



PROJECT H2020

LIVERUR

Living Lab Research Concept in Rural Areas

POLICY BRIEF

A Regional Circular Living Lab Approach to foster Rural Development

*Egartner, S.¹, Grüneis, H.¹, Haider, W.², Heinschink, K.¹, Niedermayr, J.¹,
Occelli, M.³, Stojanova, S.⁴, Stojmenova, E.⁴, Superina, A.⁴, Wagner, K.¹*

Outcomes of the EU H2020 project LIVERUR (www.liverur.eu)

¹ Federal Institute of Agricultural Economics and Mountain Research, Austria

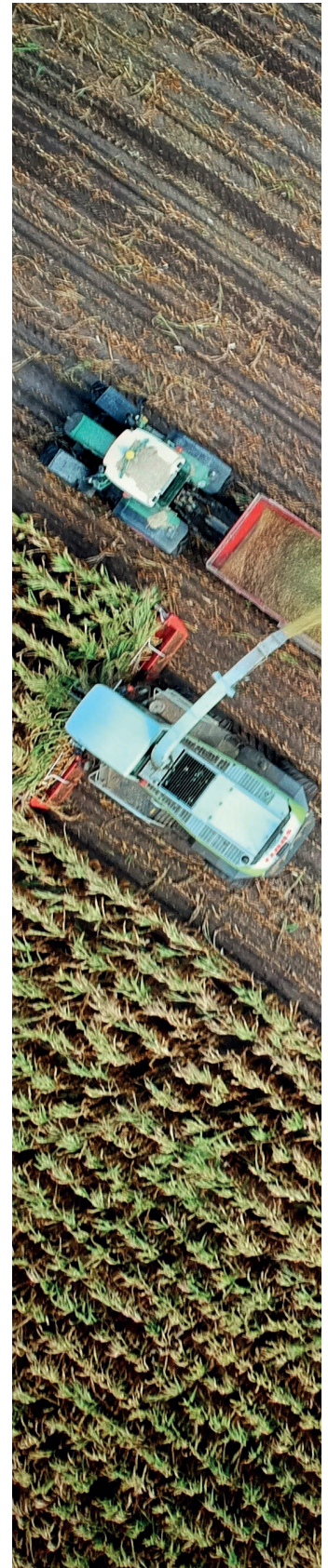
² Centre for Social Innovation, Austria

³ Institute of Life Sciences and EMbeDS, Sant'Anna School of Advanced Studies, Italy

⁴ University of Ljubljana, Faculty of Electrical Engineering, Slovenia

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 773757.

Disclaimer: The information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.



LIVERUR - 773757

1

INTRODUCTION

In the rural sector and beyond, Europe needs to transition towards a smart, inclusive, resilient and sustainable growth model. According to the European Committee of the Regions in the 2020 EU annual and regional barometer¹, the main challenges rural areas are facing are: depopulation, lack of public services, decreasing number of farms and lack of generational change in farming. The political guidelines adopted for the period 2019 – 2024, show the core value rural areas represent for the EU and the European cultural and natural heritage: they are indeed home to 137 million people, representing almost 30% of the European Union population and almost 80% of its territory². 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 deeply impacting the role and nature of rural areas³. The latest stakeholder consultation in the rural areas, launched by the European Commission at the beginning of 2021, reported that at least 40% of respondents felt left behind by the society and the policymakers⁴. This perception, alongside with the factors driving it, needs to be addressed.

In this perspective, the EU H2020 project **LIVERUR** (Living Lab research concept in Rural Areas, 2018-2021) focused on the modernisation of small and medium rural businesses and projects in the agri-food sector. It was dedicated to the improvement of existing business structures by adapting and testing the Living Lab Concept to the needs of farmers and other rural entrepreneurs with a view to support them in implementing innovative business model approaches towards circular economy. Then, by supporting the economic, environmental and social sustainability of rural businesses and areas, **LIVERUR** contributes to the long-term vision of the EU's rural areas.

LIVERUR evidence in a nutshell

The **LIVERUR** project:

- analysed existing rural business models and potentials of the Living Lab Concept in rural areas;
- developed a benchmark system to categorise existing rural business models;
- created a new business model concept – the RAIN (Regional Circular Living Lab business model) concept;
- promoted the integration of all relevant stakeholders of the rural sectors in the pilot regions through creation of an ICT enabled service environment;
- tested and validated the efficiency of the Living Lab approach in 12 rural pilot regions;
- provides support for regional development via the RAIN platform - <https://rainplatform.wtelecom.es/>

1 Document available here: <https://cor.europa.eu/en/our-work/EURegionalBarometerDocs/4370-Barometer%20optimized.pdf>

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

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

4 For further information see the accompanying Stakeholder consultation – Synopsis report (SWD(2021) 167 final)

LIVERUR analyses and activities confirmed that rural regions are quite diverse in geographical and economical terms, in population densities and structures. 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. It follows that policymakers have to bear in mind the heterogeneity of the EU's rural framework and consider the diversity of rural areas' needs, which can be addressed by rural policies at various levels, i.e. the local, regional, national, EU and international level. Furthermore, **LIVERUR** stresses that it is quite demanding to put the numerous ambitions and visions as stated in various EU policies⁵ into practical solutions and concrete business models that meet and integrate the manifold high expectations and requirements of rural entrepreneurs and businesses. In this perspective, the RAIN Concept (see Figure 1) and the RAIN platform⁶ developed within the **LIVERUR** project are based on the recent EU and national strategies and programmes⁷, with the purpose of supporting rural development policies by helping local and regional actors turn theoretical approaches into practical solutions.

Subsequently, we present a set of key messages from the **LIVERUR** project followed by specific policy recommendations on how to best tackle the rural areas' heterogeneity in an inclusive and sustainable way.

Glossary:

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.

5 E.g. Common Agricultural Policy, EU Green Deal, Climate Change and Environmental Policy, Regional Policy etc.

6 <https://rainplatform.wtelecom.es/>

7 E.g. Farm to Fork Strategy, Circular Economy Action Plan, EU Life Program, Europe 2020 Strategy for Smart, Sustainable and Inclusive Growth, Territorial Agenda 2030 etc.

Key Messages and Recommendations

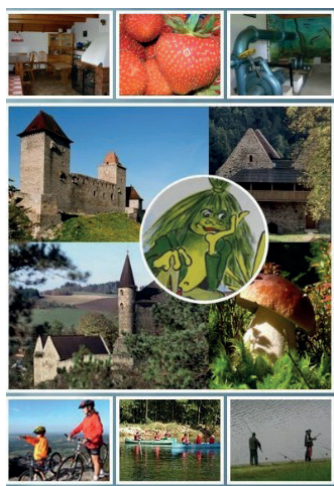
1. Rural Business Model Innovation

Key Message:

An analysis of existing rural business models resulted in the categorisation of six main types of existing rural business models with specific strengths, weaknesses, threats, opportunities and trends:

1. mainstream farm enterprises;
2. diversified agricultural enterprises;
3. food and beverages industries;
4. rural SMEs and crafts businesses;
5. rural tourism enterprises and
6. rural services.

These categories represent well established fields of economic activity across the regions and provide a decent starting point for building on regional strengths and potentials.



Photos: Cadiou, F. 2018. *Liverur Deliverable 2.1*. <https://liverur.eu/liveruroutcomes/>



Policy Recommendations:

Networking: Strengthen and diversify partnerships, cooperative structures and networks among enterprises and communities as well as public private relations. Invest in technical and social infrastructure to support capacity building and a pro-active networking for co-creation and open innovation.

Proposed strategy: e.g., by tying grant money for regional R&D projects to collaborative and open innovation-oriented work.

Proposed policy actors to be involved: e.g. regional funding organisations, regional authorities.

Human Resources: Provide incentives to support generational renewal, qualified workforce by provisioning of life-long education and training, and reduce out-migration;

Proposed strategy: e.g., by dedicating funds to qualification measures for digital technologies.

Proposed policy actors to be involved: ERDF programmes' responsables.

Infrastructure and services: Provide access to financial resources and services, increase connectivity, strengthen the profitability of businesses, make use of public funds, value and compensate ecosystem services and generate social benefits.

Proposed strategy: e.g., by setting up necessary infrastructure for regular regional exchange meetings.

Proposed policy actors to be involved: regional authorities.

Business innovation: Support business modernisation, explore new niches, business opportunities and business models, exploit synergies in the field of environmental and climate issues, new technologies with the focus on consumer needs, expectations, and trends.

Proposed strategy: e.g., by creating tighter connections between local universities and colleges with rural entrepreneurs, in order to foster the creation of rural-specific masters in business and innovation management.

Proposed policy actors to be involved: regional universities, colleges and research centres, business consultancy.

2. Public-Private-People Partnerships in Rural Living Labs

Key Message:

A research on theory of Living Labs and circular economy defines 'Living Lab' as a user-centred, open-innovation ecosystem or a systematic approach, co-created by users, integrating research and innovation processes. Furthermore, it summarizes the existing cases of the Rural Living Labs by the creation of a large repository and giving insight on how Living Labs are differentiated on the basis of three main characteristics: user involvement, real-life contexts, and public-private-people partnership (PPPP).

Policy Recommendations:

Networking: *Creating strong networks of stakeholders can increase and catalyse the benefits of Living Labs as regards rural innovation, ensuring the necessary critical mass for its sustainability while considering jointly the impacts of a globalizing economy and local daily life needs.*

Proposed strategy: *e.g., by structuring funds, incentives and benefits around multi-stakeholders and multi-purpose activities.*

Proposed policy actors to be involved: *CAP funds and regional authorities*

Human Resources: *Enable human and technological interactions between the main local actors in agro-industry by Rural Living Labs.*

Proposed strategy: *e.g., by fostering a continuous upgrade of the workforce and close the digital divide still existing among rural and urban entrepreneurs.*

Proposed policy actors to be involved: *regional universities and regional authorities*

Business innovation: *A closed loop, where all waste is reused within the production process, is the most desirable outcome for sustainability and could be the business model of choice for rural economies in the next future.*

Proposed strategy: *e.g., by incentivizing a circular economy approach, easing the tax burden on those rural businesses which foster a fully closed loop utilization of resources.*

Proposed policy actors to be involved: *national and EU authorities*

3. Smart, Inclusive, Resilient and Sustainable Rural Development

Key Message:

The innovative business model concept RAIN (Regional Circular Living Lab) consists of nine RAIN Core Elements, seven RAIN Principles and six RAIN Real Life Setting Topics model Core Elements. The Living Lab and the Circular Economy approach are central to RAIN. The structure provides a tangible integration of a holistic view and recent findings on promising sustainable and resilient rural development strategies.

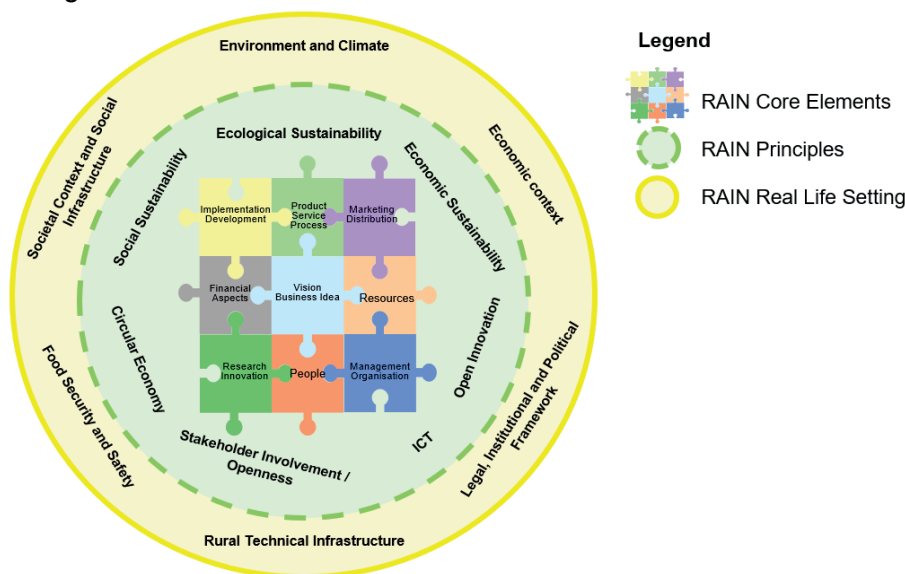


Figure 1: RAIN concept, source: Egartner et al. 2020. LIVERUR Deliverable 4.3. <https://liverur.eu/liveruroutcomes/>

Policy Recommendations:

Policies for rural regions may incentivise and support the implementation of business models; they also should support drafting integrative, holistic and inclusive business models (e.g. applying the **RAIN Concept**, making use of tools and information provided on the **RAIN platform**). Furthermore, policies should set initiatives and give incentives for integrating the **RAIN Principles** into the Core Elements of rural business models. Finally, policies should support to create awareness that the integration of the **RAIN Real Life Setting** is of great importance in drafting successful rural business models.

Proposed strategy: e.g., by including the use of the RAIN concept and the RAIN platform into existing formative courses offered to rural entrepreneurs by policymakers. There should be specific courses on business model development offered to local rural businesses, so as to make the rural activities and products competitive and sustainable.

Proposed policy actors to be involved: local and regional authorities.

Infrastructure for networking is basic and should be supported widely.

Proposed strategy: e.g., by enabling and force affordable personal networking and also by incentivizing the construction of stable and fast infrastructures which can close the digital divide currently present in rural areas. As the digital divide is also a skill divide, the incentive should be directed also to provide ICT-based courses and formative meetings.

Proposed policy actors to be involved: ERDF programs, CAP funds and regional authorities.

4. Building Up Innovative Rural Governance Models

Key Message:

The implementation of Regional Circular Living Labs in the LIVERUR pilot regions with support of the RAIN platform showed that the platform can help with covering the need for ensuring the long-term business viability and sustainability by enriching the core business activities with the RAIN principles (see Figure1). The experience showed good success e.g. with:

- Well-founded training of the trainers to communicate the idea of the RAIN concept.
- Open ecosystem network, bringing together and enabling input of all stakeholders, regional confidant people and facilitators.
- A mix of quick win solutions and mid/long-term strategic points of view, tangible benefits to keep motivation.
- Innovative digital tools and one common platform for all regional initiatives.
- Personal contacts and trust building measures, personification and user centred design of services.
- Tools for mutual understanding and recognition.
- Sharing project outcomes, exchange of experience, continuous communication.
- Get clear about and make efficient use of regional resources, close loops of regional economy and other activities.
- Keep the rural authenticity and context, create a common identity.

Policy Recommendation:

Networking: Cooperation schemes between the rural / agriculture enterprises and relevant and useful stakeholders should be promoted within the RAIN Entrepreneurial Tool. The tool is designed in a way that enables the cooperation between rural / agriculture enterprises and other stakeholders, embodying open innovation procedures.

Proposed strategy: e.g., by presenting extensively the RAIN entrepreneurial tool to local policy-makers and advisors and by incentivizing the inclusion of this tool in rural entrepreneurial courses.

Proposed policy actors to be involved: local universities and rural advisors.

Human Resources: The RAIN Entrepreneurial Tool should provide support and guidance on the topic of work-life balance through the presence of relevant experts and through the possibility that rural entrepreneurs can directly communicate with them through the online community.

Proposed strategy: e.g., by including the RAIN Entrepreneurial tool among existing platforms and frameworks aiming at linking rural businesses with legal, commercial and production experts.

Proposed policy actors to be involved: local chambers of agriculture and existing rural associations on the ground.

Business innovation: The RAIN Entrepreneurial Tool should provide a context of innovative channels that can be used to reach customers, conducting a business state-of-the-art analysis, improve enterprises' technological readiness level, ensuring the long-term business viability and sustainability.

Proposed strategy: e.g., by fostering the use of the tool in every-day business activities through the provision of incentives and trainings.

Proposed policy actors to be involved: local authorities.