PROJECT H2020
LIVERUR

Living Lab Research Concept in Rural Areas

DELIVERABLE 5.1:

Circular Rural Business Hub: database for piloting and stakeholders' involvement

LIVERUR - 773757

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FIGURES

1 Inspired by Steen et al., 2017 and Nyström et al., 2014). Design: Christian Smida

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2 THE IMPLICATIONS OF SOCIAL FARMING FOR RURAL POVERTY REDUCTION, FINAL REPORT, 15 DECEMBER 2014, FAO REPORT

TABLES

EXECUTIVE SUMMARY

Purpose – In the framework of **LIVERUR**, an important consideration with user involvement is to know who to involve in the different innovation stages of the project in the 13 targeted regions. The aim of including users in the different phases of innovation process is to identify the user needs and to reduce the market risks. In the **LIVERUR** project the (end) users as potential future customers, with different qualifications are included in the innovation processes based on their suitability to achieve the expected output. Here, the requesting customers provide ideas for new products from the basis of their needs (Enkel, Perez-Freije & Gassmann, 2005[1]).

The objective of Task 5.1: Creation of a Living Lab territorial Community to gather all the users and stakeholders necessary for the piloting implementation. Lead Role: TRA, Month 15

To successfully implement the piloting territories **LIVERUR** consortium proceed with:

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1 Enkel, E., Perez-Freije, J., & Gassmann, O. 2005. Minimizing Market Risks Through Customer Integration in New Product Development: Learning from Bad Practice. Creativity and Innovation Management, 14(4): 425-437.

(i) Identification of the rural activities for which of the 13 piloting territories – 20 living lab scenarios, identified by T4.1;

(ii) User & Stakeholders survey on type, interests, different knowledge levels and needs;

(iii) Co-creation and other stakeholder' involvement techniques and communication material, based on the knowledge acquired in task 3.3.

(iv) Practical example for User & Stakeholder involvements through the Malta based Circular Rural Living Lab

Design/methodology/approach – The Living Lab methodologies used in T5.1 includes:

• Design Thinking
• Interviews
• User persona
• How might we / other workshops create first ideas or understand the problem
• Brainstorming / other workshop to create ideas for solutions
• Usability workshop / other workshop to try out, test, and improve, validate, the solution
• Feedback workshop /other workshop to gather feedback from users
• Prototyping / Minimum Viable Product (MVP)
• Community Building

Findings –A Taxonomy of Users and Stakeholders in Rural Context, Methodology to Characterising Users and Stakeholders

Originality/value – A Practical example for participative model development in social farming – social enterprise for users and stakeholders involvement in rural circular innovation.
The Structure of the standardized **LIVERUR** database from 20 pilot sites (selected by T4.1)

Keywords *Open innovation, ENoLL ,participative governance, social farming, Living Labs, user involvements, stakeholder identification, Design thinking, community building methodologies*

INTRODUCTION

LIVERUR combines relevant rural topics (Agriculture, Tourism, Innovation, Energy & Environment, Food, Water, Mobility, Entrepreneurship, Social Innovation etc) for **future challenges in rural/remote/mountain areas** to give them real and sustainable perspectives in order not to force them to leave their living areas.

We are collaborating on a unique initiative and open innovation approach (called **Living Lab**) providing knowledge transfer from our research results, reusable/ replicable methods and tools to carry out such a transformation (technological, socio-economic, human centric) for all partners in their targeted territories.

LIVERUR project aims at bringing rural innovation along with high impact to the wide spectrum to the **agricultural activities, entrepreneurship, job creation, digital skills improvement, shared and circular economies along new business models and prototypes for better decision-making and community engagement.**

The urbanisation, as a general tendency today means significant changes in our living standards, but we must keep the nature-centric, ecological lifestyles, values of the tourism / tangible and intangible cultural heritage in

our villages where we were born. **Our traditional family-centric social behaviour is coming from rural communities since centuries, the sensitivity for social innovation is originated from our villages and the common wish**: to keep them more sustainable as our main mission comes from our roots.

To transforming the traditional mindset into more skilled/educated personas and take a part in a people-centric demand driven economy this is the main mission of LIVERUR project, which includes the intensive involvements of (end) users and large network of stakeholders. As the main message of T5.1.

OBJECTIVES

By DoW of LIVERUR , Task 5.1 Creation of a Living Lab territorial Community to gather all the stakeholders necessary for the piloting implementation. Lead Role: TRA Consortium role: The main role in this Task are covered of course by piloting partners in every territory. Technical partners acting as a support for the implementation of the guidelines.

Taking a Responsible Research and Innovation (RRI) approach, the **LIVERUR** project use the Living Labs and Co-creation methodologies to gather and involve all the relevant stakeholders in a Public-Private-People Partnership (PPPP) in the Piloting Actions.

The effectiveness of the Piloting Actions implementation is very much dependent on the partnerships developed and on the involvement and cooperation of the various stakeholders for which one of the 13 piloting regions.

The first step for the piloting Implementation is the analysis of the territories from a holistic view on their entrepreneurial characteristics and on their participation characteristics in order to have the idea of which participatory methodologies best suit(T2.1- T2.2.-T2.3-T2.4 , T4.1).

To successfully implement the piloting territories **LIVERUR** consortium will proceed with:

(i) Identification of the rural activities for which of the 13 piloting territories (20 scenarios) in T4.1.;
(ii) Stakeholders survey on type, interests, different knowledge levels and needs; (T5.1.)
(iii) Co-creation and other stakeholder' involvement techniques and communication material, based on the knowledge acquired in Task 3.3. (T5.1).

This task analyse the already developed 20 Piloting scenarios in terms of stakeholders involvement (by the selection of T4.1.)

Timetable:

Task 5.1.1. Reading 20 pilot scenarios and writing D5.1. Circular Rural Business Hub: database for piloting and stakeholders' involvement (15/07/2019)
Task 5.1.2. First draft of D5.1 (20/07/2019)
Task 5.1.3. Peer review   (27/07/2019)
Task 5.1.4. Final version and submission (30/07/2019)

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1 IDENTIFICATION OF THE RURAL ACTIVITIES FOR WHICH OF THE 13 PILOTING TERRITORIES & 20 SCENARIOS

This chapter is a guide to each of the '6P' components, i.e. places, people, priorities, platforms, process-setup and process-evaluation. There was a task list s for each 13 Rural Living Labs.

Circular Rural Living Labs will work best in clearly bounded areas and settings, with a boundary on a local map. As they supposed to have physical space and governance, they should also be 'institutionally bounded', with a clearly defined set of organizations (Living Lab management by each). Each Rural Living Labs reflects well defined local areas that people understand, and/or existing political areas, or areas in which the improvement of local programmes are focused.

Because Circular Living Labs aim at generating solutions in real world settings, suitable places are those with clear challenges, and/or rapid changes planned or in progress. Such changes can be driven from different directions, by top-down, bottom-up, or lateral forces:

- 'Top-down' forces: places with official regeneration/renewal/development programmes. For these the Looper Lab can work along with official organizations.
- 'Bottom-up' forces: places with tangible needs & demands, but no official programmes. For these the Looper Lab would start with a more grass roots approach.
- 'Lateral' forces: places where change is driven by other forces, e.g. urban infrastructure, gentrification, CBD expansion etc. In many such cases (e.g. inner London) there may be strong arguments about who are the stakeholders, who is allowed into the meetings, what is their objective, etc., as mentionned in the[1]

While the focus here is on rural communities, the peri-urban communities are equally in the picture. Other actors, such as organizations, markets, knowledge or cultural communities, can also benefit from the **LIVERUR** approach, with some practical differences.

The Structure of the standardized LIVERUR database from 20 pilot sites (selected by T4.1)

The process and justification for selecting the places of the Rural Living Labs in each territory have been described in the DoW, than all have been presented in excel files on the Excel of T4.1. finally on ppt slides and videos on the First Day of the 3rd LIVERUR Consortium Meeting at Azores islands/Portugal in 26-28 June 2019. All geographical places have been shown on maps on the template of WP5, coordinated with WP3.

The following details were given:
- Description of proposed pilot zones
- Picture from the Pilot site and Physical Infrastructure
- Physical Infrastructure and Stakeholders' involvement
  Physical infrastructure: Availability, usage and/or dependence of physical infrastructure (buildings and other specific environments)
  Stakeholder's involvement

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1 EU Urban Project "Learning Loops in the Public Realm" (2017-2020) http://projects.seed.manchester.ac.uk/synergistics/collaboratorium/looper-learning-loops-in-the-public-realm/

> **Relationships with the main stakeholders: research organizations, companies, funding organisations, users/citizens, buyers (Who are them? Are they easy to involve?)**
> - PILOT ZONE: future plans/ideas/aspirations/dreams (plans on how to set-up your rural living lab and do you see any potential/real difficulties)
> - PILOT ZONE: transition to circularity (on which stage of the model below & TRL level will be developed by the rural living lab)

1.1 Preparatory phase I. : Pilot action description (First stage)

LIVERUR PROJECT
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Pilot actions description

In order to develop a complete and coherent project, piloting partners were asked to answer the following questions related to the piloting area – in order to provide a brief description (half a page maximum), in the project writing phase.

- Briefly describe the **territorial/ normative/ behavioural characteristics of the area** in which you are thinking to develop the piloting action

  ◦ Which territorial characteristics are present in the territory?
  ◦ Which agricultural activities and food value chains would be interested by the project?
  ◦ Since living labs aim at predominantly involve all the actors in the bio-food value chain, which actors can be involved in the region?
  ◦ What type of agricultural business model are at the moment applied?
  ◦ How is the entrepreneurial attitude of the region related to agricultural activities?
  ◦ How is the consumer attitude, since living labs plan to involve them actively?
  ◦ What is the attitude to novelties and reforms of policy-makers in the territorial and agricultural field?
  ◦ What are the biggest obstacles for new entrepreneurs in the region?
  ◦ Are there any entrepreneurial cluster already existing? Are there experimenting techniques already present?
  ◦ What about energy efficiency in the value chain? Is there already some measure implemented?
  ◦ What about environmental and green attitude of the region? Covenant of Mayor implemented? CO2 reduction policies?

1.2 Preparatory phase II. : Pilot actions description (Second stage) from 2018

Nr.	Sector	Partners	Brief description	Region
1	Living Lab in Short supply chain in agriculture	AWI	Including Living Labs in the frontier scenario of short supply chain management in agriculture, phenomenon which includes for example direct marketing, community supported agriculture.	Austria

2	Living Lab in Cultivation activities (Mediterranean climate) with short supply of water and technological penetration	UCAM ADRI	The region is a major producer of fruits, vegetables, and flowers for the rest of Spain and Europe. Wineries and olive cultivation are developed as well. Even though the temperature make Murcia very suitable for agriculture, the low precipitation make the water supply a sensible and problematic topic. Vega del Segura is a territory belonging to the Murcia region, with a very high population density. Most exploitations are related to the fruit with bone. LIVERUR will help complementing the EDLP Estrategia de Desarrollo Local Participativo (Participative Strategy for Local Development) adopted by the region in 2016.	Spain
3	Living Lab in agro-tourism and selling of niche products from the farm	WIRELESS INFO	Local Action Group Posumavi act for the regional development in the south-western part of Bohemia. It is a small enterprise area, with active and organized primary producers. The point of strength and the problems rely intrinsically in the small entity of the actors.	Czech Republic
4	Living Lab in double insularity ecosystem Specific aim: attraction of young entrepreneurs In the diary sector	TR Associates	In Gozo area, territorial challenges are the most difficult to overcome. The island suffers from high transportation costs, lack of young entrepreneurs in the agri-sector, lack of diversification product and low ability to reap economies of scale. The main production relies on diary and tomatoes products.	Malta/Gozo (*the project scope has been changed to Social farming/ Social innovati*on)
5	Azores Living Lab: Quality and Sustainable production	FRCT – Regional Fund for Science and Technologies	The main sector is represented by the milk production chain. Here the effort will be based on creating the conditions to establish a rural entrepreneurial ecosystem in the Azores Archipelago that seeks for quality and sustainability in the production chain. The main challenges here to face are: difficulty in acquiring land and low payment in the primary sector.	Azores Arcipelago
6	Living Lab in organic farming and agro-ecology framework Slovenia	CAFS UNI-LUB	In the Slovenian framework, small farming activities represent the main model. While large farmers are intrinsically entrepreneurial – oriented, small farmers need a great support on that. Since environment and green attitude are hot topic in Slovenia, the living lab will be developed in this perspective.	Slovenia

7	Living Lab in the Mediterranean region for the management of water	PACA CEA	*This pilot actions will be iterated to meet the objectives of the Water Framework Directive (achieve good water status) and to take into account the effects of climate change (reduction of river flows, increased needs of users. This living lab will act on this environment in the south of France, considering two levels: the scale of catchments and the scale of irrigated perimeters.*	*France (the partner left the consortium)*
8	Living Lab in the West of France for the livestock production chain improvement	CRA CEA	The development of the new technologies in livestock system of the west of France is very high. The Britany and Pays de la Loire Chambers of agriculture lead some applied research projects and advice breeders to adopt the new technologies. However, one challenge is to identify problems and needs of the farmers which can find solution in the new technologies The networks of 200 pilot farms, the 8 experimental farms (knowledge transfer center) and the large partnership (research, industry…) in the two regions would be a good base for the project.	France
9	Living Lab in the production of fibre	ZSA	Fruit and berries growing have old traditions in Latvia. The climatic conditions and soil are favourable for it, especially in the eastern regions of Latvia. Fruit growing has potential in Latvia, but challenges are mainly lack of cooperation between the growers and the food processors, as well as between the food chain members; cooperatives are slowly starting to develop, lack of knowledge and motivation for cooperation; improvement of knowledge about the production of high quality fruits and production of high value and innovative products.	Latvia
10	Living Lab in raising production and transition from traditional to modern business models	ZEKA	In the context of production of fruits and vegetables; traditionally, SMAES and other companies buy fruits and vegetables from small farmers and export the products which are fresh or dried and processed or raw. However, in this traditional model, there is no room for new entrepreneurs and small farmers as they share a little amount of the profit.	Turkey
11	Living Lab in Lake Trasimeno ecosystem	SOG TRASIM	This piloting area will be developed in a lake ecosystem, where the depth of the water is extremely reduced. Therefore, living lab concept will be implemented in order to solve water management issues and to boost tourism in the region.	Italy

| 12 | Living Lab in boosting exportation of high quality products; social inclusion framework | E35 | In the framework of Reggio Emilia territory new emerging small farm activities are in development, in cooperation also with the third sector, with the aim to create occasions of social innovation and social inclusion of disadvantage groups with the involvement of several stakeholders. The Reggio Emilia Living Lab will have the aim to connect the emerging small social farming system with the big one already present and well established, in order to create occasions of development and sustainability of the new small social farms, leveraging also on the excellency products of the territory, in boosting and reinforcing a network for exportation. | Italy |
| 13 | Living Lab in traditional craft sector: circular handmade Berber carpet production | OUD | Oudref is a town and commune in the Gabès Governorate, Tunisia. The town is a center of production for the margoum, the Tunisian Berber carpet. Dar Margoum is a non-profit organization, founded in 2012. Objective of the Association: preserve the authenticity of Margoum, encouraging innovation and renewal, and paving the way for graduates of higher institutes of arts and crafts. The living lab in this region will take care of establishing a circular approach to the production of Berber carpet, from production to waste recovery. | Tunisia |

Table 1. Pilot actions description in DoW.

1.3 The List of 20 selected Rural Living Lab activities (by T4.1) , from June 2019

	Partner (country), region	Project name
1	RMB (AT), South Burgenland	Living Lab Südburgenland
2	ADRI (ES), Vega del Segura	The circular rural business model for biowaste
3	UHLA (CZ) Posumavi	Šumavaprodukt s.r.o.
4	UHLA (CZ) Posumavi	Turistická oblast Pošumaví
5	TRA (MT), Gozo	Circular Rural Living Lab Malta
6	FRCT (PT) Terceira Island	Happy Cows Project
7	UL (SI), Slovenia	SRS Padna – Historian houses
8	UL (SI), Slovenia	SRS Solčava – Logarska dolina
9	UL (SI), Slovenia	SRS Kungota – House of all generations
10	CRAPL (FR), West of France	The energetic transition for farms in West FR
11	CRAPL (FR), West of France	Agricult. biomethane product unit to the energy transition
12	ZSA (LV), Latvia	Smart Collaboration for Agriculture
13	ZEKA (TR), Manisa	Olive Excellence Center
14	UCT (IT), Trasimeno	The efficiency of processes in rural tourism

15	E 35 (IT), Reggio Emilia	Cooperativa di Comu-nità 'Valle Dei Cavalieri.'
16	E 35 (IT), Reggio Emilia	Parco commestibile Edible Park for citizens
17	DAR (TN), Quedhref	Kolna Kesra
18	CRAB (FR), Brittany	Metha BDC
19	CRAB (FR), Brittany	Air and Energy Territirial Plan
20	CRAB (FR), Brittany	Dairy Territorial Value

Table 2. List of Partners and piloting topics from June 2019.

2 ASSESSMENT OF THE PRACTICALITY (Users & Stakeholders consultations)

In the context of participatory governance in **LIVERUR**, this task have been developed with the following purposes:

✔ To find out if the assets, actors and shared vision exists or can be mobilized in order to achieve the main objectives
✔ To clarify the vision of **LIVERUR** at high level
✔ To clarify which stakeholders are to be involved in the following phases of the project: initiation, project planning and project implementation (4.2.1).
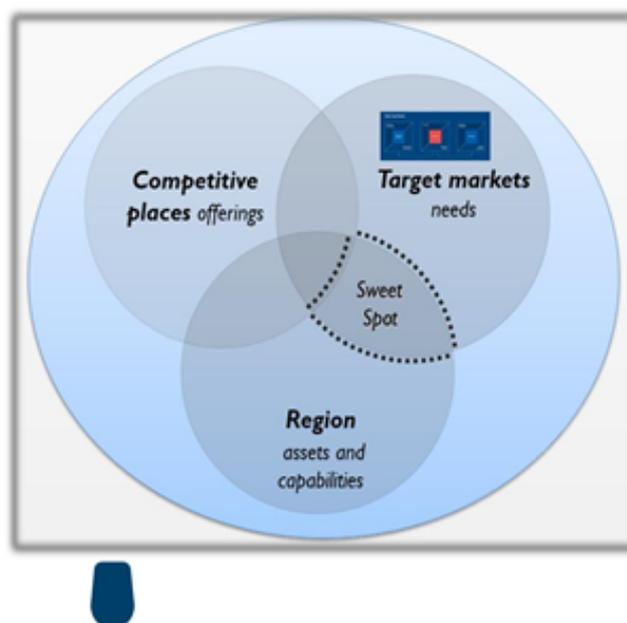

Figure 1. Assessment areas: target market & territories.

The Users & Stakeholder involvements and consultation has been followed by the typical development of a research and innovation (RiA) project where the unique differentiation (sweet spot) of **LIVERUR** place brand is emphasised through enhanced awareness of the significant OPEN INNOVATION and Living Lab approach at the core.

By including and involving developments throughout all four quadrants of the Quadruple Helix model, within **Government** the **Academic** sector, **Civil Society** and the **Business** sector, the **LIVERUR** can establish a strong foundation for development.

The project is based on multi-actor collaboration and innovation, therefore to build a network and innovation ecosystem with local/international developers, providers, customers, researchers, citizen, public and financial institutions, city councils, civil organisations and start-ups is crucial.

3 THE INTERNAL WORLD: USERS AND STAKEHOLDERS CONSULTATIONS

3.1 'PEOPLE: Having the right (end) users, stakeholders and facilitator(s) on board

After having defined a clear purpose and scope, a fundamental task in the preparatory stage of setting up the **LIVERUR** Circular Rural Living Lab is to dedicate sufficient time to the question: "**Who should participate in the Living Lab?**" This question arise two important dimensions: on the one hand, it relates to the (end-) users and stakeholder groups being of interest as participants of the local Rural Living Lab process for the co-design of the intended nature-based solution; on the other hand it also refers to the facilitator(s) in charge of steering the future Rural Living Lab process.

Although Living Lab literature gives some generic orientation on the users and stakeholder group's compilation, such as the demand on users & stakeholders being associated with the 4 core sectors (public and private sector, users and knowledge institutions), and informs important features on actor roles, an "ideal set-up" cannot be derived for the **LIVERUR** Rural Living Labs (see Fig.2) (Evans et al., 2017[2]).
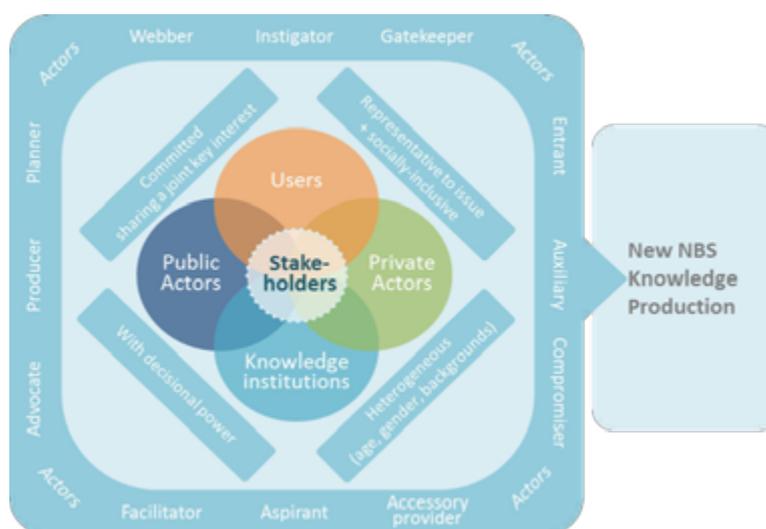

Figure 2. Generic orientation for the Stakeholder group composition of LIVERUR Circular Rural Living Lab.[3]

2 Evans, P., Schuurman, D., Ståhlbröst, A., & Vervoort, K. (2017). Living Lab Methodology - Handbook (K. Malmberg & I. Vaittinen Eds.). Manchester, UK: U4IoT Consortium. p. 76
3 Inspired by Steen et al., 2017 and Nyström et al., 2014). Design: Christian Smida

Other features mentioned in literature as being of major importance to the well- functioning of a Lab's stakeholder group are

 i) its strong commitment and sharing of a common key interest;
 ii) its representativeness to the issue and its social-inclusiveness;
iii) its heterogeneity (age; gender; culture; background; perspectives) and
iv) its capacity and power to decision-making (e.g. Reed, 2008[4]; Reed et al., 2009[5]; Engels et al., 2018b[6]; Dvarioniene, 2015[7]).

The success of a **LIVERUR** depends on **engaging 'the people' and stakeholders**.

> The **main** difference between "People" as (End) Users, and Stakeholders are: A **stakeholder** is anyone who is affected by or has an interest or stake in a particular issue. ... All end users could also be considered **stakeholders**, but not all **stakeholders** are end users.

Four key groups should be included in each Circular Rural Living Labs: community members as users, stakeholder organizations (private), government and public services, and broader beneficiaries.

✔ **LIVERUR - *Community members*** are the people who are most affected by 13 pilot actions in the **LIVERUR** area and are mainly residents and workers (farmers, craft people, in some areas there are visitors or travellers, for instance shoppers, or small size family business owners etc.).
✔ *Stakeholder organisations* include: property or business owners of local assets, service providers, other interests with a stake in the decision-making process, and knowledge holders/ experts who are involved in some way, e.g. consultants, local NGOs, civil society, cooperatives, farmers associations, community house members etc.
✔ *Policy and public service organizations*: local government or other organizations with some formal responsibility.
✔ *Broader beneficiaries* include those organisations who will benefit from the lessons developed in the **LIVERUR**. This may include localö/regional and national authorities and other policy-making bodies, e.g. professional institutes, academic networks, NGOs, LAGs etc. It is essential to involve these groups early to ensure wider impact.

Where possible, we look for ways to transfer the ownership of the Lab to the participants, so they can take more responsibilities in the co-creation process. This is an essential part of the 'strategic' learning loop of empowerment and capacity building. This is covered in WP4, WP5 & WP6, as 'community learning' and 'policy learning'.

3.2 Two stages approach

All relevant users and stakeholders were identified by desk research and invited to individual meetings. Spending the time to identify and to reach out to the relevant users & stakeholders was an important task conducted early on during this process. This report documents the users and

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4 Reed, M. S. (2008) Stakeholder participation for environmental management: a literature review. Biological Conservation, 141(10), pp. 2417–2431.

5 Reed, M., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Quinn, C., & Stringer, L. (2009) Who's in and why? A typology of stakeholder analysis methods for natural resource management. Journal of Environmental Management, 90, pp. 1933-1949.

6 Engels, F., & Rogge, J.-C. (2018 b) Tensions and Trade-Offs in Real-World Laboratories – The Participants' Perspective. Gaia-Ecological Perspectives for Science and Society, 27(S1), 28-31.

7 Dvarioniene, J., Gurauskiene, I., Gecevicius, G., Trummer, D. R., Selada, C., Marques, I., & Cosmi, C. (2015) Stakeholders involvement for energy conscious communities: The Energy Labs experience in 10 European communities. Renewable Energy, 75, pp. 512-518.

stakeholder engagement process and the outcome of the initial investigations carried out during the T2.1. and T3.3. **The identification of stakeholders was carried out in two stages**.

The first stage (T2.1.) **made the first involvement of external stakeholders (as the basis of the further local working groups)** which had already been formed to jointly investigate the possibilities of developing new features and set of services in several areas in **each pilot regions.** (T2.1. P10).

Figure 3. Quadruple Helix actors.

The local 13 Rural Living Lab staff invited potential users & stakeholders were and will attend in round tables through several Workpackages, like in T2.1., T3.3, T4.1., T5.1 and T6.1.

The second stage (T3.3) **was integrated into the individual interviews where the representatives met were asked to provide their suggestions and key individuals who should also be involved. By using this approach extensive users and stakeholder consultation was carried out at the local, regional and national level**. (T3.3. Report of analysis of the implementation challenges).

The engagement undertaken by **LIVERUR** pilot partners and successfully allowed to carry out both **a vertical top down and bottom up analysis and horizontal level analysis of the local context and issues.**

The Users and Stakeholder Consultation meetings undertaken during WP2 and WP3 involved a series of "inclusive" briefing, investigation and feedback interviews and in-depth discussion. The team placed great emphasis to reach out to all users and stakeholders from the four sectors of society; Business, Civil Society, Government and Academia, as noted earlier in the "Quadruple Helix" model. The initial users and stakeholders engagements and consultation achieved the following key outcomes:

✔ Raised awareness of the potential and desire to develop **LIVERUR** and its importance at a local, regional and national level, and gathered evidence.
✔ Engaged and energised users and stakeholders, extracted their views and interests and enabled consensus building to commence.
✔ Identified a growing group of key organisations and individuals and installed a sense of community and ownership into the idea of **LIVERUR** project.

✔ Identified a number of additional stakeholders and issues which need to be explored further and addressed in more detail during the following stages of project preparation.

✔ Identified fundamental local and regional challenges and possibilities within the project preparation and realisation stages.

By applying our methodology using the sweet spot analysis, both in our own investigations and during the interview and dialogues with stakeholders has helped to clarify how **LIVERUR** can find the unique strengths and its sweet spot in the world of national and international global market competition.

4 USERS AND STAKEHOLDERS SURVEY ON TYPE, INTERESTS, DIFFERENT KNOWLEDGE LEVELS AND NEEDS

4.1 LIVERUR Stakeholders Taxonomy

The **LIVERUR User & Stakeholder Taxonomy**: According to the user and stakeholder model proposed a List of users and stakeholders, **LIVERUR** defined the following key categories of users and stakeholders:

1. **Testbed owners**: Owner of the technological support for the development of the Circular Rural Living Lab`s testbeds.
2. **Students**: They want to use the platform for experimental reasons. They could propose use cases and use their results in their research or studies.
3. **Participants**: Those who take part in experiments. They can use the platform without paying fees because they are participating in the experiment proposed by the Consortium. (anyone)
4. **Researchers/investigators**: Those who use the Lab product either through participation or non-participation in the experiments. (anyone)
5. **Platform owners**: Those who want to develop the RAIN platform and a business model aligned with it.
6. **Testbed service manager**: Manages the platform, functions as a contact and control point of the end-user studies carried out, focus on ethical concerns and involvement strategies of end users at local level (13 pilot sites)
7. **Consortium partners**: Those who develop the platform as part of the Lab projects. (communication network operators, platform owners, ICT developers and operators, admin team),
8. **Crowd**: Ordinary people in society. They could be interested in the platform.
9. **Industry**: Group of companies, regardless of size, which are related in terms of their primary business activities. We focused on the following fields: agritech, tourism, transport, food, marketing, healthcare, information technology and telecommunication.
10. **Customers** (private and public administration): Those who want to buy the products/services and use the platform services for their needs.
11. **Government**: A group of people which governs a community or unit. It sets and administers public policy and exercises executive, political and sovereign power through customs, institutions and laws within a state. This group includes national government, policymakers, regulators and legislative and administrative/PM authority.
12. **Academic/research institutes (private and public)**: Organisations such as universities and other academic institutions whose primary focus is higher education and research. They could have significant interest in the experiments developed by the RAIN platform. (anyone)

13. **Civil society organisations**: Incorporated association, charitable trust, foundation, society, etc. that operates as a non-profit organisation.
14. **The media**: Communication channels through which **LIVERUR** news, entertainment, education, data or promotional messages are disseminated. Media includes: Internet (Websites, Facebook, Twitter and LinkedIn), newsletters, publications, conferences, events and workshops.
15. **Other Research & Innovation projects**: Those who want to use the platform to interact with the end users in their projects and perhaps to use the source code and/or results to adjust and refine the platform according to their needs.
16. **Competitors**: Person or entity/group of entities that compete against another. It could be a company or a group of companies that operate in the same or in a similar area and offers similar products or services, which are substitutes.
17. **Farmers/Farmers association/cooperatives/Craftmen/Craftwomen**: Individuals or their legal entities who are involved actively (early users) in the overall production/supply chain also in RAIN platform services and/or in the experiments on the testbeds.

4.2. Self-assessment survey should be filled up in collaboration with one or a few influential decision makers

The **Self-assessment survey** should be filled up in collaboration with one or a few influential decision makers – the project "end users" - who seek to use **LIVERUR** project results.

This survey guide **each piloting partners through a two-step process of identifying potential end users and stakeholder participants, and developing an appropriate role for each piloting actions**. LIVERUR partners could find it helpful to revisit this process periodically, as LIVERUR project evolves and gain a better understanding of the end users, stakeholders and their needs.

What is the proposed step by step scenario?

4.2.1. Introduction of the Two-step process description: how to engage the users & stakeholders

The **design principle of the two-steps process** is based on the main logic and methodology of the Living Labs that **is going to be implemented with each piloting zone, regarding their specific objective and expected impacts.**

The Living Lab global process scheme[8] is the main Guideline for the new 13 Circular Rural Living Labs (Fig 4.) , it was already mentioned in D3.2.

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8 S.Vicini, S.Bellini , A.Sanna: How to co-create internet of things-enabled services for smarter cities, SMART 2012 : The First International Conference on Smart Systems, Devices and Technologies,IARIA, 2012.
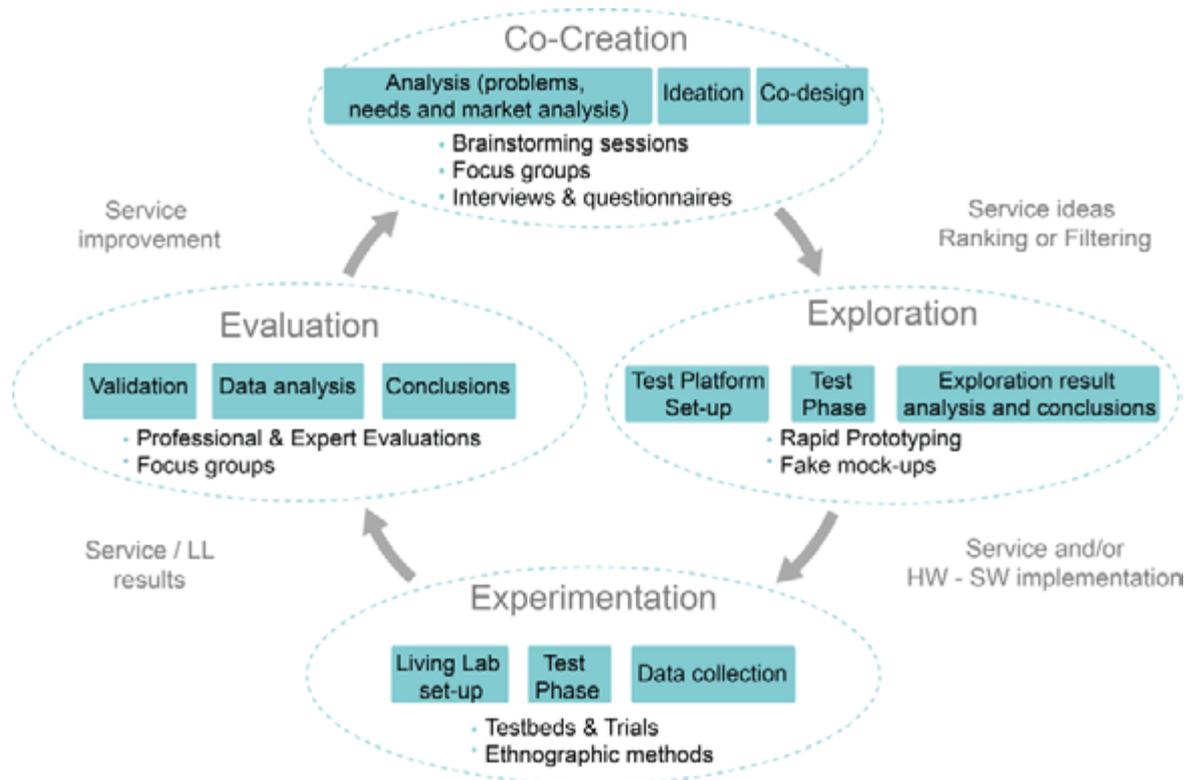
Figure 4. The Living Lab process: Co-Creation, Exploration, Experimentation, Evaluation.

The short conceptualisation of user and stakeholder engagement is organised into two steps and following the 4 main Living Lab activities: **Co-Creation, Exploration, Experimentation, Evaluation** (organisational, values, practices, sustainability and scalibility).

The Open Innovation approach helps to understand and plan the stakeholder engagement by few basic steps: **embed stakeholder engagement in research and innovation use; identify the necessary human and technical skills and resources how to engage the users & stakeholder; deploy the plans for training , capacity building and models for rewarding the effective users & stakeholder engagements, and to recognise the main users/ stakeholders role how they could interact succesfully**, as the main link with the SELF ASSESSMENT tool deployment and follow up.

The participary users and stakeholders`s shared commitment into the Rural Living Lab governance structure have to be defined by the values and objectives of stakeholder engagement in the Rural Living Lab operation, how the individual stakeholder engagement can be embedded into the decision making in the Rural Living Labs, how the individual and corporate stakeholders could attend in the value creation; how to build a sustainable and continuous stakeholder engagement in each pilot zones, how the input from users and stakeholders can be measured, analysed and shared within the Rural Living Lab communities.

Step 1.1-1.4 incorporates the following activities with users & stakeholders

Step 1.1.: Analysis of the needs/problems/challenges in each RLL piloting zones with users & stakeholders
Step 1.2.: Co-creation in design and setting-up phase by each RLL piloting zones with users & stakeholders
Step 1.3.: Lean vs Circular experimentation pilots by each RLLs with users & stakeholders
Step 1.4.: Validation /Sustainability/ Scalability by each RLL s with users & stakeholders
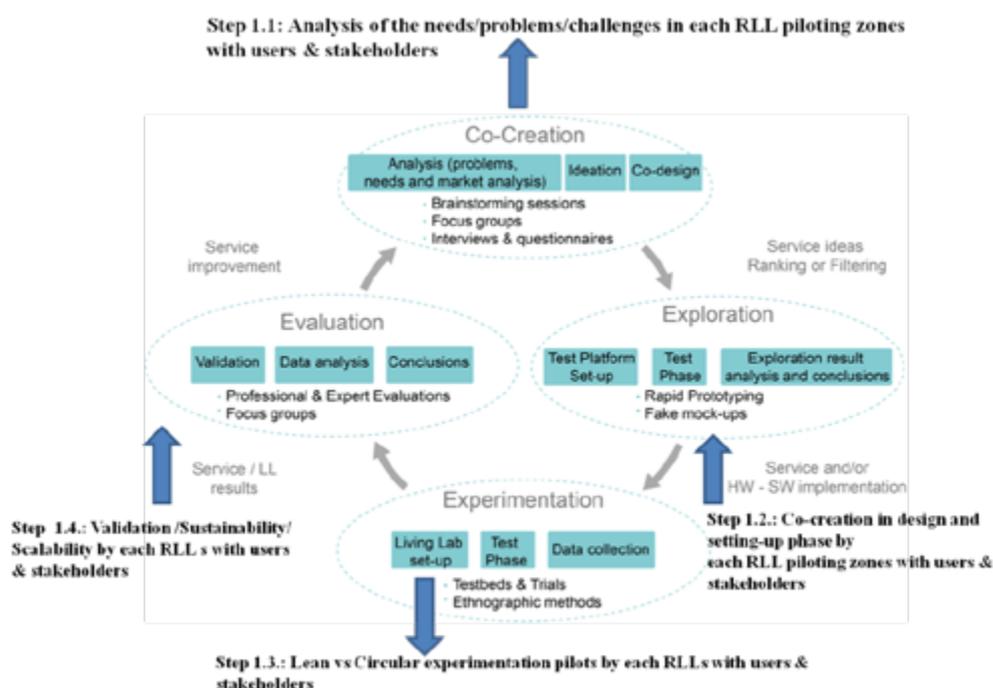
Fig. 5. The Living Lab process and follow-up of stakeholder's engagement by Step 1.1-1.4.

Step 2.1-2.4 incorporates the following "design principles" in research & innovation by early involvement of users & stakeholders in the new Circular Rural Living Labs

Step 2.1.: Service ideas; Ranking or Filtering
Step 2.2.: Service and/or HW & SW implementation
Step 2.3.: Service and LL results
Step 2.4.: Service improvement

These steps will hopefully expose the main RLLs`s actors (owners, developers, operators & users & stakeholders) in Rural Innovation to the potential social and economic value of circular rural economy. The Open Circular pilots within **LIVERUR** Rural Living Labs, by their content would increasingly engage all actors to join to the digital developments and expose their results on RAIN platform (WP5/ WP6). The power of future and emerging (smart) technologies can bring radical innovation in various sectors in the targeted rural areas.
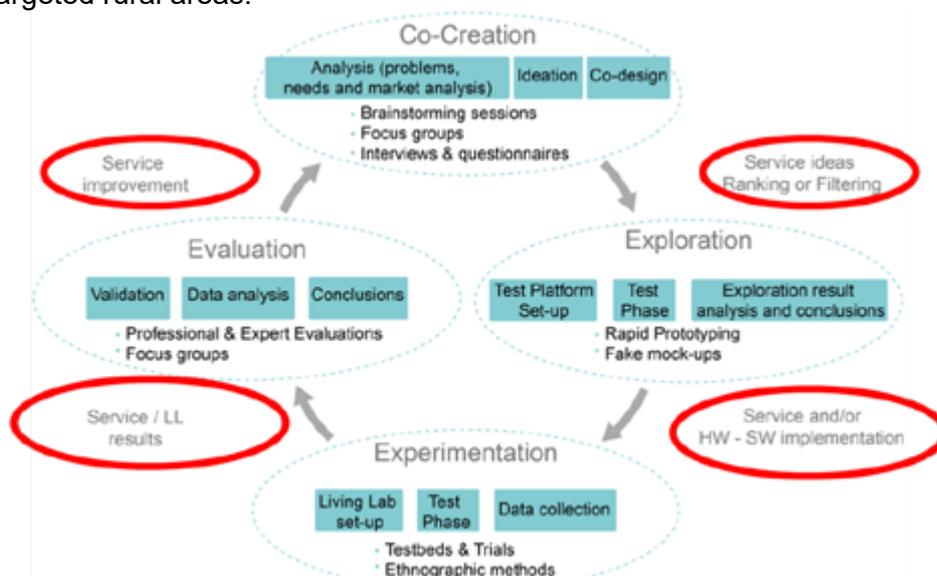
Figure 6. The main "design principles" of Living Labs.

D4.1. giving the LL Business model criteria (and so expected impacts) that **have to be further developed in the course of each piloting zone: who are the relevant stakeholders to target regarding the criteria and expected level of impact.**

4.2.2. Sustainability and Scalability of the LIVERUR Circular Rural Living Labs

SUSTAINABILITY (capacity of the LL to operate and expand after LIVERUR project)

The Living Labs facilitate and support all types of organisations to accelerate the internal and external innovation in the targeted sectors and industries. **The open innovation 1.0 and 2.0 paradigm came into the rural societies to improve the local economies and their stakeholders in two dimensions to innovation and the flow of the value creation:**

The sustainability of Circular Rural Living Labs is depending on the cohesion, power and participative governance model of the engaged stakeholders in each targeted territory.

- Technical exploitation: innovation activities to leverage existing technological /innovative capabilities outside of Rural Living Labs organisations
- Technical exploration: innovation activities to capture and benefit the value from external sources of knowledge to enhance current technological developments

The main challenge in every 13 new RLLs is the adaptation of the Open Innovation paradigm, the use and further improvements of "inflows" and "outflows" of background and foreground knowledge to accelerate internal/external innovation within Rural Living Labs, and expand the markets for commercialisation.

SCALABILITY

The capacity of the local/small scale RLL should to move on a larger scale with replication options. Every Circular Rural Living Labs can assess themselves how to better identify/anticipate the risks regarding the stakeholders' involvement; who, how to target people that maximize the sustainability; what kind of engagement, partnerships over time?

More: ANNEX 1. End User and Stakeholder Characterization by self-assessment tool.

5 CO-CREATION AND OTHER STAKEHOLDER' INVOLVEMENT TECHNIQUES AND COMMUNICATION MATERIAL, BASED ON THE KNOWLEDGE ACQUIRED IN TASK 3.3

The co-creation of other stakeholder`s involvement in LIVERUR is based on the 3 main impacts of the project: Input – Test/Validation – Exploitation

Social farming activities emerged in the northern European countries (e.g. Belgium and the Netherlands) in the mid-20th century; and they soon spread throughout Europe as a result of a growing perception of the positive impacts on both the social and the economic welfare, particularly in peripheral rural areas (Gallis, 2013[9]).

As SIMRA H2020 project describe, while social farming has developed differently in the European countries, it can be seen as a way of addressing specific **social needs and promoting innovative patterns of rural development** that are rooted in local resources. On the one hand, **social farming activities, by combining the agricultural environment with rehabilitation and care services, benefit peoples' quality of life and their social inclusion**. On the other hand, **social farming activities represent an opportunity for farmers to broaden and diversify their multifunctional agriculture, to open up new markets and offer alternative services that go beyond food production**.[10]
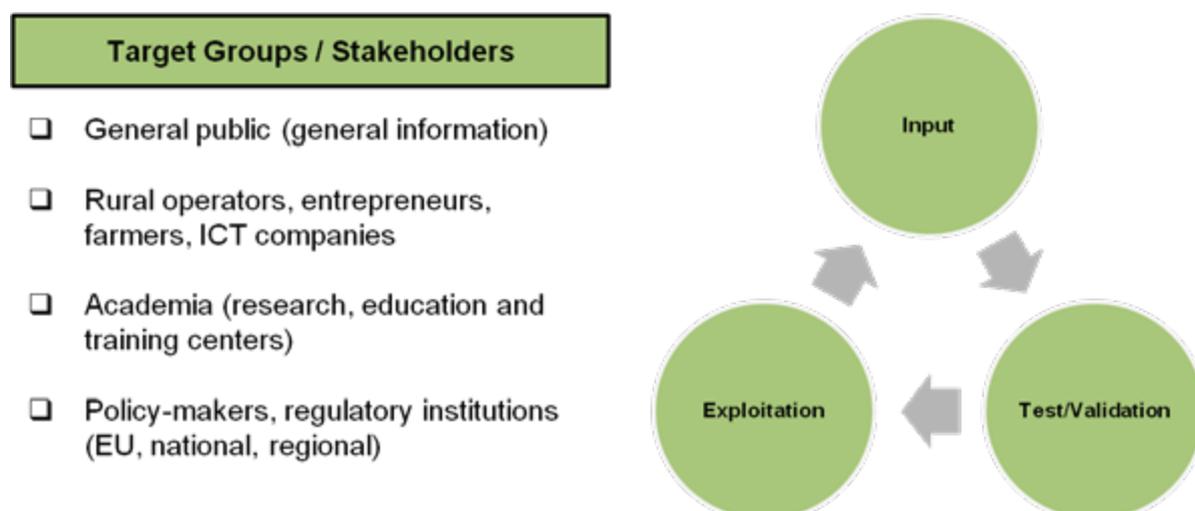

Figure 7. The main areas of stakeholders involvement: Input, Test/Validation, Exploitation.

9 Gallis, C. (Ed.): Green Care for Human Therapy, Social innovation, Rural Economy and Education. Nova Science Publishers: 189-213, New York.

10 SIMRA Social Innovation in Marginalised Rural Areas , H2020 project, http://www.simra-h2020.eu/index.php/tag/social-farming/

5.1 How to engage stakeholders in Social farming – Social innovation potentials (e.g. in Rural Living Labs` pilot activities of Malta, Austria, Slovenia, Italy, Czech Republic, France)

5.1.1 Overview and Vision

Social farming activities have been established due to the changing demands of today's society (i.e. ageing population, changing family structures, re-valorisation of rural life in an ever urbanising society, high influx of migrants and increase of people with chronical diseases). They are a practical and innovative response to societies needs that many institutionalized social services are not able to provide adequately. Hence, **social farming contributes to social and economic wellbeing as it stimulates vulnerable people's independence and their personal development based on active collaboration and help on the farm**. It promotes **women farmer's empowerment**. It provides **an additional income in peripheral rural areas as women can directly practice their pedagogical, health, care or therapeutically profession on the farm**. Moreover, it stimulates the economic sustainable development of peripheral areas by guaranteeing services to people in order to prevent further depopulation.

Social farming, or **care farming** as it is also called, defines **short or long-term activities** that **use agricultural resources such as animals and plants (medical herbs or spices, grapes, olives) to promote and generate social services in rural and peri-urban areas**. Examples of these services include **rehabilitation, therapy, sheltered employment, life-long education and other activities that contribute to social inclusion** (Di Iacovo and O'Connor, 2009[11]).

The employment-oriented initiatives aim at labour integration and social inclusion on the farm, in rural, mountain, remote or peri-urban areas , and address specific people with different problems and disabilities (i.e. people with moderate physical disabilities, with mental health difficulties and learning difficulties or people experiencing social exclusion) or vulnerable target groups (i.e. long-term unemployed, ex-prisoners, addicts). They are included in (mainly) agricultural activities such as **horticulture, vine or olive growing, animal care, food processing, direct selling of farm products, or other activities such as working in the farm-restaurant**. In this way, these (vulnerable) groups of people have the opportunity to increase their capabilities and skills, improve their social life and experience an alternative practice of reintegration into society and the labour market.

The innovative aspects of social farming are twofold: on the one hand, **innovation includes the development of new initiatives for specific target users (e.g. social farming for cell-phone dependent children and youth**, art therapy for autistic children…); on the other hand, **innovation is grounded in the creation of new forms of horizontal and vertical collaboration (e.g. between the agricultural, social, economic, health care, educational, tourism and regional development sectors), as well as the establishment of new private-public partnerships with & among cooperatives, social communities, religious organizations.**

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11 Francesco Di Iacovo, Deirdre O'Connor: Supporting policies for social farming in Europe : progressing multifunctionality in responsive rural areas Published in 2009 in Firenze by Arsia.

5.1.2. The stakeholder analysis of the Cases in Malta, Austria, Slovenia, Italy, Czech Republic, France

In relation of the involvement of the stakeholders in the targeted regions, special attention have to given to the **economic, social and institutional/political (governance) aspects of social innovation**, e.g. social innovation's role in enhancing businesses/ entrepreneurship options, creating conditions for accessing new markets and providing new investment opportunities, and the means of increasing/reinforcing social capital as a key factor for local development.

Social farming can provide different benefits for its users according to their capabilities, through activities that are flexible in response to users' needs.

The different levels of benefits and the path for active social inclusion that social farming can create are illustrated in the figure below:
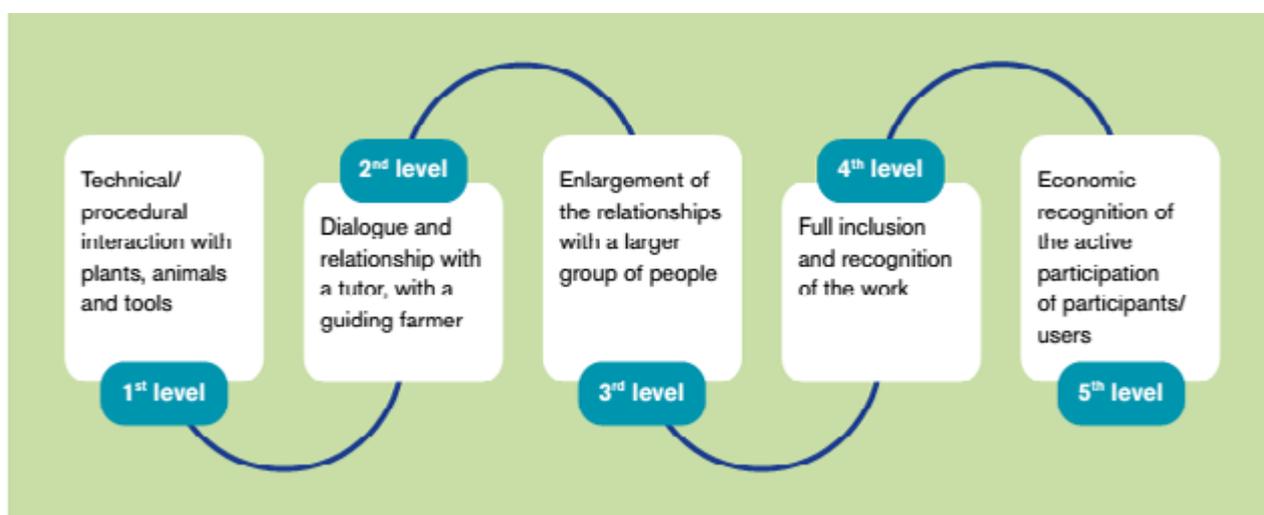
Figure 8. The five levels of the social farming paths[12]

Institutional /Action logic: 1st level: Technical/procedural interaction with plants, animals and tools
2nd level: Dialogue and relationship with tutor, with a guiding farmer
3rd level: Enlargement of the relationship with a larger group of people
4th level: Full inclusion and recognition of the work
5th level: Economic recognition of the active participation of participants/users

5.1.3. Malta-case study: practical example about the involvement of the end-users and another stakeholders

Project background

The aim of the piloting action in **Malta** is to create a **new model and alternative as multifunctional peri-urban farm to fulfil its role of promoting the means of modern nutrition** against food allergies & food intolerances (like histamine intolerance) as the growing cronic disease in the entire society . By informing people about the required skills and competencies which are required in **social farming & social entrepreneurship mainly for the social care related religious & another non-profit organisations**. The pilot case will use the experiences of local senior farmers in the selected

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12 THE IMPLICATIONS OF SOCIAL FARMING FOR RURAL POVERTY REDUCTION, FINAL REPORT, 15 DECEMBER 2014, FAO REPORT

land of Church Home for the Elderly in Dar tal-Kleru in **Birkirkara**, by **producing spices & medical herbs** (like holy basil , peppermint , ginger , thyme , and turmeric) as raw materials . The **short food supply chain will be deployed from the seed and production until the post-harvest through the traceability system, supported by IoT, Data and Blockhain technologies** to realise the direct sales of product from farms.

The social farming system and daily management structure will offer services/ activities to develop **training to provide volunteers, farmers and active seniors with the necessary skills to develop or improve these services/ activities on this farm**. Multi functionality recognises the inter connectedness of agriculture's different roles and functions beyond safer food production for social, environmental and economic sustainability. The circular model will be demonstrated by the waste water/rain water usage and recycling techniques following the local food system (Fig 6.) logic, such as: **Growing - Harvesting - Packing – Transporting – Retailing – Eating – Disposing – Growing...**

Figure 9. The circular local food system model in Malta.

End-user engagement

End-user engagement was highlighted in several steps with following objectives:

Step 1.
● to gather a critical mass of end-users, such as farmers and other actors in the value chain of social farming (i.e. agronomists, nutritionists, citizens affected by food allergy and food intolerance, PALEO & primal friendly , diet and organic food producers, elderly home operators), able to interact with ICT and Blockchain companies (solution developers) and provide feedback on the "**Food from Nature & Back**" application which includes the overall circular local food system.

Step 2.
● to provide a collaboration framework on which end-users and developers can work together;

Step 3.
- to test and validate the IoT based food traceability application, developed by all actors in the short food value chain.

Social farmers and Entrepreneurs, through the "**Food from Nature and Back" User Community**, by providing the ground for open interaction, without pre-defined roles between developers and end-users;

Step 4.
- to support beneficiaries in bringing their applications closer to the market, by gaining insights on what the market really needs.

Step 1-4 covers the five levels of the social farming paths in the Malta- Circular Rural Living Lab case. (Fig 5).

Involvement of other stakeholders

Academia:
The Circular Rural Living Lab in Malta invited scientists in co-creation process with two aims: first, to bridge the gap between scientists and lab-based research and day-to-day farming practice in informal and natural manner, and to enhance knowledge and idea sharing between these two groups. The second objective was to inspire scientists to work on new solutions based on input generated by farmers. In this way, the scientific discoveries will have both impact on world-class research as well as on everyday life and professional achievements of farmers.

Public sector:
The Circular Rural Living Lab in Malta aiming to introduce the Open Innovation concept to the socio-economic system in Malta and Gozo to social care enabled NGOS & Municipalities through **the Malta-EU Steering Committee, the Malta Business Bureau and The Malta Enterprise and The Church of Malta**. Therefore, we have involved **The Church in Malta**, due to their land usage to be the main actor in the strategic decision-making governance model . The Church in Malta brought its own network of agricultural extension services, since **they are religious organisation with state-owned buildings and lands**, and many other relevant experts. Moreover, their position brought credibility to the Circular Rural Living Lab, so **that social farmers (who are reluctant in approaching the new initiative) were encouraged to join the LIVERUR initiative**. On the other hand, **The Church in Malta** received valuable feedback on our plan about social farming to realise the short food supply chain for **further development of agricultural and ICT/Blockchain based traceability products (medical herbs and spices) as basic food ingredients**, and insights into day-to-day needs and obstacles that (new) social farmers are faced with.

Private sector:
Private companies were involved in two main activities:
- co-designing of technical solutions between ICT companies and agricultural producers
- exploration of emerging issues on the market (the process of development of ideas dedicated to agriculture and food security, validated by a considerable group of people)

Exploration
At the beginning of **LIVERUR** project, the focus was in connecting the religious community with end-users (social farmers). Inspired by the short food supply chain, the Circular Rural Living Lab in Malta introduced an innovative approach in the establishment of a **Circular Local Food System and collaboration framework** in form of social farming — and facilitated numerous B2B meetings where people from both the ICT and agri-food industry presented their problems, ideas, and discussed about the same topics from different perspectives. Some of the broken myths which were identified

include: Religious organisation doesn't know how to form social enterprise by the law, Social Farmers don't know how to use ICTs for food traceability (reality: ICT companies are first developing IoT and Blockchain technologies and then searching for problems to solve); Religious social care sensitive organisation don't know how to re-invest money back from the social farming into their core activities (reality: Religious organisations are searching resources and/or usage of the lands for agricultural activities in order to operating the elderly homes and giving healthier products to the seniors).

Experimentation

In order to facilitate testing of developed solutions and gathering feedback from end-users, ICT & Blockhain companies were matched with end-users based on their reported needs in terms of social farming practice, type of spices and medical herbs and services, etc. After the matching, companies were put in contact with the end users and several meetings were organized where testing methodologies were discussed. During the next phase, the technical solutions were set on farmers' land and they will start to produce/growing/post-harvesting and test them in real-life conditions.

STAKEHOLDER (Name / Institution)	INSTITUTIONAL LOGIC / ACTION LOGIC — One/entire of 1-5 level of social farming path	INTEREST IN PROJECT — Organisational interest	STRATEGY OF INCLUSION — Participation in permanent or occasional in the pilot	CHALLENGES — barriers/chances	PLANNED RESPONSES TO CHALLENGES — Actions to be taken
PUBLIC SECTOR					
The Church in Malta	X	Social care provider (farming/Social enterprise)	In the entire pilot activities	Forming Social enterprise within the religious entity	Legally established social enterprise
Malta-EU Steering Committee	X	Dissemination	Occasional attendance	Follow-up	Pilot demonstration
Malta Business Bureau	X	Dissemination	Occasional attendance	Follow-up	Pilot demonstration
The Enterprise	X	Incubation of social farmers	Occasional attendance	New schemes for social farming	Pilot demonstration
PRIVATE SECTOR (Business & Industry)					
TR Associates Ltd	X	Living Lab expert	In the entire pilot activities	Integration	Circular business model setup
Africunia Blockchain Digital Bank – Valletta	X	Service provider	In the entire pilot activities	Integration	Traceability system
Xception Malta Ltd.	X	Service provider	In the entire pilot activities	Integration	Transport system
IoT Malta	X	Service provider	In the entire pilot activities	Integration	Service by SigFox
USERS (e.g. interest groups)					
Assocjazzjoni Pja „Qaddejja Tac- Cenaklu in Dar tal-Kleru, Birkirkara	X	Land operator	In the entire pilot activities	Land and Water management	Water pipelines activation
Nuticians (food intolerance /histamine intolerance)	X	Organic Food expert	In the entire pilot activities	Personalised food advices	Functional Medicine, new generation of PALEO etc...
Citizen (food intolerance group)	X	Buying ingredients to their food recipes	In the entire pilot activities	Personalised food recognition	PALEO & organic food community
Seniors at elderly houses	X	Eating personalised food	Occasional attendance	Personalised food recognition	PALEO & organic food community
Social farmers (volunteers)	X	Offering charity work	In the entire pilot activities	Farmer techniques	Short food supply chain
KNOWLEDGE INSTITUTIONS					
University of Malta	X	Courses/MOOC/training	Functional medicine in rural	IoT and Blockchain	Further research in traceability
Genista Research Foundation	X	Technical assistance	Sustainable farming	IoT and Blockchain	Training materials

Table 3. Template Matrix for User / Stakeholder identification and description – The Circular Rural Living Lab Malta - Case.

CONCLUSIONS

T5.1 touched two important dimensions: on the one hand, it has related to the (end-) users and stakeholder groups being of interest as participants of the local Rural Living Lab process for the co-design of the intended nature-based solution; on the other hand it also refered to the facilitator(s) in charge of steering the future Rural Living Lab process. T5.1 contains three main steps.

(i) Identification of the rural activities for which of the 13 piloting territories (20 scenarios) in T4.1.;
(ii) Stakeholders survey on type, interests, different knowledge levels and needs; (T5.1.)
(iii) Co-creation and other stakeholder' involvement techniques and communication material, based on the knowledge acquired in Task 3.3. (T5.1).

This task made a Case study as well from Malta, in terms of users & stakeholders involvement.

The first stage (T3.2) **was to engage the 4 local working groups** which had already been formed to jointly investigate the possibilities of developing new features and set of services in several areas in each pilot regions. The local 13 Rural Living Lab staff invited potential users & stakeholders were and will attend in round tables through several Workpackages, like in T2.1., T3.3, T4.1., T5.1 and T6.1.

The second stage (T3.3.) was integrated into the individual interviews where the representatives met were asked to provide their suggestions and key individuals who should also be involved. By using this approach extensive users and stakeholder consultation was carried out at the local, regional and national level. (T3.3. Report of analysis of the implementation challenges).

The engagement undertaken by **LIVERUR** pilot partners and successfully allowed to carry out both a vertical top down and bottom up analysis and horizontal level analysis of the local context and issues.

Vertical top down and bottom up analysis:

Vertical level analysis: Private (business and industry),
Public (government, municipalities, authorities, NGOs etc.)
Users (i.eg Interest Groups) ,
Knowledge Institutions

Horizontal level analysis: Institutional logic/ Action logic

Interest in Project
Strategy of Inclusion
Challenges
Planned responses to challenges

The user & stakeholder characterization templates giving standardized matrix mapping on the interests, level of involvements, challenges of the identified **Quadruple Helix governance model** in each pilot area as the basis of a Circular Business HUB: a Database for piloting and stakeholders`s involvement in **LIVERUR** project.

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ANNEXES

ANNEX 1: End User and Stakeholder Characterization by self-assessment tool

Step 1: Characterizing End Users[13]

> **What is an end user?**
> *An end user is defined as a person or group in a position to apply the information or tools being produced, evaluated, or transferred through a Science Collaborative project in a way that is of direct consequence to the ecological, social, or economic integrity of a reserve(s) and/or surrounding watershed(s). Examples of end users include, but are not limited to, reserve staff, and public, private or non-governmental decision/policy makers, including landowners, resource managers, land use planners, and educators at all levels. End users should help define the focal issue, clarify the decision making context, identify key stakeholders, and highlight current information needs.*

Understanding **LIVERUR** end users and their needs from the very beginning of project development and keeping end users engaged throughout the project helps ensure that the assessment will be influential. Based on the understanding of the management need and potential end users, use the following table to characterize each end user. The following questions are intended to help each piloting partners through this process:

Who are your end users?

- What users or user groups have a decision making role related to the issue of concern?

What are their needs or wants?

- What are the relevant needs or wants for each end user or end user group? What problems are you hoping to help them address?
- What information do you know they need or want, given their decision making context?
- How do you know they plan to use the information?
- What are the known opportunities for the end user to use the information you are planning to work with them to produce? What are the known barriers?
- What do you expect will be the impact of the information you produce?

How engaged should they be?

- What role do you anticipate the end user will play in the development and implementation of the project, e.g. help define the project goals; facilitate iterative/adaptive learning; testing/providing feedback; evaluation, etc.? How will their engagement in this role enhance the production and usability of the science for this project?
- How frequently do you need to meet in order for them to meaningfully play this role? Note: This and the last question will likely require a conversation with your end user.
- How engaged are they able/do they want to be?

When do the outputs need to be available to the users?

- When do you expect the end user to apply the project outputs, e.g., during the project, after the project concludes, in a more distant future?

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13 See the Integrated Assessment Primer for more information on stakeholder engagement and tips for contentious topics. http://graham.umich.edu/water/nerrs/resources/ia

End User Characterization Worksheet

Using the above questions as a guide, characterize each known and potential end user by completing a row for each. Add additional lines as needed.

User (name, title, organization)	Description of need/want	Level & frequency of engagement	Potential timeline for use of outputs
End user 1:			
End user 2:			
End user 3:			
End user 4:			

Table 4. End User Characterisation Worksheet.

Step 2: Characterizing Stakeholders

> **What is a stakeholder?**
>
> *A stakeholder is anyone who is affected by or has an interest or stake in a particular issue. Examples of stakeholders include members of local, state, federal or tribal agencies; business leaders and industry representatives; representatives from non-profit groups or other citizen organizations; and individuals from loosely defined user groups, such as local residents, recreational boaters or farmers.*
>
> *All end users could also be considered stakeholders, but not all stakeholders are end users.*

Based on our current knowledge of the management need and potential stakeholders, the partners can use the following table to characterize potential stakeholders. The following questions are intended to help with this process:

Who are the stakeholders?

The **LIVERUR** piloting partners can focus on complicated issues with a variety of actors and perspectives that influence decisions and outcomes. When planning a self-assessment, the Rural Living Lab management can consider the different jurisdictions, levels of government and agencies that play a role in a particular issue. Some agencies may be well positioned to use assessment results; others may be interested but have less authority. Identify the groups likely to contribute positively if they are involved or impede the implementation of proposed solutions if their perspectives and interests are not considered. Representation on a local piloting project`s an advisory group (LAB) should be diversed and balanced. Recruit respected people that can represent each side of a contentious issue.

Why involve stakeholders?

Stakeholder participation should complement the role of project end users and provide unique perspectives on the issue and possible solutions. Consider why you are engaging specific stakeholders, what information you need, and how you will use their feedback. Stakeholders can help you:

- Refine the focal question;
- Understand the policy, social and political landscape;
- Collect the data, local knowledge, or technical or industry insights necessary for an informed assessment:
- Be perceived as credible or legitimate;
- Indentify creative and acceptable solutions to the focal questions;
- Ground-truth preliminary results; and/or
- Improve the development of final products and presentation of results.

How engaged should they be?

Quality engagement of a few end users and stakeholders is more important than reaching a large number of people. Rural Living Labs teams are encouraged to develop a formal project advisory group that includes end users, other relevant decision makers, and representative stakeholders. Invitations to serve on the advisory group should emphasize the contribution of and benefits to participants.

The amount and type of stakeholder engagement will vary depending on the project and topic, and more participation is not necessarily better if it does not suit a specific purpose.

Teams may want to keep a larger group of individuals informed about the project through email updates, websites, social media, or fact sheets. The piloting projects might also benefit by gathering information from stakeholders beyond the advisory group through surveys, interviews, public meetings, workshops, or public comment opportunities for reports. Time constraints, level of interest, and other factors will also determine how much involvement stakeholders want.

Stakeholders Characterization Worksheet

Using the above questions as a guide, characterize potential stakeholders by completing a row for each. Add additional lines as needed.

Who – potential stakeholder participant	Why – stakeholder contributions	How – role and engagement
Brainstorm the names of individuals or organizations that are connected to the topic, have a unique perspective, and might participate in the project in some way.	How specifically could each group/individual contribute to the project? Consider the unique concerns of and potential benefits to participants.	How and when should these groups or individuals be involved? What is the best way to communicate with and engage each?

Table 5. Stakeholder Characterisation Worksheet.

ANNEX 2: Semi-structured interview guideline for LIVERUR users & stakeholders meetings about the participatory process of the establishment of Circular Rural Living Labs

In order to perform an in-depth analysis of the setting-up and stakeholder participation about the new local rural living labs .The following questions can be addressed during the interviews/round tables/ meetings:

Thematic	Translation of the questions (in English)
Interviewee	Did you play a role in the LIVERUR circular rural living lab planning process? Are you well aware about the project objectives and its planning process? Did you or do you plan to participate in the design and implementation?
Participants	How did the different stakeholders participate in the planning process? How were composed the different work groups? How unfolded the workshops? Which methods were applied? Could they do something differently/better? Which were the drivers and barriers to the participation process? Who participated to the planning process? (user, expert, public authorities, academia) Did all the potential stakeholders participate in the planning process? Who did not but should participate?
Stakeholder recruitment	Did you volunteer or did somebody propose you to get involve in the planning process? How should stakeholder be selected for the Rural Living Lab? How were the participants of the participation process identified?
Stakeholder cooperation	How influenced the local stakeholders in the planning and implementation process? How interacted the local stakeholders during the planning process?
Facilitator	Who was the Moderator/Facilitator? Who nominated him/her? Which expertise did a facilitator should have?
Retrospective	Do you think that the LIVERUR experience was a success? What would you recommend to the other RLL?

Table 6. List of questions to be addressed during the interviews/round tables/meetings.

ANNEX 3: LIVERUR Template Stakeholder identification and description matrix (template model)[14]

STAKEHOLDER (Name / Institution)	INSTITUTIONAL LOGIC / ACTION LOGIC	INTEREST IN PROJECT	STRATEGY OF INCLUSION	CHALLENGES	Level of Influence/expected impact(economic, social, ecological, technological) (D4.1)	Type and period of Partnership (D4.1)
PUBLIC SECTOR						
PRIVATE SECTOR (Business & Industry)						
USERS (e.g. interest groups)						
KNOWLEDGE INSTITUTIONS						

Table 7. Stakeholder identification and description matrix.