



PROJECT H2020

LIVERUR

Living Lab Research Concept in Rural Areas

DELIVERABLE 7.11:

LIVERUR Policy Framework

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EXECUTIVE SUMMARY

The **LIVERUR** project's short-term objective is to improve knowledge of business models that grow in rural areas, including the understanding of their potential. In the long term, the project will increase the potential for rural economic diversification.

WP7 is devoted to disseminating **LIVERUR** results, especially to capitalize on the lessons learnt by **LIVERUR** pilot actions. More specifically, task 7.10 works with pilot actors and local policy makers on the urgency of the current challenges in the rural areas and the need to adopt the preferred alternative or course of action emerged from three years of **LIVERUR** project. The outcome, under the form of a policy brief, serves as an impetus for the next European actions towards 2050.

The considerable diversification of **LIVERUR** pilot actions both in terms of geographical coverage and in terms of rural business activities grant to the **LIVERUR** policy framework a detailed level of analysis, based on forty-eight indicators which capture both qualitative and quantitatively key lessons learnt from the pilot activities in the areas and regions interested by the project. This document is therefore a unique evidence-based collection of policy insights, furtherly summarized in the D7.10

This framework is developed to deliver key insights on the pilot areas and regions before and after the **LIVERUR** intervention. To this purpose, the forty-eight indicators here selected are extensively based on the benchmark criteria utilized at the beginning of the **LIVERUR** experience in order to compare baseline scenarios of different pilot areas (see the deliverable 2.4). This policy framework aims at using the mentioned indicators for a within – pilots and between – pilots comparative analysis.

1 INTRODUCTION

Among the political guidelines settled for the period 2019 – 2024, the EU's rural areas are seen as a core part of the European way of life: they are indeed home to 137 million people, representing almost 30% of the European Union population and almost 80% of its territory¹. Rural areas are widely recognised and valued for food production, management of natural resources, protection of natural landscapes, as well as recreation and tourism. Many of the traditions, festivals and culture are rooted in Europe's rural areas. Yet, social, health and economic changes of the last decade, including globalisation, urbanisation, and the recent Covid-19 pandemic, are changing the role and nature of rural areas².

More specifically, rural development is the second pillar of the common agricultural policy (CAP), reinforcing the first pillar of income supports and market measures by strengthening the social, environmental and economic sustainability of rural areas. As widely known, the CAP contributes to the sustainable development of rural areas through three long-term objectives: (i) fostering the competitiveness of agriculture and forestry; (ii) ensuring the sustainable management of natural resources and climate action and (iii) achieving a balanced territorial development of rural economies and communities including the creation and maintenance of employment.

In this perspective, the EU H2020 project **LIVERUR** (2018-2021) focused on the modernisation of small and medium rural businesses and projects in the agri-food sector. It was dedicated to improving existing business structures by supporting farmers and other rural entrepreneurs in implementing innovative business model approaches following the Living Lab concept and moving towards a circular economy. By supporting the economic sustainability of rural businesses and areas, **LIVERUR** contributes to the long-term vision for the EU's rural areas.

At the end of the project implementation, **LIVERUR** partners have the mandate to scope whether actions undertaken within LIVERUR areas and regions contributed to the rural development of the interested areas. To perform this evaluation a policy framework of analysis for the **LIVERUR** project was developed and implemented in each pilot areas during the last three months of project implementation (i.e., July, August, September 2021). The outcome is a remarkably detailed investigation, based on forty-eight indicators, aimed at comparing between and within pilots' performances. Salient findings are summarized in a policy brief (deliverable 7.10). As previously underlined, this policy framework of analysis is strictly linked to the benchmark analysis conducted at the beginning of the **LIVERUR** project (available in the deliverable 2.4).

1 A long-term vision for the EU's rural areas (2020) - document available here: https://ec.europa.eu/info/sites/default/files/strategy/strategy_documents/documents/ltvra-c2021-345_en.pdf

2 See Commission report on the impact of demographic change (COM (2020) 241 final) and green paper on ageing (COM (2021) 50 final)

2 THE POLICY FRAMEWORK SETTING

The **LIVERUR** policy framework support the inclusion of **LIVERUR** outcomes into existing and future European rural policy. In this perspective, the **LIVERUR** policy framework has developed a logic structure to organize policy-related evidence within the project. The logic structure is presented in Figure 1:

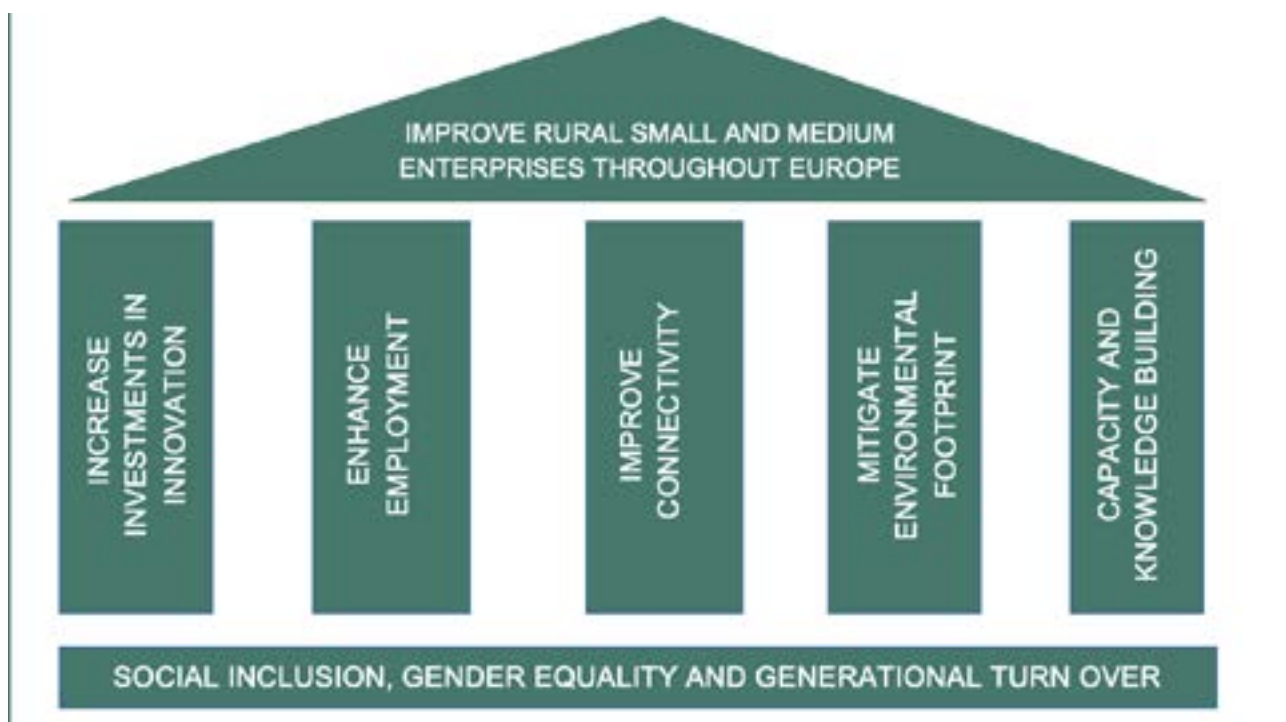


Figure 1. LIVERUR logic structure for the policy framework

The **LIVERUR** policy framework is based on a structure composed by five main objectives: (i) increase investment in rural innovations, (ii) enhance rural employment, (iii) improve rural connectivity (in terms of network infrastructure and beyond), (iv) reduction and mitigation of the environmental footprint of rural businesses and lastly, (v) the capacity and knowledge building within rural communities. These five objectives aim at supporting the economic and environmental sustainability of rural small and medium enterprises throughout Europe, in order to achieve a higher competitiveness and resilience of primary-sector businesses. The objectives are founded on three driving principles, which do not solely belong to this logic structure, but they have been characterizing **LIVERUR** actions since the early stage of the project development: (i) social inclusion, (ii) gender equality and (iii) generational turn over.

The logic structure of the policy framework has been utilized by the **LIVERUR** partners to co-develop a set of policy indicators, both qualitative and quantitative (Table 1). Before diving into the analysis of each indicator, the reader will notice that the indicators present two levels of analysis. The reason lies in the fact that the policy framework contains a lens of investigation which is twofold: (i) regional level (or NUTS-02 level) and (ii) pilot action level. The first layer of analysis collects information which interest not simply the pilot territory, but the entire region in which the pilot is situated; complementarily, a second layer of analysis focus on measuring specific indicators at pilot action level. These two layers of investigation are complementary, and they answer to two specific questions: what benefits brought the **LIVERUR** project at the pilot level? And how these benefits translated into improved indicators at the regional level?

As mentioned, the list of complete indicators at the baseline of the **LIVERUR** policy analysis is reported in Table 1. The forty-eight indicators are briefly explained in the table, where the reader can find a short description of what each indicator stands for and how it is measured. Each pilot action team collected information on the forty-eight indicators during the summer of 2021, while the pilot activities connected to **LIVERUR** project were concluding. This exercise, quite time-consuming in its nature, paid high dividends when we needed to summarize the policy implications of **LIVERUR** findings in the three years of project implementation.

The forty-eight indicators were developed following the five main objectives of the **LIVERUR** logic structure for the policy framework; more specifically, the increase in investment in innovation is measured by the indicators n. 5, 32, 44. The enhancement of rural employment is captured by indicators n. 6,7, 19, 36. Improve connectivity is grasped by the indicators n. 19, 20, 21, 49. The mitigation of the environmental footprint is the largest category measured (as the **LIVERUR** project is strongly based on the regional circular economy principle) and it is pictured by the indicators n. 14-17, 24-29, 31, 33, 34, 40. Finally, the capacity and knowledge building objective is captured by indicators n. , 46, 47. The remaining indicators grasp the cross-cutting topics at the baseline of the logic structure as well as indicators on the economic performances and competitiveness of the pilot action or the region.

Finally, it is worth mentioning that the forty-eight indicators were selected following the business model assessment iterated at the beginning of the project and contained in the deliverable 3.2 (freely available in the **LIVERUR** website). This parallelism is of extreme importance, as it allows a pre-**LIVERUR** and a post-**LIVERUR** comparison in the pilot areas.

Table 1. List of the indicators composing the LIVERUR policy framework

Nr.	Indicator	Description
Level of analysis: the region (NUTS-02 area) in which the LIVERUR pilot action has taken place		
1	Number of people interested by the pilot action	Number
2	Surface area interested by the pilot action	SqKm
3	Density of the area	People/SqKm
4	Gross domestic product of the area	GDP / capita
5	Investment in innovation and research	% of the GDP
6	Employment rate	Number of people between 18 and 69 years, whom during the reference period have an employment in the area of reference of the pilot
7	Employment rate in agriculture	Number of people between 18 and 69 years, whom during the reference period have an employment in the agricultural sector in the area of reference of the pilot
8	Agricultural business established in the last 5 years	Number
9	Gender gap for the employment rate	% of difference between the female employment rate and the male employment rate
10	Gender pay gap	Average gross hourly earnings for male paid employees - female paid employees, as a percentage of average gross hourly earnings of male paid employees
11	Inclusive and equitable education	Do the activities of the territory foster inclusive and equitable quality education and promote lifelong learning opportunities?
12	Social inclusion and disadvantaged group	Are there specific programs targeting the social inclusion of disadvantaged groups?
13	Expenditure on cultural services	% of the GDP
14	Surface area devoted to agricultural activities	SqKm
15	Green jobs on the territory	Percentage of green jobs on the territory (Number FTE/total FTE of region)

16	Use of renewable energy	Percentage of renewable energy (/total energy used)
17	Water consumption	Water consumption / hab (million cubic meter / capita)
18	Internet access	Regular use of the internet, (% of persons who accessed the internet on average at least once a week)
19	Employment in high tech sector	Employment in high-tech sector (% of total employment)
20	Length of usable roads	Length(km)/surface area(km ²)
21	Infrastructure intensity	Intensity of flow (persons and merchandise) inside and out of the territory
22	Public health and safety	Life expectancy
23	Number of health care personnel	Number of health care personnel / 100 000 inhabitants
24	Number of jobs related to circular economy	Number of jobs (% total employment)
25	Domestic material consumption	tones / per capita
26	Area under intense farming	SqKm employed under a type of agriculture which is intensive
27	Area under organic farming	SqKm employed under a type of agriculture which is organic (even if not officially certified)
28	Area under agroforestry or mixed farming	SqKm employed under a type of agriculture which integrates trees, animals and crops
29	Area under specific limitations (such as conservation areas or forest protected zones)	SqKm under limitations by policy rules and agreements
30	Annual allocation of European Agricultural Fund for Rural Development	€/year
31	Recycling rate of the area	%
32	Patents registered in the area (for processes, products or innovations of any sort)	number
33	Water consumption	Water consumption / hab (million cubic meter / capita)

Level of analysis: LIVERUR specific pilot action		
34	Food waste	Food waste intervention developed in the region during LIVERUR project
35	Acknowledgment of the territory	Declare if the area has been subjected to quality labelling, awards, or any other similar acknowledgment
36	Workforce back to the countryside	Declare if there has been an increase in people working in the rural area subjected to the pilot
37	Co-creative initiatives	Number of co-creative initiatives and multi-actors meetings kicked-off outside the official running of LIVERUR but inspired by the activities within the project
38	Final price of the product	Declare if the final price of the product targeted by the living lab has been increased and of how much (and if not, why)
39	Number of people/clients engaged in the area	Number of people visiting the area for tourism or any other service
40	Measure of resilience	Here we would like you to list two parameters of distress: (i) revenue of your rural business, highlighting the Covid year explicitly; (ii) number of new products or services or businesses invented in the area; (iii) activities born during Covid period to mitigate the effects of the pandemic
41	Overall well-being	Declare if the overall well-being of the area has increased. Write here an anecdotic example that we can report as a declaration.
42	New products/services introduced in the territory	Number of new services/products introduced in the territory linked to the Living Lab
43	New patents introduced	Number of new patents introduced in the territory linked to the Living Lab
44	Project applications	Project applications for funding schemes developed in the territory in the course of LIVERUR Living Lab
45	Inclusion of disadvantaged groups and societal well-being	Number of people (people that experience a higher risk of poverty, social exclusion, discrimination and violence than the general population, including, but not limited to, ethnic minorities, migrants, people with disabilities, isolated elderly people, etc.) that are involved in project development in the territory
46	Capacity and knowledge building	Number of people trained in co-creation/participation (living lab) methodologies in the territory
47	Governance structure	Number of annual community meetings held in the territory (on the main topic of the Living Lab) including quadruple helix actors

48	Regional value creation	Number of CSO organizations that use services/products/ of Living Lab
49	Infrastructure	Space provided for participatory stakeholder engagement in m ²

In the following section, we construct a policy analysis for each of the twelve pilot sites involved in the **LIVERUR** project. For each pilot region, we will briefly summarize the characteristics of the area; stemming from the benchmark study analysis conducted at the beginning of the **LIVERUR** project (and contained in the deliverable 2.4), a snapshot of the economic, social and environmental sustainability of the area prior to the **LIVERUR** implementation is presented. Subsequently, the forty-eight indicators are reported, to compare the pre-**LIVERUR** assessment with the endline policy analysis. Each section is concluded by a qualitative comment on the results found.

3 POLICY ANALYSIS IN THE LIVERUR PILOTS SITES

3.1 Süb Burgenland, AT

South Burgenland (part of the Austrian province of Burgenland) is inhabited by 97,000 residents and covers an area of 1,500 km². The hilly landscape and the illyric climate favor a very diverse agriculture with a recently growing trend of organic production. Small enterprises are predominant, direct marketing is a big widely used. Another economic asset are thermal springs, exploited via some spa resorts and boosting the tourism. A low population density and insufficient public transport in this peripheral region led to growing outmigration to bigger cities.

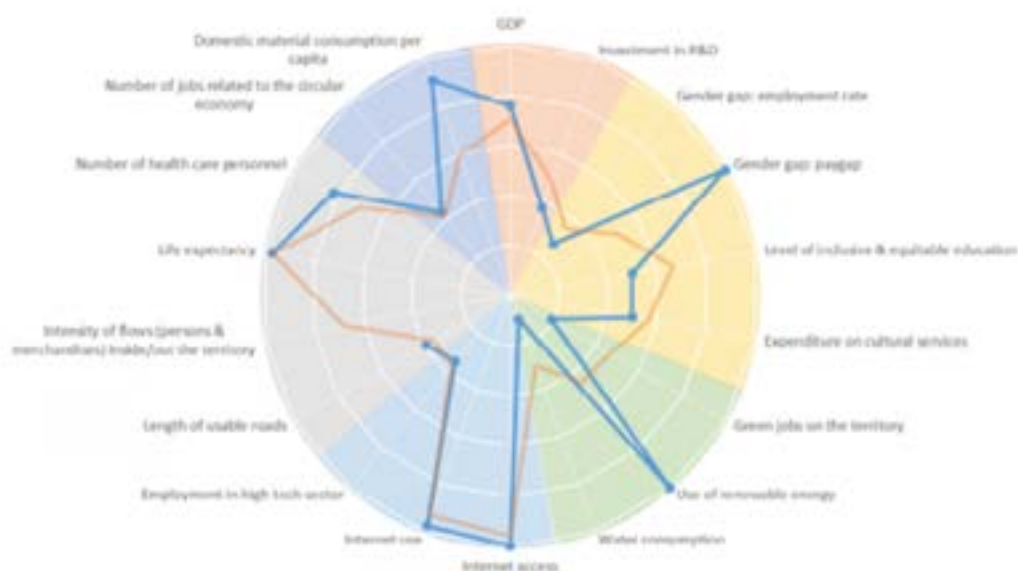


Figure 2. Benchmark study for the region of Süd Burgenland (AT). Source: D 2.4 LIVERUR project. In blue the performance of the specific pilot region, in orange the average performance of the LIVERUR territories.

Table 2. List of the indicators (2021), Süd Burgenland (AT)

Nr.	Indicator	Value for Süd Burgenland (AT)
1	Number of people interested by the pilot action	150
2	Surface area interested by the pilot action	1.471,4 SqKm
3	Density of the area	67/SqKm
4	Gross domestic product of the area	30.700€/capita
5	Investment in innovation and research	1,2%
6	Employment rate	105.136
7	Employment rate in agriculture	18.000
8	Agricultural business established in the last 5 years	n/a
9	Gender gap for the employment rate	Male employment rate: 79,9% Female employment rate: 80,2%
10	Gender pay gap	900 € less per month
11	Inclusive and equitable education	Yes, safe work is available for people with disabilities
12	Social inclusion and disadvantaged group	Yes, numerous projects are available on the topic: among others, (i) EFS-programm "Beschäftigung Österreich 2014 - 2020", (ii) "Aktives und gesundes Altern", IWB-ESF 2014-2020
13	Expenditure on cultural services	1,20%
14	Surface area devoted to agricultural activities	1.840,8 SqKm
15	Green jobs on the territory	4,1% (186.099)
16	Use of renewable energy	49,7%
17	Water consumption	2,5 million cubic meters
18	Internet access	87,80%
19	Employment in high tech sector	28,50%
20	Length of usable roads	9118 km
21	Infrastructure intensity	Medium

22	Public health and safety measured in life expectancy	Men: 79,80 years / Women: 83,84 years
23	Number of health care personnel	10.094/294.000 inhabitants
24	Number of jobs related to circular economy	1.800
25	Domestic material consumption	21,7 tones/ per capita
26	Area under intense farming	1383,08 SqKm
27	Area under organic farming	459,19 SqKm
28	Area under agroforestry or mixed farming	2731,54 SqKm
29	Area under specific limitations (such as conservation areas or forest protected zones)	1586,22 SqKm
30	Annual allocation of European Agricultural Fund for Rural Development	40,93 Million (for the period 2014 – 2016)
31	Recycling rate of the area	Packaging: 66 % Paper: 84% Glass: 84% Metal: 84%
32	Patents registered in the area (for processes, products or innovations of any sort)	around 2.300
33	Water consumption	Initiatives launched in the territory: Campagne BMV May 2nd: Food Waste Day Too Good To Go
34	Acknowledgment of the territory	Yes, with seal approvals
35	Workforce back to the countryside	Retraction from Vienna, decrease in the number of employees in the two districts of Güssing and Jennersdorf

36	Co-creative initiatives	3
37	Final price of the product	yes
38	Number of people/clients engaged in the area	216.175
39	Measure of resilience area	n/a
40	Overall well-being	n/a
41	New products/services introduced in the territory	10
42	New patents introduced	n/a
43	Project applications	n/a
44	Inclusion of disadvantaged groups and societal well-being	Organization “pro mente”
45	Capacity and knowledge building	15
46	Governance structure	4
47	Regional value creation	10
48	Infrastructure	70 Sqm

First policy results

In the pre-**LIVERUR** benchmark analysis, the pilot region of Süd Burgenland was outperforming with respect to the average **LIVERUR** benchmark in terms of numerous indicators; the weakness identified was in terms of gender gap employment rate in agriculture, which was higher than in other pilot areas. As shown by the table, in the endline policy analysis the employment rate by gender is improved in the territory: female employment rate is now slightly above 80%, while male employment rate is around 79%. Moreover, the pilot area of Süd Burgenland was able to increase the competitiveness of the territory by developing 10 new products and services during the implementation of the **LIVERUR** project. 15 people belonging to variegated stakeholder groups were trained thanks to the living lab methodology and the quadruple helix actors were involved in up to four meetings every year. Another weak spot identified by the baseline benchmarking analysis was the presence of few green jobs on the territory: at the endline, these amount to 4,1% of the total jobs available, accompanied by a recycling rate which is above 80% for many materials considered. Around 2.000 jobs in the pilot region are linked to circular economy activities. Finally, extensive agricultural practices connected to the introduction and evaluation of ecosystem services are extensively practiced in the Süd Burgenland pilot region: worth mentioning is the fact that almost 3.000 sqkm are under agroforestry or mixed farming in the region.

3.2 Vega del Segura, ES

The very densely populated Pilot Region Vega del Segura comprises 12 municipalities. They are inhabited in sum by 108,400 residents and cover an area of 959 km². The good natural and infrastructural conditions promote the establishment of agri-food industry, related mostly to fruits. Most of the exploitation of agricultural land takes place in small plots and farms owned by individuals. Besides that, energy-companies, and the business sector play an important role.

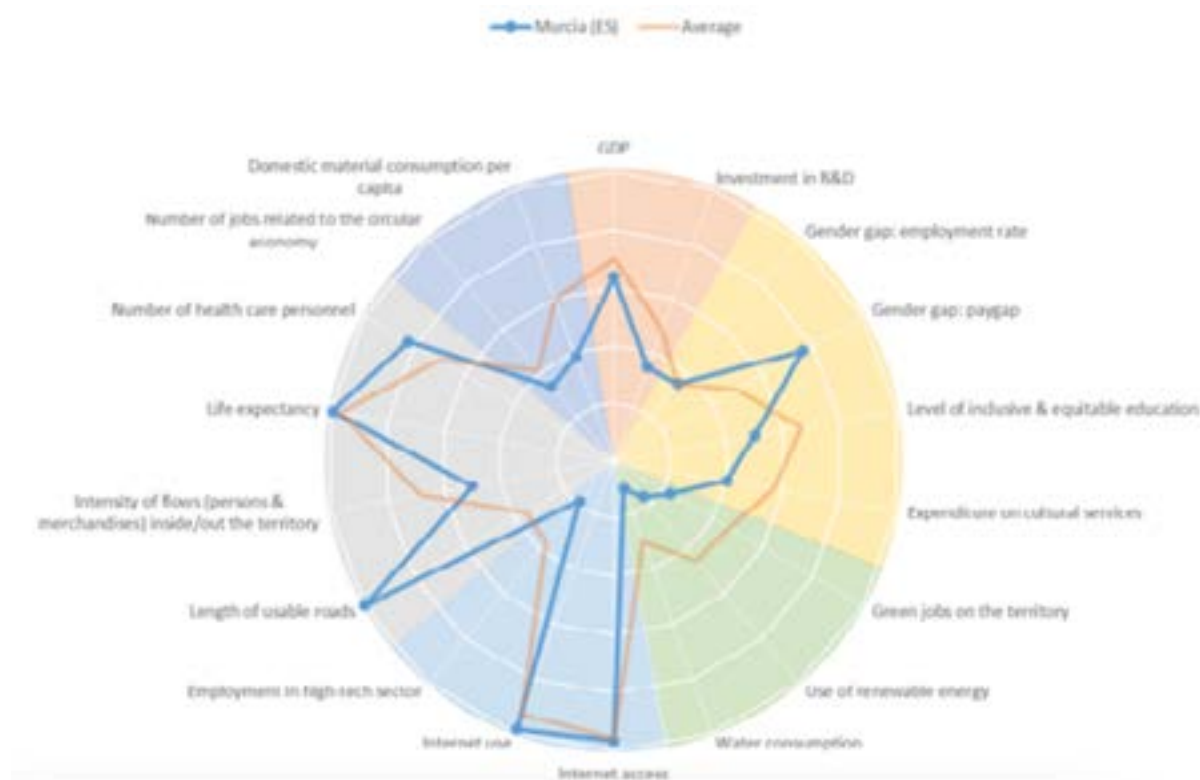


Figure 3: Benchmark study for the region of Vega del Segura (ES). Source: D 2.4 LIVERUR project. In blue the performance of the specific pilot region, in orange the average performance of the LIVERUR territories

Table 4. List of the indicators (2021), Vega del Segura (ES)

Nr.	Indicator	Value for Vega del Segura (ES)
1	Number of people interested by the pilot action	108.409
2	Surface area interested by the pilot action	958,6 SqKm
3	Density of the area	119/SqKm
4	Gross domestic product of the area	17.000-20.000 €/capita
5	Investment in innovation and research	n/a
6	Employment rate	49,30%
7	Employment rate in agriculture	11,50%
8	Agricultural business established in the last 5 years	104
9	Gender gap for the employment rate	(-)16,33% for female
10	Gender pay gap	27,26%
11	Inclusive and equitable education	n/a
12	Social inclusion and disadvantaged group	n/a
13	Expenditure on cultural services	n/a
14	Surface area devoted to agricultural activities	479
15	Green jobs on the territory	n/a
16	Use of renewable energy	n/a
17	Water consumption	149 liters/habitant
18	Internet access	n/a
19	Employment in high tech sector	n/a
20	Length of usable roads	n/a
21	Infrastructure intensity	n/a
22	Public health and safety measured in life expectancy	100%
23	Number of health care personnel	3,6/1000 inhabitants
24	Number of jobs related to circular economy	n/a
25	Domestic material consumption	n/a
25	Area under intense farming	n/a
26	Area under intense farming	n/a

27	Area under organic farming	38,4%
28	Area under agroforestry or mixed farming	n/a
29	Area under specific limitations (such as conservation areas or forest protected zones)	n/a
30	Annual allocation of European Agricultural Fund for Rural Development	700.000€/year
31	Recycling rate of the area	20,2%
32	Patents registered in the area (for processes, products or innovations of any sort)	n/a
33	Food waste	Yes, for a total intervention of 200kg
34	Acknowledgment of the territory	No
35	Workforce back to the countryside	No
36	Co-creative initiatives	5
37	Final price of the product	No, the product has not had time to go on market
38	Number of people/clients engaged in the area	2829/per month
39	Measure of resilience	During the recent Covid-19 pandemic, due to business closure, the pilot area registered losses, although in the recent months they have recovered almost 100% of their occupation. More services have been created at home in the restaurant sector.
40	Overall well-being	The added value of rural areas has increased due to the sense of security that sparsely inhabited and open spaces give. In our territory, streets have been closed to traffic to give the hospitality sector more space to expand the terraces and offer their services outdoors, where we have all benefited from those spaces without pollution or traffic noise.
41	New products/services introduced in the territory	Because of the situation generated by the health crisis caused by covid, the product has not been able to go on the market
42	New patents introduced	Due to the situation generated by the health crisis caused by covid, the product has not been able to go on the market
43	Project applications	n/a
44	Inclusion of disadvantaged groups and societal well-being	5000 thanks to the LEADER project

45	Capacity and knowledge building	30
46	Governance structure	20
47	Regional value creation	3
48	Infrastructure	400

First policy results

The pilot region of Val de Segura in Spain was heavily affected by the Covid-19 crisis, which impeded to the pilot team to launch a new product on the market at the end of the **LIVERUR** project. Nonetheless, the regional circular living lab methodology was successfully implemented in this territory: the pilot team was able to train more than 30 entrepreneurs utilizing the **LIVERUR** participatory methodology, organizing more than 20 meetings in one year of **LIVERUR** implementation. The area devoted to **LIVERUR** living lab activities has also been remarkable, with a total of more than 400 sqm devoted to participatory actions. Unfortunately, the poor availability of data made impossible to retrieve some indicators on which the pilot region was lagging behind with respect to other **LIVERUR** territories in the benchmark analysis: among others, jobs related to circular economy activities, investment in research and innovation, expenditure in cultural services and creation of green jobs in the territory.

3.3 France, FR (Bretagne and Pays de la Loire)

Key messages from LIVERUR experience

There are three **LIVERUR** pilot zones in Bretagne, which is France's first producing region of poultry (meat and egg), cow's milk, veal calves, pigs and vegetable crops (greenhouses and open field). Agriculture is a major economic and employment sector for the region from upstream to downstream along the supply chain with a dense agro-food sector employing 58,200 people (excluding craft activities). The three territories are representative of the Brittany agricultural system with a high density of livestock, especially dairy farms. The main issues for these territories are to strengthen the link between society and farmers, to address the environmental impacts of agriculture and, in parallel, to maintain the number of farmers and global agricultural turnover.

The Pilot Region West of France, situated in the region Bretagne- Pays de la Loire is inhabited by 6,900,000 residents and covers an area of 59,000 km². It is a main region of agricultural production with a focus on animal husbandry (dairy products, pigs, poultry). In consequence, a lot of jobs are connected to agriculture and food industry which are the major economic forces in the region. Good natural conditions and a modern structure of the enterprises are an asset of the region.

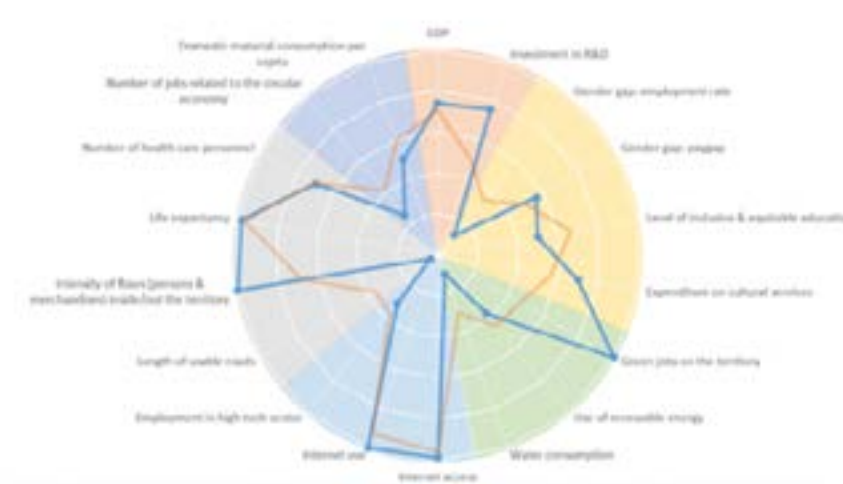


Figure 4: Benchmark study for the region of Bretagne (FR). Source: D 2.4 LIVERUR project. In blue the performance of the specific pilot region, in orange the average performance of the LIVERUR territories.



Figure 5: Benchmark study for the region of Pays de la Loire (FR). Source: D 2.4 LIVERUR project. In blue the performance of the specific pilot region, in orange the average performance of the LIVERUR territories.

Table 5. List of the indicators (2021), Bretagne (FR)

Nr.	Indicator	Value for Bretagne and Pays de la Loire (FR)
1	Number of people interested by the pilot action	3.330.000
2	Surface area interested by the pilot action	27.208 SqKm
3	Density of the area	121,03/SqKm
4	Gross domestic product of the area	25.738€/year
5	Investment in innovation and research	4%
6	Employment rate	36% (1.200.000)
7	Employment rate in agriculture	68.000
8	Agricultural business established in the last 5 years	450 new farms per year
9	Gender gap for the employment rate	30% of employment in farming is occupied by females
10	Gender pay gap	n/a
11	Inclusive and equitable education	Very important issue within the territory
12	Social inclusion and disadvantaged group	Yes, at the national and the regional level
13	Expenditure on cultural services	n/a
14	Surface area devoted to agricultural activities	1.620.000SqKm
15	Green jobs on the territory	n/a
16	Use of renewable energy	18% - Brittany has 18% of global energy autonomy which is low at national scale
17	Water consumption	100m3/habitants
18	Internet access	90%
19	Employment in high tech sector	6%
20	Length of usable roads	67.000 km of usable roads
21	Infrastructure intensity	Medium – Brittany has good communication infrastructures, but it remains a peripheral region
22	Public health and safety measured in life expectancy	85,4 years for female and 78,8 for male
23	Number of health care personnel	321/100.000 inhabitants
24	Number of jobs related to circular economy	n/a
25	Domestic material consumption	n/a
25	Area under intense farming	n/a

26	Area under organic farming	n/a
27	Area under organic farming	1.300 SqKm
28	Area under agroforestry or mixed farming	13.789 SqKm
29	Area under specific limitations (such as conservation areas or forest protected zones)	1170 SqKm
30	Annual allocation of European Agricultural Fund for Rural Development	434€ Mio (total CAP amount for the region)
31	Recycling rate of the area	n/a
32	Patents registered in the area (for processes, products or innovations of any sort)	210/year
33	Food waste	There is a regional association supported by the regional council which work on the topic (https://www.solaal.org/solidarite-du-champ-a-lassiette-en-bretagne/)
34	Acknowledgment of the territory	Food quality product and quality label for the product of the region
35	Workforce back to the countryside	No
36	Co-creative initiatives	At least one other project on living lab concept which work on animal welfare https://www.assolitouesterel.org/
37	Final price of the product	No
38	Number of people/clients engaged in the area	12.8000.000 (75% of the tourist activity maintained during the Covid crisis)
39	Measure of resilience	n/a
40	Overall well-being	n/a
41	New products/services introduced in the territory	1 – high quality milk production
42	New patents introduced	0
43	Project applications	0
44	Inclusion of disadvantaged groups and societal well-being	n/a
45	Capacity and knowledge building	50
46	Governance structure	n/a
47	Regional value creation	n/a
48	Infrastructure	n/a

First policy results (Bretagne and Pays de la Loire)

The list of indicators for the Bretagne territory picture a territory which has a very high rate of investment in innovation (4%). The pilot team was able to create a good network of associated projects in the territory, with the presence of another living lab – based project on animal welfare and the creation of a regional association supported by the regional council centred on food waste. The pilot action developed a new product: a high-quality milk, identified by a quality-related innovative label. During the pilot activities 50 new resources were trained on the RAIN concept. The Covid pandemic seems to have affected the pilot area and region only partially, with 75% of the tourists still actively visiting the territory. With respect to the benchmark study, the pilot area is showing a deficit in the number of job connected to circular economy activities. On the other hand, the gender gap of women employed in the agricultural sector has been constantly improving during the three years of LIVERUR implementation and it has now reached a level of 30%.

3.4 Unione dei Comuni del Trasimeno, IT

The Pilot Region Trasimeno is inhabited by 704,000 residents and covers an area of 2,500 km². 23% of SMEs are connected to agriculture, forestry or fishing. The focus is on agro-tourism, handcraft and local products. The union of municipalities aims to develop synergies and co-operations between public administration, entrepreneurs and NGOs.

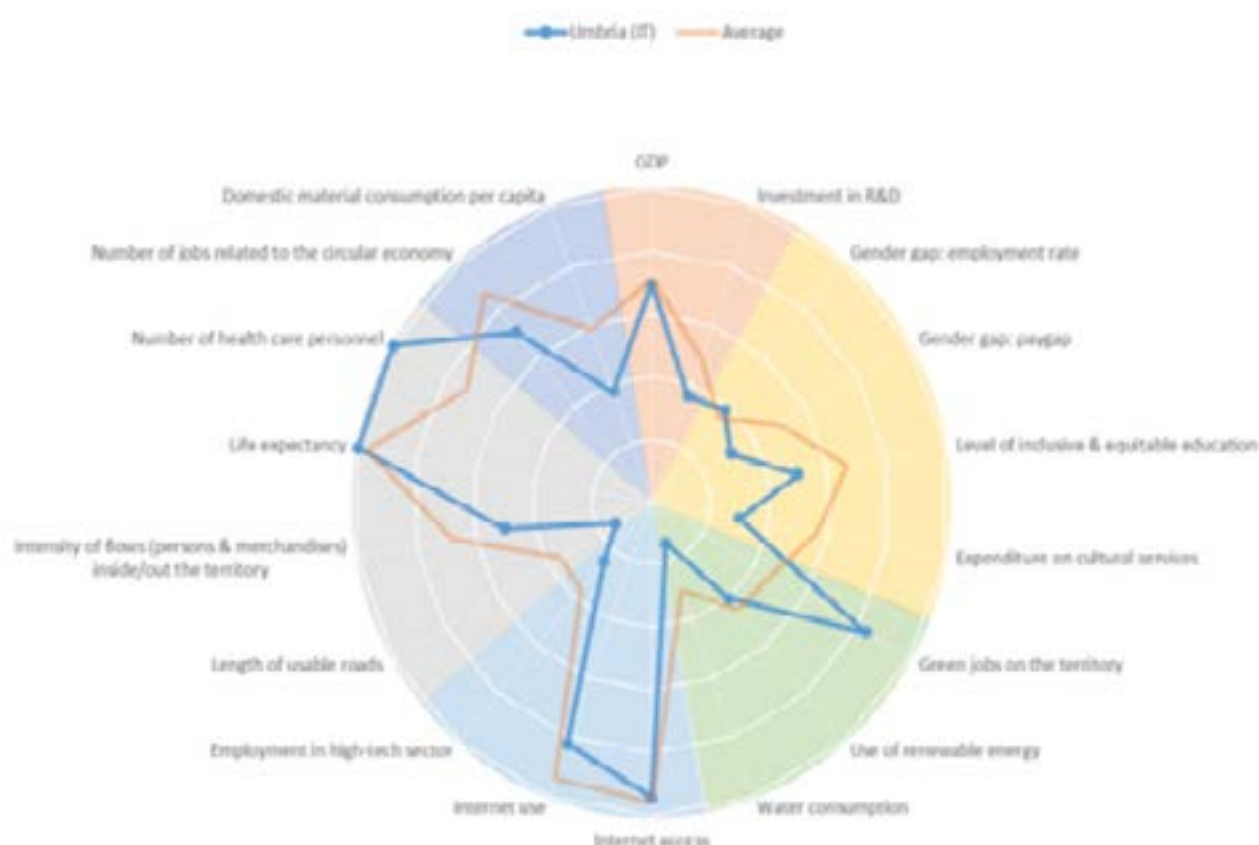


Figure 6. Benchmark study for the region of Unione Comuni del Trasimeno (IT). Source: D 2.4 LIVERUR project. In blue the performance of the specific pilot region, in orange the average performance of the LIVERUR territories.

Table 6. List of the indicators (2021), Unione dei Comuni del Trasimeno (IT)

Nr.	Indicator	Value for Unione dei Comuni del Trasimeno (IT)
1	Number of people interested by the pilot action	30024,28
2	Surface area interested by the pilot action	104,98
3	Density of the area	286
4	Gross domestic product of the area	89166 euro/year/farm
5	Investment in innovation and research	70%
6	Employment rate	80%
7	Employment rate in agriculture	50%
8	Agricultural business established in the last 5 years	n/a
9	Gender gap for the employment rate	40%
10	Gender pay gap	5-8 euro/hour
11	Inclusive and equitable education	moderate efforts
12	Social inclusion and disadvantaged group	Yes
13	Expenditure on cultural services	20%
14	Surface area devoted to agricultural activities	n/a
15	Green jobs on the territory	60%
16	Use of renewable energy	30%
17	Water consumption	2000 mc/year
18	Internet access	70%
19	Employment in high tech sector	10%
20	Length of usable roads	500 km
21	Infrastructure intensity	Medium
22	Public health and safety measured in life expectancy	high
23	Number of health care personnel	1000 / 100.000 inhabitants
24	Number of jobs related to circular economy	70%
25	Domestic material consumption	0,24 t/capita

26	Area under organic farming	50 SqKm
27	Area under organic farming	20 SqKm
28	Area under agroforestry or mixed farming	80 SqKm
29	Area under specific limitations (such as conservation areas or forest protected zones)	100 SqKm
30	Annual allocation of European Agricultural Fund for Rural Development	90.000
31	Recycling rate of the area	20%
32	Patents registered in the area (for processes, products or innovations of any sort)	150
33	Food waste	Farmhouses and service waste services available in the area
34	Acknowledgment of the territory	Yes
35	Workforce back to the countryside	No
36	Co-creative initiatives	10
37	Final price of the product	Not available, because in progress
38	Number of people/clients engaged in the area	500.000 in summer time
39	Measure of resilience	n. 1 local open weekly market, n. 10 0km selling, n. 1 fish shop, n. 30 new open-air restaurants
40	Overall well-being	rural tourism incomes increase = 30%
41	New products/services introduced in the territory	2 web app (TRASIMENO LL and WINE ROAD tourism ex.)
42	New patents introduced	0
43	Project applications	2 (woody biomass use)
44	Inclusion of disadvantaged groups and societal well-being	About 30 migrants coming from African Countries
45	Capacity and knowledge building	20
46	Governance structure	10
47	Regional value creation	2
48	Infrastructure	50 sqm

First policy results

The pilot area of Trasimeno in Italy has achieved remarkable results since the start of the LIVERUR project. The pilot region has a strong agricultural footprint, with more than 50% of the inhabitants working for the primary sector. If in the benchmark analysis, the pilot region was showing a deficit in terms of green job, the endline analysis underlines that 70% of rural jobs are related to circular economy and that the green jobs on the territory account for 60% of the total jobs available. The gender gap on employment remains of a considerable amount (40%), but the pilot team was able to establish more than 10 round tables each year where matters of gender equality and social inclusion were repeatedly discussed with local policymakers, local businesses and representatives of the civil society. The pilot team included in the activities also a group of asylum seekers from diverse African countries. The improvement brought by the LIVERUR participatory activities became evident during the pandemic, when 10 shops were created for selling zero-kilometres products, 30 new open-air restaurants were launched into business and 1 fish shop was established. The overall well-being of the area is calculated by a 30% increase of tourism income for the area interested by the LIVERUR project. From an implementation perspective, the pilot area was able to launch two web app, one related to the newly established Trasimeno Living Lab (called Trasimeno LL) and one for touristic purposes, which describes alternative wine roads for the area (called WINE ROAD).

3.5 Provincia di Reggio Emilia, IT

The Pilot Region Reggio Emilia and Appenino Reggiano comprises peri-urban and rural areas. It is inhabited by 58,300 residents and covers an area of 778 km². One part of the region is located in the Padana plane and shows a high number of SMEs, mostly farm enterprises and agro-food processing industries (focus on dairy products, vine and vinegar). The second part is a mountain area with low population density and very small settlements. The typical rural economy is based on family owned micro agri-enterprises.



Figure 7. Benchmark study for the region of Reggio Emilia (IT). Source: D 2.4 LIVERUR project. In blue the performance of the specific pilot region, in orange the average performance of the LIVERUR territories.

Table 7. List of the indicators (2021), Reggio Emilia (IT)

Nr.	Indicator	Value for Reggio Emilia (IT)
1	Number of people interested by the pilot action	529,609
2	Surface area interested by the pilot action	2,291,15 SqKm
3	Density of the area	231,2 people/SqKm
4	Gross domestic product of the area	24,468
5	Investment in innovation and research	2% (EMILIA ROMAGNA)
6	Employment rate	68% (age 15-64)
7	Employment rate in agriculture	4,1% (EMILIA ROMAGNA)
8	Agricultural business established in the last 5 years	n/a
9	Gender gap for the employment rate	12,6% (age 15-64)
10	Gender pay gap	12% (ITALY)
11	Inclusive and equitable education	Very important issue in the territory
12	Social inclusion and disadvantaged group	Yes
13	Expenditure on cultural services	n/a
14	Surface area devoted to agricultural activities	1361,8 SqKm (REGGIO EMILIA) - 13611,53 SqKm SAT (EMILIA ROMAGNA) 13% (EMILIA ROMAGNA)
15	Green jobs on the territory	13% (EMILIA ROMAGNA)
16	Use of renewable energy	153 m2 pro capita for year (ITALY)
17	Water consumption	n/a
18	Internet access	n/a
19	Employment in high tech sector	n/a
20	Length of usable roads	n/a
21	Infrastructure intensity	n/a
22	Public health and safety measured in life expectancy	83,5
23	Number of health care personnel	41 (EMILIA ROMAGNA)
24	Number of jobs related to circular economy	n/a
25	Domestic material consumption	7 tons/per capita for year (ITALY)
26	Area under intense farming	

27	Area under organic farming	899 SqKm (REGGIO EMILIA) - 8.976,89 SqKm (EMILIA ROMAGNA) [SAU-ORGANIC]
28	Area under agroforestry or mixed farming	175 SqKm (REGGIO EMILIA) - 1665,25 SqKm (EMILIA ROMAGNA)
29	Area under specific limitations (such as conservation areas or forest protected zones)	1510 SqKm (EMILIA ROMAGNA Regional and national parks)
30	Annual allocation of European Agricultural Fund for Rural Development	n/a
31	Recycling rate of the area	77%
32	Patents registered in the area (for processes, products or innovations of any sort)	744 (2019)
33	Food waste	n/a
34	Acknowledgment of the territory	<p>Pilot area - Edible Park was selected during ECOMONDO, the largest fair dedicated to the Green Economy, to present the project and the set-up of the Living Lab, anticipated by the publication of an article more detailed on the topic. Pilot area - Community cooperatives, during the last years, have been receiving many recognitions, in particular: 1. Valle dei Cavalieri was rewarded with two very significant awards .the first from the Ministry of Economic Development as one of the three economic realities of Italy worthy of recognition for planning and economic innovation in the territories of mountain, the second recognition in January 2018, in Madrid at the World Tourism Fair, of an Award promoted by the UN, on Innovative tourism for companies, 2. I Briganti di Cerreto was awarded with the Sustainable Forest Community Award 2016, conceived by Legambiente and PEFC Italia, with the patronage of Anci and the Ministry of the Environment. The aim of the initiative is to reward good practices of territorial and forest management of inland areas.</p>
35	Workforce back to the countryside	Pilot area - Edible Park: new farm manager (family management, approx 5 people)
36	Co-creative initiatives	3
37	Final price of the product	n/a
38	Number of people/clients engaged in the area	n/a
39	Measure of resilience	Pilot area - Community cooperatives: ii) implemented delivery services of local goods and products iii) shift of events to online platforms and meetings

40	Overall well-being	Pilot area - Edible Park: well-being of the area has increased thanks to the new farm manager
41	New products/services introduced in the territory	Pilot area - Edible Park: thanks to the new farm manager, a local market is re-born, new educational activities has been carried out during the summer 2021 and new selling channels have started to be used to sell and promote products
42	New patents introduced	n/a
43	Project applications	Pilot area - Edible Park: June 2021 candidacy to “Best Small Business: Good Food for All” competition” in the frame of UN FOOD Systems Summit
44	Inclusion of disadvantaged groups and societal well-being	4
45	Capacity and knowledge building	Approx. 110 people
46	Governance structure	4
47	Regional value creation	Edible Park - 8 Community coops - 15
48	Infrastructure	n/a

First policy results

The pilot area of Reggio Emilia presented a benchmark analysis which highlighted the consistent work that the local administration carried out in previous years with respect to some key LIVERUR topics (among others, social innovation, creation of inclusive and equitable opportunities for minorities and disadvantaged categories and boost of green jobs on the territory). From a policy perspective, the actuation of LIVERUR improved a situation which was already promising. Just to give an example, the Living Lab established in the pilot area, called Edible Park, was invited to ECOMONDO, the largest fair on green economy, to present the results achieved and the methodology used. The Edible Park Living Lab was able to re-create a local market in the pilot area, which was previously dismissed as not economically viable. In the same context, new educational activities were carried out during the summer 2021 and new selling channels have started to be used to sell and promote products during the Covid-19 pandemic. The community cooperatives involved thanks to the LIVERUR project have received several recognitions in the past three years: among others, the LIVERUR-supported cooperative Valle dei Cavalieri was awarded by the Italian Ministry of Economic Development as one of the three economic realities of Italy worthy of recognition for economic planning and innovation in the mountain territories.

3.6 Latvija, LV

Latvia – the Pilot Region as a whole is inhabited by 1,960,000 residents and covers an area of 64,600 km². The highest potential in the agricultural sector is seen in fruit growing – on the one hand traditionally as the natural conditions are favorable, on the other as market and consumer demands increase. The small-scaled agricultural enterprises’ structure and lacking cooperation hinder further developments. Fruit processing SMEs are developing very quickly.



Figure 8. Benchmark study for the region of Latvija (LV). Source: D 2.4 LIVERUR project. In blue the performance of the specific pilot region, in orange the average performance of the LIVERUR territories.

Table 8. List of the indicators (2021), Latvija (LV)

Nr.	Indicator	Value for Latvija (LV)
1	Number of people interested by the pilot action	n/a
2	Surface area interested by the pilot action	62.200 SqKm
3	Density of the area	31/SqKm
4	Gross domestic product of the area	16.201€/year
5	Investment in innovation and research	64%
6	Employment rate	62%
7	Employment rate in agriculture	8%
8	Agricultural business established in the last 5 years	n/a
9	Gender gap for the employment rate	5,8%
10	Gender pay gap	22,3% lower hourly wage for women
11	Inclusive and equitable education	Very important
12	Social inclusion and disadvantaged group	Yes
13	Expenditure on cultural services	2,8%
14	Surface area devoted to agricultural activities	19.700 SqKm
15	Green jobs on the territory	n/a
16	Use of renewable energy	37,60%
17	Water consumption	17.918 m ³ /person/year
18	Internet access	83,70%
19	Employment in high tech sector	0,4%
20	Length of usable roads	n/a
21	Infrastructure intensity	n/a
22	Public health and safety measured in life expectancy	74,78
23	Number of health care personnel	n/a
24	Number of jobs related to circular economy	n/a
25	Domestic material consumption	n/a
26	Area under intense farming	14.000 SqKm

27	Area under organic farming	3.000 SqKm
28	Area under agroforestry or mixed farming	n/a
29	Area under specific limitations (such as conservation areas or forest protected zones)	18.048 SqKm
30	Annual allocation of European Agricultural Fund for Rural Development	Around 140 Mio€
31	Recycling rate of the area	57%
32	Patents registered in the area (for processes, products or innovations of any sort)	60
33	Food waste	2 seminars held on the topic
34	Acknowledgment of the territory	The Band ZELT BIO very well-known and popular: for nutrition, for health, for beauty care
35	Workforce back to the countryside	More than half (52%) of the country's population lives in Riga and Pieriga. In recent years, there has been a tendency for residents of the capital to often move to the Pieriga region. In 2020, the number of population in 110 counties out of 110 increased, and 15 of them were Pieriga counties.
36	Co-creative initiatives	n/a
37	Final price of the product	n/a
38	Number of people/clients engaged in the area	n/a
39	Measure of resilience	n/a
40	Overall well-being	n/a
41	New products/services introduced in the territory	n/a
42	New patents introduced	n/a
43	Project applications	n/a
44	Inclusion of disadvantaged groups and societal well-being	n/a
45	Capacity and knowledge building	190
46	Governance structure	8
47	Regional value creation	20
48	Infrastructure	40sqm

First policy results

The Latvian pilot area was able to utilize the LIVERUR methodology in order to increase the competitiveness and the recognition of the territory. The Living Lab Latvia established a sectorial working group on vegetables, fruits and berries production, offering information and service for its members. The local products and added value local products were promoted through different channels, not last the online one. Considering social inclusion as a crucial pillar of the LIVERUR actions in Latvia, the pilot team was able to boost even further the expenditure for cultural services, which now amount to almost 3% of the GDP of the pilot region. The sectorial working group within the project developed solid structure of participatory meetings, which occurred monthly.

3.7 Azores, PT

The Portuguese Pilot Region Terceira Island (Azores) is inhabited by 55,800 residents and covers an area of 402 km². Agriculture is essential for the preservation of the high-quality rural landscape and safeguarding of traditions and knowledge. The agricultural industry supplies the local market. In economic view agriculture is very important for its GDP contribution and for employment opportunities it generates.

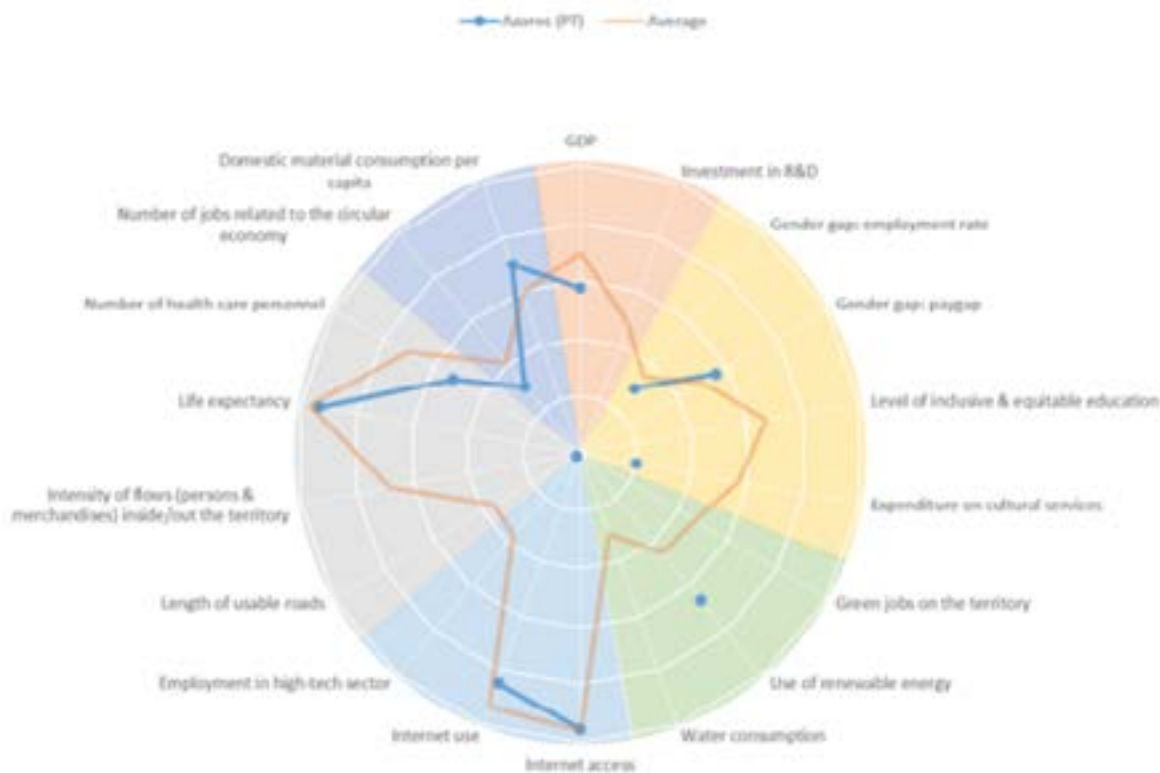


Figure 9. Benchmark study for the region of Azores (PT). Source: D 2.4 LIVERUR project. In blue the performance of the specific pilot region, in orange the average performance of the LIVERUR territories.

Table 9. List of the indicators (2021), Azores (PT)

Nr.	Indicator	Value for Azores (PT)
1	Number of people interested by the pilot action	55.833
2	Surface area interested by the pilot action	402,2 SqKm
3	Density of the area	0,7%
4	Gross domestic product of the area	17.607€/year
5	Investment in innovation and research	n/a
6	Employment rate	114.975 (in all Azores)
7	Employment rate in agriculture	9.995 (in all Azores)
8	Agricultural business established in the last 5 years	n/a
9	Gender gap for the employment rate	17%
10	Gender pay gap	n/a
11	Inclusive and equitable education	moderate efforts
12	Social inclusion and disadvantaged group	Yes
13	Expenditure on cultural services	n/a
14	Surface area devoted to agricultural activities	56%
15	Green jobs on the territory	n/a
16	Use of renewable energy	28,80%
17	Water consumption	121,1
18	Internet access	78,20%
19	Employment in high tech sector	n/a
20	Length of usable roads	n/a
21	Infrastructure intensity	n/a
22	Public health and safety measured in life expectancy	M (74,27) e W (81,33)
23	Number of health care personnel	0,2%
24	Number of jobs related to circular economy	n/a
25	Domestic material consumption	0,596 (ton/per capita.year)
26	Area under intense farming	n/a

27	Area under organic farming	n/a
28	Area under agroforestry or mixed farming	n/a
29	Area under specific limitations (such as conservation areas or forest protected zones)	n/a
30	Annual allocation of European Agricultural Fund for Rural Development	n/a
31	Recycling rate of the area	27%
32	Patents registered in the area (for processes, products or innovations of any sort)	n/a
33	Food waste	n/a
34	Acknowledgment of the territory	No
35	Workforce back to the countryside	Yes
36	Co-creative initiatives	5
37	Final price of the product	n/a
38	Number of people/clients engaged in the area	47.720
39	Measure of resilience	n/a
40	Overall well-being	n/a
41	New products/services introduced in the territory	n/a
42	New patents introduced	n/a
43	Project applications	1
44	Inclusion of disadvantaged groups and societal well-being	1
45	Capacity and knowledge building	10
46	Governance structure	6
47	Regional value creation	1
48	Infrastructure	Area of Terinov

First policy results

Since the start of the LIVERUR project, the Azores pilot area has constituted a unique environment in which to test the project's methodology. The isolation of the territory makes the regional circular living lab model even more desirable, as it offers to all the actors and stakeholders of the island a common table of discussion. The pilot team was able to engage all the stakeholders in 6 meetings each year, where a new business model based on the RAIN principles was conceived. Given the isolation of the territory, a unique policy perspective emerged: it was the intention of the different partners to share equipment that is underused (e.g., tractors, computer hardware) and that carry a heavy financial burden to their companies. This modus operandi will enable significant financial savings through a more efficient use of equipment in a shared system.

3.8 Slovenija, SI (Western and Eastern)

The Slovenian Pilot Region (various municipalities) is inhabited by 926,000 residents. Traditional family farming is still the principal model in rural regions and has proved its adaptability to diverse natural characteristics of Slovenia as well as its resilience to societal, political and market transitions.

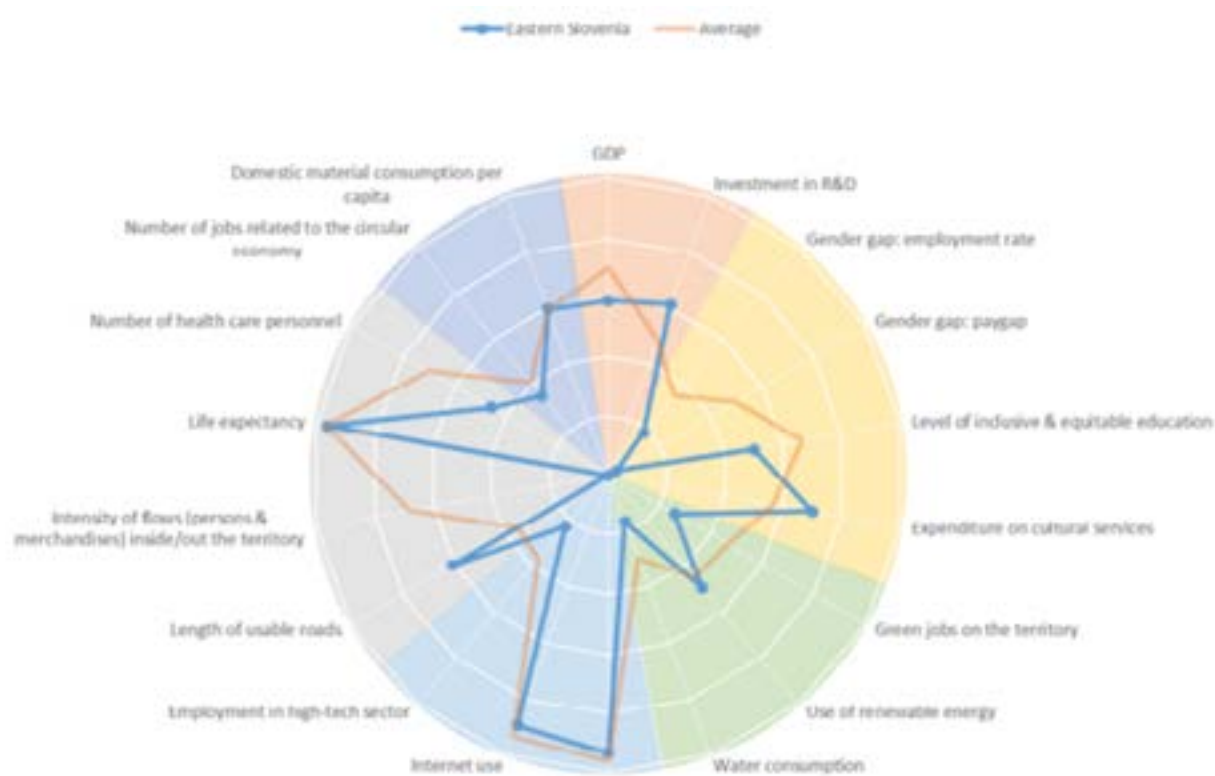


Figure 10. Benchmark study for the region of Eastern Slovenia (SLO). Source: D 2.4 LIVERUR project. In blue the performance of the specific pilot region, in orange the average performance of the LIVERUR territories.

Table 10. List of the indicators (2021), Eastern Slovenia (SLO)

Nr.	Indicator	Value for Eastern Slovenia (SLO)
1	Number of people interested by the pilot action	150
2	Surface area interested by the pilot action	49 SqKm
3	Density of the area	89/ SqKm
4	Gross domestic product of the area	19.100€/year
5	Investment in innovation and research	1.5%
6	Employment rate	74.8%
7	Employment rate in agriculture	n/a
8	Agricultural business established in the last 5 years	n/a
9	Gender gap for the employment rate	7.5%
10	Gender pay gap	7.8% less per hour
11	Inclusive and equitable education	moderate efforts
12	Social inclusion and disadvantaged group	Yes
13	Expenditure on cultural services	0.6%
14	Surface area devoted to agricultural activities	>3390.9 SqKm
15	Green jobs on the territory	n/a
16	Use of renewable energy	22%
17	Water consumption	1.09
18	Internet access	83%
19	Employment in high tech sector	5.3%
20	Length of usable roads	327Km
21	Infrastructure intensity	Low
22	Public health and safety measured in life expectancy	80.5
23	Number of health care personnel	276.15/100.000 inhabitants
24	Number of jobs related to circular economy	n/a
25	Domestic material consumption	13.286 t/capita
26	Area under intense farming	n/a

27	Area under organic farming	513.4 SqKM
28	Area under agroforestry or mixed farming	n/a
29	Area under specific limitations (such as conservation areas or forest protected zones)	n/a
30	Annual allocation of European Agricultural Fund for Rural Development	n/a
31	Recycling rate of the area	82%
32	Patents registered in the area (for processes, products or innovations of any sort)	n/a
33	Food waste	5
34	Acknowledgment of the territory	no data yet
35	Workforce back to the countryside	5
36	Co-creative initiatives	15
37	Final price of the product	no data yet
38	Number of people/clients engaged in the area	50
39	Measure of resilience	5 new products, 8 new infrastructures and investments
40	Overall well-being	parks arrangements and cycling routes
41	New products/services introduced in the territory	2
42	New patents introduced	no data yet
43	Project applications	yes
44	Inclusion of disadvantaged groups and societal well-being	50
45	Capacity and knowledge building	20
46	Governance structure	8
47	Regional value creation	5
48	Infrastructure	no data yet

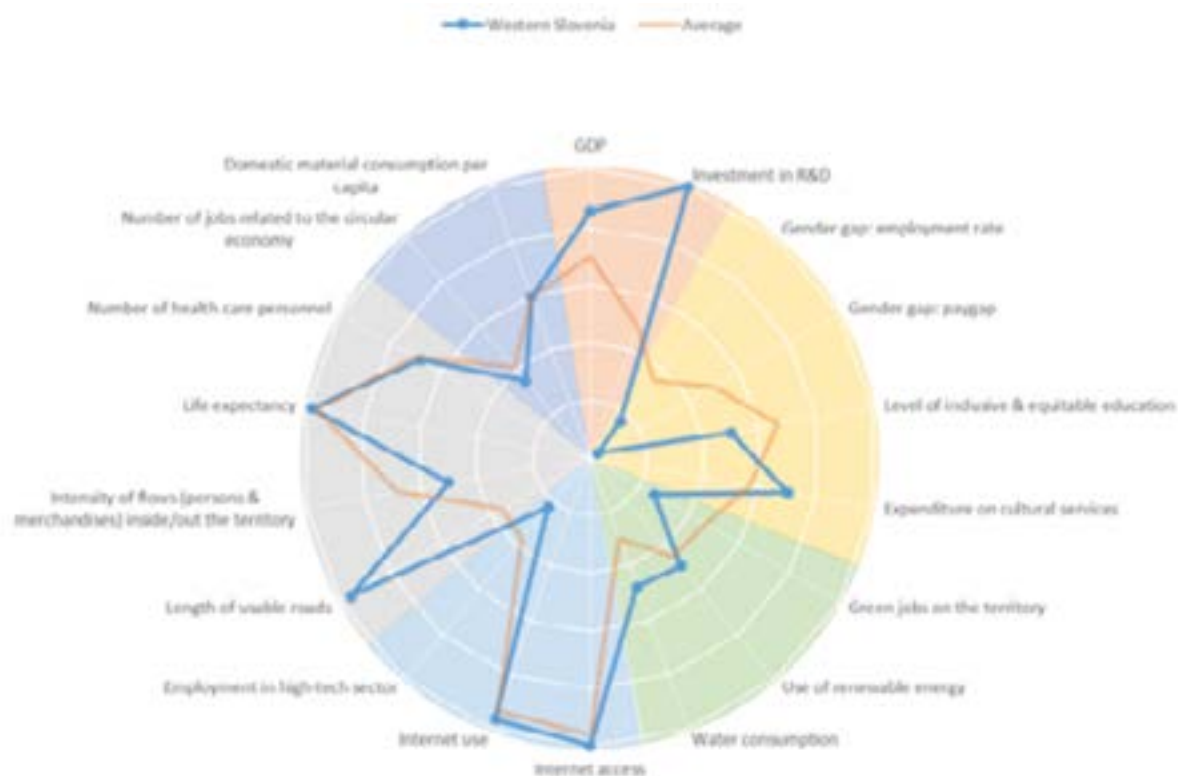


Figure 11. Benchmark study for the region of Western Slovenia (SLO). Source: D 2.4 LIVERUR project. In blue the performance of the specific pilot region, in orange the average performance of the LIVERUR territories.

Table 11. List of the indicators (2021), Western Slovenia (SLO)

Nr.	Indicator	Value for Western Slovenia (SLO)
1	Number of people interested by the pilot action	150
2	Surface area interested by the pilot action	4 SqKm
3	Density of the area	126.9/SqKm
4	Gross domestic product of the area	27.600€/year
5	Investment in innovation and research	2.3%
6	Employment rate	78.3%
7	Employment rate in agriculture	n/a
8	Agricultural business established in the last 5 years	n/a
9	Gender gap for the employment rate	4.7%
10	Gender pay gap	7.8%
11	Inclusive and equitable education	moderate efforts
12	Social inclusion and disadvantaged group	Yes
13	Expenditure on cultural services	0.6%
14	Surface area devoted to agricultural activities	>1435.7 SqKm
15	Green jobs on the territory	n/a
16	Use of renewable energy	22%
17	Water consumption	0.69
18	Internet access	88%
19	Employment in high tech sector	8.7%
20	Length of usable roads	296Km
21	Infrastructure intensity	medium
22	Public health and safety measured in life expectancy	82.7
23	Number of health care personnel	381,75 / 100.000 inhabitants
24	Number of jobs related to circular economy	n/a
25	Domestic material consumption	13.286 t/capita
26	Area under intense farming	n/a

27	Area under organic farming	210,4 SqKm
28	Area under agroforestry or mixed farming	n/a
29	Area under specific limitations (such as conservation areas or forest protected zones)	n/a
30	Annual allocation of European Agricultural Fund for Rural Development	n/a
31	Recycling rate of the area	82%
32	Patents registered in the area (for processes, products or innovations of any sort)	n/a
33	Food waste	Not relevant.
34	Acknowledgment of the territory	The territory has been subject to raising of the quality labelling. More than 10 wine producers from the local area were supported in marketing, selling and brand building. Wine destination labelling was promoted along different targeting groups.
35	Workforce back to the countryside	YES. 3,0 new staff was employed by 1. Divina Wine Hub to implement activities for local wine producers' promotion, (1,0) 2. Smart vineyards project EIP for research and development activities (1,0), 3. Local community to support administrative activates on a local level (1,0)
36	Co-creative initiatives	3 Initiatives identified: 1. Integrated development strategy for local community of Šmarje, 2. Local currency to support economic activities on local level, 3. development of business supporting infrastructure in village of Šmarje with Business Champer of Municipality of Koper
37	Final price of the product	YES. FAIR increase of the final price of the product targeted by the living lab (further increase to be expected in the coming 12 months)
38	Number of people/clients engaged in the area	App. 250 -300 local residents, 150 - 200 tourists, 100 other visitors (workshops, oratory, groups)
39	Measure of resilience	1. revenue of rural business during Covid, 2. number of new products or services invented in the area

40	Overall well-being	YES. Positive impacts of project activities on local community: 1. new meeting point developed in rural area - Šmarje village center, 2. new supportive services developed for young wine producers, 3. raising intensity of local area promotion, 4. more funding achieved for local infrastructure from municipality budget, 5. positive thinking of local residents
41	New products/services introduced in the territory	3 new products developed: 1. Virtual wine tasting for local wine promotion, 2. Coupon for local products promotion via ICT platform, 3. Local community currency
42	New patents introduced	Not relevant.
43	Project applications	3 project Applications for funding schemes developed: 1. Food chains in the wine sector, 2. Smart vineyards and digitalization in wine sector, 3. ICT in tourism and promotion of local products
44	Inclusion of disadvantaged groups and societal well-being	Not relevant.
45	Capacity and knowledge building	12 wine producers from local area, 5 NGOs, 5 local communities (committees), 10 other organizations in total of App. 50 participants
46	Governance structure	15-20 meetings / year
47	Regional value creation	30-40 organizations
48	Infrastructure	App. 32 m2 of new space has been provided in Šmarje village center for participatory stakeholder engagement. The place is subject to next activities: 1. capacity building events for wine producers, 2. collective marketing and selling of local products - wines, 3. development of new destination brand

First policy results (Eastern and Western Slovenia)

Both territories that compose the Slovenian pilot area have reached remarkable results through the three years of project implementation. The core activity was smart viticulture. Smart Viticulture is based on observation, measurement, and collection of environmental parameters to optimize wine production and reduce damaging environmental impact. In addition to solving long-term environmental challenges caused by excessive consumption of drinking water and agrochemicals, this solution empowers winegrowers with workable data which will enable them to better control their wine production and quality. The regional circular living lab methodology fostered by LIVERUR enabled the creation of a new meeting point in the interested rural area - Šmarje village center, the creation of new supportive services developed for young wine producers, enabled the raising intensity of local area promotion and to achieve more funding for local infrastructure from municipality budget. Last but not least, the RAIN business model accompanied by networking events, enhance the good thinking and trust of the civil society toward the local wine producers. All these activities, jointly with a higher recognition of the pilot area territory thanks to an astonishing marketing campaign, made it possible to increase the price of the wine; even during the Covid-19 pandemic the price remained high, supported by online wine tasting activities.

3.9 Ouedhref, TN

The Tunisian Pilot Region Ouedhref is inhabited by 10,300 residents and covers an area of 266 km². The semi-dry climate of Ouedhref is appropriate to cultivate palm-, olive-, pomegranate- and “elhenna” trees. 400 handcrafts produce carpets (margoum), mostly with female workers. This contributes by 10% of the national production. These two sectors are the most important in the region and contribute to economic stability, traditional jobs and regional identity.

Table 12. List of the indicators (2021), Ouedhref (TN)

Nr.	Indicator	Value for Ouedhref (TN)
1	Number of people interested by the pilot action	300
2	Surface area interested by the pilot action	266 SqKm
3	Density of the area	1000 inhabitants/Km
4	Gross domestic product of the area	women employment is 25% at country level in each sectors in Tunisia. However the women employment in craft sector is 90% in our pilot
5	Investment in innovation and research	1.1 %
6	Employment rate	90%
7	Employment rate in agriculture	n/a
8	Agricultural business established in the last 5 years	n/a
9	Gender gap for the employment rate	90%
10	Gender pay gap	equal
11	Inclusive and equitable education	very important issue within our territory
12	Social inclusion and disadvantaged group	Yes
13	Expenditure on cultural services	3%
14	Surface area devoted to agricultural activities	n/a
15	Green jobs on the territory	25%
16	Use of renewable energy	n/a
17	Water consumption	36000m3
18	Internet access	90%
19	Employment in high tech sector	n/a
20	Length of usable roads	22,7(km)/266(km ²)
21	Infrastructure intensity	medium
22	Public health and safety measured in life expectancy	75

23	Number of health care personnel	30 / 100.000 inhabitants
24	Number of jobs related to circular economy	10%
25	Domestic material consumption	2555tones / per capita
26	Area under intense farming	n/a
27	Area under organic farming	n/a
28	Area under agroforestry or mixed farming	n/a
29	Area under specific limitations (such as conservation areas or forest protected zones)	n/a
30	Annual allocation of European Agricultural Fund for Rural Development	n/a
31	Recycling rate of the area	10%
32	Patents registered in the area (for processes, products or innovations of any sort)	n/a
33	Food waste	In our case the food waste is recyclable in 100%
34	Acknowledgment of the territory	Our product (dar margoum) is labelled, not our region/territory
35	Workforce back to the countryside	We did not increase the number of craft women, but we were able to boost the interest to become active entrepreneurs by the craftswomen
36	Co-creative initiatives	The multi-actor involvement was done through 3 types of events 1. an attendance in national exhibition in Tunis, 2. Technology Days with stakeholders and beneficiaries in Gabes (about reusage of carpet waste) 3. Involvement of fashion designer to redesign of the by-product in fashion
37	Final price of the product	n/a
38	Number of people/clients engaged in the area	300
39	Measure of resilience	(ii) New Business case by recycling and changing the Berber carpet into new types of products ; (iii) 2 Technical workshop about new potential of the traditional Berber motifs during Covid period to mitigate the economical/sales effects
40	Overall well-being	average
41	New products/services introduced in the territory	2 new services introduced in the territory linked to the Living Lab
42	New patents introduced	n/a

43	Project applications	1 Project application for funding schemes developed in the territory during LIVERUR Living Lab to the ENPI STANd Up! Call for Mediterranean Textile et Clothes sector. Stand up! Is Sustainable Textile Action for Networking and Development in Circular Economy Business Ventures in the Mediterranean), where the fashion designer of the Association, Mars Ikram Jallouli has been selected to attend in course, among the best 20 talented young professional candidates from Tunisia (March-July 2021)
44	Inclusion of disadvantaged groups and societal well-being	10
45	Capacity and knowledge building	100
46	Governance structure	5
47	Regional value creation	5
48	Infrastructure	300

First policy results

The Tunisian pilot of Ouedhref represents a unique environment in which the multiple aspects of LIVEREUR intervention, namely the environmental, social and cultural one, co-depend intrinsically. As an example, the Berber carpet manufacturers in the pilot area are 90% women, while the gender gap in employment sees Tunisian women participating in the labour force only for a magnitude of 25%. The pilot team was able to use the RAIN business model and the RAIN method to develop new business activities by recycling and changing the Berber carpet into new types of products. Moreover, it was possible to organize technical workshops about new potential of the traditional Berber motifs to mitigate the economical/sales effects of the Covid-19 pandemic. The Living Lab proved to be able to support the innovation process for all involved stakeholders, from SMEs to end-users with special attention to micro-entrepreneur crafts women, with the potential users at the centre of the round tables organized. Even though during the LIVERUR project the number of craft women did not increase, the LIVERUR methodology enabled the creation of working groups, which were able to boost the interest of involved craft women to become active entrepreneurs.

3.10 Manisa, TK

The Pilot Region TR33 is inhabited by 1,402,000 residents and covers an area of 13,270 km². TR33 is one of the leading Turkish regions due to the regional gross value added of agricultural production. Hence, the food sector has an increasing importance for the region. Olive processing, fruit drying and packing, and dairy production are the main food processing subjects



Figure 12. Benchmark study for the region of Manisa (TK). Source: D 2.4 LIVERUR project. In blue the performance of the specific pilot region, in orange the average performance of the LIVERUR territories.

Table 13. List of the indicators (2021), TR33 Manisa (TK)

Nr.	Indicator	Value for TR33 Manisa (TK)
1	Number of people interested by the pilot action	360
2	Surface area interested by the pilot action	1.645 SqKm
3	Density of the area	106,2/SqKm
4	Gross domestic product of the area	8.711 \$ / 49.467 TL
5	Investment in innovation and research	0.96%
6	Employment rate	61,1%
7	Employment rate in agriculture	41%
8	Agricultural business established in the last 5 years	n/a
9	Gender gap for the employment rate	39%
10	Gender pay gap	10%
11	Inclusive and equitable education	Yes
12	Social inclusion and disadvantaged group	Yes
13	Expenditure on cultural services	0,1%
14	Surface area devoted to agricultural activities	825,44 SqKm
15	Green jobs on the territory	n/a
16	Use of renewable energy	n/a
17	Water consumption	224 lt
18	Internet access	79%
19	Employment in high tech sector	0,6%
20	Length of usable roads	n/a
21	Infrastructure intensity	n/a
22	Public health and safety measured in life expectancy	78 years
23	Number of health care personnel	1134 / 100.000 inhabitants
24	Number of jobs related to circular economy	n/a
25	Domestic material consumption	n/a
26	Area under intense farming	3,67 SqKm

27	Area under organic farming	1,95 SqKm
28	Area under agroforestry or mixed farming	82,54 SqKm
29	Area under specific limitations (such as conservation areas or forest protected zones)	n/a
30	Annual allocation of European Agricultural Fund for Rural Development	2.226.720 €/Year
31	Recycling rate of the area	n/a
32	Patents registered in the area (for processes, products or innovations of any sort)	209
33	Food waste	n/a
34	Acknowledgment of the territory	Livable and Aesthetic Cities Award (2012)
35	Workforce back to the countryside	1794
36	Co-creative initiatives	n/a
37	Final price of the product	100%
38	Number of people/clients engaged in the area	n/a
39	Measure of resilience	n/a
40	Overall well-being	n/a
41	New products/services introduced in the territory	2
42	New patents introduced	1
43	Project applications	n/a
44	Inclusion of disadvantaged groups and societal well-being	n/a
45	Capacity and knowledge building	285
46	Governance structure	Akhisar Olive Platform / 4
47	Regional value creation	285
48	Infrastructure	285

First policy results

TR33 region has utilized the LIVERUR methodology to improve the competitiveness of the local agricultural sector, especially of the olive oil production. The participatory methodology delivered also here remarkable results, with an increase of the final price of the product of 100%. Moreover, it has been noticed that the direct involvement of municipalities in the process has strengthened the governance both at the pilot area and regional level.

4 POLICY LESSONS FROM THE ANALYSIS

LIVERUR analysis and activities confirmed that rural regions are quite diverse in geographical and economical terms, in population densities and structures. Among others, there are regions with intensive or low input agriculture, peri-urban or peripheral regions, mountainous or flatland regions, regions with high potential in the first, second or tourism sector. In this perspective, the policy framework here presented constitutes an attempt to homogenize and summarize policy insights from eleven different testbeds around Europe. This concluding section aims at providing local, regional, and national policymakers with insights on how rural policies interact with local actions and expectations of rural businesses.

1. POLICYMAKERS AT ALL LEVELS SHOULD BEAR IN MIND THE HETEROGENEITY AMONG RURAL AREAS

From the policy results summarized in the previous section, it emerges that policymakers have to bear in mind the heterogeneity of the EU's rural framework and consider the diverse rural areas' needs, which can be addressed by rural policies at various levels, i.e., the local, regional, national, EU and international level. Current rural policy schemes, not last the EU's Rural Development policy, support rural areas to meet a wide range of economic, environmental and social challenges. However, frequently the administrative zones on which the incentives are based are too wide and fail in incorporating within-regional variability.

The case of the pilot area in Reggio Emilia (IT) presents here a perfect example: the pilot area is inserted into a rural territory which is by nature highly utilized and characterize by an intensive production system. Numerous are the incentive available for initiating more environmental-friendly management practices; nonetheless, some practices proposed (such as no tillage and agroforestry practices) would be not suitable for the pilot area interested by the LIVERUR project as they are a marginalized territory, where the conformity of the landscape does not make these practices possible. Therefore, once the European rural policies are actuated at the local level, we advocate for the inclusion into the policy framework of a mandatory consultation step with local farmers, each representative of an agroecological zone interested by the proposed policy. This would enhance the representatives of each rural zone into the policy, and it would mitigate the problem of agroecological zone misrepresentatives.

2. POLICY AMBITIONS SHOULD BE TRANSLATED INTO CONCRETE BUSINESS MODELS AND ACTIONS

Subsequently, LIVERUR comparative policy framework found that it is quite demanding to put the numerous ambitions and visions as stated in various EU policies into practical solutions and concrete business models that meet and integrate the manifold high expectations and requirements of rural entrepreneurs and businesses. Under a certain perspective, EU rural policies remain still a good picture on paper, but a fuzzy sketch when it comes to implementation.

A good example here is provided by the persistent gap present between gender employment and gender wage in the agricultural sector. There is no doubt that the environment and gender have topped the European Union's political agenda. This is reflected in the EU's flagship European Green Deal and its Gender Equality Strategy (2020-2025), which seeks to create a Union of Equality. However, despite these high-level commitments, the proven intersection between gender and the environment is missing from the EU's green transition, which risks widening the already significant gap between women and men employment in the rural sector in Europe.

Concrete solutions, shared among the pilot areas, include: funds to research and data collection on the gender-environment nexus, recognising the benefits of care work for the green transition and applying gender mainstreaming methodologies in environmental policies. The pilot area in Tunisia, which involves almost exclusively women, confirm that women agricultural producers tend to save more, are more likely to use regenerative farming practices and adopt more willingly circular economy and recycling practices.

In this perspective, the RAIN Concept and the RAIN platform developed within the LIVERUR project are based on the recent EU and national strategies and programmes, with the purpose of supporting the rural development policies' actuation and helping local and regional actors to put the theoretical approaches into practice. Among others, it contains a gender-based section, with concrete examples and ideas on how to close the gender divide in rural areas.

3. POLICYMAKERS SHOULD SUPPORT RURAL BUSINESSES WHEN SHOCKS OCCUR

Unfortunately, LIVERUR project encountered the time of Covid-19 – an unexpected shock which invested entire countries, urban and rural areas alike. LIVERUR organized a Covid-related workshop in June 2020, in order to investigate whether the response of the policymakers was considered adequate among pilot members. The idea was to see whether in times of unexpected shocks (which today is Covid-19, but it can easily be unprecedented climate change consequences tomorrow) rural policies were able to deliver the expected support. As expected, the impact of Covid-19 on rural areas has been complex: Covid pandemic had important impacts on LIVERUR pilot regions in terms of digital transformation. In some cases, the impact was positive because of an increase in the sale of products locally. But the crisis has evidenced the gap regarding the use of digital tools and in involving key partners and stakeholders in the daily activity. Other problems are the lack of free movement of people, which severely reduced tourism activity and food production. Identified challenges are the need to help farmers to promote and sell their products directly to the final consumers, IT infrastructure and the difficulties to get and use digital solutions.

However, the major challenges for rural areas during COVID-19 situation were the lack of motivation and business vision for digital transformation and the difficulties to involve policymakers and decision-makers in that sense. Some pilot areas reported a decrease in interest by policymakers, as the engagement of local authorities in rural activities diminished side by side with the worsening of the Covid crisis.

Policymakers should foresee contingency plans in case of sudden shocks and moments of need. Participatory activities, as those established during the LIVERUR project, should be nourished and improved to serve as safety nets and continuous feedback mechanisms among farmers, rural stakeholders and policymakers.

4. RURAL POLICIES SHOULD INTERVENE FOR MAKING RURAL DATA UNDERSTANDABLE AND USED

Finally, the effort behind the writing of the rural policy framework for the LIVERUR project made clear that local authorities and local stakeholders frequently lack an appropriate access to agricultural data in their own region. More precisely, farmers and local stakeholders do detain precise records on the performance of their pilot area and the connected economic activities, but they fail in positioning those records and performances on a regional and national scale.

Numerous are the dataset available at the European level (not last the Eurostat section for the Rural Development policy). However, frequently pilot members were reporting a frustration in understanding that the data collected would not find adequate terms of comparisons or would not be adequately utilized by policymakers.

We urge local policymakers to create adequate data repositories, as those present at European level. Higher level of competitiveness as well as higher economic, environmental and social performances can be achieved only through a deep understanding of the strengths and weaknesses of the analysed area; without a proper set of data collected at the lowest granularity possible, this understanding risk to remain a vague wish. Rural stakeholders, first and foremost the farmers, need to be able to consult directly local data and – when this is not possible due to a lack of infrastructures or skills – to consult researchers and experts which can suggest to them how they are performing with respect to the local and national average. The networking section on the RAIN platform was created also with this scope in mind: analysing performances is the first milestone to business improvement.

5 THE ROAD TO THE POLICY BRIEF

In the policy brief connected to this policy framework, policy makers will find key messages and recommendations presented in a concise and effective way. Two main sections of the brief detach what lessons learnt emerged from the policy analysis and what insights can be abstracted from these lessons; the recommendation section is divided according to four main topics, which are at the baseline of the Long-term vision for the EU's rural areas document (2021): (i) rural business model innovation; (ii) Public-Private-Partnership in rural areas; (iii) building up innovative rural models and (iv) smart, resilient and inclusive rural development.

CONCLUSION

The diverse and complex nature of rural areas and agricultural businesses in Europe calls for Communitarian policies which are able to include and target all relevant stakeholders, while providing adequate training and incentives for the utilization of public-private-people partnership tools. After three years of experience, LIVERUR project proposes here a set of key messages and policy recommendations based on the lessons learnt collected during the development of the initiative. Unique methods, such as the RAIN concept and the RAIN Entrepreneurial tool, are reported as ready-to-use supports for future and present rural policies.

ANNEX: GLOSSARY OF THE POLICY BRIEF

As a **Business Concept** is defined the baseline for the creation of a business model (EUROPEAN COMMISSION, 2018).

A **Business Model** describes the rationale of how an organisation creates, delivers and captures values, in economic, social, cultural and other contexts (Geissdoerfer, Martin; Savaget, Paulo; Evans, Steve, 2017).

Living Labs, as understood in LIVERUR, are user-centred, open-innovation ICT enabled ecosystems often operating in a territorial context integrating concurrent research and innovation process within a Quadruple Helix (EUROPEAN COMMISSION, 2018).

The **RAIN concept** is the acronym for the business model concept developed in the LIVERUR project: Regional circular living lab business concept.