MAP Position Paper

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

MAP POSITION PAPER

EMILIA-ROMAGNA MAP

ITALY

Version 18.01.2021

Contact information

Facilitator | Stefano Targetti, Stefano.targetti@unibo.it

Monitor | Emilia Pellegrini, Emilia.pellegrini2@unibo.it

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

1. Headline message

Rural areas (RAs) of Emilia-Romagna show a great heterogeneity, ranging from hilly-mountainous areas that can be ascribed to the OECD definition of remote RAs, to RAs of the plain that are an integral part of Functional Urban Areas (OECD, 2019). Main features of the first type of RAs are, on one hand, unique environments, an agriculture based on high-quality agri-food products, and a strong cultural and historical identity, on the other, depopulation and ageing, lack of infrastructures and services and scarce broadband penetration. Moreover, these areas suffer from a severe hydrogeological instability worsened by land abandonment. RAs of the plain, instead, are characterised by a competitive agriculture, farm concentration, homogenisation of agricultural landscape structure and fragmentation. Furthermore, the adverse effects of climate change are already producing significant losses in agricultural yields, urging the adoption of adaptation strategies especially in terms of water resources management.

Given this diversity, two visions were developed for RAs of Emilia-Romagna of 2040. The visions were developed through a consultation process based on interviews with the experts of the Emilia-Romagna Multi-actor Platform (MAP), a meeting with the MAP, and on an on-line questionnaire with larger group of rural stakeholders of the region.

In a nutshell, infrastructures, thriving agriculture and valorisation of rural territories are the keywords summarising the vision for hilly-mountainous RAs of 2040. Resiliency and competitiveness based on the quality of agri-food production, instead, are the keywords describing the vision for RAs of the plain of 2040.

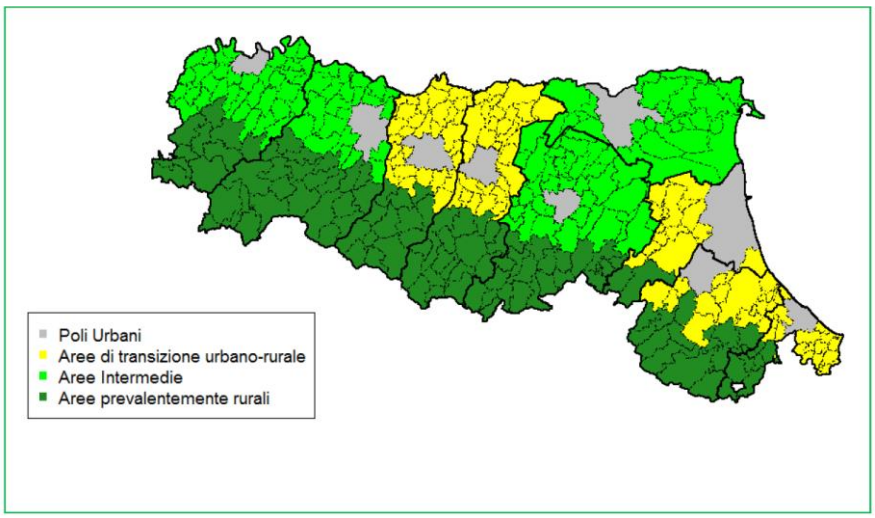
Stakeholders also identified a range of hurdles to achieve the visions. The main are the lack of investments to build new infrastructure, political incapacity for long-term programming to face hydrogeological instability, large-scale distribution and competitiveness of global markets hindering quality productions, and finally a range of cultural barriers of local population. The enablers to achieve the visions would entail both organisational and technical solutions to be implemented at all governance scales (from EU to local). The results of the consultation process also highlighted that, to keep and strengthen the quality of regional agri-food products in the future, it will be important to intervene at two levels. On one hand, there is the urgency to raise consumers' awareness regarding the additional benefits of buying quality and sustainable agri-food products. On the other hand, the CAP should ensure better price protection for agricultural commodities to reduce the competitivity gap affecting the Italian agriculture with respect to other EU and non-EU countries.

***Keywords**: infrastructures, valorisation, competitiveness, quality production, adaptation to climate change.*

2. Key scientific evidence

The Emilia-Romagna MAP covers the whole NUTS2 region of Emilia-Romagna that is located in the North-East of Italy. According to the classification adopted by the regional administration, three typologies of RAs can be identified (Figure 1 Typologies of RAs of the Emilia-Romagna region.Figure 1).

Figure 1 Typologies of RAs of the Emilia-Romagna region.



Source: Regione Emilia-Romagna e Agriconsulting, 2013

Urban-rural transitional areas (yellow) and intermediate RAs (green), for instance, are located in the plain[1] of the region and their proximity to Functional Urban Areas (OECD, 2019) determines higher density rate and much younger population compared to the other RAs. In terms of economic performance, farms located in these areas are more competitive and show a greater entrepreneurship. The agricultural sector has suffered from contraction over the last decades that, although sharper in predominantly RAs, has affected all typologies of RAs of the region. 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 has exacerbated land-use competition, homogenisation of agricultural landscape structure and fragmentation.

Predominantly RAs (dark green in Figure 1) are located along the Apennines ridge and are characterised by negative trends in the change of resident population whose average age is significantly higher compared to that of other areas of the region (

Table 1. Old-age dependency ratio – average values per Rural/urban typology (year 2012)

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

Table 1).

[1] In this paper Urban-rural transitional areas and intermediate RAs will be referred to as RAs of the plain, while predominantly RAs will be often called hilly-mountainous RAs.

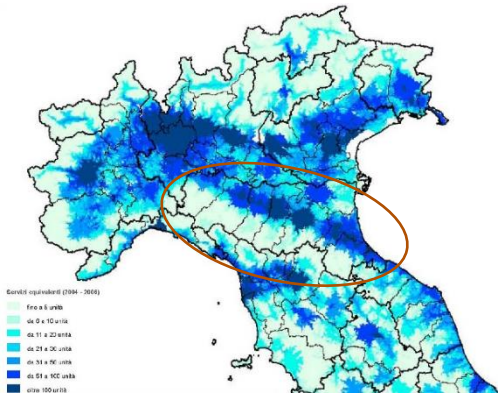
Table 1. Old-age dependency ratio[2] – average values per Rural/urban typology (year 2012)

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

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

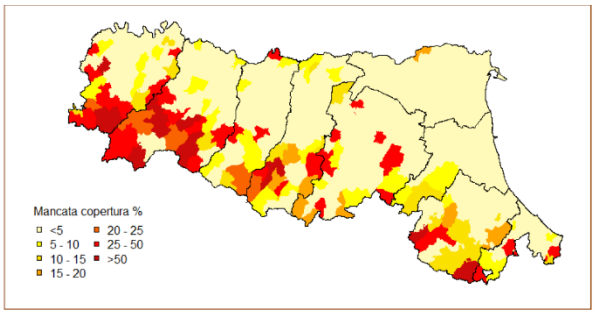
Agriculture in these RAs is characterised by the presence of small farms with lower productivity rates and an important source for farmers' income derives from other activities such as agritourism, forestry, food processing, etc. The accessibility to basic services and broadband coverage shows significant differences between predominantly RAs and the other typologies of RAs (& **Error! Reference source not found.**).

Figure 2 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 3 No broadband coverage on fixed and wireless networks (2012-2013)



Source: Regione Emilia-Romagna e Agriconsulting, 2013

[2] The old-age dependency ratio 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, 2020).

Finally, it is also worthwhile mentioning that climatic conditions are expected to get worse in the future in all type of RAs of the region. Increase in temperature is expected in all areas but with a higher magnitude in the Apennines during summer; the plain, instead, is expected to be much affected by extreme events and water shortage during summer.

Table 2 Climatic projections by homogeneous areas. Reference period 1961-1990 (numbers in black), projection for 2021-2050 (numbers in red)

	CLIMATIC INDICATORS						
HOMOGENEOUS AREAS	**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: own elaboration based on Regione Emilia-Romagna scenari climatici regionali

3. Summary of the outcomes of the consultation process

This section provides the outcome of the consultation process to develop the long-term vision for RAs of Emilia-Romagna. More in details, seven MAP's members were interviewed from June to October and the results of interviews were discussed in meeting attended by five MAP's members (plus three researchers of the UNIBO team) held on October 27th. Lastly, twenty-four replies to the on-line questionnaire were collected from November 12th to December 2nd.

More information regarding the methodology is provided in Annex 1.

3.1. Challenges and opportunities in the next 20 years

The interviews and the meeting allowed the identification of a range of challenges and opportunities that are expected to characterise RAs of Emilia-Romagna in the next 20 years. Respondents to the survey were asked to rank (on a 5-point Likert scale) all identified challenges and opportunities helping to identify the priority themes of the future.

3.1.1. Challenges in the next 20 years

Climate change

Results of the questionnaire (Figure 3) highlight that facing the effects of climate change, especially in term of management of water resources, is deemed the main challenge of the future. MAP' s members, indeed, stressed that climate change is already producing dramatic losses to local agriculture and that many different adaptation strategies

will be necessary in the future. Among them, more efforts and investments will be needed in research and innovation to understand how helping farmers to shift to more sustainable production while compensating their increasing losses in yields. Another challenge mentioned in relation to climate change will be to work on cultural and legal aspects that obstacle the introduction of more resilient agri-food products into dietary habits.

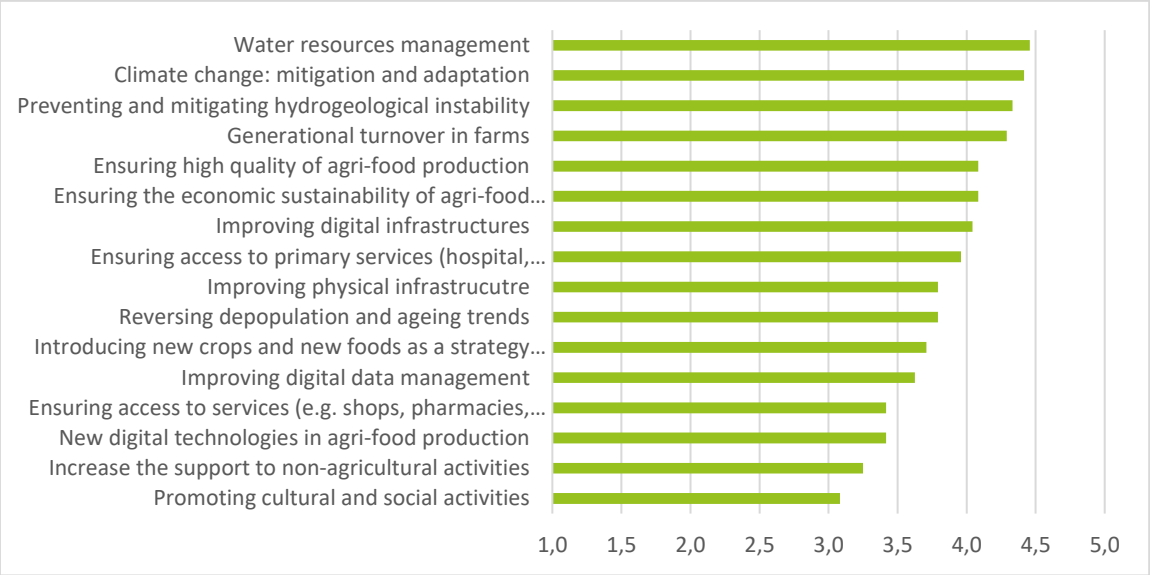
Infrastructures and services

Improving physical infrastructures in hilly-mountainous RAs is the key to reduce isolation and to prevent and contain the hydrogeological instability that is very problematic in these territories. Hydrogeological instability is also connected to land abandonment and to the negative demographic trends that affect predominantly RAs. Increasing infrastructures is key to reverse these trends because it would ease the creation and accessibility to services of general interest.

Economic sustainability

The viability of RAs depends on the possibility to guarantee an economic sustainability to these territories. For predominantly RAs this implies to ensure the profitability of typical agri-food and wine production that are usually threatened by the competition of large-scale distribution systems. In this regard, fiscal incentives, less bureaucracy for farmers, and the remuneration of ecosystem services are necessary interventions for the future. One stakeholder also pointed out that the competitiveness of regional agriculture is very much linked to the high-quality of regional agri-food production. However, high quality of production entails higher production costs compared to those of other countries that often make regional agri-food products not competitive, especially in terms of commodities. Hence, the challenge is to safeguard the high qualitative standards characterising regional agri-food products while being competitive on international markets.

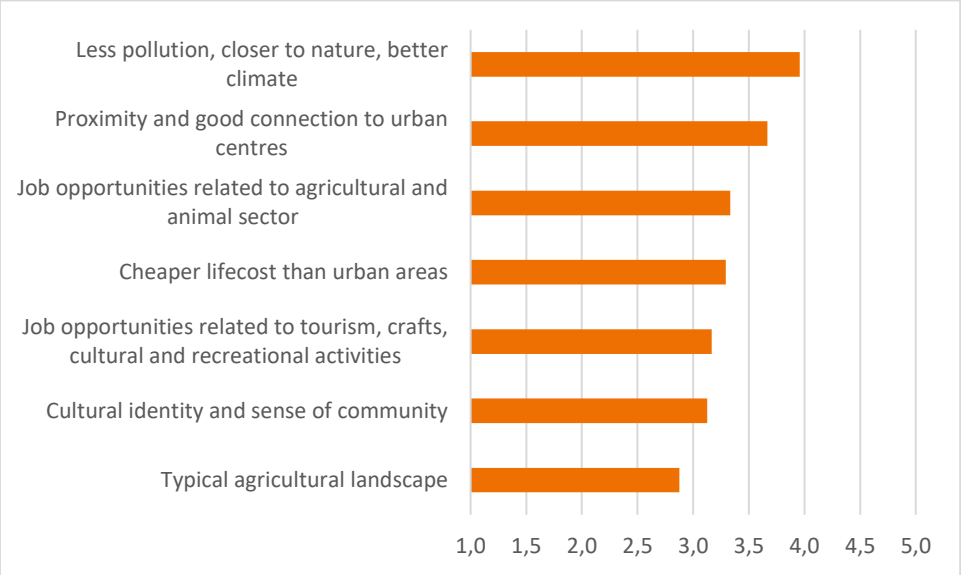
Figure 3. Results (mean values) of the survey question "How important will the following challenges be from now until 2040?"



3.1.2. Opportunities in the next 20 years

To identify opportunities a part of the questionnaire was dedicated to understanding what makes RAs more attractive. Figure 4 shows that the first two motivations to visit and settle in RAs are related to the better environment and climatic conditions, followed by the proximity and connection to urban centres. Right after, the availability of jobs related to agriculture and livestock sectors and the cheaper life cost are deemed of equal importance to decide to live in RAs.

Figure 4. Results (mean values) of the survey question "How important are the following aspects to decide to stay or settle in the rural areas of Emilia-Romagna?"



In line with that, the main opportunities that emerged from the discussion with MAP and from the survey's results can be organised around the following topics:

Digitalisation

Enhancing digital infrastructure is considered a key opportunity for the future development of RAs. Digitalisation would allow to bring new services (e.g. e-health, e-commerce) in RAs and to create jobs opportunities linked to the tertiary sector. The recent increase in smart working was also mentioned by MAP's members as good opportunity to reverse demographic trends; however, results from the survey place less emphasis on the opportunities derived from remote working (see Figure 5). At the same time, one MAP's member pointed that the enhancement of digital infrastructure should occur with a clear understanding of what are the needs of the territory. A fast broadband connection, by itself, is not a guarantee of a greater development of marginalised RAs. Increasing farmers 'uptake of digital technologies in agriculture was considered both as a challenge and an opportunity to boost the competitiveness of the sector. Interestingly, digitalisation was also mentioned as a challenge to enhance the effectiveness of collection, interpretation and use of data harvested in agriculture.

Thriving and sustainable agriculture

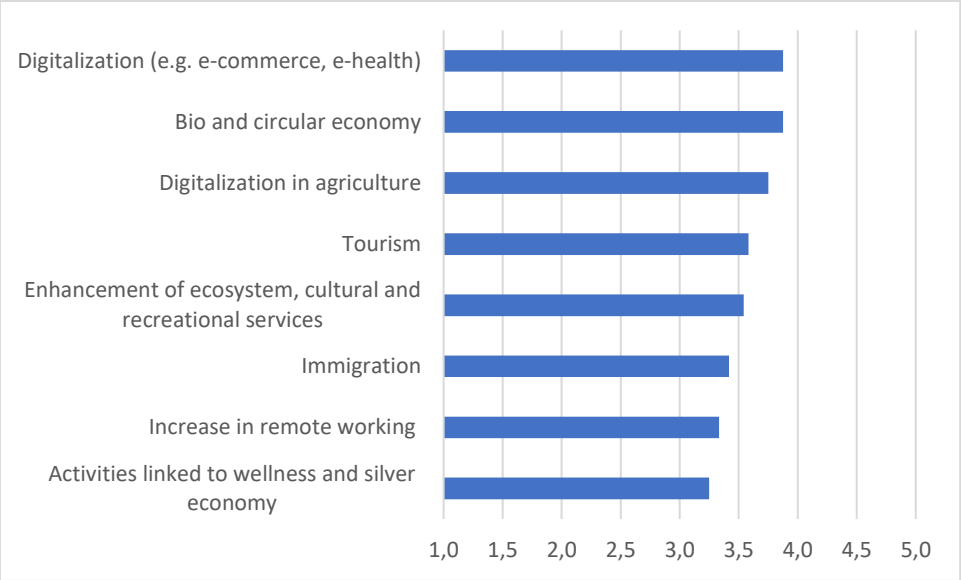
Opportunities for predominantly RAs will come from a greater valorisation of typical agri-food production. Agricultural production in these RAs is characterised by high added-value products that should be more valorised through, for instance, effective brand strategies. Moreover, given the growing demand for healthy food, another relevant theme in the future will be how to remunerate farmers that undertake sustainable production models. In this regard, prices that fully reflect the positive externalities of these productions should be accompanied with awareness campaigns that help consumers to recognise the added value of purchasing local and sustainable agri-food products.

Valorisation of non-agricultural activities

RAs could also benefit from a greater valorisation of non-agricultural activities. For instance, some RAs in the Apennines have recently seen an increase in tourism and in housing market. This because the lockdown caused by Covid-19 has enhanced the interest of urban dwellers towards the better life conditions of rural territories. These new circumstances should encourage a greater valorisation and remuneration of the services provided by RAs. Multifunctional farms might seize this opportunity by becoming specialised in the provision of new services, for instance those linked to health and wellness.

Tourism in the Apennines might also benefit in the future from the spread of e-bikes that make mountains more accessible. However, the possibility to meet these opportunities is currently hindered by a lack of human capital (resources and competences) that affects predominantly RAs. Moreover, as long as the infrastructures will not be adequate, it will be difficult to deploy the potential of these new services and activities.

Figure 5. Results (mean values) of the survey question "How important will the following opportunities be from now until 2040?"



3.2. Desirable future for 2040

Respondents to the questionnaire were asked to provide three words to describe their ideal of RAs of 2040. The word cloud (Figure 6) shows that for majority of respondents the ideal is centred on the theme of sustainability. The whole consultation process, indeed, highlighted that all three dimensions of sustainability are relevant for RAs. These, in fact, are sustainable if economic viable, with a rural economy centred on quality productions rather than quantity and on new opportunities provided by digitalisation. RAs are sustainable if populated and vital and this is possible if infrastructures, services and jobs are available. Last, but not least, RAs are sustainable if resilient to climate change and if the quality of their nature is safeguarded.

The following sections provide a more detailed description of the two visions, one for hilly-mountainous RAs and another for RAs of the plain.

Figure 6. Word cloud representing the word used by survey's respondents to describe their ideal of RAs of the future. Bigger seize means that a word was more frequently used.

3.2.1. Desirable future for hilly-mountainous RAs[3]

In 2040, infrastructures (roads, bridges, etc) will be improved in hilly-mountainous areas. This will facilitate mobility of people and goods within the region and the creation of new services in rural areas. The damages related to hydrogeological instability will be prevented and contained thanks to the enhancement of infrastructures.

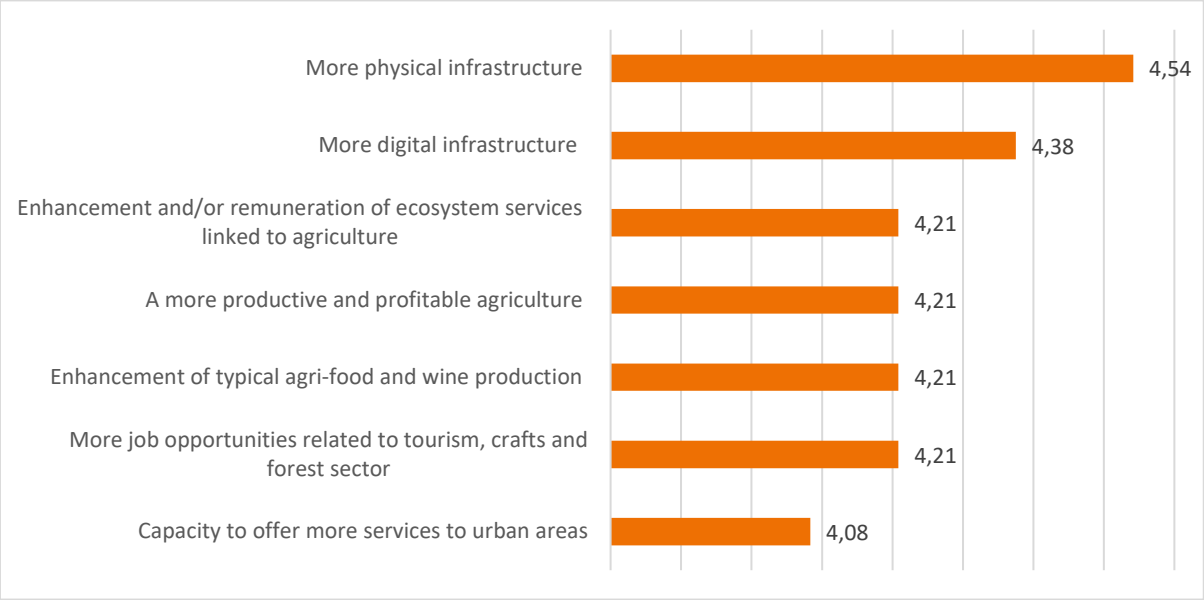
Rural areas will be more connected to the global world due to an increase in digital infrastructures. Digitalisation will be based on local needs and will lead to the creation of new jobs opportunities.

Rural economy will be sustained by a thriving agriculture based on the valorisation of typical agri-food and wine productions and on the enhancement and remuneration of ecosystem services linked to agriculture. Non-agricultural activities, such as tourism, will also contribute to the viability of rural areas. Rural areas will become the place where a range of services linked to nature, culture and wellbeing will be available to rural and urban population.

This vision was built on the arguments raised by the MAP and on the results of the on-line questionnaire. Notably, the vision emerged from the discussion with the MAP was reformulated in terms of improvements for regional rural areas in 2040 and survey's respondents were asked to rate the desirability of each improvement (on a 5-point Likert scale). It is worthy to remark that all the improvements identified by the MAP were confirmed as very desirable by respondents to the questionnaire (Figure 8). Also, in terms of priority, both MAP's members and respondents to the survey put physical infrastructure at the top of the needed improvements to realise a better future for hilly-mountainous RAs.

[3] "Hilly-mountainous" and "predominantly" are used interchangeably to describe this type of RAs

Figure 7. Average values of the desirability (on a 1-5 scale) of listed improvements in 2040 for hilly-mountainous RAs based on survey' s results



BOX: DIFFERENT VIEWPOINTS

In the vision presented to the MAP during the meeting one statement was: "the care of the territory is a priority over production". This statement was criticised by most of participants emphasizing that having a productive agriculture is fundamental to ensure the livelihood of RAs. One stakeholder, however, upheld this argument claiming that the future of RAs in the Apennines will depend on the care of the territory that is also a trigger for a more productive agriculture, and not vice versa.

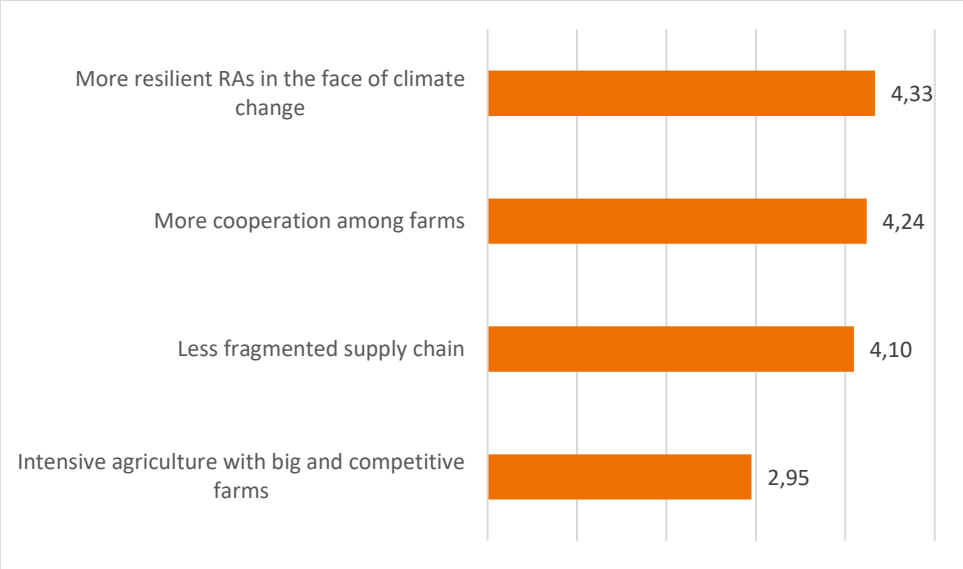
3.2.2. Desirable future for RAs of the plain

In 2040, rural areas of the plain will be more resilient to climate change. Infrastructures, such as flood retention basins, will be key to enhance resiliency of these areas but a greater economic support to farms and a strengthening of risk management and compensation tools will be also needed. The collaboration among farms in the management of water resources, for example through the creation of collective reservoirs, will be strengthened to face water-related problems. The organisation of the supply chain will be improved with a strengthening of the cooperative system. This would allow a greater participation of farmers in the supply chain and will sustain the consumption of local agri-food products.

The improvements identified by the MAP were considered very desirable by the respondents to the questionnaire except for "intensive and competitive agriculture dominated by big players" that in fact was not included into the vision (Figure 8).

As said, ensuring a competitive agriculture in the future was highlighted as a priority, but the arguments raised both by the MAP and in the questionnaire stressed the importance to boost a competitive agriculture based on quality production, both in terms of products and processes, rather than quantity.

Figure 8. Average values of the desirability (on a 1-5 scale) of listed improvements in 2040 for RAs of the plain based on survey' s results



3.3. Obstacles and enablers to achieve the vision

3.3.1. Obstacles to achieve the vision

For each improvement included in the visions, respondents to the survey were also asked to rate its probability to occur from now until 2040. Tables 3 and 4 show that for some of the improvements considered most suitable, respondents were less optimistic regarding their actual fulfilment. To understand the motivation behind their answers, respondents were asked to indicate what are the main **obstacles** to achieve the desired changes. Here, we present only obstacles that were most frequently mentioned by respondents (**Error! Reference source not found.** and Table 7 in Annex 1 report the full list of obstacles).

Table 3. Mean values of desirability (on a 1-5 scale) and probability (on a 0-100 scale) of improvements for hilly-mountainous RAs

Improvement	Desirability (mean)	Probability to occur (mean)
More physical infrastructure	4,54	50,46
More digital infrastructure	4,38	65,25
A more productive and profitable agriculture	4,21	39,42
Enhancement and/or remuneration of ecosystem services linked to agriculture	4,21	43,71
More job opportunities related to tourism, crafts and forest sector	4,21	50,25
Enhancement of typical agri-food and wine production	4,21	53,79
Capacity to offer more services to urban areas	4,08	52,43

Table 4. Mean values of desirability (on a 1-5 scale) and probability (on a 0-100 scale) of improvements for RAs of the plain

Improvement	Desirability (mean)	Probability to occur (mean)
More resilient RAs in the face of climate change	4,33	53,71
More cooperation among farms	4,24	53,48
Less fragmented supply chain	4,10	54,00
Intensive agriculture with big and competitive farms	2,95	64,76

For hilly-mountainous RAs, the main obstacles include: Lack of economic resources and investments (16 nominations); Large-scale distribution and market's asymmetries (8); Lack of political vision (7).
The enhancement of infrastructures (both physical and digital), indeed, requires large investments that often are inadequate or not available.
Large-scale distribution was considered an obstacle to the valorisation of typical agri-food products of the Apennines due to their niche dimensions their higher production costs.
Political inability for long-term programming in RAs was mentioned as a barrier to the improvement of infrastructures to prevent hydrogeological instability.
For RAs of the plain, the main obstacle identified include: Farmers' attitudes (10); Competitiveness of global markets (4); Lack of adequate incentives (3). The first mostly refers to the fact that farmers are not keen to collaborate and this hampers a widespread diffusion of collective solutions. Second, global markets are considered a factor penalising the type of agri-food and livestock production of the region that, as already mentioned, is more focused on quality rather than quantity. Lastly, the incentives that should enable a better organisation of supply chain were deemed not appropriate by some respondents.

3.3.2. Enablers to achieve the vision

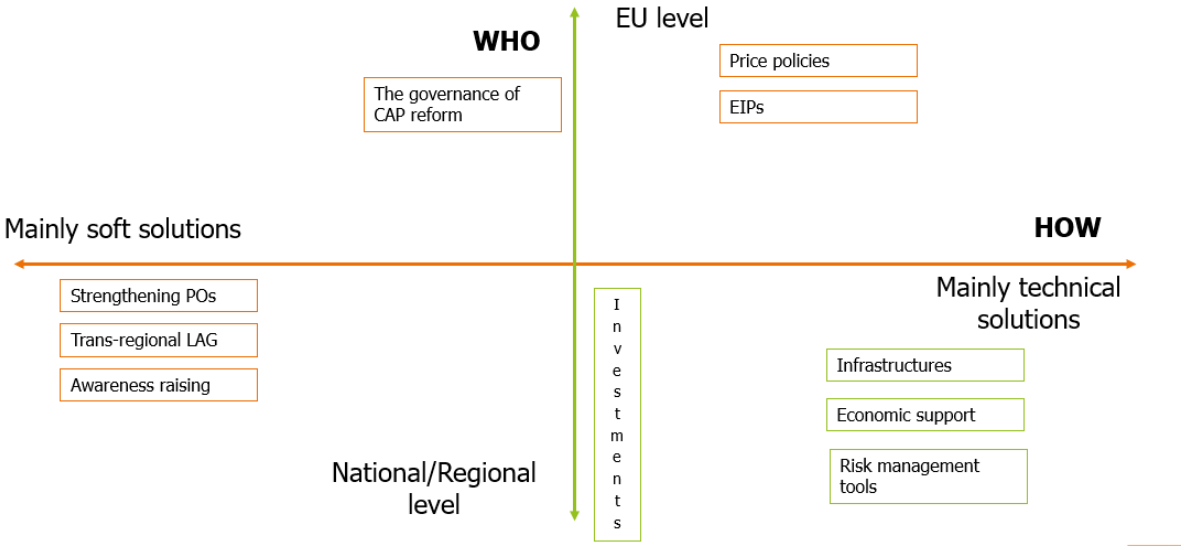
Discussion regarding **enablers** was conducted within the MAP through the interviews and the meeting. Enablers to achieve the visions refer to strategies, or rather policies, that can contribute to the achievement of a better future for RAs. Hence, in this section we organise the arguments raised by stakeholders along two axes: the first refers to *who* should make the policy, or rather *what governance level* should intervene to improve the state of RAs; the second concerns the *how,* in other words what type of solutions are needed to make an improvement in the current state (Figure 9).

Obviously, EU funds, the CAP reform and EU research agenda resulted to have a great influence on regional rural development. As mentioned, the Italian agri-food sector is characterised by high-quality products that, although very relevant on international markets, have in most of the cases niche dimensions due to the territorial conformation and the wide fragmentation of farms' structure. Such characteristics make production costs generally higher compared to those borne by other EU and non-EU countries. Hence, one stakeholder highlighted that until the EU policies do not recognise territorial diversity existing across EU countries and protect the prices of agricultural commodities, it will not be possible for Italian agriculture to be competitive on international markets.

The EU level was also referred to in relation to investments in research and innovation for adaption to climate change. In this sense, the European Innovation Partnerships were mentioned as effective hubs to create coordinating efforts at multiple scales and should be reinforced in the future.

Finally, one stakeholder criticised the ongoing CAP reform that foresees a new approach with CAP Strategic Plans elaborated at national level that marginalise regional governments. In his view, this is a risk because the authority in charge for rural development should be as much closer as possible to RAs in order to capture the specificities of rural territories.

Figure 9. Enablers to achieve the visions for RAs and their distribution along the axis governance level/ type of solutions.



Source: own elaboration

At national and regional level, some technical solutions (on the horizonal axis) have been put forward by stakeholders. First, more investments in physical and digital infrastructures will be necessary to create new opportunities for RAs. Second, the support to the economic sustainability of agricultural sector needs to be maintained. In this regard, stakeholders mentioned: interventions to support farmers' income, facilitating farmers in access to credit for buying and renting the land, and supporting farmers' uptake of risk management tools.

On the opposite side of the horizontal axis, soft solutions refer to actions that imply new organisations or aim at raising individuals' awareness. Under the first category, one stakeholder pointed out the importance of promoting dialogue and cooperation among RAs that share similar geographical, historical and cultural features but belonging to different regional administrations. This would be very important especially for RAs along the Apennines ridge and an idea might be to create a sort of trans-regional Local Action Group. In terms of organisation, another MAP's member highlighted that Producers Organisations should be strengthened to improve the organisation of the supply chain. Producers Organisation and cooperative systems, if well-organised, can help farmers to act as a critical mass and increase their bargaining power.
Solutions aiming at raising individuals' awareness were mentioned in relation to different topics. Consumers should be supported in becoming more aware of the added value of consuming healthy agri-food products produced in sustainable way, so that they might be willing to pay higher prices for their quality. In addition, work should be done on cultural resistance towards the consumption of new and more resilient agri-food products. Finally, people living in RAs should be helped to understand that living in RAs in not only a minus but can present a range of opportunities. Indeed, one stakeholder stressed that, even though it is evident that RAs are disadvantaged for many aspects, the feeling of being "less wealthy" and the inclination of local inhabitants to see weaknesses instead of strengths also penalise the development of RAs.

Annex 1. Methodology used in the MAP

This position paper is based on the guidelines provided by Kull et al. (2020) that, however, were adapted to match with the availability of stakeholders and with internal organisational and time constraints. Following, a description of the steps undertaken during the consultation process:

Step 1: Desk research and context analysis

The SHERPA discussion paper (Féret et al., 2020) was adapted to the local context through the study of regional reports and statistics. The outcome of this step is the Emilia-Romagna MAP Discussion Paper (Targetti and Pellegrini, 2020).

Step 2: Interviews

From June to October interviews were conducted with MAP's members. Thirteen experts were invited for the interviews, but only seven replied to the invitation. The experts allowed a good coverage of all types of rural areas of the region. On the other hand, the policy sector was under-represented (MAP composition: 2 Science; 4 society; 1 policy) (Table 5).

Step 3: Interview analysis

Information collected through the interviews were used to develop the two visions for RAs. In addition, a questionnaire was developed on the basis of data collected through interviews.

Step 4: MAP's meeting

On October 27th a meeting was held with five members of the MAP (1 policy; 4 society) aimed at collecting their feedbacks on the results of interviews. Stakeholders, indeed, provided additional information and required some adjustments on the presented visions. A draft version of the position paper was submitted to stakeholders for validation. The information collected during the meeting were used also to improve the survey design.

Step 5: Submission of the on-line questionnaire and analysis

The finalised version of the questionnaire was circulated to 87 stakeholders. The questionnaire was completed by 24 stakeholders (27,6 % response rate) the majority of which had a professional background in business and industry followed by public administration (Figure 10). Respondents were also asked to indicate for which typology of rural areas they had more expertise/knowledge. Figure 11 shows that intermediate and predominantly RAs were more represented in the survey.

Step 6: survey analysis and finalisation of position paper

Results of the survey were analysed and combined with the previous data collected through interviews and meeting to elaborate a final version of the position paper.

Table 5. List of stakeholders and their affiliations invited for the interviews. In red stakeholders actually interviewed.

Science/Advisory services	Society	Policy
• University of Bologna– PhD in agricultural economics • Consultancy for applied ecology – Agronomist • University of Ferrara – Professor of agricultural economics	• LAG – Technical officer • LAG - Director • Land Reclamation and Irrigation Board – Area manager • Technical assistance and consultancy to farms – Director • Apennine National Park – President • LAG – President	• Directorate of Agriculture and Rural Development of Emilia-Romagna region – policy officer

	• LAG – Technical officer • LAG – Technical officer • Food industry – Purchasing director	

Figure 10. Professional background of respondents

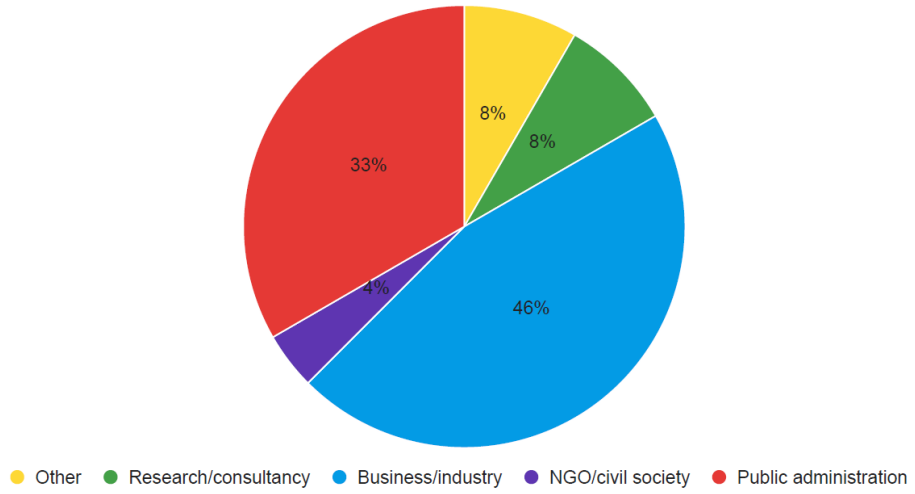
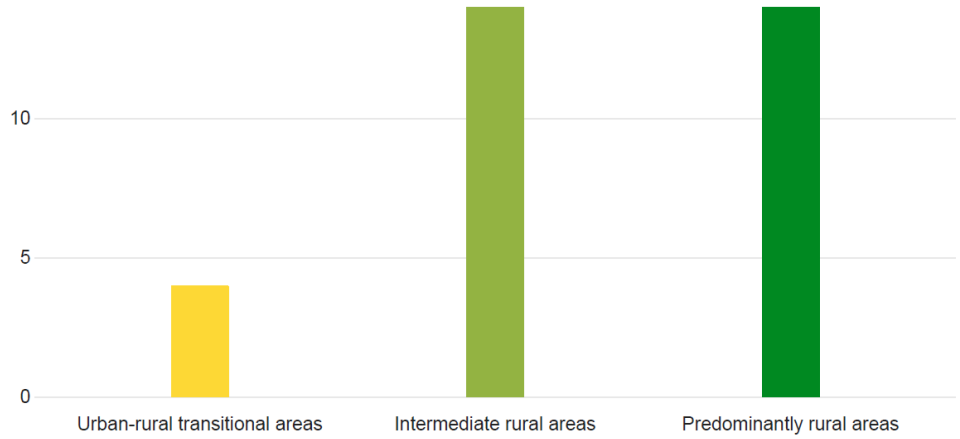


Figure 11. Typology of RAs for which respondents considered to have more expertise/knowledge



Additional information

Tables 6 and 7 report the entire list of obstacles identified through the coding of the arguments provided by survey's respondents.

Table 6. Obstacles, and relative number of nominations, to achieve the vision for hilly-mountainous Ras

Code	Nominations
Lack of economic resources and investments	16
Large-scale distribution and market's asymmetries	8

Political inability for long-term programming	7
Bureaucracy	6
Lack of competences and entrepreneurship	6
Depopulation and ageing	6
Infrastructures and accessibility	4
Attitudes, awareness and cultural barriers	4
Land abandonment	4
Consumers' attitudes and purchasing power	2
Land characteristics	2
Lack of economic and fiscal incentives	2
Generational turnover	2
Structural characteristics of rural areas	2
Communication strategy for agri-food products	1
Corruption	1
Pollution	1
Fragmentation of supply	1
Attitudes of tourists	1
Low profitability of agriculture	1

Table 7. Obstacles, and relative number of nominations, to achieve the vision for RAs of the plain.

Code	Nomination
Farmers' attitudes	10
Competitiveness of global markets	4
Lack of adequate incentives	3
Lack of economic resources and investments	1
Lack of political vision	1
Bureaucracy	1
Climate change	1
Land access	1
Generational turnover	1

Annex 2. References

European Commission, 2020. REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS on the impact of demographic change, COM(2020) 241 final. https://doi.org/10.1017/CBO9781107415324.004

Féret, S., Berchoux, T., Réquier, M., Chartier, O., Kiss-Galfalvi, T., Martino, G., 2020. SHERPA Dicussion Paper. Long-term vision for rural areas.

Kull, M., Refsgaard, K., Chartier, O., Salle, E., 2020. Long-term vision for rural areas: contribution from 20 science-society-policy platforms guidelines for map facilitators and monitors.

OECD, 2019. Rural 3.0: People-centred Rural Policy – Policy Highlights.

Regione Emilia-Romagna e Agriconsulting, 2013. Analisi del contesto socioeconomico dell'agricoltura e dei gricoltura e dei territori rurali della regione analisi swot e fabbisogni di intervento per la programmazione 2014- 2020.

Targetti, S., Pellegrini, E., 2020. Long-term vision for rural areas. Emilia-Romagna MAP Discussion Paper.