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“Living Lab research concept in rural Areas – LIVERUR”

DELIVERABLE D2.1:
Report on existing business models in EU countries and regions

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EXECUTIVE SUMMARY

About the LIVERUR project

LIVERUR is a pioneering H2020 project (2018-2021) because it addresses Living Lab concepts, circular economy and new business models creation inside the rural communities in Europe and beyond.

LIVERUR combines relevant rural topics (Agriculture, Tourism, Innovation, Energy & Environment, Food, Water, Mobility, Entrepreneurship, Social Innovation, Competition, etc.) for future challenges in rural/remote/mountain areas, in order to give them real and sustainable perspectives to cope with existing challenges (among others, climate change effects and globalization of food value chain).

The consortium is collaborating on a unique initiative and open innovation approach (called Living Lab) providing knowledge transfer from research results, reusable/ replicable methods and tools in order to foster an effective rural sector transformation (technological, socio-economic, human centric) for all LIVERUR partners in their targeted territories.

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

About WP2.1 “Conceptualization of existing rural business models in EU and regional areas”

Objective

WP2 aims at capitalizing and sharing know how on existing business models and value chains in rural areas, focusing on:

- Creation of an extensive analysis of the existing business models in rural territories in order to foster collection and capitalization of existing knowledge;
- Development of a comprehensive approach to rural business models analysis, which will identify relevant benchmarking criteria and suggest innovative comparison strategies,

This report presents the results of the task T2.1, which consists in collecting and analysing the existing business models that are operating at the European and regional/local level, providing a framework and basic state of the art for benchmark study, and further steps of LIVERUR.

The consortium proceeded in three steps to reach the objectives of Task T2.1:

- Desk research to get a **general overview of the rural area** in EU and neighbourhood countries (inside and outside the consortium area) and of the main issues to address.
- **Data collection from partners through an online questionnaire and database of 256 projects/initiatives**, giving a much more micro-picture of the rural areas panorama, and highlights specificities and main challenges among EU countries, which should be addressed in LIVERUR further steps.
- **Conceptualization of six existing business models** types and **seven innovative trends**, through analysis of the macro and micro-picture. Finally, the 256 cases of the database were split into these categories, and around 30 cases from the database were used to exemplify the conceptualization.



Global picture of the Database

The 256 projects implemented in the database cover 23 EU and 10 non-EU countries, providing a broad representativeness of rural areas.

The questions address typical business model canvas criteria (product/services, customer, resources, key partners, channels, revenue stream, and cost structure) and “subjective” impact evaluation on social, economic, environmental criteria specified with LIVERUR expert partners.

Chapter 3 gives the consolidated results, with graphs and comments for each item.

Key issues may be pointed out from the data global picture:

- The legal status is mainly carried by individual companies and the global geographical influence relies on regional areas. For this reason, a stronger cooperation between companies from different cities/countries would help to develop more advanced business models, which can have a national or even international impact.
- Maturity of the project: most of the projects/initiatives are going through their growth and maturity phase. As in this stage, the projects become visible and profitable, it is the time to get focused on taking advantage of this growth and try to readjust every aspect of the project which can be improved and of course taking into account the feedback from the market. Another big percentage of the projects/initiatives is in the maturity phase. In this case, the project is in its full potential and scope, but still some contributions can be added. The focus needs to be on extending this situation and invest in new developments. Only the 22% of the projects are in their innovation phase. Therefore, they need to be supported and prioritized.
- Types of products and services: 54% of the initiatives are based on products (mainly food & beverages). However, only 34% are based on services and only the 12% on other products. There is an opportunity to develop new business models focused on services in order to improve, for instance, accessibility or communications in rural areas.
- Another striking point is the very few projects in LiveRUR database related to water management and waste recycling, since both topics are gaining importance nowadays. This could represent a competitive advantage concerning the development of new business models in rural areas.
- Workforce: In most of the projects the workforce is under 100 people. Projects/initiatives should be promoted to make people know about them and therefore get a bigger cooperation. Marketing strategies should be involved within the projects and a more effective use of Social Media may represent a smart way to get expanded and specially to reach other targets besides the ones which are currently participating, like farmers or wholesalers.
- Positive impact on social, environmental, economic criteria: The lack of data to evaluate some environmental (water, energy consumption), economic (gross domestic product) and social (inclusion, norms for gender) criteria mean that a focused should be made to fill this gap through concrete and measuring tool and stakeholders participation.



Business Model Analysis

Six existing business model types representative of rural areas are fully described in chapter 4.

50% of projects/initiatives analysed by LIVERUR are positioned on the two existing mainstream value chain of rural areas: Conventional farming, and Food & Drink industries. The main challenges for these small companies are to be more profitable, to increase competitiveness, to get more power in the value chain and to answer food safety, healthiness, and environmental increasing requirements. The proximity of small farms with customers and other stakeholders of the local ecosystem is a strength to create value through brand quality and diversification of activities (tourism, energy production, processing of farm products...).

If the majority of the LIVERUR database projects concern “mainstream” value chain in growth or maturity phase, new trends are also yet emerging. We **identified seven innovative trends**, answering to rural issues, and opening the way to new business models. Quality of food and more globally or rural products is the dominant trend, driven by brand value, regulations and expectations of customers. Developing excellence including product and service design, understanding user value trend are key issues to be competitive. Services, both as social and business support, represent 38% of LIVERUR projects innovative trends, showing the great dynamic of rural areas in development of services. Nevertheless, it seems that big challenges still have to be faced to move towards new business models that are both socially inclusive and economically viable. Organisation that give empowerment to rural communities, integrated and new flexible approach for coordination of services across different sectors (e.g. digital platform), alternative models to deliver services (e health, e mobility..), are kind of emerging innovative ways.

With only 4% of projects concerning local energy production and use, a focus should be done on how to make it a growing concern in the further steps. Specifically water consumption, which is the major environmental issue faced in the food and drink value chain, is very poorly represented in the database.

Outputs for next steps of LIVERUR

This report gives two main outputs that should be now appropriated by partners and leaders of LIVERUR further steps, in order to move from this existing view to innovative living lab concepts. That needs to take in consideration specificities, strengths and weaknesses of the rural areas on the 4 LIVERUR pillars, and to target their “best living lab” model.

These two main outputs are:

- Creation of an extensive analysis of the existing business models in rural territories in order to foster collection and capitalization of existing knowledge: with its 256 projects/initiatives, the database provides a wealth of information and network for partners to exchange practical experiences, obstacles to face and success stories.
- Development of a comprehensive approach to rural business models analysis which will identify relevant benchmarking criteria and suggest innovative comparison strategies: based on the results of the T2.1, literature analysis, review of the results of other projects, CESIE, CEA, CLEOPA and TRA teams have developed a tool with the benchmarking



indicators. In this task T2.2 (Systemization of benchmarking criteria in order to compare existing value-chain approaches), the consortium identifies the weights to be attached to the criteria of analysis in order to create a benchmarking scale. Given the fact that different weights will lead to different results, the task lead partner will take care of following standardized protocols in the assessment, with the aim of creating an outcome, which is understandable and justifiable at a Pan-European scale.



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INTRODUCTION

LIVERUR

“The short term objective of LIVERUR is to improve knowledge of business models growing in rural areas, including an understanding of their potential” (Grant agreement)

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WP2

“The objective of this WP is to iterate a complete and extensive analysis of existing business models in European rural areas with specific attention to the following sectors:

- fruits and vegetal products (Latvia, Turkey),
- dairy products (Malta, Azores),
- cultivation from arid territories (Spain, South of France)
- agritourism and specific regional production (Czech Republic)
- organic farming (Slovenia)
- handcraft (Tunisia)
- agribusiness favouring social inclusion / providing social services (Italy)
- smart rural sector (Austria),
- livestock (West of France).

Capitalizing upon past European projects on rural economic development and rural jobs, this WP will create a benchmarking study where 10 traditional value-chain approaches (such as mass production, development of prices, optimising the cost structure of the enterprises, rationalisation, etc..) will be identified and compared taking into account the circular economy principles. The number of 10 will guarantee a highly diversified analysis without losing sight of the target aim, which is creating a benchmarking study between rural living lab techniques and the most currently utilized business models and value – chain approaches.

The aim is to identify, describe and benchmark different business models in terms of starting conditions, obstacle faced, enabling factors, financing mechanisms, generation of added value, jobs and other potential environmental and social benefits, gender issues, attractiveness to young workers, and the distribution of the value generated.

Specific objectives:

- Creation of **an extensive analysis of the existing business models in rural territories** in order to foster collection and capitalization of existing knowledge.
- Development of **a comprehensive approach to rural business models analysis**, which will identify relevant benchmarking criteria and suggest innovative comparison strategies.

TASK 2.1

“The task consists in **collecting and analysing the existing business models that are operating at the European and regional/local level**; LIVERUR strongly built this first task on past project listed in the synergies prospectus and even further.



LIVERUR does not limit the analysis to the consortium territories but focuses also on other countries thanks to the multiple links and experiences of every partners, which allow for a “net – wide strategy”. The analysis will be performed according primarily to the four LIVERUR pillars:

- 1) Environment and Resilience,
- 2) Resource efficiency – efficacy and management,
- 3) Competitiveness of SMAEs and rural value – chain,
- 4) Openness to new markets and technologies.

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There is no doubt that other criteria will be utilized as well to benchmark the different business models, criteria such as job creation, social inclusiveness of vulnerable stakeholders, gender equality etc..

The analysis will be performed according to two strategies:

- 1) desk research (scientific/other literature review, implemented EU projects, national initiatives, etc..),
- 2) in-depth and in-field interviews.”



I. METHODOLOGY

I.1. Research mode and sources

In order to reach the objectives of the Task T2.1, the consortium proceeded in three steps.

First, some desk research was conducted to get a general overview of the rural area in EU countries and of the main issues to address. Sources from the EU were used, as well as statistics, to draw a “macro-picture”.

Then, an online tool was developed to collect data directly from partners and to create a database of concrete cases. This database filled with 256 cases gives a much more micro-picture of the rural areas panorama, and highlights the complexity, diversities and heterogeneities among EU countries, which have to be addressed in the ‘Living Lab’ concept.

From the macro and micro-picture six types of existing business models and seven innovative trends were conceptualized. Finally, the 256 cases of the database were split into these categories, and around 30 cases from the database were used to exemplify the conceptualization.

I.2. Scope and representativeness

The objective of the consortium was to describe the EU rural areas in all its diversity and heterogeneity. This is why the micro-data was gathered directly from the partners. Each partner was indeed asked to give cases that were typical and representative of what can be found on their territory.

This way, the cases collected should be representative from several points of view:

- Geographical: the database contains cases from 23 EU and 10 non-EU countries
- Project/initiative size
- Innovation level: the database contains traditional cases as well as more innovative ones
- Type of activities

Note: this study does not provide any statistical value, as each partner who submitted cases has a different background and knowledge. Moreover, the varying number of partners in each country induces an over-representativeness of some countries compared to others.

II. GLOBAL OVERVIEW OF RURAL AREAS IN EUROPE

Rural areas in Europe are fundamental to sustain Europe's growth, since 56% of inhabitants live in rural areas and 91% of the surface area is classified as rural (1). For consistency, in 2010 the EU Commission agreed to define urban clusters as grid cells of one square km with a minimum population density of 300 inhabitants per square km, and a minimum population of 5,000 inhabitants. All areas outside these urban clusters are considered rural, and if more than 50% of the total population lives in rural grid cells, the region is classified as predominantly rural (1).

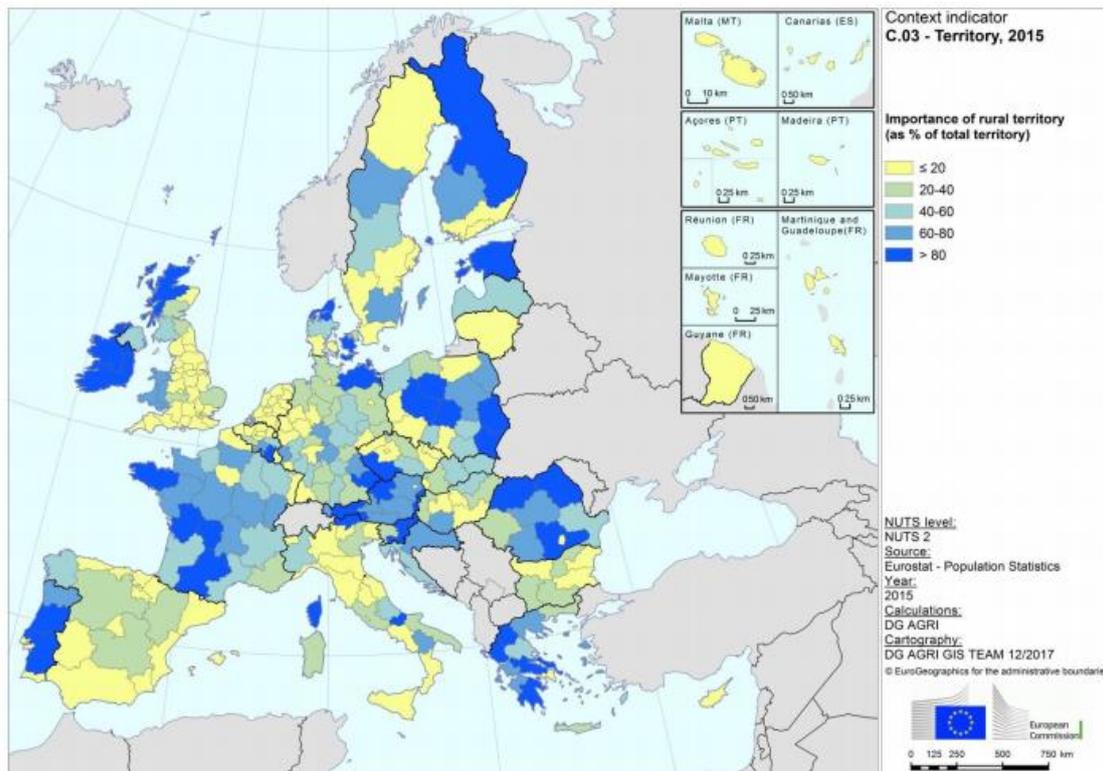


Figure 1: Importance of rural territory in NUTS 2 regions

In 2015, agricultural, fishery and forestry activities represented 1.5 % of the gross value added generated in EU-28 and 4.8 % of jobs. Agricultural land accounts for almost half of the EU area.

The last Farm Structure Survey (2013) shows there were 10.8 million agricultural holdings within the EU-28, among which 59.8 % had a standard output in excess of €2,000. These figures reflect a high diversity in terms of economic size and area across EU-28.

Whilst the share of agriculture, forestry and fisheries in rural economies has declined, the importance of diversification in rural economies has grown. In the EU-28 as a whole, around 6.8 % of farms had at least one other source of income (referred to as other gainful activities).

This share ranged from 1 % in Cyprus, Lithuania and Bulgaria, to more than one third in Germany, Sweden, Austria and Denmark (where it reached 60 %), while among those Member States that joined the EU in 2004 or 2007 the highest proportions of agricultural holdings with other gainful activities were recorded in the Czech Republic (19 %) and Slovenia (16 %).

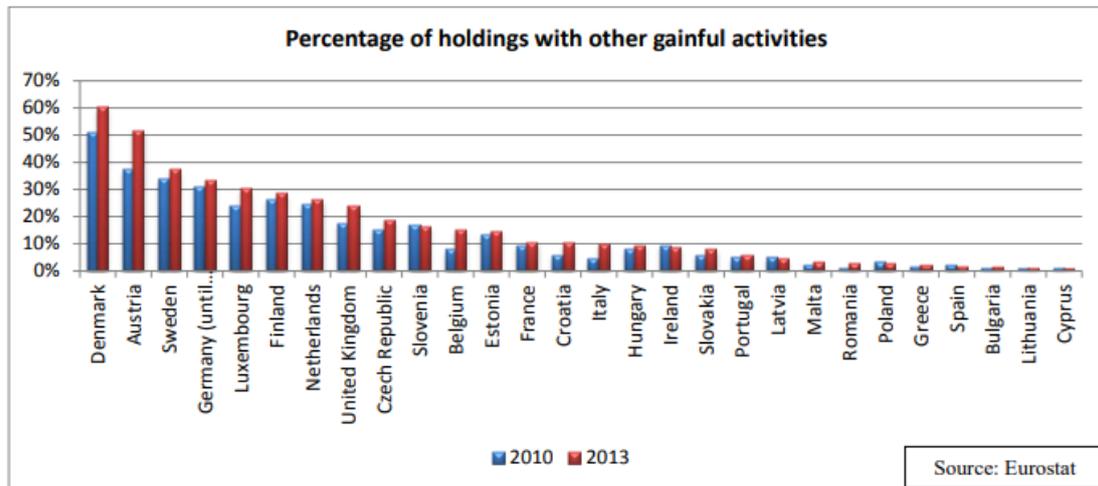


Figure 2: Percentage of holdings with other gainful activities (OGA), 2010 and 2013

Tourism is one of the three major sectors in rural areas, together with agriculture and forestry, but is particularly important in the areas characterised as coastal or upland/mountainous areas, and in places where there is a form of protective land use designation in place.

Indeed, tourism has the potential to play a significant role in the economic aspirations of many EU regions. Infrastructures that are created for tourism purposes contribute to local and regional development, while jobs that are created or maintained can help counteract industrial or rural decline.

SMEs form the backbone of the EU-28 economy. In 2015, just under 23 million SMEs generated €3.9 trillion in value added and employed 90 million people, accounted for two-thirds (67%) of EU-28 employment and slightly less than three fifths (58%) of EU-28 value added in the non-financial business sector (2).

There is no EU-wide definition of craft (type) enterprises. The “craft sector” in Europe is very diverse, covering a multitude of different professions and trades. Furthermore, among EU Member States there are very different understandings and legal definitions of what is meant by a “craft” enterprise.

An ageing and declining rural population is a growing problem in many Member States. Young people in particular leave rural areas to seek a better life in cities or abroad. Over the last decade, the proportion of people living in rural areas decreased in all countries except Greece, Poland and Slovakia (where it increased only marginally). The greatest losses of rural population took place in Estonia and Romania.

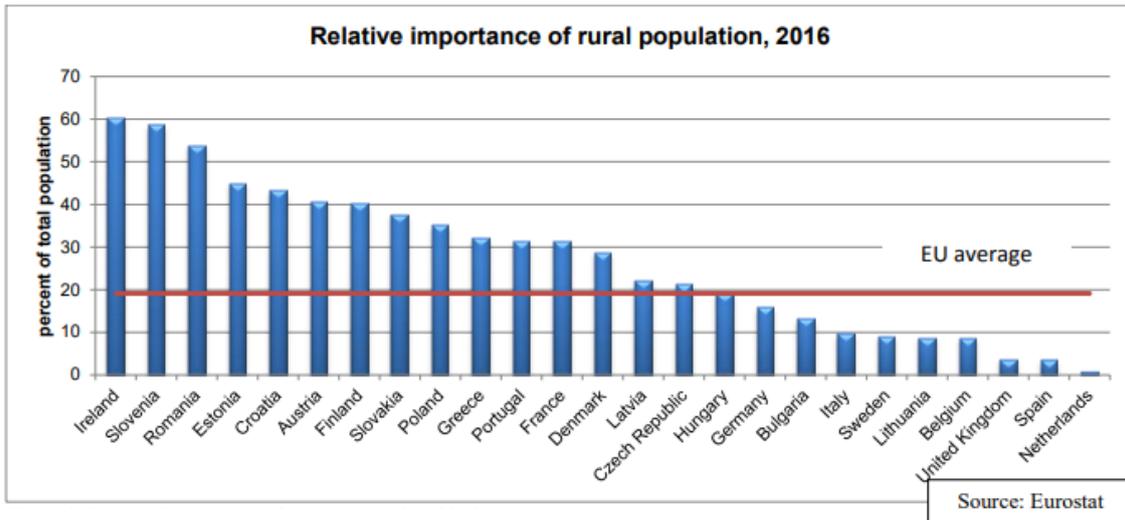


Figure 3: Relative importance of rural population, 2016

In 2016, 16% of the EU-28 population was younger than 15 years-old, the working-age population (15 - 64 years-old) represented 65% of the total and elderly people (65 years-old and above) accounted for 19%. **Since 2011, the proportion of elderly people increased in all types of regions while the share of young people decreased in all regions except for the urban ones where it increased slightly (+0.1 percentage points).**

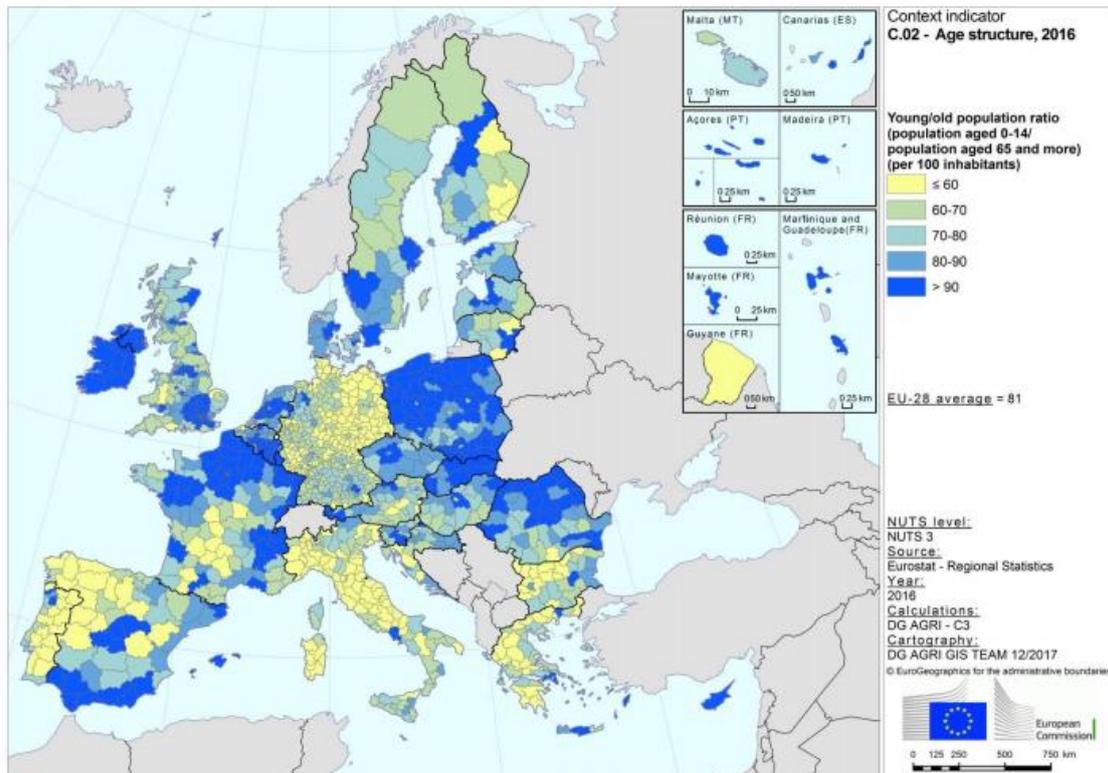


Figure 4: Age structure, young/old population ratio, 2016



This has significant implications on the demographics of rural regions, as many of those ‘left behind’ are vulnerable groups for whom leaving is not a viable option (older people, disabled people and children).

Rural communities already possess much of what they need to combat social exclusion and isolation. Nonetheless, it is possible to identify patterns of rural isolation across the EU. In 19 EU Member States, the proportion of people at risk of poverty or social exclusion in 2013 was higher in rural areas than in cities. In rural Romania and Bulgaria, the difference was as much as 20%. This is particularly relevant in the context of the Europe 2020 Strategy, which aims to promote “smart, inclusive and sustainable growth” in Europe during this decade. **In line with this, rural poverty and social exclusion must be addressed as a priority, using a sustainable and cross-sectoral approach** (3).

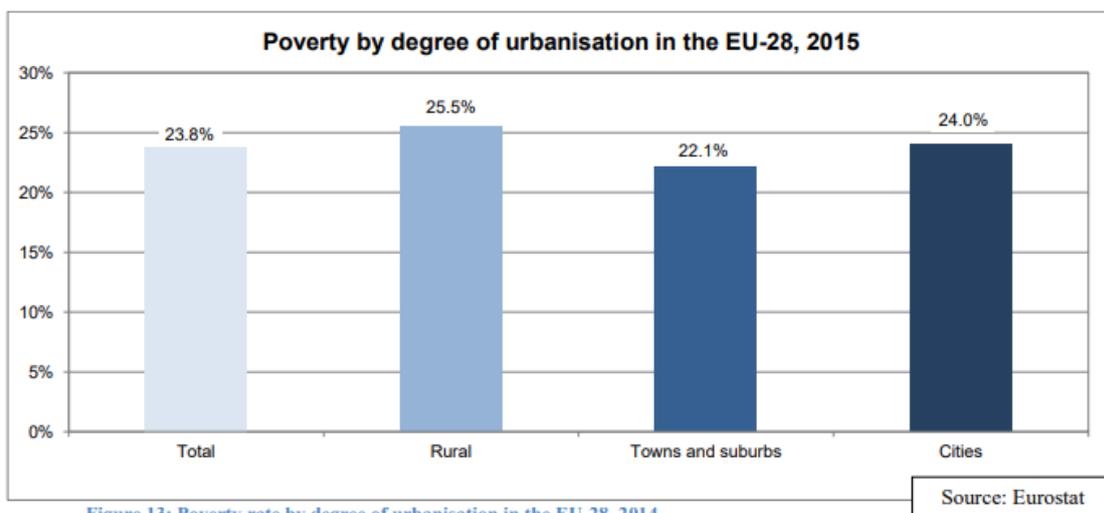


Figure 5: Poverty rate by degree of urbanization in the EU-28, 2014

If this global rural description provides macro figures and issues that will be addressed in the chapter IV “Existing business models conceptualisation”, it should not be forgotten that there is a high level of diversities and heterogeneities among rural European regions. That is why LIVERUR database, with its 256 cases collected through local partners completes this macro view with a micro one of regional specificities that have to be addressed in LIVING LAB concepts.

III. DATA COLLECTION

III.1. Methodology

III.1.1. Tool development for collection of data

The lack of consolidated sources that would give a clear vision of the EU rural areas and the will to develop a bottom-up approach pushed the consortium to create its own database, which takes into account the territorial diversity.

In order to collect the 256 cases of existing projects/initiatives for the business model analysis, the consortium chose an online questionnaire, in English. This tool was found to be practical, easy to understand and accessible to all. The filling of the questionnaire was quite intuitive, from a technical point of view, and the extraction of the data to an Excel file for analysis was easy.

The CEA created a first draft of the questionnaire and submitted it to a group of partners for review and adjustment. Expert partners in some fields were put to contribution specifically for the criteria selection for impact evaluation (social, economic, environmental) giving a first basis of benchmarking criteria. These criteria were meant to be used in the next tasks T2.2 and T2.4. The questionnaire was then adjusted and tested by two partners in real conditions before it was sent to the entire consortium on the 19/07/2018 (see Annex 1: Questionnaire of Data Collection).

The partners received the link to the online questionnaire along with guidelines giving some details about some more difficult questions. Partners were asked to fill in around 10 questionnaires each with representative projects/initiatives from their country (and non EU cases), before 16/09/2018. The questions regarded:

- The partner submitting the project/initiative,
- The sources the data came from,
- The characteristics of the project/initiative: country, name, size, legal status, employees...
- The impact of the project initiative: geographical influence, actors and stakeholders, social impact, economic impact, environmental impact ...

The database consists on the results of the online questionnaire that the CEA extracted in an Excel file.

The tool ensured the collection of 256 questionnaires submitted by 20 partners. On average, each partner submitted around 12 questionnaires, more than asked. The level of participation, reactivity and quality of the answers were very satisfying.



Figure 6: Partners' participation (question 1)

III.1.2. Sources used in the database

The sources used by the partners to fill in the online questionnaires are varied. As we see in the following Figure 7, partners used two types of research:

- Primary research which includes interviews and questionnaires;
- Secondary research which includes desk research, literature, project/initiatives documentation,

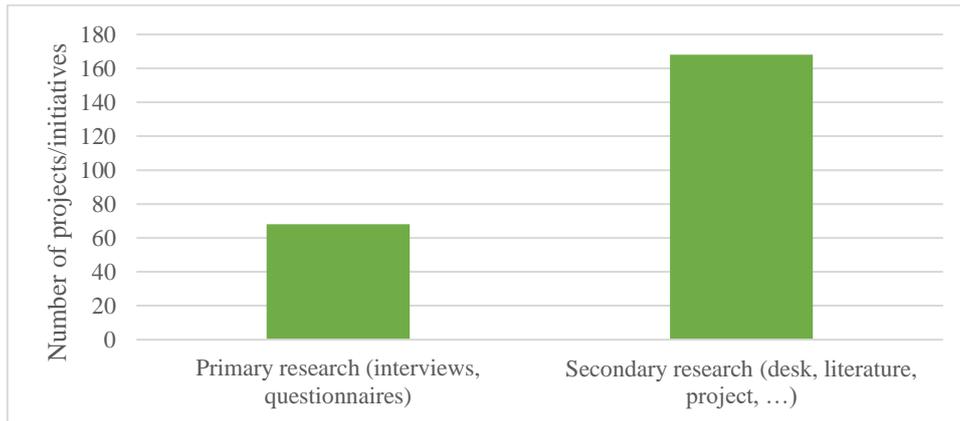


Figure 7: Source of the analysis carried out by the partners (question 6)

III.1.3. Scope and Representativeness

As specified in the Grant Agreement, this work package focuses on “existing business models in European rural areas”. It means this analysis not only concerns agricultural activities but also non-agricultural activities.

This scope objective has been reached through the questionnaires. Indeed, the database (see Figure 8) contains 70% of cases from European projects/initiatives and 30% from non-EU examples (Norway, Canada, Senegal...). Moreover, the activities described are agricultural (e.g. crops, fruits, vegetable, livestock) and non-agricultural (e.g. handcraft, services).

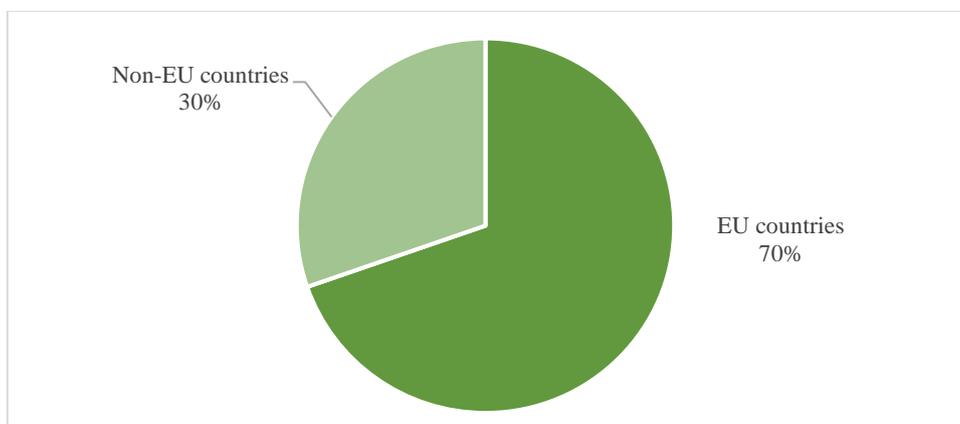


Figure 8: Proportion of EU and non-EU countries

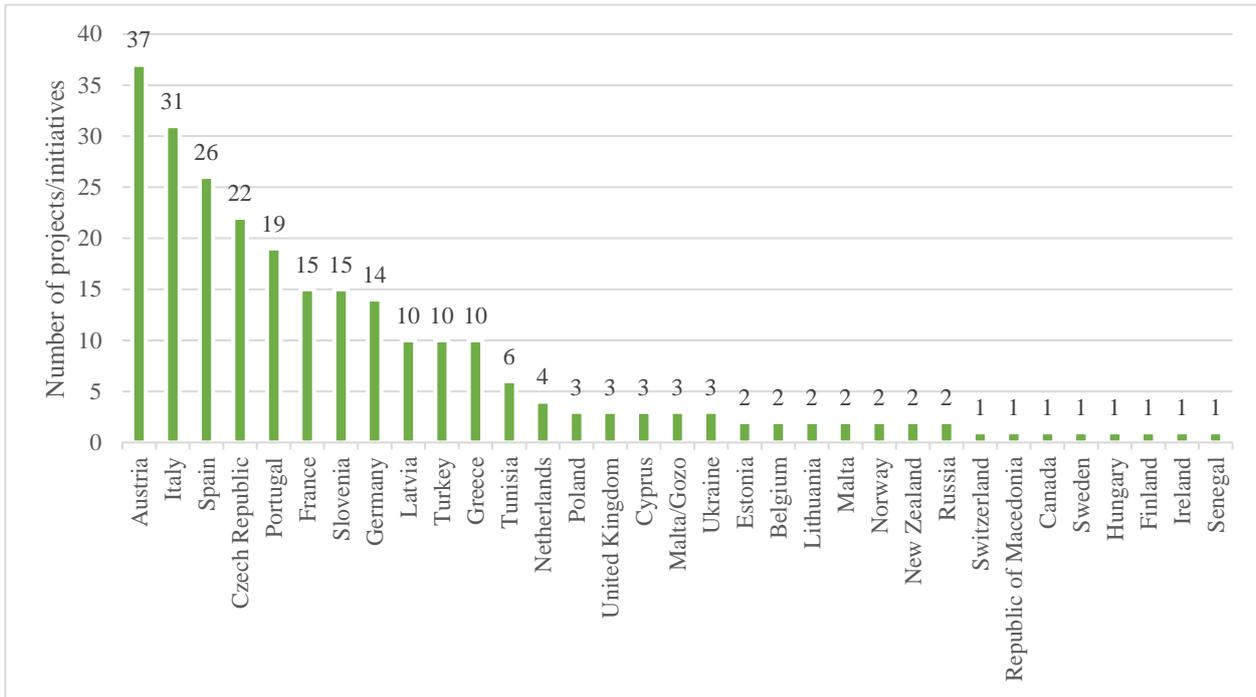


Figure 9: Number of projects/initiatives per country (question 4)

III.2. Results

III.2.1 General overview

The partners were asked to fill in the database with projects/initiatives that could be described from a business model point of view. Indeed, typical criteria from the business model canvas were implemented in the questionnaire as the activity, customer type, resources, revenue stream, etc. Therefore, all the cases from the database describe existing business models.

However the cases have a different level of maturity (see Figure 10) from innovative to mature and declining. The global picture shows a good balance between the different levels of maturity of the projects/initiatives.

Most of the projects/initiatives are going through their growth and maturity phase. If the project is in the growth phase it means that somehow it is an accepted project, that solves a need and has managed to overcome the initial barriers. So in this stage, the project becomes visible and profitable. It is the time to be focused on taking advantage of this growth and try to readjust every aspect of the project which can be improved and of course taking into account the feedback from the market. Another big percentage of the projects/initiatives is in the maturity phase. What can be done with those projects? In this case, the project is in its full potential and scope, but still some contributions can be added.

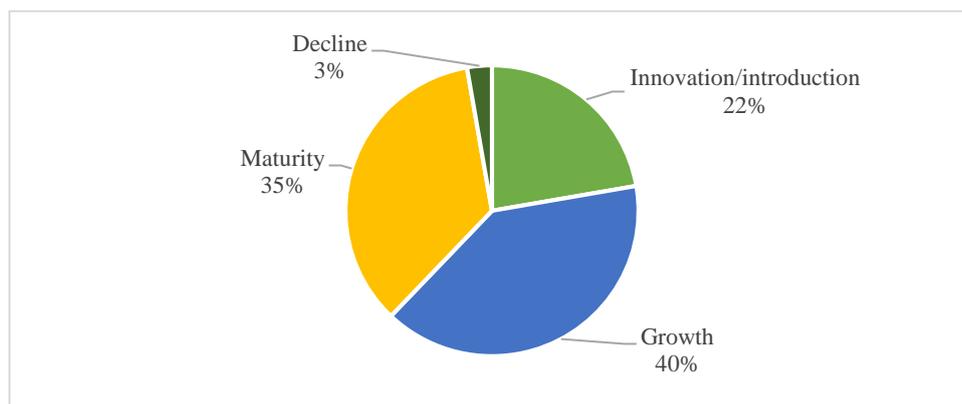


Figure 10: Maturity of the project/initiative (question 11)

Moreover, the innovation level given subjectively by the consortium is quite average (3.86). This means the consortium decided to select cases that represent both the traditional and the innovative dynamic of their territories.

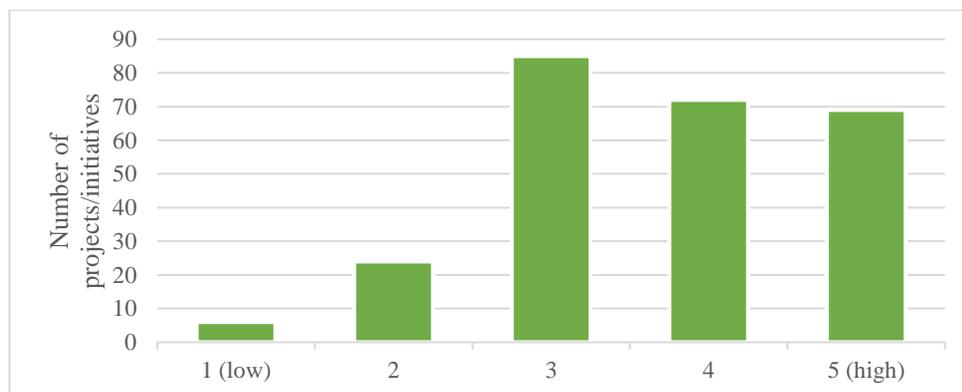


Figure 11: Innovation level from the project/initiative according to the partner submitting it (question 28)

Finally, the high concentration of the projects/initiatives after 2010 show that the partners chose cases that are more recent.

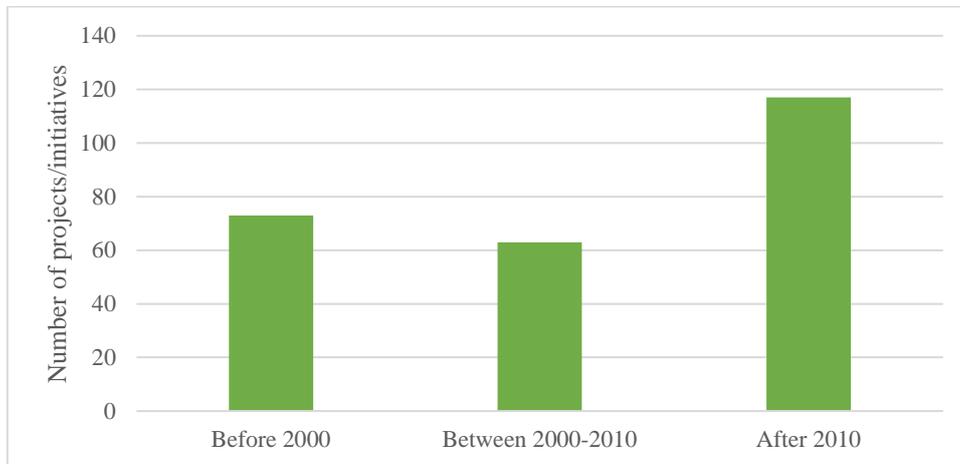


Figure 12: Year of beginning year of implementation (question 7)

III.2.2. Consolidated results

In this section, the results from the questionnaire will be described.

General information

Legal status

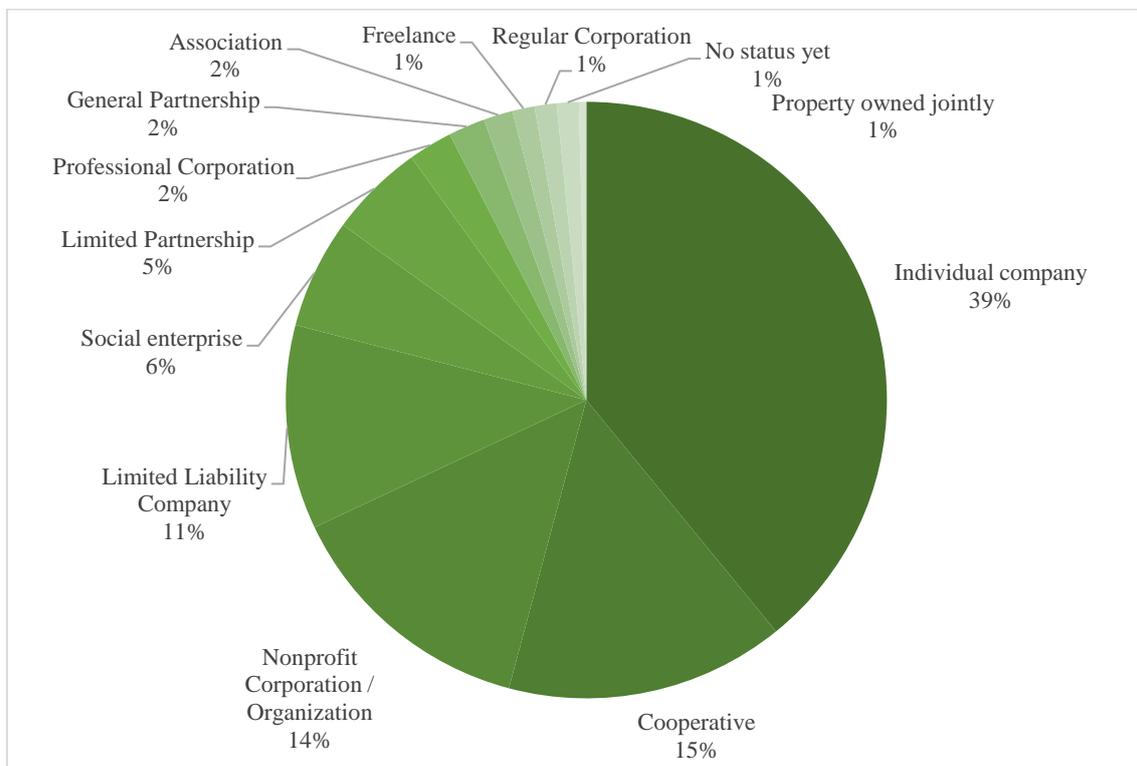


Figure 13: Legal status of the project/initiative (question 8)



For a better understanding of Figure 13, here are some definitions of the legal statuses proposed:

- **Individual Company**¹ (or Sole Proprietorship): An Individual Company is one individual or married couple in business alone. Individual companies are the most common form of business structure. This type of business is simple to form and operate, and may enjoy greater flexibility of management, fewer legal controls, and fewer taxes. However, the business owner is personally liable for all debts incurred by the business.
- **Non-profit Corporation / Organization**¹: A Non-profit Corporation is a legal entity and is typically run to further an ideal or goal rather than in the interests of profit. Many non-profits serve the public interest, but some engage in private sector activities.
- **Cooperative**²: A cooperative corporation (or simply, a "cooperative") is a special form of corporation that places ownership and/or control of the corporation in the hands of the employees or patrons of the corporation.
- **Limited Liability Company**¹: a Limited Liability Company (LLC) is formed by one or more individuals or entities through a special written agreement. The agreement details the organization of the LLC, including provisions for management, assignability of interests, and distribution of profits and losses. LLCs are permitted to engage in any lawful, for-profit business or activity other than banking or insurance
- **Social enterprise / cooperative**³: A social enterprise entity is a business with primarily social objectives. Any surpluses made are reinvested into the main principle of that entity (or into the community) rather than maximising profit for shareholders. Examples of types of objectives are regeneration of the local environmental area, promoting climate, change awareness and training for disadvantaged people. There are various legal forms that should be considered when setting up this type of entity. Which one you choose will depend upon what the social enterprise actually does and the style of management of those running it. The possible options available are as follows:
 - Limited company
 - Trust
 - Unincorporated association
 - Community interest company (CIC)
 - Charitable incorporated organisation (CIO)
 - Co-operative or community benefit society
- **Limited Partnership**¹: A Limited Partnership is composed of one or more general partners and one or more limited partners. Limited partners share in the profits of the business, but their losses are limited to the extent of their investment. Limited partners are usually not involved in the day-to-day operations of the business.
- **Professional Corporation**⁴: A professional corporation is a variation of the corporate form available to entrepreneurs who provide professional services—such as doctors, lawyers, accountants, consultants, and architects. Professional corporations can shield

¹ Source: <https://bls.dor.wa.gov/ownershipstructures>

² Source: <http://www.dmlp.org/legal-guide/cooperative-corporation>

³ Source: https://www.hwca.com/app/uploads/2015/02/Social_Enterprise_Entity_Structures.pdf

⁴ Source: <https://www.inc.com/encyclopedia/professional-corporations>



- owners from liability. While it cannot protect a professional from his/her own malpractice liability, it can protect against liability from negligence of an associate.
- **General Partnership**¹: A General Partnership is composed of 2 or more persons (usually not a married couple) who agree to contribute money, labour, or skill to a business. Each partner shares the profits, losses, and management of the business and each partner is personally and equally liable for debts of the partnership. Formal terms of the partnership are usually contained in a written partnership agreement.
 - **Association**¹: An Association is an organized group of people who share in a common interest, activity, or purpose.
 - **Freelance**⁵: Freelance refers to a type of job where the worker is self-employed. A freelance worker works for themselves and bids for temporary jobs and projects with one or more employers. Other terms used are independent contractor and consultant.
 - **Regular Corporation**¹: A Corporation is a more complex business structure. A corporation has certain rights, privileges, and liabilities beyond those of an individual. Doing business as a corporation may yield tax or financial benefits, but these can be offset by other considerations, such as increased licensing fees or decreased personal control. Corporations may be formed for profit or non-profit purposes.
 - **Property owned jointly**⁶: Joint property is any property held in the name of two or more parties. These two parties could be a husband and wife, business partners, or another combination of people who have a reason to own property together. Property that is jointly owned may be held in one of several legal forms including joint tenancy, tenancy by the entirety, community property or in a trust.

In this way, it can be observed that the most common legal status in rural areas is the individual company, which is logical because the most common activities (see Figure 19) in this database find place in a farm, and most farms are mostly family-owned. Non-profit corporations are also well represented here with projects/initiative mostly funded through EU-grants (see Figure 34) and with a social or environmental objective. Cooperatives are the third most common legal status in this database with mostly fruits and vegetable cooperatives or dairy products cooperatives.

As the legal status is mainly carried by individual companies and the global geographical influence relies on regional areas, a stronger cooperation between companies from different cities/countries would help to develop more advanced business models which can have a national or even international impact.

⁵ Source: <https://definitions.uslegal.com/f/freelance/>

⁶ Source: <https://www.investopedia.com/terms/j/jointownedproperty>

Geographical influence

The geographical influence of the projects/initiatives described in the database are mostly limited to the national territory. Few cases reach an international influence. This can be explained by the fact that most projects/initiatives are created with and for the surrounding ecosystem.

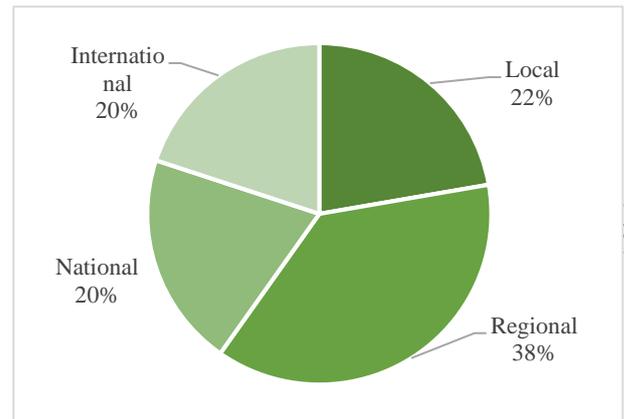


Figure 14: Geographical influence of the projects/initiatives (question 9)

Fields where the innovation takes place

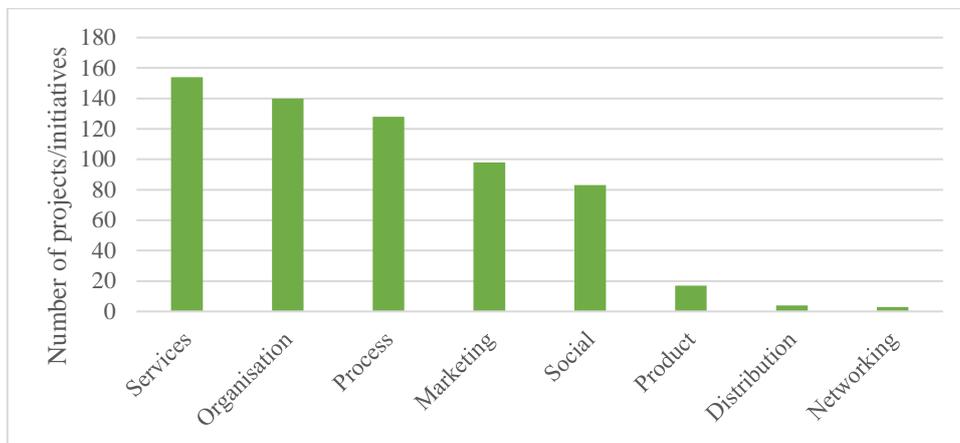


Figure 15: Fields where the innovation takes place in the projects/initiatives (question 29)

It is to note that the innovation in the projects/initiatives submitted finds mostly place at services and organisational level. Process, Marketing and, to a lesser extend Social aspects are also subject to innovation.

Activities

Type of activities

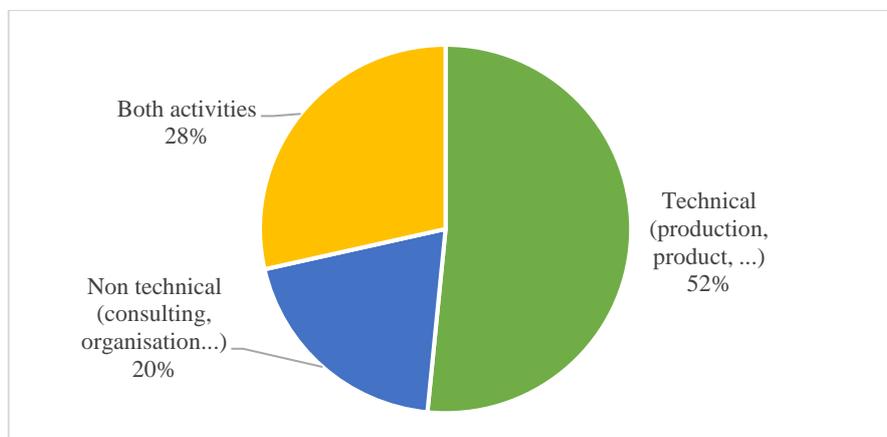


Figure 16: Type of activities the project/initiative undertakes (question 23)



Figure 16 shows that technical activities, which include food production, product production etc., account for almost half of the projects/initiatives. Non-technical activities still show a high proportion of services in rural areas (accommodation, social services, energy, and transportation).

Another important fact to see is that 30% of the cases of the database have both technical and non-technical activities, which is very representative of the global trend of diversification.

Sector of activity

| NACE Code | Description |
|-----------|---|
| A.01.1 | Growing of non-perennial crops |
| A.01.2 | Growing of perennial crops |
| A.01.3 | Plant propagation |
| A.01.4 | Animal production |
| A.01.5 | Mixed farming |
| A.01.6 | Support activities to agriculture and post-harvest crop activities |
| A.01.7 | Hunting, trapping and related service activities |
| A.02.1 | Silviculture and other forestry activities |
| A.02.4 | Support services to forestry |
| A.03.1 | Fishing |
| C.10.1 | Processing and preserving of meat and production of meat products |
| C.10.3 | Processing and preserving of fruit and vegetables |
| C.10.4 | Manufacture of vegetable and animal oils and fats |
| C.10.5 | Manufacture of dairy products |
| C.10.6 | Manufacture of grain mill products, starches and starch products |
| C.10.7 | Manufacture of bakery and farinaceous products |
| C.10.8 | Manufacture of other food products |
| C.10.9 | Manufacture of prepared animal feeds |
| C.11.0 | Manufacture of beverages |
| C.13.1 | Preparation and spinning of textile fibres |
| C.13.9 | Manufacture of other textiles |
| C.16.2 | Manufacture of products of wood, cork, straw and plaiting materials |
| C.17.2 | Manufacture of articles of paper and paperboard |
| C.20.15 | Manufacture of fertilisers and nitrogen compounds |
| C.23.4 | Manufacture of other porcelain and ceramic products |
| C.28.9 | Manufacture of other special-purpose machinery |
| C.33.1 | Repair of fabricated metal products, machinery and equipment |
| D.35.1 | Electric power generation, transmission and distribution |
| D.35.2 | Manufacture of gas; distribution of gaseous fuels through mains |
| E.36.0 | Water collection, treatment and supply |
| G.46.1 | Wholesale on a fee or contract basis |
| G.46.3 | Wholesale of food, beverages and tobacco |
| G.47.2 | Retail sale of food, beverages and tobacco in specialised stores |
| G.47.7 | Retail sale of other goods in specialised stores |
| H.49.3 | Other passenger land transport |
| H.52.2 | Support activities for transportation |
| I.55.2 | Holiday and other short-stay accommodation |
| I.55.9 | Other accommodation |
| I.56.1 | Restaurants and mobile food service activities |
| I.56.2 | Event catering and other food service activities |



| | |
|---------------|---|
| J.61.2 | Wireless telecommunications activities |
| J.62.0 | Computer programming, consultancy and related activities |
| J.63.1 | Data processing, hosting and related activities; web portals |
| J.63.9 | Other information service activities |
| M.70.2 | Management consultancy activities |
| M.71.1 | Architectural and engineering activities and related technical consultancy |
| M.72.1 | Research and experimental development on natural sciences and engineering |
| M.72.2 | Research and experimental development on social sciences and humanities |
| M.74.9 | Other professional, scientific and technical activities n.e.c. |
| N.79.1 | Travel agency and tour operator activities |
| O.84.1 | Administration of the State and the economic and social policy of the community |
| P.85.6 | Educational support activities |
| Q.86.9 | Other human health activities |
| Q.88.1 | Social work activities without accommodation for the elderly and disabled |
| Q.88.9 | Other social work activities without accommodation |
| R.91.0 | Libraries, archives, museums and other cultural activities |
| R.93.1 | Sports activities |
| R.93.2 | Amusement and recreation activities |
| S.94.1 | Activities of business, employers and professional membership organisations |
| S.94.9 | Activities of other membership organisations |

Figure 17: Structure of NACE rev.2⁷

⁷ Source: <https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF>

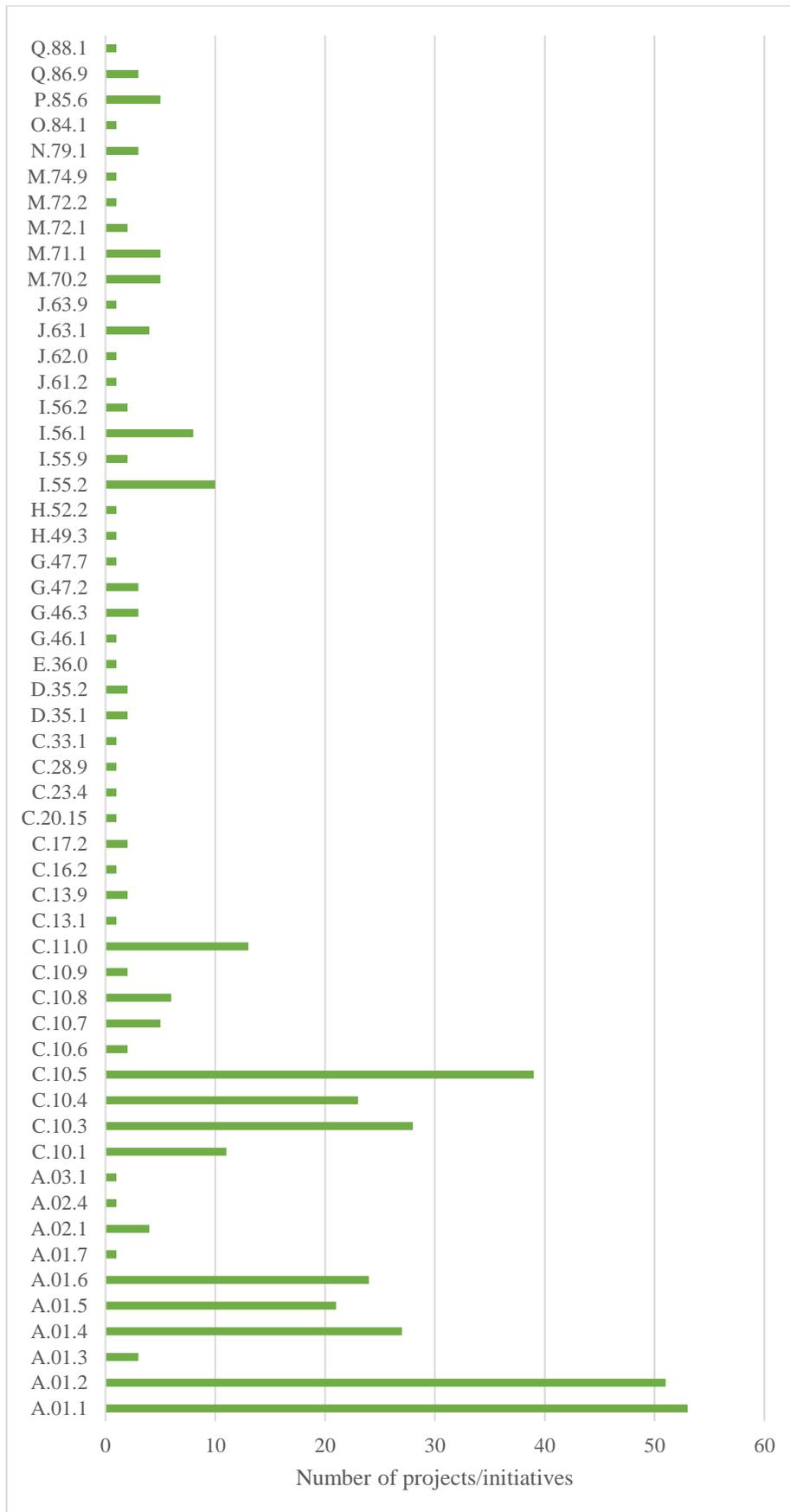


Figure 18: Number of occurrence of each NACE code rev.2 (question 5)

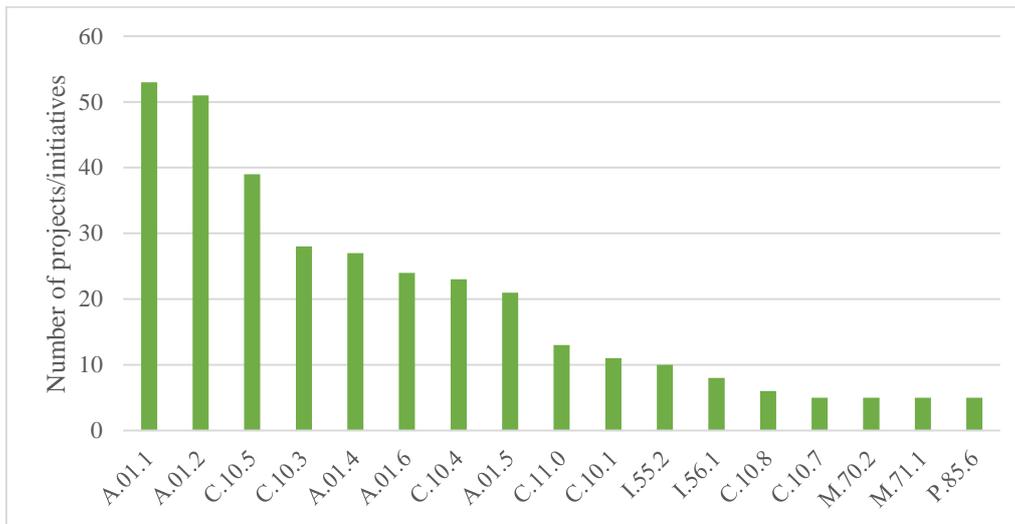


Figure 19: Most represented NACE codes

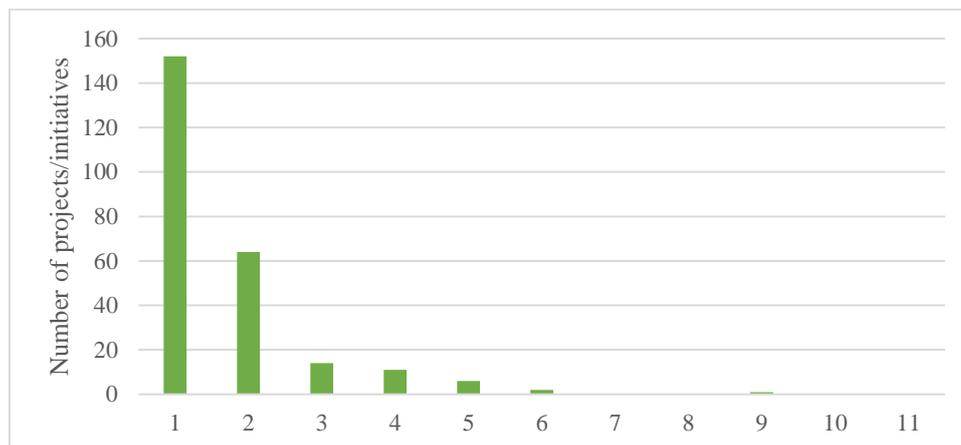


Figure 20: Number of NACE codes per project/initiative

Figure 17 details the meaning of each NACE code used.

Figure 18 shows the wide representativeness of NACE codes among the projects/initiatives submitted.

Figure 19 highlights the most represented NACE codes, which are:

- Manufacture of dairy products,
- Growing of perennial crops,
- Processing and preserving of fruit and vegetables,
- Growing of non-perennial crops,
- Animal production.

These most represented NACE codes show that even though the projects/initiatives submitted are considered on average “innovative”, the core activities remain traditional and representative of the rural area.

On Figure 20 it is to see that although the majority of project/initiatives submitted focus on one sole activity, a great number have several (from 2 to 9). This brings to light the complexity of the economic activities in the EU.

Products & services

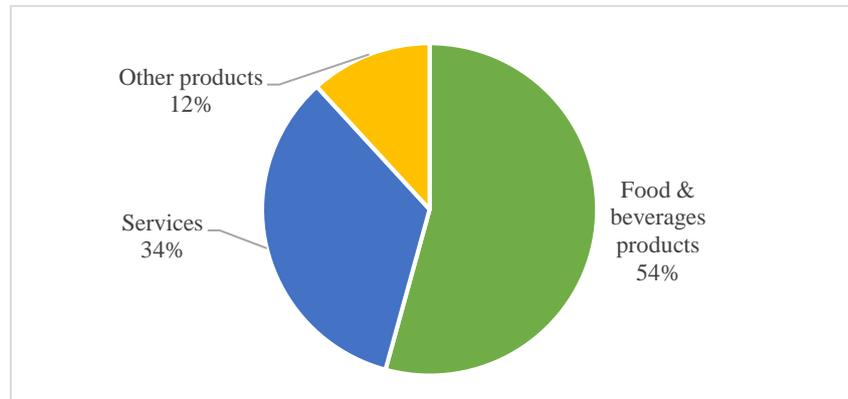


Figure 21: Type of value proposition from the project/initiative (question 18)

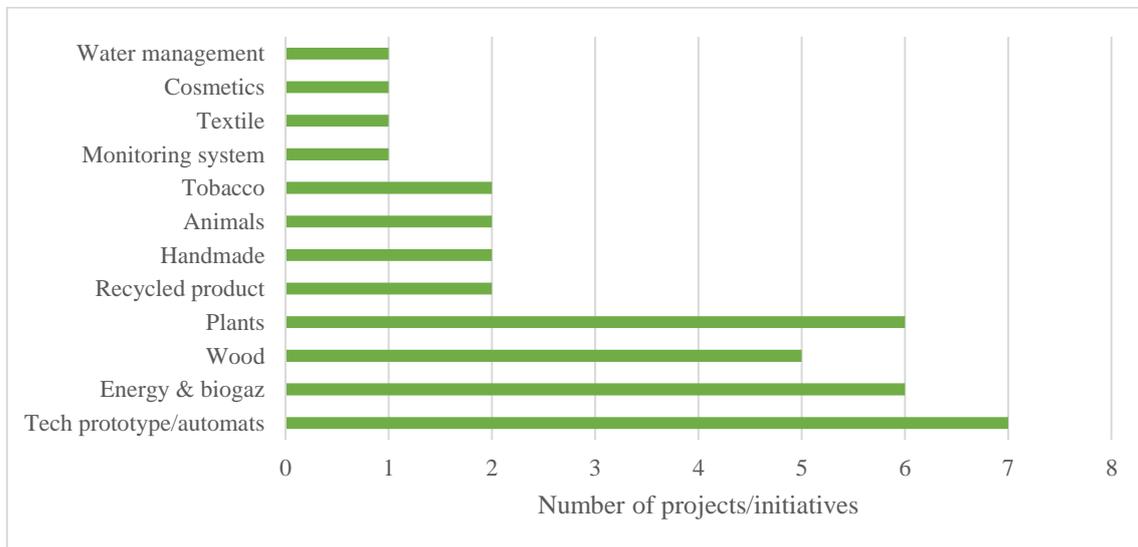


Figure 22: Details of "Other product" types

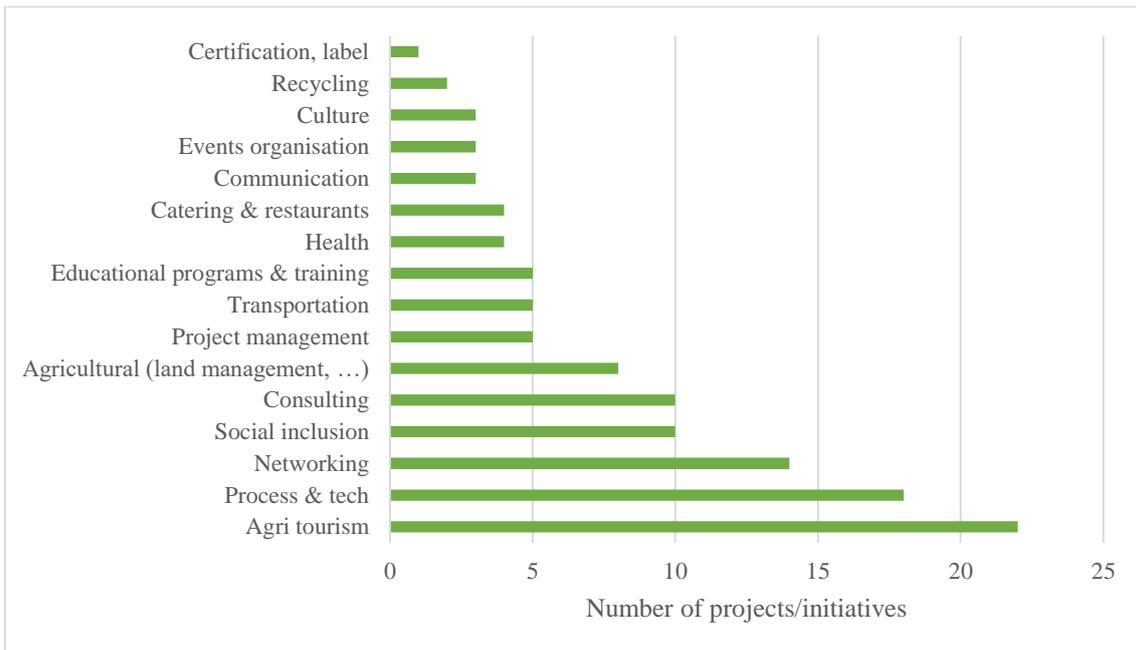


Figure 23: Types of services submitted

The objective of this question was to see what kind of products and services the projects/initiatives submitted offered. 66% of them offer products: 54% of the total produce food and beverages products, which is what one would expect; the 12% left is divided into the production of tech products, energy, wood, plants, recycling and so on so forth.

The other 34% offer different kinds of services. The most common service is agritourism. Networking, process and tech, social inclusion and consulting follow.

The fact that there are very few projects related to water management and recycling is striking since both topics are gaining importance nowadays. This could represent a competitive advantage concerning the development of new business models in rural areas.

Key partners & stakeholders

Workforce

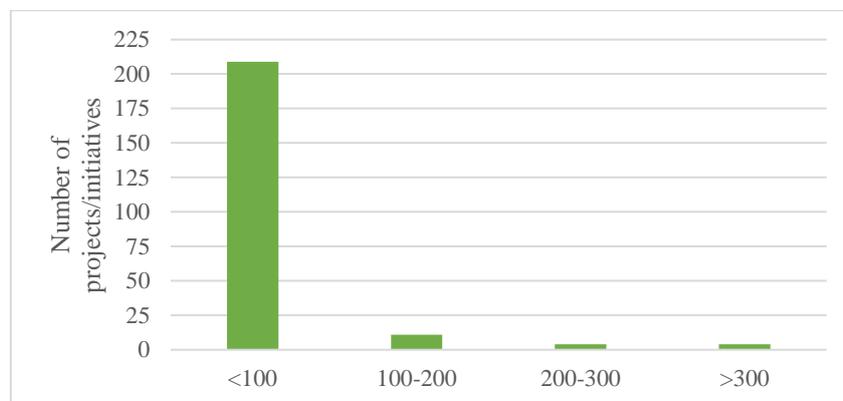


Figure 24: Number of people in the workforce from the project/initiative (question 13)

For this question, the response rate is lower than the rest (89%) due to the difficulty to find this information.

Most projects/initiatives count less than 100 workers; the average is 18 workers. Projects/initiatives should be promoted to make people know about them and therefore get a bigger cooperation.

Volunteers

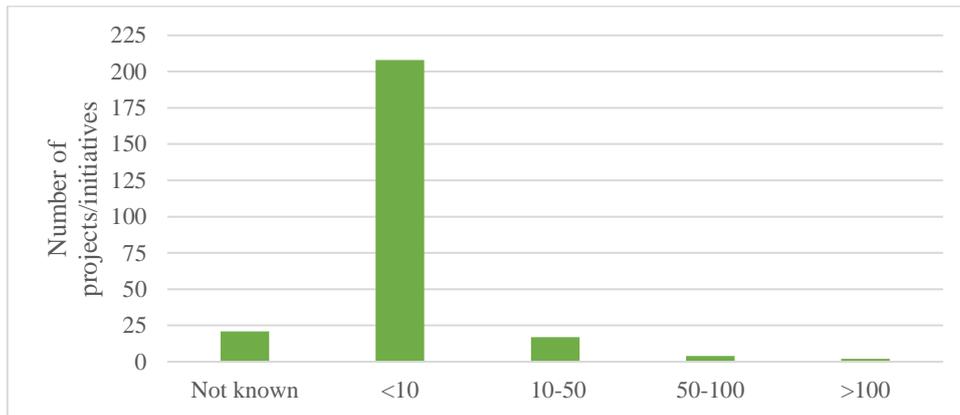


Figure 25: Number of volunteers in the project/initiative (question 14)

Again, for this question, the response rate was lower than usual (48%). The information about volunteer is either hard to find or hard to evaluate. However, with the answers given, on average, a project/initiative has around 10 volunteers.

Other internal actors (key partners of the value chain)

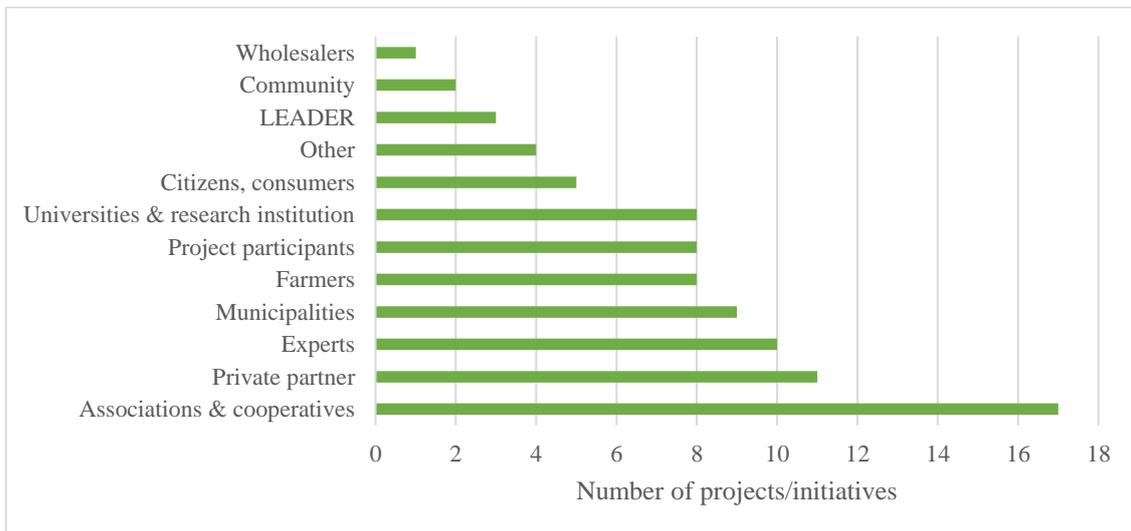


Figure 26: Internal actors, apart from the workforce and volunteers (question 15)

Other: Religious, NGO

This question was meant to understand what internal actors exist, other than the direct workforce and volunteers. It seems that cooperatives and associations are a very common internal actor, as well as private partners, experts' municipalities and farmers.

External parties (key partners of the value chain)

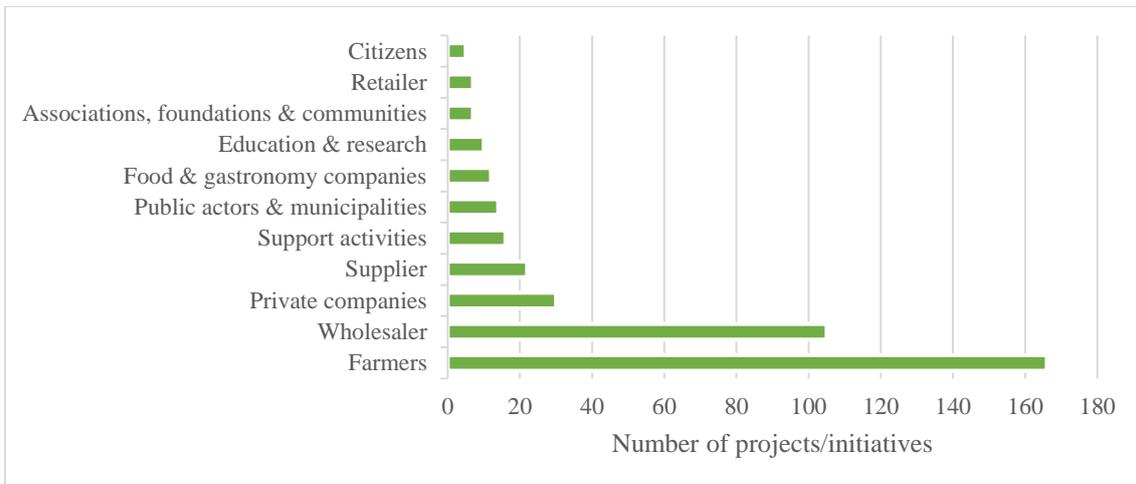


Figure 27: External companies/suppliers/partners (question 16)

Here are described the external parties (companies, suppliers, partners ...) of the projects/initiatives. The most common external parties are by far farmers and wholesalers.

Stakeholders

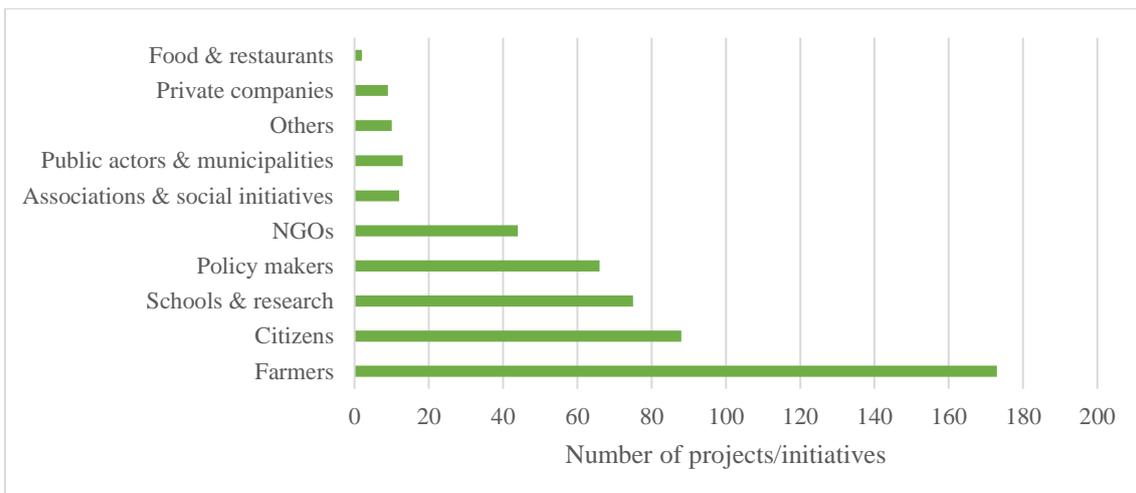


Figure 28: Stakeholders in the project/initiative (question 17)

Others: Artists, Crowd funding initiators, Energy suppliers, Technicians

The goal here was to get a better picture of the ecosystem of stakeholders around the cases submitted. There are five major types of stakeholders in the database: farmers, citizens (e.g. the general population), schools and research institutions, policy makers and NGOs.

This could reflect a “traditional value chain” which includes mainly farmers, wholesalers and cooperatives. The implication of other actors from civil society (citizens, local communities, schools) mentioned as common stakeholder should be clarified.

Customer

Type of customer

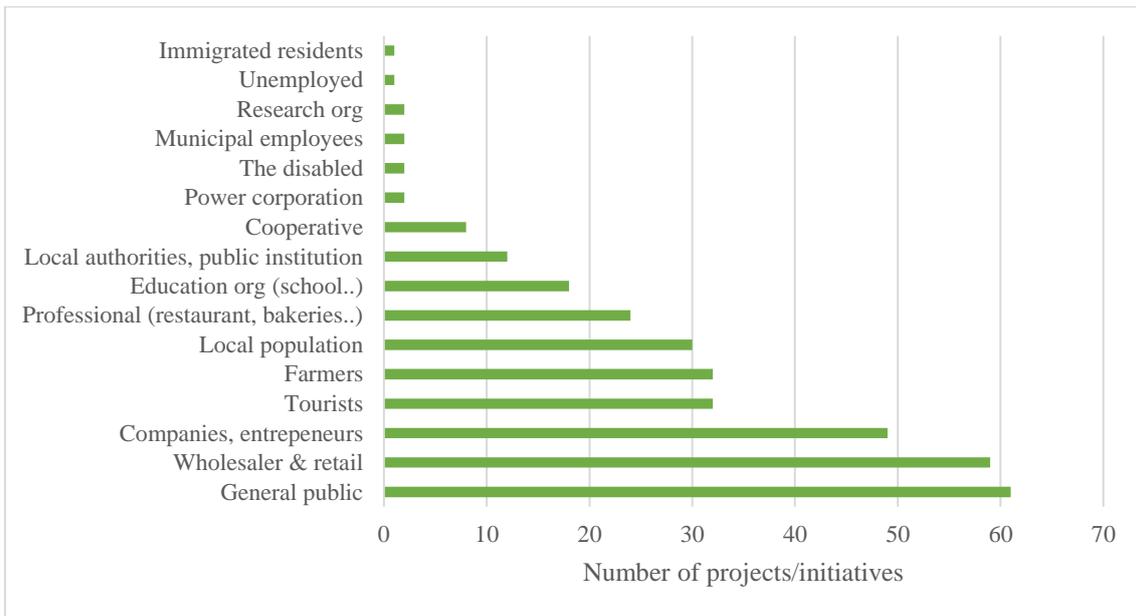


Figure 29: Types of customers of the projects/initiatives (question 19)

It seems the general public and wholesalers/retailers are the most common customers, which comes logically from the fact that the main activity is the production of food and beverages. In majority we have a B to C model (direct sale from food and beverages) but also a B to B model (with intermediaries as wholesalers and retailers). The high representation of tourists fits with the high level of agritourism.

Expected benefits for the customer

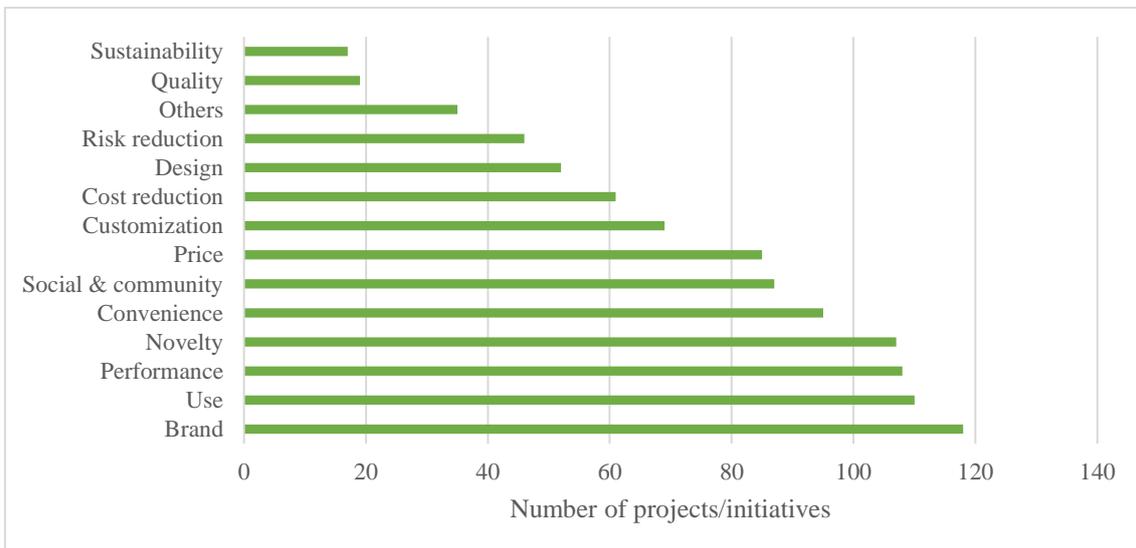


Figure 30: Expected benefits for the customers of the projects/initiatives (question 20)

Others: Responsibility & awareness, Innovation & competitiveness, Health, Education & knowledge, Networking & collaboration, Transparency, Experience, Traceability, Tourism

It appears brand, use and performance are the three more expected benefits for the customer. This reflects the fact that a high quantity of cases focus on the high quality of their products and services. It means that image and use values are the most wanted.

Relationship with the customer

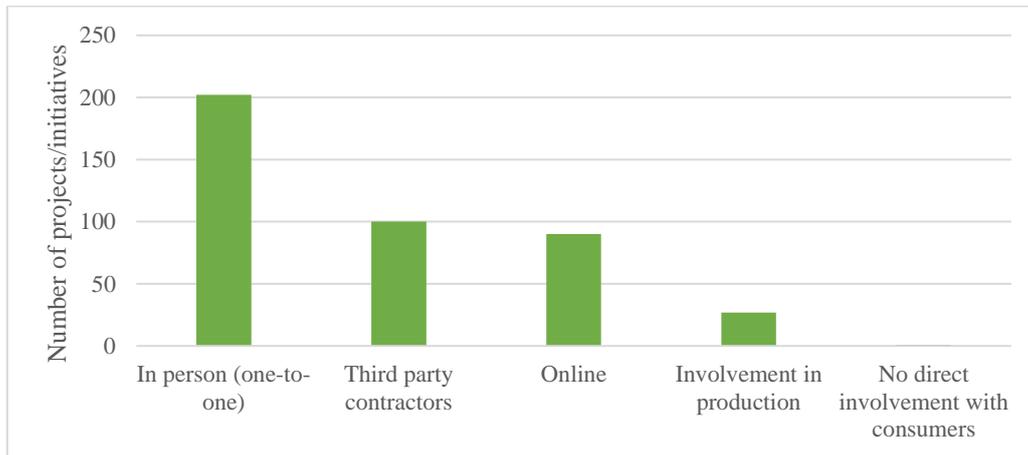


Figure 31: Relationship with the customer of the project/initiative (question 21)

The relationship with the customer find place mostly through one-to-one interactions: direct sale, events, conferences ...

Channels

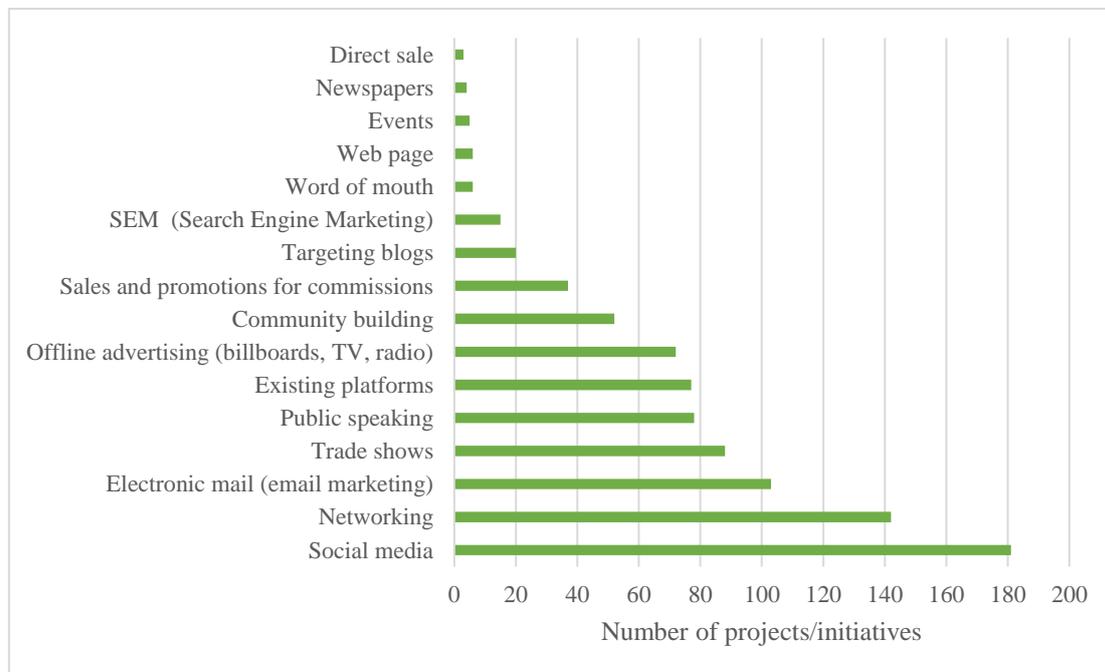


Figure 32: Channels used to reach the customer of the project/initiative (question 22)

In the cases from the database project/initiatives communicate mostly with their clients through social media. Networking events are also a common way to reach the customers, as well as e-mail marketing.

Costs

Cost structure

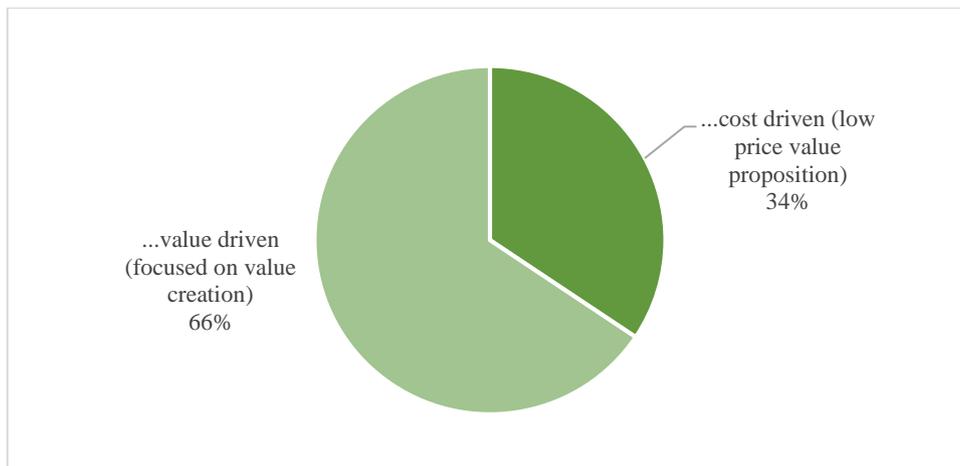


Figure 33: Type of cost structure of the projects/initiatives (question 26)

The high majority of the projects/initiatives submitted have a value driven cost structure. This means the focus is on the value creation rather than on lowering prices (which would be expected from a traditional highly industrialized model).

Financial structure

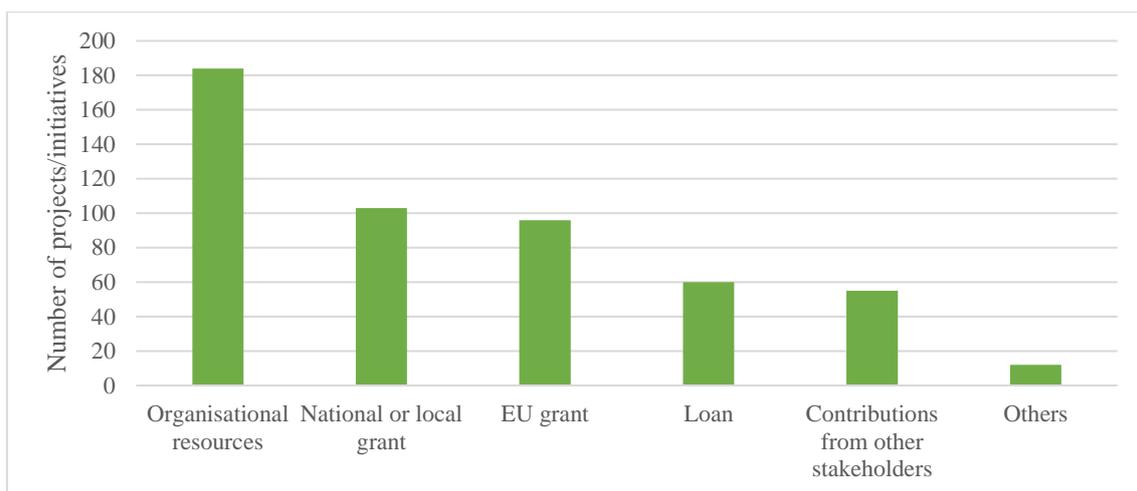


Figure 34: How the project/initiative is financially supported (question 12)

Others: Leader approach, Innovative financing (innovation vouchers), Crowd funding, Own investments, Subscription in private tours, Awards, Cooperative shares offered to farmers

Organisational resources are the biggest source of financing of the projects/initiatives, followed by public grants (national, local or EU). The high weight of grants is a point that reflects one of

the issues addressed by the LIVERUR project concerning economic value creation business models and self-sufficient revenue streams.

Revenue streams

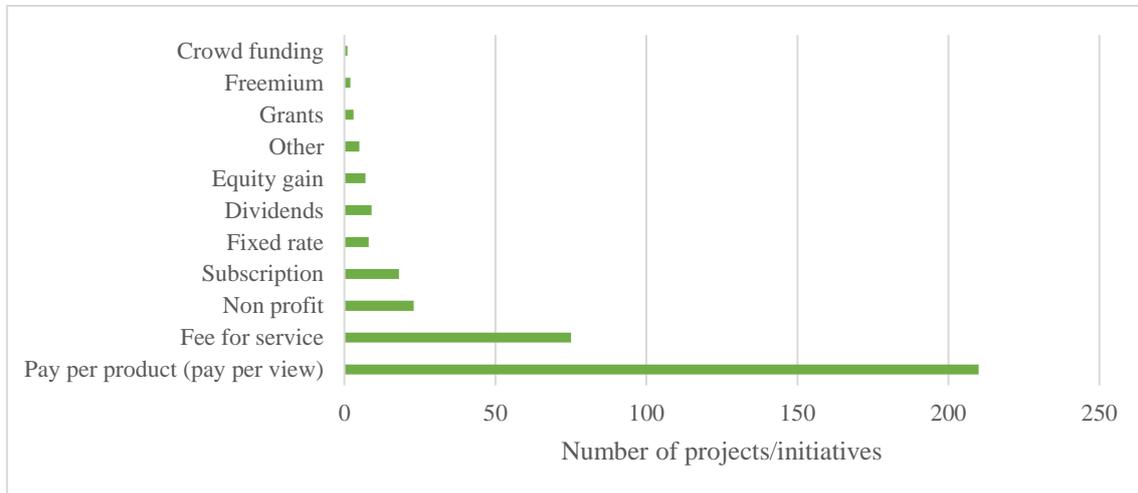


Figure 35: Types of revenue streams from the projects/initiatives (question 27)

Other: Lower costs, Referral fee, Franchise deals, Agritourism, Public funding

The most used revenue model is the ‘pay per product’, which is understandable because of the main activity of food and beverage production: people pay for a product.

Resources

Types of resources

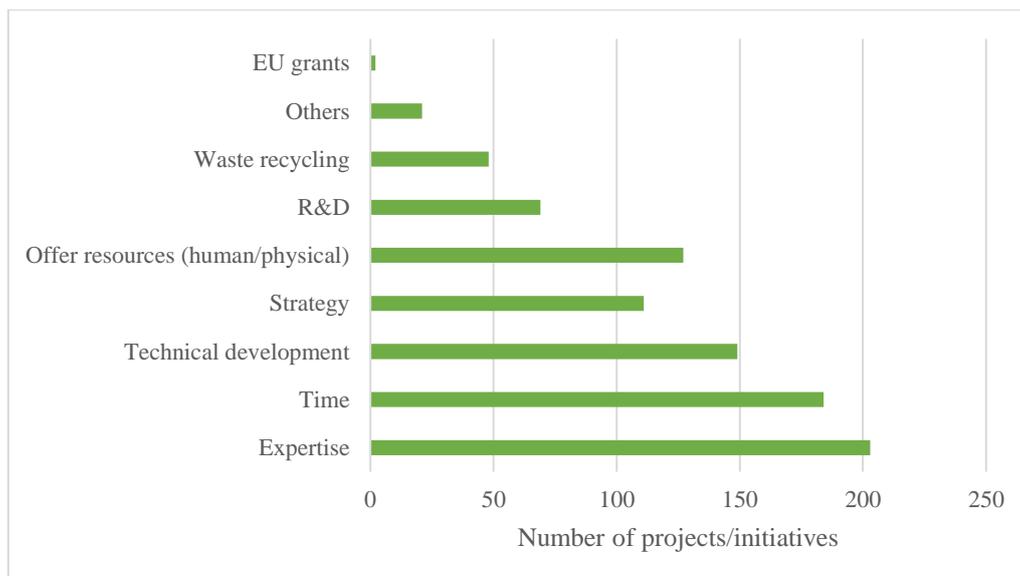


Figure 36: Type of resources used by the project/initiative (question 24)

Others: support from other stakeholders, Organisational skills, Networking, analysis and planning, ICT, energy, Logistic, Commercial, Land & water & natural resources

In this question, the main idea was to identify the resources needed by the projects/initiative to do their activity. Mostly what is needed is expertise (e.g. in the form of consulting), time and technical development.

Waste recycling

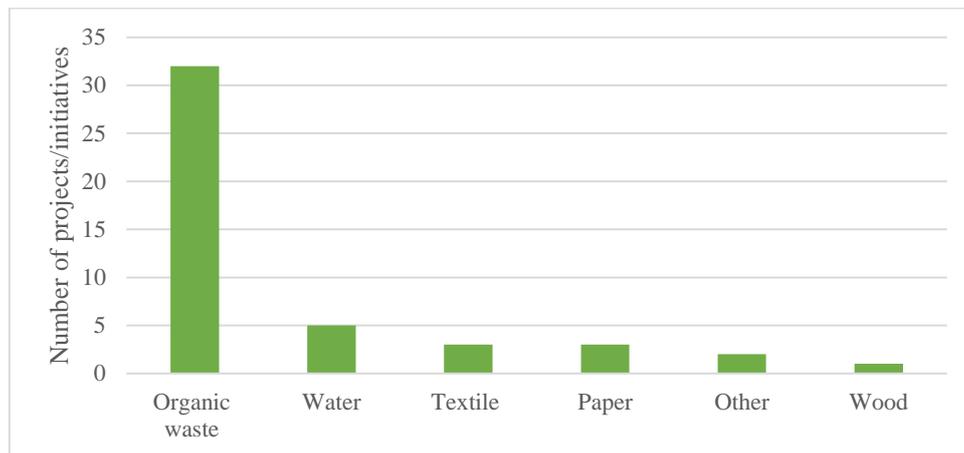


Figure 37: Types of waste recycling when this is the case (question 25)

Other: households' waste, tires, pesticides

The response rate to this question is very low, due to the fact that most projects/initiatives submitted do not have a waste recycling process (maybe another lead for improvement?).

However, within the responses, organic waste is the most recycled. Most of the time it is used as fertilizer, or biomass for energy production.

Overview of the impacts of the projects on social, economic, environmental criteria

In this section, the partners were asked to evaluate subjectively the **positive impact** of the project/initiative they were submitting on 17 criteria, so the following chapter deals with assumed impacts:

- Social: education, social norm for gender, public health, rural development, participation process of various stakeholders, social inclusion
- Economic: job creation, local economy, regional economy, national economy, GDP, local businesses
- Environmental: air quality, biodiversity, environmental sustainability, water supply and demand, energy supply and demand

The figure below gives a global picture of this evaluation, with detailed results in the following section.

| Criteria \ Impact | Social | Economic | Environmental |
|------------------------------|--|---|--|
| High (4-5) | <ul style="list-style-type: none"> Rural development | <ul style="list-style-type: none"> Local economy Local businesses | <ul style="list-style-type: none"> Environmental sustainability |
| Medium (3) | <ul style="list-style-type: none"> Learning Public health Participation process | <ul style="list-style-type: none"> Job creation Regional economy | <ul style="list-style-type: none"> Energy supply Biodiversity Air quality |
| Low (1-2) | <ul style="list-style-type: none"> Social Inclusion | <ul style="list-style-type: none"> National economy | |
| Difficult to evaluate | <ul style="list-style-type: none"> Social norms for gender Social Inclusion | <ul style="list-style-type: none"> Gross Domestic Product | <ul style="list-style-type: none"> Water supply Energy supply |

The key points of this global picture are:

- **Social:** assumed **impact on social norms for gender (gender equality...) and social inclusion** of disadvantaged people require specific attention and improvement
- **Economic:** at a local to regional scale, the projects/initiative submitted have on average a quite highly positive assumed impact. However, **the larger the scale (national, international), the less impact they have.** Looking back at Figure 14, this is coherent with the fact that the geographical influence is still weak outside of the regional territory.
- **Environmental:** assumed impact criteria lack data to evaluate. **Water supply** concern is particularly missing in this evaluation, and globally in the projects addressed in the database. As it is a crucial issue in rural areas and agriculture, this point should require specific attention in the next step of LIVERUR project.

Social impact

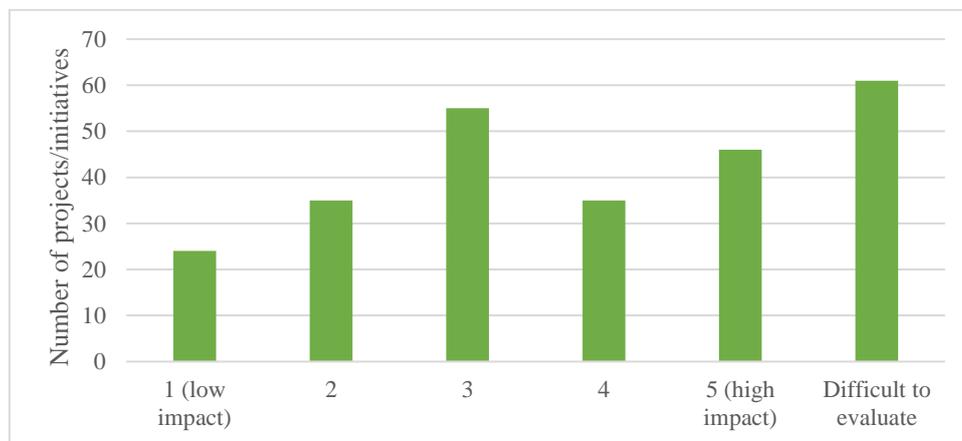


Figure 38: Impact on education (curriculum & learning)

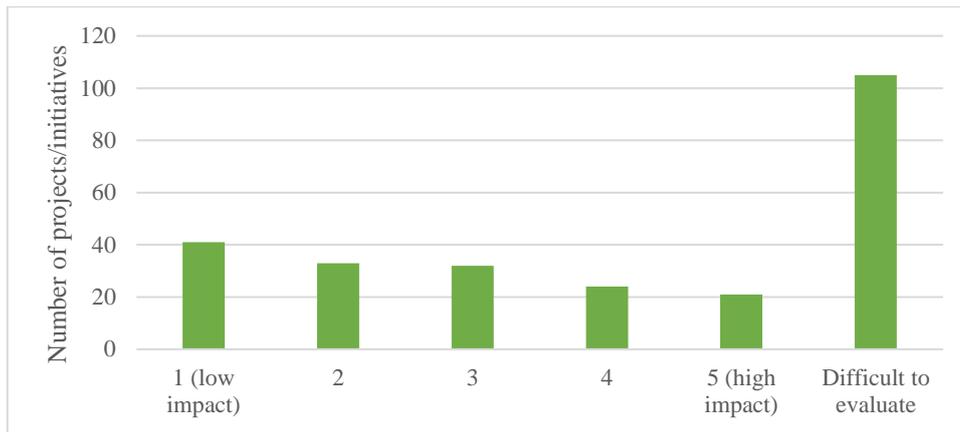


Figure 39: Impact on social norms for gender

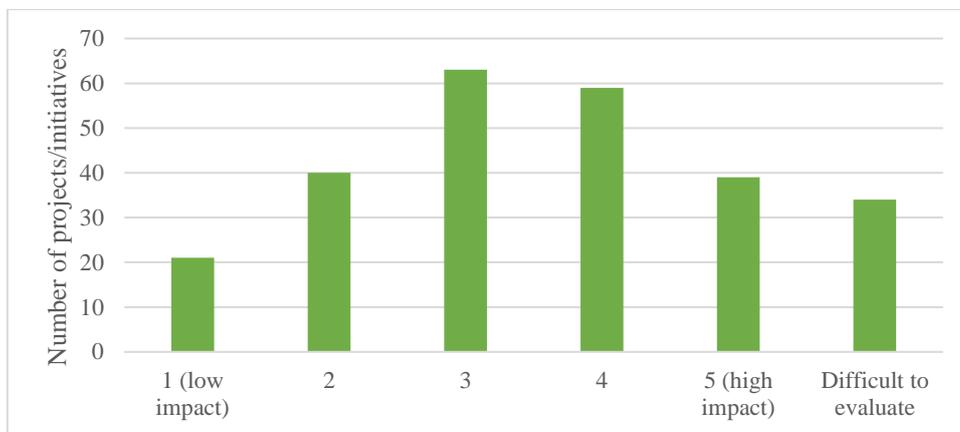


Figure 40: Impact on public health (air/water quality & human wellbeing)

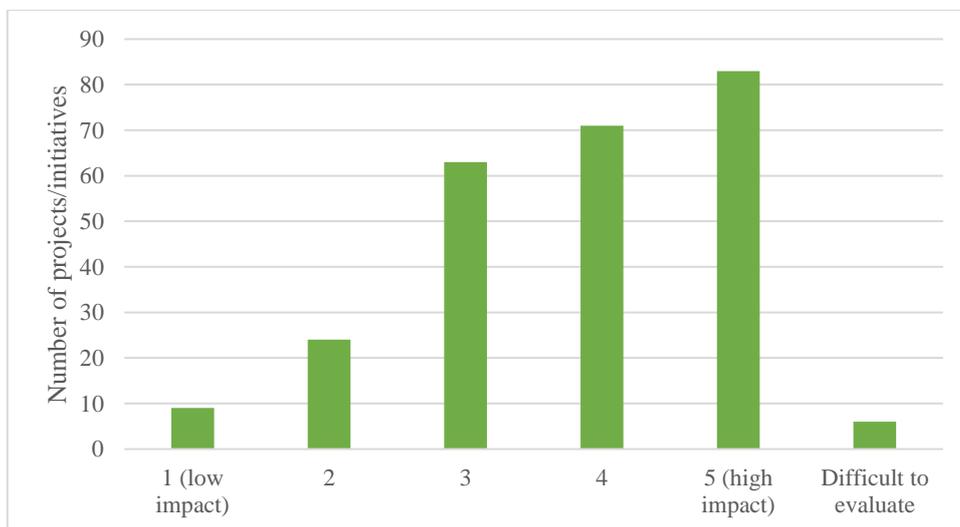


Figure 41: Impact on rural development (regional social situation)

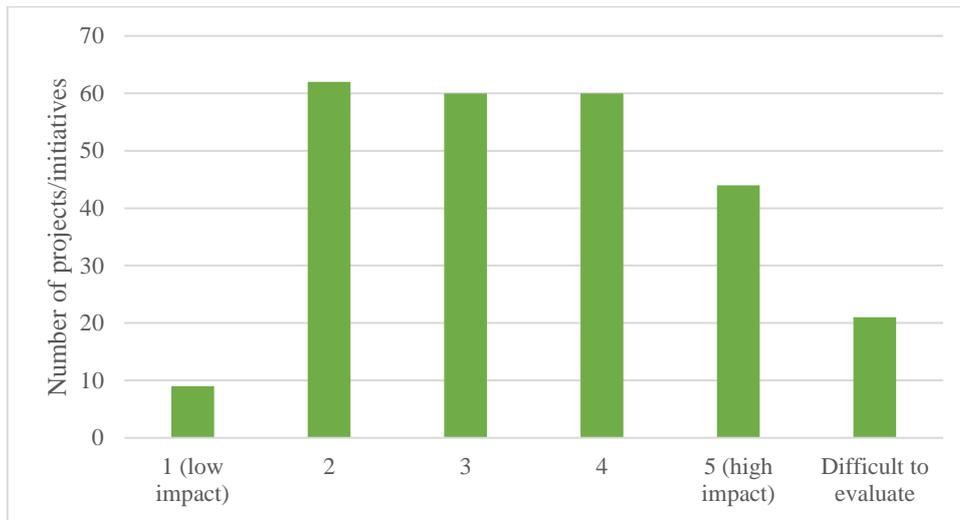


Figure 42: Impact on the participation process of various stakeholders

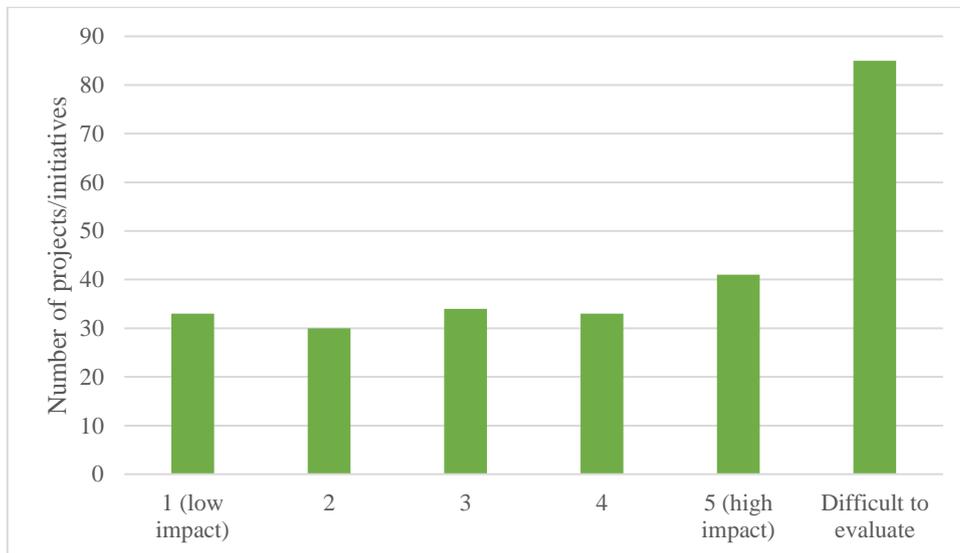


Figure 43: Impact on social inclusion (of disadvantaged groups on people)

What can be taken out of these 6 social impact criteria is that:

- On average, the impact on these social criteria were difficult to evaluate.
- The impact on learning is moderately positive.
- The impact on social norms for gender are very difficult to evaluate, but when it can be evaluated it is a moderate to low positive impact.
- The impact on public health is mostly quite positive.
- The impact on rural development is very positive.
- The impact on the participation process of the stakeholders is mostly positive.
- The impact on social inclusion of disadvantaged people is difficult to evaluate and not very positive.

To sum up, two social criteria require attention and improvement: impact on social norms for gender (gender equality...) and social inclusion of disadvantaged people.

Economic impact

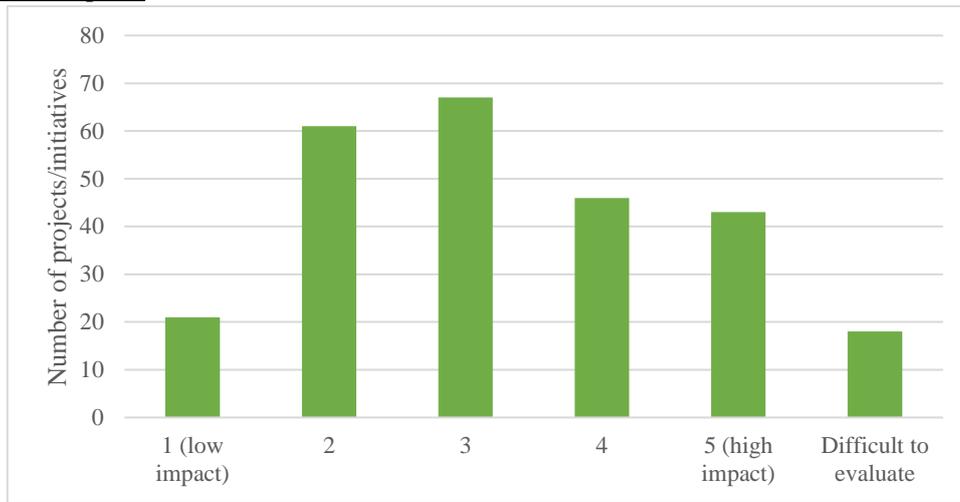


Figure 44: Impact on job creation

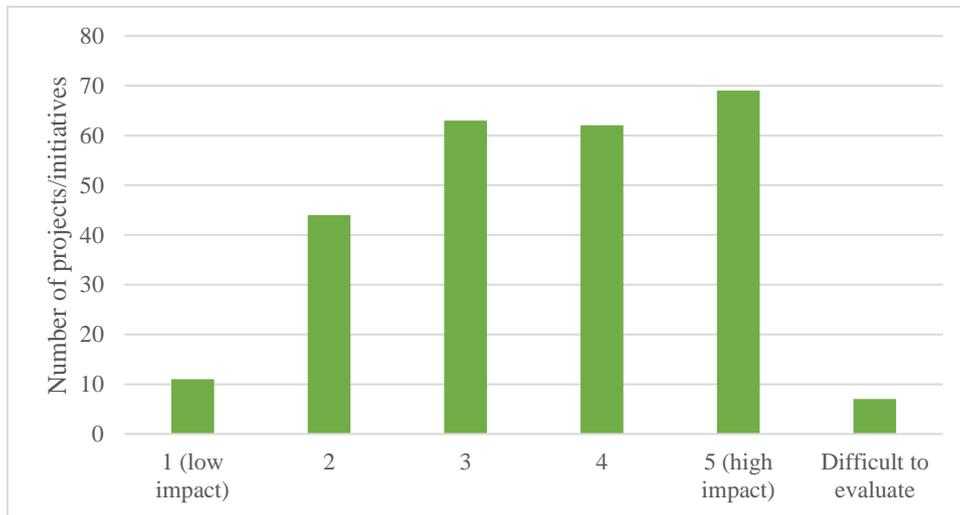


Figure 45: Impact on the local economy

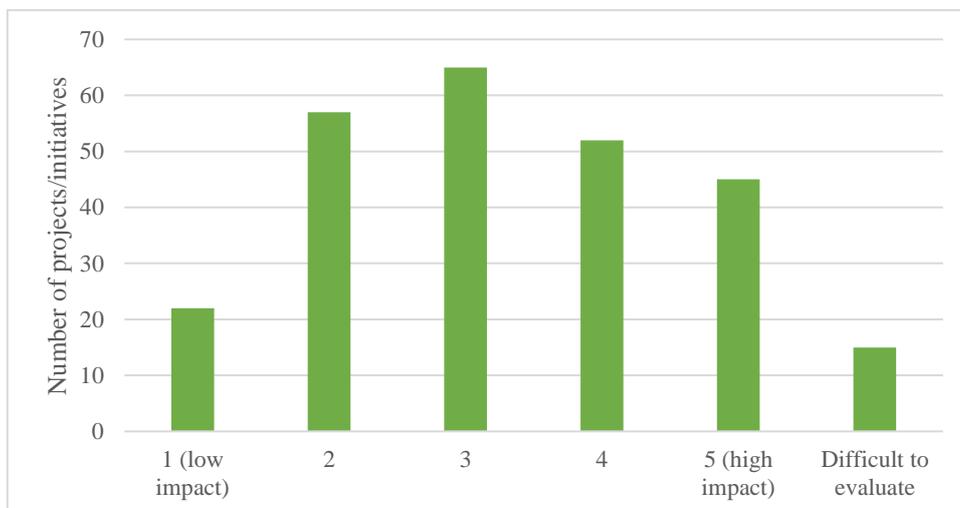


Figure 46: Impact on the regional economy

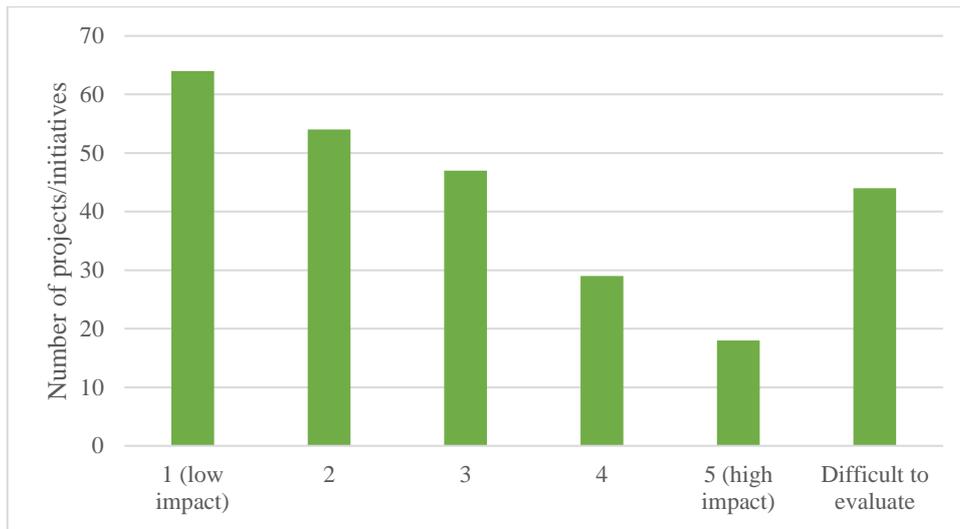


Figure 47: Impact on the national economy

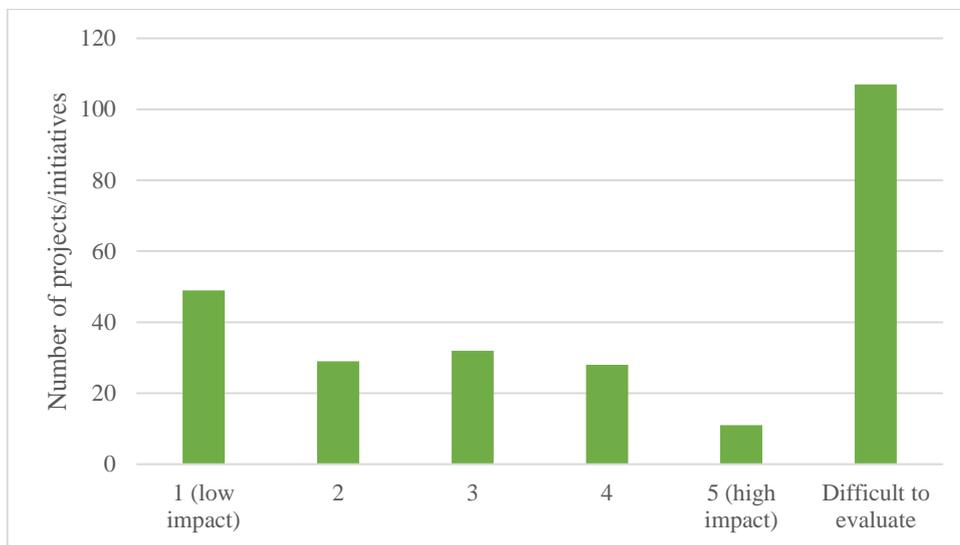


Figure 48: Impact on the GDP (Gross Domestic Product)

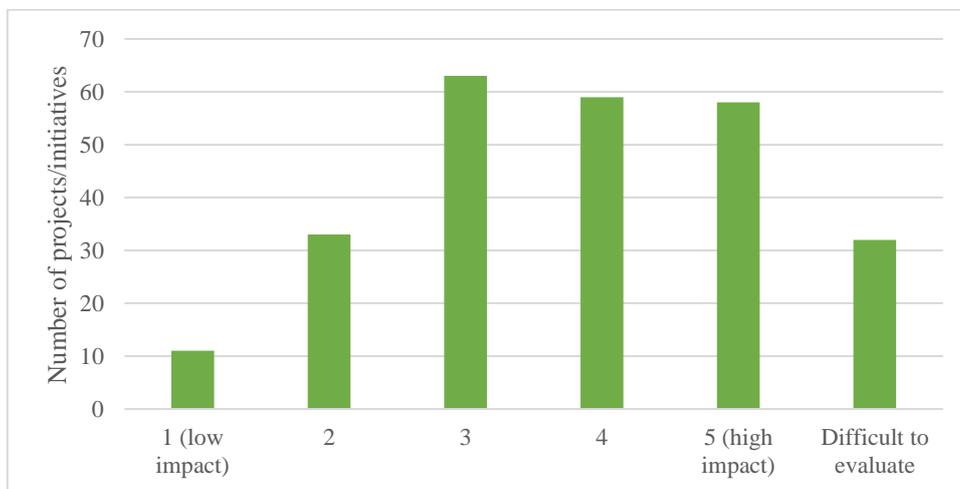


Figure 49: Impact on the local businesses

What can be taken out of these 6 economic impact criteria is that:

- The impact on job creation is moderately positive.
- The impact on the local economy is quite highly positive.
- The impact on the regional economy is also moderate to quite highly positive.
- The positive impact on the national economy is quite low.
- The impact on the GDP (Gross Domestic Product) is mostly hard to evaluate, and quite low.
- The impact on the local businesses is quite highly positive.

To sum up, at a local to regional scale, the projects/initiative submitted have on average a quite highly positive economic impact. However, the larger the geographical scale, the less economic impact they have. Looking back at Figure 14, this is coherent with the fact that the geographical influence is still weak outside of the national territory.

Environmental impact

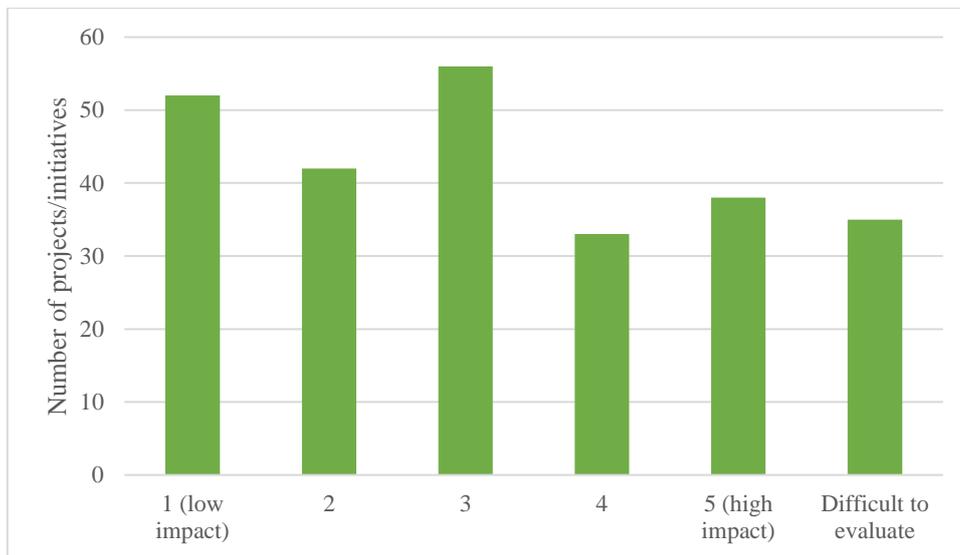


Figure 50: Impact on the air (emissions level, quality)

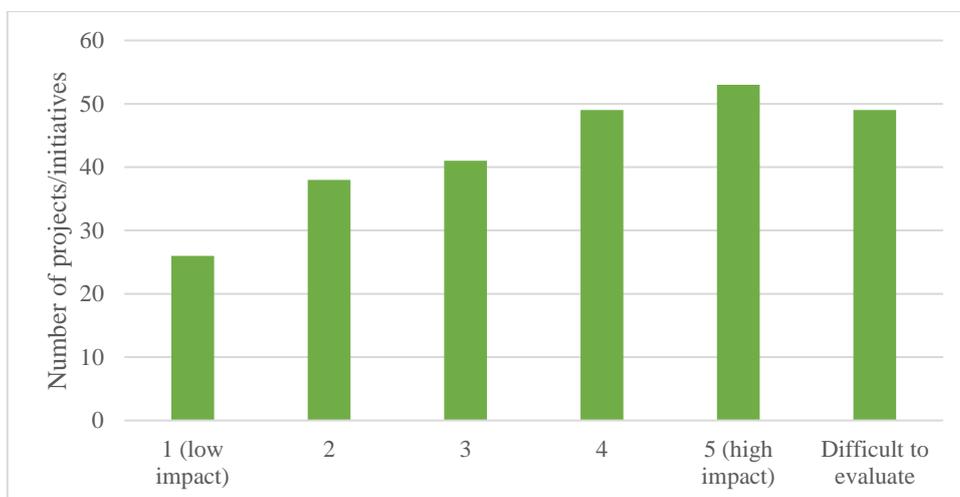


Figure 51: Impact on the biodiversity

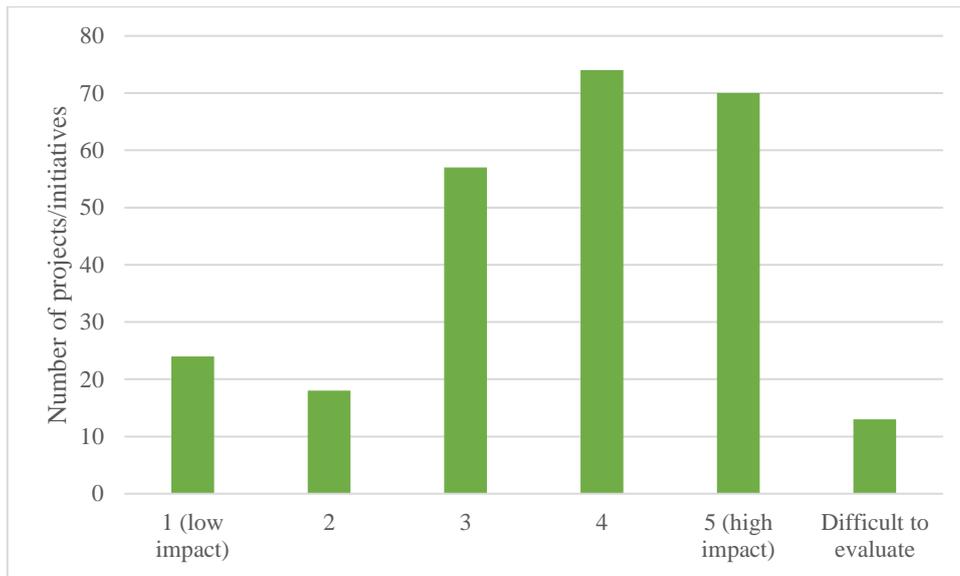


Figure 52: Impact on environmental sustainability

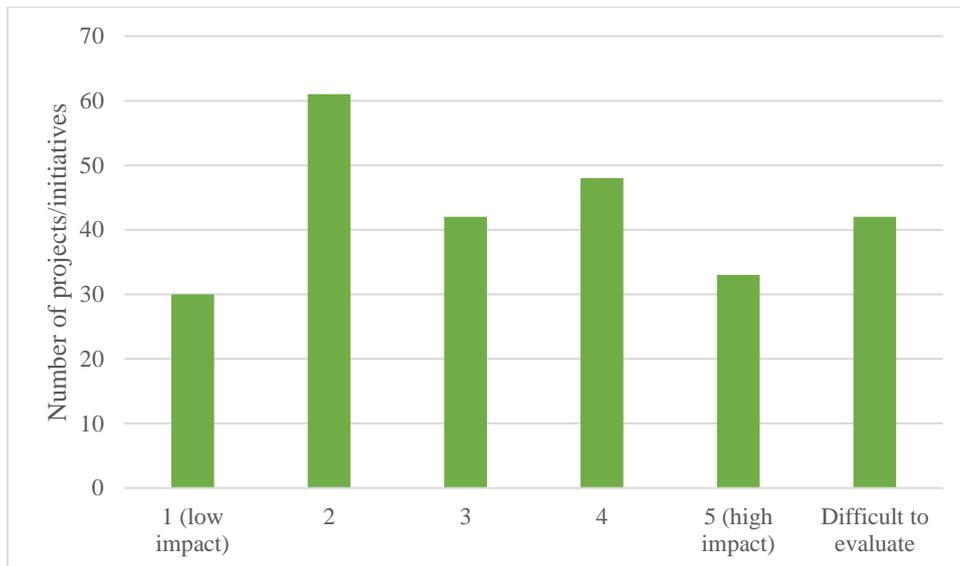


Figure 53: Impact on water supply and demand

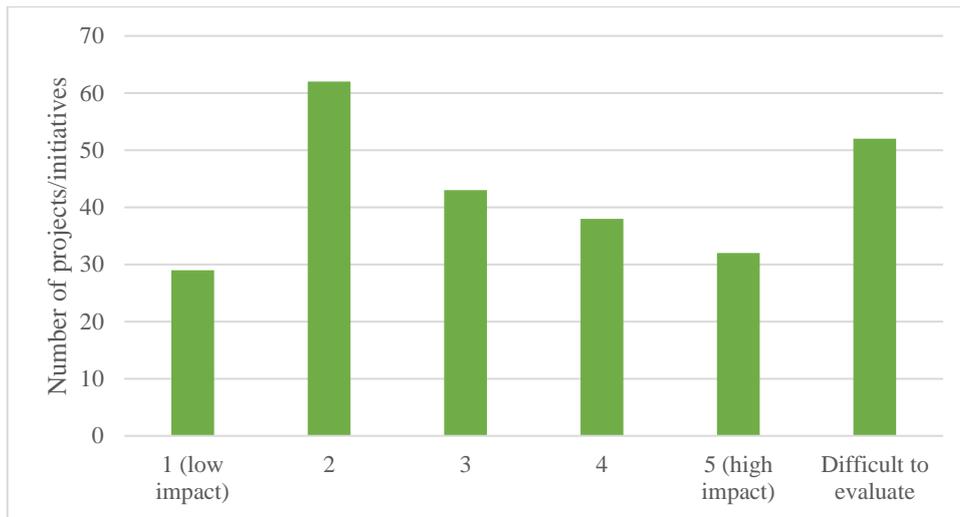


Figure 54: Impact on energy supply and demand

What can be taken out of these 5 economic impact criteria is that:

- On average, the impact on these environmental criteria were difficult to evaluate (except those on environmental sustainability).
- The impact on the air quality is quite moderately positive.
- The impact on biodiversity is mostly quite positive, even though it is difficult to evaluate.
- The impact on the environmental sustainability is very high.
- The impact on water supply and demand is difficult to evaluate but mostly quite positive.
- The impact on the energy supply and demand is also very difficult to evaluate but remains quite positive.

To sum up, these environmental impact criteria lack data to evaluate. However, when the data is available, it seems that the impact is mostly quite positive.

IV. EXISTING RURAL BUSINESS MODEL CONCEPTUALISATION

IV.1. Existing rural business models in EU & regional areas

IV.1.1. Conventional farm or mainstream farm

In 2015, agricultural, fishery and forestry activities represented 1.5% of the gross value added generated in EU28 and 4.8% of jobs. Agricultural land accounts for almost half of the EU area.

General description

The last Farm Structure Survey (2013) shows there were 10.8 million agricultural holdings within the EU-28, among which 59.8% had a standard output in excess of EUR 2000. These figures reflect a high diversity in terms of economic size and area across EU28 (illustrated in the figure below). In Romania and Hungary, almost 70% of farm holdings had a standard output below EUR 2000. At the contrary, in the Netherlands, Belgium, Luxembourg and Germany almost 99% of farm holdings exceed EUR 2000 and more than 2/3 exceed EUR 25 000 in France, Germany, Luxembourg, Belgium and the Netherlands.

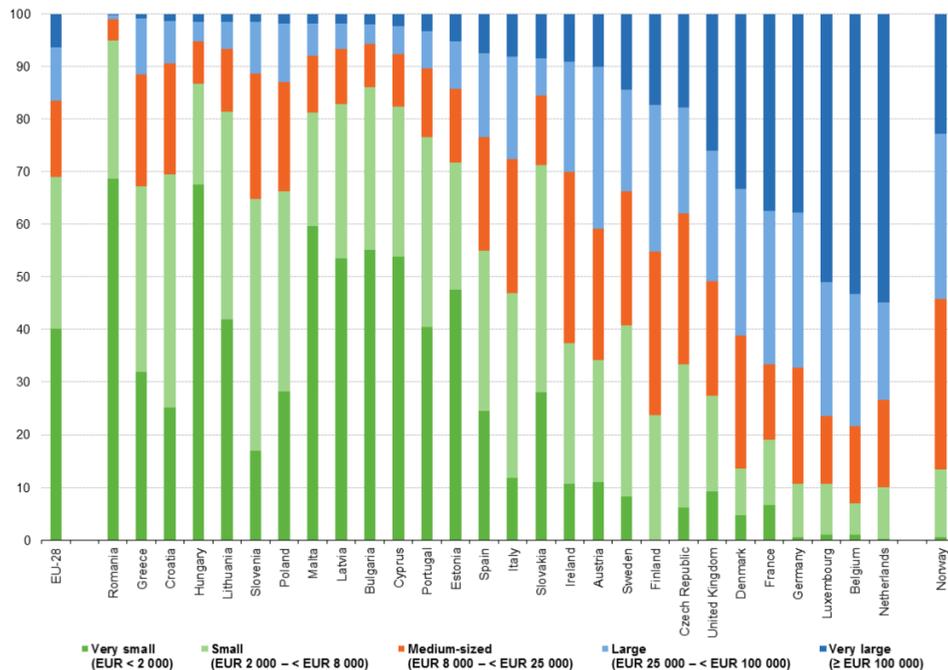


Figure 55: Share of total number of farm holdings, by economic size of farm, 2013 (% of total) (Source: Farm Structure Survey, 2013)

Very small and small farms accounted for more than two thirds (69.1%) of all farms in the EU-28, whereas their share of standard output was at 5% and their share of utilised agricultural areas was at 22%. By contrast, very large farm with a standard output of at least EUR 100 000 accounted for 6.3% of the total number of farms and for 71.4% of the agricultural standard output.

The map hereunder shows the average economic size of farms for NUTS level two regions. There were 35 regions across the EU-28 where the standard output per farm averaged at least EUR 200 000 (the Netherlands, Germany, Belgium, Denmark, France, the United Kingdom, the Czech Republic and Slovakia). At the other end of the range, there were 10 regions in the EU-28 where

farms on average generated EUR 5 000 or less (Romania, Greek island region of Ionia Nisia and the Polish region of Podkarpckie).

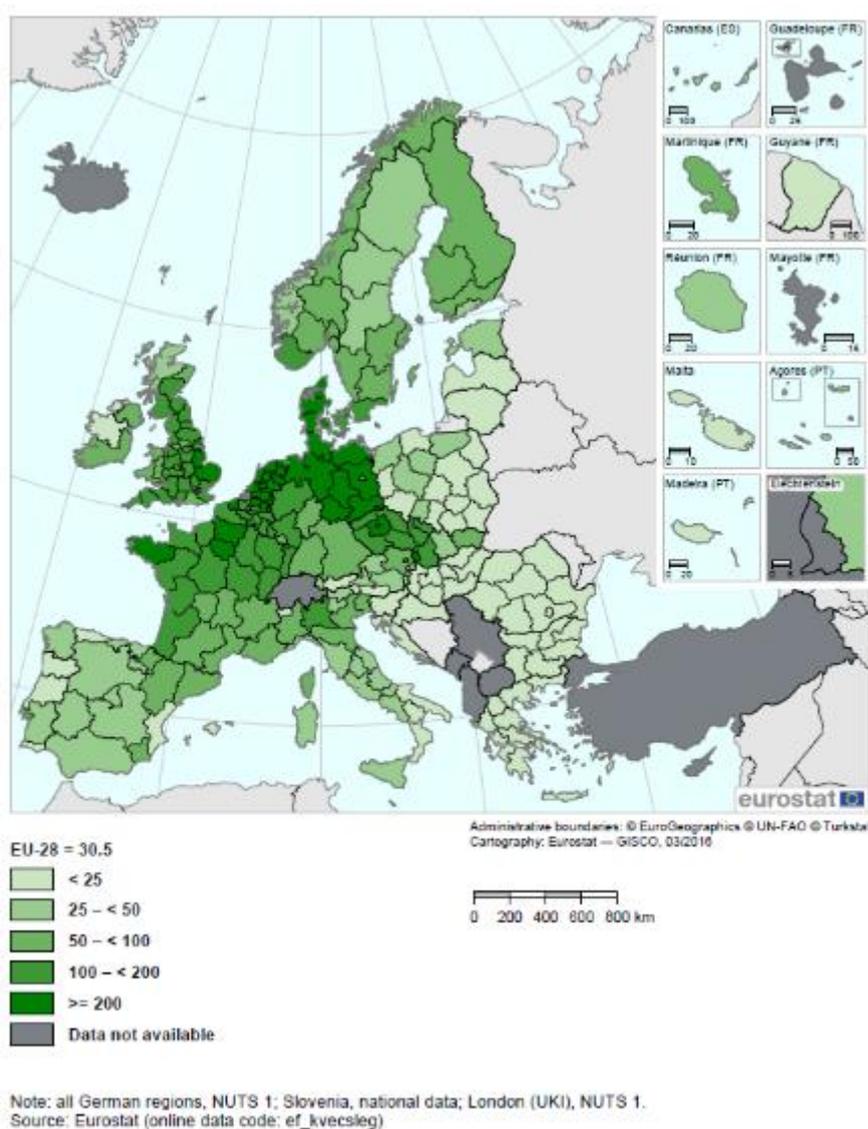


Figure 56: Average economic size of farm holdings, by NUTS 2 regions, 2013 (1000 EUR)

There were 22.2 million persons working in farm holdings in EU28 in 2013. It corresponds to 9.5 million AWUs (annual work units). The labour force is composed as following: 44% sole holders, 32% family labour and 24% non-family labour.

Business Model

Schematically, there are 3 kinds of business models among European farm holdings:

- Subsistence households where more than half of production is self-consumed. The part of production that is not self-consumed is mainly sell directly to consumers (on the farm, on markets ...). This model occurs primarily in Romania, Slovenia, Latvia and is pregnant in most of East and Southern Europe.

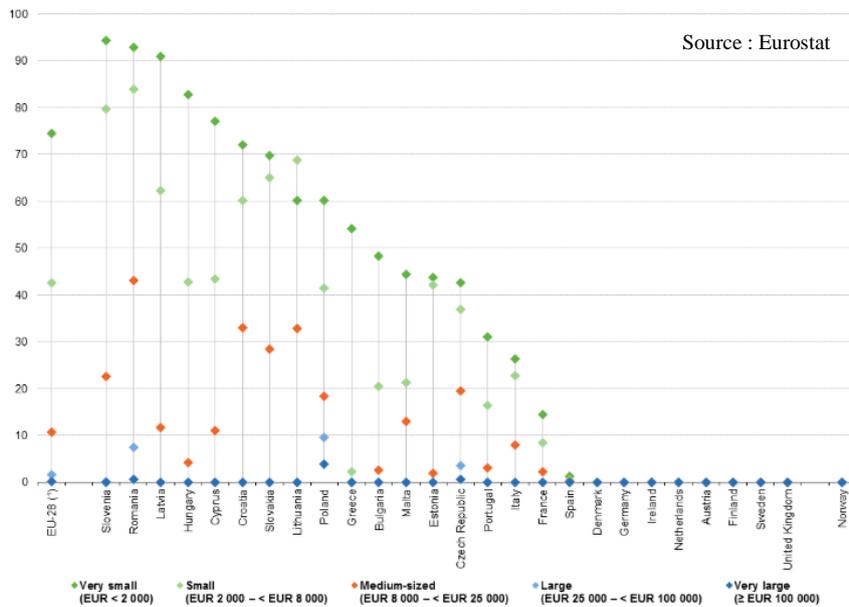


Figure 57: Share of farm holdings with more than half of production being self-consumed, by economic size of farm, 2013 (%).

- Farm household that sell their products to industries, cooperatives or dealers. After the first and second transformation, products are sell to wholesalers or medium and large retailers. This is the predominant business model for large and very large farms. The labour force is composed of family members (either sole holders or other family members) and non-family-members. In very large farm, family labour exceeds 50% in Greece, the United-Kingdom, the Netherlands, Malta, Finland, Austria, Luxembourg, Belgium and Ireland. At the contrary non family-labour accounted for more than 90% of the labour input of very large farms in Hungary, Bulgaria, Estonia, the Czech Republic, Romania and Slovakia. These farms had often a different ownership status (cooperatives or corporate farms).



Figure 58: Value chain of the conventional farm

- The third model is a mix between direct sales and long value chain.

Services provided

Beyond its role of producing food, agricultural activity has also several functions such as renewable natural resources management, landscape and biodiversity conservation, contribution to the socio-economic viability of rural areas.

Key resources

For crops activities, key resources are the soil, seeds, water, organic or chemical amendment, machineries, crop protection products; farm building, energy, agricultural services.



For livestock activities, key resources are the livestock, feeding, farm building, veterinary products, machineries, energy and agricultural services.

Challenges

Economic challenges:

The main economical challenge of agriculture activities is the poor profitability of the activity. According to Farm Accountancy Data Network (FADN), 10% to 17% of farms faced negative net income in the period 2004-2013; the large majority (54% to 60%) had a positive net income but below the opportunity costs and only 24% to 35% of farms had a positive farm net income higher than their estimated opportunity costs.

Another economical challenge is the weak bargaining power in the food chain.

Environmental challenges:

Although agricultural production delivers many ecosystems services (biodiversity, cultural ...), use of crop protection products or amendments could have caused soil or water pollution and soil depletion.

In addition, production systems, plants and animals have to adapt to a rapidly changing environment and climate.

Social challenges:

For several decades, the number of farms in the EU has been decreasing. Between 2005 and 2013, the total number of farms in the EU-28 (excluding Croatia) fell by 26.2%. The largest declines in farm numbers were recorded in Slovakia (-12.5% /year), Bulgaria (-8.9%/an), Poland (-6.6%/year), Italy (-6.5%/an), the Czech Republic (-5.8%/year), Latvia (-5.5%/an) and the United Kingdom (-5.3%/year). Farmers are fewer and social link is harder to keep.

The second big social challenge is the farm succession. It is very difficult for young people to take over big capital-intensive farms. On the other hand, farming lack of attractiveness for young people.

Trends

Technologies/innovations

Farms routinely uses sophisticated technologies such as robots, temperature and moisture sensors, aerial images and GPS technology. A part of holdings is engaged in precision agriculture. Environmental challenges combined to farm modernization put technologies at the heart of farm holdings.

Organisation

Farm holding are more and more capital-intensive with bigger and more expensive equipment. To face this trend, farmers created cooperatives to share equipment between several farms and to lower costs.

Farm holdings tend to diversify their activity and source of revenue: direct sale, quality products, transformation, agritourism, energy production, etc. the general idea is to going up in the value chain. These trends are presented in the following section.



There is more and more interest in valuing ecosystems services provided by agriculture and using the Common agricultural policy (CAP) budget or other funds to pay for them. This is an area of innovation which includes organisation, such as collaboration of farmers with new business models, or developing new label and sustainability schemes.

Regulations

The CAP has been launched in 1962. It aims to:

- support farmers and improve agricultural productivity, so that consumers have a stable supply of affordable food,
- ensure that European Union (EU) farmers can make a reasonable living,
- help tackling climate change and the sustainable management of natural resources
- maintain rural areas and landscapes across the EU;
- keep the rural economy alive promoting jobs in farming, agri-foods industries and associated sectors.

Significant reforms of the CAP have taken place in 1992, 2003, 2008 and 2013. The latest reform of the CAP is based on four new legislative instruments that aim to simplify the rules of the CAP:

- support for rural development, Regulation No 1305/2013;
- financing, management and monitoring of the CAP, Regulation No 1306/2013;
- direct payments, Regulation 1307/2013;
- measures linked to agricultural products, Regulation 1308/2013.

The next reform will occur in 2020. On 1 June 2018, the European Commission presented legislative proposals on the future of the CAP for the period after 2020. Most notably change are the reduction of budget, the definition of 9 objectives for the policy and the increasing subsidiarity for Member States. The 9 objectives of the future CAP are:

- to ensure a fair income to farmers;
- to increase competitiveness;
- to rebalance the power in the food chain;
- climate change action;
- environmental care;
- to preserve landscapes and biodiversity;
- to support generational renewal;
- vibrant rural areas;
- to protect food and health quality.

Regulations regarding environment, food safety, animal and plant health and animal welfare have been evolving continually. Consequently, farmers have to adapt their practices using technologies or knowledge.

IV.1.2. Diversified agriculture

General description

Many farm holdings tend to diversify their activity and source of revenue with the willingness to ensure more added value. In 2013, 7% of EU holding were diversified. The situation is deeply contrasted across Member States: while this share is less than 5% in Latvia, Malta, Romania,

Poland, Greece, Spain, Bulgaria, Lithuania and Cyprus, it reaches 60% in Denmark, 52% in Austria and 51% in Norway. In Italy, the diversification process has gain in importance with 10% in 2013 and 5% in 2010.

Forestry is the most important activity in Denmark and Austria with more than 40% of holdings practicing this activity and in Norway with 28%. Contractual work is widely developed across Europe: 15% to 22% in northern Europe (Denmark, Norway, Sweden and Finland); 5 to 12% in Austria, Germany, the Netherlands, Luxembourg, the United Kingdom, Belgium and Estonia.

| | Holding with other gainful activities | | | | | | | | |
|----------------|---------------------------------------|-------------|------------|----------------------------|-----------------------------|-------------|------------------|--------------|-------|
| | Total | Tourism | Handicraft | Processing of farm product | Renewable energy production | Aquaculture | Contractual work | Forestry | Other |
| Denmark | 60,1% | 1,4% | 3,4% | 1,6% | 2,9% | - | 17,9% | 41,7% | 15,0% |
| Austria | 51,7% | 7,1% | 0,5% | 6,6% | 5,5% | 0,2% | 5,8% | 41,8% | 1,6% |
| Norway | 51,1% | 5,3% | 1,0% | 2,1% | 1,1% | - | 22,9% | 27,6% | 5,2% |
| Sweden | 37,3% | 7,1% | 1,8% | 3,5% | 3,3% | 0,4% | 21,3% | - | 7,3% |
| Germany | 33,0% | 3,1% | 0,0% | 5,0% | 16,3% | 0,3% | 7,3% | 7,4% | 5,8% |
| Luxembourg | 30,3% | 3,8% | 0,5% | 6,3% | 10,6% | - | 12,0% | 2,9% | 7,2% |
| Finland | 28,5% | 3,1% | 0,5% | 1,4% | 2,7% | 0,1% | 16,7% | 2,5% | 9,7% |
| Netherlands | 26,1% | 4,1% | - | 1,5% | 1,8% | 0,0% | 6,0% | - | 18,7% |
| United Kingdom | 23,7% | 6,8% | 0,5% | 1,2% | 5,3% | 0,2% | 8,6% | 1,8% | 6,0% |
| Czech Republic | 18,6% | 2,4% | 0,3% | 4,5% | 1,7% | 0,3% | 8,5% | 3,1% | 0,6% |
| Slovenia | 16,1% | 1,0% | 0,2% | 2,7% | 0,1% | 0,1% | 1,2% | 12,0% | 0,1% |
| Belgium | 15,0% | 1,9% | 0,5% | 1,9% | 3,3% | 0,1% | 5,1% | 0,6% | 4,4% |
| Estonia | 14,5% | 1,4% | 0,8% | 0,9% | 0,1% | 0,1% | 5,0% | 4,5% | 3,8% |
| France | 10,5% | 2,4% | 0,1% | 3,8% | 0,7% | 0,0% | 2,6% | 0,1% | 1,4% |
| Croatia | 10,3% | 1,8% | 0,2% | 7,6% | 0,0% | 0,0% | 0,8% | - | 0,3% |
| Italy | 9,9% | 2,0% | 0,0% | 3,1% | 2,3% | 0,0% | 2,1% | 0,5% | 2,0% |
| Hungary | 9,2% | 0,4% | 0,0% | 5,1% | 0,0% | 0,1% | 2,7% | 0,6% | 1,7% |
| Ireland | 8,6% | 1,3% | 0,3% | 0,2% | 0,3% | 0,2% | 2,1% | 4,5% | 0,6% |
| Slovakia | 7,8% | 0,9% | 0,2% | 2,8% | 0,2% | 0,1% | 3,9% | 0,3% | 1,8% |
| Portugal | 5,8% | 0,3% | 0,0% | 0,6% | - | - | 0,6% | 4,3% | 0,1% |
| Latvia | 4,6% | 0,6% | 0,1% | 0,4% | 0,0% | 0,2% | 0,7% | 2,5% | 0,4% |
| Malta | 3,0% | - | - | 2,5% | - | - | 0,6% | - | - |
| Romania | 2,8% | 0,0% | 0,0% | 1,8% | 0,0% | 0,0% | 0,4% | - | 0,8% |
| Poland | 2,6% | 0,6% | 0,2% | 0,2% | 0,0% | 0,1% | 0,4% | 0,1% | 1,2% |
| Greece | 1,9% | 0,1% | 0,0% | 1,1% | 0,0% | 0,0% | 0,6% | 0,0% | 0,1% |
| Spain | 1,6% | 0,4% | 0,0% | 0,4% | 0,0% | 0,0% | 0,5% | 0,1% | 0,3% |
| Bulgaria | 1,2% | 0,0% | 0,0% | 0,1% | 0,0% | 0,0% | 0,8% | 0,0% | 0,1% |
| Lithuania | 1,1% | 0,2% | 0,1% | 0,1% | 0,0% | 0,0% | 0,1% | 0,2% | 0,4% |
| Cyprus | 0,7% | - | - | 0,6% | - | - | 0,1% | - | - |

Figure 59: Holding with other gainful activities (Source: Eurostat)

Agritourism

Beside the agricultural production, farmers propose accommodation (bed and breakfast, rural lodgings, farm campsite), catering (evening meals), leisure activities (pedagogical farms, sports, horse-riding, farm visits). Agritourism allows farmers to:

- promote and preserve their natural and build heritage;
- diversify their activity;
- generate an additional income;
- welcome and meet people from various backgrounds.

Agritourism helps to maintain the viability of active farms and rural communities. In Austria, Norway, Sweden and in the United Kingdom, 5 to 7% of farms have developed an agritourism activity.

Generally, some organisations help farmers to develop this activity. For example, “” bring together 6 500 farmers and proposes technical consulting, training and promotion activities.

For agritourists, this is an alternative to mass tourism.

Processing of farm products

Primary agricultural products are processed on the holding (meat processing, cheese, yoghurt or jam making, olive oil, cider, fruit juice, etc.). In many cases, these processed products are sold directly to consumers. In this case, the farmer is on the entire value chain, from agricultural production to sales. This positioning allows getting more added-value and require investments in processing equipment and storage of goods. It can also have a good impact on employment (family or external job).

5 to 7% of holding have developed processing activities on farm in Austria, Germany, Croatia, Hungary and Luxembourg.

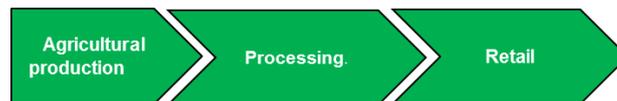


Figure 60: Value chain of farm products processing

Energy production

Farmers can produce renewable energy for their own consumption or for sale on the market: photovoltaic panels on the roofs, windmills, biogas production from organic waste (livestock manure) or crop residue. Energy production require investments in equipment (panels, windmills, digesters, ...) but also engineering and consulting services for the feasibility study, the development and the installation.

More than 5% of holding produce energy in Austria (5.5%), Germany (16.3%), Luxembourg (10.6%) and the United Kingdom (5.3%).

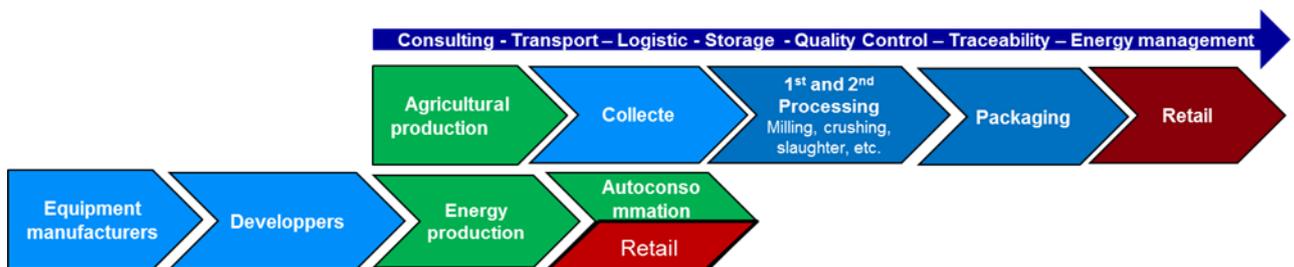


Figure 61: Value chain of energy production

Contractual work

Contractual work covers services provided outside of the farm using the means of the farm. They can be related to agriculture (ploughing, harvesting) or not (haulage work, maintenance of the landscape, clearing snow). The work can be carried out for another farmer, a local community or a company. It is a way to improve their return on investments made in farm equipment.

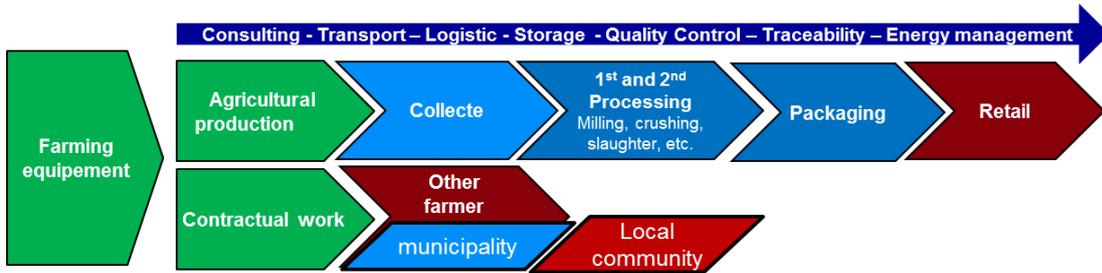


Figure 62: Value chain of contractual work

Regulation

The EU's rural development policy helps rural areas of the EU to meet the wide range of economic, environmental and social challenges of the 21st century. It is funded through the European Agricultural Fund for Rural Development (EAFRD) worth €100 billion from 2014-2020. There are 118 different rural development programmes (RPD) in the 28 Member States for this period. The current regulation does not provide a measure dedicated to farm diversification. However, Article 19 includes a measure entitled "Farm and business development", which targets, among other beneficiaries, farmers or members of a farm household who diversify into non-agricultural activities. Two support are available for farmers: a start-up aid for non-agricultural activities (up to €70 000) and a support for investments in the creation and development of non-agricultural activities.

IV.1.3. Food and beverages industry

General description

Contra-intuitively, in many European countries where the number of agricultural workers have plummeted in the last decades, industrial workers has come to be the most important active socio-professional group in rural areas. It is anyhow a very important one, many industries and industrial zones still being not located in urban nor intermediate areas but in predominantly rural territories.

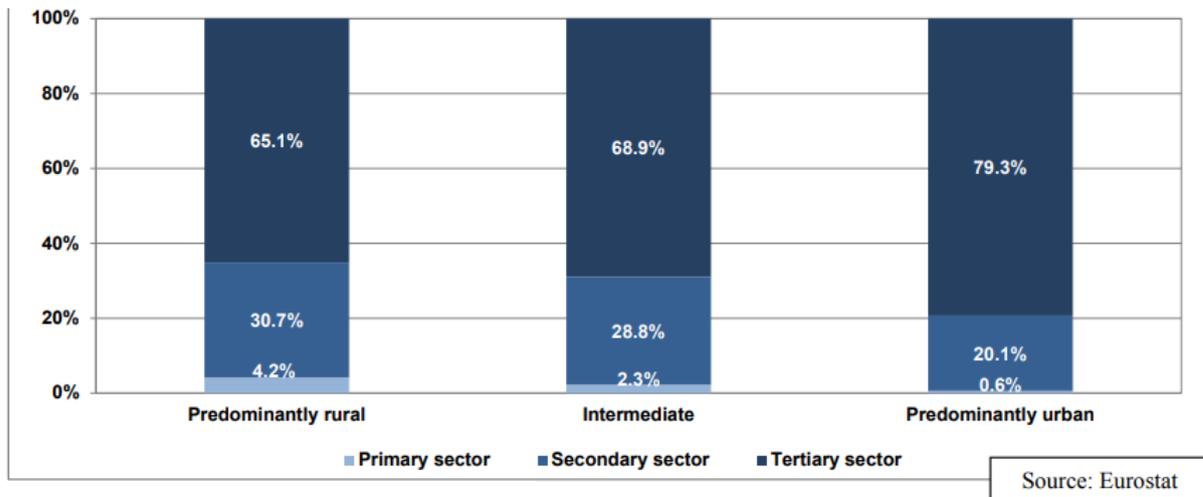


Figure 63: Gross value added by sector in the EU-28, 2014

This is especially true of the food and drink industry, which primarily deals with the transformation of rural primary productions.

| | Number of establishments | | | | | | Number of employees | | | | | |
|------------------------------|--------------------------|------------|------------|------------------|----------------------|--------------|---------------------|------------|------------|-----------------|----------------------|------------|
| | Urban centre | Peri-urban | Rural area | | | Total France | Urban centre | Peri-urban | Rural area | | | Total area |
| | | | Total | Employment areas | Other municipalities | | | | Total | Employment area | Other municipalities | |
| Total activity | 67.5 | 15.1 | 17.4 | 6.9 | 10.5 | 100 | 74.5 | 12.4 | 13.1 | 6.2 | 6.9 | 100 |
| Consumer goods industry | 72.5 | 12.3 | 15.2 | 6.4 | 8.8 | 100 | 69.9 | 11.5 | 18.6 | 9.2 | 9.4 | 100 |
| Energy | 65.0 | 10.9 | 24.1 | 11.1 | 13.0 | 100 | 84.9 | 3.9 | 11.3 | 7.1 | 4.2 | 100 |
| Capital goods industry | 63.8 | 19.8 | 16.4 | 6.5 | 9.9 | 100 | 73.4 | 14.3 | 12.3 | 6.2 | 6.1 | 100 |
| Automotive industry | 55.1 | 24.1 | 20.8 | 7.4 | 13.4 | 100 | 75.0 | 17.0 | 8.0 | 4.2 | 3.8 | 100 |
| Agricultural & food industry | 53.5 | 18.8 | 27.7 | 9.5 | 18.2 | 100 | 50.9 | 18.5 | 30.6 | 12.8 | 17.7 | 100 |
| Intermediate goods industry | 53.3 | 22.9 | 23.8 | 8.7 | 15.1 | 100 | 57.3 | 19.4 | 23.3 | 11.3 | 12.0 | 100 |
| Industries | 59.6 | 18.7 | 21.7 | 8.3 | 13.7 | 100 | 64.5 | 15.9 | 19.6 | 9.4 | 10.2 | 100 |

Figure 64: distribution of establishments and their employees according to industrial activities and area type (% of total number of establishments or employees from each activity). Source: Insee – ICS 2002

As an example of the weight of food industry in rural areas, 30,6% of French food industry workers were located in rural areas in 2002 (whereas same figure for all industry sectors was 19,6%)

Activities

Agro-food industry gathers tens of different NACE codes, corresponding to all sorts of plant and animal products' transformation activities, mainly for human or animal feeding use. This includes low transformation processes such as cleaning and packaging fresh products, as well as far more complex, energy consuming or workforce intensive processes. Depending on the indicators, main

subsectors are meat industries, drink industries, bakery and farinaceous products, oils and fats, grain mill, starch products...

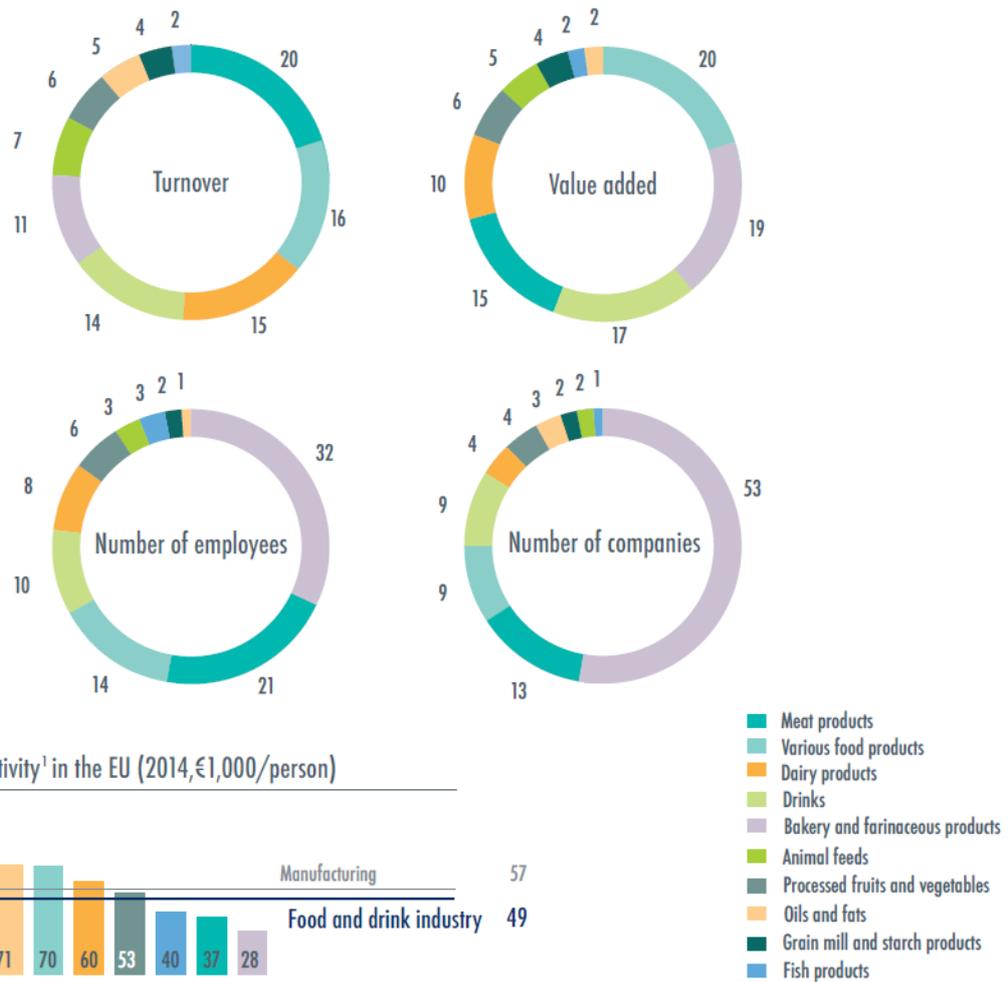


Figure 65: Turnover, value added, number of employees and companies in EU food and drink industry sectors (2014, %)

Structures and status

According to FoodDrink Europe in 2017, the mean number of jobs provided by food industry plants in EU is 15. The typical status is that of a limited liability company, belonging or not to a large agro-food firm. Around half of the food industry activity is within SMEs, which is a higher share than in most other industrial sectors.

Contribution of SMEs and large companies to the EU food and drink industry (2014,%)

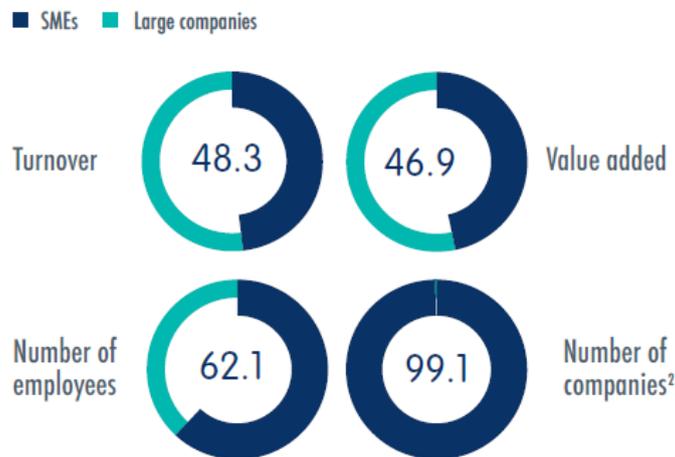


Figure 66: contribution of SMEs and large companies to the EU food and drink industry (2014,%) (Source: Eurostat)

Statistics

The food and drink industry is the EU's biggest manufacturing sector in terms of jobs (>4M, 15% of jobs in industry) and value added (>1000B€, weighting approximately the same as agriculture).

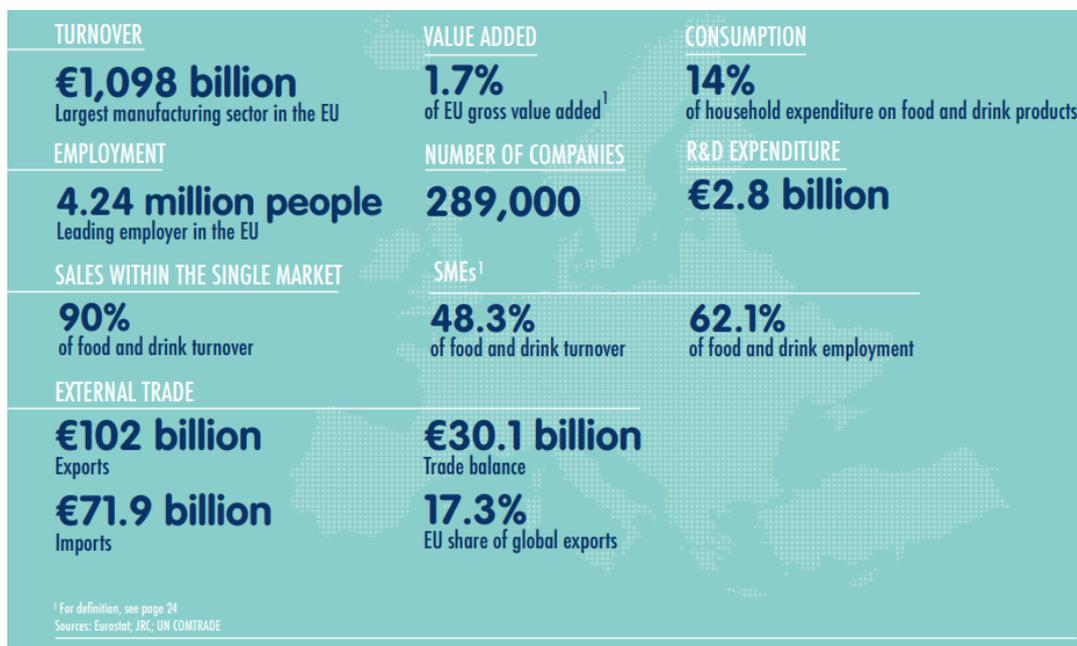


Figure 67: EU food and drink industry figures (Source: Eurostat)

Contribution of the food and drink industry to the EU economy (2014,%)

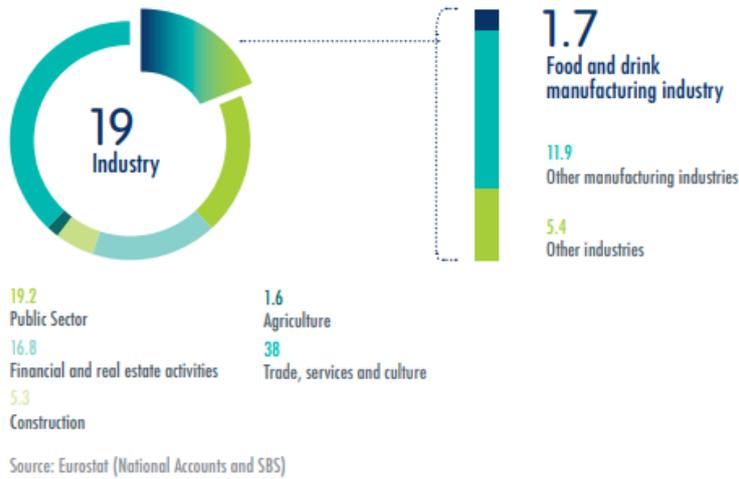


Figure 68: Contribution of the food and drink industry to the EU economy (2014, %)

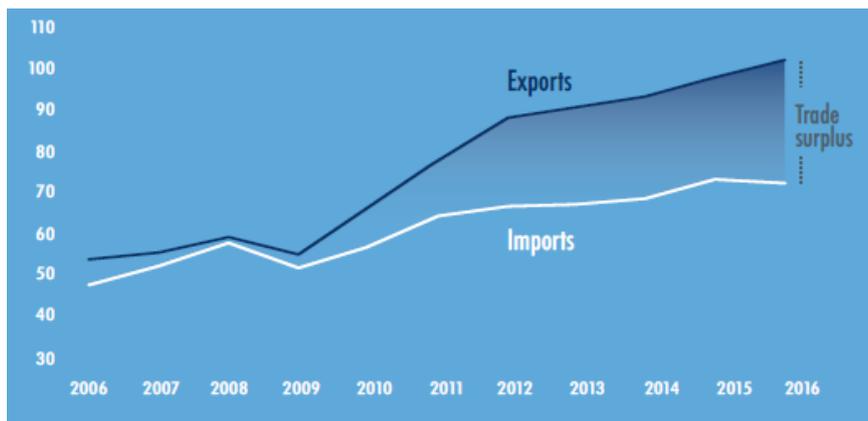


Figure 69: EU food and drink trade (€ billion) (Source: Eurostat)

Moreover, it is one of the most resilient activities, on a continuous long-term growth trend.

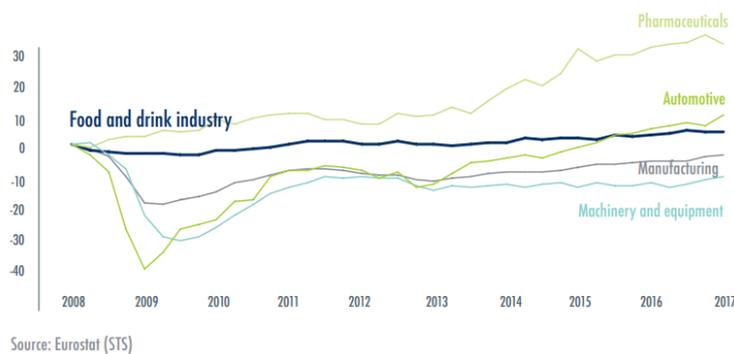


Figure 70: Production in the EU manufacturing industry (% change relative to the first quarter of 2008)

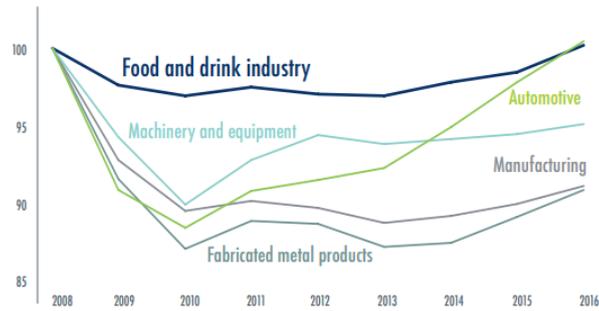


Figure 71: Employment in the EU manufacturing industry (index, 2008=100). Source: Eurostat

Geographic distribution

| | Employment ranking in manufacturing | Turnover (€ billion) | Value added (€ billion) | Number of employees (1,000) | Number of companies |
|-----------------------|-------------------------------------|----------------------|-------------------------|-----------------------------|---------------------|
| Austria | 5 | 22.7 | 5.5 | 83.3 | 3,893 |
| Belgium | 1 | 48.6 | 8.1 | 88.5 | 4,452 |
| Bulgaria | 2 | 5.2 | 1.0 | 95.6 | 6,182 |
| Croatia | 1 | 5.3 | 1.2 | 61.0 | 3,256 |
| Czech Republic | 4 | 13.3 | 2.7 | 115.4 | 9,157 |
| Denmark | 2 | 25.4 | 4.5 | 61.6 | 1,607 |
| Estonia | 2 | 1.8 | 0.4 | 15.4 | 575 |
| Finland | 4 | 10.9 | 2.6 | 37.6 | 1,846 |
| France | 1 | 179.9 | 45.0 | 427.2 | 57,290 |
| Germany ² | 3 | 168.6 | 36.7 | 569.2 | 5,812 |
| Greece ³ | 1 | 14.2 | 2.8 | 87.2 | 1,225 |
| Hungary | 1 | 11.5 | 2.0 | 106.6 | 6,812 |
| Ireland | 1 | 27.1 | - | 47.3 | 1,583 |
| Italy | 2 | 132.0 | 24.2 | 427.0 | 56,315 |
| Latvia | 1 | 1.7 | 0.4 | 23.7 | 1,120 |
| Lithuania | 1 | 4.0 | 0.8 | 44.1 | 1,609 |
| Netherlands | 1 | 70.0 | 11.3 | 128.6 | 6,065 |
| Poland | 1 | 55.6 | 9.9 | 417.5 | 14,534 |
| Portugal | 1 | 15.3 | 2.9 | 107.5 | 10,996 |
| Romania | 1 | 12.0 | - | 180.8 | 8,826 |
| Slovakia ² | 3 | 4.0 | 0.8 | 29.3 | 278 |
| Slovenia | 3 | 2.2 | 0.5 | 16.5 | 2,258 |
| Spain | 1 | 104.2 | 19.3 | 349.2 | 26,016 |
| Sweden | 4 | 18.1 | 4.5 | 50.5 | 4,240 |
| United Kingdom | 1 | 131.6 | 38.9 | 418.2 | 6,620 |

Figure 72: Food and drink industry data as published by FoodDrinkEurope National Federations (2015)

The food and drink industry is an important business sector and job provider in all European countries, the first manufacturing sector in many countries.

Business model

Services offered / value proposition

The main output of the food and drink industry is to produce goods for the human and animal feeding. Not only for the European markets, since EU28 remains the world's top trader of agro-food products.

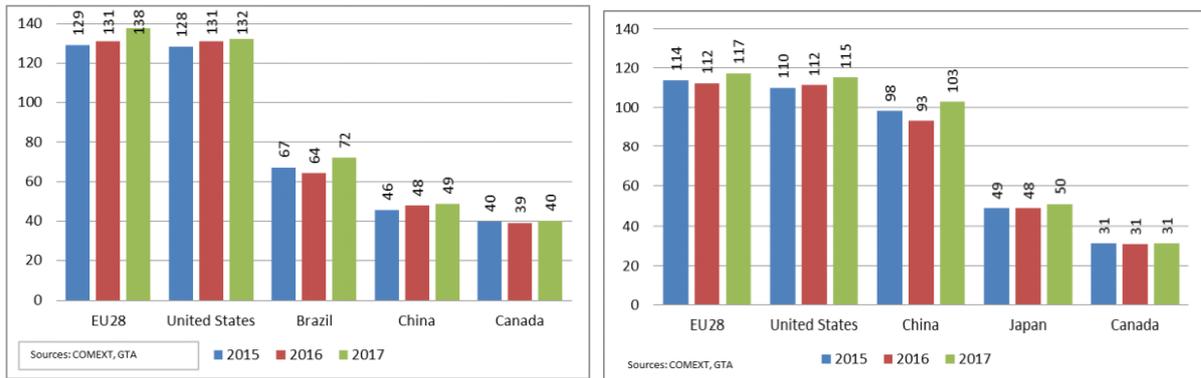


Figure 74: Top world agri-food exporters (€ billion) Figure 73: Top world agri-food importers (€ billion)

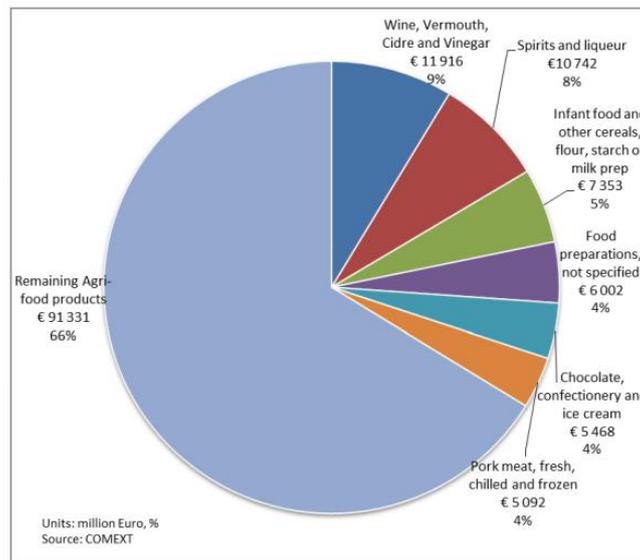


Figure 75: Composition of EU agri-food exports in 2017

Source: Monitoring agri-trade policy – Map 2018-1, EC 2018

Another service of the food and drink industry, especially in rural areas, is delivered to local ecosystems. Food industries are quite often a local customer for agriculture products, thus anchoring added-value into rural territories, directly and indirectly (through suppliers) creating jobs in small and medium settlements.

Last, bio-based products or by-products of these industries may address non-food markets, including energy production (e.g. biomass from coffee grounds) or bio-based resources for construction, textile or other sorts of production.

Revenue streams

Most – if not all – revenues for the food and drink industry come from sales of products. The distribution chain mainly goes through wholesale circuits and main retail channels. Yet as for agricultural activities, alternative distribution paths are developing that are based on short circuits

(e.g. plant shops), quality labels and tourism (e.g. museums dedicated to an industry product such as chocolate and other sweets, spirits, cakes, etc.).

Value chains

The main suppliers of the food and drink industries are the collecting structures of agricultural products, be they cooperative structures or other sorts of traders of agricultural products. Since food and drink industries in rural areas are quite often historic players on their territory, these supplies are often quite local. An historic trend however has been to consider supplies from global markets, weakening local ecosystems.

Downstream, agri-food industries are connected with market through all sorts of commercialization systems, mainly through wholesale traders. In terms of distribution food products are specific in the sense that they are fragile and perishable, so that the quality of the supply chain and transport infrastructure – in terms of speed, protection against harmful thermal and other conditions, possibly of refrigeration – is a major issue for these industries to efficiently connect to markets.

Last, and just as any other industrial activities, food and drink industries are supported with a large set of other industrial activities, including machinery supply (ovens, crushers, boilers, heat systems...) and many sorts of industrial services (product/process design and optimization, cleaning and maintenance, certification, product tasting panels, etc.).

Key resources

As stated above, the access to industrial services and the quality of the logistics and transport infrastructure are key issues for these industries. Considering the rural location, other infrastructures such as energy and water supply or telecommunications are also an important enabler for a sustainable and competitive production, as is the access to a sufficiently trained workforce.



Figure 76: Labels for protected geographical indications

Quality labels such as protected geographical indications or environmental and social responsibility may also be important assets supporting the business models of the food and drink industries.

Challenges

Market

Considering the number of products, the relation of food consumption with European national and regional cultures and the intimate meaning of alimentation within lifestyle choices of citizens, market trends within the food sector are necessarily manifold.

FoodDrinkEurope identifies the following 15 heavy trends, groups into five families:

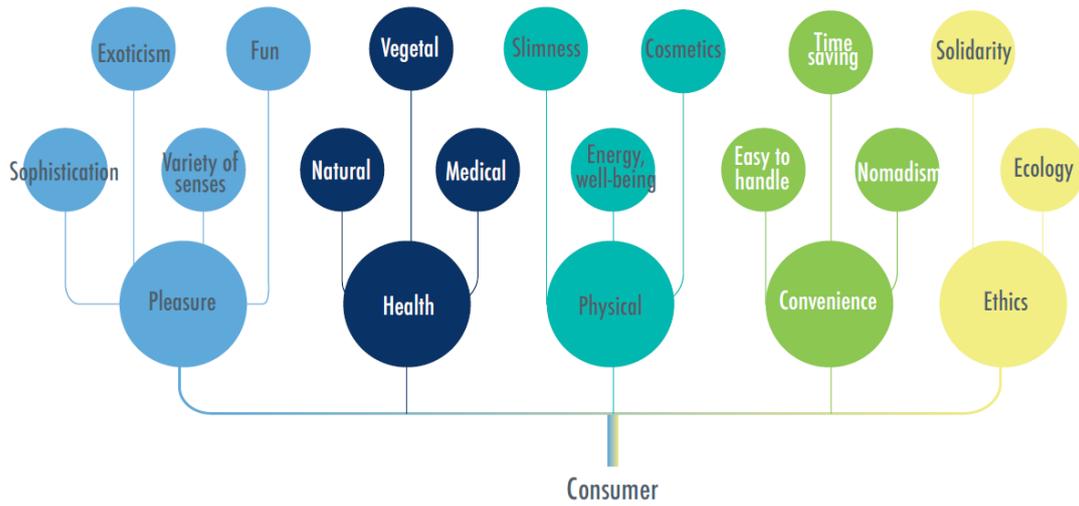
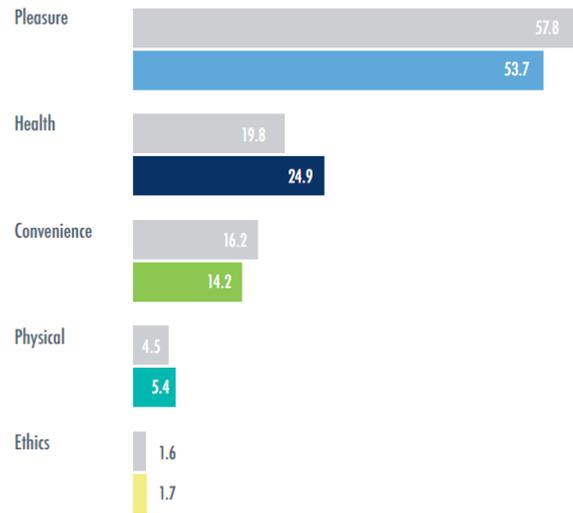


Figure 77: Food innovation trends (Source: Eurostat)

The relative importance of each driver may vary in time but a clear point is the challenges for this industry run all over the industrial chain, from raw matters sourcing to product packaging, traceability, taste and nutritive properties, going through process environmental footprint reduction, logistics optimization, etc.

An overall market trend to be highlighted is the fact that economic development all over the world goes with a shift from basic alimentary products to more transformed, packaged and informed consumption. The global market for food industry products is relentlessly increasing, and global demographic trends with projected 15 billion humans on earth in 2050 highlight the growing need for a further growth of adequate food and drink production. Up to now, the European players have been among the most successful in the world to address such demand.



Source: XTC World Innovation Panorama 2017

Figure 78: Drivers of innovation in Europe (2015-2016, %)

Food innovation trends in Europe (2015-2016,%)

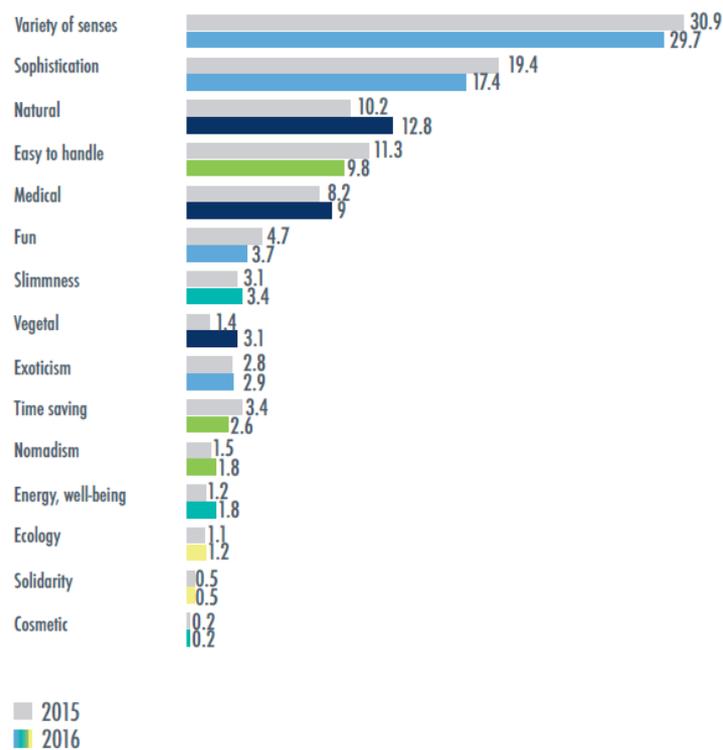


Figure 79: Food innovation trends in Europe (2015-2016, %) (Source: XTC World Innovation Panorama 2017)

Environmental

The most critical environmental challenges for the agri-food industries are energy and water consumption.

Energy consumption

Energy is a major issue since temperature is a key factor in food processing, be it generation of cold for food conservation or heat for cooking, drying, roasting, sterilization, boiling, hydrogenation... All aspects included, the food processing and distribution represents around half of the total agri-food activities energy consumption, and subsequently a significant share of human GHG emissions.

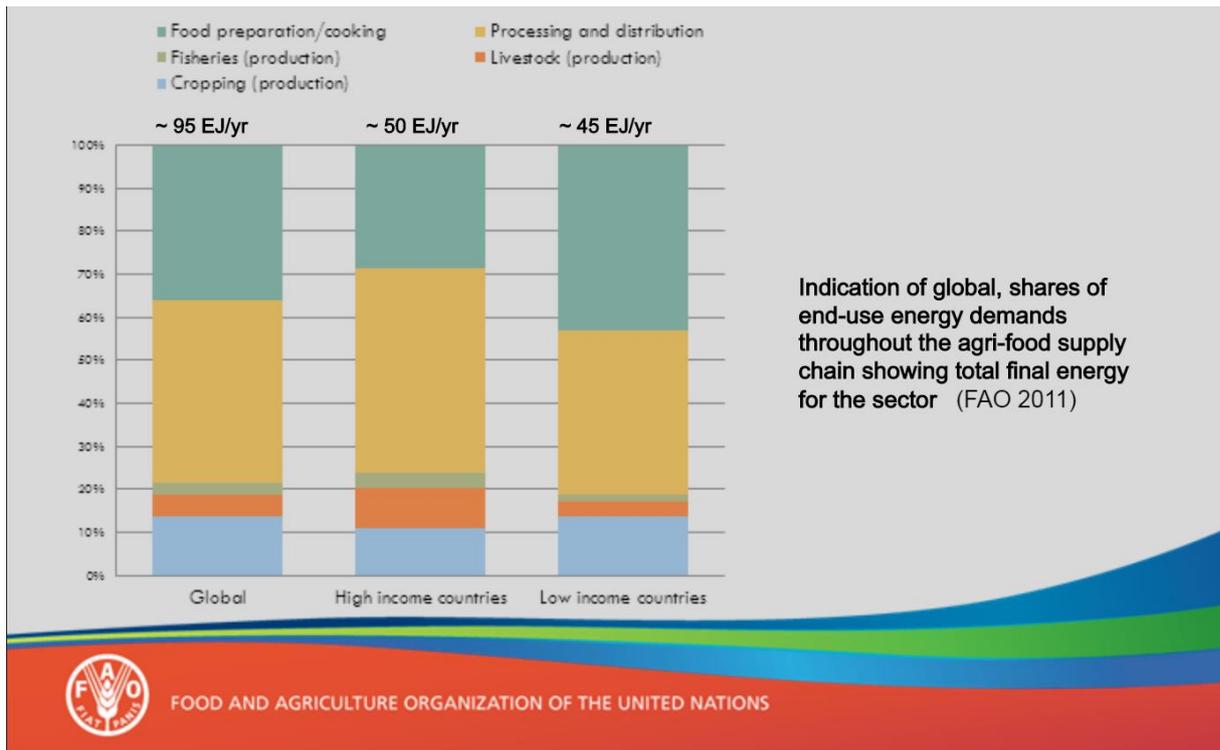


Figure 80: Energy demand in the agri-food sector

Water consumption

Water consumption is the other major environmental issue faced by the food and drink industry. Be it for cleaning, eating or many other processes, this sectors uses high volumes of water. Europe as a whole is not a world region where the pressure on this essential resource is critical yet, but in some European regions it is nevertheless a growing concern. Moreover, water use is also a matter of effluents management, used water containing many residues – from the process itself or from the food resource, e.g. pesticides – that need to be properly processed so as to safely deliver it back to the environment. With progress being achieved in understanding ecotoxicology mechanisms, this is a major and growing issue.

Sanitary issues

In parallel to growing concerns about environment pollution, a clear trend towards increasing requirements on food safety and healthiness has major consequences on food industries. Substances bans are now a very clear trend that the agro-food industry needs to consider. Because of regulation evolutions (such as with GMOs or glyphosate) or based on stakeholders voluntary choice to avoid or limit the use of unhealthy/environmentally and/or socially doubtful / controversial substances (e.g. hydrogenated fats, palm oil, paraben, etc.). In this case the ban can be a direct choice from the industry – as a commercial asset for its products – or implemented under pressure from consumers, association and distributors.



Waste reduction and reuse

Another environmental issue, less stringent yet but growing and with various regulatory attempts, is raised around reducing waste. As for other industry sectors, the circular economy concerns and concepts are being spread in the agri-food sector, pushing for innovation in packaging, traceability, valorisation of by-products, optimization of processes, etc.

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Social

Localized production

Many agri-food products are representative of a given territory, possibly part of its cultural identity, and this territorial anchoring is an important driver for consumer choice and therefore for the marketing arguments taken by producers and distributors. An issue there is trust on the fact that production is really done on the given territory with a geographically acceptable product sourcing. One point here is on potentially misleading labelling of products. Another is on the balance to be made by industries for their supply between market competition and choices that consumers can consider reasonable (including because of transport environmental footprint). These two points are faced by companies and to be considered case by case, but the overall result of numerous affairs in this domain is an overall mistrust of citizens with a potential harmful effect far above the sole food and drink industry issues.

Working conditions

The food and drink industry includes many different realities, but some specificities make its production activities potentially difficult in terms of working, with resulting issues on workers' health, motivation and staff turnover. This is particularly true in the meat processing sector, where the production chains are known to create musculoskeletal problems and other health issues, but also in many subsectors that have strong handling constraints, eventually under cold constraints. Gesture assistance, logistics automation and other technology and/or process improvements are expected to tackle these issues, but in a sector accounting with swarms of SMEs the access to capital for investing in these solutions is a barrier to be overcome.

Animal well-being

Another “social” issue for a part of the food industry – common with breeding activities – is the growing sensitivity of society towards animal well-being. This is a long term trend.

Trends

Need for a continuous upgrade of the production tool and logistic chain

Being industrial activities, the economic sustainability of food and drink industries is highly dependent on the status of their production tool. Process integration, chain automation precision and monitoring, gesture assistance, handling automation, product traceability, pathogen detection... technological needs are important and the food and drink industry is a first line target of industry digitalization and modernization plans in European member states and regions. High volume plants are fully engaged in this movement, but an issue is that the food and drink sector –



especially in rural territories - is widely constituted of SMEs, often territorially anchored as addressed here above, not necessarily able to engage in heavy investments.

Innovation to face growing society vigilance and regulation constraints

Be it for sanitary reasons, environment protection or social concerns, society is more and more concerned by the way food is produced, and this comes back to industries in the form of consumer requirements as well as of more stringent regulations. Answers need to come from different forms of innovation (new products, alternative supplies, better processes, news distribution channels...).

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Expectations on supportive infrastructure and dynamic context

Under growing constraints and expectations, with the need for being competitive enough to support investments, rural food and drink industries need to be supported by efficient infrastructures and a favourable environment. Transport infrastructure is a key for efficient logistic chains, especially since European food and drink products are important exporters and need to be well connected to global business chains. Skills are also important if production tools are to be modernized, and for rural territories, this goes through adequate local training solutions as well as with supporting overall attractiveness of these territories. Last, efficient local banking systems, able to address funding needs of local industries, are also a key success factor for a sustainable industrial presence in rural territories.

IV.1.4. Rural SMEs and craft business

General description

Micro-enterprises, a subset of the Small and Medium Enterprises (SME) class represents over 95 % of European enterprises and are especially important for poorer Southern European countries.

All over Europe it is micro-entrepreneurs who innovate, take risks, and offer viability to communities that would otherwise die or become dependent. While the facts about the contribution of micro-enterprises is well known, micro-enterprises and micro-entrepreneurs are not well researched, understood, or recognised for their contribution. Further, micro-enterprises and micro entrepreneurs are not dis-aggregated so that we can understand their inner workings. We cannot separate rural micro-entrepreneurs from urban entrepreneurs. Therefore, we do not know precisely their contribution to rural sustainability

However, we have very little information providing consolidated figures on rural SMEs at European level. The MICRO project has collected primary research to identify the propensity of **rural micro-entrepreneurs to engage in training to sustain and grow their micro-enterprises**. From the research, much has been learned about the reasons why rural micro-entrepreneurs do/do not engage. The research also identifies training topics that are priorities for rural micro-entrepreneurs. These findings underpin the preparation of rural micro entrepreneur focused open access training that will be piloted by the MICRO project partners during 2017-2018. (1)

**MICRO Project Issues from Secondary Research
Relevant to Training for Rural Micro and Craft-Type Enterprise
Entrepreneurs**

The following are eight key points arising from the literature review relevant to training of rural micro and craft entrepreneurs:

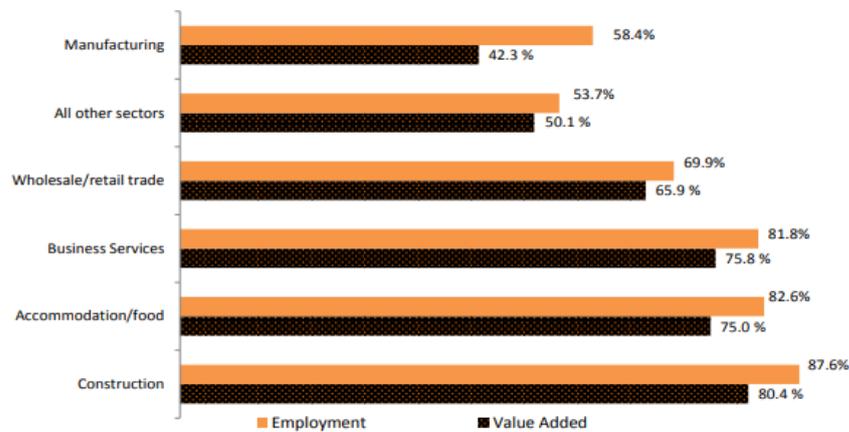
1. Rural areas with 56% of EU inhabitants and 91% of the EU land surface area is a vast resource requiring attention for sustainability.
2. Micro-enterprises, a subset of the Small and Medium Enterprises (SME) class represents over 95 % of European enterprises and are especially important for poorer Southern European countries.
3. The internal and external barriers preventing micro-enterprise and craft-type entrepreneurs attending training are known, but not adequately responded to.
4. The lack of skilled labour is a severe limitation for rural micro and craft-type enterprise contributing to the high failure rate of early stage rural micro and craft-type enterprises, especially in poorer Southern European countries.
5. Geographical remoteness is a particular isolating and cost factor for rural micro and craft-type micro-enterprises, and limits engagement with suppliers and clients relative to urban based micro-enterprises.
6. Training for rural micro and craft-type enterprise entrepreneurs needs to be designed in partnership with micro-enterprise entrepreneurs, and delivered in innovative ways using innovative instruments that address the particular challenges of rural micro and craft-type enterprise entrepreneurs.
7. Quality Broadband connectivity is an essential requirement for rural micro and craft-type micro-enterprise entrepreneurs to provide access, to reduce cost, and to allow equality of access regardless of distance or remoteness.
8. The training topics identified in the MICRO project primary research (following in this report) is supported by a number of secondary research data findings.

Figure 81: Micro project issues

Activities

The activities of rural SMEs considered in this chapter covers other activities than agricultural one, contributing to rural economy: Construction, Business Services, Accommodation & Food, Manufacturing, Others

In 2016, SMEs accounted for more than 2/3 of employment and valued added in the ‘accommodation and food services’, ‘business services’, ‘construction’ and ‘trade’ sectors.



Source: Eurostat, National Statistical Offices, and DIW Econ

Figure 82: Contribution of SMEs to employment and value added in the key sectors of the EU-28 non-financial business sector in 2016

Structure & Status

SMEs:

In the European Union, the main definition of SME relates to enterprises with fewer than 250 employees. For this classification, SMEs must be independent entities, their sales do not exceed €50 million or their annual balance sheet does not exceed €43 million². SMEs are further classified into

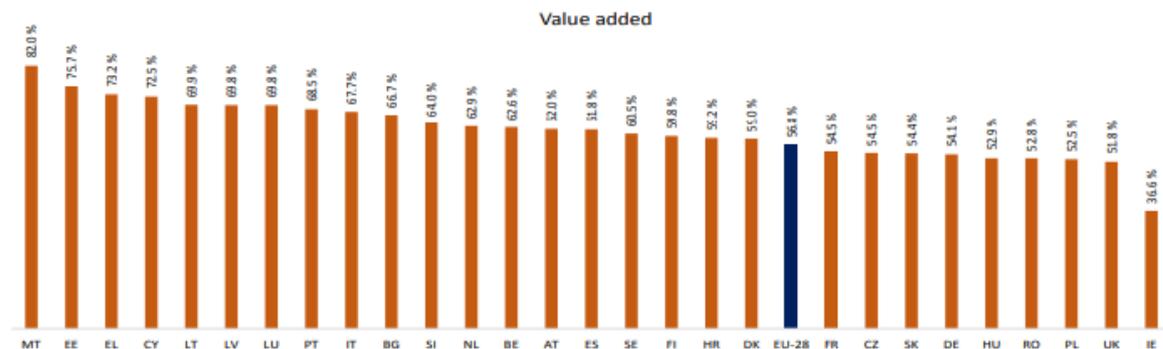
- Medium-sized enterprises: 50 to 249 persons employed
- Small enterprises: 10 to 49 persons employed
- Micro-enterprises: up to 9 persons employed

| Company Category | Employees | Turnover | Balance sheet total |
|------------------|-----------|---------------|---------------------|
| Micro | < 10 | < €2 million | < €2 million |
| Small | < 50 | < €10 million | < €10 million |
| Medium -sized | < 250 | < €50 million | < €43 million |

Source: Commission Recommendation of 6 May 2003 concerning the definition of micro, small, and medium-sized enterprises. (2003/361/EC), Official Journal of the European Union, L 124/36, 20 May 2003
(Source Muller et al. 2016, p.3)

Figure 83: EU Definition of SMEs

Among Member States, SMEs play the most important economic role in 2016 in Cyprus and Greece (more than 80 % of total employment) and Malta (more than 80 % of value added).



Source: Eurostat, National Statistical Offices, and DIW Econ

Note: The data for Ireland reflect the recent revisions to the economy-wide and sectoral value added and GDP data.

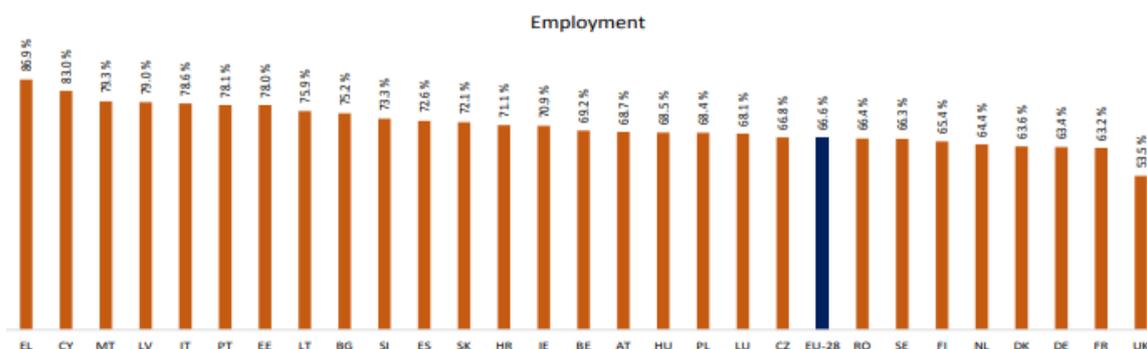


Figure 84: Contribution of SMEs to value added and employment in the non-financial business sector in 2016

Self-employment (as a proportion of total employment) varied greatly in the EU28 in 2016 - from 7.7 % in Denmark to 29.5 % in Greece; It also varied greatly across EU28 sectors in 2016: from 88 % in ‘agriculture’ to 42% in "accommodation and food services". (2)

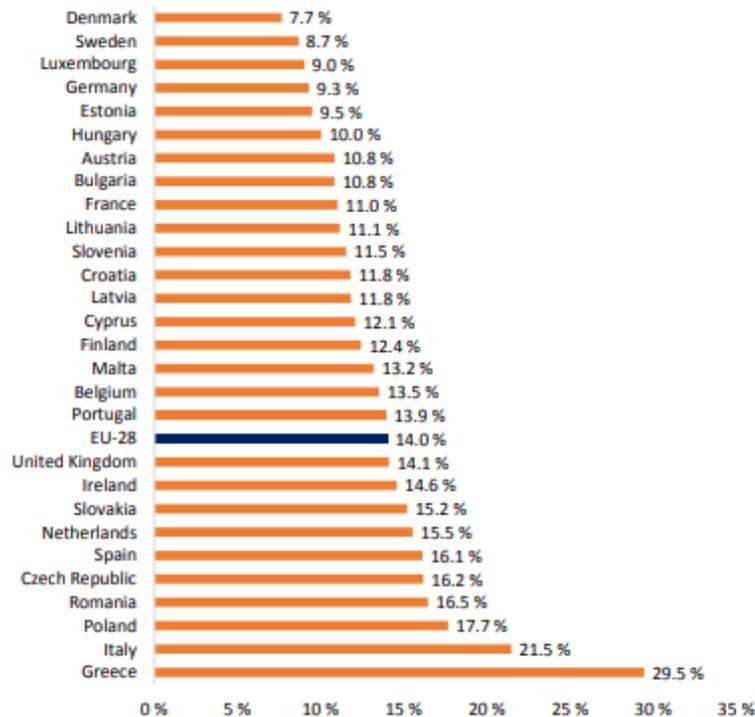


Figure 85: Self-employment rate (in %) in EU-28 Member States in 2016 (2) (Source: Eurostat)

Craft-Type Enterprise:

There is no EU-wide definition of craft (type) enterprises. The “craft sector” in Europe is very diverse, covering a multitude of different professions and trades. Furthermore, among EU Member States there are very different understandings and legal definitions of what is meant by a “craft” enterprise.

While the term micro enterprise is a statistical category based on a certain size of enterprise and is accepted across Europe, the notion of “craft” has developed in the majority of European countries on the basis of specific national traditions and frameworks. There is no EU-wide definition of craft (type) enterprises. The “craft sector” in Europe is very diverse, covering a multitude of different professions and trades. Furthermore, among EU Member States there are very different understandings and legal definitions of what is meant by a “craft” enterprise.

For example, Italy is the only EU country where crafts are mentioned in the national constitution, defining craft enterprises as enterprises in which the owner himself works and has overall business responsibility and liability. Furthermore, the enterprise should either produce goods or deliver services in the field of artisan products or commodities. The Italian law also stipulates that craft enterprises should not exceed a certain size in terms of number of employees. In contrast, there is no craft-specific legislation in Ireland. The only existing characterization of craft and craft related activities in Ireland deriving from a definition of The Design and Crafts Council of Ireland (DCCoI), which does not specifically relate to craft enterprise, but describes craft-type enterprises as “Encompassing a range of different skills including textile making and clothing, pottery and ceramics, jewellery, glass and woodworking and furniture; Irish craft businesses are

characteristically small in scale and are geographically widespread, but taken nationally the industry is a significant employer, currently sustaining 5,700 jobs in this sector.” (1)

There are a number of specific aspects characterising both craft and micro enterprises (1):

- In micro and craft enterprises, the owner plays an important role, being directly involved in the business, carries major personal responsibility and prefers to be financially independent.
- Micro and craft enterprise products/services are often tailor-made or produced in small quantities. This means that craft technical and managerial competences, transferred via person to-person relationships, play an important role in the enterprises, with these competencies being for example through apprentice systems.
- There is often a close relationship with clients and craft organisations, with many micro-enterprises also playing an important role in local communities. The work has an individual character.
- Craft micro-businesses commonly sell their products through local retail outlets and often engage in personal delivery.

Business Model

Services, value proposition

Micro and craft enterprise products/services in rural areas are often tailor-made or produced in small quantities.

Value Chain

SMEs can be either on B2B or B2C value chain type. Projects of LIVERUR database shows a balance between the two types.

Each of this business model has weaknesses and strengths: a targeted positioning of rural SMEs on value chains regarding threats and opportunities they can bring, is a key issue to increase competitiveness and profitability of rural SMEs.

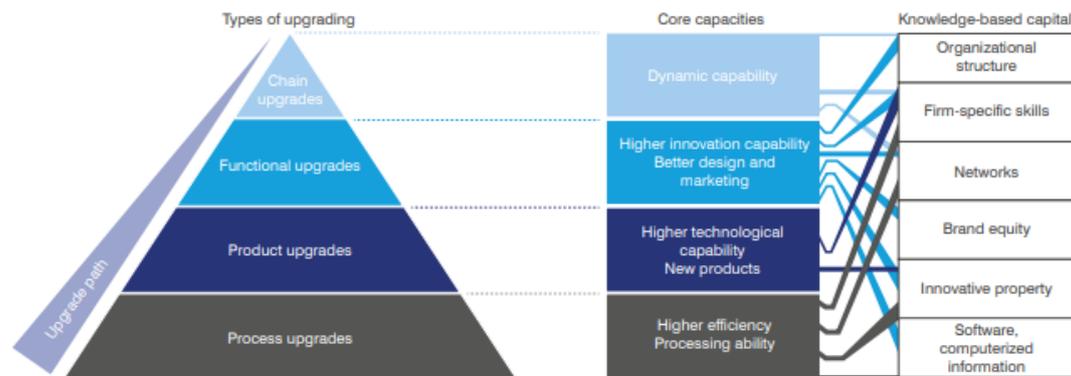


Figure 86: value chain of rural SMEs and craft business

Micro and craft enterprises in rural areas often have direct link with end customer, giving them empowerment and agility to develop business opportunities and increasing their value content. On the other hand, rural micro structures may also be disconnected from profitable value chain (wholesalers, logistics) and limited in expanding their market out of a local scale, making them more vulnerable to external competition.

In B2B models, SMEs are often lower-tier supplier, position that tends to be precarious, as other suppliers can easily replace the original supplier by offering comparative advantages, such as lower costs. SMEs as supplies of global market, weakening local ecosystems, is an historic trend in agro food industry (see IV.1.3).

Thus, the challenge for SMEs is to move up by increasing their value content or by attracting more buyers or value chains. Enterprises can consider upgrading in various ways, for example by entering higher unit value market niches or new sectors, or by undertaking new productive functions. (4)



Source: Avendaño, Daude, & Perea (2013).

Figure 87: Types of upgrades in value chains

Examples of rural SMEs value chain upgrading success stories

KÜRT: From repair shop to European data recovery company

KÜRT Co. has grown from a small, Hungarian-owned enterprise into an international group, developing technologies and solutions for information protection, data loss prevention and data recovery. Recognizing emerging opportunities and responding rapidly with new solutions contributed to KÜRT’s global success. The company used the European market as a stepping-stone to develop and market services that were later sold globally

Synthite Industrial Chemicals: From small factory to a global spice leader

From a small village extraction factory in India, Synthite Industrial Chemicals has become a world leader in the value-added spices industry, processing and supplying a wide range of spices to major food, fragrance and flavour companies in over 100 countries. Synthite’s strong commitment to innovation and technology and early adoption of global food safety directives have given the company a competitive advantage in internationalization.

Challenges

Economic

« The promotion of entrepreneurship spirit has to be further developed in rural areas, and in particular the promotion of new niches of business opportunities, such as “Energy, Environment, Eco-industries, ICT or Social Innovation”. » (6)

Key challenges that face business development in rural areas:

- access to finance; communication and logistics;
- access to knowledge; innovation services support,



A study commissioned by the European Commission, DG Enterprise and Industry among micro-enterprises, business organisations, professionals and VET providers in Austria, Bulgaria, Denmark, France, German, Italy, Poland and UK, identified the following micro-enterprises skill needs:

- Customer and market orientation;
- Developing knowledge about foreign markets;
- Management skills.

Social & environmental

Education and training

Education and training, as presented in the ET2020 strategy, is integral to addressing capacity and training needs of rural micro-enterprises growth and competitiveness across Europe. One of the challenges noted in the strategy is that some member states (MS) do not have comprehensive strategies on Adult Education focusing on rural micro-enterprise entrepreneurs. Where they exist, inadequate measures are taken to monitor and update them, identify gaps, or identify best practice in line with the ET2020 strategy.

Youth unemployment EU Project “RE-CRAFT: Rural Entrepreneurship, Craft your future!” will be dedicated to the unemployment problems and entrepreneurship opportunities of young people living in rural areas (8).

Strategic approach to CSR Corporate Social Responsibility (CSR)

To develop and implement a strategic CSR policy, a company must map its inside-out linkages, its value chain effects on society, and its outside-in linkages, the effects of the context in which the firm operates on its activities. When mapping inside-out linkages, the company should look to all its value chain activities and identify both the positive and negative effects they may have on the environment and society. This requires the analysis of the firm’s support activities like infrastructure, human resource management, technology development and procurement policies, and its primary activities, including resource supply and logistics, operations, transport, marketing and sales and after-sales services.

CSR can provide many business benefits to a company. The greatest competitive advantage stems from a strategic approach to CSR in which company values are aligned with its CSR goals and focus on environmentally and socially sustainable aspects. Emphasis on CSR values across the stakeholder, social, economic, environmental and philanthropic or voluntary dimensions of a company helps to motivate companies to continue to meet their responsibility objectives.

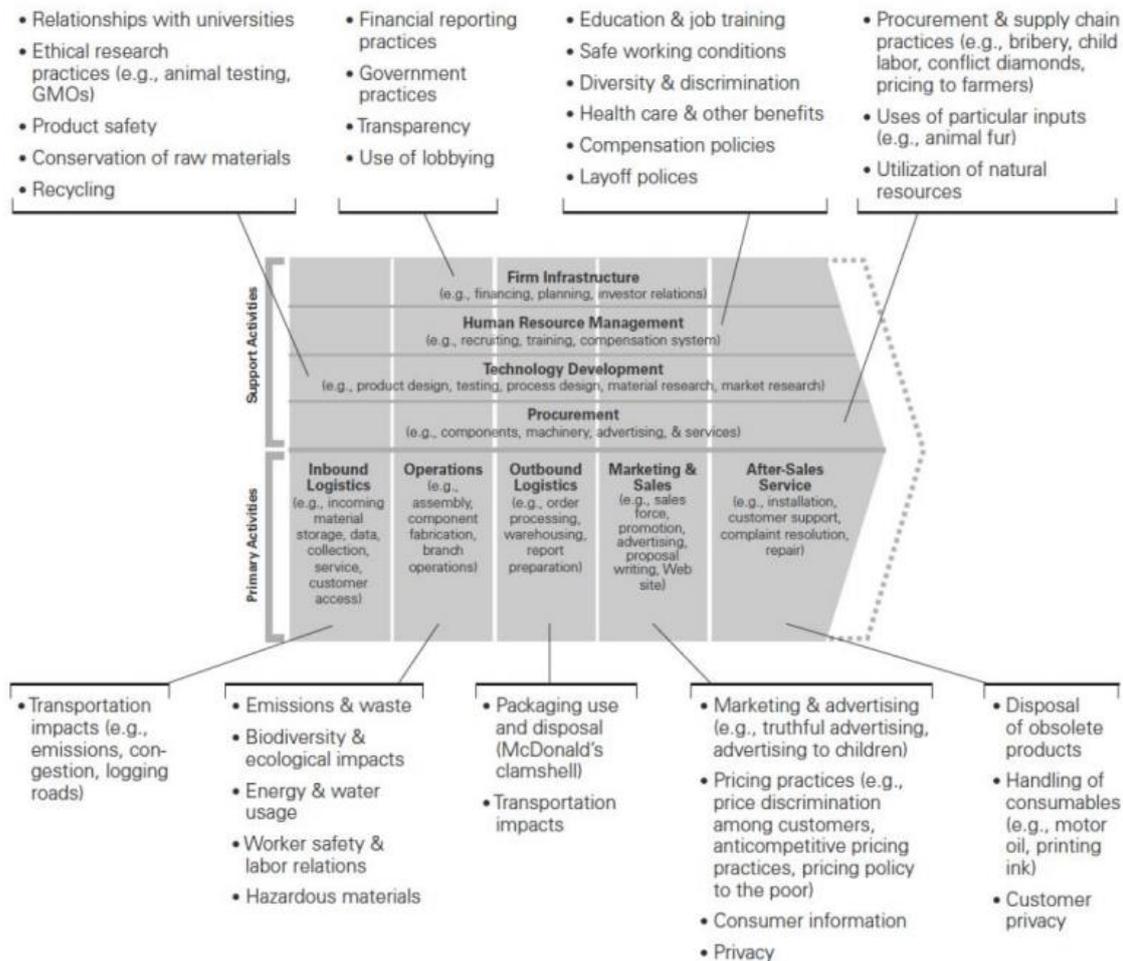


Figure 88: Mapping of aspects to be considered in a company's CSR strategy across its value chain activities (5)

Trends

Technologies / Innovation

Training supply, content and deliver

The European Commission recognised there are many innovative ways and instruments to address organisational challenges of micro-enterprises, such as e-learning, open and distant learning, and flexible online platforms to distribute training. Training is best delivered to microenterprise entrepreneurs when they are 'on the job' or 'facing the challenge'. **For the micro-enterprise entrepreneurs training is best delivered in small practical applicable chunks that are constantly engaging and supported by peer and expert mentoring. Micro-enterprise entrepreneurs are not classroom learners.**

ICT for education and training

Information communication technology (ICT) offers new ways to link smaller enterprises in order to create networks that might benefit rural business by expanding their reach. Indeed,



geographical remoteness isolates micro-enterprises from one another, as well as their suppliers and clients, limiting their capacity to grow. By better understanding ICT functioning and opportunities micro-enterprises in 12 rural areas may be able to network and expand their markets, helping them to overcome the disadvantages of remoteness and isolation.

In the EU Micro Project field study, co-operative approach to training/peer learning and online/e-learning was the most commonly suggested as evidenced in comments such as: *“More networking events to enable people to meet each other, share ideas and be inspired by the creativity and innovative ways of others”*. (1)

Digitalization, Quality Broadband connectivity

The Digital Economy and Society Index (DESI) is a composite index that summarises relevant European digital performance indicators and tracks the evolution of EU member states digital competitiveness the digital access and performance difficulties for rural based communities was noted. (9)

The Human Capital dimension of the DESI index score measures the skills needed to take advantage of digital society possibilities. The skills range from basic user skills (get online, send an email, get goods and services, etc.), to advanced skills that empower the citizen to participate and the workforce to take advantage of technology for enhanced productivity and economic growth. *“In the Human Capital dimension, Denmark, Luxembourg Finland, Sweden and the Netherlands obtained the highest scores in 2016, and Romania, Bulgaria, Greece and Italy got the lowest ones”* (9)

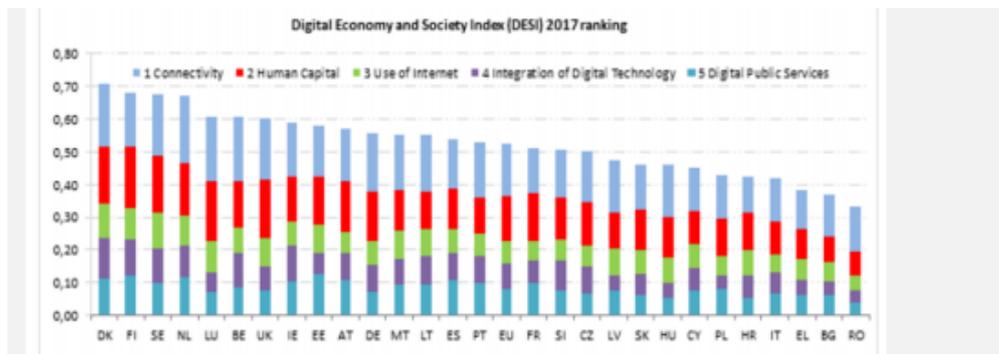


Figure 89: Digital economy & society index (DESI) EU, 2017



Entrepreneurship Networking Platform of Achaia: networking platform for regional businesses that supports interfacing with greater P.A, Chambers, Acad.-Research community + productivity actors (10) :

The targeted problem is the low competitiveness of micro SMEs/SMEs of the Region which derives from a number of reasons: Lack of access to innovation, Low innovation transfer, Low resource efficiency (human resources, equipment, infrastructure), Limited utilization of open business data, Limited synergies, Lack of business model flexibility, Low interfacing of policy strategies with real business data

The networking platform creates the appropriate framework to develop tools that provide services to businesses and all involved stakeholders. The interconnection of micro-SMEs/SMEs and professionals with each other and the use of innovative tools and methods (crowdsourcing, tele-education, teleconferencing, data sharing, etc.) creates dynamics in the business profile of our region, enhancing the region's competitiveness and extroversion.

Similarly, academics and research institutions participate in the overall system, ensuring technological transfer in the business world, while public administration bodies, entrepreneurial actors and productive actors shape better growth conditions for the business community.

<https://www.interregeurope.eu/ruralsmes/news/news-article/3595/entrepreneurship-networking-platform-of-achaia/>

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Economic

Moving from “CSR” (Corporate Social Responsibility) to CSV (Creating Share Value): “a new business strategy concept to help SMEs building a sustainable competitive advantage.”(26)

Porter and Kramer’s definition of CSV is: **“You create shared value by enhancing the competitive position of a company while at the same time advancing the society in which it operates.”** The words ‘at the same time’ are very important. When some leaders look at the relationship between a company and society, they tend to think it is a zero-sum game, a game with only one winner, like the concept of competition within an industry.

CSV is about finding opportunities for growth in sustainable development. It is about creating value for the business while creating value for the world at large, rom “zero-sum” game to win-win situations. Whereas CSR is only about giving back, CSV is a two-way street making business much more sustainable and meaningful in the long run.(26)

Examples of creating shared value: Nestlé

Nestlé needs high-quality raw materials to produce first-class dairy products. When they entered the market in India in the Moga district in 1962, local farmers were not able to consistently deliver this quality. Only 180 farmers passed the test. Nestlé worked with local farmers to improve their production techniques and long-term contracts to buy products at a fair price.

Today there are 75,000 farmers that reach Nestlé’s quality standards. In the Moga region, they have five times more doctors than other regions of India, better primary schools and basic needs like electricity are fulfilled.



Policies

The Entrepreneurship 2020 Action Plan proposes to re-ignite the entrepreneurial spirit in Europe through

- Entrepreneurial education and training to support growth Business creation.
- Business creation and higher education for entrepreneurship.
- Better access to finance.
- New business opportunities in the digital age.
- Clearer and simpler rules to reduce the regulatory.
- Reaching out to women, seniors, migrants, the unemployed, young people as entrepreneurs.

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New policies instruments evaluated through European Project, focused on rural SMEs, and aiming at improving rural SMEs competitiveness and supporting the access to new niches of business opportunities in the field of Energy, Environment, Eco-industries, ICT or Social Innovation:

- “Rur@l SMEs” Jan2017-Jun 2021: The key policy instruments linked to Investments and Growth are managed mostly from the main cities (regional or national capitals), often disconnected to rural areas, and have less impact in areas of lower population density, in particular the actions towards innovation of the SMEs. The aim of rural SMEs is to improve the policies on regional support systems for entrepreneurs through exchange of experiences and identification of good practices, implementing the lessons learnt in regional action plans to increase the creation of innovative SMEs in rural areas. (7)
- European SME innovation Associate (call INNOSUP-02-2019-2020): provides for SMEs the opportunity to get an individual grant that covers the costs of the first year of employment to employ a highly skilled experienced researcher. The support includes the necessary training and further accompanying measures aiming at making the selected person rapidly operational. (11)
- Corporate Social Responsibility: In the light of the current framework conditions (6), the Interreg Europe Road-CSR project (A Roadmap for Integrating Corporate Social Responsibility into EU Member States and Business Practices) is making the case that he integration of CSR into business practices of SMEs is not only a question of responsibility but also brings clear gains of competitiveness.(12) (5)

Access to finance: The European Commission works to improve the financing environment for small businesses in Europe. (28)

The 2014-2020 programme for the Competitiveness of Enterprises and Small and Medium-Sized Enterprises (COSME) will make it easier for SMEs to access loans and equity finance.

The SME Instrument of the Horizon 2020 Framework Programme for Research and Innovation offers funding and support for innovation projects that help SMEs grow and expand their activities into other countries.

Capacity Building for Rural Enterprise: The key message of the Organization for Economic Cooperation and Development (OECD) Better Skills, Better Jobs, Better Lives (2012) report on skills policies around the world is that skills have become the global currency of the twenty-first century. If individual countries want their economy and society to move ahead they must invest in talent development. “In a fast-changing global economy, skills will to a great extent determine competitiveness and the capacity to drive innovation”. While skills do not always or automatically convert into jobs and growth, they are essential for sustainability, viability and for capacity

enhancement. This is especially true for the small percentage of persons who are innovators and potential entrepreneurs. There is a challenge facing individual countries and the EU to develop effective strategies for building capacity among entrepreneurs, especially those remotely located. Supporting initiatives for the remotely located entrepreneur are important to ensure that rural areas will be able to sustain and grow a balanced population. (13)

Each rural region has distinct assets and resources. The Rural Policy 3.0 supports rural areas to identify niche markets and mobilise assets and resources in areas of absolute and comparative advantage. Given the lack of economies of agglomeration, rural areas tend to specialise in tradable activities, which in turn are exported to cities or to other countries. Tradable activities and rural regions are highly exposed to international competition: to succeed they must be able to match the prices and quality of competing firms. Therefore, innovation and entrepreneurship is important to increasing productivity and enabling local diversification and value-adding



Figure 90: Creating jobs & economic opportunity through innovation

“Innovation does not come from isolation but it is generated from contact and exchange with other sectors and people. The remaining challenge is to improve methods to measure rural innovation. Creating platforms that are inclusive to SMEs and promoting work across borders can boost the innovation process in rural areas.”

OECD 11th Rural development conference Enhancing Rural Innovation (April 2018)

Examples of SMEs that capitalize on CSR as a business opportunity (DNV GL’s Global opportunity Report 2018) (5)

Cases of product and service stewardship in which the companies have decided to incorporate social and environmental needs into the design and function of their products/ services. By taking a leading sustainability role in their corresponding markets, the enterprises can capture the value customers associate with their products/ services.



NATURAL ALTERNATIVE TO PLASTIC WRAP

Using simple, organic ingredients, Bee's Wrap produces a sustainable alternative to plastic wrap for food storage that is reusable, biodegradable, and compostable.

Bee's Wrap provides its customers with a plastic-free alternative way to keep food fresh. Combining GOTS certified organic cotton, beeswax sourced from sustainably managed hives in the United States, organic jojoba oil, and tree resin, the result is a malleable food wrap, that can be used again and again. At the end of its lifetime, the wrap can be composted or even used as natural and effective fire starters for wood stoves. Unlike plastic wrap, Bee's Wrap is biodegradable and consequence-free for the environment and marine species.

Figure 91: example - the bee's wrap



TURNING AGRICULTURAL WASTE INTO BUILDING BOARDS

Kokoboard is turning trash into cash and alleviating rural poverty by upcycling agricultural waste products into building materials and trendy products.

In Asia, more than 24 million tons of agricultural waste are produced every year, and are mostly incinerated, releasing carbon to the atmosphere. Kokoboard has instead found a use for such waste streams, turning coconut husks, peanut shells, and rice straw into construction boards, sequestering more than 200 tons of CO₂ annually. Based on a mission to improve social and economic well-being locally, as well as protect the environment on which we depend, Kokoboard is also upcycling its products further into trendy lifestyle and homeware goods. In addition, the company sells the plans for its machinery, allowing others to replicate its good work.

Figure 92: example - waste re-use

IV.1.5. Rural tourism

General description

Tourism is one of the three major sectors in rural areas, together with agriculture & forestry, but particularly important in the areas characterised as coastal or upland/mountainous areas, and where there is a form of protective land use designation in place.

Indeed, tourism has the potential to play a significant role in the economic aspirations of many EU regions. Infrastructure that is created for tourism purposes contributes to local and regional development, while jobs that are created or maintained can help counteract industrial or rural decline.

Barriers to rural growth are a complex set of factors, dominated by quality of infrastructure and accessibility, sectoral structure of the economy and demographic evolution. (14)

Even though everything started like a simple, cheap and not so popular form of tourism, rural tourism is now considered sophisticated, modern and addresses to highly educated, well-travelled

and from higher socio-economic groups people. The term “rural tourism” has been defined in a number of ways, it varies from country to country, and it is rather difficult to find a universal definition, due to its complex multi-faceted nature, being not only a “farm-based tourism”, as it is often considered. European Commission adopted this collocation for “tourism in areas with a low density of population”, rural areas and villages.

Rural tourism, agro-tourism and village tourism are more often than not used as synonyms and, even though there is no widely applicable and universally accepted definition for this form of tourism, everyone does agree that it offers “unique and specific experiences [...] authentic ones, in which the promoted lifestyle is primordial”. Besides, rural tourism is considered a stress releaser, an opportunity to take advantage of clean air, raw environment, a pleasant “back to origins” experience.

Activities

“Rural tourism is the kind of tourist services in rural areas, services involving investors, tour operators, local and central governments. These services include accommodation, meals (with a focus on traditional local cuisine) and all leisure activities according to the desires of tourists”, but does not have the same significance in all the EU countries. (14)

Rural tourism is a great part of farms diversification (Agri tourism), with activities covering accommodation, catering services, leisure activities (see IV.1.2).

| Accommodation | Activities | Attractions |
|--|---|---|
| <ul style="list-style-type: none"> • Campground • Community lodge • Family-run guesthouse • Farm • Local family/homestay • Rural Bed & Breakfast • Small rural hotel • Tent • Tree house • Village house | <ul style="list-style-type: none"> • Animal observation • Boat trip • Cycling • Cooking workshop • Handicraft workshop • Horse-riding • Fishing • Sporting activities • Swimming • Tours, for example village, coffee, tea or wine tours • Walking trail | <ul style="list-style-type: none"> • Archaeological sites • Cultural centres • Cultural, gastronomic, heritage and other routes/trails • Folk groups • Heritage sites • Landscape sceneries • Local industrial, agricultural or craft companies • Local markets • Museums • Plantations • Wildlife sanctuaries |

Figure 93: Examples of rural accommodation, activities and attraction (15)

Structure and status

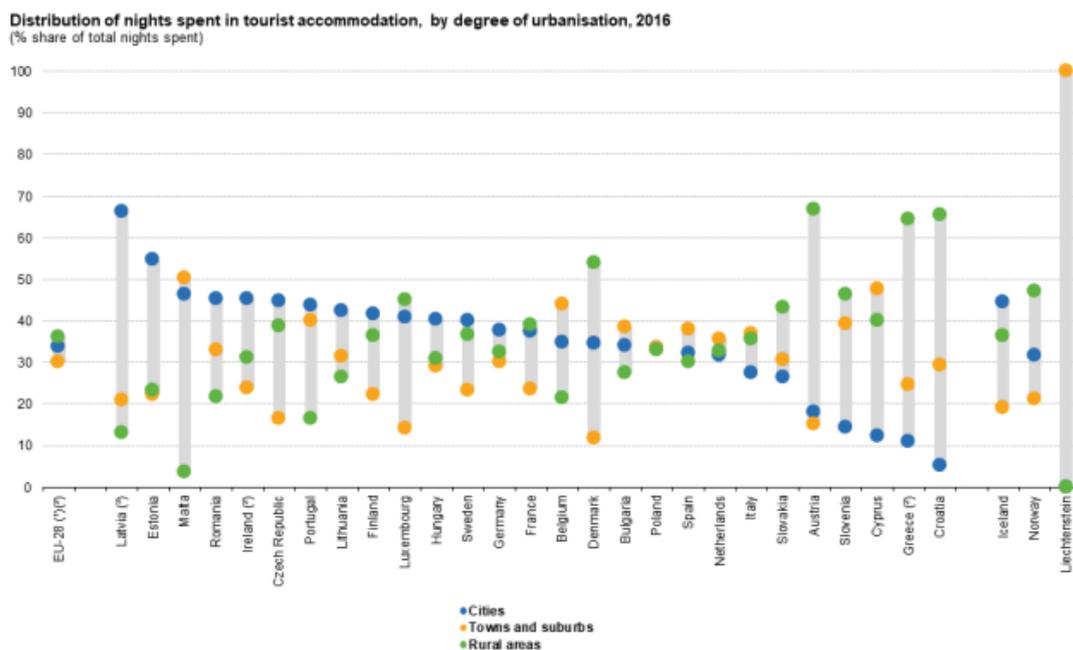
Rural Tourism in Europe is composed of a very large number of micro-businesses (Small family owned establishment, micro and craft enterprises, local service providers). It is essentially private sector, and primarily driven by economic goals and employment creation, often by developing part-time/plural-activity jobs. It is important in terms of rural income and employment, typically providing between 10 and 20% of rural income and employment, twice tourism's income and employment levels averaged across Europe. (16)

Cooperative structures may also exist in rural tourism; for example, Ireland developed such cooperative marketing to face the fragmentation of the offer, which is a great barrier to the tourism growth (wide range of different organisations deliver different elements of the product, lack of co-ordination and vision...).

Statistics

In order to identify significant trends of ecotourism, agro-tourism and rural tourism in the European Union, focusing on the New Member States, given the available statistics, **the number of “Nights spent at tourist accommodation establishments by degree of urbanization” is considered to be the most relevant.**

“Nights spent at tourist accommodation establishments by degree of urbanization” refers to the number of nights a guest/tourist (resident or non-resident) actually spends (sleeps or stays) or is registered (his/her physical presence there being unnecessary) in a tourist accommodation establishment by the degree of urbanization of the area where the accommodation establishment is actually located in. Data comprises the overnights spent in hotels, holiday and other short-stay accommodation, camping grounds, recreational vehicle parks and trailer parks.



Note: ranked on cities. The United Kingdom: not available.
 (*) 2014.
 (**) Estimates.
 (*) 2015.
 Source: Eurostat (online data code: tour_occ_ninatd)

Figure 94: Distribution of nights spent in tourist accommodation, by degree of urbanisation, 2016 (% share of total nights spent)

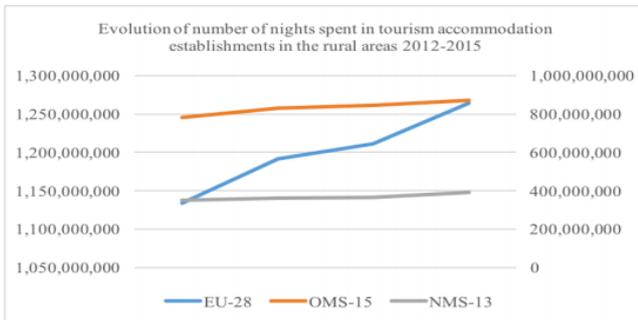


Figure 96: evolution of number of nights spent in tourism accommodation establishments in the rural areas 201 (source : Eurostat)

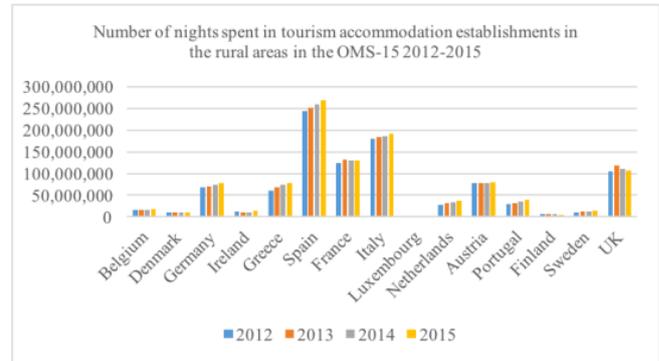


Figure 95: number of nights spent in tourism accommodation establishments in the rural area in the OMS-15 2012-2015(source : Eurostat)

This figure illustrates year-by-year the evolution of the number of nights spent in tourism accommodation establishments the OMS-15 from 2012 to 2015. All of the countries except for Finland saw their numbers increasing in terms of nights spent at rural tourism accommodation establishments, indicating an ascendant trend and growing interest for this form of tourism. The most impressive rise was reported by Portugal, +34% in 2015 compared to 2012, but Spain is definitely the leader of rural tourism in the EU-28 in the period 2012-2015, reporting two times more nights spent in tourism accommodation establishments in the rural areas than the next one in top, Italy, closely followed by France. Baleares Islands in Spain, southern Belgian region of the Province Luxembourg, the western part of Zeeland Dutch area, Burgenland in eastern Austria, Cumbria in north-west England and the Highlands and Islands region of Scotland are the rural localities that recorded the highest number of overnight stays spent in rural tourism accommodation establishments.

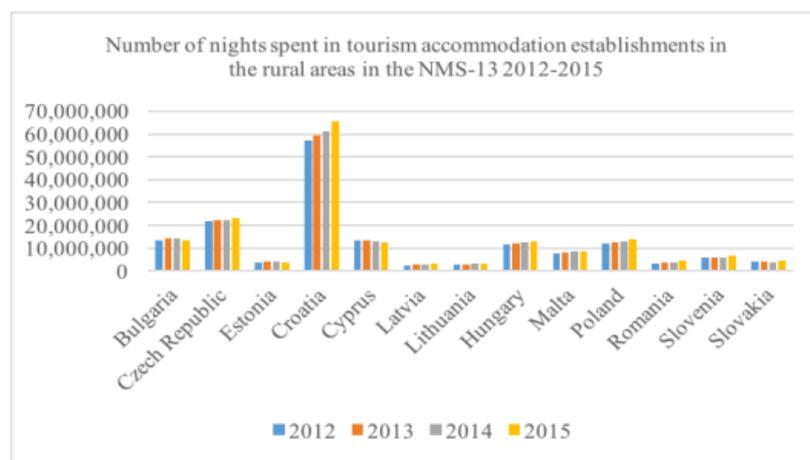


Figure 97: number of nights spent in tourism accommodation establishments in the rural areas in the NMS-13 2012-2015 (Source: Eurostat)



Example of Jadranska Hrvatska in Croatia: the region with the highest number of overnight stays spent in rural localities in the whole Europe

Jadranska Hrvatska in Croatia is the region with the highest number of overnight stays spent in rural localities in the whole Europe in the period analyzed, not only among the New Member States. This area was actually the 6th most visited place in EU-28. Jadranska Hrvatska is often called “Dalmatia” and attracts many nature lovers, providing them with various active recreation opportunities, natural diversity, numerous national parks, traditional food, fine wines, and UNESCO-protected areas. Croatia’s outstanding performance can be partially attributed to the fact that here, “rural area occupies 91.6% of total territory”, but also to the country’s current tourism strategy, whose main objectives are to diversify touristic offerings, so to decrease seasonality, increase tourism expenditure, create new jobs, decrease turnover rate and improve quality by organizing cultural, sport and gastronomic events, as well as setting up and promoting thematic parks and cycling routes. In what regards the rural tourism in the Czech Republic, this sector seems to enjoy unprecedented prosperity and to become a popular trend, as the current marketing campaign focuses on rebranding the country and increasing its competitiveness by focusing on journeys of discovery the country through unique cultural elements, gastronomy, traditions and customs. Horse farming is the most common form of rural tourism in Czech Republic.

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Business Model

Value proposition

“Rural tourism” refers to trips where the main motive is to enjoy (rural areas, rural communities, rural experiences). It aims to include and benefit rural communities, while preserving their environmental and cultural assets. It brings rural areas economic development by creating additional income and employment. Tourism development can also improve the social wellbeing in rural areas. For example, by stimulating improvements in infrastructure, sanitary and electricity networks. It is closely related to nature and eco-tourism, adventure tourism, community-based tourism, cultural and heritage tourism. (15)

Rural travellers participate in activities, lifestyles and traditions of rural communities. This way they get a personalised experience of the countryside. They usually rent rural accommodation, which they can combine with (rural) activities and attractions. Preferably using the local social, cultural and natural resources.

But rural travellers may come for business trips. If, from an economic perspective, holidaymakers and people making business trips have broadly similar consumption patterns (transport, accommodation and restaurant/catering services), their different level of expectations and services to provide have to be taken in consideration. (20)

Value chain

Regarding its fragmentation, great variation among rural region, depending on a host of factors including work force characteristics and seasonality issues, it’s difficult to picture a typical value chain of rural tourism.

Figure 98 presents one way of viewing the complex nature of rural regions and tourism’s role by mapping the links between elements and issues. The map serves its purpose in illustrating the relationship between tourism and rural regions.

The community is central to this process, and in many ways cannot be separated from any of the elements on the map.(27)

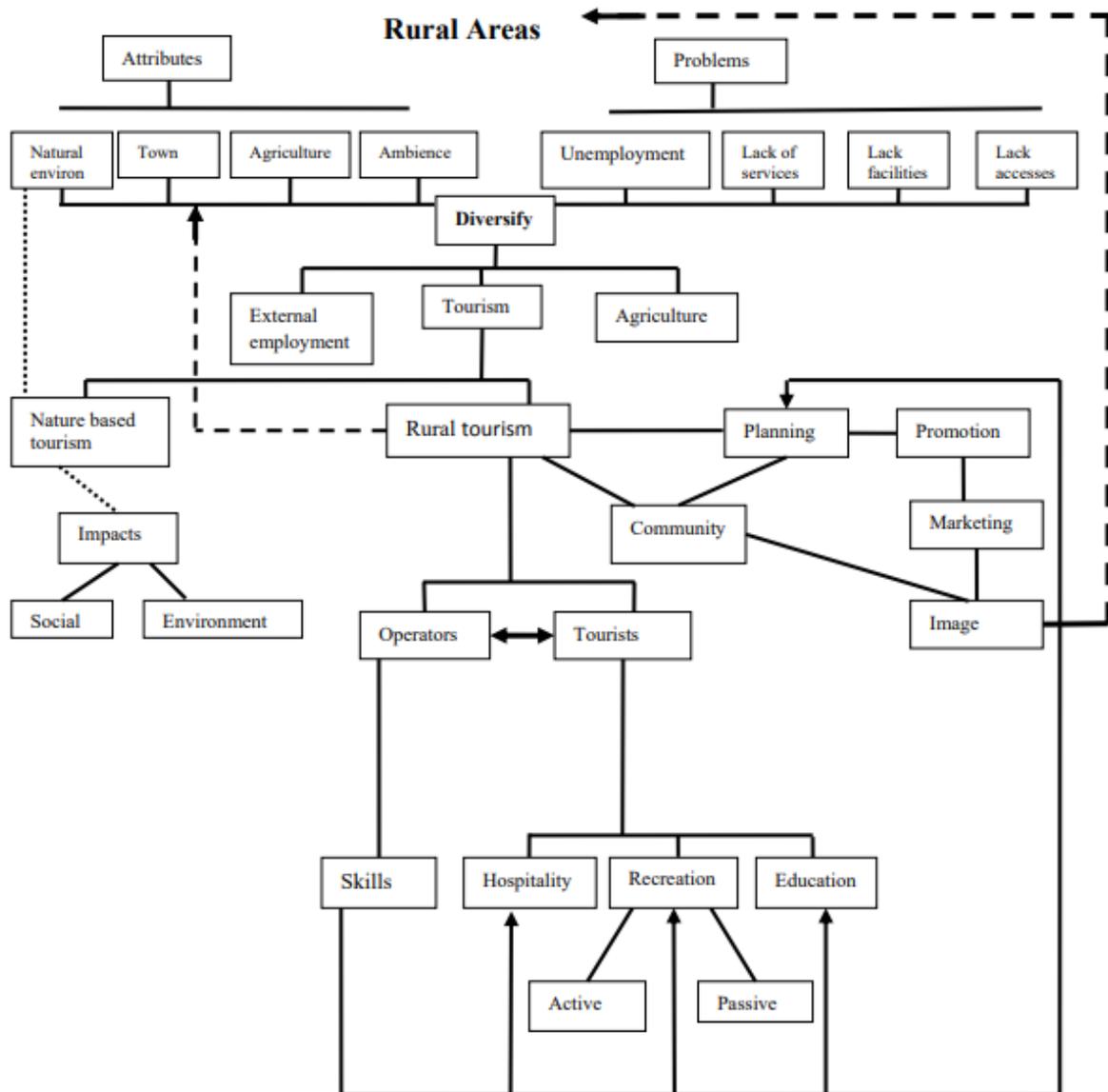


Figure 98: Rural tourism. Adopted from Beeton (2006)

“The Tourism Promotion Model” is a model where rural development and micro and small enterprise (MSE) development approaches are combined. In this model, any resource could be regarded as a tourism product, including natural, cultural, historical, and human resources, specifically: agricultural, forestry, and marine products, mountains, rivers, lakes, the sky, stars, beautiful scenery, historical sites, museums, cultural events, ethnic dancing, ethnic clothes, local people’s traditional techniques, and their hospitality. In other words, the local life itself could be a tourism product. Because of the diversity of tourism products, a wide variety of jobs and

business opportunities can be created in the tourism promotion model. Below is an example of the tourism promotion model which simplifies its concept. (17)

The key in this model will be the tourism association. Whether the model works well or not depends on how the tourism association motivates the tourism-related residents in the village and coordinates with external markets such as travel agencies and the media.

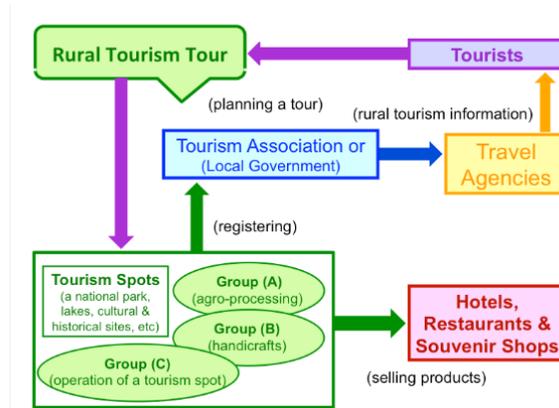


Figure 99: Tourism promotion business model (17)

Case study conducted on a family-run farm within the territory of the Paiwan tribal community of the North Dawu Mountain situated in the Central Mountain Range of Taiwan.(18)

The small-scale farmer implements an integrated approach that systematically optimizes supply chain relationships to improve both the upstream and downstream sides of agri-food tourism services. The upstream element of agri-food tourism, for example, can be adjusted to employ organic or “natural” farming methods that allow small-scale farmers to secure an “organic” certification. Based on this approach, a small farm is gradually transformed into a type of educational institution that can demonstrate to customers the methods for farming high-quality organic coffee while also attracting tourists of various backgrounds to experience the downstream components of agri-food tourism in a recreational setting. This case study highlights how a particular small-scale farmer plays an important role in attracting other tribal farmers to engage in sustainable practices that help preserve cultural, social, and environmental systems while also presenting agri-food tourism as a brand identity.

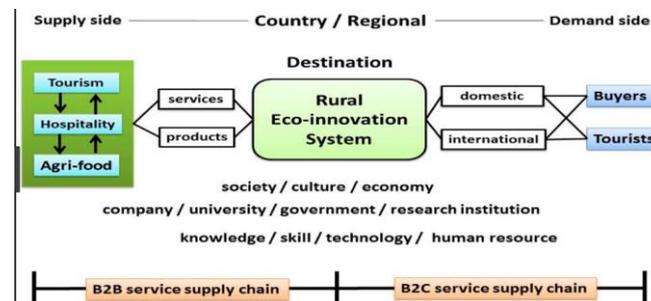
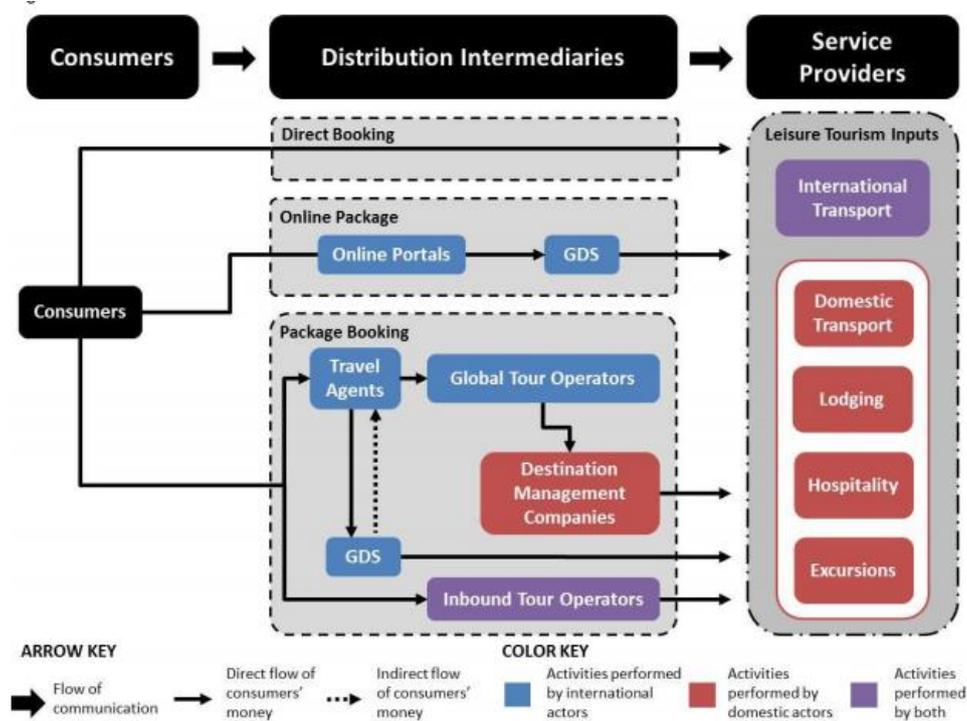


Figure 100: A proposed conceptual framework for agri-food tourism as eco-innovation strategy.

Contrasting with this microbusiness, local and fragmented picture, concentrated lead firms in the leisure tourism global value chain are also key players of rural tourism, specifically through digitalization of the sector. They assemble and package individual services into cohesive travel experiences. The power of lead firms derives from the ability to draw on the capabilities of large, global networks of service providers, while also having direct access to consumers or travel agents. Most often, these actors are the distribution intermediaries that populate the ‘Online Package’ and ‘Package Booking’ distribution channels, although in some cases, powerful individual service providers such as international airlines and hotels may act as lead firms by bundling and selling tourism products. Online portals, tour operators, and Destination Management Companies (DMCs) are among the most prominent lead firms.

The identity, power, and linkages among these actors depend on the distribution channels that consumers use to access the product. Figure 103 provides an illustration, tracing both the communication flows and consumer expenditures through the chain.



Note: Information flows are represented by the thick black arrows at the top; communication travels from the consumers to the distribution intermediaries to the service providers. The solid and dashed lines with smaller arrows indicate the flow of consumer money through the chain. Direct flow of expenditures represents payments for services directly related to the consumers' tourism experience. Indirect flow of expenses represents back-end transactions where payment between companies is not based on consumers' experiences.

Source: Daly and Guinn (forthcoming).

Figure 101: Tourism Global Value Chain

Challenges

Economic

Rural Tourism in Europe suffers from fragmentation, little cooperation or coordination and increasing competition internally and externally. Developing local cooperation, and linkages at regional, national, international level, integrating global tourism value chain are key issues.



Tourism demand is sensitive to changes in environments, thus making tourism earnings unstable. Seasonal fluctuation in tourism demand poses difficulties for destinations, and potentially undermines profitability. (19)

Strategy & Marketing

Growing demand for customised experiences, new products and value customers (new expectations of rural travellers such as interactions with local, agritourism or farm stay, “Slow tourism”...), growing competition from other destinations makes improvement of market knowledge and marketing techniques a crucial issue. (16)

Rural areas have to increase market knowledge and marketing techniques, to build their offer and value proposition by matching their resources, competitive strengths, attractive factors and the different type of customer expectations and trends. Many literature exists about “customer profile in rural tourism”, which could help regions to build their value proposition.

Upscaled tourism including product quality, personal and food safety, sustainability, loyalty programs, facilities and upgrade service programs, special experiences –backstage, unexpected surprises...) is a key driver of innovative business model. Many cases of LIVERUR database already address this issue (see IV.3)

Example of a pragmatic guideline to target its market: « What are the opportunities for rural tourism from Europe? » (15)

Rural tourism fits perfectly into the trend that European travellers seek authentic, unique experiences and local lifestyles. European rural travellers want to experience natural, unspoiled landscapes and authentic accommodation. Rural communities in developing countries often have great resources to offer such experiences. If you can offer these experiences, rural tourism can be an interesting market segment for you.

1. Product definition
2. Which European markets offer opportunities for rural tourism?
3. What trends offer opportunities on the European market for rural tourism?
4. What requirements should your rural travel product comply with to be allowed on the European market?
5. What competition do I face on the European market?
6. Through what channels can you get your rural tourism products on the European market?
7. What are the end-market prices for rural tourism products?

Organisation

Cooperation, coordination: improving governance, partnerships and networking, linkage with domestic industry (underdeveloped linkages between tourism and sectors such as agriculture and



construction can inhibit industry development and limit the economic benefits associated with tourism) (22)

Skills training: Management, organization, communication, computer skills and marketing tools are critical for distribution intermediaries and service providers that seek to upgrade their position in the chain. (21)

Environmental

Sustainable tourism is an alternative area, which provides considerable potential for growth: it involves the protection and enhancement of cultural and natural heritage, ranging from the arts to local gastronomy, or the preservation of biodiversity. Characteristics such as these drive the demand for reliable and harmonised statistics within the field of tourism, as well as within the wider context of regional policy and sustainable development policy.

Social

Viable job opportunities for people with less education and training to work. This, in turn, can promote the rights of women and youth, thereby weakening the chauvinistic nature of a given culture

The development of tourism could limit the impacts of the critical weaknesses (lacks a socially young and dynamic cohort). These issues have become structural problems for place-based development, by offering new land-based job opportunities to members of the local community, thereby benefitting the entire economy and society

Inflow of expatriates, who are motivated by benefits from tourism, can also be an important source of social impact. (32)

Trends and development plants

Technologies / Innovation

The e-rural tourism services include large scale of various information services, which could be for instance included under e-business (reservation) and content publishing (nature, history, etc.). This is related to the fact, that the rural tourism is mainly oriented on individual's needs. It never could be mass-oriented. Important goal of rural tourism is to offer a complex program. The providers of rural tourism want a service, assistance and co-operation in this sphere. They ask above all the advice how to invest into the accommodation capacities and how to use such capacities. They look for connection to information systems, they would co-operate in the offers of free accommodation. It seems reasonable to build added value chains of providers of various rural services.

In comparison with mass or industrial tourism, the problem of rural tourism is the budget for suitable advertisement. Small farmers are not able to pay for advertising their services and it is then difficult to give information to customers (abroad) about the availability of recreation. This is the reason, why in many countries are formed associations for rural tourism. Offering to these associations the opportunity to advertise their activities would help to develop the rural tourism.(25)



Policies

Package travel directive: The Package Travel Directive (2015/2302/EU) is the most important European legislation for the travel industry. European tour operators are likely to translate it into demands on you. Common non-legal requirements concern reliability, liability, sustainability and the protection of children in tourism. Sustainability certification is well on its way to becoming a mainstream requirement. Voluntary ISO standards support safety in several niche tourism markets.

ISO standards for niche tourism: ISO standards are voluntary, consensus-based, market relevant International Standards. They support innovation and provide solutions to global challenges. To support safe practices, there are specific standards for certain niche tourism markets. For example, adventure tourism, Thalasso therapy, diving, wellness spas and food safety management for culinary tourism.

Sustainability

European tour operators increasingly demand sustainability from their suppliers. The primary focus used to be on environmental sustainability, like pollution and waste, energy and water management. Recently, it has expanded to include social issues like human rights and labour conditions. Tour operators usually anchor these values in their code of conduct with a CSR policy.

Global Sustainable Tourism Council (GTC) Criteria (23)

The GSTC Criteria serve as the global baseline standards for sustainability in travel and tourism. The Criteria are used for education and awareness-raising, policy-making for businesses and government agencies and other organization types, measurement and evaluation, and as a basis for certification.

They are the result of a worldwide effort to develop a common language about sustainability in tourism. They are arranged in four pillars: Sustainable management, Socioeconomic impacts, Cultural impacts, Environmental impacts (including consumption of resources, reducing pollution, and conserving biodiversity and landscapes)

The GSTC Criteria reflect our goal in attaining a global consensus on sustainable tourism. The process of developing the Criteria was designed to adhere to the standards-setting code of the ISEAL Alliance, the international body providing guidance for the development and management of sustainability standards for all sectors. That code is informed by relevant ISO standards.

The Criteria are the minimum, not the maximum, which businesses, governments, and destinations should achieve to approach social, environmental, cultural, and economic

They are the result of a worldwide effort to develop a common language about sustainability in tourism. They are arranged in four pillars: Sustainable management, Socioeconomic impacts, Cultural impacts, Environmental impacts (including consumption of resources, reducing pollution, and conserving biodiversity and landscapes).

CO2 Footprint of tourism products

Another new development involves labelling the CO2 footprints of tourism products. Dutch carbon calculator Carmacal is drumming up global interest by winning some prestigious innovation awards. The tool calculates the CO2 impact of travel packages. Several tour operators have expressed interest in using this tool to ‘label’ their products. After the carbon calculator is rolled out among tour operators, the goal is to make it available for consumers to make their own calculations.



Figure 102: Dutch Carbon Calculator Carmacal (source UNWTO)

IV.1.6. Rural services to inhabitants

General description

People living and working in rural Europe are usually at higher risk of poverty. They also often face difficulties in accessing infrastructure and public services, and display lower levels of employment, income and educational attainment. The term rural isolation refers to these inequalities, as well as the mechanisms that perpetuate them such as remoteness and low population density.

An ageing and declining rural population is a growing problem in many Member States. Young people in particular leave rural areas to seek a better life in cities or abroad. **This has significant implications on the demographic of rural regions, as many of those ‘left behind’ are vulnerable groups for whom leaving is not a viable option (older people, disabled people and children).** Investment in rural areas is therefore needed to increase educational, training and employment opportunities for young people. **Initiatives improving access to infrastructure and services are also needed to improve the quality of life in rural areas, and give inhabitants a greater incentive to stay.**

Rural communities already possess much of what they need to combat social exclusion and isolation. Nonetheless, it is possible to identify patterns of rural isolation across the EU. In 19 EU Member States, the proportion of people at risk of poverty or social exclusion in 2013 was higher

in rural areas than in cities. In rural Romania and Bulgaria, the difference was as much as 20%. This is particularly relevant in the context of the Europe 2020 Strategy, which aims to promote “smart, inclusive and sustainable growth” in Europe during this decade. In line with this, rural poverty and social exclusion must be addressed as a priority, using a sustainable and cross-sectoral approach.

Concretely, rural poverty is characterised by reduced access to education, employment opportunities, infrastructure and services. Although interconnected, each of these issues should be targeted individually. (3)

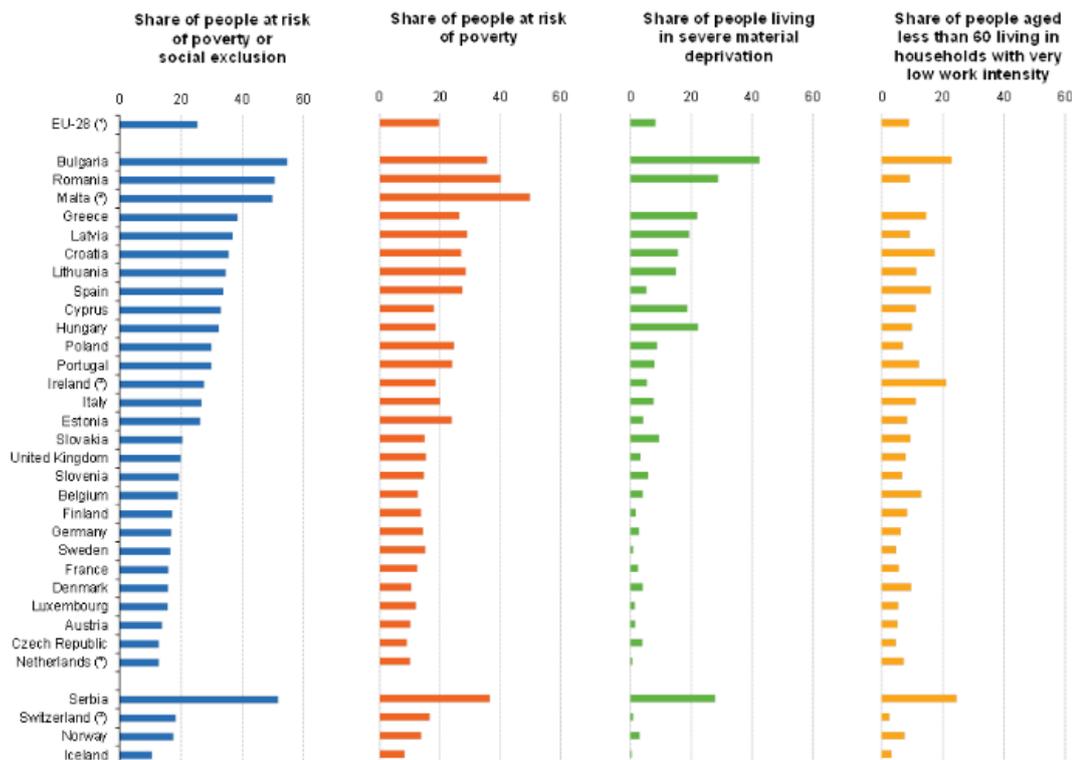


Figure 103: Share of people living in rural areas who are at risk of poverty or social exclusion, by type of risk, 2015 (%)

Activities

The activities cover all services to inhabitants (citizens, economic actors) of rural areas, in the fields of education, sport, culture, leisure, information, health, mobility, transport, logistic, infrastructures (energy, water, communications, roads).

Social farming, digital inclusion, mobile support services, care services are activities we can find in LIVERUR database projects as well as other secondary sources.

Structure & status

NGOs and private sectors are two types of major actors: NGOs often pursue explicit poverty reduction goals, while the private sector may see them as a by-product.(19)

Business model



Services, value proposition

Improving access to services and infrastructure should be the cornerstone of all rural development initiatives in Europe. Problems such as remoteness, low population density and population decline can all be targeted with improved access to education, broadband internet, transport and healthcare in rural regions. For example, building transport links in an isolated area improves access to services, which in turn improves wellbeing and can even reduce outmigration and foster social mobility. Even in the most remote areas, innovative approaches to service provision can ensure that isolated communities have access to basic services.(3)

91

Value Chain

In search of viable alternatives to reducing poverty, value chain development emerged in the early 2000s. Value chain development has generally been defined as an ‘effort to strengthen mutually beneficial linkages among firms so that they work together to take advantage of market opportunities, that is, to create and build trust among value chain participants’. Key concepts related to value chain development are: win–win relationships, upgrading, innovation, and added value. ‘Pro-poor’ value chain development has been defined as a ‘positive or desirable change in a value chain to extend or improve productive operations and generate social benefits: poverty reduction, income and employment generation, economic growth, environmental performance, gender equity and other development goals’. (19)

Many value chain initiatives involving the poor are based on simple conceptual models focusing on a few variables (output, employment, income, production practices, and infrastructure), while minimizing or omitting other critical, albeit complex, factors (e.g. social and human capital building, vulnerability). Such initiatives often aim to achieve greater productivity and better prices for poor households, and the resulting increase in income is seen as a proxy for poverty reduction, if not overall development. On the upside, the simplified design of a value chain initiative reduces both monitoring and evaluation, and implementation costs and makes the results easy to communicate across the chain and to other stakeholders. On the downside, such an approach does not recognize the full set of assets needed by poor households to effectively participate in value chain development, nor does it address how these assets can be built over time to permanently escape from poverty and ensure livelihood resilience, or deal with the trade-offs the rural poor face when making decisions about their allocation of time and resources between a specific value chain and other livelihood activities.

Rural communities are the best equipped to identify and target the problems they face. Giving citizens a platform to articulate these problems empowers them to take action and ensures the relevance and efficacy of rural development efforts. Bringing communities together to share ideas and common experiences not only reduces their sense of isolation, it allows them to work together to target the issues outlined in this report. This is why several Member States have established Rural Parliaments. (3)

The Netherlands

There are some 2500 village organisations in the Netherlands. These organisations are made up of volunteers who take responsibility for the wellbeing of their villages. Village organisations are members of a regional organisation for small villages. There are 11 regional organisations, made up of professionals who support the village inhabitants and their local organisations. These 11 regional organisations form the national organisation LVKK (Landelijke Vereniging voor Kleine Kernen – National Organisation for Small Villages).

LVKK hosts national Rural Parliaments, bringing together representatives from local and regional organisations across the Netherlands. Regional organisations host a parliament once every two years, and themes from these regional parliaments are noted and, if widely relevant, discussed at the national meetings. Issues related to just one specific region are sent to the regional government.

Prevalent themes at Rural Parliaments in the Netherlands include ageing and declining populations in rural areas, the economic crisis, social mobility, access to healthcare, education and broadband internet, as well as the renovation of unused buildings for social purposes (such as housing for young people or spaces for vocational projects).

At the November 2015 Rural Parliament, the main themes were healthcare in rural areas and the allocation of social housing. Following the event, concrete advice was sent to the Dutch parliament. Events such as these facilitate dialogue between rural communities and regional and national governments, ensuring the relevance and efficacy of rural development efforts in the Netherlands.



© Plattelands Parlement

Figure 104: Example of the Netherlands (source: <https://volonteeurope.eu>)

Challenges

Integrated and new flexible approach to the provision of services with coordination of public services

Governments across the OECD are increasingly pursuing what can be described as integrated and flexible approaches to the provision of services in rural areas as a way of maintaining quality and access. Integration refers to the coordination of public services across a range of sectors. Flexibility in service provision refers to use alternative models to deliver public services—e.g., the use of e-health services or mobile services. These types of service delivery models can entail greater risk, involve a wider array of actors, and must navigate challenging regulatory issues (10)

Accessing education

Access to education is strongly correlated with life chances and social mobility. A lack of educational skills and qualifications tends to limit access to jobs, and therefore increases the risk of poverty and social exclusion. In assessing access to education, a number of dimensions should be considered, including level of educational attainment¹, school dropouts², academic achievement, and participation in lifelong learning.

In general, rural areas present lower levels of educational attainment and higher rates of school dropouts. Across the EU, the proportion of early leavers from education and training was highest among those living in rural areas (13.3% compared with 12.6% in towns and suburbs, and 10.7% in cities). Early leavers made up a higher share of the population aged 18-24 in rural areas in most



EU Member States and particularly in rural areas of Bulgaria, Spain and Romania. The percentage of people who achieved at least upper-secondary education in rural areas in 2013 was 71.2%, compared to 77.8% in cities. In rural regions of Bulgaria, Greece, Spain, Italy, Malta, Portugal and Romania, the percentage was as low as 60%. Rural regions also present the lowest rates of lifelong learning.

As the European Commission has rightly noted, “evidence suggests that delivery of education and training, at all levels of the education system, is likely to prove an important mean of helping the poor and socially excluded” in rural areas. (3)

Employment

In 2013, predominantly rural regions had a slightly lower rate of employment than the country average in 15 Member States. For the EU as a whole, the employment rate in rural Europe stood at 68% in 2013, 0.8% below intermediate regions. There are, however, significant discrepancies in the distribution of employment rates by degree of urbanisation across the EU. In Bulgaria and Lithuania, for example, employment rates were as much as 14.3 and 12.3 % higher in cities than in rural areas. As the number of farms across the EU decreases, rural workers in Member States are leaving agriculture and seeking employment in other sectors. In 2010, there were around 12 million farms in the EU, but only 10 million Annual Work Units¹, which is less than one per farm. (3)

Ageing populations

Ageing populations are particularly prominent in rural parts of Bulgaria, Germany, Greece, Spain, France, Italy, the Netherlands, Portugal, Finland, Sweden and the United Kingdom. In rural regions, only four countries (Belgium, Poland, Slovakia and especially Ireland) have more young people than older people, while Germany, Spain, Italy and Portugal count less than 65 young people for every 100 older people

Growth of ageing population will lead to an increased burden on those of working age to provide for the social expenditure required by the ageing population for a range of related services.

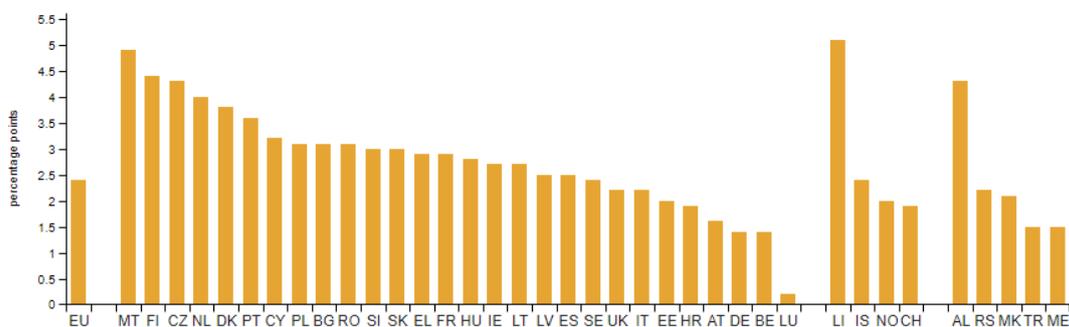


Figure 105: increase in the share of the population aged 65 years or over between 2007 and 2017 (Source: Volonteuropa)

Outmigration

Due to a lack of educational and employment opportunities, rural Europe experiences high levels of outmigration. An ageing and declining rural population is a growing problem in many Member



States. Young people in particular leave rural areas to seek a better life in cities or abroad. This has significant implications for the demographic of rural regions, as many of those ‘left behind’ are vulnerable groups for whom leaving is not a viable option (older people, disabled people and children). From an economic perspective, these trends are worrying. There can be little development in areas where younger and more qualified groups leave to seek better opportunities elsewhere. Furthermore, those staying behind are vulnerable and more likely to suffer the effects of social exclusion. Not only is it harder for vulnerable groups to live in areas lacking infrastructure and support, they are also often unable to contribute to the development of the local economy. In many cases, rural isolation becomes self-perpetuating. (3)

Healthcare

There is a direct correlation between geographical position and access to healthcare. There tend to be fewer healthcare providers in sparsely populated areas, as there is less incentive to provide services due to the low number of people being served. Poor access to education and training also means that there are likely to be fewer local medical professionals in these regions. This means that patients may have to travel long distances to receive necessary assistance. Whereas young people leave rural areas to seek better opportunities, some of the older or disabled population may be forced to leave to access services. Access to healthcare is therefore an important factor to consider when assessing wellbeing in rural areas. In 2013, the proportion of the EU-28 population aged 18-64 who classified their own health as bad or very bad was as high as 6.7% among rural populations. This was somewhat higher than those living in urban areas (6%). The discrepancy was particularly noticeable in Eastern Member States. Rural areas across EU Member States suffer from a lack of medical infrastructure and staff, as well as limited access to medical specialists. In some cases, difficulty accessing healthcare is also due to the low number of people with medical insurance in rural areas (for example agricultural workers and small farmers who usually have small or no pensions). The challenge of accessing medical assistance is even greater for vulnerable ethnic minorities and undocumented migrants. The EU’s health strategy is closely aligned with the Europe 2020 strategy. **Investment in health, and attempts to reduce health inequalities, must target rural areas as a priority. With better access to healthcare, rural populations will stay active for longer, reinforcing their employability and contributing to social cohesion (3).**

Internet access

The European Commission’s Digital Agenda is one of the seven pillars of the Europe 2020 Strategy. It aims to tap into the potential of ICT to foster innovation, economic growth and progress. A lack of ICT skills perpetuates unemployment in rural regions, as rural workers cannot compete in the modern labour market. It therefore impedes economic development and increases feelings of isolation, with communities feeling ‘cut off’ from the modern world. While one of the seven pillars of the Digital Agenda is to promote fast and ultra-fast internet access to all, broadband internet is available to only 76% of rural households in Europe, compared to 96% of non-rural households. This urban-rural digital divide, especially acute in the newer Member States, is further reinforced by a lack of ICT education in rural schools. The implications of such a digital divide are numerous. A lack of ICT skills perpetuates unemployment in rural regions, as workers cannot compete in the modern labour market. It therefore impedes economic development and increases feelings of isolation, with communities feeling ‘cut off’ from the modern world. People without internet access are also unable to view online information about

government and civil society initiatives, which may be helpful to them. It is therefore vital to increase broadband availability and take up in rural areas, and increase ICT training in line with this. (3)

Trends

To combat rural isolation, governments, businesses, citizens and civil society need to be pulling in the same direction. Rural communities already possess much of what they need to combat poverty and social exclusion, and together we must support them to do just that.

To recognize and foster rural communities, who have tremendous development potential, through participative and inclusive development processes: Local communities understand their context and needs, and are the best equipped to identify and target the problems they face. Rural communities must therefore be given a platform to articulate these ideas and problems, whether that be an official rural parliament, or a more informal rural meeting. They must be consulted and involved at every step of rural development processes, and empowered to take action. It should be recognised that rural communities have a lot to offer, and we must work together to create an enabling environment for them to reach their full potential.

“The countryside possesses intrinsic therapeutic values that can be harnessed in win-win ways to help society and rural economic development.” (Source: European network for rural development)

To introduce, develop new technologies as enablers for increasing social services and benefits for citizens.

Health relies on technology to modify the provision of healthcare and medical research in rural areas. Social isolation, a lack of skilled medical staff and an ageing population are pressing challenges. Drones delivering blood, t-shirts that monitor health or medical 3D printing is currently being used.



The challenge by introducing these technologies is to enhance social inclusion rather than increase social isolation (e.g. digital service provision may increase isolation), to manage these technologies (lack of skilled medical staff), and accessibility to reach health centres with technology (infrastructure still matters). (13)

Last year, the **Imago Mundi Association** led a small-scale ICT project in the rural community of Mălureni in Romania. The initiative, Digital Opportunities For Future Generations, hosted a series of ICT workshops with the aim of increasing the computer skills of the community's young population.

A lack of ICT education in rural schools further reinforces the urban-rural digital divide.

An example of effective cross-sector collaboration, the project was sponsored by Renault Romania and Ateliere Fara Frontiere, and coordinated by Imago Mundi. Bringing targeted ICT training to rural areas fosters social mobility and economic development by equipping rural populations with

Figure 106: Example of Project supporting ICT training (source: <https://volonteurpe.eu>)

In the field of energy, if new technologies linked to energy production expand in rural areas (solar, wind, biomass), the challenge is to develop more user-centered models, increasing social inclusion and services to inhabitants, specifically in the field of mobility which is still often underdeveloped. LIVERUR database gives an example of a solar taxi service in Austria.



© Devetashko Plateau Association

A place of stunning beauty, the Devetashko Plateau is one of Bulgaria's most isolated regions. For years, people from the area's handful of villages saw no reason to come together in common activities or projects. In 2007, however, the **Devetashko Plateau Association** built a playground in one of the local villages. The following year, the Association brought the region's residents together to share their visions of how they wanted the Plateau to develop. Ever since, the organisation has been carrying out projects at the communities' request. With the Devetashko Plateau Association's help, the communities have found a way to revitalise the local economy and generate income.

Taking advantage of the beautiful natural attractions and rich traditions the Devetashko has to offer, the communities registered guesthouses and restaurants to cater for tourists. Only 10 years ago, the region was completely unknown to Bulgarians, now it receives hundreds of visitors each year. The local residents are very proud of their heritage. They offer visitors unique culinary experiences and planned activities (such as foraging for wild herbs). For the past 8 years, the villages have also competed to host the annual 'Songs of Spring' festival, which attracts visitors from all over Bulgaria. The people from the Devetashko Plateau have come together to show their region and traditions to the world.

Very importantly, the Association and the communities have attempted to spread the benefits of their revitalised local economy throughout the region.

Very importantly, the Association and the communities have attempted to spread the benefits of their revitalised local economy throughout the region.

Visitors are encouraged to stay and participate in activities in the most remote mountainous villages which are not so close to the popular attractions. This way, communities with apparently fewer opportunities for growth are supported in generating local income.

A large part of the initiative's success is that it was built on previously existing local capital, involving even the most remote communities. By promoting tourism in the area, the people of the Devetashko Plateau have created a network of rural communities, built connections with urban populations and found a sustainable approach to stimulating the local economy and labour market.

Figure 107: Example of Project supporting local economy (source: <https://volonturope.eu>)

Social farming success story: EAFRD project highlights rural Austria's potential for social inclusion services

A farm diversification project in Austria typifies the potential socio-economic benefits of using agriculture as a basis for the provision of different types of health and education therapies.



Services for special needs: EAFRD project provides valuable transitional care support in rural Spain

Funds from a Spanish RDP have helped to create a community residence where severely disabled people can be offered basic care, as well as educational and professional occupational training.



Help for minority groups: Hungarian EAFRD project improves opportunities for rural Roma families

Some sections of rural society remain disadvantaged by obstacles to integration. Many Roma communities, for example, continue to experience problems regarding exclusion from employment, education, health and welfare.





Digital inclusion: Slovenian farmers benefit from computer literacy courses

Access to the Internet is frequently considered as a basic social need in modern societies, and RDP support is being used to address digital inclusion challenges around rural Europe.



Mobile support services: Portuguese projects improve management of home care provision



Community development approaches to social inclusion continue to increase throughout rural Europe and the EAFRD is involved in supporting these projects through the use and improvement of mobile social services.

Problem-solving assistance: English farm provides valuable care services for local community

EAFRD co-finance from England's RDP has been used to enhance a care farm development leading to the provision of new services and support that are helping to solve some of the social inclusion problems faced by people with special needs.



Figure 108: Example of EAFRD project supporting social inclusion (24)

IV.2. Synthesis on Business Models conceptualization

The Business Model Canvas is a tool commonly used to describe an existing business model or to create a new one.

It gives indication on the value proposition, target customer, cost structure, financing, key activities, resources and partners to achieve the value proposition.

Among different existing canvas tools, we choose to use Alexander Osterwalder model, for its efficiency regarding key issues to address in LIVERUR and ease of use in a “multi stakeholders” context.

Such business model implementation requires to analyse economic environmental (market, competition...) and to have in mind the vision and strategic issues of the project.

The business model canvases offered in this chapter formalise the existing rural landscape that has been developed in chapter II.1 on the 5 main existing streams, giving a framework and generic bricks to be used in the next steps of LIVERUR by the partners, to move from this existing representation to new “Living Lab” business model creation.

Figure 109: Positioning of projects/initiatives in the 5 existing business model types precises the positioning of LIVERUR data base projects both on this existing business model and on emerging, new business models trends developed in the next chapter. This positioning shows that LIVERUR data base projects already addresses more innovating and emerging trends than conventional and current mainstream ones.

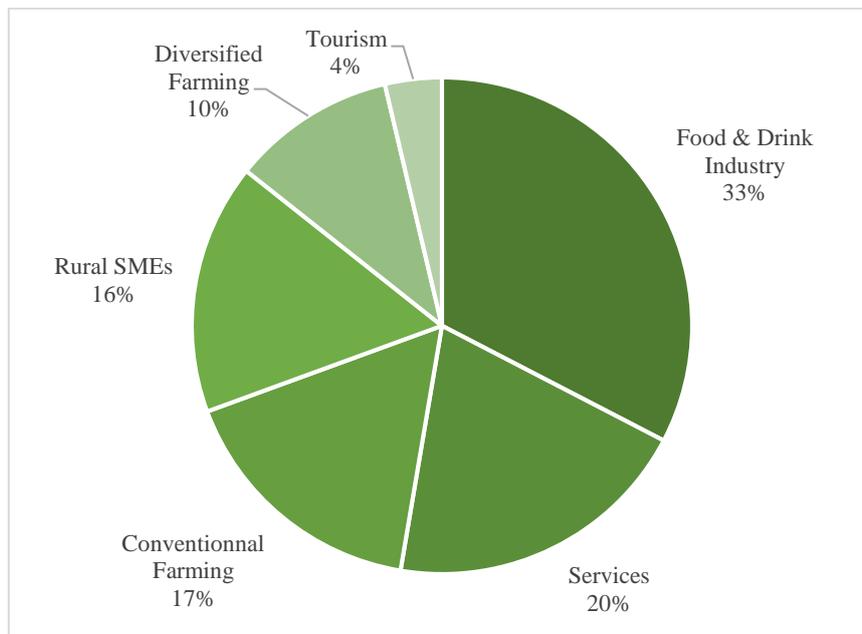


Figure 109: Positioning of projects/initiatives in the 5 existing business model types



IV.2.1. Business model Conventional farming

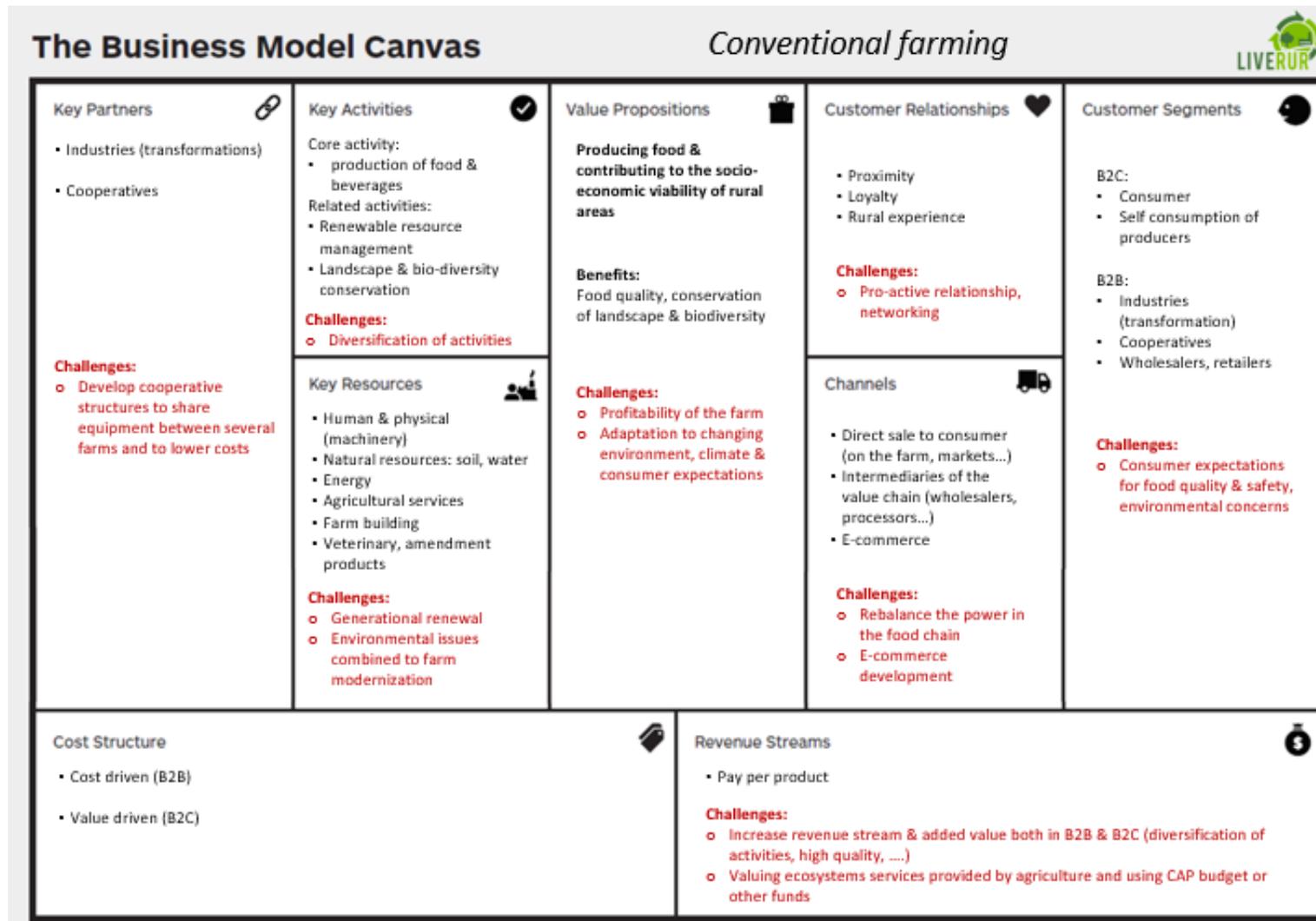


Figure 110: Business Model Canvas for Conventional Farming



Examples:

| La Lucerna http://cooplalucerna.it/ | |
|--|---|
| Country | Italy |
| Date of beginning | 1987 |
| Legal status | Social Enterprise |
| Workforce | - |
| Activities | Growing and distribution of vegetables |
| Value proposition | Provide biologic products, while reducing impact of production on environment |
| Value chain | Direct sale, on the farm, on retail point of sales and on line |





| Fresh Carott.com http://www.versepeen.nl | |
|--|--|
| Country | NL |
| Date of beginning | 1992 |
| Legal status | Cooperative |
| Workforce | 50 |
| Activities | Production of carrots |
| Value proposition | Provide certified products of quality and freshness thanks to experience and knowledge of the 3 growers' joint venture. |
| Value chain | Member of Fossa Eugenia growers' association whose aim is to supply premium quality produce that meets the demands of critical consumers via the shortest possible chain. A winning formula for customers and growers alike. |





IV.2.2 Business model Diversified farming

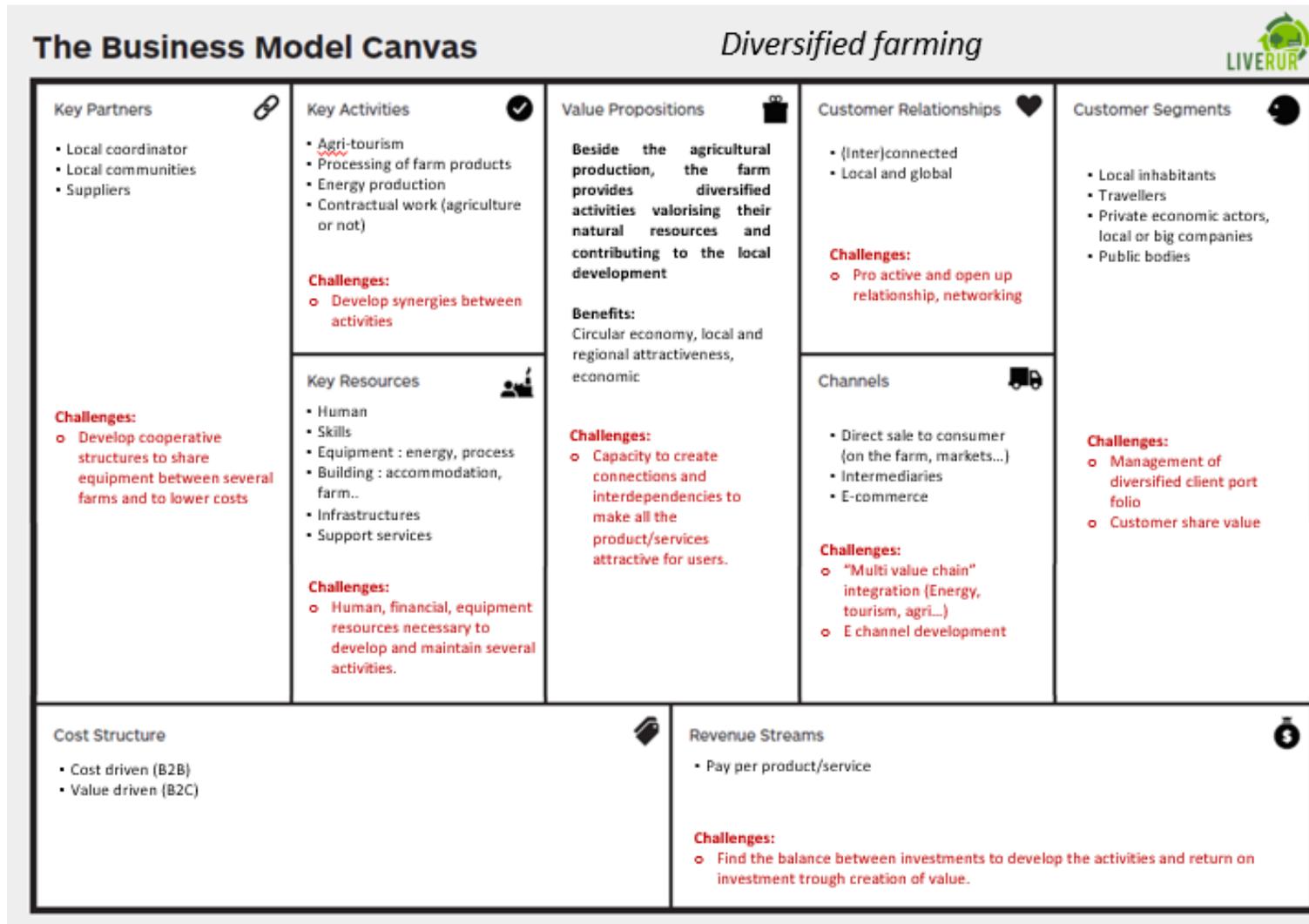


Figure 111: Business Model Canvas for Diversified Farming



Examples:

| Mlyn Podhora http://www.krus.cz | | |
|--|--|--|
| Country | Czech Republic | |
| Date of beginning | 1996 | |
| Legal status | Individual Company | |
| Workforce | 3 | |
| Activities | Vegetable and fruit production, fodder crops, guest house, small museum, services (agri and municipalities maintaining cross country trails in winter) | |
| Value proposition | Rural tourism for special customers, local tradition in cabbage growing, contributing to attractiveness of the region | |
| Value chain | Direct customer | |

| Aziende Agricola Moretti http://www.aziendagricolamoretti.it/ | | |
|--|--|--|
| Country | Italy | |
| Date of beginning | 2007 | |
| Legal status | Individual Company | |
| Workforce | 5 | |
| Activities | Cattle farming and transformation, growing of crops for animal feeding | |
| Value proposition | Provide high quality, safety and sustainable products | |
| Value chain | Direct sale , on the farm and on line | |



IV.2.3 Business model Food & Drink Industry

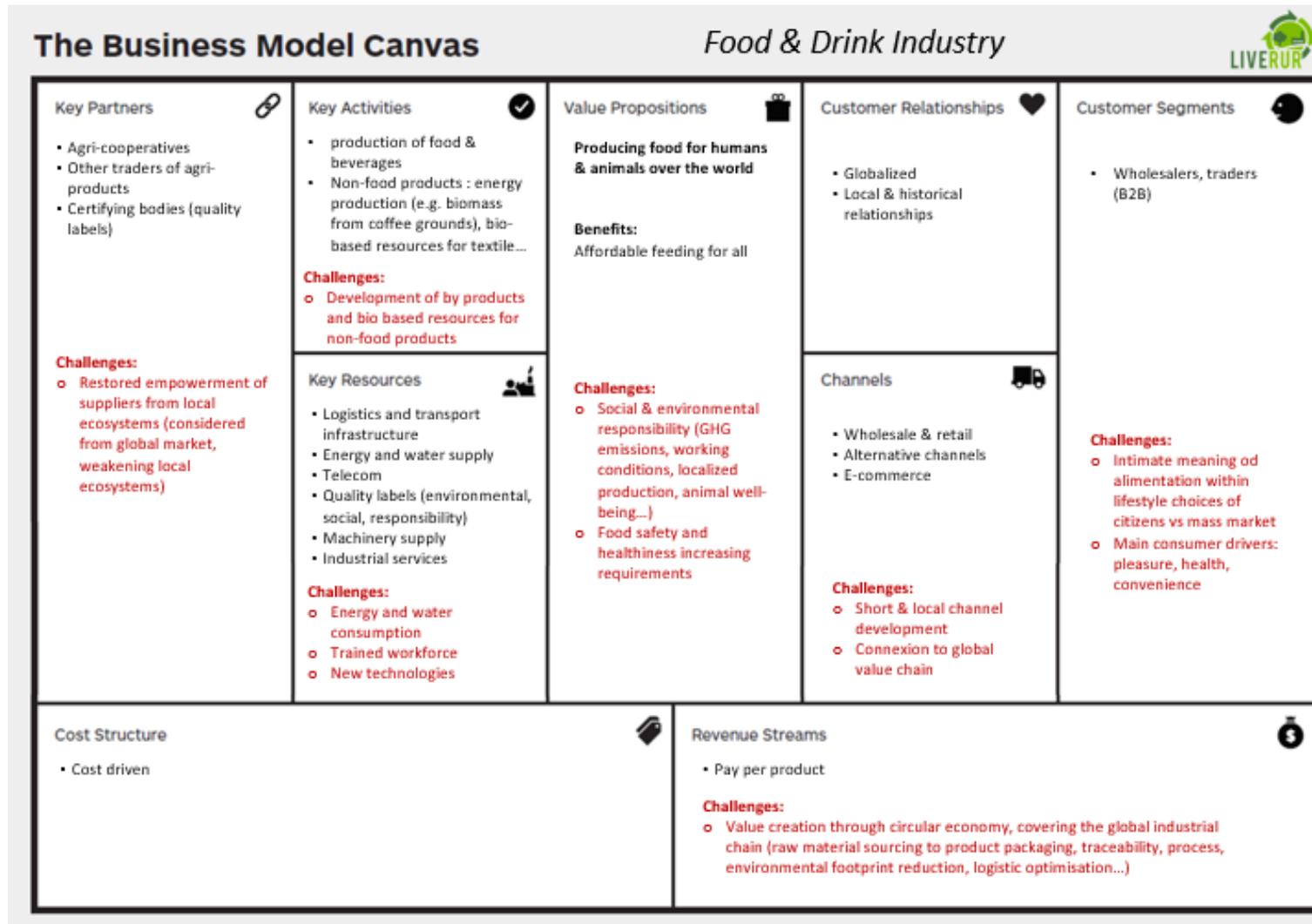


Figure 112: Business Model Canvas for Food & Drink Industry



Examples:

| Prima Mundo http://www.primamundo.com/en | |
|---|--|
| Country | Belgium |
| Date of beginning | 1960 |
| Legal status | Cooperative |
| Workforce | 50 |
| Activities | Supplier of vegetables and fruits, logistics |
| Value proposition | “By working with different sites spread all over Belgium, we are able to offer a tailor-made service to all our customers. Thanks to this spread we are able to play on our strengths to maximum effect: flexibility, quality and sustainability.” |
| Value chain | Wholesaling products from producers selected on sustainable requirements, to final consumers national and international, through 4 brands |




SUSTAINABILITY

Sustainability is an important aspect in our society in 2017. The PRIMAMUNDO group wants to contribute to this as well. Sustainability is the future and a

QUALITY STANDARDS

The PRIMAMUNDO group and its different sites have the necessary certificates to profile themselves as your partner for fruit and vegetables.

| LactAçores | |
|-------------------|--|
| Country | Portugal |
| Date of beginning | 1991 |
| Legal status | Cooperative |
| Workforce | 105 |
| Activities | Collect and deliver dairy products |
| Value proposition | “Company of excellence with high levels of growth both at home and abroad, based on the excellence and quality of our products.” |
| Value chain | Union of Azores dairy cooperatives, sell products coming from the islands, made using traditional expertise and meeting the highest food safety standards. |






IV.2.4 Business Model Rural SMEs

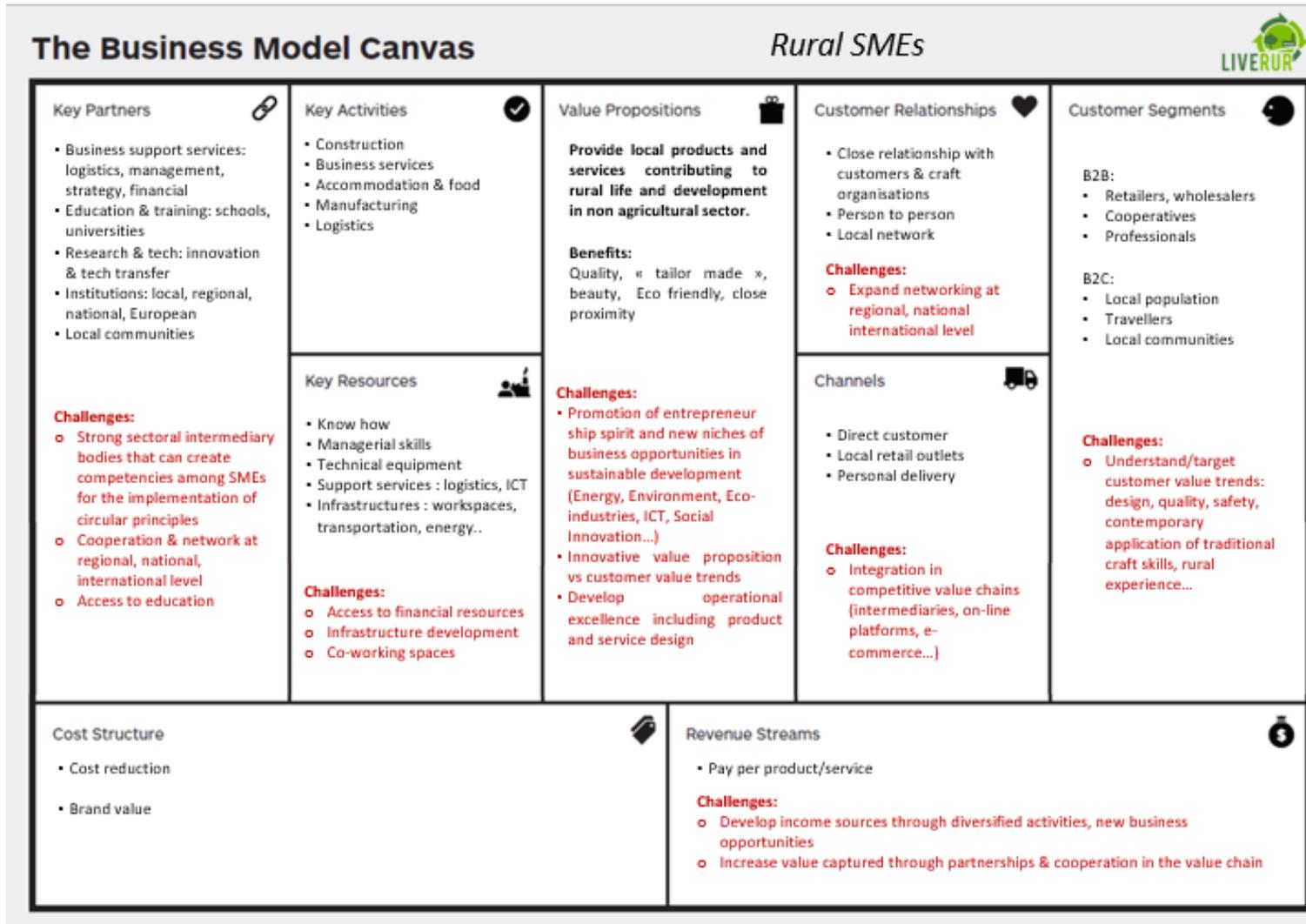


Figure 113: Business Model Canvas for Rural SMEs



Examples:

| VINNÝ ŠENK U MIKEŠE http://www.vinnysenkumikese.cz/ | |  <p>Virtuální prohlídka</p> |
|---|---|--|
| Country | Czech Republic | |
| Date of beginning | 2000 | |
| Legal status | Individual company | |
| Workforce | 4 | |
| Activities | Catering services, sale of alcoholic and non-alcoholic beverages, food, regional food, wine bar, café | |
| Value proposition | Gastronomic experience through local products | |
| Value chain | Direct sale to consumers (tourists, inhabitants, private companies, restaurants) of regional products | |

| Pedrin http://organicospedrin.com/ | |   |
|--|---|---|
| Country | Spain | |
| Date of beginning | 1 | |
| Legal status | Limited Liability Company | |
| Workforce | 3 | |
| Activities | Sale of organic fertilizers | |
| Value proposition | « Basic pillar of our activity is the optimal combination of traditional manure process and integration of new technologies to provide differentiated and highest quality products» | |
| Value chain | Supply of organic material from local farmers, sell to farmers through network distribution | |



IV.2.5 Business Model Rural Tourism

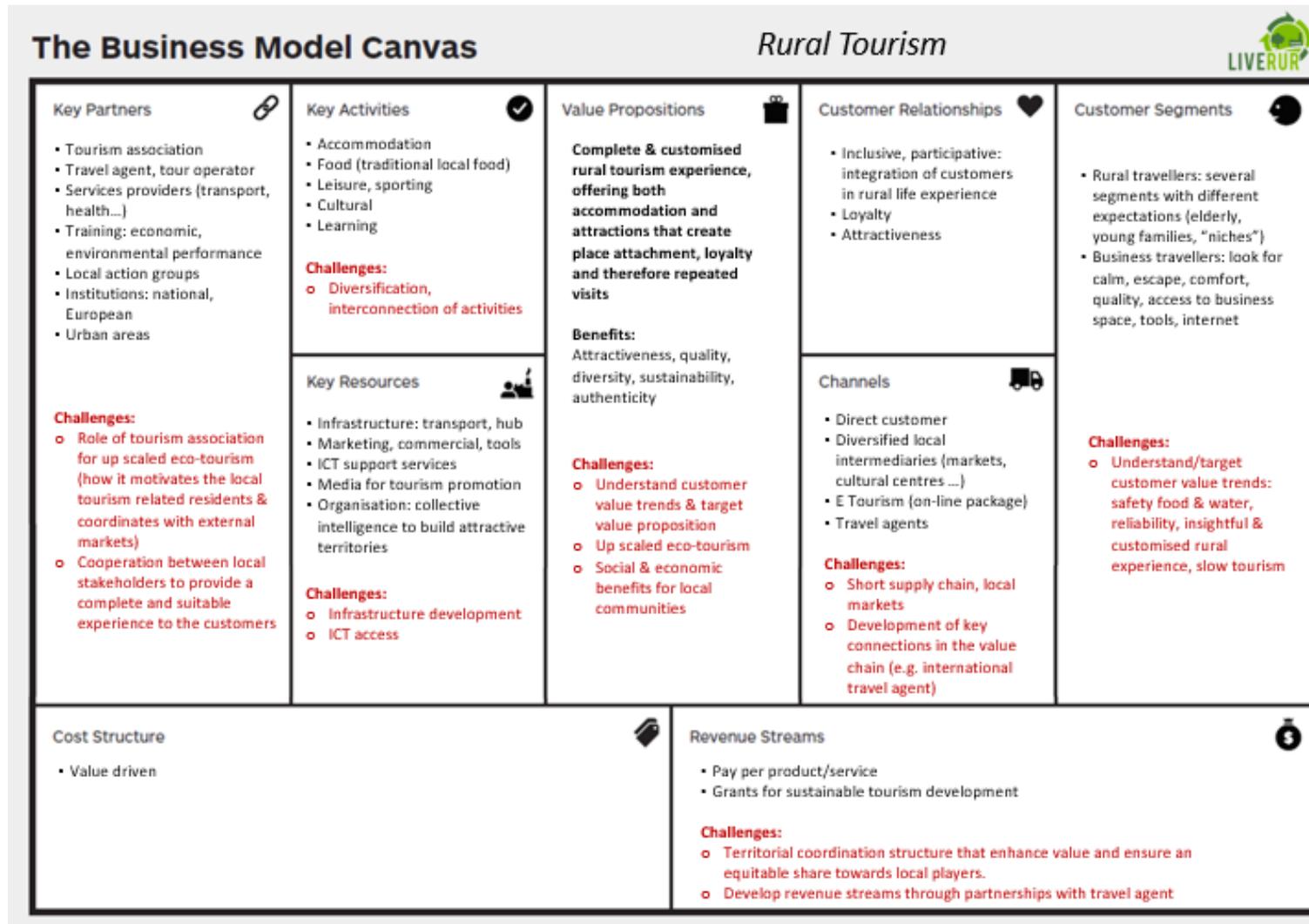


Figure 114: Business Model Canvas for Rural Tourism



Examples:

| Erlebnispardies Südburgenland https://www.erlebnispardies.at/erlebnispardies/ | |  <p>“Ever wanted to make your own chocolate, work on roasting coffee or even be a farmer for a whole day? Then you are exactly right with us! “</p> |
|---|---|--|
| Country | Austria | |
| Date of beginning | 2003 | |
| Legal status | Non profit corporation | |
| Workforce | 2 | |
| Activities | Culinary, wine, wellness, sports, landscape and culture | |
| Value proposition | “Come experience and enjoy Adventure paradise Southern Burgenland.” | |
| Value chain | Coordination of 50 companies (producers, direct markets, farmers, leisure facilities, hosts) in 4 region; Marketing, Promotion towards general public | |

| Finca El Campillo http://www.fincacampillo.com/ | |  |
|---|---|--|
| Country | Spain | |
| Date of beginning | 2018 | |
| Legal status | Limited Liability Company | |
| Workforce | 2 | |
| Activities | Rural accommodation | |
| Value proposition | Comfortable and high quality rural accommodation combined with regional attractive activities | |
| Value chain | Tourism office makes coordination, marketing and promotion of regional tourism activities through | |



IV.2.6 Business Model Rural services to inhabitants

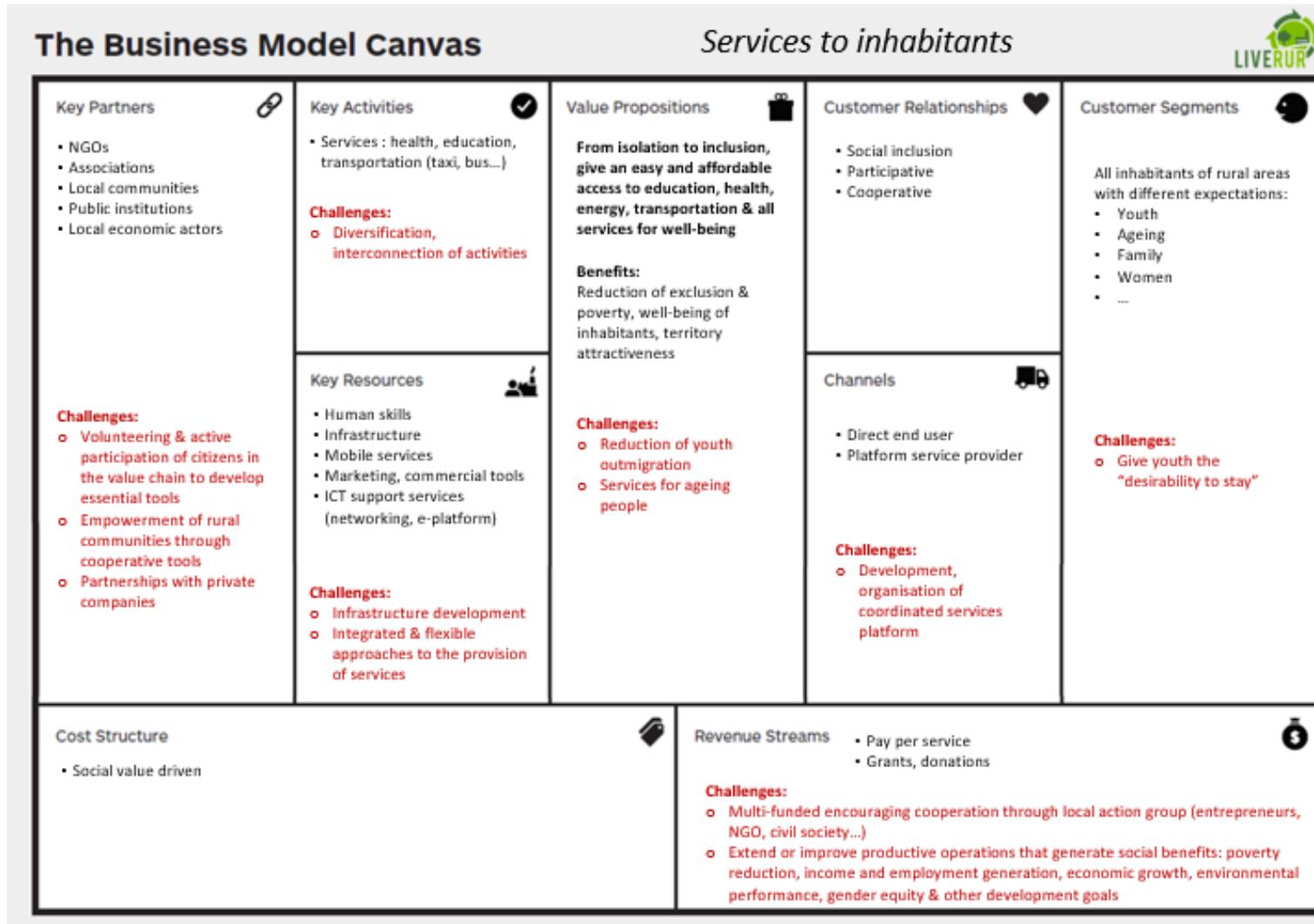


Figure 115: Business Model Canvas for Services to Inhabitants



Examples:

| PONICS VET http://zemniekusaeima.lv/en/ponics-vet-hydroponics-agricultural-technician/ | |  |
|--|---|--|
| Country | Latvia | <p>More information on the project website – HERE</p> <p>Project partners:</p> <ul style="list-style-type: none"> - Latvia University of Agriculture (Latvia) - IDEC (Greece) - Eurocrea Merchant (Italy) - BIC INNOBRIDGE (Bulgaria) - Association for Vertical Farming (international non-profit organisation) - Union “Farmers’ Parliament” (Latvia) |
| Date of beginning | 2017 | |
| Legal status | Non profit corporation | |
| Workforce | 7 | |
| Activities | Training on Hydroponics Agricultural Technicians | |
| Value proposition | Build up an innovative professional profile, the HYDROPONICS TECHNICIAN and a training course for such a profile. | |
| Value chain | The training is addressed to young farmers (aged 19-35) , coming from rural and semi-urban areas. It is based on the European credit system for vocational education and training (ECVET) in order to enable the mobility of learners between EU countries and facilitate the creation of employability for young people, especially in the agricultural sector. | |
| Clinica de fisioterapia Aday http://fisioterapiaaday.com/ | |  |
| Country | Spain | |
| Date of beginning | 2018 | |
| Legal status | Property owned jointly | |
| Workforce | 3 | |
| Activities | Health care services : physiotherapy, neuropsychology, osteopathy, dietetic, pomology, depilation laser | |
| Value proposition | Trusty and highly skilled professional team for people wellbeing improvement. | |
| Value chain | Provide services to local inhabitants | |

IV.3. From existing business models to innovative models

IV.3.1 Introduction

Seven main trends have been identified, coming from major issues to address, and LIVERUR database of projects. Despite we aimed at giving the most exhaustive and representative cartography, it may be still reducer regarding the diversity, great amount of innovative initiatives and trend for linkage activities more than sectorised one.

Figure 116: Positioning of projects/initiatives in the 7 innovative business model shows the positioning of LIVERUR data base cases in the different innovative trends identified.

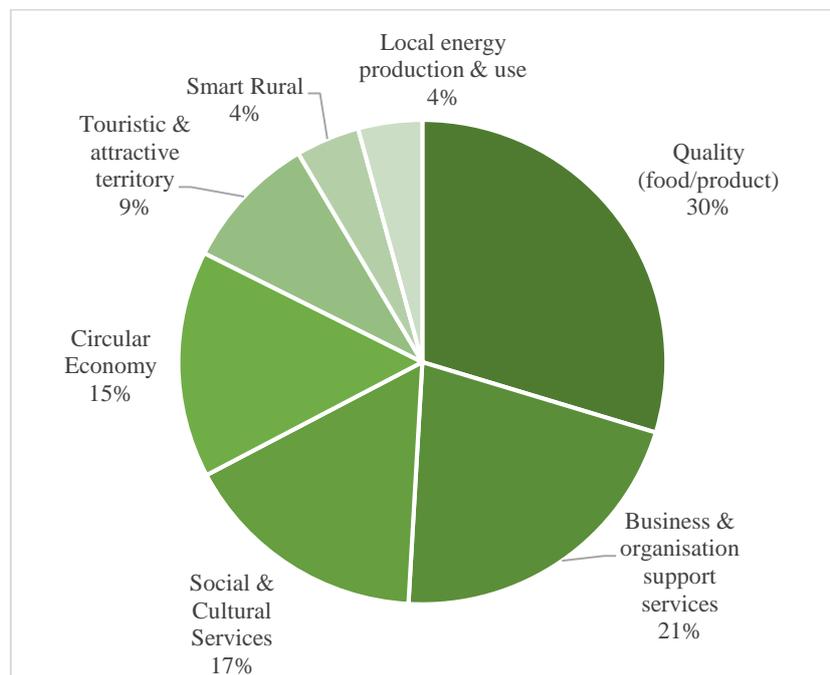


Figure 116: Positioning of projects/initiatives in the 7 innovative business model trends

Innovating way of representing the business models are emerging, from “conventional” canvas type to more circular and cooperative types, and will have to be built by each European territory. That is the goal of LIVERUR WP3 through a participative and co construction approach.

IV.3.2 Development

IV.3.2.1 Smart rural

Definition: New technologies integration in rural areas, covering ICT, Electronics, Energy..

Main challenges:

- New technologies development as enablers for increasing social services and benefits for citizens : ICT access, Training & education ...

- Environmental challenge combined to farm modernization
- Adaptation to a fast changing environment and climate

Innovative trends:

- Upgrade of agri-food production tool and logistic chain
- Autonomous machinery
- Integration of sensors and soft fort measures, prediction, diagnostic, localization...
- E-learning, e-business, e-health, e-mobility...

Typical examples of LIVERUR database

| BauernAutomat https://www.bauernautomat.at | |  <p>The demand for original foods is rising steadily, while the demands of consumers for quality and availability are high. People like to buy directly from the farm! Your personal farm machine is the solution for constant availability - so you can offer your customers around the clock fresh products from our own production - without having to be constantly on site.</p> |
|---|--|--|
| Country | Austria | |
| Date of beginning | 2016 | |
| Legal status | Limited Liability Company | |
| Workforce | nd | |
| Activities | Manufacturing and sell of automatic food distributors | |
| Value proposition | “Your personal outlet farm shop” | |
| Value chain | Component supplier, assembly, turnkey solution saied to food producers | |

| DOT farming reimaged https://seedotrun.com/about.php | |  |
|--|---|--|
| Country | Canada | |
| Date of beginning | 2017 | |
| Legal status | Limited Liability Company | |
| Workforce | - | |
| Activities | Mobile diesel-powered platform designed to handle a large variety of implements commonly used in agriculture, mining and construction. | |
| Value proposition | “Packed with some of the latest technology from both the agricultural and automotive industry, DOT is intelligent and hardworking enough to | |

| | | |
|-------------|--|--|
| | complete every task it's assigned—without taking a lunch break.” | |
| Value chain | Sale to farmers | |

Comment: a prototype unit is powering a seeder, sprayer, land roller, and grain cart on research farm fields. In 2018, a limited release will be made available to select farms in Saskatchewan directly from Dot Technology Corp. Based on the performance of the limited release, production will ramp up significantly and distribution will be broadened. (source: LIVERUR database)

IV.3.2.2 Rural circular economy

Definition: A circular economy is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life. (29)

Main challenges:

- Environmental impact reduction
- Social inclusion
- Economic growth of small farms and SMEs

Innovative trends:

- Cooperation between all stakeholders
- Hybridisation of different traditional business model for new holistic approaches
- Waste recycling and reuse

Typical examples of LIVERUR database

| | | |
|---|---|--|
| Beyond Waste www.sustainablelivinglab.net | | |
| Country | Switzerland | |
| Date of beginning | 2018 | |
| Legal status | Non-profit corporation | |
| Workforce | 4 | |
| Activities | Action learning platform : ideation, prototype, test sustainable solution, convene social ecosystem and facilitate cross sector collaboration | |
| Value proposition | Explore the potential of ecosystem awareness and facilitate the co-creation of solutions for circular economy | |

“Drawing from Theory-U as a basis for reflexive action, Beyond Waste Lab is part of a wider movement known as Transforming Capitalism Lab (TCL), led by MIT's Presencing Institute and HuffPost. “

| | | |
|-------------|--|--|
| | transformation in Canton de Vaud | |
| Value chain | Open collaboration between governments, business and civil society | |

| | | |
|--|--|--|
| Orange Fiber http://orangefiber.it/ | | |
| Country | Italy | |
| Date of beginning | 2014 | |
| Legal status | Limited Liability Company | |
| Workforce | 5 | |
| Activities | Design, manufacture, and sell clothes made with orange fibre | |
| Value proposition | “Responsible Passion, Innovation and elegance” : sustainability, new standard luxury 3.0 | |
| Value chain | Citrus juice by product collected nearby producers as raw material for clothes that are designed, and sold by Orange Fiber and Through fashion Tech Lab. | |

IV.3.2.3 Social & cultural rural services

Definition: All services to inhabitants, including social (health, education, sport...) and cultural.

Main challenges:

- Integrated and new flexible approach to the provision of services with coordination of public services across a range of sectors
- Ageing people care
- Social inclusion (disabled, migrants)
- Decrease of youth outmigration

Innovative trends:

- Organisation, governance that give empowerment to rural communities
- Development of global platform for services coordination
- Alternative models to deliver services (e health, e mobility...)

Typical examples of LIVERUR database

| Poterie de Sejnane http://sejnenia.tn | | |
|--|--|--|
| Country | Tunisie | |
| Date of beginning | 2012 | |
| Legal status | Cooperative | |
| Workforce | 8 | |
| Activities | Pottery handcraft | |
| Value proposition | Local know how, collective visio. “While inventing new designs, potters have built links with new generation of customers at an international level. | |
| Value chain | Participative and transparent governance with 35 women subscribers. An advisory committee “Amis de Sajenan” gives support to the group | |

| Arrive Tour Qay http://sejnenia.tn | | |
|---|---|--|
| Country | Austria | |
| Date of beginning | 2017 | |
| Legal status | Non profit organisation | |
| Workforce | 2 | |
| Activities | discussion platforms with politicians and municipality employees, workshops on cultural diversity . | |
| Value proposition | <p>The focus of the initiative is on cultural transmission and educational work at a regional and interregional level, where projects are elaborated by integrating ideas and needs of citizens and newly immigrated residents on a demand- and process-oriented basis, specifically to the needs of municipalities in order to improve interculturality and diversity in municipalities.</p> <p>Target Groups are community ministers, local clubs and schools, volunteers, interested people, new arrivals.</p> | |

Structure development and involvement of communities:
 2016: Pilot with two municipalities (Freelance activity Ikult)
 2017: Seven municipalities (Leader Saalachtal)
 2018: Nine Municipalities (Leader Saalachtal)
 From 2019-2020 overall Pongau (Leader Pongau)

IV.3.2.4 Local energy production & use

Definition: Local renewable and sustainable energy production (biomass, solar, wind, geothermal..) and systems to reduce energy consumption

Main challenges:

- GHG reduction, waste reduction
- Viable economic local business model
- Security of energy supply

Innovative trends:

- Co-operative merging of the energy supply
- Circular economy model (biomass, heat recovery...)

Typical examples of LIVERUR database

| Derval Agri Méthane | |
|----------------------------|--|
| Country | France Pays de La Loire |
| Date of beginning | 2013 |
| Legal status | Regular Corporation |
| Workforce | |
| Activities | Collective methanator for electricity and heat production |
| Value proposition | Experimental and training demonstrator for farmers |
| Value chain | Biogas is transformed in electricity first, then in heat by co-generation; heat is valorised by warming the local swimming pool and the high school of DERVAL. The digestate is valorised by fertilising fields of 5 farmers. Electricity is sold to the national company EDF. |

Loire-Atlantique- Derval agri méthane est né!
Chambre d'agriculture de Loire-Atlantique

Le 09/10/2017 à 18:28 | Soyez le 1er à déposer un commentaire

Le projet de méthaniseur collectif à la ferme de Derval va enfin voir le jour ! Il permettra de chauffer la piscine et le lycée de Derval à partir d'effluents d'élevages locaux.

| Energy park Micheldorf-Hirt | |
|---|--|
| https://nachhaltigwirtschaften.at/en/edz/projects/energy-park-micheldorf-hirt.php | |
| Country | Austria |
| Date of beginning | 2007 |
| Legal status | Non profit Corporation |
| Workforce | - |
| Activities | |
| Value proposition | Co-operative merging of the energy supply for the Region of Micheldorf within an operating |

| | | |
|--|---|--|
| | <p>scheme and supply of energy produced through renewable resources. Sustainable, autarkic, economic energy park.</p> | |
|--|---|--|

IV.3.2.5 Enhanced food quality

Definition: General quality including safety, taste, traceability

Main challenges:

- Answer new standards of customers, regulatory institutions, wholesalers...
- Increase competitiveness of small farms and SMEs
- Integrate both short local circuit value chain and global one.

Innovative trends:

- Brand value promotion,
- Certification labels
- Organic products

Typical examples of LIVERUR database

| | | |
|--|--|--|
| <p>Magro Food Village http://www.magro.com.mt/</p> | |  <p>Officially certified by MTA</p>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px; text-align: center;"> <p>WE LOVE FOOD embrace traditions INNOVATE to add convenience BELIEVE in QUALITY & HEALTHY offerings BIG on CORPORATE SOCIAL RESPONSIBILITY</p> </div> |
| Country | Malta | |
| Date of beginning | 2014 | |
| Legal status | Limited Liability Company | |
| Workforce | 150 | |
| Activities | Production and provision of quality food (tomatoes, dairy products and other craft food) | |
| Value proposition | Highest quality and safety through rigid standards HACCP, ISO 22000, BRC... | |
| Value chain | Cluster “Magro Food Village” | |

| | | |
|--|---|--|
| <p>Ekološka kmetija Kukenberger http://www.ekosirarna.si</p> | |    |
| Country | Slovenia | |
| Date of beginning | 2013 | |
| Legal status | Individual company | |
| Activities | Production of organic hay & milk products | |

| | | |
|-------------------|---|---|
| Value proposition | highest quality of products, caring for animal welfare & people, & sustainable way of treating the soil |  Toni Kukenberger - Innovative Young Farmer 2016 |
| Value chain | Diversified farm value chain | |

IV.3.2.6 Touristic & attractive territory

Definition: services for travellers (accommodation, food, leisure, cultural, learning) and contributing to enhance the attractiveness of the rural territory.

Main challenges:

- Role of tourism association, for up scaled eco-tourism
- Cooperation between local stakeholders to provide a complete and suitable experience to the customers
- Infrastructure development
- ICT support services
- Development of key connections in the value chain, at regional, national and international level

Innovative trends:

- Organisation, governance ensuring global coordination and promoting diversity of services

Typical examples of LIVERUR database

| | | |
|--|---|--|
| Merill http://www.merill.com.mt | |  |
| Country | Malta | |
| Date of beginning | 2013 | |
| Legal status | Social enterprise | |
| Workforce | 11 | |
| Activities | private and organised tours in sheep farming, sea salt harvesting, valorising Malta`s gastronomic heritage and agro-ecosystem regeneration | |
| Value proposition | “Create alternative experiences for locals and tourists, which contribute directly towards the conservation of the environment and empowerment of the rural communities.” | |

| | | |
|-------------|--|--|
| Value chain | Merill rural network brings together a number of farmers, breeders and artisans. The aim of this network is to create awareness about local agriculture, revive traditions, and empower the rural community to diversify their income in a sustainable manner. | |
|-------------|--|--|

| | | |
|---|--|--|
| Kellerstöckl-Resort Südburgenland https://www.rmb.at/news-detail/news/kellerstoeckl-resort-suedburgenland/ | | |
| Country | Austria | |
| Date of beginning | 2017 | |
| Legal status | Cooperative Company | |
| Workforce | 2 | |
| Activities | Rural tourism package | |
| Value proposition | In addition to overnight accommodations in the authentic cellar floors, various side offers from the region (culinary tastings, nearby excursion destinations ...) should complete this package and make the Kellerstöckl project a major attraction in southern Burgenland for wine tourists from near and far. | |
| Value chain | In about 50 to 70 Kellerstöckl owners are to be integrated with existing interest and willingness to cooperate in a professional operator model | |

IV.3.2.7 Business and organisation support services

Definition:

Technical, strategic, marketing/commercial, organisation, logistics, training and all other services that support rural SMEs business and development.

Main challenges:

- Promotion of entrepreneurship spirit, competitiveness of rural areas
- Transition to cooperative and circular economy
- Upscale value chain and develop customer share value strategy

Innovative trends:

- Learning (e learning, open, distant learning, on line platform)
- E commerce
- Organisation, governance

Typical examples of LIVERUR database

| Social Farming 2.0 https://socialfarming.distrettoagruidisicilia.it | | |
|--|--|--|
| Country | Italy | |
| Date of beginning | 2017 | |
| Legal status | No Status yet | |
| Workforce | 65 | |
| Activities | Seminars and theoretical / practical training for technical professionalism and <i>new entrepreneurship in the citrus supply chain</i> (production, artisanal transformation and relational tourism). | |
| Value proposition | Social inclusion, skill improvement, employment, transparency in the labour supply demand mechanism, dissemination of the concept of social responsibility in the supply chain | |
| Value chain | Sicilian citrus supply chain (production, artisanal transformation and relational tourism) | |

| Biopassive Office of Agringenia ingenieria y medio ambiente www.agringeniaequipo.com | | |
|--|--|--|
| Country | Spain | |
| Date of beginning | 2018 | |
| Legal status | Individual company | |
| Workforce | 3 | |
| Activities | Hiring agricultural insurance, measurement and appraisal of farms, technical advice on agricultural projects | |



CONCLUSION

Outputs for next steps of LIVERUR

This report gives two main outputs that should be now appropriated by partners and leaders of LIVERUR further steps, in order to move from this existing view to innovative living lab concepts. That needs to take in consideration specificities, strengths and weaknesses of the rural areas on the 4 LIVERUR pillars, and to target their “best living lab” model.

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These **two main outputs** are:

- Creation of an extensive analysis of the existing business models in rural territories in order to foster collection and capitalization of existing knowledge: with its 256 projects, the database provides a wealth of information and network for partners to exchange practical experiences, obstacles to face and success stories.
- Development of a comprehensive approach to rural business models analysis which will identify relevant benchmarking criteria and suggest innovative comparison strategies: based on the results of the T2.1, literature analysis, review of the results of other projects, CESIE, CEA, CLEOPA and TRA teams have developed a tool with the benchmarking indicators. In this task T2.2 (Systemization of benchmarking criteria in order to compare existing value-chain approaches), the consortium identifies the weights to be attached to the criteria of analysis in order to create a benchmarking scale. Given the fact that different weights will lead to different results, the task lead partner will take care of following standardized protocols in the assessment, with the aim of creating an outcome, which is understandable and justifiable at a Pan-European scale.



ANNEXES

Annex 1: Questionnaire of Data Collection

LIVERUR WP2 Data Collection

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This questionnaire aims at creating a database for the WP2 "extensive analysis of the existing business models in rural territories".

What are we looking for?

- Business models for rural areas
- Value chain approaches

How?

- Scientific/other literature review
- 'Know-how' of implemented EU projects
- National Initiatives
- In-depth and in-field interviews

KPIs:

- More than 60 business models analysed
- Dataset of min 2000 stakeholders from the EU Rural Ecosystem

*Obligatoire

1. Partner organisation *

Sélectionner ▼



Description of the project/initiative

Here you will answer questions regarding the project/initiative you are describing.

2. Name of the project/initiative *

Votre réponse

3. Sources: put here the link(s) to related websites (if existing)

Reminder: all the documents related to the project/initiative have to be uploaded on the WP2 platform.

Votre réponse

4. Country of the project/initiative analyzed *

Votre réponse

5. Sector code (NACE): please look at the guidelines and enter the code for your sector (ex. A.1.11) *

You can use several codes if necessary. If the code number is not available, you can just enter key words corresponding.

Votre réponse

6. Source of the analysis carried out *

Project

National initiative

Literature review

Autre :



7. Period of implementation (beginning year - ending year) *

If ongoing just write the beginning year.

Votre réponse

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8. Legal status of the organisation established in the frame of the project / initiative? *

- Cooperative company
- Individual company
- NGO
- Independant association
- Autre : _____

9. Global geographical influence *

- Local
- Regional
- National
- International

10. Annual financial turnover (k€)

Not compulsory, please use k€ format

Votre réponse

11. Maturity of the project/initiative *

- Innovation/introduction
- Growth
- Maturity
- Decline



12. How is the business financially supported ? *

If several answers, you can check several choices.

- EU grant
- National or local grant
- Organisational resources
- Contributions from other stakeholders
- Loan
- Innovative financing (innovation vouchers)
- Autre : _____

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Description of the Business Model Criteria

Here you will answer questions that will help us establish the corresponding Business Model.

Internal Actors

13. Workforce: how many people work in this project/initiative?

(On a regular basis with an employment contract (full time equivalent))

Votre réponse _____

14. Volunteers: how many people contribute to this project/initiative without financial reward? *

Votre réponse _____

15. Are there any other internal actors?

(who contribute to knowledge creation and implementation of actions, ...)

Votre réponse _____



External Actors

16. What are the external companies/suppliers/parties needed to achieve the activities ? *

- wholesaler
- farmers
- Autre : _____

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17. What kind of stakeholders contribute to this project/initiative? *

Several choices allowed.

- Farmers
- Citizen
- Consumers
- Research institutions
- NGOs
- Policy makers
- Crowd funding initiators
- Autre : _____



Value proposition

18. What is (are) the product(s) or service(s) of this project/initiative? *

If several products/services, please indicate them all.

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Votre réponse

19. Who are the customers of the product(s)/service(s)? *

Votre réponse

20. What are the expected benefits for the customers ? *

- Novelty
- Performance
- Customization
- Design
- Price
- Brand
- Cost reduction
- Risk reduction
- Convenience
- Use
- Social
- Autre :

21. What are the type of relationships with the customers? *

- In person (one-to-one)
- Third party contractors
- Online
- Events (one-to-many)
- Involvement in production
- Autre : _____

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Dissemination Channels

22. What are the channels used to reach the customers? *

- Social media
- Public speaking
- Electronic mail (email marketing)
- Networking
- SEM (Search Engine Marketing)
- Targeting blogs
- Sales and promotions for commissions
- Existing platforms
- Trade shows
- Community building
- Offline advertising (billboards, TV, radio)
- Autre : _____



Key activities and resources

23. What activities does the project/initiative undertake? *

- Technical (production, product, ...)
- Non technical (consulting, organisation...)
- Autre : _____

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24. What type of resources are used? *

- Time
- Expertise
- Technical development
- Strategy
- R&D
- Offer resources (human/physical)
- Waste recycling
- Autre :

25. If waste recycling, please precise which type:

Votre réponse _____

Cost structure & revenue stream

26. Is the cost structure...

- ...cost driven (low price value proposition)
- ...value driven (focused on value creation)

27. What are the revenue streams? *

- Pay per product (pay per view)
- Fee for service
- Fixed rate
- Subscription
- Dividends
- Freemium
- Equity gain
- Non profit (individual donors, foundations...)
- Autre :

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Innovation process

28. What is according to you the level of innovation of the action, project, initiative? *

| | 1 | 2 | 3 | 4 | 5 | |
|--------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| Non existant | <input type="radio"/> | Very high |

29. In which field(s) does the innovation take place? *

Several choices allowed

- Organisation
- Social
- Services
- Marketing
- Process
- Autre : _____

Impact criteria

In this section you will have to grade the positive impact of the project/initiative on different criteria (social, economic, environmental)

30. Social impact *

If the project/initiative described is young and does not have yet tools for evaluating these criteria, check "Difficult to evaluate".

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| | 1 (low impact) | 2 | 3 | 4 | 5 (high impact) | Difficult to evaluate |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Education (curriculum & learning) | <input type="radio"/> |
| Social norms for gender | <input type="radio"/> |
| Public health (air/water quality & human well being) | <input type="radio"/> |
| Rural development (regional social situation) | <input type="radio"/> |
| Participation process (of various stakeholders) | <input type="radio"/> |
| Social inclusion (of various disadvantaged groups of persons) | <input type="radio"/> |

31. Economic impact on... *

If the project/initiative described is young and does not have yet tools for evaluating these criteria, check "Difficult to evaluate".

| | 1 (low impact) | 2 | 3 | 4 | 5 (high impact) | Difficult to evaluate |
|------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Job creation | <input type="radio"/> |
| Local economy | <input type="radio"/> |
| Regional economy | <input type="radio"/> |
| National economy | <input type="radio"/> |
| GDP (Gross Domestic Product) | <input type="radio"/> |
| Local businesses | <input type="radio"/> |



32. Environmental impact on... *

If the project/initiative described is young and does not have yet tools for evaluating these criteria, check "Difficult to evaluate".

| | 1 (low impact) | 2 | 3 | 4 | 5 (high impact) | Difficult to evaluate |
|--------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Air (emissions level, quality) | <input type="radio"/> |
| Biodiversity | <input type="radio"/> |
| Environmental sustainability | <input type="radio"/> |
| Water (supply & demand) | <input type="radio"/> |
| Energy (supply & demand) | <input type="radio"/> |

Comments

If you have any other comment about the project initiative your just described, please write it here:

Votre réponse



REFERENCES & SOURCES

- (1) M. Kenny, S. O'Malley, S. Kinahan, L. Costantino, C. Vernarelli, B. Petrovska Mitevska, S. Koceski, I. Paolucci, G. Costantino, R. Albertazzi, F.J. Guijas Delgado and M. Moschou. 2017. *Rural Micro and Craft Enterprise Entrepreneurs: Sustaining Rural Europe*. A MICRO Project Composite Report.
[http://www.microsmetraining.eu/pdf/MICRO_European_Comparative_Report.pdf Accessed 16 October 2018]
- (2) EC (European Commission). 2017. *Annual report on European SMEs 2016/2017*.
[<https://publications.europa.eu/en/publication-detail/-/publication/0b7b64b6-ca80-11e7-8e69-01aa75ed71a1/language-en/format-PDF> Accessed 16 October 2018]
- (3) Volonteuropa. 2016. *Rural isolation of citizens in Europe*. Europe for Citizens Programme
[https://volonteuropa.eu/wp-content/uploads/2017/01/Volonteuropa_RuralIsolation_Report.pdf?1135fa Accessed 16 October 2018]
- (4) ITC (International Trade Center). 2017. *SME guide to value chain*.
[<http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/AssetPDF/SME%20Guide%20to%20value%20chains-web.pdf> Accessed 16 October 2018]
- (5) H. Knudson. 2018. *Making the business case: The effects of corporate social responsibility on SME competitiveness*. Interreg Europe
[https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1523518061.pdf Accessed 16 October 2018]
- (6) EC (European Commission). 2001. Green Paper: Promoting a European framework for Corporate Social Responsibility
[http://europa.eu/rapid/press-release_DOC-01-9_en.pdf Accessed 16 October 2018]
- (7) Interreg Europe. *Rural SMEs*.
[<https://www.interregeurope.eu/ruralsmes/> Accessed 16 October 2018]
- (8) Up2Europe. *Rural entrepreneurship, craft your future!*.
[https://www.up2europe.eu/european/projects/re-craft-rural-entrepreneurship-craft-your-future_78626.html Accessed 16 October 2018]
- (9) EC (European Commission). *Digital Single Market*.
[<https://ec.europa.eu/digital-single-market/en/desi> Accessed 29/05/2017 Accessed 16 October 2018]
- (10) Interreg Europe. *Entrepreneurship Networking Platform of Achaia*.
[<https://www.interregeurope.eu/policylearning/good-practices/item/885/entrepreneurship-networking-platform-of-achaia/> Accessed 16 October 2018]
- (11) Interreg Europe. *European SME innovation Associate – pilot*.
[<https://www.interregeurope.eu/policylearning/news/3993/european-sme-innovation-associate-pilot/> Accessed 16 October 2018]



- (12) Interreg Europe. *Corporate social responsibility as an economic opportunity for SMEs*. [<https://www.interregeurope.eu/policylearning/news/4033/corporate-social-responsibility-as-an-economic-opportunity-for-smes/> Accessed 16 October 2018]
- (13) OECD. 2018. *Enhancing rural innovation*. 11th OECD Rural Development Conference. [<https://www.oecd.org/rural/rural-development-conference/outcomes/Proceedings.pdf> Accessed 16 October 2018]
- (14) N. Noev. 2013. *EAFRD support for sustainable rural tourism 2014 – 2020*. Euromeeting 2013, Brussels [https://www.euromontana.org/wp-content/uploads/2014/08/2013_12_20_tourism_eafrd_2014.pdf Accessed 16 October 2018]
- (15) CBI (Centre for the Promotion of Imports from developing countries, Netherlands). 2018. *What are the opportunities for rural tourism from Europe?* [<https://www.cbi.eu/market-information/tourism/rural-tourism/rural-tourism-europe/> Accessed 16 October 2018]
- (16) European Parliament's Committee on Transport and Tourism. 2013. *Industrial heritage an agri/rural tourism in Europe*. [[http://www.europarl.europa.eu/RegData/etudes/etudes/join/2013/495840/IPOL-TRAN_ET\(2013\)495840_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/etudes/join/2013/495840/IPOL-TRAN_ET(2013)495840_EN.pdf) Accessed 16 October 2018]
- (17) EEN (Economic Empowerment Network). *Tourism promotion model*. [<http://www.een-letsbear.com/value-chain/tourism-promotion-model/> Accessed 16 October 2018]
- (18) Shang-Yu Liu, Chen-Ying Yen, Kuang-Nan Tsai and Wei-Shuo Lo. 2017. *A Conceptual Framework for Agri-Food Tourism as an Eco-Innovation Strategy in Small Farms*. [<https://www.mdpi.com/2071-1050/9/10/1683/htm> Accessed 16 October 2018]
- (19) Dongoh Joo. 2013. *Fair trade tourism: conceptual evolution and potential market projection*. [<http://www.tourismesolidaire.org/ressources/tourisme-equitable-evolution-conceptuelle-et-previsions-marche-potentiel> Accessed 16 October 2018]
- (20) Eurostat. 2018. *Tourism statistics at regional level*. Statistics explained. [<https://ec.europa.eu/eurostat/statistics-explained/pdfscache/1945.pdf> Accessed 16 October 2018]
- (21) Jack Daly and Gary Gereffi. 2017. *Tourism global value chains and Africa*. [<https://www.wider.unu.edu/sites/default/files/wp2017-17.pdf> Accessed 16 October 2018]
- (22) CBI (Centre for the Promotion of Imports from developing countries, Netherlands). 2018. *What requirements must my services comply with to attract European tour operators?* [<https://www.cbi.eu/market-information/tourism/buyer-requirements/> Accessed 16 October 2018]



- (23) GTSC (Global sustainable Tourism Council). *GSTC Criteria*.
[<http://www.gstcouncil.org/gstc-criteria/> Accessed 16 October 2018]
- (24) ENRD (European Network for Rural Development). 2013. *The European Agricultural Fund for Rural Development: Examples of projects supporting social inclusion*.
[<https://enrd.ec.europa.eu/sites/enrd/files/fms/pdf/8AD4A2D5-C355-06D9-1B68-E31A73E0A72B.pdf> Accessed 16 October 2018]
- (25) Zbynek Krivanek, Jiri Vidman. *ICT solution for rural tourism*.
[<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.120.3335&rep=rep1&type=pdf> Accessed 16 October 2018]
- (26) J. De Flander. *CSV vs CSR I Creating Shared Value vs CSR explained!*
[<https://jeroen-de-flander.com/csv-csr-shared-value/> Accessed 16 October 2018]
- (27) Fariborz Aref & Sarjit S Gill. 2009. *Rural Tourism Development through Rural Cooperatives*. Nature and Science.
[http://www.sciencepub.net/nature/ns0710/09_1214_Tourism_ns0710.pdf Accessed 16 October 2018]
- (28) EC (European commission). *Access to finance for SMEs*.
[https://ec.europa.eu/growth/access-to-finance_en Accessed 16 October 2018]
- (29) WRAP (Waste and Resources Action Programme)
[<http://www.wrap.org.uk/about-us/about/wrap-and-circular-economy> Accessed 16 October 2018]

Other sources:

- Alan Lew. 2012. *Moving up the Value Chain: Best Practices & Benchmarks for Rural Tourism*.
[<https://www.slideshare.net/alew/moving-up-the-value-chain-best-practices-benchmarks-for-rural-tourism> Accessed 16 October 2018]
- Ana Martinez Juan. 2016. *Rural Areas and Poverty*. European Parliamentary Research Service Blog.
[<https://epthinktank.eu/2016/12/16/rural-areas-and-poverty/> Accessed 16 October 2018]
- CBT-IRDC (Community Based Tourism International Research for Development Center).
[http://www.cbt-irdc.org/?ge=show_pages&gen_lang=1706201313114 Accessed 16 October 2018]
- Dietmar Stoian, Jason Donovan, John Fisk and Michelle F. Muldoon. 2012. *Value chain development for rural poverty reduction: A reality check and a warning*.
[<https://www.developmentbookshelf.com/doi/pdf/10.3362/1755-1986.2012.006> Accessed 16 October 2018]
- EC (European Commission). 2018. *Agricultural and farm income*.
[<https://ec.europa.eu/agriculture/sites/agriculture/files/statistics/facts-figures/agricultural-farm-income.pdf> Accessed 16 October 2018]



EC (European Commission). *Future of the common agricultural policy.*

[https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/future-cap_en Accessed 16 October 2018]

EPRS (European Parliamentary Research Service). 2016. *Farm diversification in the EU.*

[[http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/581978/EPRS_BRI\(2016\)581978_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/581978/EPRS_BRI(2016)581978_EN.pdf) Accessed 16 October 2018]

Eurac research. *Agritourism.*

[<http://agritourism.eurac.edu/editions/2018-edition/> Accessed 16 October 2018]

Eurostat. 2014. *Eurostat regional yearbook 2014: Agriculture.*

[<https://ec.europa.eu/eurostat/documents/3217494/5786409/KS-HA-14-001-11-EN.PDF/2def3682-3ceb-4bdd-9cea-5e1a61bab98b> Accessed 16 October 2018]

Sandra Loureiro. 2012. *Tourism in Rural Areas: Foundation, Quality and Experience.*

[https://www.researchgate.net/publication/224830375_Tourism_in_Rural_Areas_Foundation_Quality_and_Experience Accessed 16 October 2018]