sharper for predominantly rural areas of the region both in terms of the number of farms and of UAA (Figure 4 and 5). Moreover, the contraction has mostly affected farms of small-size (< 2 ha) that have decreased by 50% from 2000 to 2010 (Regione Emilia-Romagna e Agriconsulting, 2013). These trends had consequences for the reconfiguring of the rural territories of the region. Notably, an increase in farm concentration (increasing UAA per holding and decreasing N. of holdings) and intensification in the plain area of the region has exacerbated land-use competition, homogenization of agricultural landscape structure and fragmentation. Land-use change has, indeed, increased over the last years (especially due urbanization and industrialization) and a large share of regional territory is characterized by medium and high level of fragmentation far beyond national rates (Table 3).

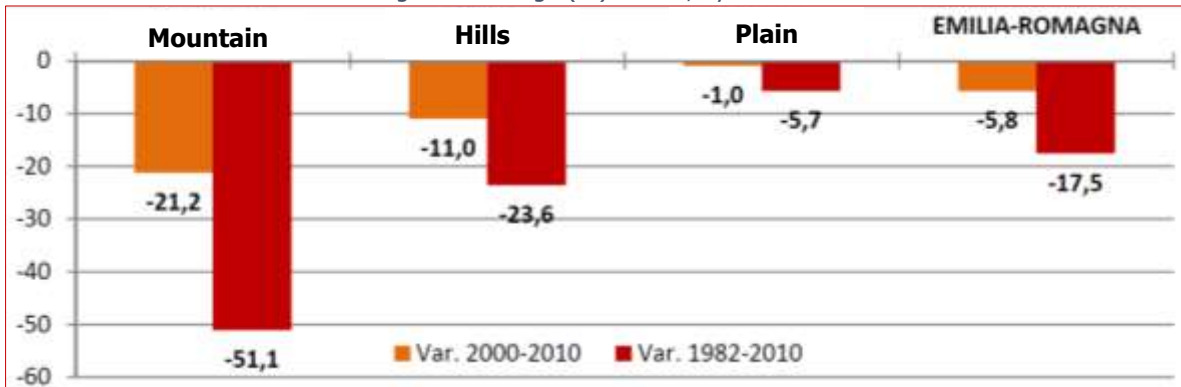
² The old-age dependency ratio represented in Figure 3 is calculated as the ratio of the number of people aged 64 or older, compared to the number of people aged 15-64 years old (Regione Emilia-Romagna e Agriconsulting, 2013). The ratio indicates the level of support available to older persons by the demographic working age population (European Commission, 2020b).

Figure 4 Change (%) in the number of farms, by altitude



Source: Regione Emilia-Romagna e Agriconsulting, 2013

Figure 5 Change (%) in UAA, by altitude



Source: Regione Emilia-Romagna e Agriconsulting, 2013

Table 3 Land coverage by fragmentation categories (2018)

Territory	Fragmentation (%)				
	very low	low	medium	high	very high
ITALY	9,50	18,61	33,06	26,44	12,40
Emilia-Romagna	0,00	10,07	38,09	36,52	15,31

Source: ISPRA

Climatic conditions are also expected to be worsen in all rural areas of the region. Table 4 shows the projections (2021-2050) of change in climatic conditions per homogeneous areas of the region: increase in temperature are expected in all areas of the region with an higher magnitude in the Apennines during summer; however the plain is expected to be much affected by extreme events and water shortage during summer.

Looking at the economic performance, farms with lower productivity (i.e. farms classified as “non-enterprise” with standard output <10 thousand euros) are usually located in predominantly rural areas, while more competitive farms (i.e. farms classified as “enterprises” with standard output > 20 thousand) are mostly in urban-rural and intermediate rural areas (Figure 6) (Regione Emilia-Romagna e Agriconsulting, 2013).

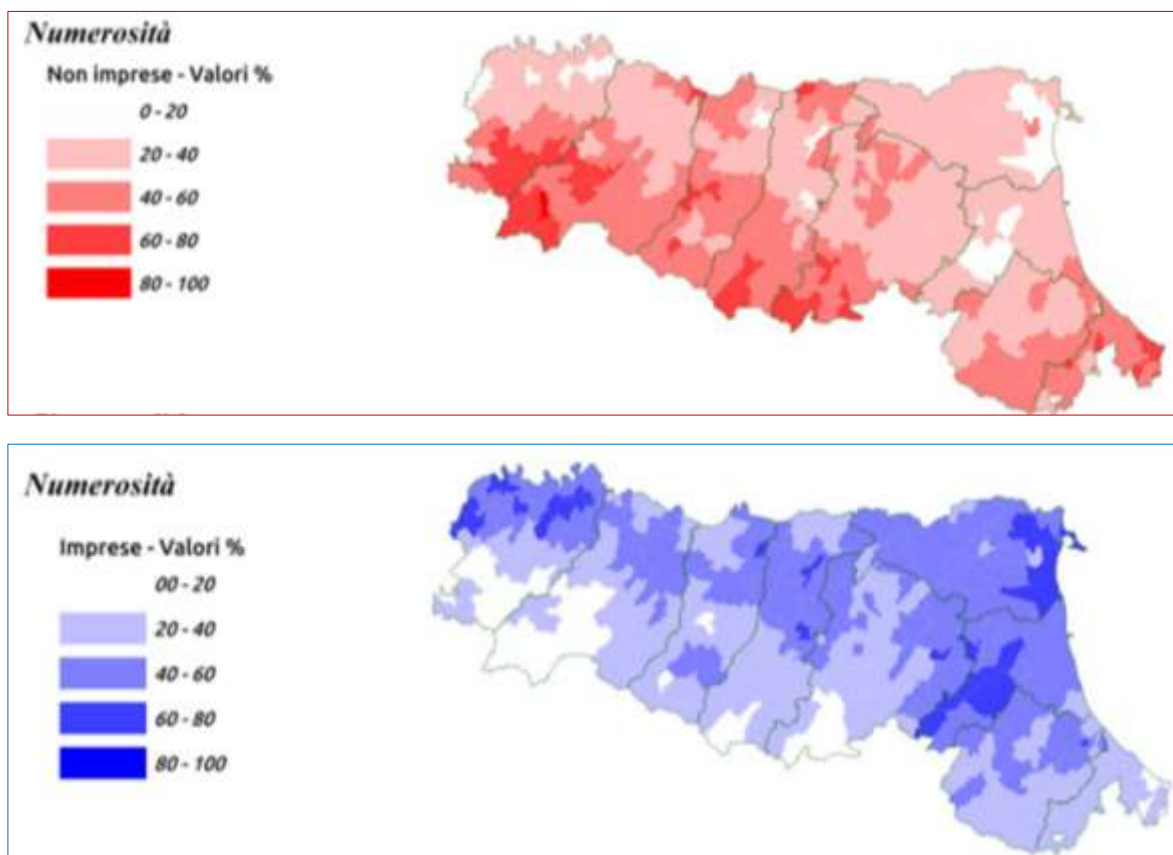
In predominantly rural areas, especially in the mountain, an important source for farmers’ income derives from other activities such as agritourism, forestry, food processing, etc. On the opposite, these activities are less relevant in the plain area (Table 5).

Table 4 Climatic projections by homogeneous areas. Reference period 1961-1990 (numbers in black), projection for 2021-2050 (numbers in red)

HOMOGENEOUS AREAS	CLIMATIC INDICATORS						
	Average annual temperature [°C]	Max summer temperature [°C]	Min winter temperature [°C]	Tropical nights in summer	Heat waves (N°)	Annual precipitation (mm)	Days without precipitations in summer
APPENNINES RIDGE OVEST	8.4 10	20.9 23.5	- 2.1 -0.9	0 1	3 9	1500 1450	17 22
APPENNINES RIDGE EST	9.3 11	21.5 24.8	- 1.0 0.2	1 3	3 9	1450 1340	18 23
HILLS OVEST	10.9 12.6	25.2 27.7	- 1.2 0.2	2 7	3 8	1020 940	20 26
HILLS EST	11.7 13.4	25.5 28.8	0 1.4	3 8	2 8	1000 910	20 25
PLAIN EST	12.9 14.5	28.2 31	- 0.3 1.3	8 18	3 7	710 650	21 28
PLAIN OVEST	12.7 14.4	28 30.5	- 0.3 1.5	11 29	2 7	770 700	21 30

Source: Regione Emilia-Romagna [scenari climatici regionali](#)

Figure 6 Distribution of “non-enterprise” farms (top) and of “enterprises” (bottom) in Emilia-Romagna



Source: Regione Emilia-Romagna e Agriconsulting, 2013

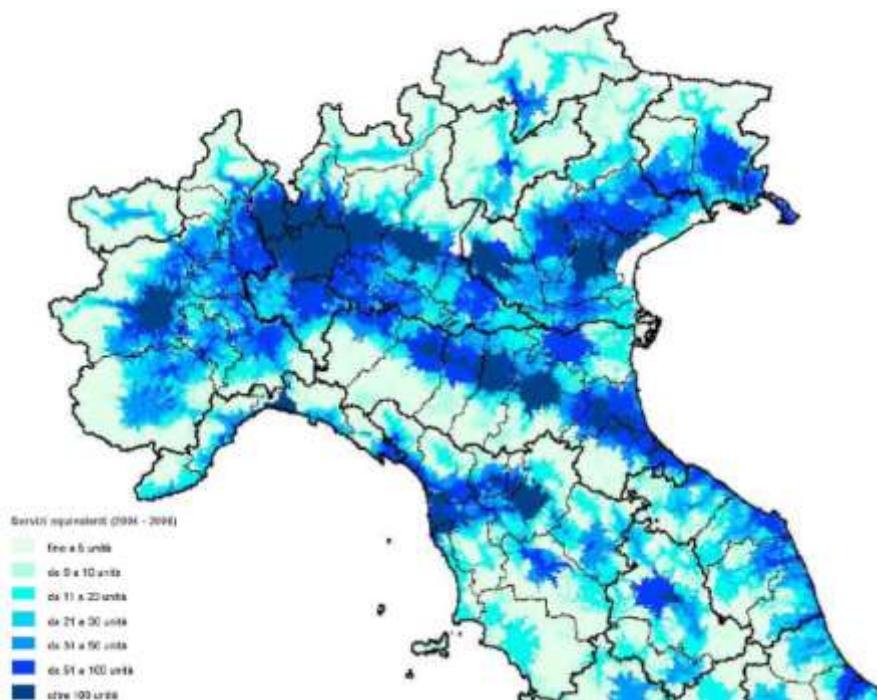
Table 5 Share of farms performing other activities, by altitude

Emilia-Romagna (Tot)	Mountain	Hills	Plain
9%	15,5%	11,0%	7,0%

Source: Regione Emilia-Romagna e Agriconsulting, 2013

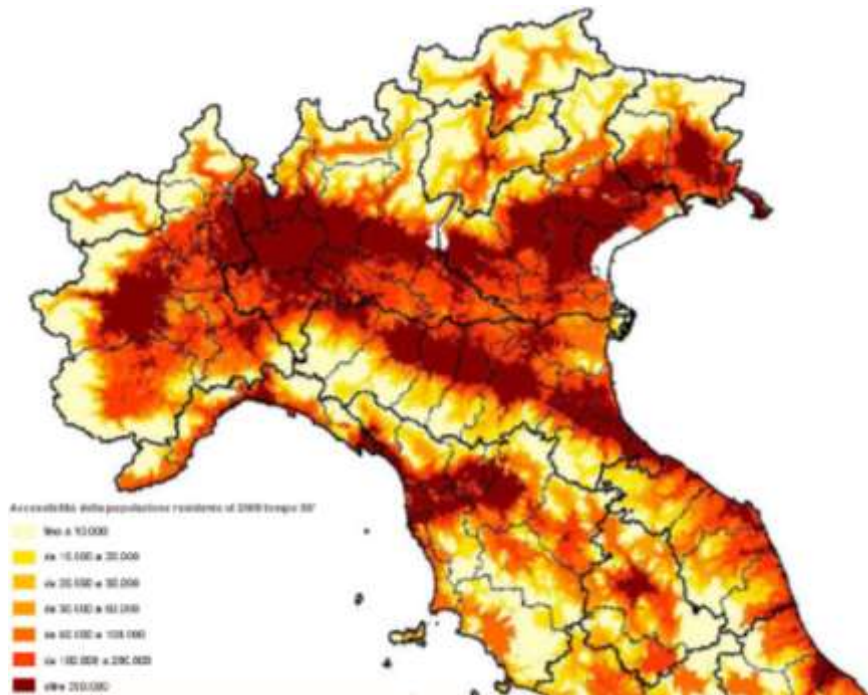
Services' provision also generates significant unbalances in the region. Despite the Emilia-Romagna being in a good condition both in relation to the national and European contexts, the availability and accessibility to basic services present significant differences between plain and mountain areas. This is evident if we look at the degree of accessibility intended as the capacity to reach a service (Figure 7) or to reach other people (Figure 8) in 30 minutes moving from a given municipality.

Figure 7 Accessibility to services (e.g. schools, hospitals, cultural and financial services) in 30 minutes (2004-2006). Light colour means lower accessibility.



Source: L'Atlante Nazionale del Territorio Rurale (CAIRE, 2013)

Figure 8 Accessibility to resident population in 30 minutes (2008). Light colour means lower accessibility.

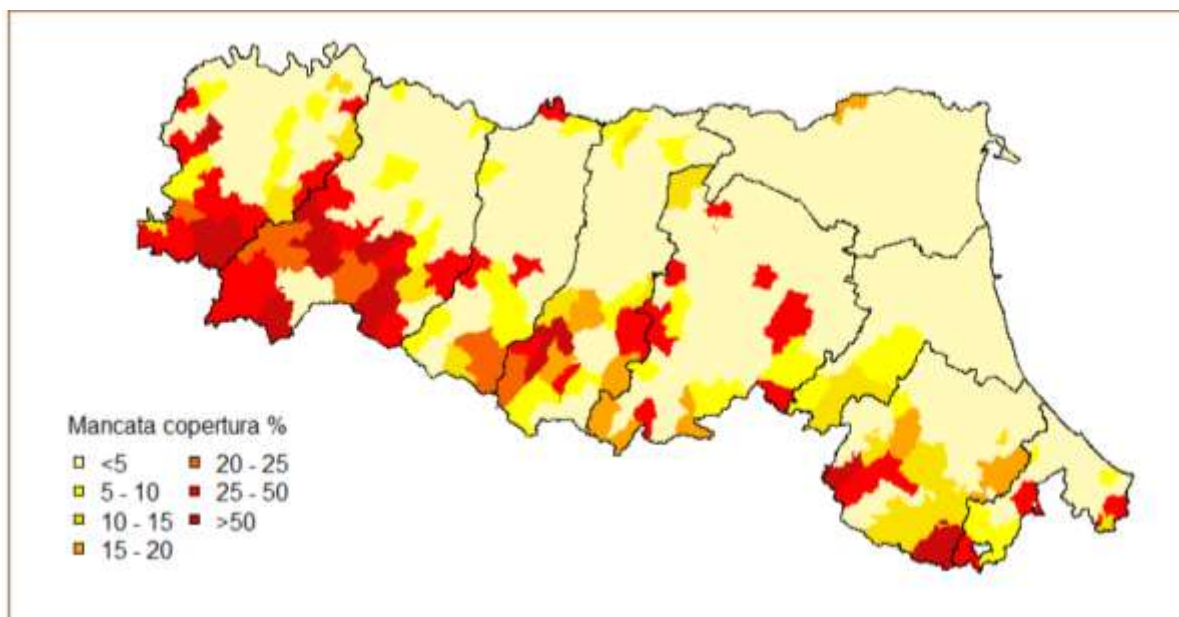


Source: L'Atlante Nazionale del Territorio Rurale (CAIRE, 2013)

Moreover, the gap between urban and rural areas in the access to modern information and communications technology (ICT) – the so-called digital divide – is more significant for predominantly rural areas of Emilia-Romagna. Even though connection to broadband services (fixed and wireless networks above 2 MB/sec) reaches 90.5% of the population, predominantly rural areas are more disadvantaged (Figure 9). When it comes to high-speed broadband services (above 30 MB/sec), however, it is estimated that only 9% of the population is connected (Regione Emilia-Romagna e Agriconsulting, 2013). It is worthwhile mentioning that in 2007 the Emilia-Romagna Regional Government created LepidaScpA, an in-house service provider established by Regional Law (11/2004). The company provides homogeneous and efficient broadband network (Lepida Network) linking all local authorities in the region with optical fibre (European Commission, 2020a).

Lastly, the digital divide across rural areas concerns also the provision of ICT at farm level. Only 9.6% of farms in the region are equipped with ICT and of these more than 71% are located in the plain (Table 6). Likewise, the use of the internet and the ownership of a website or webpage decrease by moving from plain to mountain areas.

Figure 9 No broadband coverage on fixed and wireless networks (2012-2013)



Source: Regione Emilia-Romagna e Agriconsulting, 2013

Table 6 ICT equipment at farm level by altitude (2010)

Altitude	Farms with ICT (%)	Use of Internet (%)	Ownership of a website or webpage (%)
Mountain	5,8	9,5	11
Hills	22,5	33,7	38,2
Plain	71,6	56,8	50,8

Source: own elaboration based on ISTAT Agricultural census (2010)

2.2. Review of main challenges and opportunities

Due to the diversity that characterizes the rurality of Emilia-Romagna, the upcoming challenges and opportunities are also expected to be manifold and different across rural areas of the region. Opportunities and challenges will also depend on the capacity to deal with the long-term effects of the current crisis due to CoVID-19. If on one hand, the pandemic has demonstrated the urgency to strengthen the resilience of agri-food industry, on the other, it might provide new opportunities for development of rural areas. Given the complexity and unpredictability of the situation, one may attempt to group challenges and opportunities for rural areas of Emilia-Romagna under three main subjects.

The first relates to help the agri-food sector to find a **balance between competitiveness and sustainability**. Matching this balance is a priority for rural areas located in the plain where the risks related to land use change, fragmentation, air-pollution and biodiversity loss are still high. The recent EU Biodiversity Strategy ([COM\(2020\) 380 final](#)), indeed, establishes the “urgent need to bring back at least 10% of agricultural area under high-diversity landscape features”.

Moreover, the Farm to Fork Strategy ([COM\(2020\) 381 final](#)) will probably entail additional efforts for the agri-food industry of Emilia-Romagna to fulfil the new targets established at EU level. The strategy, indeed, establishes a comprehensive approach, from production to consumption, to shift to sustainable food systems

with a timeframe of 2030. Emphasis is placed on ensuring a sustainable food production by means of a significant reduction in the use of pesticides, fertilizers, nutrient loss, antimicrobials and through an increase in organic farming³. It is worth mentioning that, for some of these targets, Emilia-Romagna is already in a process of improvement. For instance, the application of N mineral fertilizer has significantly decreased over the last decades mostly due to the implementation of Nitrate Directive but also to innovation towards more environmental friendly approaches promoted through the RDP (Marconi et al., 2015), the rates of UAA under organic farming are higher compared to the other regions of Northern Italy (ISPRA, 2019), and there are several registered geographical indications characterized by sustainable supply chain (e.g. Parmigiano Reggiano). Hence, the next programming period will be essential to achieve the targets established by the strategies at national and local level. However, the negotiation for the new CAP is being conducted in these exceptional circumstances and the new framework for implementation (i.e. through the national CAP Strategic Plans) may entail new challenges at the regional level.

The second subject is related to the **digital divide**. The spread of smart-working, as side-effect of the lockdown, has shown the urgency of increasing broadband penetration in remote areas also to encourage the uptake of e-health solutions. It is estimated that for every 10% increase in broadband penetration rate there is an increase of 1% of Gross Domestic Product (GDP) and 80 new jobs emerging for every 1.000 new broadband users (European Commission, 2020a). The Farm to Fork strategy also addresses this issue establishing the objective that 100% of rural areas get access to fast broadband internet by 2025. As said, the process for enhancing digital infrastructure has already started in Emilia-Romagna with the creation of LepidaScpA. In 2013, for instance, the company launched a project called Net4All that has achieved to bring ultrafast broadband via fibre optic cables to areas where enterprises suffered from lower competitiveness and productivity⁴. Such processes should be kept and reinforced in the future and a combination of public and private investments will be necessary to enhance the connectivity of rural areas. Besides, digital divide for households should also be combined with digitalisation of agriculture: both aspects are, indeed, strictly connected and should not proceed separately.

The third subject consists in putting rural areas at the core of the strategy for **adaptation and mitigation to climate change**. Rural areas, in fact, contribute to the production of a wide range of environmental public goods that can help to mitigate the impact of climate change. The provision of such public goods, however, is still not adequately valorised and there is a lack of knowledge and skills for adaptation. The [PROVIDE](#) project, for instance, showed that the provision of public goods create different opportunities for intensive areas (characterised by trade-offs and conflicts), for areas of high touristic potential (that have good chance to have opportunities from public goods provision) and for marginal areas under risk of abandonment (in which forest-related carbon sink actions can actually be of great interest). Hence, the valorisation of these public goods and service, especially in predominantly rural areas of the region, can create relevant opportunities for development in the future.

2.3. Summary of existing foresight(s)

Foresights conducted at national level:

³ In details the Farm to Fork strategy establishes to achieve by 2030: a reduction in the overall use and risk of chemical pesticides by 50%, a reduction in the use of hazardous pesticides by 50%, a decrease in nutrient loss by 50%, a reduction in the use of fertilizers by 20%, a drop in the sales of antimicrobials for farmed animals and in aquaculture by 20%, at least 25% of the EU's agricultural land under organic farming, and a reduction of food waste by 50% at the level of retail and consumption. Moreover, the strategy aims at improving the overall sustainability of the food supply chain and at making healthy and sustainable food more affordable.

⁴<https://ec.europa.eu/digital-single-market/en/news/broadband-handbook-facing-challenges-broadband-deployment-rural-and-remote-areas>

- The Institute for Environmental Protection and Research (ISPRA, 2013) reports to the European Commission the progresses made at national level to monitor and reduce greenhouse gas emissions. Within this comprehensive report, a part is dedicated to national projections of greenhouse gas emissions by sources and their removal by sinks as a minimum for the years 2015, 2020 2025 and 2030, organized by gas and by sector.

Foresights conducted at regional level:

- The regional administration, within the regional strategy for mitigation and adaptation to climate change, develop climatic projections for homogeneous areas of the region ([scenari climatici regionali](#)).
- Tomozeiu et al. (2018) assessed climate change scenarios of seasonal minimum and maximum temperature over different Italian agricultural areas, during the periods 2021–2050 and 2071–2100 against 1961–1990. One of the analysed agricultural area is located in Faenza (Emilia-Romagna) specialized in kiwifruits production. For the same agricultural area, a study conducted by Villani et al. (2011) estimated the climate change impacts for the period 2021-2050 on kiwifruits irrigation water needs.
- ERVET S.p.a. (2017) in collaboration with Regione Emilia-Romagna elaborated the Regional Energy Plan whit “business as usual” and “target” scenarios for GHG emission by energy sectors with a time horizon of 2030.

3. Results from interviews with MAP members

This section is built upon interviews with three MAP’s members. Due to the current situation in Italy, indeed, it was not possible to conduct interviews with all members of the MAP. Nevertheless, the three interviewees represent different organizations and also different geographical areas of the region, notably: the regional agricultural and forestry office that covers the whole regional territory, an environmental consultancy based in the province of Ferrara and a Local Action Group based in the provinces of Parma and Piacenza. Such a diversity is also reflected in the different positions of stakeholders with respect to the future opportunities and challenges.

3.1. Challenges and opportunities in the next 20 years

All interviewees cited **depopulation and ageing** as concerns for rural areas, especially for those located in the Apennines. According to one interviewee, lack of basic services and infrastructures are also significant problems for mountain areas and are a direct consequence of these demographic trends. On the opposite, another interviewee did not find accessibility to services as a problem that affect rural areas of the region. Interestingly, one interviewee reported that lower population density has represented a benefit during the peak of CoVID-19 pandemic: mountain areas in some of the provinces of Emilia-Romagna have, indeed, reported less contagions. This is creating a growing interest by urban dwellers towards mountain areas that are experiencing an increase in tourism and even in housing market. This might represent an opportunity in the future to reverse the current depopulation trends. However, it is fundamental that this change does not occur at the expense of rural communities and environment.

According to one interviewee, **enhancing the digital infrastructure** is a priority for rural areas of the region to tackle the lack of job opportunities and the following depopulation and ageing. This challenge has become even more evident due to CoVID-19 and the ensuing spread of smart working that showed that it is not necessary to live in the cities to work. Digitalization, however, is a necessary but not sufficient condition to improve the economy of rural areas. The **support to farmers’ income** through fiscal incentives and

payments for ecosystem services is also needed. Nevertheless, a greater digitalization of rural areas could create the field where new opportunities can develop. For instance, companies and services, usually based in the cities, could decide to set up in rural areas if the right means are available.

Another interviewee highlighted that the challenge of digitalization implies also to make a **more effective use of the large amount of data available in agriculture**. Both at regional and national level, there is often a lack of a common jargon in the categorization of data harvested in agriculture; moreover, data collected from different sources (e.g. regional environmental protection agency, regional agricultural and forestry office, etc.) have different digital languages. This makes digitalization ineffective and impedes the possibility to provide rapid feedbacks to farmers.

Interviewees agreed that **climate change** also constitutes a great challenge for the region especially for rural and urban areas located in the plain that are experiencing a significant increase in temperature. This, however, can represent an opportunity for predominantly rural areas to attract more population due to the better climatic and environmental conditions.

There might be opportunities in the future also related to the **provision of services** linked to health and wellness in rural areas. Like for recreational and educational services, multifunctional farms might also become specialized in the provision of services linked to wellness and health.

Climate change might also entail a **change in production and a greater diversification of rural economy** in the future. The decrease in agricultural yields, due to the effects of climate change, might require considering a shift of production to the so-called resilient products. New food products (e.g. insects) and new cereals (e.g. sorghum and millet) that do not belong to our food culture, but that can prove a better adaptation to climate change, might represent opportunities for income diversification in the future. Of course, this change has several socio-cultural implications that should be taken into account in the future. The large presence of immigrants, with different dietary habits, should be also considered. Diversification of rural economy, indeed, should follow two trajectories in the future: on one hand, shifting the production to more resilient products, on the other, paying more attention to the socio-cultural aspects linked to food.

Lastly, interviewees identified the risk related to **landslides and floods** as an important challenge for rural areas. One respondent highlighted that in mountain areas hydrological instability is exacerbated by depopulation and land abandonment. According to another, improving land management is a priority in the future and requires large public investments in the construction and maintenance of infrastructure. It is also very important to value the work done by farmers to keep the land in a good state, for instance through agro-environment schemes and water works.

3.2. Desirable future for 2040

The CoVID-19 and the climate change are creating unique opportunities to reverse the current trends of rural areas. Thus, the future of rural areas will in part depend on the capacity to seize these opportunities. For instance, one interviewee was optimistic, and in his vision rural areas will be **more populated**, with **stronger internal relations** and a **more balanced generation mix**. Digitalization will play a key role in achieving this vision because it has the potential to make rural areas **more connected to the global world** while keeping their local characteristics.

Two interviewees pointed that **rural areas should be in the forefront in the strategy for adaptation to climate change**, both in terms of environmental, health and recreational services' provision, than in the production of resilient food products. Especially this last aspect will require working on the socio-cultural aspects related to food.

For one interviewee, **rural areas should become safer** and more attention should be paid to the conservation and maintenance of the territory especially in the face of the growing challenges due to the effects of climate change.

In the vision of one interviewee, the future of rural areas of the Apennines should be characterized by **thriving rural communities** that respect and value the rural environment. Rural and urban dwellers that live and benefit from rural areas should actively contribute to their conservation and safeguard.

A vision for rural areas would also require a **rethinking of the current governance** on which the EAFR is based. On one hand, a reform should concern the contents of RDPs. The support to the agricultural production will still be fundamental in the future, but, especially for remote rural areas, RDPs should go forward by focusing on services' provision and on the valorisation of social and cultural aspects of rural communities. On the other hand, this vision would imply a new governance of rural development based on homogeneous areas rather than on administrative boundaries. Homogeneous areas (e.g. mountain ridge, hills, plain, etc.) share the same geographical, social, cultural and historical characteristics. Hence, in the vision of one interviewee, overcoming administrative boundaries and tailoring RDP's interventions on homogeneous areas will be fundamental in the future.

3.3. Challenges in reaching the vision

Regarding digitalization, the **need for large investments** may be a challenge for reaching the vision. One interviewee reported that there is still a gap with respect to digital infrastructure in the region and that this issue was probably underestimated in the past. On the contrary, another interviewee believed that significant investments have been made in the last Rural Development Program, but she also recognized that ensuring Internet connection in rural areas is important.

All the interviewees identified **governance-related problems** – both at EU and regional level - among the main challenges to reach the vision even though expressing different opinions on the topic. One interviewee argued that the authority in charge for rural development should be as much closer as possible to rural areas. On the opposite, the on-going CAP reform foresees a different approach based on the CAP Strategic Plans elaborated at national level. With this new approach, the regional government risks to be marginalized. The valorisation of rurality, instead, would require an empowerment of government levels that are more proximate to rural areas and are able to capture the specificities of the territories.

Interestingly, another interviewee argued that the governance on which the use of EAFR has been based so far – with the regional governments being the main actors in the programming – is inadequate. Regional RDPs follow administrative boundaries that are not appropriate to program interventions for rural development. This issue has consequence also for the use of funds. Economic incentives, if not tailored on local characteristics and needs, might not produce the expected results. This is evident in mountain areas affected by depopulation where, for some interventions, economic aids are useless because there is anyway a lack of working force to ensure implementation.

Another interviewee highlighted that an obstacle to improve the safety of rural areas is represented by the **fragmentation of competences across a multitude of actors** that often do not communicate with each other. Similar to the problem related to the large amount of data in agriculture, the wide range of activities and plans that are implemented by different sectors reduce the capacity to provide rapid answers when the problems related to hydrogeological instability occur.

4. Conclusion and next steps

This paper aims to discuss the most relevant challenges and opportunities for the future of rural areas of Emilia-Romagna by means of a desk research and interviews with some of the members of the MAP.

Section 2 reports the results of the desk research and provides a picture of the diversity characterising rural areas of Emilia-Romagna. Predominately rural areas, indeed, share many features with other remote rural

areas of Europe, such as depopulation, ageing, low productivity, and limited broadband penetration. On the opposite, rural areas based in the plain have higher productivity levels but suffer from the effects of climate change, land-use competition and fragmentation.

Given such diversity, the identification of relevant themes for rural areas of Emilia-Romagna was done through the interviews. Section 3 reports the opinions of interviewees and their vision for rural areas with a time horizon of 2040. Notably, the long-term vision foresees a rurality that is more connected to the global world thanks to an increase in digital infrastructure. Thriving rural communities with strong internal relations should characterize rural areas in the future. Furthermore, rural areas should be at the forefront in the adaptation to climate change through environmental, health and recreational services' provision, and the production of resilient food products. Moreover, rural areas are expected to be safer in the future which require an improvement in land management. The obstacles to achieve this vision mostly rely on governance-related problems identified both at EU level and at regional level.

For the next step of the Delphi process, a survey will be submitted to stakeholders. The survey will take into account the diversity that characterizes rural areas of the region; such diversity, indeed, makes very difficult to build a unique vision for all typologies of rural areas of Emilia-Romagna.

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